



# 2014 Physician Quality Reporting System (PQRS) Measures Groups Specifications Manual

01/23/2014

This manual contains specific guidance for reporting 2014 Physician Quality Reporting System (PQRS) Measures Groups. Measures Groups are a subset of four or more PQRS measures that have a particular clinical condition or focus in common. Only those measures groups defined in this document can be utilized when reporting the measures group options. All other individual measures that are included in PQRS but not defined in this manual as included in a measures group cannot be grouped together to define a measures group.

Twenty-five (25) measures groups have been established for 2014 PQRS: Diabetes, Chronic Kidney Disease (CKD), Preventive Care, Coronary Artery Bypass Graft (CABG), Rheumatoid Arthritis (RA), Perioperative Care, Back Pain, Hepatitis C, Heart Failure (HF), Coronary Artery Disease (CAD), Ischemic Vascular Disease (IVD), HIV/AIDS, Asthma, Chronic Obstructive Pulmonary Disease (COPD), Inflammatory Bowel Disease (IBD), Sleep Apnea, Dementia, Parkinson's Disease, Hypertension, Cardiovascular Prevention, Cataracts, Oncology, Total Knee Replacement (TKR), General Surgery, and Optimizing Patient Exposure to Ionizing Radiation (OPEIR). As required by applicable statutes, through formal notice-and-comment rulemaking in 2013, these 25 measures groups consist of individual measures established for use in the 2014 PQRS. An eligible professional may choose to report one or more measures groups through registry-based submission. Note that denominator coding has been modified from the original individual measures specified by the measure developer to allow for implementation in PQRS as a measures group. An overview for each measures group is included in this manual followed by specific reporting instructions for each measure within the group.

There are two reporting periods available for eligible professionals to report 2014 PQRS measures groups: a) 12-month reporting period from January 1 through December 31, 2014 OR b) a 6-month reporting period from July 1 through December 31, 2014. Measures groups containing a measure with a 0% performance rate will not be counted as satisfactorily reporting the measures group. Those eligible professionals who satisfactorily report quality-data under the measures groups reporting option may earn an incentive payment equal to 0.5% of their total estimated allowed charges for Medicare Part B Physician Fee Schedule (PFS) covered professional services furnished during the applicable reporting period.

Please note, eligible professionals may choose to pursue more than one 2014 PQRS option. However, an eligible professional who satisfactorily reports under more than one reporting option will earn a maximum of one incentive payment equal to 0.5% of their total estimated allowed charges for Medicare Part B PFS covered professional services furnished during the longest reporting period for which he or she satisfied reporting requirements. This manual describes how to implement 2014 reporting of PQRS measures groups to facilitate satisfactory reporting of quality-data by eligible professionals who wish to participate under this reporting alternative. Additional information describing how to implement 2014 measures groups can be found in the *2014 Physician Quality Reporting System (PQRS) Getting Started with Measures Groups* and *Physician Quality Reporting Made Simple - Reporting the Preventive Care Measures Group* at: <http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/PQRS>.

**Note: This document applies to PQRS for incentive payment eligibility only. Those who report satisfactorily for the 2014 program year may avoid the 2016 payment adjustment. Additional information on how to avoid future PQRS payment adjustments can be found through supporting documentation available on the CMS website at <http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/PQRS>.**

### Measures Groups Reporting Method:

There is one reporting method for submission of measures groups:

#### 20 Patient Sample Method via Registry – 12-month or 6-month reporting period:

- A participating eligible professional must report on all applicable measures within the selected measures group for a minimum sample of 20 unique patients, a majority of which must be Medicare Part B FFS patients, who meet patient sample criteria for the measures group. If the eligible professional does not have at least 11 unique Medicare Part B FFS patients who meet patient sample criteria for the measures group, the eligible professional will need to choose another measures group or choose another reporting option. Please refer to the *2014 Physician Quality Reporting System (PQRS) Implementation Guide* to determine the proper reporting option.

For registry-based 12-month reporting option submissions, all applicable measures within the group must be reported during the reporting period (January 1 through December 31, 2014), according to each measures group's reporting instructions contained within each group's overview section.

For registry-based 6-month reporting option submissions, all applicable measures within the group must be reported during the reporting period (July 1 through December 31, 2014), according to each measures group's reporting instructions contained within each group's overview section.

Measures groups containing a measure with a 0% performance rate will not be counted as satisfactorily reporting the measures group.

The patient sample for the 20 Patient Sample Method is determined by diagnosis and/or specific encounter parameters common to all measures within a selected measures group. All applicable measures within a group must be reported for each patient within the sample that meets the criteria (e.g., age or gender) required in accordance with this manual. For example, if an eligible professional is reporting on the Preventive Care Measures Group, the *Screening or Therapy for Osteoporosis* measure would only need to be reported on **women** within the eligible professional's patient sample.

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## DIABETES MEASURES GROUP OVERVIEW

### 2014 PQRS OPTIONS FOR MEASURES GROUPS:

#### 2014 PQRS MEASURES IN DIABETES MEASURES GROUP:

- #1. Diabetes: Hemoglobin A1c Poor Control
- #2. Diabetes: Low Density Lipoprotein (LDL-C) Control (< 100 mg/dL)
- #117. Diabetes: Eye Exam
- #119. Diabetes: Medical Attention for Nephropathy
- #163. Diabetes: Foot Exam

#### 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.

**G8485:** I intend to report the Diabetes 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, 2014 **OR** July 1 through December 31, 2014).
- Patient sample criteria for the Diabetes Measures Group are patients aged 18 through 75 years with a specific diagnosis of diabetes accompanied by a specific patient encounter:

#### The following diagnosis codes indicating diabetes:

**ICD-9-CM [for use 1/1/2014 – 9/30/2014]:** 250.00, 250.01, 250.02, 250.03, 250.10, 250.11, 250.12, 250.13, 250.20, 250.21, 250.22, 250.23, 250.30, 250.31, 250.32, 250.33, 250.40, 250.41, 250.42, 250.43, 250.50, 250.51, 250.52, 250.53, 250.60, 250.61, 250.62, 250.63, 250.70, 250.71, 250.72, 250.73, 250.80, 250.81, 250.82, 250.83, 250.90, 250.91, 250.92, 250.93, 357.2, 362.01, 362.02, 362.03, 362.04, 362.05, 362.06, 362.07, 366.41, 648.00, 648.01, 648.02, 648.03, 648.04

**ICD-10-CM [for use 10/1/2014 – 12/31/2014]:** E10.10, E10.11, E10.21, E10.22, E10.29, E10.311, E10.319, E10.321, E10.329, E10.331, E10.339, E10.341, E10.349, E10.351, E10.359, E10.36, E10.39, E10.40, E10.41, E10.42, E10.43, E10.44, E10.49, E10.51, E10.52, E10.59, E10.610, E10.618, E10.620, E10.621, E10.622, E10.628, E10.630, E10.638, E10.641, E10.649, E10.65, E10.69, E10.8, E10.9, E11.00, E11.01, E11.21, E11.22, E11.29, E11.311, E11.319, E11.321, E11.329, E11.331, E11.339, E11.341, E11.349, E11.351, E11.359, E11.36, E11.39, E11.40, E11.41, E11.42, E11.43, E11.44, E11.49, E11.51, E11.52, E11.59, E11.610, E11.618, E11.620, E11.621, E11.622, E11.628, E11.630, E11.638, E11.641, E11.649, E11.65, E11.69, E11.8, E11.9, O24.011, O24.012, O24.013, O24.019, O24.02, O24.03, O24.111, O24.112, O24.113, O24.119, O24.12, O24.13

#### Accompanied by:

**One of the following patient encounter codes:** 99201, 99202, 99203, 99204, 99205, 99211, 99212, 99213, 99214, 99215, 99217, 99218, 99219, 99220, 99221, 99222, 99223, 99231, 99232, 99233, 99238, 99239, 99281, 99282, 99283, 99284, 99285, 99291, 99304, 99305, 99306, 99307, 99308, 99309, 99310, 99315, 99316, 99318, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350, 99455, 99456, G0402, G0438, G0439

- Report a numerator option on **all** measures within the Diabetes Measures Group for each patient within the sample.

- Instructions for qualifying numerator option reporting for each of the measures within the Diabetes 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 G8494:** All quality actions for the applicable measures in the Diabetes Measures Group have been performed for this patient

- This measures group contains one or more inverse measures. An inverse measure is a measure that represents a poor clinical quality action as meeting performance for the measure. For these measures, a lower performance rate indicates a higher quality of clinical care. Composite codes for measures groups that contain inverse measures are only utilized when the appropriate quality clinical care is given.
- The composite code for this measures group may be reported when codes in the summary table below are applicable for reporting of each measure within the measures group.

Measure	#1*	#2	#117	#119	#163
<b>QDC options for acceptable use of the composite QDC</b>	3044F <u>or</u> 3045F	3048F	2022F <u>or</u> 2024F <u>or</u> 2026F <u>or</u> 3072F	3060F <u>or</u> 3061F <u>or</u> 3062F <u>or</u> 3066F <u>or</u> G8506	G9226

\*Indicates an inverse measure

- To report satisfactorily the Diabetes Measures Group requires **all** 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. When a lower rate indicates better performance, such as Measure #1, a 0% performance rate will be counted as satisfactorily reporting (100% performance rate would not be considered satisfactorily reporting). 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.
- **NOTE:** The detailed instructions in this specification apply exclusively to the reporting and analysis of the included measures under the measures groups option.

◆ **Measure #1 (NQF 0059): Diabetes: Hemoglobin A1c Poor Control**

**DESCRIPTION:**

Percentage of patients 18-75 years of age with diabetes who had hemoglobin A1c > 9.0% during the measurement period

**NUMERATOR:**

Patients whose most recent HbA1c level (performed during the measurement period) is > 9.0%

**Numerator Instructions:** Patient is numerator compliant if most recent HbA1c level is > 9.0% or is missing a result or if an HbA1c test was not done during the measurement year.

**NUMERATOR NOTE:** *The performance period for this measure is 12 months from date of encounter. A lower calculated performance rate for this measure indicates better clinical care or control.*

**Numerator Options:**

Most recent hemoglobin A1c level > 9.0% **(3046F)**

**OR**

Hemoglobin A1c level was **not** performed during the performance period (12 months) **(3046F with 8P)**

**OR**

Most recent hemoglobin A1c (HbA1c) level < 7.0% **(3044F)**

**OR**

Most recent hemoglobin A1c (HbA1c) level 7.0 to 9.0% **(3045F)**

◆ Measure #2 (NQF 0064): Diabetes: Low Density Lipoprotein (LDL-C) Control (< 100 mg/dL)

**DESCRIPTION:**

Percentage of patients aged 18-75 years of age with diabetes whose LDL-C was adequately controlled (< 100 mg/dL) during the measurement period

**NUMERATOR:**

Patients whose most recent LDL-C < 100 mg/dL during the measurement period

***NUMERATOR NOTE:*** *The performance period for this measure is 12 months from the date of encounter. The patient is not numerator compliant if the result for the most recent LDL-C test during the measurement period is  $\geq 100$  mg/dL, or is missing, or if an LDL-C test was not performed during the measurement period.*

**Numerator Options:**

Most recent LDL-C < 100 mg/dL **(3048F)**

**OR**

Most recent LDL-C 100-129 mg/dL **(3049F)**

**OR**

Most recent LDL-C  $\geq 130$  mg/dL **(3050F)**

**OR**

LDL-C was **not** performed during the performance period (12 months) **(3048F with 8P)**

◆ Measure #117 (NQF 0055): Diabetes: Eye Exam

**DESCRIPTION:**

Percentage of patients 18-75 years of age with a diagnosis of diabetes (type 1 and type 2) who had a retinal or dilated eye exam in the measurement period or a negative retinal or dilated eye exam (negative for retinopathy) in the year prior to the measurement period

**NUMERATOR:**

Patients who had a retinal or dilated eye exam by an eye care professional (optometrist or ophthalmologist) in the measurement period or a negative retinal or dilated eye exam (negative for retinopathy) by an eye care professional (optometrist or ophthalmologist) in the year prior to the measurement period. For retinal or dilated eye exams performed 12 months prior to the measurement period, an automated result must be available.

**Definition:**

**Automated Result** – Electronic system-based data that includes results generated from test or procedures. For administrative data collection automated/electronic results are necessary in order to show that the exam during the 12 months prior was negative for retinopathy.

**Numerator Options:**

Dilated retinal eye exam with interpretation by an ophthalmologist or optometrist documented and reviewed **(2022F)**

**OR**

Seven standard field stereoscopic photos with interpretation by an ophthalmologist or optometrist documented and reviewed **(2024F)**

**OR**

Eye imaging validated to match diagnosis from seven standard field stereoscopic photos results documented and reviewed **(2026F)**

**OR**

Low risk for retinopathy (no evidence of retinopathy in the prior year) **(3072F)\***

**\*NOTE:** This code can only be used if the encounter was during the measurement period because it indicates that the patient had “no evidence of retinopathy in the prior year”. This code definition indicates results were negative, therefore an automated result is not required.

**OR**

Dilated eye exam was **not** performed, reason not otherwise specified **(2022F or 2024F or 2026F with 8P)**

◆ Measure #119 (NQF 0062): Diabetes: Medical Attention for Nephropathy

**DESCRIPTION:**

The percentage of patients 18-75 years of age with diabetes who had a nephropathy screening test or evidence of nephropathy during the measurement period

**NUMERATOR:**

Patients with a screening for nephropathy or evidence of nephropathy during the measurement period

**Numerator Instructions:** This measure is looking for a nephropathy screening test or evidence of nephropathy.

**Numerator Options:**

Positive microalbuminuria test result documented and reviewed **(3060F)**

**OR**

Negative microalbuminuria test result documented and reviewed **(3061F)**

**OR**

Positive macroalbuminuria test result documented and reviewed **(3062F)**

**OR**

Documentation of treatment for nephropathy (eg, patient receiving dialysis, patient being treated for ESRD, CRF, ARF, or renal insufficiency, any visit to a nephrologist) **(3066F)**

**OR**

Patient receiving angiotensin converting enzyme (ACE) inhibitor or angiotensin receptor blocker (ARB) therapy **(G8506)**

**OR**

Nephropathy screening was **not** performed, reason not otherwise specified **(3060F or 3061F or 3062F with 8P)**

◆ Measure #163 (NQF 0056): Diabetes: Foot Exam

**DESCRIPTION:**

Percentage of patients aged 18-75 years of age with diabetes who had a foot exam during the measurement period

**NUMERATOR:**

Patients who received a foot exam (i.e., visual inspection, sensory exam with monofilament **AND** pulse exam) during the measurement period

***NUMERATOR NOTE:*** Patients who received a foot exam at least once within the prior 12 months.

**Numerator Options:**

Foot examination performed (includes examination through visual inspection, sensory exam with monofilament, and pulse exam – report when **all** of the 3 components are completed) **(G9226)**

**OR**

Documentation of medical reason for not performing foot exam (e.g., patient with bilateral foot/leg amputation) **(G9224)**

**OR**

Foot exam was **not** performed, reason not otherwise given **(G9225)**



## DIABETES MEASURES GROUP RATIONALE AND CLINICAL RECOMMENDATION STATEMENTS

### Measure #1 – Diabetes: Hemoglobin A1c Poor Control

#### RATIONALE:

Diabetes mellitus (diabetes) is a group of diseases characterized by high blood glucose levels caused by the body's inability to correctly produce or utilize the hormone insulin. It is recognized as a leading cause of death and disability in the U.S. and is highly underreported as a cause of death. Diabetes may cause life-threatening, life-ending or life-altering complications, including poor circulation, nerve damage or neuropathy in the feet and eventual amputation. Nearly 60-70 percent of diabetics suffer from mild or severe nervous system damage (American Diabetes Association 2009).

Randomized clinical trials have demonstrated that improved glycemic control, as evidenced by reduced levels of glycohemoglobin, correlates with a reduction in the development of microvascular complications in both Type 1 and Type 2 diabetes (Diabetes Control and Complications Trial Research Group 1993; Ohkubo 1995). In particular, the Diabetes Control and Complications Trial (DCCT) showed that for patients with Type 1 diabetes mellitus, important clinical outcomes such as retinopathy (an important precursor to blindness), nephropathy (which precedes renal failure), and neuropathy (a significant cause of foot ulcers and amputation in patients with diabetes) are directly related to level of glycemic control (Diabetes Control and Complications Trial Research Group 1993). Similar reductions in complications were noted in a smaller study of intensive therapy of patients with Type 2 diabetes by Ohkubo and co-workers, which was conducted in the Japanese population (Ohkubo et al., 1995).

#### CLINICAL RECOMMENDATION STATEMENTS:

American Geriatrics Society (Brown et al. 2003):

For frail older adults, persons with life expectancy of less than 5 years, and others in whom the risks of intensive glycemic control appear to outweigh the benefits, a less stringent target such as 8% is appropriate. (Quality of Evidence: Level III; Strength of Evidence: Grade B)

American Diabetes Association (2009):

Lowering A1c to below or around 7% has been shown to reduce microvascular and neuropathic complications of type 1 and type 2 diabetes. Therefore, for microvascular disease prevention, the A1c goal for non-pregnant adults in general is < 7%. (Level of Evidence: A)

In type 1 and type 2 diabetes, randomized controlled trials of intensive versus standard glycemic control have not shown a significant reduction in CVD outcomes during the randomized portion of the trials. Long-term follow-up of the Diabetes Control and Complications Trial (DCCT) and UK Prospective Diabetes Study (UKPDS) cohorts suggests that treatment to A1C targets below or around 7% in the years soon after the diagnosis of diabetes is associated with long-term reduction in risk of macrovascular disease. Until more evidence becomes available, the general goal of < 7% appears reasonable for many adults for macrovascular risk reduction. (Level of Evidence: B)

Subgroup analyses of clinical trials such as the DCCT and UKPDS and the microvascular evidence from the Action in Diabetes and Vascular Disease: Preterax and Diamicon MR Controlled Evaluation (ADVANCE) trial suggest a small but incremental benefit in microvascular outcomes with A1c values closer to normal. Therefore, for selected individual patients, providers might reasonably suggest even lower A1c goals than the general goal of < 7%, if this can be achieved without significant hypoglycemia or other adverse effects of treatment. Such patients might include those with short duration of diabetes, long life expectancy, and no significant CVD. (Level of Evidence: B)

Conversely, less stringent A1c goals than the general goal of < 7% may be appropriate for patients with a history of severe hypoglycemia, limited life expectancy, advanced microvascular or macrovascular complications, and extensive comorbid conditions and those with longstanding diabetes in whom the general goal is difficult to attain despite diabetes self-management education, appropriate glucose monitoring, and effective doses of multiple glucose lowering agents including insulin. (Level of Evidence: C)

## **Measure #2 - Diabetes: Low Density Lipoprotein (LDL-C) Control (< 100 mg/dL)**

### **RATIONALE:**

Diabetes mellitus (diabetes) is a group of diseases characterized by high blood glucose levels caused by the body's inability to correctly produce or utilize the hormone insulin. It is recognized as a leading cause of death and disability in the U.S. and is highly underreported as a cause of death. Diabetes may cause life-threatening, life-ending or life-altering complications, including poor cholesterol, specifically lipoprotein (LDL). Clinical guidelines recommend lifestyle modifications that include reducing intake of saturated fat, trans fat and cholesterol, weight loss, and increased physical activity (American Diabetes Association 2009). Statin therapy is suggested for eligible patients whose levels are consistently and significantly higher (American Diabetes Association 2009).

### **CLINICAL RECOMMENDATION STATEMENTS:**

American Diabetes Association (2009): In most adult patients, measure fasting lipid profile at least annually. In adults with low-risk lipid values (LDL cholesterol < 100 mg/dL, HDL cholesterol > 50 mg/dl, and triglycerides < 150 mg/dl), lipid assessments may be repeated every 2 years.

American Association of Clinical Endocrinologists (2007): Aggressive management of dyslipidemia in patients with diabetes mellitus is critical; treat patients to achieve the following goal: LDL-C < 100 mg/dL (< 70 mg/dL is recommended for patients with diabetes mellitus and coronary artery disease).

## **Measure #117 - Diabetes: Eye Exam**

### **RATIONALE:**

Diabetes mellitus (diabetes) is a group of diseases characterized by high blood glucose levels caused by the body's inability to correctly produce or utilize the hormone insulin. It is recognized as a leading cause of death and disability in the U.S. and is highly underreported as a cause of death. Diabetes of either type may cause life-threatening, life-ending or life-altering complications, including glaucoma and blindness. Diabetic retinopathy is the most common diabetic eye disease and causes 21,000–24,000 new cases of blindness annually. The consensus among established clinical guidelines is that patients with both types of diabetes should have an initial dilated and comprehensive eye exam soon after diagnosis. Guidelines also recommend consultation with an ophthalmologist for treatment options if a patient has any level of macular edema or diabetic retinopathy (proliferative and nonproliferative) (American Diabetes Association 2009).

### **CLINICAL RECOMMENDATION STATEMENTS:**

American Diabetes Association (ADA) (2009):

- Adults and children aged 10 years or older with type 1 diabetes should have an initial dilated and comprehensive eye examination by an ophthalmologist or optometrist within 5 years after the onset of diabetes. (B recommendation)
- Patients with type 2 diabetes should have an initial dilated and comprehensive eye examination by an ophthalmologist or optometrist shortly after the diagnosis of diabetes. (B recommendation)
- Subsequent examinations for type 1 and type 2 diabetic patients should be repeated annually by an ophthalmologist or optometrist. Less frequent exams (every 2–3 years) may be considered following one or more normal eye exams. Examinations will be required more frequently if retinopathy is progressing. (B recommendation)
- Women with preexisting diabetes who are planning pregnancy or who have become pregnant should have a comprehensive eye examination and be counseled on the risk of development and/or progression of diabetic retinopathy. (B recommendation)
- Eye examination should occur in the first trimester with close follow-up throughout pregnancy and for 1 year postpartum. (B recommendation)

- Promptly refer patients with any level of macular edema, severe nonproliferative diabetic retinopathy (NPDR), or any proliferative diabetic retinopathy (PDR) to an ophthalmologist who is knowledgeable and experienced in the management and treatment of diabetic retinopathy. (A recommendation)
- Laser photocoagulation therapy is indicated to reduce the risk of vision loss in patients with high-risk PDR, clinically significant macular edema, and in some cases of severe NPDR. (A recommendation)
- The presence of retinopathy is not a contraindication to aspirin therapy for cardioprotection, as this therapy does not increase the risk of retinal hemorrhage. (A recommendation)

American Geriatric Society (AGS) (Brown et al. 2003): The older adult who has new-onset DM should have an initial screening dilated-eye examination performed by an eye-care specialist with funduscopy training. (Level I, Grade B)

### **Measure #119 - Diabetes: Medical Attention for Nephropathy**

#### **RATIONALE:**

Diabetes mellitus (diabetes) is a group of diseases characterized by high blood glucose levels caused by the body's inability to correctly produce or utilize the hormone insulin (National Institute of Diabetes and Digestive and Kidney Diseases 2011). It is recognized as a leading cause of death and disability in the U.S. and is highly underreported as a cause of death (National Institute of Diabetes and Digestive and Kidney Diseases 2011). Diabetes may cause life-threatening, life-ending or life-altering complications, including end-stage kidney disease. Diabetes is the primary cause of kidney failure, accounting for 44 percent of newly diagnosed cases in 2005 (National Institute of Diabetes and Digestive and Kidney Diseases 2011). Clinical guidelines recommend regular testing to evaluate urine albumin excretions and serum creatinine and the estimated glomerular filtration rate derived from serum creatinine, in addition to comparing measurements when screening for chronic kidney disease (American Diabetes Association 2009; American Association of Clinical Endocrinologists 2007).

#### **CLINICAL RECOMMENDATION STATEMENTS:**

American Diabetes Association (2009):

- Perform an annual test to assess urine albumin excretion in type 1 diabetic patients with diabetes duration of  $\geq$  5 years and in all type 2 diabetic patients, starting at diagnosis. (Level of Evidence E)
- Measure serum creatinine at least annually in all adults with diabetes regardless of the degree of urine albumin excretion. The serum creatinine should be used to estimate GFR and stage the level of chronic kidney disease (CKD), if present. (Level of Evidence E)
- In the treatment of the nonpregnant patient with micro- or macroalbuminuria, either ACE inhibitors or ARBs should be used. (Level of Evidence A)

American Association of Clinical Endocrinologists (2007): Screen all patients with diabetes mellitus for chronic kidney disease annually; screening should begin 5 years after diagnosis in patients with Type 1 diabetes mellitus (T1DM) and at the time of diagnosis in patients with Type 2 diabetes mellitus (T2DM). Testing includes:

- Measurement of albumin-to-creatinine ratio in a spot urine specimen and measurement of the estimated glomerular filtration rate derived from serum creatinine

The following are diagnostic criteria for chronic kidney disease:

- Estimated glomerular filtration rate  $<$  60 mL/min/1.73 m<sup>2</sup> or albumin-to-creatinine ratio  $\geq$  30 mg albumin/g creatinine
- Microalbuminuria  $\geq$  30 mg albumin/g creatinine
- Macroalbuminuria  $\geq$  300 mg albumin/g creatinine (Grade A)
- Prescribe an angiotensin-converting enzyme inhibitor or an angiotensin receptor blocker in the antihypertensive regimen in the absence of contraindications. (Grade A)

California Healthcare Foundation/American Geriatrics Society (2003): A test for the presence of microalbumin should be performed at diagnosis in patients with type 2 diabetes mellitus. After the initial screening and in the absence of

previously demonstrated macro- or microalbuminuria, a test for the presence of microalbumin should be performed annually. (Level III, Grade A)

### **Measure #163 - Diabetes: Foot Exam**

#### **RATIONALE:**

Diabetes mellitus (diabetes) is a group of diseases characterized by high blood glucose levels caused by the body's inability to correctly produce or utilize the hormone insulin. It is recognized as a leading cause of death and disability in the U.S. and is highly underreported as a cause of death. Diabetes may cause life-threatening, life-ending or life-altering complications, including poor circulation, nerve damage or neuropathy in the feet and eventual amputation. Nearly 60-70 percent of diabetics suffer from mild or severe nervous system damage. The consensus among established clinical guidelines is that patients with diabetes should have a foot exam soon after diagnosis and annually thereafter. Comprehensive foot care programs can lower amputation rates by 45-85 percent (American Diabetes Association 2009).

#### **CLINICAL RECOMMENDATION STATEMENTS:**

American Diabetes Association (2009) Guidelines/Recommendations: Perform annual comprehensive foot examination to identify risk factors predictive of ulcers and amputations. The foot examination should include inspection, assessment of foot pulses, and testing for loss of protective sensation (10-g monofilament plus testing any one of: vibration using 128-Hz tuning fork, pinprick sensation, ankle reflexes, or vibration perception threshold).

## CHRONIC KIDNEY DISEASE (CKD) MEASURES GROUP OVERVIEW

### 2014 PQRS OPTIONS FOR MEASURES GROUPS:

#### 2014 PQRS MEASURES IN THE CHRONIC KIDNEY DISEASE (CKD) MEASURES GROUP:

- #110. Preventive Care and Screening: Influenza Immunization
- #121. Adult Kidney Disease: Laboratory Testing (Lipid Profile)
- #122. Adult Kidney Disease: Blood Pressure Management
- #123. Adult Kidney Disease: Patients On Erythropoiesis-Stimulating Agent (ESA) - Hemoglobin Level > 12.0 g/dL

#### 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.

**G8487:** I intend to report the Chronic Kidney Disease (CKD) 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, 2014 OR July 1 through December 31, 2014).
- Patient sample criteria for the CKD Measures Group are patients aged 18 years and older with a specific diagnosis of CKD accompanied by a specific patient encounter:

#### One of the following diagnosis codes indicating stage 4 or 5 chronic kidney disease:

**ICD-9-CM [for use 1/1/2014 – 9/30/2014]:** 585.4, 585.5

**ICD-10-CM [for use 10/1/2014 – 12/31/2014]:** N18.4, N18.5

*Note: The diagnosis code for stage 3 chronic kidney disease (583.3) is not included within the common denominator for reporting the CKD Measures Group*

#### Accompanied by:

**One of the following patient encounter codes:** 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99304, 99305, 99306, 99307, 99308, 99309, 99310, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350

- Report a numerator option on **all applicable** measures within the CKD Measures Group for each patient within the eligible professional's patient sample. Report measures #122 and #123 once during the month the patient is included in the patient sample population. For these measures, subsequent months do not need to be reported.
- Measure #122 only needs to be reported when the patient also has the following diagnosis code indicating proteinuria:  
**ICD-9-CM [for use 1/1/2014 – 9/30/2014]:** 791.0  
**ICD-10-CM [for use 10/1/2014 - 12/31/2014]:** R80.1 R80.8, R80.9
- Instructions for qualifying numerator option reporting for each of the measures within the Chronic Kidney Disease (CKD) 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 G8495:** All quality actions for the applicable measures in the CKD Measures Group have been performed for this patient

- This measures group contains one or more inverse measures. An inverse measure is a measure that represents a poor clinical quality action as meeting performance for the measure. For these measures, a lower performance rate indicates a higher quality of clinical care. Composite codes for measures groups that contain inverse measures are only utilized when the appropriate quality clinical care is given.
- The composite code for this measures group may be reported when codes in the summary table below are applicable for reporting of each measure within the measures group.

Measure	#110	#121	#122	#123*
<b>QDC options for acceptable use of the composite QDC</b>	G8482	G8725	G8476	4172F or G0910 & 4171F

\*Indicates an inverse measure

- To report satisfactorily the CKD Measures Group 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.
- Measure #110 only needs to be reported a minimum of once during the reporting period when the patient's visit included in the patient sample population is between January and March for the 2013-2014 influenza season **OR** between October and December for the 2014-2015 influenza season. When the patient's office visit is between April and September, Measure #110 is not applicable and will not affect the eligible provider's reporting or performance rate. Measure #110 need only be reported on patients 18 years and older.
- 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. 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 Aged 65 Years and Older 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. 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. When a lower rate indicates better performance, such as Measure #123, a 0% performance rate will be counted as satisfactorily reporting (100% performance rate would not 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 groups option.

**▲ Measure #110 (NQF 0041): Preventive Care and Screening: Influenza Immunization**

**DESCRIPTION:**

Percentage of patients aged 6 months and older seen for a visit between October 1 and March 31 who received an influenza immunization OR who reported previous receipt of an influenza immunization

**NUMERATOR:**

Patients who received an influenza immunization OR who reported previous receipt of an influenza immunization

**Numerator Instructions:**

- If reporting this measure between January 1, 2014 and March 31, 2014, G-code **G8482** should be reported when the influenza immunization is ordered or administered to the patient during the months of August, September, October, November, and December of 2013 or January, February, and March of 2014 for the flu season ending March 31, 2014.
- If reporting this measure between October 1, 2014 and December 31, 2014, G-code **G8482** should be reported when the influenza immunization is ordered or administered to the patient during the months of August, September, October, November, and December of 2014 for the flu season ending March 31, 2015.
- Influenza immunizations administered during the month of August or September of a given flu season (either 2013-2014 flu season OR 2014-2015 flu season) can be reported when a visit occurs during the flu season (October 1 - March 31). In these cases, **G8482** should be reported.

**Definition:**

**Previous Receipt** - Receipt of the current season's influenza immunization from another provider OR from same provider prior to the visit to which the measure is applied (typically, prior vaccination would include influenza vaccine given since August 1st).

**Numerator Options:**

Influenza immunization administered or previously received (**G8482**)

**OR**

Influenza immunization was not ordered or administered for reasons documented by clinician (e.g., patient allergy or other medical reason, patient declined or other patient reasons, or other system reasons) (**G8483**)

**OR**

Influenza immunization ordered or recommended (to be given at alternate location or alternate provider); vaccine not available at time of visit (**G0919**)

**OR**

Influenza immunization was **not** ordered or administered, reason not given (**G8484**)



**▲ Measure #121 (NQF 1668): Adult Kidney Disease: Laboratory Testing (Lipid Profile)**

**DESCRIPTION:**

Percentage of patients aged 18 years and older with a diagnosis of chronic kidney disease (CKD) (stage 3, 4 or 5, not receiving Renal Replacement Therapy [RRT]) who had a fasting lipid profile performed at least once within a 12-month period

**NUMERATOR:**

Patients who had a fasting lipid profile performed at least once within a 12-month period

**Definition:**

**RRT (Renal Replacement Therapy)** - For the purposes of this measure, RRT includes hemodialysis, peritoneal dialysis, and kidney transplantation.

**Numerator Options:**

Fasting lipid profile performed (Triglycerides, LDL-C, HDL-C, and Total Cholesterol) **(G8725)**

**OR**

Clinician has documented reason for not performing fasting lipid profile (e.g., patient declined, other patient reasons) **(G8726)**

**OR**

Fasting lipid profile not performed, reason not given **(G8728)**

**▲ Measure #122: Adult Kidney Disease: Blood Pressure Management**

**DESCRIPTION:**

Percentage of patient visits for those patients aged 18 years and older with a diagnosis of chronic kidney disease (CKD) (stage 3, 4 or 5, not receiving Renal Replacement Therapy [RRT]) and proteinuria with a blood pressure < 130/80 mmHg OR  $\geq$  130/80 mmHg with a documented plan of care

**NUMERATOR:**

Patient visits with blood pressure < 130/80 mmHg OR  $\geq$  130/80 mmHg with a documented plan of care

**Numerator Instructions:** If multiple blood pressure measurements are taken at a single visit, use the most recent measurement taken at that visit.

**Definitions:**

**Proteinuria** - > 300 mg of albumin in the urine per 24 hours OR albumin creatinine ratio (ACR) > 300 mcg/mg creatinine OR protein to creatinine ratio > 0.3 mg/mg creatinine.

**Plan of Care** - A documented plan of care should include one or more of the following: recheck blood pressure within 90 days; initiate or alter pharmacologic therapy for blood pressure control; initiate or alter non-pharmacologic therapy (lifestyle changes) for blood pressure control; documented review of patient's home blood pressure log which indicates that patient's blood pressure is or is not well controlled.

**RRT (Renal Replacement Therapy)** - For the purposes of this measure, RRT includes hemodialysis, peritoneal dialysis, and kidney transplantation.

**Numerator Options:**

Most recent blood pressure has a systolic measurement of < 130 mmHg and a diastolic measurement of < 80 mmHg (**G8476**)

OR

Most recent blood pressure has a systolic measurement of  $\geq$  130 mmHg and/or a diastolic measurement of  $\geq$  80 mmHg (**G8477**)

**AND**

Elevated blood pressure plan of care documented (**0513F**)

**OR**

Blood pressure measurement **not** performed or documented, reason not given (**G8478**)

OR

**No** documentation of elevated blood pressure plan of care, reason not otherwise specified (**0513F with 8P**)

**AND**

Most recent blood pressure has a systolic measurement of  $\geq$  130 mmHg and/or a diastolic measurement of  $\geq$  80 mmHg (**G8477**)

**▲ Measure #123 (NQF 1666): Adult Kidney Disease: Patients On Erythropoiesis-Stimulating Agent (ESA) - Hemoglobin Level > 12.0 g/dL**

**DESCRIPTION:**

Percentage of calendar months within a 12-month period during which a hemoglobin level is measured for patients aged 18 years and older with a diagnosis of advanced chronic kidney disease (CKD) (stage 4 or 5, not receiving Renal Replacement Therapy [RRT]) or End Stage Renal Disease (ESRD) (who are on hemodialysis or peritoneal dialysis) who are also receiving erythropoiesis-stimulating agent (ESA) therapy AND have a hemoglobin level > 12.0 g/dL

**NUMERATOR:**

Calendar months during which patients have a hemoglobin level > 12.0 g/dL

**Numerator Instructions:** The hemoglobin values used for this measure should be the most recent (last) hemoglobin value recorded for each calendar month.

**Note:** A lower calculated performance rate for this measure indicates better clinical care or control.

**Definition:**

**RRT (Renal Replacement Therapy)** - For the purposes of this measure, RRT includes hemodialysis, peritoneal dialysis, and kidney transplantation.

**Numerator Options:**

Most Recent Hemoglobin (Hgb) level > 12.0 g/dL (**G0908**)

**AND**

Patient receiving Erythropoiesis-Stimulating Agents (ESA) therapy (**4171F**)

**OR**

Hemoglobin level measurement **not** documented, reason not given (**G0909**)

**AND**

Patient receiving Erythropoiesis-Stimulating Agents (ESA) therapy (**4171F**)

**OR**

Patient not receiving Erythropoiesis-Stimulating Agents (ESA) therapy (**4172F**)

**OR**

Most Recent Hemoglobin Level ≤ 12.0 g/dL (**G0910**)

**AND**

Patient receiving Erythropoiesis-Stimulating Agents (ESA) therapy (**4171F**)

## CHRONIC KIDNEY DISEASE (CKD) MEASURES GROUP RATIONALE AND CLINICAL RECOMMENDATION STATEMENTS

### **Measure #110 - Preventive Care and Screening: Influenza Immunization**

#### **RATIONALE:**

Annual influenza vaccination is the most effective method for preventing influenza virus infection and its complications. Influenza vaccine is recommended for all persons aged  $\geq 6$  months who do not have contraindications to vaccination.

#### **CLINICAL RECOMMENDATION STATEMENTS:**

The following evidence statements are quoted verbatim from the referenced clinical guidelines.

Routine annual influenza vaccination is recommended for all persons aged  $\geq 6$  months. To permit time for production of protective antibody levels, vaccination should optimally occur before onset of influenza activity in the community, and providers should offer vaccination as soon as vaccine is available. Vaccination also should continue to be offered throughout the influenza season. (CDC/ACIP, 2011)

### **Measure #121 - Adult Kidney Disease: Laboratory Testing (Lipid Profile)**

#### **RATIONALE:**

The principal reason to evaluate dyslipidemias in patients with CKD is to detect abnormalities that may be treated to reduce the incidence of ACVD. A number of observational studies have reported that various dyslipidemias are associated with decreased kidney function in the general population and in patients with CKD. (KDOQI)

Many factors influence the prevalence of dyslipidemias in CKD. Changes in proteinuria, GFR, and treatment of CKD may alter lipoprotein levels. Therefore, it is prudent to evaluate dyslipidemias more often than is recommended in the general population. (KDOQI)

#### **CLINICAL RECOMMENDATION STATEMENTS:**

The following evidence statements are quoted verbatim from the referenced clinical guidelines.

Only selected portions of the clinical guidelines are quoted here; for more details, please refer to the full guideline.

All adults and adolescents with CKD should be evaluated for dyslipidemias. (Grade B) (KDOQI, 2003)

For adults and adolescents with CKD, the assessment of dyslipidemias should include a complete fasting lipid profile with total cholesterol, LDL, HDL, and triglycerides. (Grade B) (KDOQI, 2003)

If a patient has  $GFR \leq 30$  ml/min/1.73m<sup>2</sup>, then s/he should be monitored for dyslipidemias; measurements should include triglycerides, LDL, HDL, and total cholesterol. (B) (RPA, 2002)

### **Measure #122 - Adult Kidney Disease: Blood Pressure Management**

#### **RATIONALE:**

Accurate measurement in CKD is especially important, because hypertension is more common in CKD, and because JNC 7 identifies CKD as a "compelling indication" for more aggressive antihypertensive therapy because of the higher risk of CVD in CKD than in the general population. (KDOQI)

Target blood pressure in nondiabetic kidney disease should be  $< 130/80$  mmHg. (KDOQI)

The requirement for proteinuria in the denominator for these measures is based on growing controversy regarding the appropriateness of prior recommendations for a BP  $< 130/80$  and for the use of ACE inhibition/angiotensin receptor blockade in non-proteinuric kidney disease. (Chang et al, 2010 and Agarwal, 2011)

## **CLINICAL RECOMMENDATION STATEMENTS:**

Only selected portions of the clinical guidelines are quoted here; for more details, please refer to the full guideline.

Blood pressure should be measured at each health encounter (Grade A). (KDOQI, 2004)

If a patient has  $GFR \leq 30$  ml/min/1.73m<sup>2</sup>, then his/her blood pressure should be checked with every clinic visit (Grade A). (RPA, 2002)

If a patient has a  $GFR \leq 30$  ml/min/1.73m<sup>2</sup>, and if blood pressure is determined to be elevated (systolic > 130 mmHg OR diastolic > 80 mmHg), then she/he should receive intensified antihypertensive therapy (Grade B). (RPA, 2002)

Patients with CKD should be considered in the “highest-risk” group for CVD for implementing recommendations for pharmacological therapy, irrespective of cause of CKD (Grade A). (KDOQI, 2004)

Target blood pressure for CVD risk reduction in CKD and diabetic/nondiabetic kidney disease should be < 130/80 mmHg (Grade B). (KDOQI, 2004)

All antihypertensive agents can be used to lower blood pressure in CKD. Multidrug regimens will be necessary in most patients with CKD to achieve therapeutic goals. Patients with specific causes of kidney disease and CVD will benefit from specific classes of agents. (KDOQI, 2004)

All classes of antihypertensive agents are effective in lowering blood pressure in CKD. Antihypertensive agents should be prescribed as follows, when possible: Preferred agents for CKD should be used first (Grade A); Diuretics should be included in the antihypertensive regimen in most patients (Grade A); Choose additional agents based on cardiovascular disease-specific indications to achieve therapeutic and preventive targets and to avoid side-effects and interactions (Grade B). (KDOQI, 2004)

Lifestyle modifications recommended for CVD risk reduction should be recommended as part of the treatment regimen. (Grade B). (KDOQI, 2004)

Elevated blood pressure must be confirmed on repeated visits before characterizing an individual as having hypertension. Blood pressure can be determined by resting blood pressure measurement in the health-care provider's office (casual blood pressure [CBP]), self-measured blood pressure (SMBP), or ambulatory blood pressure monitoring (ABPM). Blood pressure should be measured according to the recommendations for indirect measurement of arterial blood pressure of the American Heart Association and Seventh Report of the Joint National Committee on the Prevention, Detection, Evaluation and Treatment of High Blood Pressure (JNC 7) (Grade A); Patients should be taught to measure and record their blood pressure, whenever possible (Grade C). (KDOQI, 2004)

High blood pressure is both a cause and a complication of chronic kidney disease. As a complication, high blood pressure may develop early during the course of chronic kidney disease and is associated with adverse outcomes—in particular, faster loss of kidney function and development of cardiovascular disease.

- Blood pressure should be closely monitored in all patients with chronic kidney disease.
- Treatment of high blood pressure in chronic kidney disease should include specification of target blood pressure levels, nonpharmacologic therapy, and specific antihypertensive agents for the prevention of progression of kidney disease (Guideline 13) and development of cardiovascular disease (Guideline 15). (KDOQI, 2002)
- Interventions to slow the progression of kidney disease should be considered in all patients with chronic kidney disease.
- Interventions that have been proven to be effective include:
  - (1) Strict glucose control in diabetes;
  - (2) Strict blood pressure control;
  - (3) Angiotensin-converting enzyme inhibition or angiotensin-2 receptor blockade. (KDOQI, 2002)

**Measure #123 - Adult Kidney Disease: Patients On Erythropoiesis-Stimulating Agent (ESA) – Hemoglobin Level > 12.0g/dL**

**RATIONALE:**

Anemia is a common complication of chronic kidney disease (CKD). The prevalence of anemia varies with the degree of renal impairment in predialysis patients with CKD, but once end-stage kidney failure occurs, all patients are eventually affected. Anemia develops once renal function decreases to < 50% because of a deficiency in endogenous erythropoietin (EPO) production by the kidney, decreased red cell survival, blood losses, and increased red blood cell destruction once the patient begins dialysis treatment, particularly hemodialysis. Anemia reduces physical capacity, well-being, neurocognitive function, and energy level and worsens quality of life both in predialysis and dialysis patients. Anemia also induces adaptive cardiovascular mechanisms to maintain tissue oxygen supply. This leads to left ventricular hypertrophy, left ventricular dilation, and myocardial ischemia, which are risk factors for cardiovascular disease and death. It is plausible that reversing anemia may reduce this risk. (Strippoli et al, 2004)

In clinical practice for CKD patients, determination of the frequency and size of sequential ESA dose adjustments in relationship to a threshold Hgb or target Hgb level; and an interpretation of previous therapeutic trends and responsiveness to ESA therapy is critical. (KDOQI, 2007)

Improvement in quality of life and avoidance of transfusion are treatment benefits from determining the appropriate hemoglobin level, and there is potential for harm when aiming for high Hgb targets. The potential harms are based on evidence from RCTs suggesting that assignment to Hgb targets greater than 13.0 g/dL may increase the risk of life threatening adverse events. (KDOQI, 2007)

**CLINICAL RECOMMENDATION STATEMENTS:**

Only selected portions of the clinical guidelines are quoted here; for more details, please refer to the full guideline.

In the opinion of the [KDOQI] Work Group, in dialysis and nondialysis patients with CKD receiving ESA therapy, the selected Hgb target should generally be in the range of 11.0 to 12.0 g/dL. (Clinical Practice RECOMMENDATION) (KDOQI, 2007)

In dialysis and nondialysis patient with CKD receiving ESA therapy, the Hgb target should not be greater than 13.0 g/dL. (Clinical Practice GUIDELINE—MODERATELY STRONG EVIDENCE) (KDOQI, 2007)

## PREVENTIVE CARE MEASURES GROUP OVERVIEW

### 2014 PQRS OPTIONS FOR MEASURES GROUPS:

#### **2014 PQRS MEASURES IN THE PREVENTIVE CARE MEASURES GROUP:**

- #39. Screening or Therapy for Osteoporosis for Women Aged 65 Years and Older
- #48. Urinary Incontinence: Assessment of Presence or Absence of Urinary Incontinence in Women Aged 65 Years and Older
- #110. Preventive Care and Screening: Influenza Immunization
- #111. Pneumonia Vaccination Status for Older Adults
- #112. Breast Cancer Screening
- #113. Colorectal Cancer Screening
- #128. Preventive Care and Screening: Body Mass Index (BMI) Screening and Follow-Up
- #173. Preventive Care and Screening: Unhealthy Alcohol Use - Screening
- #226. Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention

#### **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.

**G8486:** I intend to report the Preventive Care 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, 2014 OR July 1 through December 31, 2014).
- Patient sample criteria for the Preventive Care Measures Group are for patients aged 50 years and older with a specific patient encounter:  
  
**One of the following patient encounter codes:** 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215
- Report a numerator option on **all applicable** measures within the Preventive Care Measures Group for each patient within the eligible professional's patient sample.
- Applicable measures contain patient demographic criteria specific to the measure. For example, Screening or Therapy for Osteoporosis is applicable to *women aged 65 years and older* within the sample population, while the Influenza Vaccination measure within this group is applicable to *all patients* aged 50 years and older. Eligible professionals may find it more efficient to report all measures in the group for each patient within their sample. Reporting measure(s) from the group that are inapplicable to an individual patient will not affect the eligible provider's reporting or performance rate.



Preventive Care Measures Group Demographic Criteria		
Age	Measures for Male Patients	Measures for Female Patients
< 50 years	Patient does not qualify for measures group analysis	Patient does not qualify for measures group analysis
50-64 years	110, 113, 128, 173, 226	110, 112, 113, 128, 173, 226
65-69 years	110, 111, 113, 128, 173, 226	39, 48, 110, 111, 112, 113, 128, 173, 226
70-75 years	110, 111, 113, 128, 173, 226	39, 48, 110, 111, 113, 128, 173, 226
≥ 76 years	110, 111, 128, 173, 226	39, 48, 110, 111, 128, 173, 226

- Instructions for qualifying numerator option reporting for each of the measures within the Preventive Care 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 G8496:** All quality actions for the applicable measures in the Preventive Care Measures Group have been performed for this patient

- To report satisfactorily the Preventive Care 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.
- Measure #112: The measure's 27-month look back period applies to women ages 52-74 (the numerator looks for a mammogram any time on or between October 1, 27 months prior to the measurement period, and December 31 of the measurement period in order to capture women who have had a mammogram every 24 months per clinical guidelines, with a 3-month grace period). Therefore, women ages 50-52 are included in the measure if they had a visit and a mammogram since age 50, but the look-back only applies to patients age 52-74.
- Measure #110 need only be reported a minimum of once during the reporting period when the patient's visit included in the patient sample population is between January and March for the 2013-2014 influenza season **OR** between October and December for the 2014-2015 influenza season. When the patient's office visit is between April and September, Measure #110 is not applicable and will not affect the eligible provider's reporting or performance rate.
- 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 Aged 65 Years and Older 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 groups option.

**\* Measure #39 (NQF 0046): Screening or Therapy for Osteoporosis for Women Aged 65 Years and Older**

**DESCRIPTION:**

Percentage of female patients aged 65 years and older who have a central dual-energy X-ray absorptiometry (DXA) measurement ordered or performed at least once since age 60 or pharmacologic therapy prescribed within 12 months

**NUMERATOR:**

Patients who had a central DXA measurement ordered or performed at least once since age 60 or pharmacologic therapy prescribed within 12 months

**Definitions:**

**Pharmacologic Therapy** – U.S. Food and Drug Administration approved pharmacologic options for osteoporosis prevention and/or treatment of postmenopausal osteoporosis include, in alphabetical order: bisphosphonates (alendronate, ibandronate, and risedronate), calcitonin, estrogens (estrogens and/or hormone therapy), parathyroid hormone [PTH (1-34), teriparatide], and selective estrogen receptor modules or SERMs (raloxifene).

**Prescribed** – Includes patients who are currently receiving medication(s) that follow the treatment plan recommended at an encounter during the reporting period, even if the prescription for that medication was ordered prior to the encounter.

**Numerator Options:**

Patient with central Dual-energy X-Ray Absorptiometry (DXA) results documented or ordered or pharmacologic therapy (other than minerals/vitamins) for osteoporosis prescribed (**G8399**)

**OR**

Clinician documented that patient was not an eligible candidate for screening or therapy (**G8401**)

**OR**

Patient with central Dual-energy X-Ray Absorptiometry (DXA) results **not** documented or **not** ordered or pharmacologic therapy (other than minerals/vitamins) for osteoporosis not prescribed, reason not given (**G8400**)

**\* Measure #48 (NQF 0098): Urinary Incontinence: Assessment of Presence or Absence of Urinary Incontinence in Women Aged 65 Years and Older**

**DESCRIPTION:**

Percentage of female patients aged 65 years and older who were assessed for the presence or absence of urinary incontinence within 12 months

**NUMERATOR:**

Patients who were assessed for the presence or absence of urinary incontinence within 12 months

**Definition:**

**Urinary Incontinence** – Any involuntary leakage of urine.

**Numerator Options:**

Presence or absence of urinary incontinence assessed (**1090F**)

**OR**

Documentation of medical reason(s) for not assessing for the presence or absence of urinary incontinence (**1090F with 1P**)

**OR**

Presence or absence of urinary incontinence **not** assessed, reason not otherwise specified (**1090F with 8P**)

**▲ Measure #110 (NQF 0041): Preventive Care and Screening: Influenza Immunization**

**DESCRIPTION:**

Percentage of patients aged 6 months and older seen for a visit between October 1 and March 31 who received an influenza immunization OR who reported previous receipt of an influenza immunization

**NUMERATOR:**

Patients who received an influenza immunization OR who reported previous receipt of an influenza immunization

**Numerator Instructions:**

- If reporting this measure between January 1, 2014 and March 31, 2014, G-code **G8482** should be reported when the influenza immunization is ordered or administered to the patient during the months of August, September, October, November, and December of 2013 or January, February, and March of 2014 for the flu season ending March 31, 2014.
- If reporting this measure between October 1, 2014 and December 31, 2014, G-code **G8482** should be reported when the influenza immunization is ordered or administered to the patient during the months of August, September, October, November, and December of 2014 for the flu season ending March 31, 2015.
- Influenza immunizations administered during the month of August or September of a given flu season (either 2013-2014 flu season OR 2014-2015 flu season) can be reported when a visit occurs during the flu season (October 1 - March 31). In these cases, **G8482** should be reported.

**Definition:**

**Previous Receipt** - Receipt of the current season's influenza immunization from another provider OR from same provider prior to the visit to which the measure is applied (typically, prior vaccination would include influenza vaccine given since August 1st).

**Numerator Options:**

Influenza immunization administered or previously received (**G8482**)

**OR**

Influenza immunization was not ordered or administered for reasons documented by clinician (e.g., patient allergy or other medical reason, patient declined or other patient reasons, or other system reasons) (**G8483**)

**OR**

Influenza immunization ordered or recommended (to be given at alternate location or alternate provider); vaccine not available at time of visit (**G0919**)

**OR**

Influenza immunization was **not** ordered or administered, reason not given (**G8484**)

◆ Measure #111 (NQF 0043): Pneumonia Vaccination Status for Older Adults

**DESCRIPTION:**

Percentage of patients 65 years of age and older who have ever received a pneumococcal vaccine

**NUMERATOR:**

Patients who have **ever** received a pneumococcal vaccination

**Numerator Options:**

Pneumococcal vaccine administered or previously received (**4040F**)

**OR**

Pneumococcal vaccine was **not** administered or previously received, reason not otherwise specified (**4040F with 8P**)

◆ **Measure #112: Breast Cancer Screening**

**DESCRIPTION:**

Percentage of women 50 through 74 years of age who had a mammogram to screen for breast cancer within 27 months

**NUMERATOR:**

Patients who had one or more mammograms any time on or between October 1, 27 months prior to December 31 of the measurement period, not to precede the patient's 50<sup>th</sup> birthday.

**Numerator Options:**

Screening mammography results documented and reviewed **(3014F)**

**OR**

Documentation of medical reason(s) for not performing a mammogram (i.e., women who had a bilateral mastectomy or two unilateral mastectomies) **(3014F with 1P)**

**OR**

Screening mammography results were **not** documented and reviewed, reason not otherwise specified **(3014F with 8P)**

◆ **Measure #113 (NQF 0034): Colorectal Cancer Screening**

**DESCRIPTION:**

Percentage of patients 50 through 75 years of age who had appropriate screening for colorectal cancer

**NUMERATOR:**

Patients who had at least one or more screenings for colorectal cancer during or prior to the measurement period.

Appropriate screenings are defined by any one of the following criteria below:

- Fecal occult blood test (FOBT) during the measurement period
- Flexible sigmoidoscopy during the measurement period or the four years prior to the measurement period
- Colonoscopy during the measurement period or the nine years prior to the measurement period

**Numerator Options:**

Colorectal cancer screening results documented and reviewed **(3017F)**

**OR**

Documentation of medical reason(s) for not performing a colorectal cancer screening (i.e., diagnosis of colorectal cancer or total colectomy) **(3017F with 1P)**

**OR**

Colorectal cancer screening results were **not** documented and reviewed, reason not otherwise specified **(3017F with 8P)**



◆ **Measure #128 (NQF 0421): Preventive Care and Screening: Body Mass Index (BMI) Screening and Follow-Up**

**DESCRIPTION:**

Percentage of patients aged 18 years and older with a documented BMI during the current 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 encounter

**Normal Parameters:**      Age 65 years and older BMI ≥ 23 and < 30  
   Age 18 – 64 years BMI ≥ 18.5 and < 25

**NUMERATOR:**

Patients with a documented BMI during the encounter or during the previous six months, AND when the BMI is outside of normal parameters, follow-up is documented during the encounter or during the previous six months of the encounter with the BMI outside of normal parameters

**Numerator Instructions:** An eligible professional or their staff is required to measure both height and weight. Both the height and the weight must be measured within the same six months. Self-reported values cannot be used. The documentation of a follow-up plan must be based on the most recent documented BMI within the previous six months.

**Definitions:**

**BMI** – Body mass index (BMI), is a number calculated using the Quetelet index: weight divided by height squared (W/H<sup>2</sup>) and is commonly used to classify weight categories. BMI can be calculated using:

Metric Units: BMI = Weight (kg) / (Height (m) x Height (m))

OR

English Units: BMI = Weight (lb) / (Height (in) x Height (in)) x 703

**Follow-Up Plan** – Proposed outline of treatment to be conducted as a result of a BMI out of normal parameters. A follow-up may include but is not limited to: documentation education, a referral (e.g., a registered dietician, nutritionist, occupational therapist, physical therapist, primary care provider, exercise physiologist, mental health professional, or surgeon), pharmacological interventions, dietary supplements, exercise counseling, or nutrition counseling.

**Not Eligible for BMI Calculation or Follow-Up Plan** – A patient is not eligible if one or more of the following reasons are documented:

- Patient is receiving palliative care
- Patient is pregnant
- Patient refuses BMI measurement (refuses height and/or weight)
- Any other reason documented in the medical record by the provider why BMI calculation or follow-up plan was not appropriate
- 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 Options:**

BMI is documented within normal parameters and no follow-up plan is required (**G8420**)

**OR**

BMI is documented above normal parameters and a follow-up plan is documented (**G8417**)

**OR**

BMI is documented below normal parameters and a follow-up plan is documented (**G8418**)

**OR**

BMI not documented, documentation the patient is not eligible for BMI calculation (**G8422**)

**OR**

BMI is documented as being outside of normal limits, follow-up plan is not documented, documentation the patient is not eligible (**G8938**)

**OR**

BMI **not** documented and no reason is given (**G8421**)

**OR**

BMI documented outside normal parameters, **no** follow-up plan documented, no reason given (**G8419**)

**▲ Measure #173: Preventive Care and Screening: Unhealthy Alcohol Use – Screening**

**DESCRIPTION:**

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

**NUMERATOR:**

Patients who were screened for unhealthy alcohol use at least once within 24 months using a systematic screening method

**Definition:**

**Unhealthy Alcohol Use** – Covers a spectrum that is associated with varying degrees of risk to health. Categories representing unhealthy alcohol use include risky use, problem drinking, harmful use, and alcohol abuse, and the less common but more severe alcoholism and alcohol dependence. Risky use is defined as > 7 standard drinks per week or > 3 drinks per occasion for women and persons > 65 years of age; > 14 standard drinks per week or > 4 drinks per occasion for men ≤ 65 years of age.

**Systematic Screening Method** – A systematic method of assessing for unhealthy alcohol use should be utilized. Systemic screening methods include but are not limited to:

- AUDIT Screening Instrument
- CAGE Screening Instrument
- AUDIT-C Screening Instrument
- Single Item Screening Instrument

Alternative approaches may also include questions regarding quantity/frequency of consumption (ie, drinks per week or drinks per occasion).

**Numerator Options:**

Patient screened for unhealthy alcohol use using a systematic screening method **(3016F)**

**OR**

Documentation of medical reason(s) for not screening for unhealthy alcohol use (eg, limited life expectancy, other medical reasons) **(3016F with 1P)**

**OR**

Unhealthy alcohol use screening **not** performed, reason not otherwise specified **(3016F with 8P)**

**▲ Measure #226 (NQF 0028): Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention**

**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:**

Patient screened for tobacco use AND received tobacco cessation intervention (counseling, pharmacotherapy, or both), if identified as a tobacco user (**4004F**)

**OR**

Current tobacco non-user (**1036F**)

**OR**

Documentation of medical reason(s) for not screening for tobacco use (eg, limited life expectancy, other medical reasons) (**4004F with 1P**)

**OR**

Tobacco screening OR tobacco cessation intervention **not** performed, reason not otherwise specified (**4004F with 8P**)

## PREVENTIVE CARE MEASURES GROUP RATIONALE AND CLINICAL RECOMMENDATION STATEMENTS

### Measure #39 - Screening or Therapy for Osteoporosis for Women Aged 65 Years and Older

#### RATIONALE:

Patients with elevated risk for osteoporosis should have the diagnosis of osteoporosis excluded or be on treatment of osteoporosis.

#### CLINICAL RECOMMENDATION STATEMENTS:

The U.S. Preventive Services Task Force (USPSTF) recommends that women aged 65 and older be screened routinely for osteoporosis. (B Recommendation) (USPSTF)

The USPSTF recommends that routine screening begin at age 60 for women at increased risk for osteoporotic fractures. Use of risk factors, particularly increasing age, low weight, and non-use of estrogen replacement, to screen younger women may identify high-risk women. (B Recommendation) (USPSTF)

BMD measurement should be performed in all women beyond 65 years of age. Dual x-ray absorptiometry of the lumbar spine and proximal femur provides reproducible values at important sites of osteoporosis-associated fracture. These sites are preferred for baseline and serial measurements. (AACE)

The most important risk factors for osteoporosis-related fractures are a prior low-trauma fracture as an adult and a low BMD in patients with or without fractures. (AACE)

BMD testing should be performed on:

- All women aged 65 and older regardless of risk factors
- Younger postmenopausal women with one or more risk factors (other than being white, postmenopausal, and female)
- Postmenopausal women who present with fractures (NQF)

The decision to test for BMD should be based on an individual's risk profile. Testing is never indicated unless the results could influence a treatment decision. (NQF)

Markers of greater osteoporosis and fracture risk include older age, hypogonadism, corticosteroid therapy, and established cirrhosis. (Level B Evidence) (NQF)

The single most powerful predictor of a future osteoporotic fracture is the presence of previous such fractures. (NQF)

Pharmacologic therapy should be initiated to reduce fracture risk in women with:

- BMD T-scores below - 2.0 by central dual x-ray absorptiometry (DXA) with no risk factors
- BMD T-scores below - 1.5 by central dual x-ray absorptiometry (DXA) with one or more risk factors
- A prior vertebral or hip fracture (NQF)

The decision to measure bone density should follow an individualized approach. It should be considered when it will help the patient decide whether to institute treatment to prevent osteoporotic fracture. It should also be considered in patients receiving glucocorticoid therapy for 2 months or more and patients with other conditions that place them at high risk for osteoporotic fracture. (NIH)

The most commonly used measurement to diagnose osteoporosis and predict fracture risk is based on assessment of BMD by dual-energy X-ray absorptiometry (DXA). (NIH)

Measurements of BMD made at the hip predict hip fracture better than measurements made at other sites while BMD measurement at the spine predicts spine fracture better than measures at other sites. (NIH)

## **Measure #48 - Urinary Incontinence: Assessment of Presence or Absence of Urinary Incontinence in Women Aged 65 Years and Older**

### **RATIONALE:**

Female patients may not volunteer information regarding incontinence so they should be asked by their physician.

### **CLINICAL RECOMMENDATION STATEMENTS:**

Strategies to increase recognition and reporting of UI are required and especially the perception that it is an inevitable consequence of aging for which little or nothing can be done. (ICI)

Patients with urinary incontinence should undergo a basic evaluation that includes a history, physical examination, measurement of post-void residual volume, and urinalysis. (ACOG) (Level C)

Health care providers should be able to initiate evaluation and treatment of UI basing their judgment on the results of history, physical examination, post-voiding residual and urinalysis. (ICI) (Grade B for women)

## **Measure #110 - Preventive Care and Screening: Influenza Immunization**

### **RATIONALE:**

Annual influenza vaccination is the most effective method for preventing influenza virus infection and its complications. Influenza vaccine is recommended for all persons aged  $\geq 6$  months who do not have contraindications to vaccination.

### **CLINICAL RECOMMENDATION STATEMENTS:**

The following evidence statements are quoted verbatim from the referenced clinical guidelines.

Routine annual influenza vaccination is recommended for all persons aged  $\geq 6$  months. To permit time for production of protective antibody levels, vaccination should optimally occur before onset of influenza activity in the community, and providers should offer vaccination as soon as vaccine is available. Vaccination also should continue to be offered throughout the influenza season. (CDC/ACIP, 2011)

## **Measure #111 - Pneumonia Vaccination Status for Older Adults**

### **RATIONALE:**

Pneumonia is a common cause of illness and death in the elderly and persons with certain underlying conditions such as heart failure, diabetes, cystic fibrosis, asthma, sickle cell anemia, or chronic obstructive pulmonary disease (NHLBI, 2011). In 1998, an estimated 3,400 adults aged  $> 65$  years died as a result of invasive pneumococcal disease (IPD) (CDC, 2003).

Among the 91.5 million US adults aged  $> 50$  years, 29,500 cases of IPD, 502,600 cases of nonbacteremic pneumococcal pneumonia and 25,400 pneumococcal-related deaths are estimated to occur yearly; annual direct and indirect costs are estimated to total \$3.7 billion and \$1.8 billion, respectively. Pneumococcal disease remains a substantial burden among older US adults, despite increased coverage with 23-valent pneumococcal polysaccharide vaccine, (PPV23) and indirect benefits afforded by PCV7 vaccination of young children (Weycker, et al., 2011).

Vaccination has been found to be effective against bacteremic cases (OR: 0.34; 95% CI: 0.27–0.66) as well as nonbacteremic cases (OR: 0.58; 95% CI: 0.39–0.86). Vaccine effectiveness was highest against bacteremic infections caused by vaccine types (OR: 0.24; 95% CI: 0.09–0.66) (Vila-Corcoles, et al., 2009).

### **CLINICAL RECOMMENDATION STATEMENTS:**

The Advisory Committee on Immunization Practices' (ACIP) Updated Recommendations for Prevention of Invasive Pneumococcal Disease Among Adults Using the 23-Valent Pneumococcal Polysaccharide Vaccine recommends

pneumococcal vaccine for all immunocompetent individuals who are 65 and older or otherwise at increased risk for pneumococcal disease. Routine revaccination is not recommended, but a second dose is appropriate for those who received PPV23 before age 65 years for any indication if at least 5 years have passed since their previous dose (USPSTF, 1989; ACIP, 2010).

The major updates for the 2010 update are: 1) the indications for which PPSV23 vaccination is recommended now include smoking and asthma, and 2) routine use of PPSV23 is no longer recommended for Alaska Natives or American Indians aged <65 years unless they have medical or other indications for PPV23.

### **Measure #112 - Breast Cancer Screening**

#### **RATIONALE:**

Breast cancer ranks as the second leading cause of cancer-related death in women, accounting for nearly 40,000 estimated deaths in 2011 (American Cancer Society, 2011). Deaths from breast cancer have decreased over the years, in part due to early detection using mammography. About 85 percent of breast cancers occur in women who have no family history of breast cancer. Mammography is particularly valuable to the patients, detecting on average about 80-90 percent of breast cancers in women with no symptoms. (BreastCancer.Org, 2012)

#### **CLINICAL RECOMMENDATION STATEMENTS:**

The U.S. Preventive Services Task Force (USPSTF) recommends biennial screening mammography for women aged 50-74 years (B recommendation). The decision to start regular, biennial screening mammography before the age of 50 years should be an individual one and take patient context into account, including the patient's values regarding specific benefits and harms (C recommendation). (USPSTF, 2009) The Task Force concludes the evidence is insufficient to assess the additional benefits and harms of screening mammography in women 75 years and older (I statement).

U.S. Preventive Services Task Force (2009):

Grade: B recommendation. The USPSTF recommends biennial screening mammography for women aged 50 to 74 years.

Grade: C recommendation. The decision to start regular, biennial screening mammography before the age of 50 years should be an individual one and take patient context into account, including the patient's values regarding specific benefits and harms.

Grade: I Statement. The USPSTF concludes that the current evidence is insufficient to assess the additional benefits and harms of screening mammography in women 75 years or older.

Grade: D recommendation. The USPSTF recommends against teaching breast self-examination (BSE).

Grade: I Statement. The USPSTF concludes that the current evidence is insufficient to assess the additional benefits and harms of clinical breast examination (CBE) beyond screening mammography in women 40 years or older.

Grade: I Statement. The USPSTF concludes that the current evidence is insufficient to assess the additional benefits and harms of either digital mammography or magnetic resonance imaging (MRI) instead of film mammography as screening modalities for breast cancer.

### **Measure #113 - Colorectal Cancer Screening**

#### **RATIONALE:**

An estimated 142,570 men and women were diagnosed with colon cancer in 2010. In the same year, 51,370 were estimated to have died from the disease, making colorectal cancer the third leading cause of cancer death in the United States (American Cancer Society 2010).

Screening for colorectal cancer is extremely important as there are no signs or symptoms of the cancer in the early stages. If the disease is caught in its earliest stages, it has a five-year survival rate of 91%; however, the disease is often not caught this early. While screening is extremely effective in detecting colorectal cancer, it remains underutilized (American Cancer Society 2010).

Fecal occult blood tests, colonoscopy, and flexible sigmoidoscopy are shown to be effective screening methods (United States Preventive Services Task Force, 2008). Colorectal screening of individuals with no symptoms can identify polyps whose removal can prevent more than 90% of colorectal cancers (Rozen 2004).

Studies have shown that the cost-effectiveness of colorectal cancer screening is \$40,000 per life year gained, which is similar to the cost-effectiveness of mammography for breast cancer screening (Hawk and Levin 2005).

#### **CLINICAL RECOMMENDATION STATEMENTS:**

The United States Preventive Services Task Force (2008):

[1]The USPSTF recommends screening for colorectal cancer using fecal occult blood testing, sigmoidoscopy, or colonoscopy in adults, beginning at age 50 years and continuing until age 75 years (A recommendation).

[2]The USPSTF concludes that the evidence is insufficient to assess the benefits and harms of computed tomographic (CT) colonography and fecal DNA testing as screening modalities for colorectal cancer (I statement).

The American Cancer Society, The American College of Radiology, and the U.S. Multi-Society Task Force on Colorectal Cancer (Levin et al. 2008):

Tests that Detect Adenomatous Polyps and Cancer:

- [1]Colonoscopy (every 10 yrs)
- [2]Flexible sigmoidoscopy (every 5 yrs)
- [3]fecal occult blood tests (fecal occult blood test (FOBT))
- [4]Double contrast barium enema (DCBE) (every 5 yrs)
- [5]Computed tomographic colonography (CTC) (every 5 years)

Tests that Primarily Detect Cancer:

- [1] guaiac fecal occult blood test (gFOBT) with high sensitivity for cancer (annually)
- [2] fecal immunochemical test (FIT) with high sensitivity for cancer (annually)
- [3] stool DNA (sDNA) with high sensitivity for cancer (interval uncertain)

Modalities not approved:

- [1] Single digital rectal examination fecal occult blood test (FOBT) has a poor sensitivity for CRC and should not be performed as a primary screening method
- [2] Studies evaluating virtual colonoscopy and fecal DNA testing for CRC screening have yielded conflicting results and therefore cannot be recommended

#### **Measure #128 - Preventive Care and Screening: Body Mass Index (BMI) Screening and Follow-Up**

##### **RATIONALE:**

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) reported that 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).

Flegal, Carroll, Kit and Ogden (2012) reported the prevalence of BMI-defined obesity in adults is high and continues to exceed 30% in most sex-age groups. In addition to the continued high prevalence rate for adults in general, there has been 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).

Finkelstein, Trogon, 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.

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 Health E-Stat, Fryer and Ogden reported that poor nutrition or underlying health conditions can result in underweight. Results from the 2007-2010 National Health and Nutrition Examination Survey (NHANE), 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).

Ranhoff, Gjoen and Mowe (2005) recommended using BMI < 23 for the elderly to identify positive results with malnutrition screens and poor nutritional status.

#### **CLINICAL RECOMMENDATION STATEMENTS:**

Although multiple clinical recommendations addressing obesity have been developed by professional organizations, societies and associations, two recommendations have been identified which exemplify the intent of the measure and address the numerator and denominator.

The US Preventive Health Services Task Force (USPSTF) recommends screening all adults (aged 18 years and older) for obesity. Clinicians should offer or refer patients with a BMI of 30 or higher to intensive, multicomponent behavioral interventions. This is a B recommendation (Moyer, 2012)

As cited in Wilkinson et al. (2012), Institute for Clinical Systems Improvement (ICSI) Preventive Services for Adults, Obesity Screening (Level II) Recommendation provides the following guidance:

- Record height, weight and calculate body mass index at least annually
- A BMI greater or equal to 30 is defined as obese
- A BMI of 25-29 is defined as overweight
- Intensive intervention for obese individuals, based on BMI, is recommended by the U.S. Preventive Services to help control weight.

#### **Measure #173 - Preventive Care and Screening: Unhealthy Alcohol Use - Screening**

##### **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.

##### **CLINICAL RECOMMENDATION STATEMENTS:**

The USPSTF strongly recommends screening and behavioral counseling interventions to reduce alcohol misuse by adults, including pregnant women, in primary care settings. (B Recommendation) (USPSTF, 2004)

During new patient encounters and at least annually, patients in general and mental healthcare settings should be screened for at-risk drinking, alcohol use problems and illnesses, and any tobacco use. (NQF, 2007)

All patients identified with alcohol use in excess of National Institute on Alcohol Abuse and Alcoholism guidelines and/or any tobacco use should receive brief motivational counseling intervention by a healthcare worker trained in this technique. (NQF, 2007)

### **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)

## CORONARY ARTERY BYPASS GRAFT (CABG) MEASURES GROUP OVERVIEW

### 2014 PQRS OPTIONS FOR MEASURES GROUPS:

#### 2014 PQRS MEASURES IN CORONARY ARTERY BYPASS GRAFT (CABG) MEASURES GROUP:

- #43. Coronary Artery Bypass Graft (CABG): Use of Internal Mammary Artery (IMA) in Patients with Isolated CABG Surgery
- #44. Coronary Artery Bypass Graft (CABG): Preoperative Beta-Blocker in Patients with Isolated CABG Surgery
- #164. Coronary Artery Bypass Graft (CABG): Prolonged Intubation
- #165. Coronary Artery Bypass Graft (CABG): Deep Sternal Wound Infection Rate
- #166. Coronary Artery Bypass Graft (CABG): Stroke
- #167. Coronary Artery Bypass Graft (CABG): Postoperative Renal Failure
- #168. Coronary Artery Bypass Graft (CABG): Surgical Re-Exploration
- #169. Coronary Artery Bypass Graft (CABG): Anti-Platelet Medications at Discharge
- #170. Coronary Artery Bypass Graft (CABG): Beta-Blockers Administered at Discharge
- #171. Coronary Artery Bypass Graft (CABG): Anti-Lipid Treatment at Discharge

#### 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.

**G8544:** I intend to report the Coronary Artery Bypass Graft (CABG) Measures Group

- Report the patient sample method:  
**20 Patient Sample Method:** 20 unique procedures (patients – a majority of which must be Medicare Part B FFS [fee for service] patients) meeting patient sample criteria for the measures group during the reporting period (January 1 through December 31, 2014 **OR** July 1 through December 31, 2014).
- Patient sample criteria for the CABG Measures Group are patients aged 18 years and older that have a specific procedure for isolated CABG performed:

**One of the following procedure codes indicating coronary artery bypass graft:** 33510, 33511, 33512, 33513, 33514, 33516, 33517, 33518, 33519, 33521, 33522, 33523, 33533, 33534, 33535, 33536

- Measure #167 need only be reported when the patient does not have a documented history of renal failure or baseline serum creatinine  $\geq 4.0$  mg/dL. Measure #169, #170, and #171 need only be reported when the patient is not deceased prior to discharge. Therefore, these measures are only applicable to a patient when these additional criteria are indicated.
- Report a numerator option on **all applicable** measures within the CABG Measures Group for each procedure (patient) within the eligible professional's patient sample.
- Instructions for qualifying numerator option reporting for each of the measures within the Coronary Artery Bypass Graft (CABG) 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 G8497:** All quality actions for the applicable measures in the Coronary Artery Bypass Graft (CABG) Measures Group have been performed for this patient

This measures group contains one or more inverse measures. An inverse measure is a measure that represents a poor clinical quality action as meeting performance for the measure. For these measures, a lower performance rate indicates a higher quality of clinical care. Composite codes for measures groups that contain inverse measures are only utilized when the appropriate quality clinical care is given.

The composite code for this measures group may be reported when codes in the summary table below are applicable for reporting of each measure within the measures group.

Measure	#43	#44	#164*	#165*	#166*	#167*	#168*	#169	#170	#171
<b>QDC options for acceptable use of the composite QDC</b>	4110F	4115F	G8570	G8572	G8574	G8576	G8578	G8579	G8582	G8585

\*Indicates an inverse measure.

- To report satisfactorily the CABG Measures Group it requires **all applicable** measures for each patient within the eligible professional's patient sample to be reported each time an isolated CABG procedure is performed 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. When a lower rate indicates better performance, such as Measure #164, a 0% performance rate will be counted as satisfactorily reporting (100% performance rate would not 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 groups option.

**Ω Measure #43 (NQF 0134): Coronary Artery Bypass Graft (CABG): Use of Internal Mammary Artery (IMA) in Patients with Isolated CABG Surgery**

**DESCRIPTION:**

Percentage of patients aged 18 years and older undergoing isolated CABG surgery who received an IMA graft

**NUMERATOR:**

Patients undergoing isolated CABG who received an IMA graft

**Numerator Options:**

Internal mammary artery graft performed for primary, isolated coronary artery bypass graft procedure  
**(4110F)**

**OR**

Documentation of medical reason(s) for not performing an internal mammary artery graft for primary, isolated coronary artery bypass graft procedure. Acceptable medical reasons include: subclavian stenosis, previous cardiac or thoracic surgery, previous mediastinal radiation, emergent or salvage procedure, no left anterior descending artery disease **(4110F with 1P)**

**OR**

Internal mammary artery graft **not** performed for primary, isolated coronary artery bypass graft procedure, reason not otherwise specified **(4110F with 8P)**

**Measure #44 (NQF 0236): Coronary Artery Bypass Graft (CABG): Preoperative Beta-Blocker in Patients with Isolated CABG Surgery**

**DESCRIPTION:**

Percentage of isolated Coronary Artery Bypass Graft (CABG) surgeries for patients aged 18 years and older who received a beta-blocker within 24 hours prior to surgical incision

**NUMERATOR:**

Patients who received a beta-blocker within 24 hours prior to surgical incision of isolated CABG surgeries

**Definition:**

**Medical Reason** - Eligible professional must document specific reason(s) for not administering beta-blockers.

**Numerator Options:**

Beta blocker administered within 24 hours prior to surgical incision **(4115F)**

**OR**

Documentation of medical reason(s) for not administering beta blocker within 24 hours prior to surgical incision (eg, not indicated, contraindicated, other medical reasons) **(4115F with 1P)**

**OR**

Beta blocker **not** administered within 24 hours prior to surgical incision, reason not otherwise specified **(4115F with 8P)**

**Ω Measure #164 (NQF 0129): Coronary Artery Bypass Graft (CABG): Prolonged Intubation**

**DESCRIPTION:**

Percentage of patients aged 18 years and older undergoing isolated CABG surgery who require postoperative intubation > 24 hours

**NUMERATOR:**

Patients undergoing isolated CABG who require intubation > 24 hours following exit from the operating room

**Numerator Instructions:** A lower calculated performance rate for this measure indicates better clinical care or control.

**Numerator Options:**

Prolonged postoperative intubation (> 24 hrs) required (**G8569**)

**OR**

Prolonged postoperative intubation (> 24 hrs) not required (**G8570**)

**Ω Measure #165 (NQF 0130): Coronary Artery Bypass Graft (CABG): Deep Sternal Wound Infection Rate**

**DESCRIPTION:**

Percentage of patients aged 18 years and older undergoing isolated CABG surgery who, within 30 days postoperatively, develop deep sternal wound infection involving muscle, bone, and/or mediastinum requiring operative intervention

**NUMERATOR:**

Patients who, within 30 days postoperatively, develop deep sternal wound infection involving muscle, bone, and/or mediastinum requiring operative intervention. Patient must have **ALL** of the following conditions: 1.) wound opened with excision of tissue (incision and drainage) or re-exploration of mediastinum, 2.) positive culture unless patient is on antibiotics at time of culture or no culture obtained, and 3.) treatment with antibiotics beyond perioperative prophylaxis

**Numerator Instructions:** A lower calculated performance rate for this measure indicates better clinical care or control.

**Numerator Options:**

Development of deep sternal wound infection within 30 days postoperatively (**G8571**)

**OR**

**No** deep sternal wound infection (**G8572**)



**Ω Measure #166 (NQF 0131): Coronary Artery Bypass Graft (CABG): Stroke**

**DESCRIPTION:**

Percentage of patients aged 18 years and older undergoing isolated CABG surgery who have a **postoperative** stroke (i.e., any confirmed neurological deficit of abrupt onset caused by a disturbance in blood supply to the brain) that did not resolve within 24 hours

**NUMERATOR:**

Patients who have a postoperative stroke (i.e., any confirmed neurological deficit of abrupt onset caused by a disturbance in blood supply to the brain) that did not resolve within 24 hours

**Numerator Instructions:** A lower calculated performance rate for this measure indicates better clinical care or control.

**Numerator Options:**

Stroke following isolated CABG surgery (**G8573**)

**OR**

**No** stroke following isolated CABG surgery (**G8574**)

**Ω Measure #167 (NQF 0114): Coronary Artery Bypass Graft (CABG): Postoperative Renal Failure**

**DESCRIPTION:**

Percentage of patients aged 18 years and older undergoing isolated CABG surgery (without pre-existing renal failure) who develop postoperative renal failure or require dialysis

**NUMERATOR:**

Patients who develop postoperative renal failure or require dialysis; (Definition of renal failure/dialysis requirement - patient had acute renal failure or worsening renal function resulting in one of the following: 1) increase of serum creatinine to  $\geq 4.0$  mg/dL or 3x most recent preoperative creatinine level, or 2) a new requirement for dialysis postoperatively)

**Numerator Instructions:** A lower calculated performance rate for this measure indicates better clinical care or control.

**Numerator Options:**

Developed postoperative renal failure or required dialysis (**G8575**)

**OR**

**No** postoperative renal failure/dialysis not required (**G8576**)

**Ω Measure #168 (NQF 0115): Coronary Artery Bypass Graft (CABG): Surgical Re-Exploration**

**DESCRIPTION:**

Percentage of patients aged 18 years and older undergoing isolated CABG surgery who require a return to the operating room (OR) during the current hospitalization for mediastinal bleeding with or without tamponade, graft occlusion, valve dysfunction, or other cardiac reason

**NUMERATOR:**

Patients who require a return to the OR during the current hospitalization for mediastinal bleeding with or without tamponade, graft occlusion, valve dysfunction, or other cardiac reason

**Numerator Instructions:** A lower calculated performance rate for this measure indicates better clinical care or control.

**Numerator Options:**

Re-exploration required due to mediastinal bleeding with or without tamponade, graft occlusion, valve dysfunction, or other cardiac reason (**G8577**)

**OR**

Re-exploration **not** required due to mediastinal bleeding with or without tamponade, graft occlusion, valve dysfunction, or other cardiac reason (**G8578**)

**Ω Measure #169 (NQF 0116): Coronary Artery Bypass Graft (CABG): Antiplatelet Medications at Discharge**

**DESCRIPTION:**

Percentage of patients aged 18 years and older undergoing isolated CABG surgery who were discharged on antiplatelet medication

**NUMERATOR:**

Patients who were discharged on antiplatelet medication

**Numerator Options:**

Antiplatelet medication at discharge (**G8579**)

**OR**

Antiplatelet medication contraindicated (**G8580**)

**OR**

**No** antiplatelet medication at discharge (**G8581**)

**Ω Measure #170 (NQF 0117): Coronary Artery Bypass Graft (CABG): Beta-Blockers Administered at Discharge**

**DESCRIPTION:**

Percentage of patients aged 18 years and older undergoing isolated CABG surgery who were discharged on beta-blockers

**NUMERATOR:**

Patients who were discharged on beta-blockers

**Numerator Options:**

Beta-blocker at discharge (**G8582**)

**OR**

Beta-blocker contraindicated (**G8583**)

**OR**

**No** beta-blocker at discharge (**G8584**)

**Ω Measure #171 (NQF 0118): Coronary Artery Bypass Graft (CABG): Anti-Lipid Treatment at Discharge**

**DESCRIPTION:**

Percentage of patients aged 18 years and older undergoing isolated CABG surgery who were discharged on a statin or other lipid-lowering regimen

**NUMERATOR:**

Patients who were discharged on a statin or other lipid-lowering regimen

**Numerator Options:**

Anti-lipid treatment at discharge (**G8585**)

**OR**

Anti-lipid treatment contraindicated (**G8586**)

**OR**

**No** anti-lipid treatment at discharge (**G8587**)

## CORONARY ARTERY BYPASS GRAFT MEASURES GROUP RATIONALE AND CLINICAL RECOMMENDATION STATEMENTS

### **Measure #43 - Coronary Artery Bypass Graft (CABG): Use of Internal Mammary Artery (IMA) in Patients with Isolated CABG Surgery**

#### **RATIONALE:**

A major innovation has been the introduction of off-bypass CABG, which has reduced the post-procedure length of stay in some centers to between 2 and 3 days. In some centers, this has led to a total 3-month cost for single-vessel coronary bypass that is not significantly different from the total 3-month cost for angioplasty of single-vessel disease. Considering the favorable long-term patency of an internal mammary artery (IMA) graft to the LAD, the cost reductions possible with off-bypass CABG may improve the relative cost-effectiveness of coronary bypass compared with either medical therapy or percutaneous techniques, particularly for symptomatic, proximal LAD disease.

#### **CLINICAL RECOMMENDATION STATEMENTS:**

##### *Class I*

In every patient undergoing CABG, the left internal mammary artery (IMA) should be given primary consideration for revascularization of the left anterior descending (LAD) artery. (*Level of Evidence: B*)

### **Measure #44 - Coronary Artery Bypass Graft (CABG): Preoperative Beta-Blocker in Patients with Isolated CABG Surgery**

#### **RATIONALE:**

Postoperative atrial fibrillation (POAF) is a common complication following cardiac surgery, occurring in 25-40% of patients (Crystal, 2004, Burgess, 2006).

POAF has been associated with increased rates of post-operative morbidity and mortality and consequently, increased costs (Mariscalco, 2008, Crystal, 2004, Bramer, 2010).

Prophylactic administration of beta-blockers have been shown to reduce the risk of POAF and mortality following isolated coronary artery bypass graft surgery (Connolly, 2003, Mariscalco, 2008, Ferguson, 2002).

Khan's meta-analysis of RCTs found that "Preoperative BB initiation resulted in 52% reduction in the incidence of AF as compared to controls, however these results were not statistically significant." ElBardissi (2012) showed a 19.5% increase in preoperative use of beta-blockers from 2000-2009.

Coronary revascularization, comprising coronary artery bypass graft (CABG) surgery and percutaneous coronary intervention (PCI), is among the most common major medical procedures provided by the US health care system, with more than 1 million procedures performed annually. It is also among the most costly (Medicare inpatient payments to hospitals for coronary revascularizations exceeded \$6.7 billion in fiscal year 2006, an amount larger than the reimbursement for any other medical or surgical procedure) (Epstein, 2011).

#### **CLINICAL RECOMMENDATION STATEMENTS:**

##### Preoperative Beta-blockers

##### Class I

1. Beta-blockers should be administered for at least 24 hours before CABG to all patients without contraindications to reduce the incidence or clinical sequelae of postoperative AF. (*Level of Evidence: B*), (ACCF/AHA, 2011)

##### Class IIa

1. Preoperative use of beta-blockers in patients without contraindications, particularly in those with an LV ejection fraction (LVEF) greater than 30%, can be effective in reducing the risk of in-hospital mortality. (*Level of Evidence: B*), (ACCF/AHA, 2011)

2. Beta-blockers can be effective in reducing the incidence of perioperative myocardial ischemia. (*Level of Evidence: B*), (ACCF/AHA, 2011)

#### Class IIb

1. The effectiveness of preoperative beta-blockers in reducing in-hospital mortality rate in patients with LVEF less than 30% is uncertain. (*Level of Evidence: B*), (ACCF/AHA, 2011)

### **Measure #164 - Coronary Artery Bypass Graft (CABG): Prolonged Intubation**

#### **RATIONALE:**

Based on the STS coronary artery bypass graft (CABG) study population, the morbidity rate associated with prolonged intubation following CABG is 5.96%. Also, prolonged ventilation (defined as > 24 hours) was an independent predictor for readmission to the ICU following CABG surgery (OR=10.53; CI: 6.18 to 17.91). Shorter ventilation times are linked to high quality of care (i.e., reduced in-hospital and operative mortality, as well as better long-term outcomes as compared to prolonged ventilation).

#### **CLINICAL RECOMMENDATION STATEMENTS:**

Extubation greater than (>) 24 hours is considered a “pulmonary complication.” Patients who were extubated after 24 hours had a longer duration of hospital stay and a greater incidence of postoperative complications.

### **Measure #165 - Coronary Artery Bypass Graft (CABG): Deep Sternal Wound Infection Rate**

#### **RATIONALE:**

The most serious hospital-acquired infection associated with coronary artery bypass graft (CABG) surgery is deep sternal wound or deep surgical site infection. The most common bacteria involved are *S. aureus* including increasingly more common methicillin resistant *Staph* (MRS). For CABG only outcomes 1997-1999 the STS dataset reported 0.63% deep sternal wound infection rate in 503,478 records. A report from an academic hospital reported 1.9% deep surgical site infections (Centers for Disease Control and Prevention National Nosocomial Infection Surveillance [CDC NNIS] criteria) in 1,980 patients undergoing isolated CABG or CABG+ procedures from 1996-1999. The Northern New England Cardiovascular Disease Study Group reported an incidence rate for mediastinitis of 1.25% and noted a marked increase in mortality during the first year post-CABG and a threefold increase during a 4-year follow-up period.

#### **CLINICAL RECOMMENDATION STATEMENTS:**

Several risk factors for sternal wound infection have been identified that can be optimized with good care practices: prophylactic antibiotics within 1 hour before incision time (odds ratio 5.3) [see antibiotic timing process measure] and avoiding elevated blood glucose levels (odds ratio 10.2). Surveillance for surgical site infections is a critical hospital function to monitor infection control practices and direct improvement activity.

### **Measure #166 - Coronary Artery Bypass Graft (CABG): Stroke**

#### **RATIONALE:**

Stroke is a devastating complication after coronary bypass surgery. The 1999 American College of Cardiology/American Heart Association (ACC/AHA) guidelines indicate that adverse cerebral outcomes are observed in ~6% of patients after bypass surgery equally divided between 2 types:

- 1) associated with major, focal neurological defects, stupor or coma and 2) evidence of deterioration in intellectual function. Type 1 deficits occur in ~3% of patients and are responsible for 21% mortality.

Reports in the literature on postoperative stroke incidence are difficult to compare because the conditions included in the term “stroke” vary. A standardized definition of stroke will provide common language to compare stroke incidence and evaluate management strategies for reducing this devastating complication.



Reported rates of postoperative cerebral dysfunction range from 0.4% to 13.8% following coronary operations. Complications for patients undergoing emergent CABG or valve surgery were greater than the complication rate for patients undergoing elective CABG or valve surgery. As bypass times increased, so did the incidence of stroke. When bypass time was 90 to 113 minutes, OR =1.59, p=0.022 and when bypass time was > 114 minutes, the OR =2.59, p < 0.001. Outcomes are better when patient age is younger and with beating-heart surgery rather than on-pump surgery.

#### **CLINICAL RECOMMENDATION STATEMENTS:**

The 1999 ACC/AHA guidelines describe strategies for reducing the risk of postoperative stroke such as an aggressive approach to the management of patients with severely diseased ascending aortas identified by intraoperative echocardiographic imaging, prevention or aggressive management of postoperative atrial fibrillation, delay of bypass surgery in the case of a left ventricular mural thrombus or a recent, preoperative CVA and preoperative carotid screening. Patients should carefully be screened for cerebrovascular disease to help prevent stroke and its associated morbidities.

Use of beta-adrenergic antagonists was associated with a lower incidence of stroke in patients undergoing elective CABG (OR=0.45; 95% CI 0.23 to 0.83; p=0.016). Use of antiplatelet agents within 48 hours of surgery is associated with a decreased risk of stroke (OR=0.51, p=0.01). Increased use of beating-heart surgery without cardiopulmonary bypass may lead to a lower prevalence of stroke following cardiac surgery and thus improve patient outcomes.

#### **Measure #167 - Coronary Artery Bypass Graft (CABG): Postoperative Renal Failure**

##### **RATIONALE:**

In 2000, coronary artery bypass graft (CABG) surgery was performed on more than 350,000 patients at a cost of close to \$20 billion. Some degree of Acute Renal Dysfunction (ARD) occurs in about 8% of patients following CABG, and dialysis-dependent renal failure occurs in 0.7% to 3.5% of patients receiving CABG. The latter is associated with substantial increases in morbidity, length of stay, and mortality (odds ratios for mortality range from 15 to 27). ARD is associated with increased morbidity, mortality and length of stay in an ICU following surgery. In addition, Acute Renal Failure occurs in 1.5% of patients undergoing any type of cardiac surgery. There has been a substantial increase in postoperative morbidity, mortality, and cost associated with this relatively common complication, regardless of whether or not this incidence varies much between providers, and there are implications of even a modest decrease in its incidence.

##### **CLINICAL RECOMMENDATION STATEMENTS:**

Acute renal failure following CABG is an intermediate outcome measure for mortality since this complication is independently associated (OR=27) with early mortality following cardiac surgery, even after adjustment for comorbidity and postoperative complications.

#### **Measure #168 - Coronary Artery Bypass Graft (CABG): Surgical Re-Exploration**

##### **RATIONALE:**

In 2000, coronary artery bypass graft (CABG) surgery was performed on more than 350,000 patients at a cost of close to \$20 billion. Re-exploration after surgery is a serious complication that impacts length of stay, efficient use of resources, and increases risk for additional complications and death. As one of several major complications of cardiac surgery, repeat surgery is particularly worrisome for consumers and is an inefficient use of resources.

##### **CLINICAL RECOMMENDATION STATEMENTS:**

Re-exploration after surgery is a serious complication that impacts length of stay, efficient use of resources, and increases risk for additional complications and death. This measure is currently in use by approximately 65% of providers in the United States who perform cardiac surgery and report data to the STS National Database.

#### **Measure #169 - Coronary Artery Bypass Graft (CABG): Antiplatelet Medications at Discharge**

**RATIONALE:**

Use of aspirin soon after coronary artery bypass graft (CABG) is associated with reduced risk of death and ischemic complications involving the heart, brain, kidneys, and gastrointestinal tract. High-risk patients now represent the majority of patients who undergo bypass surgery, giving rise to rates of 15% or higher for complications affecting heart, brain, kidneys, and intestines.

Guidelines from the American College of Chest Physicians recommend the administration of aspirin soon after CABG, specifically 325 mg per day starting six hours after surgery.

**CLINICAL RECOMMENDATION STATEMENTS:**

Evidence-based discharge therapies are underutilized in older patients who underwent CABG during hospitalization for acute myocardial infarction.

**Measure #170 - Coronary Artery Bypass Graft (CABG): Beta-Blockers Administered at Discharge****RATIONALE:**

Upwards of 70% of patients who undergo revascularization procedures have had a myocardial infarction (MI). Cumulative evidence and randomized trials indicate that patients with a previous MI live longer if they are on beta blockers. For many years, patients were taken off beta-blocker medications in preparation for surgery. Evidence from the STS National Database demonstrated that beta blocker use is safe and effective in many CABG patients previously thought to be at high risk for adverse events of beta blocker therapy (women, elderly, diabetes, congestive heart failure). In addition, the use of post-operative b-blockers is now known to protect patients both at one year and long term (greater than 5 years) from death following cardiac surgery. This effect is associated with a 46 % risk reduction in death at one year and 35% risk reduction in mortality during long-term follow-up (Chan et al., 2012).

**CLINICAL RECOMMENDATION STATEMENTS:**

Beta blockade reduces atrial fibrillation complications following CABG. At four to five years, survival was approximately 13% worse in patients who developed postoperative atrial fibrillation ( $p < 0.001$ ).

**Measure #171 - Coronary Artery Bypass Graft (CABG): Anti-Lipid Treatment at Discharge****RATIONALE:**

Atherosclerosis is a chronic disease. Events such as acute myocardial infarction (AMI) and coronary artery bypass graft (CABG) surgery identify patients with the disease, but acute therapy is not sufficient for optimal long-term outcomes. In post-bypass patients, atherosclerosis continues to progress in the native circulation and develops at an accelerated rate in saphenous vein bypass grafts. Management of the chronic disease is critically important in patients with atherosclerosis, such as those undergoing CABG.

The advantages of adherence to the American College of Cardiology/American Heart Association "Get with the Guidelines" program are discussed in a recent article, which also demonstrates both variation in quality and opportunity for improvement (38% compliance with guidelines before program implementation, 98.4% compliance thereafter). The article also discusses educational and process measures used by a major medical center to achieve compliance.

**CLINICAL RECOMMENDATION STATEMENTS:**

Compliance rates for patients receiving personalized follow-up for lipid management over two years were significantly better than in the control group. Lipid lowering in coronary heart disease has been demonstrated distinctively through three trials (CLAS, post-CABG, and CARE) to delay the progression of atherosclerosis and/or reduce deaths, and non-fatal MI following bypass surgery. Aggressive (low-density lipoprotein [LDL] cholesterol-lowering treatment (target  $< 85$  mg/dL) was correlated to a slower rate of disease progression (31%) after 4-5 years in comparison to the control group, which was comprised of patients receiving moderate lipid-lowering treatment (target  $< 130$  to  $140$  mg/dL).

## RHEUMATOID ARTHRITIS (RA) MEASURES GROUP OVERVIEW

### 2014 PQRS OPTIONS FOR MEASURES GROUPS:

#### **2014 PQRS MEASURES IN RHEUMATOID ARTHRITIS (RA) MEASURES GROUP:**

- #108. Rheumatoid Arthritis (RA): Disease Modifying Anti-Rheumatic Drug (DMARD) Therapy
- #176. Rheumatoid Arthritis (RA): Tuberculosis Screening
- #177. Rheumatoid Arthritis (RA): Periodic Assessment of Disease Activity
- #178. Rheumatoid Arthritis (RA): Functional Status Assessment
- #179. Rheumatoid Arthritis (RA): Assessment and Classification of Disease Prognosis
- #180. Rheumatoid Arthritis (RA): Glucocorticoid Management

#### **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.

**G8490:** I intend to report the Rheumatoid Arthritis Measures Group

- Report the patient sample method:  
**20 Patient Sample Method:** 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, 2014 **OR** July 1 through December 31, 2014).
- Patient sample criteria for the RA Measures Group are patients aged 18 years and older with a specific diagnosis of RA accompanied by a specific patient encounter:

#### **One of the following diagnosis codes indicating rheumatoid arthritis:**

**ICD-9-CM [for use 1/1/2014 – 9/30/2014]:** 714.0, 714.1, 714.2, 714.81

**ICD-10-CM [for use 10/1/2014 - 12/31/2014]:** M05.00, M05.011, M05.012, M05.019, M05.021, M05.022, M05.029, M05.031, M05.032, M05.039, M05.041, M05.042, M05.049, M05.051, M05.052, M05.059, M05.061, M05.062, M05.069, M05.071, M05.072, M05.079, M05.09, M05.111, M05.112, M05.119, M05.121, M05.122, M05.129, M05.131, M05.132, M05.139, M05.141, M05.142, M05.149, M05.151, M05.152, M05.159, M05.161, M05.162, M05.169, M05.171, M05.172, M05.179, M05.19, M05.20, M05.211, M05.212, M05.219, M05.221, M05.222, M05.229, M05.231, M05.232, M05.239, M05.241, M05.242, M05.249, M05.251, M05.252, M05.259, M05.261, M05.262, M05.269, M05.271, M05.272, M05.279, M05.29, M05.30, M05.311, M05.312, M05.319, M05.321, M05.322, M05.329, M05.331, M05.332, M05.339, M05.341, M05.342, M05.349, M05.351, M05.352, M05.359, M05.361, M05.362, M05.369, M05.371, M05.372, M05.379, M05.39, M05.40, M05.411, M05.412, M05.419, M05.421, M05.422, M05.429, M05.431, M05.432, M05.439, M05.441, M05.442, M05.449, M05.451, M05.452, M05.459, M05.461, M05.462, M05.469, M05.471, M05.472, M05.479, M05.49, M05.50, M05.511, M05.512, M05.519, M05.521, M05.522, M05.529, M05.531, M05.532, M05.539, M05.541, M05.542, M05.549, M05.551, M05.552, M05.559, M05.561, M05.562, M05.569, M05.571, M05.572, M05.579, M05.59, M05.60, M05.611, M05.612, M05.619, M05.621, M05.622, M05.629, M05.631, M05.632, M05.639, M05.641, M05.642, M05.649, M05.651, M05.652, M05.659, M05.661, M05.662, M05.669, M05.671, M05.672, M05.679, M05.69, M05.70, M05.711, M05.712, M05.719, M05.721, M05.722, M05.729, M05.731, M05.732, M05.739, M05.741, M05.742, M05.749, M05.751, M05.752, M05.759, M05.761, M05.762, M05.769, M05.771, M05.772, M05.779, M05.79, M05.80, M05.811, M05.812, M05.819, M05.821, M05.822, M05.829, M05.831, M05.832, M05.839, M05.841, M05.842, M05.849, M05.851, M05.852, M05.859, M05.861, M05.862, M05.869, M05.871, M05.872, M05.879, M05.89, M05.9, M06.00, M06.011, M06.012, M06.019, M06.021, M06.022, M06.029, M06.031, M06.032, M06.039, M06.041, M06.042, M06.049, M06.051, M06.052, M06.059, M06.061,

M06.062, M06.069, M06.071, M06.072, M06.079, M06.08, M06.09, M06.1, M06.30, M06.311, M06.312, M06.319, M06.321, M06.322, M06.329, M06.331, M06.332, M06.339, M06.341, M06.342, M06.349, M06.351, M06.352, M06.359, M06.361, M06.362, M06.369, M06.371, M06.372, M06.379, M06.38, M06.39, M06.80, M06.811, M06.812, M06.819, M06.821, M06.822, M06.829, M06.831, M06.832, M06.839, M06.841, M06.842, M06.849, M06.851, M06.852, M06.859, M06.861, M06.862, M06.869, M06.871, M06.872, M06.879, M06.88, M06.89, M06.9

**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, G0402

- Report a numerator option on **all** measures within the RA Measures Group for each patient within the eligible professional's patient sample.
- Instructions for qualifying numerator option reporting for each of the measures within the Rheumatoid Arthritis (RA) 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 G8499:** All quality actions for the applicable measures in the Rheumatoid Arthritis Measures Group have been performed for this patient

- To report satisfactorily the RA Measures Group it requires **all** 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.
- **NOTE:** The detailed instructions in this specification apply exclusively to the reporting and analysis of the included measures under the measures groups option.

**◆ Measure #108 (NQF 0054): Rheumatoid Arthritis (RA): Disease Modifying Anti-Rheumatic Drug (DMARD) Therapy**

**DESCRIPTION:**

Percentage of patients aged 18 years and older who were diagnosed with RA and were prescribed, dispensed, or administered at least one ambulatory prescription for a DMARD

**NUMERATOR:**

Patients who were prescribed, dispensed, or administered at least one disease modifying anti-rheumatic drug (DMARD)

**Definitions:**

**Prescribed** – May include prescription given to the patient for DMARD therapy at one or more visits in the 12-month period OR patient already taking DMARD therapy as documented in current medication list.

The DMARDs listed below are considered DMARDs for the purposes of this measure.

Description	Prescription	J Codes
5-Aminosalicylates	• Sulfasalazine	N/A
Alkylating agents	• Cyclophosphamide	N/A
Aminoquinolines	• Hydroxychloroquine	N/A
Anti-rheumatics	• Auranofin • Gold sodium thiomalate	• Leflunomide • Methotrexate • Penicillamine
Immunomodulators	• Abatacept • Adalimumab • Anakinra • Certolizumab	• Certolizumab pegol • Etanercept • Golimumab • Infliximab • Rituximab • Tocilizumab
Immunosuppressive agents	• Azathioprine	• Cyclosporine • Mycophenolate
Janus kinase (JAK) Inhibitor	• Tofacitinib	
Tetracyclines	• Minocycline	N/A

**Note: J codes should only be used to identify if the appropriate DMARD therapy was prescribed to the patient. CPT II codes are used when reporting this measure.**

**Numerator Options:**

Disease modifying anti-rheumatic drug therapy prescribed, dispensed, or administered **(4187F)**

**OR**

Documentation of medical reason(s) for not prescribing, dispensing, or administering disease modifying anti-rheumatic drug therapy (ie, patients with a diagnosis of HIV or pregnancy). **(4187F with 1P)**

**OR**

Disease modifying anti-rheumatic drug therapy was **not** prescribed, dispensed, or administered, reason not otherwise specified **(4187F with 8P)**

**Measure #176: Rheumatoid Arthritis (RA): Tuberculosis Screening**

**DESCRIPTION:**

Percentage of patients aged 18 years and older with a diagnosis of rheumatoid arthritis (RA) who have documentation of a tuberculosis (TB) screening performed and results interpreted within 6 months prior to receiving a first course of therapy using a biologic disease-modifying anti-rheumatic drug (DMARD)

**NUMERATOR:**

Patients for whom a TB screening was performed and results interpreted within 6 months prior to receiving a first course of therapy using a biologic DMARD

**Numerator Instructions:** Patients are considered to be receiving a first course of therapy using a biologic DMARD only if they have never previously been prescribed or dispensed a biologic DMARD.

**Definition:**

**Biologic DMARD Therapy** – Includes Adalimumab, Etanercept, Infliximab, Abatacept, Anakinra (Rituximab is excluded).

**NUMERATOR NOTE:** *The correct combination of numerator code(s) must be reported on the claim form in order to properly report this measure. The “correct combination” of codes may require the submission of multiple numerator codes.*

**Numerator Options:**

TB screening performed and results interpreted within six months prior to initiation of first-time biologic disease modifying anti-rheumatic drug therapy for RA **(3455F)**

**AND**

Patient receiving first-time biologic disease modifying anti-rheumatic drug therapy for rheumatoid arthritis **(4195F)**

**OR**

Documentation of medical reason for not screening for TB or interpreting results (ie, patient positive for TB and documentation of past treatment; patient has recently completed a course of anti-TB therapy) **(3455F with 1P)**

**AND**

Patient receiving first-time biologic disease modifying anti-rheumatic drug therapy for rheumatoid arthritis **(4195F)**

**OR**

Patient not receiving first-time biologic disease modifying anti-rheumatic drug therapy for rheumatoid arthritis **(4196F)**

**OR**

TB screening **not** performed or results **not** interpreted, reason not otherwise specified **(3455F with 8P)**

**AND**

Patient receiving first-time biologic disease modifying anti-rheumatic drug therapy for rheumatoid arthritis **(4195F)**

**⌘ Measure #177: Rheumatoid Arthritis (RA): Periodic Assessment of Disease Activity**

**DESCRIPTION:**

Percentage of patients aged 18 years and older with a diagnosis of rheumatoid arthritis (RA) who have an assessment and classification of disease activity within 12 months

**NUMERATOR:**

Patients with disease activity assessed by a standardized descriptive or numeric scale or composite index and classified into one of the following categories: low, moderate or high, at least once within 12 months

**Definition:**

**Assessment and Classification of Disease Activity** – Assesses if physicians are utilizing a standardized, systematic approach for evaluating the level of disease activity. The scales/instruments listed are examples of how to define activity level and cut-off points can differ by scale. Standardized descriptive or numeric scales and/or composite indexes could include but are not limited to: DAS28, SDAI, CDAI, RADAI, RAPID.

**Numerator Options:**

Rheumatoid arthritis (RA) disease activity, low **(3470F)**

**OR**

Rheumatoid arthritis (RA) disease activity, moderate **(3471F)**

**OR**

Rheumatoid arthritis (RA) disease activity, high **(3472F)**

**OR**

Disease activity **not** assessed and classified, reason not otherwise specified **(3470F with 8P)**

**⌘ Measure #178: Rheumatoid Arthritis (RA): Functional Status Assessment**

**DESCRIPTION:**

Percentage of patients aged 18 years and older with a diagnosis of rheumatoid arthritis (RA) for whom a functional status assessment was performed at least once within 12 months

**NUMERATOR:**

Patients for whom a functional status assessment was performed at least once within 12 months

**Definitions:**

**Functional Status Assessment** – This measure assesses if physicians are using a standardized descriptive or numeric scale, standardized questionnaire, or notation of assessment of the impact of RA on patient activities of daily living. Examples of tools used to assess functional status include but are not limited to: Health Assessment Questionnaire (HAQ), Modified HAQ, HAQ-2; American College of Rheumatology's Classification of Functional Status in Rheumatoid Arthritis.

**Activities of Daily Living** – Could include a description of any of the following: dressing/grooming, rising from sitting, walking/running/ability to ambulate, stair climbing, reaching, gripping, shopping/running errands/house or yard work.

**Numerator Options:**

Functional status assessed (1170F)

**OR**

Functional status **not** assessed, reason not otherwise specified (1170F **with 8P**)



**⌘ Measure #179: Rheumatoid Arthritis (RA): Assessment and Classification of Disease Prognosis**

**DESCRIPTION:**

Percentage of patients aged 18 years and older with a diagnosis of rheumatoid arthritis (RA) who have an assessment and classification of disease prognosis at least once within 12 months

**NUMERATOR:**

Patients with at least one documented assessment and classification (good/poor) of disease prognosis utilizing clinical markers of poor prognosis within 12 months

**Numerator Instructions:** This measure evaluates if physicians are assessing and classifying disease prognosis using a standardized, systematic approach. Disease prognosis should be classified as either poor or good.

**Definitions:**

**Poor Prognosis** – RA patients with features of poor prognosis have active disease with high tender and swollen joint counts, often have evidence of radiographic erosions, elevated levels of rheumatoid factor (RF) and/or anti-cyclic citrullinated peptide (anti-CCP) antibodies, and an elevated erythrocyte sedimentation rate, and an elevated C-reactive protein level.

**Clinically Important Markers of Poor Prognosis** – Classification should be based upon at a minimum the following: functional limitation (e.g., HAQ Disability Index), extra-articular disease (e.g., vasculitis, Sjorgen's syndrome, RA lung disease, rheumatoid nodules), RF positivity, positive anti-CCP antibodies (both characterized dichotomously, per CEP recommendation), and/or bony erosions by radiography.

**Numerator Options:**

Disease prognosis for rheumatoid arthritis assessed, poor prognosis documented **(3475F)**

**OR**

Disease prognosis for rheumatoid arthritis assessed, good prognosis documented **(3476F)**

**OR**

Disease prognosis for rheumatoid arthritis **not** assessed and classified, reason not otherwise specified **(3475F with 8P)**

**Measure #180: Rheumatoid Arthritis (RA): Glucocorticoid Management**

**DESCRIPTION:**

Percentage of patients aged 18 years and older with a diagnosis of rheumatoid arthritis (RA) who have been assessed for glucocorticoid use and, for those on prolonged doses of prednisone  $\geq$  10 mg daily (or equivalent) with improvement or no change in disease activity, documentation of glucocorticoid management plan within 12 months

**NUMERATOR:**

Patients who have been assessed for glucocorticoid use and for those on prolonged doses of prednisone  $\geq$  10 mg daily (or equivalent) with improvement or no change in disease activity, documentation of a glucocorticoid management plan within 12 months

**Definitions:**

**Prolonged Dose** – Doses > 6 months in duration.

**Prednisone Equivalents** – Determine using the following:

1 mg of prednisone = 1 mg of prednisolone; 5 mg of cortisone; 4 mg of hydrocortisone; 0.8 mg of triamcinolone; 0.8 mg of methylprednisolone; 0.15 mg of dexamethasone; 0.15 mg of betamethasone.

**Glucocorticoid Management Plan** – Includes documentation of attempt to taper steroids OR documentation of a new prescription for a non-glucocorticoid disease-modifying anti-rheumatic drug (DMARD) OR increase in dose of non-glucocorticoid DMARD dose for persistent RA disease activity at current or reduced dose.

**NUMERATOR NOTE:** *The correct combination of numerator code(s) must be reported on the claim form in order to properly report this measure. The “correct combination” of codes may require the submission of multiple numerator codes.*

**Numerator Options:**

Patient not receiving glucocorticoid therapy (**4192F**)

**OR**

Patient receiving < 10 mg daily prednisone (or equivalent), or RA disease activity is worsening, or glucocorticoid use is for less than 6 months (**4193F**)

**OR**

Patient receiving  $\geq$  10 mg daily prednisone (or equivalent) for longer than 6 months, and improvement or no change in disease activity (**4194F**)

**AND**

Glucocorticoid Management Plan documented (**0540F**)

**OR**

Documentation of medical reason(s) for not documenting glucocorticoid dose and documenting management plan (ie, glucocorticoid prescription is for a medical condition other than RA) (**0540F with 1P**)

**AND**

Patient receiving  $\geq$  10 mg daily prednisone (or equivalent) for longer than 6 months, and improvement or no change in disease activity (**4194F**)

**OR**

Glucocorticoid dose was not documented, reason not otherwise specified (**4194F with 8P**)

**OR**

Glucocorticoid plan not documented, reason not otherwise specified (**0540F with 8P**)

**AND**

Patient receiving  $\geq 10$  mg daily prednisone (or equivalent) for longer than 6 months, and improvement or no change in disease activity **(4194F)**

## **RHEUMATOID ARTHRITIS (RA) MEASURES GROUP RATIONALE AND CLINICAL RECOMMENDATION STATEMENTS**

### **Measure #108 - Rheumatoid Arthritis (RA): Disease Modifying Anti-Rheumatic Drug (DMARD) Therapy**

#### **RATIONALE:**

Early diagnosis and management of RA presents an important opportunity to alter the course of this progressive disease. Treatment in the first few months after disease onset takes advantage of a window of opportunity to effectively limit structural damage to joints and improves health outcomes. American College of Rheumatology (ACR) guidelines underscore early DMARD therapy.

#### **CLINICAL RECOMMENDATION STATEMENTS:**

The American College of Rheumatology (ACR) recommends targeting either low disease activity or remission in all patients with early RA (level of evidence C) and established RA (level of evidence C) receiving any DMARD or biologic agent.

In patients with early RA, the ACR recommends the use of DMARD monotherapy both for low disease activity and for moderate or high disease activity with the absence of poor prognostic features (level of evidence A–C). In patients with early RA, the ACR recommends the use of DMARD combination therapy (including double and triple therapy) in patients with moderate or high disease activity plus poor prognostic features (level of evidence A–C). In patients with early RA, the ACR also recommends the use of an anti-TNF biologic with or without methotrexate in patients who have high disease activity with poor prognostic features (level of evidence A and B). Infliximab is the only exception and the recommendation is to use it in combination with methotrexate, but not as monotherapy.

### **Measure #176 - Rheumatoid Arthritis (RA): Tuberculosis Screening**

#### **RATIONALE:**

Before initiating biologic DMARDs for a patient with RA, it is essential to screen the patient for tuberculosis, as research has documented a higher incidence of TB after anti-TNF $\alpha$  therapy. All patients being considered for biologic DMARD should receive a tuberculin skin test, even if the patient has previously received the BCG vaccination. Test results, in addition to patient risk for TB and other tests, should be used to assess the patient's risk for latent TB infection. This is a patient safety measure.

#### **CLINICAL RECOMMENDATION STATEMENTS:**

The American College of Rheumatology recommends screening to identify latent TB infection (LTBI) in all RA patients being considered for therapy with biologic agents, regardless of the presence of risk factors for LTBI. (Level of Evidence: C) (ACR, 2012)

### **Measure #177 - Rheumatoid Arthritis (RA): Periodic Assessment of Disease Activity**

#### **RATIONALE:**

After establishing a diagnosis of RA, risk assessment is crucial for guiding optimal treatment. For the purposes of selecting therapies, physicians should consider the patient's disease activity at the time of the treatment decisions.

#### **CLINICAL RECOMMENDATION STATEMENTS:**

Several indices to measure RA disease activity have been developed each of which has advantages and disadvantages. Evidence-based guidelines require clear definitions of disease activity to make rational therapeutic choices, but it is not possible or appropriate to mandate use of a single disease activity score for the individual physician, and different studies have used different definitions. Therefore, the TFP was asked to consider a combined estimation of disease activity, which allowed reference to many past definitions. With these instruments as our guide, we rated RA disease activity in an ordinal manner as low, moderate, or high. (ACR, 2008)

## **Measure #178 - Rheumatoid Arthritis (RA): Functional Status Assessment**

### **RATIONALE:**

Functional limitations are a significant and disruptive complication for patients living with RA. Assessments of functional limitations are used to assess prognosis and guide treatment and therapy decisions. Functional status should be assessed at the baseline and each follow-up visit, using questionnaires such as the ACR's Classification of Functional Status in RA or the Health Assessment Questionnaire or an assessment of activities of daily living. Regardless of the assessment tool used, it should indicate whether a functional decline is due to inflammation, mechanical damage, or both, as treatment strategies will vary accordingly.

### **CLINICAL RECOMMENDATION STATEMENTS:**

The management of RA is an iterative process, and patients should be periodically reassessed for evidence of disease or limitation of function with significant alteration of joint anatomy. Baseline evaluation of disease activity and damage in patients with rheumatoid arthritis through evaluation of functional status or quality of life assessments using standardized questionnaires, a physician's global assessment of disease activity, or patient's global assessment of disease activity. The initial evaluation of the patient with RA should document symptoms of active disease (i.e., presence of joint pain, duration of morning stiffness, degree of fatigue), functional status, objective evidence of disease activity (i.e., synovitis, as assessed by tender and swollen joint counts, and the ESR or CRP level), and mechanical joint problems.

At each follow up visit, the physician must assess whether the disease is active or inactive. Symptoms of inflammatory (as contrasted with mechanical) joint disease, which include prolonged morning stiffness, duration of fatigue, and active synovitis on joint examination, indicate active disease and necessitate consideration of changing the treatment program. Occasionally, findings of the joint examination alone may not adequately reflect disease activity and structural damage; therefore, periodic measurements of the ESR or CRP level and functional status, as well as radiographic examinations of involved joints should be performed. It is important to determine whether a decline in function is the result of inflammation, mechanical damage, or both; treatment strategies will differ accordingly. (ACR, 2002)

## **Measure #179 - Rheumatoid Arthritis (RA): Assessment and Classification of Disease Prognosis**

### **RATIONALE:**

After establishing a diagnosis of RA, risk assessment is crucial for guiding optimal treatment. For the purposes of selecting therapies, physicians should consider the presence of these prognostic factors at the time of the treatment decisions.

### **CLINICAL RECOMMENDATION STATEMENTS:**

Poor prognosis is suggested by earlier age at disease onset, high titer of RF, elevated ESR, and swelling of > 20 joints. Extraarticular manifestations of RA, such as rheumatoid nodules, Sjogren's syndrome, episcleritis and scleritis, interstitial lung disease, pericardial involvement, systemic vasculitis, and Felty's syndrome, may also indicate a worse prognosis. Since studies have demonstrated that treatment with DMARDs may alter the disease course in patients with recent-onset RA, particularly those with unfavorable prognostic factors, aggressive treatment should be initiated as soon as the diagnosis has been established. (Level C Evidence) (ACR, 2008)

Assessment of prognosis should be performed at baseline, before starting medications, to assess organ dysfunction due to comorbid diseases. The literature agrees that a thorough assessment includes recording a complete blood cell count, electrolyte levels, creatinine levels, hepatic enzyme levels (AST – aspartate aminotransferase, ALT – alanine aminotransferase, and albumin), and performing a urinalysis and stool guaiac. If necessary prognosis at baseline should rule out other diseases; this may be repeated during disease flares to rule out septic arthritis through synovial fluid analysis. (Level C Evidence) (ACR, 2008)

## **Measure #180 - Rheumatoid Arthritis (RA): Glucocorticoid Management**

**RATIONALE:**

Glucocorticoids are an important part of RA treatment as they inhibit inflammation and may control synovitis. However, long-term use of glucocorticoids, especially at high doses, should be avoided, due to the potential health complications. Monitoring length and dose of glucocorticoid treatment for patients with RA is integral to making other clinical decisions.

**CLINICAL RECOMMENDATION STATEMENTS:**

Low-dose oral glucocorticoids and local injections of glucocorticoids are highly effective for relieving symptoms in patients with active RA. The benefits of low-dose systemic glucocorticoids, however, should always be weighed against their adverse effects. The adverse effects of long-term oral glucocorticoids at low doses are protean and include osteoporosis, hypertension, weight gain, fluid retention, hyperglycemia, cataracts, and skin fragility, as well as the potential for premature atherosclerosis. These adverse effects should be considered and should be discussed in detail with the patient before glucocorticoid therapy is begun. For long term disease control, the glucocorticoid dosage should be kept to a minimum. For the majority of patients with RA, this means equal or less than 10 mg of prednisone per day. (ACR, 2002)

## PERIOPERATIVE CARE MEASURES GROUP OVERVIEW

### 2014 PQRS OPTIONS FOR MEASURES GROUPS:

#### 2014 PQRS MEASURES IN PERIOPERATIVE CARE MEASURES GROUP:

- #20. Perioperative Care: Timing of Prophylactic Parenteral Antibiotic – Ordering Physician
- #21. Perioperative Care: Selection of Prophylactic Antibiotic – First OR Second Generation Cephalosporin
- #22. Perioperative Care: Discontinuation of Prophylactic Parenteral Antibiotics (Non-Cardiac Procedures)
- #23. Perioperative Care: Venous Thromboembolism (VTE) Prophylaxis (When Indicated in ALL Patients)

#### 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.

**G8492:** I intend to report the Perioperative Care Measures Group

- Report patient sample method:  
**20 Patient Sample Method via registries:** 20 unique procedures (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, 2014 **OR** July 1 through December 31, 2014).
- Patient sample criteria for the Perioperative Care Measures Group are patients aged 18 years and older that have a specific surgical procedure performed:

**One of the following surgical procedure codes:** 0236T, 15734, 15830, 15832, 15833, 15834, 15835, 15836, 15837, 19260, 19271, 19272, 19300, 19305, 19306, 19307, 19316, 19318, 19324, 19361, 19364, 19366, 19367, 19368, 19369, 19380, 21627, 21632, 21740, 21750, 21805, 21825, 22551, 22554, 22558, 22600, 22612, 22630, 27080, 27125, 27130, 27132, 27134, 27137, 27138, 27158, 27202, 27235, 27236, 27244, 27245, 27269, 27280, 27282, 27440, 27441, 27442, 27443, 27445, 27446, 27447, 27880, 27881, 27882, 27884, 27886, 27888, 31760, 31766, 31770, 31775, 31786, 31805, 32096, 32097, 32098, 32100, 32110, 32120, 32124, 32140, 32141, 32150, 32215, 32220, 32225, 32310, 32320, 32440, 32442, 32445, 32480, 32482, 32484, 32486, 32488, 32491, 32505, 32506, 32507, 32800, 32810, 32815, 32900, 32905, 32906, 32940, 33020, 33025, 33030, 33031, 33050, 33300, 33310, 33320, 33361, 33362, 33363, 33364, 33877, 33880, 33881, 33883, 33886, 33889, 33891, 34051, 34800, 34802, 34803, 34804, 34805, 34812, 34820, 34825, 34830, 34831, 34832, 34833, 34834, 34900, 35011, 35013, 35021, 35081, 35082, 35091, 35092, 35102, 35103, 35131, 35141, 35142, 35151, 35152, 35206, 35211, 35216, 35241, 35246, 35266, 35271, 35276, 35301, 35311, 35363, 35371, 35372, 35460, 35512, 35521, 35522, 35523, 35525, 35526, 35533, 35537, 35538, 35539, 35540, 35556, 35558, 35565, 35566, 35570, 35571, 35572, 35583, 35585, 35587, 35601, 35606, 35612, 35616, 35621, 35623, 35626, 35631, 35632, 35633, 35634, 35636, 35637, 35638, 35642, 35645, 35646, 35647, 35650, 35654, 35656, 35661, 35663, 35665, 35666, 35671, 36830, 37224, 37225, 37226, 37227, 37228, 37229, 37230, 37231, 37616, 37617, 38100, 38101, 38115, 38120, 38381, 38571, 38572, 38700, 38720, 38724, 38746, 38747, 38760, 38765, 38770, 38780, 39000, 39010, 39200, 39220, 39501, 39540, 39541, 39545, 39560, 39561, 43020, 43030, 43045, 43100, 43101, 43107, 43108, 43112, 43113, 43116, 43117, 43118, 43121, 43122, 43123, 43124, 43130, 43135, 43279, 43280, 43281, 43282, 43300, 43305, 43310, 43312, 43313, 43314, 43320, 43325, 43327, 43328, 43330, 43331, 43332, 43333, 43334, 43335, 43336, 43337, 43340, 43341, 43350, 43351, 43352, 43360, 43361, 43400, 43401, 43405, 43410, 43415, 43420, 43425, 43496, 43500, 43501, 43502, 43510, 43520, 43605, 43610, 43611, 43620, 43621, 43622, 43631, 43632, 43633, 43634, 43640, 43641, 43644, 43645, 43651, 43652, 43653, 43770, 43771, 43772, 43773, 43774, 43800, 43810, 43820, 43825, 43830, 43832, 43840, 43843, 43845, 43846, 43847, 43848, 43850, 43855, 43860, 43865, 43870, 43880, 43886, 43887, 43888, 44005,

44010, 44020, 44021, 44050, 44055, 44120, 44125, 44126, 44127, 44130, 44140, 44141, 44143, 44144, 44145, 44146, 44147, 44150, 44151, 44155, 44156, 44157, 44158, 44160, 44180, 44186, 44187, 44188, 44202, 44204, 44205, 44206, 44207, 44208, 44210, 44211, 44212, 44227, 44300, 44310, 44312, 44314, 44316, 44320, 44322, 44340, 44345, 44346, 44602, 44603, 44604, 44605, 44615, 44620, 44625, 44626, 44640, 44650, 44660, 44661, 44680, 44700, 44800, 44820, 44850, 44900, 44950, 44955, 44960, 44970, 45000, 45020, 45110, 45111, 45112, 45113, 45114, 45116, 45119, 45120, 45121, 45123, 45126, 45130, 45135, 45136, 45150, 45160, 45171, 45172, 45395, 45397, 45400, 45402, 45540, 45541, 45550, 45560, 45562, 45563, 45800, 45805, 45820, 45825, 47100, 47120, 47122, 47125, 47130, 47140, 47141, 47142, 47350, 47400, 47420, 47425, 47460, 47480, 47560, 47561, 47562, 47563, 47564, 47570, 47600, 47605, 47610, 47612, 47620, 47630, 47700, 47701, 47711, 47712, 47715, 47720, 47721, 47740, 47741, 47760, 47765, 47780, 47785, 47800, 47801, 47802, 47900, 48000, 48001, 48020, 48100, 48102, 48105, 48120, 48140, 48145, 48146, 48148, 48150, 48152, 48153, 48154, 48155, 48500, 48510, 48520, 48540, 48545, 48547, 48548, 48554, 48556, 49000, 49002, 49010, 49020, 49040, 49060, 49203, 49204, 49205, 49215, 49220, 49250, 49320, 49321, 49322, 49323, 49505, 49507, 50320, 50340, 50360, 50365, 50370, 50380, 57267, 58150, 58152, 58180, 58200, 58210, 58240, 58260, 58262, 58263, 58267, 58270, 58275, 58280, 58285, 58290, 58291, 58292, 58293, 58294, 58951, 58953, 58954, 58956, 60200, 60210, 60212, 60220, 60225, 60240, 60252, 60254, 60260, 60270, 60271, 60280, 60281, 60500, 60502, 60505, 60520, 60521, 60522, 60540, 60545, 60600, 60605, 60650, 61312, 61313, 61315, 61510, 61512, 61518, 61548, 61697, 61700, 62230, 63015, 63020, 63045, 63047, 63056, 63075, 63081, 63267, 63276, 64746

**NOTE:** CPT Category I procedure codes billed by surgeons performing surgery on the same patient, submitted with modifier 62 (indicating two surgeons, i.e., dual procedures) will be included in the denominator population. Both surgeons participating in PQRS will be fully accountable for the clinical action described in the measure.

- Report a numerator option on **all** measures within the Perioperative Care Measures Group for each procedure (patient) within the eligible professional's patient sample.
- Instructions for qualifying numerator option reporting for each of the measures within the Perioperative Care 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 G8501:** All quality actions for the applicable measures in the Perioperative Care Measures Group have been performed for this patient

- To report satisfactorily the Perioperative Care Measures Group it requires **all** measures for each patient within the eligible professional's patient sample to be reported each time a surgical procedure is performed 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.

**NOTE:** The detailed instructions in this specification apply exclusively to the reporting and analysis of the included measures under the measures groups option.



**\* Measure #20 (NQF 0270): Perioperative Care: Timing of Prophylactic Parenteral Antibiotic - Ordering Physician**

**DESCRIPTION:**

Percentage of surgical patients aged 18 years and older undergoing procedures with the indications for prophylactic parenteral antibiotics, who have an order for prophylactic parenteral antibiotic to be given within one hour (if fluoroquinolone or vancomycin, two hours), prior to the surgical incision (or start of procedure when no incision is required)

**NUMERATOR:**

Surgical patients who have an order for prophylactic parenteral antibiotic to be given within one hour (if fluoroquinolone or vancomycin, two hours) prior to the surgical incision (or start of procedure when no incision is required)

**Numerator Instructions:** There must be documentation of order (written order, verbal order, or standing order/protocol) specifying that prophylactic parenteral antibiotic is to be given within one hour (if fluoroquinolone or vancomycin, two hours) prior to the surgical incision (or start of procedure when no incision is required) OR documentation that prophylactic parenteral antibiotic has been given within one hour (if fluoroquinolone or vancomycin, two hours) prior to the surgical incision (or start of procedure when no incision is required).

**Numerator Note:** *In the event surgery is delayed, as long as the patient is redosed (if clinically appropriate) the numerator coding should be applied.*

**Numerator Options:**

**Table 1A:** *The antimicrobial drugs listed below are considered prophylactic parenteral antibiotics for the purposes of this measure. G8632 should be reported when antibiotics from this table were not ordered.*

<ul style="list-style-type: none"> <li>• Ampicillin/sulbactam</li> <li>• Aztreonam</li> <li>• Cefazolin</li> <li>• Cefmetazole</li> <li>• Cefotetan</li> <li>• Cefoxitin</li> </ul>	<ul style="list-style-type: none"> <li>• Cefuroxime</li> <li>• Ciprofloxacin</li> <li>• Clindamycin</li> <li>• Ertapenem</li> <li>• Erythromycin base</li> <li>• Fluoroquinolone</li> <li>• Gatifloxacin</li> </ul>	<ul style="list-style-type: none"> <li>• Gentamicin</li> <li>• Levofloxacin</li> <li>• Metronidazole</li> <li>• Moxifloxacin</li> <li>• Neomycin</li> <li>• Vancomycin</li> </ul>
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Documentation of order for prophylactic parenteral antibiotics to be given within one hour (if fluoroquinolone or vancomycin, two hours) prior to surgical incision (or start of procedure when no incision is required) **(G8629)**

**OR**

Documentation that administration of prophylactic parenteral antibiotic was initiated within one hour (if fluoroquinolone or vancomycin, two hours) prior to surgical incision (or start of procedure when no incision is required), as ordered **(G8630)**

**OR**

Clinician documented that patient was not an eligible candidate for ordering prophylactic parenteral antibiotics to be given within one hour (if fluoroquinolone or vancomycin, two hours) prior to the surgical incision (or start of procedure when no incision is required) **(G8631)**

**OR**

Prophylactic parenteral antibiotics were **not** ordered to be given or given within one hour (if fluoroquinolone or vancomycin, two hours) prior to the surgical incision (or start of procedure when no incision is required), reason not given **(G8632)**

**\* Measure #21 (NQF 0268): Perioperative Care: Selection of Prophylactic Antibiotic – First OR Second Generation Cephalosporin**

**DESCRIPTION:**

Percentage of surgical patients aged 18 years and older undergoing procedures with the indications for a first OR second generation cephalosporin prophylactic antibiotic, who had an order for a first OR second generation cephalosporin antimicrobial prophylaxis

**NUMERATOR:**

Surgical patients who had an order for a first OR second generation cephalosporin for antimicrobial prophylaxis

**Numerator Instructions:** There must be documentation of an order (written order, verbal order, or standing order/protocol) for a first OR second generation cephalosporin for antimicrobial prophylaxis OR documentation that a first OR second generation cephalosporin was **given**.

**Numerator Note:** *In the event surgery is delayed, as long as the patient is redosed (if clinically appropriate) the numerator coding should be applied.*

**Numerator Options:**

Documentation of an order for a first OR second generation cephalosporin for antimicrobial prophylaxis (**G9197**)

**Note:** Quality-data code **G9197** is provided for antibiotic **ordered** or antibiotic **given**. Report quality-data code **G9197** if a first or second generation cephalosporin was given for antimicrobial prophylaxis.

**OR**

Documentation of medical reason(s) for not ordering a first or second generation cephalosporin for antimicrobial prophylaxis (**G9196**)

**OR**

Order for a first or second generation cephalosporin for antimicrobial prophylaxis was **not** documented, reason not given (**G9198**)

**\* Measure #22 (NQF 0271): Perioperative Care: Discontinuation of Prophylactic Parenteral Antibiotics (Non-Cardiac Procedures)**

**DESCRIPTION:**

Percentage of non-cardiac surgical patients aged 18 years and older undergoing procedures with the indications for prophylactic parenteral antibiotics AND who received a prophylactic parenteral antibiotic, who have an order for discontinuation of prophylactic parenteral antibiotics within 24 hours of surgical end time

**NUMERATOR:**

Non-cardiac surgical patients who have an order for discontinuation of prophylactic parenteral antibiotics within 24 hours of surgical end time

**Numerator Instructions:** There must be documentation of order (written order, verbal order, or standing order/protocol) specifying that prophylactic parenteral antibiotic is to be discontinued within 24 hours of surgical end time OR specifying a course of antibiotic administration limited to that 24-hour period (e.g., “to be given every 8 hours for three doses” or for “one time” IV dose orders) OR documentation that prophylactic parenteral antibiotic **was** discontinued within 24 hours of surgical end time.

**Numerator Options:**

Documentation that order was given to discontinue prophylactic antibiotics within 24 hours of surgical end time, non-cardiac procedure **(4049F)**

***Note:** CPT Category II code **4049F** is provided for documentation that antibiotic discontinuation was ordered or that antibiotic discontinuation was accomplished. Report CPT Category II code **4049F** if antibiotics were discontinued within 24 hours.*

**AND**

Documentation that prophylactic antibiotics were given within 4 hours prior to surgical incision or given intraoperatively **(4046F)**

**OR**

Documentation of medical reason(s) for not discontinuing prophylactic antibiotics within 24 hours of surgical end time **(4049F with 1P)**

**AND**

Documentation that prophylactic antibiotics were given within 4 hours prior to surgical incision or given intraoperatively **(4046F)**

**OR**

Documentation that prophylactic antibiotics were neither given within 4 hours prior to surgical incision nor given intraoperatively **(4042F)**

**OR**

Order was **not** given to discontinue prophylactic antibiotics within 24 hours of surgical end time, non-cardiac procedure, reason not otherwise specified **(4049F with 8P)**

**AND**

Documentation that prophylactic antibiotics were given within 4 hours prior to surgical incision or given intraoperatively **(4046F)**

**\* Measure #23 (NQF 0239): Perioperative Care: Venous Thromboembolism (VTE) Prophylaxis (When Indicated in ALL Patients)**

**DESCRIPTION:**

Percentage of surgical patients aged 18 years and older undergoing procedures for which VTE prophylaxis is indicated in all patients, who had an order for Low Molecular Weight Heparin (LMWH), Low-Dose Unfractionated Heparin (LDUH), adjusted-dose warfarin, fondaparinux or mechanical prophylaxis to be given within 24 hours prior to incision time or within 24 hours after surgery end time

**NUMERATOR:**

Surgical patients who had an order for LMWH, LDUH, adjusted-dose warfarin, fondaparinux or mechanical prophylaxis to be given within 24 hours prior to incision time or within 24 hours after surgery end time

**Numerator Instructions:** There must be documentation of order (written order, verbal order, or standing order/protocol) for VTE prophylaxis OR documentation that VTE prophylaxis was given.

**Definition:**

**Mechanical Prophylaxis** – Does not include TED hose

**Numerator Options:**

Documentation that an order was given for venous thromboembolism (VTE) prophylaxis to be given within 24 hours prior to incision time or 24 hours after surgery end time **(4044F)**

**Note:** A single CPT Category II code is provided for VTE prophylaxis **ordered** or VTE prophylaxis **given**. If VTE prophylaxis is given, report **4044F**.

**OR**

Documentation of medical reason(s) for patient not receiving any form of VTE prophylaxis (LMWH, LDUH, adjusted-dose warfarin, fondaparinux or mechanical prophylaxis) within 24 hours prior to incision time or 24 hours after surgery end time **(4044F with 1P)**

**OR**

Order was **not** given for venous thromboembolism (VTE) prophylaxis to be given within 24 hours prior to incision time or 24 hours after surgery end time, reason not otherwise specified **(4044F with 8P)**

## PERIOPERATIVE CARE MEASURES GROUP RATIONALE AND CLINICAL RECOMMENDATION STATEMENTS

### **Measure #20 - Perioperative Care: Timing of Prophylactic Antibiotic – Ordering Physician**

#### **RATIONALE:**

The appropriate timing of administration of prophylactic parenteral antibiotics has been demonstrated to reduce the incidence of surgical wound infections. Specifying the time of administration in the order is critical as available evidence suggests that the drug should be received within one hour before incision for maximum antimicrobial effect.

#### **CLINICAL RECOMMENDATION STATEMENTS:**

Overall, administration of the first dose of antimicrobial beginning within 60 minutes before surgical incision is recommended. Administration of vancomycin and fluoroquinolones should begin within 120 minutes before surgical incision because of the prolonged infusion times required for these drugs. (ASHP, 2013)

Infusion of the first antimicrobial dose should begin within 60 minutes before incision. However, when a fluoroquinolone or vancomycin is indicated, the infusion should begin within 120 minutes before incision to prevent antibiotic-associated reactions. Although research has demonstrated that administration of the antimicrobial at the time of anesthesia induction is safe and results in adequate serum and tissue drug levels at the time of incision, there was no consensus that the infusion must be completed before incision. (SIPGWW, 2004)

### **Measure #21 - Perioperative Care: Selection of Prophylactic Antibiotic – First OR Second Generation Cephalosporin**

#### **RATIONALE:**

Current published evidence supports the use of either cefazolin, a first generation cephalosporin, or cefuroxime, a second generation cephalosporin, for many surgical procedures, in the absence of  $\beta$ -lactam allergy. An alternative antimicrobial regimen may be appropriate depending on the antimicrobial susceptibility pattern in an individual institution (potentially a medical reason for excluding patients treated at that institution from this measure).

#### **CLINICAL RECOMMENDATION STATEMENTS:**

For most procedures, cefazolin is the drug of choice for prophylaxis because it is the most widely studied antimicrobial agent, with proven efficacy. It has a desirable duration of action, spectrum of activity against organisms commonly encountered in surgery, reasonable safety, and low cost. (ASHP, 2013)

In operations for which cephalosporins represent appropriate prophylaxis, alternative antimicrobials should be provided to those with a high likelihood of serious adverse reaction or allergy on the basis of patient history or diagnostic tests such as skin testing.

The preferred antimicrobials for prophylaxis in patients undergoing hip or knee arthroplasty are cefazolin and cefuroxime. Vancomycin or clindamycin may be used in patients with serious allergy or adverse reactions to  $\beta$ -lactams.

The recommended antimicrobials for cardiothoracic and vascular operations include cefazolin or cefuroxime. For patients with serious allergy or adverse reaction to  $\beta$ -lactams, vancomycin is appropriate, and clindamycin may be an acceptable alternative. (SIPGWW, 2004)

### **Measure #22 - Perioperative Care: Discontinuation of Prophylactic Parenteral Antibiotics (Non-Cardiac Procedures)**

#### **RATIONALE:**

There is no evidence there is added benefit of prolonged prophylactic parenteral antibiotic use. Prolonged use may increase antibiotic resistant organisms.

**CLINICAL RECOMMENDATION STATEMENTS:**

The shortest effective duration of antimicrobial administration for preventing SSI is not known; however, evidence is mounting that postoperative antimicrobial administration is not necessary for most procedures. The duration of an antimicrobial prophylaxis should be less than 24 hours for most procedures. (ASHP, 2013)

Prophylactic antimicrobials should be discontinued within 24 hours after the operation. (SIPGWW, 2004)

**Measure #23 - Perioperative Care): Venous Thromboembolism (VTE) Prophylaxis (When Indicated in ALL Patients)****RATIONALE:**

This measure addresses VTE risk based on surgical procedure. VTE prophylaxis is appropriate for all patients undergoing these procedures regardless of individual patient thromboembolic risk factors.

Additional work is needed to determine if a physician-level measure for VTE prophylaxis can be developed to address individual patient thromboembolic risk factors, in addition to procedural risk, without creating data collection burden. Duration of VTE prophylaxis is not specified in the measure due to varying guideline recommendations for different patient populations.

**CLINICAL RECOMMENDATION STATEMENTS:**

For general and abdominal-pelvic surgery patients at very low risk for VTE (< 0.5%; Rogers score, < 7; Caprini score, 0), we recommend that no specific pharmacologic (Grade 1B) or mechanical (Grade 2C) prophylaxis be used other than early ambulation. (ACCP, 2012)

For general and abdominal-pelvic surgery patients at low risk for VTE (~ 1.5%; Rogers score, 7-10; Caprini score, 1-2), we suggest mechanical prophylaxis, preferably with intermittent pneumatic compression (IPC), over no prophylaxis. (Grade 2C) (ACCP, 2012)

For general and abdominal-pelvic surgery patients at moderate risk for VTE (~ 3.0%; Rogers score, > 10; Caprini score, 3-4) who are not at high risk for major bleeding complications, we suggest LMWH (Grade 2B), LDUH (Grade 2B), or mechanical prophylaxis, preferably with IPC (Grade 2C), over no prophylaxis. (ACCP, 2012)

For general and abdominal-pelvic surgery patients at moderate risk for VTE (3.0%; Rogers score, > 10; Caprini score, 3-4) who are at high risk for major bleeding complications or those in whom the consequences of bleeding are thought to be particularly severe, we suggest mechanical prophylaxis, preferably with IPC, over no prophylaxis. (Grade 2C) (ACCP, 2012)

For general and abdominal-pelvic surgery patients at high risk for VTE (~ 6.0%; Caprini score, ≥ 5) who are not at high risk for major bleeding complications, we recommend pharmacologic prophylaxis with LMWH (Grade 1B) or LDUH (Grade 1B) over no prophylaxis. We suggest that mechanical prophylaxis with elastic stockings or IPC should be added to pharmacologic prophylaxis (Grade 2C). (ACCP, 2012)

For high-VTE-risk patients undergoing abdominal or pelvic surgery for cancer who are not otherwise at high risk for major bleeding complications, we recommend extended-duration pharmacologic prophylaxis (4 weeks) with LMWH over limited-duration prophylaxis. (Grade 1B) (ACCP, 2012)

For high-VTE-risk general and abdominal pelvic surgery patients who are at high risk for major bleeding complications or those in whom the consequences of bleeding are thought to be particularly severe, we suggest use of mechanical prophylaxis, preferably with IPC, over no prophylaxis until the risk of bleeding diminishes and pharmacologic prophylaxis may be initiated. (Grade 2C) (ACCP, 2012)

For general and abdominal-pelvic surgery patients at high risk for VTE (6%; Caprini score, ≥ 5) in whom both LMWH and unfractionated heparin are contraindicated or unavailable and who are not at high risk for major bleeding

complications, we suggest low-dose aspirin (Grade 2C), fondaparinux (Grade 2C), or mechanical prophylaxis, preferably with IPC (Grade 2C), over no prophylaxis. (ACCP, 2012)

For general and abdominal-pelvic surgery patients, we suggest that an inferior vena cava (IVC) filter should not be used for primary VTE prevention. (Grade 2C) (ACCP, 2012)

For general and abdominal-pelvic surgery patients, we suggest that periodic surveillance with venous compression ultrasound should not be performed. (Grade 2C) (ACCP, 2012)

For cardiac surgery patients with an uncomplicated postoperative course, we suggest use of mechanical prophylaxis, preferably with optimally applied IPC, over either no prophylaxis (Grade 2C) or pharmacologic prophylaxis (Grade 2C). (ACCP, 2012)

For thoracic surgery patients at moderate risk for VTE who are not at high risk for perioperative bleeding, we suggest LDUH (Grade 2B), LMWH (Grade 2B), or mechanical prophylaxis with optimally applied IPC (Grade 2C) over no prophylaxis. (ACCP, 2012)

For thoracic surgery patients at high risk for VTE who are not at high risk for perioperative bleeding, we suggest LDUH (Grade 1B) or LMWH (Grade 1B) over no prophylaxis. In addition, we suggest that mechanical prophylaxis with elastic stockings or IPC should be added to pharmacologic prophylaxis (Grade 2C). (ACCP, 2012)

For thoracic surgery patients who are at high risk for major bleeding, we suggest use of mechanical prophylaxis, preferably with optimally applied IPC, over no prophylaxis until the risk of bleeding diminishes and pharmacologic prophylaxis may be initiated. (Grade 2C) (ACCP, 2012)

For craniotomy patients, we suggest that mechanical prophylaxis, preferably with IPC, be used over no prophylaxis (Grade 2C) or pharmacologic prophylaxis (Grade 2C). (ACCP, 2012)

For craniotomy patients at very high risk for VTE (e.g., those undergoing craniotomy for malignant disease), we suggest adding pharmacologic prophylaxis to mechanical prophylaxis once adequate hemostasis is established and the risk of bleeding decreases. (Grade 2C) (ACCP, 2012)

For patients undergoing spinal surgery, we suggest mechanical prophylaxis, preferably with IPC, over no prophylaxis (Grade 2C), unfractionated heparin (Grade 2C), or LMWH (Grade 2C). (ACCP, 2012)

For patients undergoing spinal surgery at high risk for VTE (including those with malignant disease or those undergoing surgery with a combined anterior-posterior approach), we suggest adding pharmacologic prophylaxis to mechanical prophylaxis once adequate hemostasis is established and the risk of bleeding decreases. (Grade 2C) (ACCP, 2012)

For major trauma patients, we suggest use of LDUH (Grade 2C), LMWH (Grade 2C), or mechanical prophylaxis, preferably with IPC (Grade 2C), over no prophylaxis. (ACCP, 2012)

For major trauma patients at high risk for VTE (including those with acute spinal cord injury, traumatic brain injury, and spinal surgery for trauma), we suggest adding mechanical prophylaxis to pharmacologic prophylaxis (Grade 2C) when not contraindicated by lower extremity injury. (ACCP, 2012)

For major trauma patients in whom LMWH and LDUH are contraindicated, we suggest mechanical prophylaxis, preferably with IPC, over no prophylaxis (Grade 2C) when not contraindicated by lower-extremity injury. We suggest adding pharmacologic prophylaxis with either LMWH or LDUH when the risk of bleeding diminishes or the contraindication to heparin resolves. (Grade 2C) (ACCP, 2012)

For major trauma patients, we suggest that an IVC filter should not be used for primary VTE prevention. (Grade 2C) (ACCP, 2012)

For major trauma patients, we suggest that periodic surveillance with venous compression ultrasound should not be performed. (Grade 2C) (ACCP, 2012)

In patients undergoing THA or TKA, we recommend use of one of the following for a minimum of 10 to 14 days rather than no antithrombotic prophylaxis: low-molecular-weight heparin (LMWH), fondaparinux, apixaban, dabigatran, rivaroxaban, low-dose unfractionated heparin (LDUH), adjusted-dose VKA, aspirin (all Grade 1B), or an intermittent pneumatic compression device (IPCD) (Grade 1C). (ACCP, 2012)

In patients undergoing HFS, we recommend use of one of the following rather than no antithrombotic prophylaxis for a minimum of 10 to 14 days: LMWH, fondaparinux, LDUH, adjusted-dose VKA, aspirin (all Grade 1B), or an IPCD (Grade 1C). (ACCP, 2012)

For patients undergoing major orthopedic surgery (THA, TKA, HFS) and receiving LMWH as thromboprophylaxis, we recommend starting either 12 h or more preoperatively or 12 h or more postoperatively rather than within 4 h or less preoperatively or 4 h or less postoperatively. (Grade 1B) (ACCP, 2012).

In patients undergoing THA or TKA, irrespective of the concomitant use of an IPCD or length of treatment, we suggest the use of LMWH in preference to the other agents we have recommended as alternatives: fondaparinux, apixaban, dabigatran, rivaroxaban, LDUH (all Grade 2B), adjusted-dose VKA, or aspirin (all Grade 2C). (ACCP, 2012)

In patients undergoing HFS, irrespective of the concomitant use of an IPCD or length of treatment, we suggest the use of LMWH in preference to the other agents we have recommended as alternatives: fondaparinux, LDUH (Grade 2B), adjusted-dose VKA, or aspirin (all Grade 2C). (ACCP, 2012)

For patients undergoing major orthopedic surgery, we suggest extending thromboprophylaxis in the outpatient period for up to 35 days from the day of surgery rather than for only 10 to 14 days. (Grade 2B) (ACCP, 2012)

In patients undergoing major orthopedic surgery, we suggest using dual prophylaxis with an antithrombotic agent and an IPCD during the hospital stay. (Grade 2C) (ACCP, 2012)

In patients undergoing major orthopedic surgery and increased risk of bleeding, we suggest using an IPCD or no prophylaxis rather than pharmacologic treatment. (Grade 2C) (ACCP, 2012)

In patients undergoing major orthopedic surgery and who decline or are uncooperative with injections or an IPCD, we recommend using apixaban or dabigatran (alternatively rivaroxaban or adjusted-dose VKA if apixaban or dabigatran are unavailable) rather than alternative forms of prophylaxis. (all Grade 1B) (ACCP, 2012)

In patients undergoing major orthopedic surgery, we suggest against using IVC filter placement for primary prevention over no thromboprophylaxis in patients with an increased bleeding risk or contraindications to both pharmacologic and mechanical thromboprophylaxis. (Grade 2C) (ACCP, 2012)

For asymptomatic patients following major orthopedic surgery, we recommend against Doppler (or duplex) ultrasound screening before hospital discharge. (Grade 1B) (ACCP, 2012)

We suggest no prophylaxis rather than pharmacologic thromboprophylaxis in patients with isolated lower-leg injuries requiring leg immobilization. (Grade 2C) (ACCP, 2012)

For patients undergoing knee arthroscopy without a history of prior VTE, we suggest no thromboprophylaxis rather than prophylaxis. (Grade 2B) (ACCP, 2012)



## BACK PAIN MEASURES GROUP OVERVIEW

### 2014 PQRS OPTIONS FOR MEASURES GROUPS:

#### 2014 PQRS MEASURES IN BACK PAIN MEASURES GROUP:

- #148. Back Pain: Initial Visit
- #149. Back Pain: Physical Exam
- #150. Back Pain: Advice for Normal Activities
- #151. Back Pain: Advice Against Bed Rest

#### 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.

**G8493:** I intend to report the Back Pain 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 [fee for service] patients) meeting patient sample criteria for the measures group during the reporting period (January 1 through December 31, 2014 **OR** July 1 through December 31, 2014).
- Patient sample criteria for the Back Pain Measures Group are patients aged 18 through 79 years with a specific diagnosis for back pain accompanied by a specific patient encounter **OR** patients aged 18-79 years that have a specific back surgical procedure performed:

#### One of the following diagnosis codes indicating back pain:

**ICD-9-CM [for use 1/1/2014 – 9/30/2014]:** 721.3, 721.41, 721.42, 721.90, 722.0, 722.10, 722.11, 722.2, 722.30, 722.31, 722.32, 722.39, 722.4, 722.51, 722.52, 722.6, 722.70, 722.71, 722.72, 722.73, 722.80, 722.81, 722.82, 722.83, 722.90, 722.91, 722.92, 722.93, 723.0, 724.00, 724.01, 724.02, 724.09, 724.2, 724.3, 724.4, 724.5, 724.6, 724.70, 724.71, 724.79, 738.4, 738.5, 739.3, 739.4, 756.12, 846.0, 846.1, 846.2, 846.3, 846.8, 846.9, 847.2

**ICD-10-CM [for use 10/1/2014 - 12/31/2014]:** M43.00, M43.10, M43.27, M43.28, M46.40, M46.41, M46.42, M46.43, M46.44, M46.45, M46.46, M46.47, M46.48, M46.49, M47.14, M47.15, M47.16, M47.17, M47.18, M47.20, M47.26, M47.27, M47.28, M47.816, M47.817, M47.818, M47.819, M47.896, M47.897, M47.898, M47.899, M47.9, M48.00, M48.01, M48.02, M48.03, M48.04, M48.05, M48.06, M48.07, M48.08, M50.00, M50.01, M50.02, M50.03, M50.20, M50.21, M50.22, M50.23, M50.30, M50.31, M50.32, M50.33, M50.80, M50.81, M50.82, M50.83, M50.90, M50.91, M50.92, M50.93, M51.04, M51.05, M51.06, M51.07, M51.14, M51.15, M51.16, M51.17, M51.24, M51.26, M51.27, M51.34, M51.35, M51.36, M51.37, M51.44, M51.45, M51.47, M51.87, M51.9, M53.2X7, M53.2X8, M53.86, M53.87, M53.88, M54.14, M54.15, M54.16, M54.17, M54.30, M54.31, M54.32, M54.40, M54.41, M54.42, M54.5, M54.89, M54.9, M96.1, M99.03, M99.04, M99.20, M99.21, M99.22, M99.23, M99.24, M99.25, M99.26, M99.27, M99.28, M99.29, M99.30, M99.31, M99.32, M99.33, M99.34, M99.35, M99.36, M99.37, M99.38, M99.39, M99.40, M99.41, M99.42, M99.43, M99.44, M99.45, M99.46, M99.47, M99.48, M99.49, M99.50, M99.51, M99.52, M99.53, M99.54, M99.55, M99.56, M99.57, M99.58, M99.59, M99.60, M99.61, M99.62, M99.63, M99.64, M99.65, M99.66, M99.67, M99.68, M99.69, M99.70, M99.71, M99.72, M99.73, M99.74, M99.75, M99.76, M99.77, M99.78, M99.79, M99.83, M99.84, Q76.2, S33.5XXA, S33.6XXA, S33.8XXA, S33.9XXA

#### AND

**One of the following patient encounter codes:** 97001, 97002, 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215

OR

**One of the following back surgical procedure codes:** 22210, 22214, 22220, 22222, 22224, 22226, 22532, 22533, 22534, 22548, 22554, 22556, 22558, 22585, 22590, 22595, 22600, 22612, 22614, 22630, 22632, 22818, 22819, 22830, 22840, 22841, 22842, 22843, 22844, 22845, 22846, 22847, 22848, 22849, 63001, 63003, 63005, 63011, 63012, 63015, 63016, 63017, 63020, 63030, 63035, 63040, 63042, 63043, 63044, 63045, 63046, 63047, 63048, 63055, 63056, 63057, 63064, 63066, 63075, 63076, 63077, 63078, 63081, 63082, 63085, 63086, 63087, 63088, 63090, 63091, 63101, 63102, 63103, 63170, 63172, 63173, 63180, 63182, 63185, 63190, 63191, 63194, 63195, 63196, 63197, 63198, 63199, 63200

- Report a numerator option on **all** measures within the Back Pain Measures Group for each patient within the eligible professional's patient sample.
- Instructions for qualifying numerator option reporting for each of the measures within the Back Pain 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 G8502:** All quality actions for the applicable measures in the Back Pain Measures Group have been performed for this patient

- To report satisfactorily the Back Pain Measures Group for the 20 Patient Sample Method it requires **all** measures for each patient within the sample to be reported where **the initial visit** to the clinician for **each episode** of back pain or each surgery for back pain that occurred during the corresponding reporting period. If the patient's initial visit for this episode of back pain occurred prior to the beginning of the reporting period, report that the visit in the sample is a subsequent visit for the episode and this will **not** count toward the 20 patient sample. This measures group may be reported by more than one clinician if multiple clinicians evaluate or treat the patient for the back pain episode.
- 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.
- **NOTE:** The detailed instructions in this specification apply exclusively to the reporting and analysis of the included measures under the measures groups option.

◆ **Measure #148 (NQF 0322): Back Pain: Initial Visit**

**DESCRIPTION:**

The percentage of patients aged 18 through 79 years with a diagnosis of back pain or undergoing back surgery who had back pain and function assessed during the initial visit to the clinician for the episode of back pain

**NUMERATOR:**

Patients who had all five of the following components assessed at the initial visit to the clinician for an episode of back pain: pain assessment, functional status, patient history (including notation of presence or absence of warning signs), assessment of prior treatment and response, and employment status

**Definitions:**

**Pain Assessment** – Must use any of the following assessment tools:

SF-36

Oswestry Low Back Pain Disability Questionnaire

Roland-Morris Disability Questionnaire

Quebec Pain Disability Scale

Sickness Impact Profile

Multidimensional Pain Inventory

**OR**

If none of the above tools are used, documentation of any of the following pain scales is acceptable:

McGill Pain Questionnaire

Visual analog scale

Brief pain inventory

Chronic pain grade

Neuropathic pain scale

Numerical rating scale (e.g., pain intensity 1–10)

Verbal descriptive scale (e.g., pt. report: “burning, shooting, stabbing”)

Faces pain scale

**Functional Status Assessment** – Must use any of the following assessment tools:

SF-36

Oswestry Low Back Pain Disability Questionnaire

Roland-Morris Disability Questionnaire

Quebec Pain Disability Scale

Sickness Impact Profile

Multidimensional Pain Inventory

**OR**

If none of the above tools are used, there must be documentation that activities of daily living (ADL) were assessed. Assessment of all of the following ADLs must be documented:

- Eating
- Bathing
- Using the toilet
- Dressing
- Getting up from bed or a chair

**Patient History** – Documentation necessary to satisfy assessment for red flags, which can include the following:

- Indication/notation of presence or absence of red flags
- Notation of specific symptoms that may indicate the presence of red flags (examples noted below)
  - “Red Flags” include:
    - History of cancer or unexplained weight loss
    - Current infection or immunosuppression

Fracture or suspected fracture

- Motor vehicle accident or industrial injury with suspicion of fracture
- Major fall with suspicion of fracture

Cauda equina syndrome or progressive neurologic deficit

- Saddle anesthesia
- Recent onset bladder dysfunction (urine retention, increased frequency, overflow incontinence)
- Recent onset fecal incontinence (loss of bowel control)
- Major motor weakness

**Assessment of Prior Treatment and Response** – If applicable, documentation that patient has been queried about back pain episode(s), treatment and response. Notation could include the following:

- No prior back pain
- Diagnosis and dates of back pain reports for the previous two years, or as far back as the patient is able to provide information
- Report from referring physician with summary of back pain history
- Patient report of history and attempted treatments, including diagnostic tests (e.g., imaging)

**Employment Status** – Use of either of the following assessment tools will satisfy this requirement:

- Sickness Impact Profile
- Multidimensional Pain Inventory

**OR**

Variables of an employment assessment can count. These variables must include documentation of the following:

- Type of work, including job tasks that may affect back pain management
- Work status (e.g., out of work, part-time work, work with or without limitations)
- If patient is not working or limited in work capacity, length of time for work limitations
- Workers' compensation or litigation involvement

**Episode** – Patient with back pain who has not been seen or treated for back pain by any practitioner during the 4 months prior to the first clinical encounter with a diagnosis of back pain. If a patient has a four-month period without treatment, and then sees both a primary care physician and a specialist, both visits are considered the initial visit with that clinician. A new episode can either be a recurrence for a patient with prior back pain or a patient with a new onset of back pain. The first clinical encounter after the four months without being seen or treated for back pain is considered the beginning of the new episode.

**Initial Visit** – First visit to the clinician during an episode of back pain. There can only be one initial visit with each clinician, but there can be more than one initial visit for a patient, if multiple clinicians evaluate or treat the patient for the back pain episode. Report the appropriate Quality-Data Codes on the claim for each initial visit.

**Numerator Options:**

Back pain and function assessed, including all of the following: Pain assessment AND functional status AND patient history, including notation of presence or absence of “red flags” (warning signs) AND assessment of prior treatment and response, AND employment status (**1130F**)

**OR**

Back pain and function was **not** assessed during the initial visit, reason not otherwise specified (**1130F with 8P**)

◆ Measure #149 (NQF 0319): Back Pain: Physical Exam

**DESCRIPTION:**

Percentage of patients aged 18 through 79 years with a diagnosis of back pain or undergoing back surgery who received a physical examination at the initial visit to the clinician for the episode of back pain

**NUMERATOR:**

Patients who had a physical examination at the initial visit to the clinician for a new episode of back pain

**Definitions:**

**Physical Examination:** For patients with radicular symptoms, documentation of physical exam must include the following, at a minimum:

Indication of straight leg raise test

**AND**

Notation of completion of neurovascular exam (a neurovascular exam must include ankle and knee reflexes; quadriceps; ankle and great toe dorsiflexion strength; plantar flexion; muscle strength; motor testing; pulses in lower extremities; and sensory exam)

For patients **without** radicular symptoms, documentation of physical exam must include the following:

Documentation of straight leg raise, neurovascular exam or clear notation of absence or presence of neurologic deficits

**Episode** – Patient with back pain who has not been seen or treated for back pain by any practitioner during the 4 months prior to the first clinical encounter with a diagnosis of back pain. If a patient has a four-month period without treatment, and then sees both a primary care physician and a specialist, both visits are considered the initial visit with that clinician. A new episode can either be a recurrence for a patient with prior back pain or a patient with a new onset of back pain. The first clinical encounter after the 4 months without being seen or treated for back pain is considered the beginning of the new episode.

**Initial Visit** – First visit to the clinician during an episode of back pain. There can only be one initial visit with each clinician, but there can be more than one initial visit for a patient, if multiple clinicians evaluate or treat the patient for the back pain episode. Report the appropriate Quality-Data Codes on the claim for each initial visit.

**Numerator Options:**

Physical examination on the date of the initial visit for low back pain performed, in accordance with specifications **(2040F)**

**OR**

Physical exam was **not** performed during the initial visit, reason not otherwise specified **(2040F with 8P)**

◆ **Measure #150 (NQF 0314): Back Pain: Advice for Normal Activities**

**DESCRIPTION:**

The percentage of patients aged 18 through 79 years with a diagnosis of back pain or undergoing back surgery who received advice for normal activities at the initial visit to the clinician for the episode of back pain

**NUMERATOR:**

Patients with documentation of advice to maintain or resume normal activities at the initial visit to the clinician for a new episode of back pain

**Definitions:**

**Episode** – Patient with back pain who has not been seen or treated for back pain by any practitioner during the 4 months prior to the first clinical encounter with a diagnosis of back pain. If a patient has a four-month period without treatment, and then sees both a primary care physician and a specialist, both visits are considered the initial visit with that clinician. A new episode can either be a recurrence for a patient with prior back pain or a patient with a new onset of back pain. The first clinical encounter after the 4 months without being seen or treated for back pain is considered the beginning of the new episode.

**Initial Visit** – First visit to the clinician during an episode of back pain. There can only be one initial visit with each clinician, but there can be more than one initial visit for a patient, if multiple clinicians evaluate or treat the patient for the back pain episode. Report the appropriate Quality-Data Codes on the claim for each initial visit.

**Numerator Options:**

Patient counseled during the initial visit to maintain or resume normal activities **(4245F)**

**OR**

Advice for normal activities was **not** performed during the initial visit, reason not otherwise specified **(4245F with 8P)**

◆ **Measure #151 (NQF 0313): Back Pain: Advice Against Bed Rest**

**DESCRIPTION:**

The percentage of patients aged 18 through 79 years with a diagnosis of back pain or undergoing back surgery who received advice against bed rest lasting four days or longer at the initial visit to the clinician for the episode of back pain

**NUMERATOR:**

Patients with documentation of advice against bed rest lasting four days or longer at the initial visit to the clinician for an episode of back pain

**Definitions:**

**Episode** – Patient with back pain who has not been seen or treated for back pain by any practitioner during the 4 months prior to the first clinical encounter with a diagnosis of back pain. If a patient has a four-month period without treatment, and then sees both a primary care physician and a specialist, both visits are considered the initial visit with that clinician. A new episode can either be a recurrence for a patient with prior back pain or a patient with a new onset of back pain. The first clinical encounter after the 4 months without being seen or treated for back pain is considered the beginning of the new episode.

**Initial Visit** – First visit to the clinician during an episode of back pain. There can only be one initial visit with each clinician, but there can be more than one initial visit for a patient, if multiple clinicians evaluate or treat the patient for the back pain episode. Report the appropriate Quality-Data Codes on the claim for each initial visit.

**Numerator Options:**

Patient counseled during the initial visit for an episode of back pain against bed rest lasting 4 days or longer **(4248F)**

**OR**

Advice against bed rest was **not** performed during the initial visit, reason not otherwise specified **(4248F with 8P)**

## BACK PAIN MEASURES GROUP RATIONALE AND CLINICAL RECOMMENDATION STATEMENTS

### **Measure #148 - Back Pain: Initial Visit**

#### **RATIONALE:**

Ensuring that a patient history, physical examination and assessment of prior back pain treatment and response is within the control of the treating provider as a process of care that can be established for the initial patient visit. These process measures can assist both physicians and patients in making decisions about appropriate health care in the diagnosis and treatment of back pain.

#### **CLINICAL RECOMMENDATION STATEMENTS:**

The Universe of Adult Patients with Low Back Pain and Sciatica recommends that a history is obtained from the patient upon the initial visit, followed by an appropriate physical examination. When evaluating patients with low back pain, it is important to consider the critical exclusionary diagnoses, most important of which are fracture, infection, tumor, progressive neurological deficit and cauda equina syndrome (AAOS, 2002).

### **Measure #149 - Back Pain: Physical Exam**

#### **RATIONALE:**

The history and physical examination are helpful mainly in identifying risk factors for delayed recovery that may have a psychosocial basis or identifying signs of serious underlying diseases (such as fracture, tumor, infection or deformity) that require specific treatment.

#### **CLINICAL RECOMMENDATION STATEMENTS:**

Physical exam components may differ by diagnosis or suspected diagnosis. For example, straight-leg raise should be performed on patients with sciatica or pseudoclaudication, but may be negative in patients with spinal stenosis. Clues to underlying systemic disease include the patient's age; a history of cancer; unexplained weight loss; injection drug use or chronic infection; the duration of pain; the presence of night-time pain and the response to previous therapy. In addition, prolonged back pain may be associated with the failure of previous treatment, depression and somatization. (Deyo, 2001)

### **Measure #150 - Back Pain: Advice for Normal Activities**

#### **RATIONALE:**

Advice to continue ordinary activity can give equivalent or faster symptomatic recovery from the acute attack and lead to less chronic disability and less time off work.

#### **CLINICAL RECOMMENDATION STATEMENTS:**

For most patients, the best recommendation is a rapid return to normal activities with neither bed rest nor exercise in the acute phase. This recommendation must be tempered by consideration of the patient's usual job or life demands. Heavy lifting, trunk twisting, and bodily vibrations should be avoided in the acute phase. (Deyo, 2001)

### **Measure #151 - Back Pain: Advice against Bed Rest**

#### **RATIONALE:**

Strong evidence shows that bed rest is not an effective treatment option for acute back pain. Maintaining usual activities has been shown to improve recovery.

#### **CLINICAL RECOMMENDATION STATEMENTS:**

Patients with acute low back pain should be advised to stay active and continue ordinary activity within the limits permitted by the pain. Remaining active leads to more rapid recovery with less chronic disability and fewer recurrent problems than either bed rest or back mobilizing exercises (ICSI, 2005).



## HEPATITIS C MEASURES GROUP OVERVIEW

### 2014 PQRS OPTIONS FOR MEASURES GROUPS:

#### 2014 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
- #183. Hepatitis C: Hepatitis A Vaccination in Patients with Hepatitis C Virus (HCV)

#### 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:** 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, 2014 **OR** July 1 through December 31, 2014).
- 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 1/1/2014 – 9/30/2014]:** 070.54

**ICD-10-CM [for use 10/1/2014 - 12/31/2014]:** B18.2

#### **Accompanied by:**

**One of the following patient encounter codes:** 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215

- Report a numerator option on **all applicable** measures within the Hepatitis C Measures Group for each patient within the eligible professional's patient sample.
- Applicable measures contain patient demographic criteria specific to the measure. For example, Counseling Regarding Use of Contraception Prior to Antiviral Therapy is applicable to female patients *aged 18 through 44 years and all men aged 18 years and older* within the sample population, while the Antiviral Treatment Prescribed measure within this group is applicable to *all patients* aged 18 years and older. Eligible professionals may find it more efficient to report all measures in the group for each patient within their sample. Reporting measure(s) from the group that are inapplicable to an individual patient will not affect the eligible provider's reporting or performance rate.
- 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 groups option.

**▲ Measure #84 (NQF 0395): Hepatitis C: Ribonucleic Acid (RNA) Testing Before Initiating Treatment**

**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) 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:**

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**

Patient not receiving antiviral treatment for hepatitis C (**4151F**)

**OR**

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: HCV Genotype Testing Prior to Treatment**

**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:**

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**

Clinician documented that patient is not an eligible candidate for genotype testing; patient not receiving antiviral treatment for hepatitis C (**G8458**)

**OR**

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**

**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) 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:**

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 (**G8461**)

**OR**

Hepatitis C quantitative RNA testing not performed between 4-12 weeks after the initiation of antiviral treatment for reasons documented by clinician (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 (**G8461**)

**OR**

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

**OR**

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 (**G8461**)

**▲ Measure #183 (NQF 0399): Hepatitis C: Hepatitis A Vaccination in Patients with Hepatitis C Virus (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 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

**Definitions:**

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

**Numerator Options:**

Hepatitis A vaccine injection administered or previously received **(4148F)**

**OR**

Patient has documented immunity to hepatitis A **(3215F)**

**OR**

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**

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**

Hepatitis A vaccine **not** received, reason not otherwise specified **(4148F with 8P)**

## HEPATITIC C MEASURES GROUP RATIONALE AND CLINICAL RECOMMENDATION STATEMENTS

### **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 #183 - Hepatitis C: Hepatitis A Vaccination in Patients with Hepatitis C Virus (HCV)**

**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. (AASLD, 2009)

**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)



## HEART FAILURE (HF) MEASURES GROUP OVERVIEW

### 2014 PQRS OPTIONS FOR MEASURES GROUPS:

#### 2014 PQRS MEASURES IN HEART FAILURE (HF) MEASURES GROUP:

- #5. Heart Failure (HF): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy for Left Ventricular Systolic Dysfunction (LVSD)
- #8. Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)
- #198. Heart Failure: Left Ventricular Ejection Fraction (LVEF) Assessment
- #226. Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention

#### 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.

**G8548:** I intend to report the Heart Failure (HF) Measures Group

- Report the patient sample method:  
**20 Patient Sample Method:** 20 unique patients (a majority of which must be Medicare Part B FFS [fee for service] patients) meeting patient sample criteria for the measures group during the reporting period (January 1 through December 31, 2014 **OR** July 1 through December 31, 2014).
- Patient sample criteria for the HF Measures Group are patients aged 18 years and older with a specific diagnosis of HF accompanied by a specific patient encounter:

#### One of the following diagnosis codes indicating heart failure:

**ICD-9-CM [for use 1/1/2014 – 9/30/2014]:** 402.01, 402.11, 402.91, 404.01, 404.03, 404.11, 404.13, 404.91, 404.93, 428.0, 428.1, 428.20, 428.21, 428.22, 428.23, 428.30, 428.31, 428.32, 428.33, 428.40, 428.41, 428.42, 428.43, 428.9

**ICD-10-CM [for use 10/1/2014 - 12/31/2014]:** I11.0, I13.0, I13.2, I50.1, I50.20, I50.21, I50.22, I50.23, I50.30, I50.31, I50.32, I50.33, I50.40, I50.41, I50.42, I50.43, I50.9

#### Accompanied by:

**One of the following patient encounter codes:** 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99304, 99305, 99306, 99307, 99308, 99309, 99310, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350

- Report a numerator option on **all** measures within the HF Measures Group for each patient within the eligible professional's patient sample.
- Instructions for qualifying numerator option reporting for each of the measures within the Heart Failure (HF) 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 G8551:** All quality actions for the applicable measures in the Heart Failure (HF) Measures Group have been performed for this patient

- To report satisfactorily the HF Measures Group it requires **all** measures for each patient within the eligible professional's patient sample to be reported a minimum of once during the reporting period.
- Measures #5 and #8 are represented differently from the corresponding individual measures. Therefore the individual measures are specified and analyzed in a slightly different manner than the same measures contained within the measures group. Use the measure specifications as defined within the measures group for reporting purposes in order to satisfactorily report the measures group.
- 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.
- **NOTE:** The detailed instructions in this specification apply exclusively to the reporting and analysis of the included measures under the measures groups option.

**Measure #5 (NQF 0081): Heart Failure (HF): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy for Left Ventricular Systolic Dysfunction (LVSD)**

**DESCRIPTION:**

Percentage of patients aged 18 years and older with a diagnosis of heart failure (HF) with a current or prior left ventricular ejection fraction (LVEF) < 40% who were prescribed ACE inhibitor or ARB therapy either within a 12 month period when seen in the outpatient setting OR at **each** hospital discharge

**NUMERATOR:**

Patients who were prescribed ACE inhibitor or ARB therapy within a 12 month period when seen in the outpatient setting or at hospital discharge

**NUMERATOR NOTE:** *The reporting numerator options contained within this specification are represented differently than the corresponding individual measure. Reference this specification only in order to satisfactorily report the measures group.*

*For purposes of the Heart Failure Measures Group, hospital discharge codes are not included as part of the common denominator. This measure should only be reported on those patients seen in the outpatient setting.*

**Numerator Instructions:** LVEF < 40% corresponds to qualitative documentation of moderate dysfunction or severe dysfunction. The LVSD may be determined by quantitative or qualitative assessment, which may be current or historical. Examples of a quantitative or qualitative assessment may include an echocardiogram: 1) that provides a numerical value of LVSD or 2) that uses descriptive terms such as moderately or severely depressed left ventricular systolic function. Any current or prior ejection fraction study documenting LVSD can be used to identify patients.

**Definition:**

**Prescribed - Outpatient setting:** May include prescription given to the patient for ACE inhibitor or ARB therapy at one or more visits in the measurement period OR patient already taking ACE inhibitor or ARB therapy as documented in current medication list.

**Numerator Options:**

Angiotensin converting enzyme (ACE) inhibitor or angiotensin receptor blocker (ARB) therapy prescribed or currently being taken **(4010F)**

**AND**

Left ventricular ejection fraction (LVEF) < 40% or documentation of moderately or severely depressed left ventricular systolic function **(3021F)**

**OR**

Documentation of medical reason(s) for not prescribing angiotensin converting enzyme (ACE) inhibitor or angiotensin receptor blocker (ARB) therapy (eg, hypotensive patients who are at immediate risk of cardiogenic shock, hospitalized patients who have experienced marked azotemia, allergy, intolerance, other medical reasons) **(4010F with 1P)**

**OR**

Documentation of patient reason(s) for not prescribing angiotensin converting enzyme (ACE) inhibitor or angiotensin receptor blocker (ARB) therapy (eg, patient declined, other reasons) **(4010F with 2P)**

**OR**

Documentation of system reason(s) for not prescribing angiotensin converting enzyme (ACE) inhibitor or angiotensin receptor blocker (ARB) therapy (eg, other system reasons) **(4010F with 3P)**

**AND**

Left ventricular ejection fraction (LVEF) < 40% or documentation of moderately or severely depressed left ventricular systolic function **(3021F)**

OR

Left ventricular ejection fraction (LVEF)  $\geq$  40% or documentation as normal or mildly depressed left ventricular systolic function **(3022F)**

OR

Left ventricular ejection fraction (LVEF) was not performed or documented **(3021F with 8P)**

OR

Angiotensin converting enzyme (ACE) inhibitor or angiotensin receptor blocker (ARB) therapy was not prescribed, reason not otherwise specified **(4010F with 8P)**

AND

Left ventricular ejection fraction  $<$  40% or documentation of moderately or severely depressed left ventricular systolic function **(3021F)**

**Measure #8 (NQF 0083): Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)**

**DESCRIPTION:**

Percentage of patients aged 18 years and older with a diagnosis of heart failure (HF) with a current or prior left ventricular ejection fraction (LVEF) < 40% who were prescribed beta-blocker therapy either within a 12 month period when seen in the outpatient setting OR at **each** hospital discharge

**NUMERATOR:**

Patients who were prescribed beta-blocker therapy within a 12 month period when seen in the outpatient setting or at each hospital discharge

**NUMERATOR NOTE:** *The reporting numerator options contained within this specification are represented differently than the corresponding individual measure. Reference this specification only in order to satisfactorily report the measures group.*

*For purposes of the Heart Failure Measures Group, hospital discharge codes are not included as part of the common denominator. This measure should only be reported on those patients seen in the outpatient setting.*

**Numerator Instructions:** The left ventricular systolic dysfunction may be determined by quantitative or qualitative assessment, which may be current or historical. Examples of a quantitative or qualitative assessment may include an echocardiogram: 1) that provides a numerical value of left ventricular systolic dysfunction or 2) that uses descriptive terms such as moderately or severely depressed left ventricular systolic function. Any current or prior ejection fraction study documenting LVSD can be used to identify patients. LVEF < 40% corresponds to qualitative documentation of moderate dysfunction or severe left ventricular systolic dysfunction.

**Definitions:**

**Prescribed – Outpatient Setting:** May include prescription given to the patient for beta-blocker therapy at one or more visits in the measurement period OR patient already taking beta-blocker therapy as documented in current medication list.

**Beta-blocker Therapy** - For patients with prior LVEF < 40%, beta-blocker therapy should include bisoprolol, carvedilol, or sustained release metoprolol succinate.

**Numerator Options:**

Beta-blocker therapy prescribed (**G8450**)

**AND**

Left ventricular ejection fraction (LVEF) < 40% or documentation of moderately or severely depressed left ventricular systolic function (**G8923**)

**OR**

Beta-Blocker Therapy for LVEF < 40% not prescribed for reasons documented by the clinician (e.g., low blood pressure, fluid overload, asthma, patients recently treated with an intravenous positive inotropic agent, allergy, intolerance, other medical reasons, patient declined, other patient reasons, or other reasons attributable to the healthcare system) (**G8451**)

**AND**

Left ventricular ejection fraction (LVEF) < 40% or documentation of moderately or severely depressed left ventricular systolic function (**G8923**)

**OR**

Left ventricular ejection fraction (LVEF) ≥ 40% or documentation as normal or mildly depressed left ventricular systolic function (**G8395**)

**OR**

Left ventricular ejection fraction (LVEF) not performed or documented (**G8396**)

**OR**

Beta-blocker therapy not prescribed (**G8452**)

**AND**

Left ventricular ejection fraction (LVEF) < 40% or documentation of moderately or severely depressed left ventricular systolic function (**G8923**)

**Measure #198 (NQF 0079): Heart Failure: Left Ventricular Ejection Fraction (LVEF) Assessment**

**DESCRIPTION:**

Percentage of patients aged 18 years and older with a diagnosis of heart failure for whom the quantitative or qualitative results of a recent or prior [any time in the past] LVEF assessment is documented within a 12 month period

**NUMERATOR:**

Patients for whom the quantitative or qualitative results of a recent or prior (any time in the past) LVEF assessment is documented within a 12 month period

**Numerator Instructions:** The left ventricular systolic dysfunction may be determined by quantitative or qualitative assessment, which may be current or historical. Examples of a quantitative or qualitative assessment may include an echocardiogram: 1) that provides a numerical value of left ventricular systolic function or 2) that uses descriptive terms such as moderately or severely depressed left ventricular systolic function. Documentation must include documentation in a progress note of the results of an LVEF assessment, regardless of when the evaluation of ejection fraction was performed.

**Definitions:**

**Qualitative Results Correspond to Numeric Equivalent as Follows:**

- Hyperdynamic: corresponds to LVEF greater than 70%
- Normal: corresponds to LVEF 50% to 70% (midpoint 60%)
- Mild dysfunction: corresponds to LVEF 40% to 49% (midpoint 45%)
- Moderate dysfunction: corresponds to LVEF 30% to 39% (midpoint 35%)
- Severe dysfunction: corresponds to LVEF less than 30%

**Numerator Options:**

Left ventricular ejection fraction (LVEF) < 40% or documentation as normal or mildly depressed left ventricular systolic function (**G8738**)

**OR**

Left ventricular ejection fraction (LVEF)  $\geq$  40% or documentation of severely or moderately depressed left ventricular systolic function (**G8739**)

**OR**

Left ventricular ejection fraction (LVEF) **not** performed or assessed, reason not given (**G8740**)

**▲ Measure #226 (NQF 0028): Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention**

**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:**

Patient screened for tobacco use AND received tobacco cessation intervention (counseling, pharmacotherapy, or both), if identified as a tobacco user **(4004F)**

**OR**

Current tobacco non-user **(1036F)**

**OR**

Documentation of medical reason(s) for not screening for tobacco use (eg, limited life expectancy, other medical reason) **(4004F with 1P)**

**OR**

Tobacco screening OR tobacco cessation intervention **not** performed, reason not otherwise specified **(4004F with 1P)**



## HEART FAILURE MEASURES GROUP RATIONALE AND CLINICAL RECOMMENDATION STATEMENTS

### **Measure #5 - Heart Failure: (HF): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy for Left Ventricular Systolic Dysfunction (LVSD)**

#### **RATIONALE:**

In the absence of contraindications, ACE inhibitors or ARBs are recommended for all patients with symptoms of heart failure and reduced left ventricular systolic function. ACE inhibitors remain the first choice for inhibition of the renin-angiotensin system in chronic heart failure, but ARBs can now be considered a reasonable alternative. Both pharmacologic agents have been shown to decrease the risk of death and hospitalization. Additional benefits of ACE inhibitors include the alleviation of symptoms and the improvement of clinical status and overall sense of well-being of patients with heart failure.

#### **CLINICAL RECOMMENDATION STATEMENTS:**

Angiotensin converting enzyme inhibitors are recommended for all patients with current or prior symptoms of [heart failure] and reduced LVEF, unless contraindicated. (Class I, Level of Evidence: A) (ACCF/AHA, 2009)

Treatment with an [ACE inhibitor] should be initiated at low doses [see excerpt from guideline table below], followed by gradual increments in dose if lower doses have been well tolerated. Clinicians should attempt to use doses that have been shown to reduce the risk of cardiovascular events in clinical trials. If these target doses of an [ACE inhibitor] cannot be used or are poorly tolerated, intermediate doses should be used with the expectation that there are likely to be only small differences in efficacy between low and high doses. (ACCF/AHA, 2009)

Inhibitors of the Renin-Angiotensin-Aldosterone System Commonly Used for the Treatment of Patients with [Heart Failure] with Low Ejection Fraction:

Drug	Initial Daily Dose(s)	Maximum Doses(s)
<b>ACE Inhibitors</b>		
Captopril	6.25 mg 3 times	50 mg 3 times
Enalapril	2.5 mg twice	10 to 20 mg twice
Fosinopril	5 to 10 mg once	40 mg once
Lisinopril	2.5 to 5 mg once	20 to 40 mg once
Perindopril	2 mg once	8 to 16 mg once
Quinapril	5 mg twice	20 mg twice
Ramipril	1.25 to 2.5 mg once	10 mg once
Trandolapril	1 mg once	4 mg once
<b>Angiotensin Receptor Blockers</b>		
Candesartan	4 to 8 mg once	32 mg once
Losartan**	25 to 50 mg once	50 to 100 mg once
Valsartan	20 to 40 mg twice	160 mg twice

\*\*[Note: Among ARB's, Losartan has the weakest evidence supporting its value in heart failure patients.] Additionally, while the 2009 guidelines recommended a maximum dosage of 100mg, the maximum dosage recommendation for Losartan has been increased to 150mg based on the HEAAL trial. (Konstam MA, et al.,2009)

An ARB should be administered to post - [myocardial infarction (MI)] patients without [heart failure] who are intolerant of [ACE inhibitors] and have a low LVEF. (Class I, Level of Evidence: B) (ACCF/AHA, 2009)

Angiotensin II receptor blockers are reasonable to use as alternatives to [ACE inhibitors] as first - line therapy for patients with mild to moderate [heart failure] and reduced LVEF, especially for patients already taking ARBs for other indications. (Class IIa, Level of Evidence: A) (ACCF/AHA, 2009)

For the hospitalized patient:

- In patients with reduced ejection fraction experiencing a symptomatic exacerbation of [heart failure] requiring hospitalization during chronic maintenance treatment with oral therapies known to improve outcomes, particularly ACE inhibitors or ARBs and beta-blocker therapy, it is recommended that these therapies be continued in most patients in the absence of hemodynamic instability or contraindications. (Class I, Level of Evidence: C) (ACCF/AHA, 2009)
- In patients hospitalized with [heart failure] with reduced ejection fraction not treated with oral therapies known to improve outcomes, particularly ACE inhibitors or ARBs and beta-blocker therapy, initiation of these therapies is recommended in stable patients prior to hospital discharge. Initiation of beta-blocker therapy is recommended after optimization of volume status and successful discontinuation of intravenous diuretics, vasodilators, and inotropic agents. Beta-blocker therapy should be initiated at a low dose and only in stable patients. Particular caution should be used when initiating beta-blockers in patients who have required inotropes during their hospital course. (Class I, Level of Evidence: B) (ACCF/AHA, 2009)

### **Measure #8 - Heart Failure: Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)**

#### **RATIONALE:**

Beta-blockers are recommended for all patients with stable heart failure and left ventricular systolic dysfunction, unless contraindicated. Treatment should be initiated as soon as a patient is diagnosed with left ventricular systolic dysfunction and does not have low blood pressure, fluid overload, or recent treatment with an intravenous positive inotropic agent. Beta-blockers have been shown to lessen the symptoms of heart failure, improve the clinical status of patients, reduce future clinical deterioration, and decrease the risk of mortality and the combined risk of mortality and hospitalization.

#### **CLINICAL RECOMMENDATION STATEMENTS:**

Beta-blockers (using 1 of the 3 proven to reduce mortality, i.e., bisoprolol, carvedilol, and sustained release metoprolol succinate) are recommended for all stable patients with current or prior symptoms of [heart failure] and reduced LVEF, unless contraindicated. (Class I, Level of Evidence: A) (ACCF/AHA, 2009)

Treatment with a beta blocker should be initiated at very low doses [see excerpt from guideline table below], followed by gradual increments in dose if lower doses have been well tolerated physicians, especially cardiologists and primary care physicians, should make every effort to achieve the target doses of the beta blockers shown to be effective in major clinical trials. (ACCF/AHA, 2009)

Beta Blockers Commonly Used for the Treatment of Patients with [Heart Failure] with Low Ejection Fraction:

Drug	Initial Daily Dose(s)	Maximum Doses(s)
<b>Beta Blockers</b>		
Bisoprolol	1.25 mg once	10 mg once
Carvedilol	3.125 mg twice	25 mg twice 50 mg twice for patients > 85 kg
Metoprolol succinate extended release (metoprolol CR/XL)	12.5 to 25 mg once	200 mg once

For the hospitalized patient:

- In patients with reduced ejection fraction experiencing a symptomatic exacerbation of [heart failure] requiring hospitalization during chronic maintenance treatment with oral therapies known to improve outcomes, particularly [ACE inhibitors] or ARBs and beta-blocker therapy, it is recommended that these therapies be continued in most patients in the absence of hemodynamic instability or contraindications. (Class I, Level of Evidence: C) (ACCF/AHA, 2009)

- In patients hospitalized with [heart failure] with reduced ejection fraction not treated with oral therapies known to improve outcomes, particularly [ACE inhibitors] or ARBs and beta-blocker therapy, initiation of these therapies is recommended in stable patients prior to hospital discharge. (Class I, Level of Evidence: B) (ACCF/AHA, 2009)
- Initiation of beta-blocker therapy is recommended after optimization of volume status and successful discontinuation of intravenous diuretics, vasodilators, and inotropic agents. Beta-blocker therapy should be initiated at a low dose and only in stable patients. Particular caution should be used when initiating beta blockers in patients who have required inotropes during their hospital course. (Class I, Level of Evidence: B) (ACCF/AHA, 2009)

### **Measure #198 - Heart Failure: Left Ventricular Ejection Fraction (LVEF) Assessment**

#### **RATIONALE:**

Evaluation of LVEF in patients with heart failure provides important information that is required to appropriately direct treatment. Several pharmacologic therapies have demonstrated efficacy in slowing disease progression and improving outcomes in patients with left ventricular systolic dysfunction. LVEF assessed during the initial evaluation of patients presenting with heart failure can be considered valid unless the patient has demonstrated a major change in clinical status, experienced or recovered from a clinical event, or received therapy that might have a significant effect on cardiac function.

A comprehensive 2-dimensional echocardiogram with Doppler flow studies has been identified as the single most useful diagnostic test in the evaluation of patients with heart failure.

#### **CLINICAL RECOMMENDATION STATEMENTS:**

The following evidence statements are quoted verbatim from the referenced clinical guidelines:

Two-dimensional echocardiography with Doppler should be performed during initial evaluation of patients presenting with HF to assess LVEF, LV size, wall thickness, and valve function. Radionuclide ventriculography can be performed to assess LVEF and volumes. (Class I, Level of Evidence: C) (ACC/AHA, 2009)

Magnetic resonance imaging or computed tomography may be useful in evaluating chamber size and ventricular mass, detecting right ventricular dysplasia, or recognizing the presence of pericardial disease, as well as in assessing cardiac function and wall motion. (ACCF/AHA, 2009)

### **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)

## CORONARY ARTERY DISEASE (CAD) MEASURES GROUP OVERVIEW

### 2014 PQRS OPTIONS FOR MEASURES GROUPS:

#### 2014 PQRS MEASURES IN CORONARY ARTERY DISEASE (CAD) MEASURES GROUP:

- #6. Coronary Artery Disease (CAD): Antiplatelet Therapy
- #197. Coronary Artery Disease (CAD): Lipid Control
- #226. Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention
- #242. Coronary Artery Disease (CAD): Symptom Management

#### 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 measure groups for use by registries that utilize claims data.

**G8489:** I intend to report the Coronary Artery Disease (CAD) Measures Group

- Report the patient sample method:  
**20 Patient Sample Method:** 20 unique patients (a majority of which must be Medicare Part B FFS [fee for service] patients) meeting patient sample criteria for the measures group during the reporting period (January 1 through December 31, 2014 **OR** July 1 through December 31, 2014).
- Patient sample criteria for the CAD Measures Group are patients aged 18 years and older with a specific diagnosis of CAD accompanied by a specific patient encounter:

#### One of the following diagnosis codes indicating coronary artery disease:

**ICD-9-CM [for use 1/1/2014 – 9/30/2014]:** 410.00, 410.01, 410.02, 410.10, 410.11, 410.12, 410.20, 410.21, 410.22, 410.30, 410.31, 410.32, 410.40, 410.41, 410.42, 410.50, 410.51, 410.52, 410.60, 410.61, 410.62, 410.70, 410.71, 410.72, 410.80, 410.81, 410.82, 410.90, 410.91, 410.92, 411.0, 411.1, 411.81, 411.89, 412, 413.0, 413.1, 413.9, 414.00, 414.01, 414.02, 414.03, 414.04, 414.05, 414.06, 414.07, 414.2, 414.3, 414.8, 414.9, V45.81, V45.82

**ICD-10-CM [for use 10/1/2014 - 12/31/2014]:** I20.0, I20.1, I20.8, I20.9, I21.01, I21.02, I21.09, I21.11, I21.19, I21.21, I21.29, I21.3, I21.4, I22.0, I22.1, I22.2, I22.8, I22.9, I24.0, I24.1, I24.8, I24.9, I25.10, I25.110, I25.111, I25.118, I25.119, I25.2, I25.5, I25.6, I25.700, I25.701, I25.708, I25.709, I25.710, I25.711, I25.718, I25.719, I25.720, I25.721, I25.728, I25.729, I25.730, I25.731, I25.738, I25.739, I25.750, I25.751, I25.758, I25.759, I25.760, I25.761, I25.768, I25.769, I25.790, I25.791, I25.798, I25.799, I25.810, I25.811, I25.812, I25.82, I25.83, I25.89, I25.9, Z95.1, Z95.5, Z98.61

#### Accompanied by:

**One of the following patient encounter codes:** 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99304, 99305, 99306, 99307, 99308, 99309, 99310, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350

- Report a numerator option on **all applicable** measures within the CAD Measures Group for each patient within the eligible professional's patient sample.
- Instructions for qualifying numerator option reporting for each of the measures within the Coronary Artery Disease (CAD) 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 G8498:** All quality actions for the applicable measures in the Coronary Artery Disease (CAD) Measures Group have been performed for this patient

- To report satisfactorily for the CAD 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.

Measure #242 is represented differently from the corresponding individual measure. Therefore the individual measures are specified and analyzed in a slightly different manner than the same measures contained within the measures group. Use the measure specifications as defined within the measures group for reporting purposes in order to satisfactorily report the measures group.

- 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.
- **NOTE:** The detailed instructions in this specification apply exclusively to the reporting and analysis of the included measures under the measures groups option.

**Measure #6 (NQF 0067): Coronary Artery Disease (CAD): Antiplatelet Therapy**

**DESCRIPTION:**

Percentage of patients aged 18 years and older with a diagnosis of coronary artery disease seen within a 12 month period who were prescribed aspirin or clopidogrel

**NUMERATOR:**

Patients who were prescribed aspirin or clopidogrel

**Definition:**

**Prescribed** – May include prescription given to the patient for aspirin or clopidogrel at one or more visits in the measurement period OR patient already taking aspirin or clopidogrel as documented in current medication list.

**Numerator Options:**

Aspirin or clopidogrel prescribed **(4086F)**

**OR**

Documentation of medical reason(s) for not prescribing aspirin or clopidogrel (eg, allergy, intolerance, receiving other thienopyridine therapy, receiving warfarin therapy, bleeding coagulation disorders, other medical reasons) **(4086F with 1P)**

**OR**

Documentation of patient reason(s) for not prescribing aspirin or clopidogrel (eg, patient declined, other patient reasons) **(4086F with 2P)**

**OR**

Documentation of system reason(s) for not prescribing aspirin or clopidogrel (eg, lack of drug availability, other reasons attributable to the health care system) **(4086F with 3P)**

**OR**

Aspirin or clopidogrel was **not** prescribed, reason not otherwise specified **(4086F with 8P)**

**Measure #197 (NQF 0074): Coronary Artery Disease (CAD): Lipid Control**

**DESCRIPTION:**

Percentage of patients aged 18 years and older with a diagnosis of coronary artery disease seen within a 12 month period who have a LDL-C result < 100 mg/dL OR patients who have a LDL-C result ≥ 100 mg/dL and have a documented plan of care to achieve LDL-C < 100 mg/dL, including at a minimum the prescription of a statin

**NUMERATOR:**

Patients who have a LDL-C result < 100 mg/dL OR patients who have a LDL-C result ≥ 100 mg/dL and have a documented plan of care to achieve LDL-C < 100 mg/dL, including at a minimum the prescription of a statin

**Numerator Instructions:** The first numerator option can be reported for patients who have a documented LDL-C < 100 mg/dL at any time during the measurement period (if more than one result, report most current). All patients that meet denominator criteria without an LDL-C result will NOT meet performance for the measure.

**Definitions:**

**Documented plan of care** - Includes the prescription of a statin and may also include: documentation of discussion of lifestyle modifications (diet, exercise) or scheduled re-assessment of LDL-C.

**Prescribed** - May include prescription given to the patient for a statin at one or more visits within the measurement period OR patient already taking a statin as documented in current medication list.

**Numerator Options:**

Most current LDL-C < 100 mg/dL (**G8736**)

**OR**

Most current LDL-C ≥ 100 mg/dL (**G8737**)

**AND**

Statin therapy prescribed or currently being taken (**4013F**)

**AND**

Plan of care to achieve lipid control documented (**0556F**)

**OR**

Most current LDL-C ≥ 100 mg/dL (**G8737**)

**AND**

Plan of care to achieve lipid control documented (**0556F**)

**AND**

Documentation of medical reason(s) for statin therapy not prescribed or currently being taken (eg, allergy, intolerance to statin medication(s), other medical reasons) (**4013F with 1P**)

**OR**

Documentation of patient reason(s) for statin therapy not prescribed or currently being taken (eg, patient declined, other patient reasons) (**4013F with 2P**)

**OR**

Documentation of system reason(s) for statin therapy not prescribed or currently being taken (eg, financial reasons, other system reasons) (**4013F with 3P**)

**OR**

Most current LDL-C ≥ 100 mg/dL (**G8737**)

**AND**

Statin therapy **not** prescribed or currently being taken, reason not otherwise specified (**4013F with 8P**)

**OR**



Most current LDL-C  $\geq$  100 mg/dL (**G8737**)

**AND**

Plan of care to achieve lipid control **not** documented (**0556F with 8P**)

**OR**

LDL-C result not present or not within 12 months prior (**G8943**)

**▲ Measure #226 (NQF 0028): Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention**

**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:**

Patient screened for tobacco use AND received tobacco cessation intervention (counseling, pharmacotherapy, or both), if identified as a tobacco user **(4004F)**

**OR**

Current tobacco non-user **(1036F)**

**OR**

Documentation of medical reason(s) for not screening for tobacco use (eg, limited life expectancy, other medical reason) **(4004F with 1P)**

**OR**

Tobacco screening OR tobacco cessation intervention **not** performed, reason not otherwise specified **(4004F with 8P)**

## Measure #242: Coronary Artery Disease (CAD): Symptom Management

### **DESCRIPTION:**

Percentage of patients aged 18 years and older with a diagnosis of coronary artery disease seen within a 12 month period with results of an evaluation of level of activity and an assessment of whether anginal symptoms are present or absent with appropriate management of anginal symptoms within a 12 month period

### **NUMERATOR:**

Patients with appropriate management of anginal symptoms within a 12 month period

**NUMERATOR NOTE:** *The reporting numerator options contained within this specification are represented differently than the corresponding individual measure. Reference this specification only in order to satisfactorily report the measures group.*

**Numerator Instruction:** Patients with an evaluation of level of activity and an assessment of whether anginal symptoms are present or absent are included within this measure

Evaluation of level of activity and evaluation of presence or absence of angina symptoms should include:

- Documentation of Canadian Cardiovascular Society (CCS) Angina Class OR
- Completion of a disease-specific questionnaire (e.g., Seattle Angina Questionnaire or other validated questionnaire) to quantify angina and level of activity

### **Definitions:**

#### **Canadian Cardiovascular Society (CCS) Angina Classification:**

Class 0: Asymptomatic

Class 1: Angina with strenuous exercise

Class 2: Angina with moderate exertion

Class 3: Angina with mild exertion

1. Walking 1-2 level blocks at normal pace

2. Climbing 1 flight of stairs at normal pace

Class 4: Angina at any level of physical exertion

#### **Appropriate Management of Anginal Symptoms Includes the Following:**

1. Absence of anginal symptoms as determined by evaluation of level of activity and symptoms.

### **OR**

2. Presence of anginal symptoms as determined by evaluation of level of activity and symptoms and a plan of care is documented to achieve control of anginal symptoms.

Documented plan of care may include:

- 2 or more anti-anginal medications prescribed, \*\* OR
- Referral for consideration for coronary revascularization, OR
- Referral for additional evaluation or treatment of anginal symptoms

\*\*Prescribed may include prescription given to the patient for anti-anginal medication at one or more visits in the measurement period OR patient already taking 2 or more anti-anginal medications as documented in current medication list.

### **Numerator Options:**

Severity of angina assessed by level of activity (1010F)

### **AND**

Angina present (1011F)

### **AND**

Plan of care to manage anginal symptoms documented (0557F)

**OR**

Severity of angina assessed by level of activity (1010F)

**AND**

Angina absent (1012F)

**OR**

Severity of angina assessed by level of activity (1010F)

**AND**

Angina present (1011F)

**AND**

Documentation of medical reason(s) for not providing any specified element of plan of care to achieve control of anginal symptoms (eg, allergy, intolerance, other medical reasons) (0557F *with 1P*)

**OR**

Documentation of patient reason(s) for not providing any specified element of plan of care to achieve control of anginal symptoms (eg, patient declined, other patient reasons) (0557F *with 2P*)

**OR**

Documentation of system reason(s) for not providing any specified element of plan of care to achieve control of anginal symptoms (eg, financial reasons, other reasons attributable to the health care system) (0557F *with 3P*)

**OR**

Severity of angina assessed by level of activity (1010F)

**AND**

Angina present (1011F)

**AND**

Plan of care to achieve control of angina symptoms was **not** performed, reason not otherwise specified (0557F *with 8P*)

**OR**

Severity of angina **not** assessed, reason not otherwise specified (1010F *with 8P*)

## CORONARY ARTERY DISEASE (CAD) MEASURES GROUP RATIONALE AND CLINICAL RECOMMENDATION STATEMENTS

### **Measure #6 - Coronary Artery Disease (CAD): Antiplatelet Therapy**

#### **RATIONALE:**

Use of antiplatelet therapy has shown to reduce the occurrence of vascular events in patients with coronary artery disease, including myocardial infarction and death.

#### **CLINICAL RECOMMENDATION STATEMENTS:**

The following evidence statements are quoted verbatim from the referenced clinical guidelines.

Aspirin should be started at 75 to 162 mg per day and continued indefinitely in all patients unless contraindicated. (Class I Recommendation, Level A Evidence) (ACC/AHA, 2007)

Clopidogrel when aspirin is absolutely contraindicated. (Class IIa Recommendation; Level of Evidence B) (ACC/AHA, 2002)

### **Measure #197 - Coronary Artery Disease (CAD): Lipid Control**

#### **RATIONALE:**

Managing LDL-C to less than 100 mg/dL through use of statins reduces risk of cardiovascular events.

#### **CLINICAL RECOMMENDATION STATEMENTS:**

The following evidence statements are quoted verbatim from the referenced clinical guidelines:

Recommended lipid management includes assessment of a fasting lipid profile (Class I Recommendation, Level A Evidence). (ACC/AHA, 2007)

- a. LDL-C should be less than 100 mg/dL (Class I Recommendation, Level A Evidence)
- b. Reduction of LDL-C to less than 70 mg/dL or high-dose statin therapy is reasonable (Class IIa Recommendation, Level A Evidence).
- c. If baseline LDL-C is greater than or equal to 100 mg/dL, LDL-lowering medications are used in high-risk or moderately high-risk persons, it is recommended that intensity of the therapy be sufficient to achieve a 30% to 40% reduction in LDL-C levels (Class I Recommendation, Level A Evidence).
- d. If on-treatment LDL-C is greater than or equal to 100 mg/dL, LDL-lowering therapy should be intensified (Class I Recommendation, Level A Evidence).
- e. If baseline LDL-C is 70 to 100 mg/dL, it is reasonable to treat LDL-C to less than 70 mg/dL (Class IIa Recommendation, Level B Evidence).

Statins should be considered as first-line drugs when LDL-lowering drugs are indicated to achieve LDL treatment goals. (The Third Report of the National Cholesterol Education Program [NCEP] Adult Treatment Panel III [ATPIII], 2002)

### **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 #242 - Coronary Artery Disease (CAD): Symptom Management**

#### **RATIONALE:**

In order to effectively manage the symptoms of a patient with chronic stable coronary artery disease, an assessment of those symptoms needs to be performed. This assessment is the basis of any treatment modification that needs to be made. Effective management of the symptoms associated with chronic stable coronary artery disease (eg, chest pain, shortness of breath) through medication management or referral for consideration of revascularization or other additional treatment. This may lead to improved patient quality of life, an important patient-centered outcome.

#### **CLINICAL RECOMMENDATION STATEMENTS:**

The following evidence statements are quoted verbatim from the referenced clinical guidelines:

The treatment of chronic stable angina has two complementary objectives: to reduce the risk of mortality and morbid events and to reduce symptoms. From the patient's perspective, it is often the latter that is of greater concern. The cardinal symptom of [coronary artery disease (CAD)] is anginal chest pain or equivalent symptoms, such as exertional dyspnea. Often the patient suffers not only from discomfort of the symptom itself but also from accompanying limitations on activities and the associated anxiety that the symptoms may produce. (ACC/AHA, 2002) Beta-blockers as initial therapy in the absence of contraindications in patients with prior MI or without prior MI. (Class I Recommendation; Level of Evidence A [with prior MI]) (Class I Recommendation; Level of Evidence B [without prior MI]) (ACC/AHA, 2002)

Sublingual nitroglycerin or nitroglycerin spray for the immediate relief of angina. (Class I Recommendation; Level of Evidence B) (ACC/AHA, 2002)

Calcium antagonists\* or long-acting nitrates as initial therapy for reduction of symptoms when beta-blockers are contraindicated. (Class I Recommendation; Level of Evidence B) (ACC/AHA, 2002)

Calcium antagonists\* or long-acting nitrates in combination with beta-blockers when initial treatment with beta-blockers is not successful. (Class I Recommendation; Level of Evidence B) (ACC/AHA, 2002)

Calcium antagonists\* and long-acting nitrates as a substitute for beta-blockers if initial treatment with beta-blockers leads to unacceptable side effects. (Class I Recommendation; Level of Evidence C) (ACC/AHA, 2002)

\*Short-acting, dihydropyridine calcium antagonists should be avoided.

## ISCHEMIC VASCULAR DISEASE (IVD) MEASURES GROUP OVERVIEW

### 2014 PQRS OPTIONS FOR MEASURES GROUPS:

#### 2014 PQRS MEASURES IN ISCHEMIC VASCULAR DISEASE (IVD) MEASURES GROUP:

- #204. Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antithrombotic
- #226. Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention
- #236. Controlling High Blood Pressure
- #241. Ischemic Vascular Disease (IVD): Complete Lipid Profile and LDL-C Control (< 100 mg/dL)

#### 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 measure groups for use by registries that utilize claims data.

**G8547:** I intend to report the Ischemic Vascular Disease (IVD) 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, 2014 **OR** July 1 through December 31, 2014).
- Patient sample criteria for the IVD Measures Group are patients aged 18 years and older with a specific diagnosis of IVD accompanied by a specific patient encounter **OR** patients aged 18 years and older with a coronary artery bypass graft (CABG) or percutaneous coronary interventions (PCI):

#### One of the following diagnosis codes indicating ischemic vascular disease:

**ICD-9-CM [for use 1/1/2014 – 9/30/2014]:** 411.0, 411.1, 411.81, 411.89, 413.0, 413.1, 413.9, 414.00, 414.01, 414.02, 414.03, 414.04, 414.05, 414.06, 414.07, 414.2, 414.8, 414.9, 429.2, 433.00, 433.01, 433.10, 433.11, 433.20, 433.21, 433.30, 433.31, 433.80, 433.81, 433.90, 433.91, 434.00, 434.01, 434.10, 434.11, 434.90, 434.91, 440.1, 440.20, 440.21, 440.22, 440.23, 440.24, 440.29, 440.4, 444.01, 444.09, 444.1, 444.21, 444.22, 444.81, 444.89, 444.9, 445.01, 445.02, 445.81, 445.89

**ICD-10-CM [for use 10/1/2014 - 12/31/2014]:** I20.0, I20.1, I20.8, I20.9, I21.11, I21.19, I21.21, I21.29, I24.0, I24.1, I24.8, I24.9, I25.10, I25.110, I25.111, I25.118, I25.119, I25.5, I25.6, I25.700, I25.701, I25.708, I25.709, I25.710, I25.711, I25.718, I25.719, I25.720, I25.721, I25.728, I25.729, I25.730, I25.731, I25.738, I25.739, I25.750, I25.751, I25.758, I25.759, I25.760, I25.761, I25.768, I25.769, I25.790, I25.791, I25.798, I25.799, I25.810, I25.811, I25.812, I25.82, I25.89, I25.9, I63.00, I63.011, I63.012, I63.019, I63.02, I63.031, I63.032, I63.039, I63.09, I63.10, I63.111, I63.112, I63.119, I63.12, I63.131, I63.132, I63.139, I63.19, I63.20, I63.211, I63.212, I63.219, I63.22, I63.231, I63.232, I63.239, I63.29, I63.30, I63.311, I63.312, I63.319, I63.321, I63.322, I63.329, I63.331, I63.332, I63.339, I63.341, I63.342, I63.349, I63.39, I63.40, I63.411, I63.412, I63.419, I63.421, I63.422, I63.429, I63.431, I63.432, I63.439, I63.441, I63.442, I63.449, I63.49, I63.50, I63.511, I63.512, I63.519, I63.521, I63.522, I63.529, I63.531, I63.532, I63.539, I63.541, I63.542, I63.549, I63.59, I63.6, I63.8, I63.9, I65.01, I65.02, I65.03, I65.09, I65.1, I65.21, I65.22, I65.23, I65.29, I65.8, I65.9, I66.01, I66.02, I66.03, I66.09, I66.11, I66.12, I66.13, I66.19, I66.21, I66.22, I66.23, I66.29, I66.3, I66.8, I66.9, I70.1, I70.201, I70.202, I70.203, I70.208, I70.209, I70.211, I70.212, I70.213, I70.218, I70.219, I70.221, I70.222, I70.223, I70.228, I70.229, I70.231, I70.232, I70.233, I70.234, I70.235, I70.238, I70.239, I70.241, I70.242, I70.243, I70.244, I70.245, I70.248, I70.249, I70.25, I70.261, I70.262, I70.263, I70.268, I70.269, I70.291, I70.292, I70.293, I70.298, I70.299, I70.92, I74.01, I74.09, I74.10, I74.11, I74.19, I74.2, I74.3, I74.4, I74.5, I74.8, I74.9, I75.011, I75.012, I75.013, I75.019, I75.021, I75.022, I75.023, I75.029, I75.81, I75.89

**OR**



**Diagnosis for acute myocardial infarction:**

**(ICD-9-CM) [for use 01/1/2014-09/30/2014]:** 410.01, 410.11, 410.21, 410.31, 410.41, 410.51, 410.61, 410.71, 410.81, 410.91

**(ICD-10-CM) [for use 10/01/2014-12/31/2014]:** I21.01, I21.02, I21.09, I21.11, I21.19, I21.21, I21.29, I21.3, I21.4

**Accompanied by:**

**One of the following patient encounter codes:** 99201, 99202, 99203, 99204, 99205, 99211, 99212, 99213, 99214, 99215, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350, G0402

**OR**

**One of the following coronary artery bypass graft (CABG) or percutaneous coronary interventions (PCI) surgical procedure codes:** 33510, 33511, 33512, 33513, 33514, 33516, 33517, 33518, 33519, 33521, 33522, 33523, 33533, 33534, 33535, 33536, 92920, 92924, 92928, 92933, 92937, 92941, 92943

- Report a numerator option on **all applicable** measures within the IVD Measures Group for each patient within the eligible professional's patient sample.
- Instructions for qualifying numerator option reporting for each of the measures within the Ischemic Vascular Disease (IVD) 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 G8552:** All quality actions for the applicable measures in the Ischemic Vascular Disease (IVD) Measures Group have been performed for this patient

- To report satisfactorily the IVD Measures Group 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 Aged 65 Years and Older 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 groups option.

◆ **Measure #204 (NQF 0068): Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antithrombotic**

**DESCRIPTION:**

Percentage of patients 18 years of age and older who were discharged alive for acute myocardial infarction (AMI), coronary artery bypass graft (CABG) or percutaneous coronary interventions (PCI) in the 12 months prior to the measurement period, or who had an active diagnosis of ischemic vascular disease (IVD) during the measurement period and who had documentation of use of aspirin or another antithrombotic during the measurement period

**NUMERATOR:**

Patients who have documentation of use of aspirin or another antithrombotic therapy

**Numerator Instructions:** Oral antithrombotic therapy consists of aspirin, clopidogrel, combination of aspirin and extended release dipyridamole, prasugrel, ticagrelor or ticlopidine.

**NUMERATOR NOTE:** *The performance period for this measure is 12 months.*

**Numerator Options:**

Aspirin or another antithrombotic therapy used (**G8598**)

**OR**

Aspirin or another antithrombotic therapy **not** used, reason not given (**G8599**)

**▲ Measure #226 (NQF 0028): Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention**

**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:**

Patient screened for tobacco use AND received tobacco cessation intervention (counseling, pharmacotherapy, or both), if identified as a tobacco user **(4004F)**

**OR**

Current tobacco non-user **(1036F)**

**OR**

Documentation of medical reason(s) for not screening for tobacco use (eg, limited life expectancy, other medical reason) **(4004F with 1P)**

**OR**

Tobacco screening OR tobacco cessation intervention **not** performed, reason not otherwise specified **(4004F with 8P)**

◆ **Measure #236 (NQF 0018): Controlling High Blood Pressure**

**DESCRIPTION:**

Percentage of patients 18 through 85 years of age who had a diagnosis of hypertension (HTN) within the first six months of the measurement period and whose blood pressure (BP) was adequately controlled (< 140/90 mmHg) during the measurement period

**NUMERATOR:**

Patients whose most recent blood pressure is adequately controlled (systolic blood pressure < 140 mmHg and diastolic blood pressure < 90 mmHg) during the measurement period

**Numerator Instructions:** To describe both systolic and diastolic blood pressure values, **each must be reported separately**. If there are multiple blood pressures on the same date of service, use the lowest systolic and lowest diastolic blood pressure on that date as the representative blood pressure.

Only blood pressure readings performed by a clinician in the provider office are acceptable for numerator compliance with this measure. Do not include blood pressure readings that meet the following criteria:

- Blood pressure readings from the patient's home (including readings directly from monitoring devices).
- Taken during an outpatient visit which was for the sole purpose of having a diagnostic test or surgical procedure performed (e.g., sigmoidoscopy, removal of a mole).
- Obtained the same day as a major diagnostic or surgical procedure (e.g., stress test, administration of IV contrast for a radiology procedure, endoscopy).

If no blood pressure is recorded during the measurement period, the patient's blood pressure is assumed "not controlled."

**Numerator Options:**

*Systolic pressure (Select one (1) code from this section):*

Most recent systolic blood pressure < 140 mmHg (**G8752**)

**OR**

Most recent systolic blood pressure ≥ 140 mmHg (**G8753**)

**AND**

*Diastolic pressure (Select one (1) code from this section):*

Most recent diastolic blood pressure < 90 mmHg (**G8754**)

**OR**

Most recent diastolic blood pressure ≥ 90 mmHg (**G8755**)

**OR**

Documentation of end stage renal disease (ESRD), dialysis, renal transplant or pregnancy (**G9231**)

**OR**

No documentation of blood pressure measurement, reason not given (**G8756**)

**◆ Measure #241 (NQF 0075): Ischemic Vascular Disease (IVD): Complete Lipid Profile and LDL-C Control (< 100 mg/dL)**

**DESCRIPTION:**

Percentage of patients 18 years of age and older who were discharged alive for acute myocardial infarction (AMI), coronary artery bypass graft (CABG) or percutaneous coronary interventions (PCI) in the 12 months prior to the measurement period, or who had an active diagnosis of ischemic vascular disease (IVD) during the measurement period, and who had each of the following during the measurement period: a complete lipid profile and LDL-C was adequately controlled (< 100 mg/dL)

**NUMERATOR:**

Patients who received at least one lipid profile (or ALL component tests) with most recent LDL-C < 100 mg/dL

***NUMERATOR NOTE:*** *The performance period for this measure is 12 months from the date of service.*

**Numerator Options:**

Lipid panel results documented and reviewed (must include total cholesterol, HDL-C, triglycerides and calculated LDL-C) **(G8593)**

*Note: If LDL-C could not be calculated due to high triglycerides, count as complete lipid profile.*

**AND**

Most recent LDL-C < 100 mg/dL **(G8595)**

**OR**

Lipid profile **not** performed, reason not given **(G8594)**

**OR**

Lipid panel results documented and reviewed (must include total cholesterol, HDL-C, triglycerides and calculated LDL-C) **(G8593)**

**AND**

Most recent LDL-C ≥ 100 mg/dL **(G8597)**

## ISCHEMIC VASCULAR DISEASE (IVD) MEASURES GROUP RATIONALE AND CLINICAL RECOMMENDATION STATEMENTS

### Measure #204 - Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antithrombotic

#### RATIONALE:

Coronary heart disease (CHD) is a major cause of death in the United States – in 2004, it was an underlying or contributing cause of death for 451,300 people (1 of every 5 deaths). Acute myocardial infarction (AMI) was an underlying or contributing cause of death for 156,000 people (American Heart Association 2008). In addition, nearly 16 million people (or 7.3 percent of the American population) had CHD in 2005 (American Heart Association 2008). The cost of cardiovascular diseases and stroke in the United States for 2008 was estimated at \$448.5 billion (American Heart Association 2008). This figure includes health expenditures (direct costs such as the cost of physicians and healthcare practitioners, hospital and nursing home services, medications, home health care and other medical durables) and lost productivity resulting from morbidity and mortality (indirect costs). AMI accounts for 18 percent of hospital discharges and 28 percent of deaths due to heart disease (National Heart, Lung, and Blood Institute 2000). Research has shown that costs associated with cardiovascular disease for hospitals are easily \$156 billion (American Heart Association 2008).

Aspirin treatments reduce MI in men (127 events per 100,000 person-years) and women (17 events per 100,000 person-years) (Grieving et al. 2008). While studies have shown warfarin to be more effective, aspirin is a safer, more convenient, and less expensive form of therapy (Patrono et al. 2004). Aspirin therapy has been shown to directly reduce the odds of cardiovascular events among men by 14 percent and among women by 12 percent (Berger et al. 2006). Aspirin use has been shown to reduce the number of strokes by 20 percent, MI by 30 percent, and other vascular events by 30 percent (Weisman and Graham 2002).

#### CLINICAL RECOMMENDATION STATEMENTS:

U.S. Preventive Services Task Force (2009):

The U.S. Preventive Services Task Force (USPSTF) strongly recommends that clinicians discuss aspirin chemoprevention with adults who are at increased risk (5-year risk of greater than or equal to 3 percent) for coronary heart disease (CHD). Discussions with patients should address both the potential benefits and harms of aspirin therapy.

The USPSTF found good evidence that aspirin decreases the incidence of coronary heart disease in adults who are at increased risk for heart disease. They also found good evidence that aspirin increases the incidence of gastrointestinal bleeding and fair evidence that aspirin increases the incidence of hemorrhagic strokes. The USPSTF concluded that the balance of benefits and harms is most favorable in patients at high risk of CHD (5-year risk of greater than or equal to 3 percent) but is also influenced by patient preferences.

USPSTF encourages men age 45 to 79 years to use aspirin when the potential benefit of a reduction in myocardial infarctions outweighs the potential harm of an increase in gastrointestinal hemorrhage. They encourage women age 55 to 79 years to use aspirin when the potential benefit of a reduction in ischemic strokes outweighs the potential harm of an increase in gastrointestinal hemorrhage.

American Diabetes Association (2008):

Use aspirin therapy (75-162 mg/day) as a primary prevention strategy in those with type 1 or 2 diabetes at increased cardiovascular risk, including those who are 40 years of age or who have additional risk factors (family history of CVD, hypertension, smoking, dyslipidemia, or albuminuria).

American Heart Association/American Stroke Association (2006):

AHA/ASA: The use of aspirin is recommended for cardiovascular (including but not specific to stroke) prophylaxis among persons whose risk is sufficiently high for the benefits to outweigh the risks associated with treatment (a 10-year risk of cardiovascular events of 6% to 10%).

American College of Clinical Pharmacy (2004):

For long-term treatment after PCI, the guideline developers recommend aspirin, 75 to 162 mg/day. For long-term treatment after PCI in patients who receive antithrombotic agents such as clopidogrel or warfarin, the guideline developers recommend lower-dose aspirin, 75 to 100 mg/day. For patients with ischemic stroke who are not receiving thrombolysis, the guideline developers recommend early aspirin therapy, 160 to 325 mg/day.

### **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 #236 - Controlling High Blood Pressure**

#### **RATIONALE:**

Hypertension is a very significant health issue in the United States. Fifty million or more Americans have high blood pressure that warrants treatment, according to the National Health and Nutrition Examination Survey (NHANES) survey (Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure 2003). The United States Preventive Services Task Force (USPSTF) recommends that clinicians screen adults aged 18 and older for high blood pressure (United States Preventive Services Task Force 2007).

The most frequent and serious complications of uncontrolled hypertension include coronary heart disease, congestive heart failure, stroke, ruptured aortic aneurysm, renal disease, and retinopathy. The increased risks of hypertension are present in individuals ranging from 40 to 89 years of age. For every 20 mmHg systolic or 10 mmHg diastolic increase in blood pressure, there is a doubling of mortality from both ischemic heart disease and stroke (Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure 2003).

Better control of blood pressure has been shown to significantly reduce the probability that these undesirable and costly outcomes will occur. The relationship between the measure (control of hypertension) and the long-term clinical outcomes listed is well established. In clinical trials, antihypertensive therapy has been associated with reductions in stroke incidence (35-40 percent), myocardial infarction incidence (20-25 percent) and heart failure incidence (>50 percent) (Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure 2003).

#### **CLINICAL RECOMMENDATION STATEMENTS:**

The United States Preventive Services Task Force (2007) recommends screening for high blood pressure in adults age 18 years and older. This is a grade A recommendation.

Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure (2003): Treating systolic blood pressure and diastolic blood pressure to targets that are <140/90 mmHg is associated with a decrease in cardiovascular disease complications.

#### **Measure #241 - Ischemic Vascular Disease (IVD): Complete Lipid Profile and LDL-C Control (< 100 mg/dL)**

#### **RATIONALE:**

A 10 percent decrease in total cholesterol levels (population wide) may result in an estimated 30 percent reduction in the incidence of coronary heart disease (CHD) (Centers for Disease Control and Prevention 2000). Based on data from the Third Report of the Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults:

- Less than half of persons who qualify for any kind of lipid-modifying treatment for CHD risk reduction are receiving it
- Less than half of even the highest-risk persons, those who have symptomatic CHD, are receiving lipid-lowering treatment
- Only about a third of treated patients are achieving their LDL goal; less than 20 percent of CHD patients are at their LDL goal (National Cholesterol Education Program (NCEP) Expert Panel on Detection, Evaluation, and Treatment of High Blood Pressure 2002)

According to data from the Behavioral Risk Factor Surveillance System (BRFSS) from 1991–2003, the prevalence of cholesterol screening during the preceding 5 years increased from 67.3 percent in 1991 to 73.1 percent in 2003 (Centers for Disease Control and Prevention 2005).

Between 1988–94 and 1999–2002, the age-adjusted mean total serum cholesterol level of adults 20 years of age and older decreased from 206 mg/dL to 203 mg/dL, and LDL cholesterol levels decreased from 129 mg/dL to 123 mg/dL. The mean level of LDL cholesterol for American adults age 20 and older is 123 mg/dL (Carroll et al. 2005). However, even given this decrease, there is still a significant amount of room for improvement.

#### **CLINICAL RECOMMENDATION STATEMENTS:**

Third report of the National Cholesterol Education Program (NCEP) Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults (Adult Treatment Panel III). (2001) AND Implications of recent clinical trials for the National Cholesterol Education Program Adult Treatment Panel III guidelines. (2004)

In high-risk persons, the recommended LDL-C goal is < 100 mg/dL.



- An LDL-C goal of < 70 mg/dL is a therapeutic option on the basis of available clinical trial evidence, especially for patients at very high risk.
- If LDL-C is >100 mg/dL, an LDL-lowering drug is indicated simultaneously with lifestyle changes.
- If baseline LDL-C is < 100 mg/dL, institution of an LDL-lowering drug to achieve an LDL-C level < 70 mg/dL is a therapeutic option on the basis of available clinical trial evidence.
- If a high-risk person has high triglycerides or low HDL-C, consideration can be given to combining a fibrate or nicotinic acid with an LDL-lowering drug. When triglycerides are > 200 mg/dL, non-HDL-C is a secondary target of therapy, with a goal 30 mg/dL higher than the identified LDL-C goal.

The U.S. Preventive Services Task Force (USPSTF) strongly recommends screening men aged 35 and older for lipid disorders and recommends screening men aged 20 to 35 for lipid disorders if they are at increased risk for coronary heart disease. The USPSTF also strongly recommends screening women aged 45 and older for lipid disorders if they are at increased risk for coronary heart disease and recommends screening women aged 20 to 45 for lipid disorders if they are at increased risk for coronary heart disease.

## HIV/AIDS MEASURES GROUP OVERVIEW

### 2014 PQRS OPTIONS FOR MEASURES GROUPS:

#### 2014 PQRS MEASURES IN HIV/AIDS MEASURES GROUP:

- #159. HIV/AIDS: CD4+ Cell Count or CD4+ Percentage Performed
- #160. HIV/AIDS: Pneumocystis Jiroveci Pneumonia (PCP) Prophylaxis
- #205. HIV/AIDS: Sexually Transmitted Disease Screening for Chlamydia, Gonorrhea, and Syphilis
- #338. HIV Viral Load Suppression
- #339. Prescription of HIV Antiretroviral Therapy
- #340. HIV Medical Visit Frequency
- #341. Gap in HIV Medical Visits

#### 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.

**G8491:** I intend to report the HIV/AIDS Measures Group

- Report the patient sample method:  
**20 Patient Sample Method:** 20 unique patients (a majority of which must be Medicare Part B FFS [fee for service] patients) meeting patient sample criteria for the measures group during the reporting period (January 1 through December 31, 2014 **OR** July 1 through December 31, 2014).

Patient sample criteria for the HIV/AIDS Measures Group are patients aged 13 years and older with a specific diagnosis of HIV/AIDS accompanied by a specific patient encounter

#### **One of the following diagnosis codes indicating HIV/AIDS:**

**ICD-9-CM [for use 1/1/2014 - 9/30/2014]:** 042, V08

**ICD-10-CM [for use 10/1/2014 - 12/31/2014]:** B20, Z21

#### **Accompanied by:**

**One of the following patient encounter codes:** 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, G0402

- Report a numerator option on **all** measures within the HIV/AIDS Measures Group for each patient within the eligible professional's patient sample.
- Instructions for qualifying numerator option reporting for each of the measures within the HIV/AIDS 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 G8500:** All quality actions for the applicable measures in the HIV/AIDS Measures Group have been performed for this patient

This measures group contains one or more inverse measures. An inverse measure is a measure that represents a poor clinical quality action as meeting performance for the measure. For these measures, a lower performance rate indicates a higher quality of clinical care. Composite codes for measures groups that contain inverse measures are only utilized when the appropriate quality clinical care is given.

The composite code for this measures group may be reported when codes in the summary table below are applicable for reporting of each measure within the measures group.

Measure	#159	#160	#205	#338	#339	#340	#340*
<b>QDC options for acceptable use of the composite QDC</b>	G9214	G9222 & 3494F	G9228	G9243	G9245	G9247	G9249

\*Indicates an inverse measure

- To report satisfactorily for the HIV/AIDS Measures Group it requires **all** measures for each patient within the eligible professional's patient sample to be reported a minimum of once during the reporting period. Measure #159 will be reported once during the reporting period for measures group purposes.
- Measures #160 is represented differently from the corresponding individual measure. Therefore the individual measure is specified and analyzed in a slightly different manner than the same measure contained within the measures group. Use the measure specification as defined within the measures group for reporting purposes in order to satisfactorily report the measures group.
- 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.
- **NOTE:** The detailed instructions in this specification apply exclusively to the reporting and analysis of the included measures under the measures groups option

**□ Measure #159 (NQF 0404): HIV/AIDS: CD4+ Cell Count or CD4+ Percentage Performed**

**DESCRIPTION:**

Percentage of patients aged 6 months and older with a diagnosis of HIV/AIDS for whom a CD4+ cell count or CD4+ cell percentage was performed at least once every 6 months

**NUMERATOR:**

Patients with CD4+ cell count or CD4+ cell percentage performed at least once every 6 months

***NUMERATOR NOTE:** Report this measure once during the reporting period for measures group purposes.*

**Numerator Options:**

CD4+ cell count or CD4+ cell percentage results documented (**G9214**)

**OR**

CD4+ cell count or percentage results **not** documented, reason not otherwise specified (**G9215**)

**Measure #160 (NQF 0405): HIV/AIDS: Pneumocystis Jiroveci Pneumonia (PCP) Prophylaxis**

**DESCRIPTION:**

Percentage of patients aged 6 weeks and older with a diagnosis of HIV/AIDS who were prescribed Pneumocystis Jiroveci Pneumonia (PCP) prophylaxis

**NUMERATOR:**

Patients who were prescribed pneumocystis jiroveci pneumonia (PCP) prophylaxis within 3 months of CD4 count below 200 cells/mm<sup>3</sup>

**NUMERATOR NOTE:** *The reporting numerator options contained within this specification are represented differently than the corresponding individual measure. Reference this specification only in order to satisfactorily report the measures group.*

**Definition:**

**Prescribed** – May include prescription given to the patient for PCP prophylaxis therapy at one or more visits in the 12-month period OR patient already taking PCP prophylaxis therapy as documented in current medication list.

**Numerator Options:**

Pneumocystis jiroveci pneumonia prophylaxis prescribed within 3 months of low CD4+ cell count below 200 cells/mm<sup>3</sup> (**G9222**)

**AND**

CD4+ cell count < 200 cells/mm<sup>3</sup> (**3494F**)

**OR**

Pneumocystis jiroveci pneumonia prophylaxis not prescribed within 3 months of low CD4+ cell count below 200 cells/mm<sup>3</sup> for medical reason (i.e., patient's CD4+ cell count above threshold within 3 months after CD4+ cell count below threshold, indicating that the patient's CD4+ levels are within an acceptable range and the patient does not require PCP prophylaxis) (**G9219**)

**AND**

CD4+ cell count < 200 cells/mm<sup>3</sup> (**3494F**)

**OR**

CD4+ cell count 200 – 499 cells/mm<sup>3</sup> (**3495F**)

**OR**

CD4+ cell count ≥ 500 cells/mm<sup>3</sup> (**3496F**)

**OR**

PCP prophylaxis was **not** prescribed within 3 months of low CD4+ cell count below 200 cells/mm<sup>3</sup>, reason not otherwise specified (**G9217**)

**AND**

CD4+ cell count < 200 cells/mm<sup>3</sup> (**3494F**)

**OR**

CD4+ cell count **not** performed, reason not otherwise specified (**3494F with 8P**)

**□ Measure #205 (NQF 0409): HIV/AIDS: Sexually Transmitted Disease Screening for Chlamydia, Gonorrhea, and Syphilis**

**DESCRIPTION:**

Percentage of patients aged 13 years and older with a diagnosis of HIV/AIDS for whom chlamydia, gonorrhea, and syphilis screenings were performed at least once since the diagnosis of HIV infection

**NUMERATOR:**

Patients with chlamydia, gonorrhea, and syphilis screenings performed at least once since the diagnosis of HIV infection

**Numerator Options:**

Chlamydia, gonorrhea, and syphilis screening results documented (report when results are present for **all** of the 3 screenings) (G9228)

**OR**

Chlamydia, gonorrhea, and syphilis screening results not documented (Patient refusal is the only allowed exclusion) (G9229)

**OR**

Chlamydia, gonorrhea, and syphilis screening **not** documented as performed, reason not otherwise specified (G9230)

**∞ Measure #338 (NQF 2082): HIV Viral Load Suppression**

**DESCRIPTION:**

The percentage of patients, regardless of age, with a diagnosis of HIV with a HIV viral load less than 200 copies/mL at last viral load test during the measurement year

**NUMERATOR:**

Number of patients with a HIV viral load less than 200 copies/mL at last viral load test

**Numerator Options:**

Documentation of viral load less than 200 copies/mL (**G9243**)

**OR**

Documentation of viral load equal to or greater than 200 copies/mL (**G9242**)

**∞ Measure #339 (NQF 2083): Prescription of HIV Antiretroviral Therapy**

**DESCRIPTION:**

Percentage of patients, regardless of age, with a diagnosis of HIV prescribed antiretroviral therapy for the treatment of HIV infection during the measurement year

**NUMERATOR:**

Number of patients prescribed HIV antiretroviral therapy during the reporting period

**Numerator Options:**

Antiretroviral therapy prescribed (**G9245**)

**OR**

Antiretroviral therapy **not** prescribed (**G9244**)



**∞ Measure #340 (NQF 2079): HIV Medical Visit Frequency**

**DESCRIPTION:**

Percentage of patients, regardless of age with a diagnosis of HIV who had at least one medical visit in each 6 month period of the 24 month measurement period, with a minimum of 60 days between medical visits

**NUMERATOR:**

Number of patients who had at least one medical visit in each 6 month period of the 24 month measurement period, with a minimum of 60 days between medical visits

**Numerator Options:**

Patient had at least one medical visit in each 6 month period of the 24 month measurement period, with a minimum of 60 days between medical visits **(G9247)**

**OR**

Patient did **not** have at least one medical visit in each 6 month period of the 24 month measurement period, with a minimum of 60 days between medical visits **(G9246)**

**∞ Measure #341 (NQF 2080): Gap in HIV Medical Visits**

**DESCRIPTION:**

Percentage of patients, regardless of age, with a diagnosis of HIV who did not have a medical visit in the last 6 months

**NUMERATOR:**

Number of patients who did not have a medical visit in the last 6 months

**Numerator Instructions:** A lower calculated performance rate for this measure indicates better clinical care or control.

**Numerator Options:**

Patient did not have a medical visit in the last 6 months (**GG9248**)

**OR**

Patient had a medical visit in the last 6 months (**G9249**)

## HIV/AIDS MEASURES GROUP RATIONALE AND CLINICAL RECOMMENDATION STATEMENTS

### **Measure #159 - HIV/AIDS: CD4+ Cell Count or CD4+ Percentage Performed**

#### **RATIONALE:**

CD4+ cell counts help to establish monitoring frequency, and are taken into account when establishing a patient's disease stage.

#### **CLINICAL RECOMMENDATION STATEMENTS:**

Asymptomatic patients with normal CD4 cell counts and low virus loads can be monitored infrequently, repeating virus load measurements every 3-4 months and CD4 cell counts every 3-6 months. (Level of Evidence: B) (IDSA)

CD4 percentage or count should be measured at the time of diagnosis of HIV infection and at least every 3-4 months thereafter. (DHHS)

Clinicians should measure CD4 cell counts at the time of diagnosis of HIV infection and every 3 to 4 months thereafter. (NYSDOH)

### **Measure #160 - HIV/AIDS: Pneumocystis Jiroveci Pneumonia (PCP) Prophylaxis**

#### **RATIONALE:**

Although advances in the management of HIV and AIDS diseases have been made, *Pneumocystis carinii* pneumonia (PCP) remains an important complication and cause of morbidity. Without PCP prophylaxis, patients with HIV/AIDS are at increased risk of developing PCP, especially when CD4 cell counts fall 200mm<sup>3</sup>-250mm<sup>3</sup> (Kaplan, 1998; Phair, 1990). PCP prophylaxis is very effective and has been demonstrated to prolong life.

Data from Kaiser Permanente suggests that a gap exists between what is recommended for patients with HIV infection, and what is actually performed. According to 2005-2006 data from Kaiser Permanente California (both Northern and Southern), Georgia, and Oregon, only 71% of HIV-infected persons with a CD4<200mm<sup>3</sup> received PCP prophylaxis (personal communication, 2007).

#### **CLINICAL RECOMMENDATION STATEMENTS:**

HIV-infected adults and adolescents, including pregnant women and those on HAART, should receive chemoprophylaxis against PCP if they have a CD4+T lymphocyte count of <200/mL or a history of oropharyngeal candidiasis. (USPH/IDSA, 2002)

### **Measure #205 - HIV/AIDS: Sexually Transmitted Disease Screening for Chlamydia, Gonorrhea, and Syphilis**

#### **RATIONALE**

Sexually transmitted diseases that cause mucosal inflammation (such as gonorrhea and chlamydia) increase the risk for HIV-infection (as these diseases and other sexually transmitted diseases can increase the infectiousness of and a person's susceptibility to HIV) (Galvin, 2004).

#### **CLINICAL RECOMMENDATION STATEMENTS:**

All patients should be screened with laboratory tests for STDs at the initial encounter (A-II for syphilis, for trichomoniasis in women, and for chlamydial infection in women aged less than 25 years; B-II for gonorrhea and chlamydial infection in all men and women), and thereafter, depending on reported high-risk behavior, the presence of other STDs, and the prevalence of STDs in the community (B-III). (Aberg, 2004)

Consideration should be given to screening all HIV-infected men and women for gonorrhea and chlamydial infections. However, because of the cost of screening and the variability of prevalence of these infections, decisions about routine screening for these infections should be based on epidemiologic factors (including prevalence of

infection in the community or the population being served), availability of tests, and cost. (Some HIV specialists also recommend type-specific serologic testing for herpes simplex virus type 2 for both men and women.) (B-II, for identifying STDs) (CDC, HRSA, NIH, HIVMA of IDSA, 2003)

### **Measure #338 - HIV Viral Load Suppression**

#### **RATIONALE:**

Sustained viral load suppression is directly related to reduction in disease progression and to reduction in potential for transmission of infection. Among persons in care, sustained viral load suppression represents the cumulative effect of prescribed therapy, ongoing monitoring, and patient adherence. The measure will direct providers' attention and quality improvement efforts towards this important outcome.

#### **CLINICAL RECOMMENDATION STATEMENTS:**

Plasma HIV RNA (viral load) should be measured in all patients at baseline and on a regular basis thereafter, especially in patients who are on treatment, because viral load is the most important indicator of response to antiretroviral therapy (ART). Thus, viral load testing serves as a surrogate marker for treatment response and can be useful in predicting clinical progression.

Optimal viral suppression is generally defined as a viral load persistently below the level of detection (<20–75 copies/mL, depending on the assay used). In addition, low-level positive viral load results (typically <200 copies/mL) appear to be more common with some viral load assays than others, and there is no definitive evidence that patients with viral loads quantified as <200 copies/mL using these assays are at increased risk for virologic failure. For the purposes of clinical trials the AIDS Clinical Trials Group (ACTG) currently defines virologic failure as a confirmed viral load >200 copies/mL, which eliminates most cases of apparent viremia caused by blips or assay variability. Effective treatment reduces HIV-associated morbidity and mortality and reduces transmission of HIV. The mechanism for the impact of treatment is viral load suppression.

Multiple studies demonstrate that viral load suppression is associated with slowing disease progression. Analysis of 18 trials that included more than 5,000 participants with viral load monitoring showed a significant association between a decrease in plasma viremia and improved clinical outcome. Viral load testing serves as a surrogate marker for treatment response and can be useful in predicting clinical progression. As a result, the Department of Health and Human Services (HHS) Guidelines include a recommendation for measuring viral load at baseline and on a regular basis because viral load is the most important predictor of response to therapy. This recommendation is graded AI. The review of the evidence focuses on the evidence for the treatment and prevention recommendations.

### **Measure #339 - Prescription of HIV Antiretroviral Therapy**

#### **RATIONALE:**

The primary goal of antiretroviral therapy (ART) is to reduce HIV-associated morbidity and mortality. This is best accomplished by using antiretroviral therapy to maximally inhibit HIV replication, as measured by consistent plasma HIV RNA (viral load) values below the level of detection using commercially available assays. Measure reflects important aspect of care that significantly impacts survival, mortality and hinders transmission.

#### **CLINICAL RECOMMENDATION STATEMENTS:**

Antiretroviral therapy (ART) reduces HIV-associated morbidity and mortality by maximally inhibiting HIV replication (as defined by achieving and maintaining plasma HIV RNA (viral load) below levels detectable by commercially available assays). Durable viral suppression improves immune function and quality of life, lowers the risk of both AIDS-defining and non-AIDS-defining complications, and prolongs life. Emerging evidence also suggests that additional benefits of ART-induced viral load suppression include a reduction in HIV-associated inflammation and possibly its associated complications.

Measures of viral replication are known to predict HIV disease progression. Among untreated HIV-infected individuals, time to clinical progression and mortality is fastest in those with greater viral loads. This finding is confirmed across the wide spectrum of HIV-infected patient populations such as injection drug users (IDUs), women, and individuals with hemophilia. Several studies have shown the prognostic value of pretherapy viral load for predicting post-therapy response. Once therapy has been initiated, failure to achieve viral suppression and viral load at the time of treatment failure is predictive of clinical disease progression.

ART has also been shown to reduce transmission of HIV and increases the length of survival. The risk of sexual HIV transmission is highly correlated with HIV viral load in the blood and genital secretions of the infected individual, and ART reduces HIV blood viral load as well as HIV viral shedding in potentially infectious body fluids including semen, cervicovaginal secretions, and anorectal secretions.

### **Measure #340 - HIV Medical Visit Frequency**

#### **RATIONALE:**

Early linkage to, and long-term retention in HIV care leads to better health outcomes. Linkage to HIV medical care shortly after HIV diagnosis and continuous care thereafter provide opportunities for risk reduction counseling, initiation of treatment, and other strategies that improve individual health and prevent onward transmission of infection (1-6). Delayed linkage and poor retention in care are associated with delayed receipt of antiretroviral treatment, higher rate of virologic failure, and increased morbidity and mortality (5, 7).

Poor retention in care during the first year of outpatient medical care is associated with delayed or failed receipt of antiretroviral therapy, delayed time to virologic suppression and greater cumulative HIV burden, increased sexual risk transmission behaviors, increased risk of long-term adverse clinical events, and low adherence to antiretroviral therapy (1, 5, 7, 9). Early retention in HIV care has been found to be associated with time to viral load suppression and 2-year cumulative viral load burden among patients newly initiating HIV medical care (8). In this study, each “no show” clinic visit conveyed a 17% increased risk of delayed viral load suppression. A dose-response relationship has been shown between constancy of visits during the first year (i.e. having an HIV primary care visit in each 3-month quarter) and survival (9). Another study examining care over a two year period has found that mean increase from baseline CD4 counts was significantly greater among those with optimal retention (visits in all 4 six-month intervals) than among those with sub-optimal retention, and that mortality was higher among those with suboptimal retention (10).

In an analysis of 9 years (January 1, 2001 through December 31, 2009) of outpatient HIV care utilization from 17,425 HIV infected adults enrolled in the HIV Research Network (HIVRN), a consortium of HIV care clinics, Yehia et al. (12) found that 7179 (41.6%) individuals never experienced an interval between outpatient visits longer than 6 months (no gap), 5426 (31.1%) had one or more 7–12-month gaps in care, and 4820 (27.7%) had one or more gaps of longer than 12 months.

#### **CLINICAL RECOMMENDATION STATEMENTS:**

Department of Health and Human Service (HHS) guidelines make recommendations regarding the types and frequency of screenings, laboratory testing, and counseling that should be provided to people living with HIV. Screening, testing, and counseling are delivered through comprehensive HIV medical care visits. The frequency of the medical visit are related to the individual patient’s health status and attainment of health outcomes. Based on the frequency of screenings, testing, and counseling, HIV medical visits should occur every six months.

### **Measure #341 - Gap in HIV Medical Visits**

#### **RATIONALE:**

Early linkage to, and long-term retention in HIV care leads to better health outcomes. Linkage to HIV medical care shortly after HIV diagnosis and continuous care thereafter provide opportunities for risk reduction counseling, initiation of treatment, and other strategies that improve individual health and prevent onward transmission of

infection (1-6). Delayed linkage and poor retention in care are associated with delayed receipt of antiretroviral treatment, higher rate of virologic failure, and increased morbidity and mortality (5, 7).

Poor retention in care during the first year of outpatient medical care is associated with delayed or failed receipt of antiretroviral therapy, delayed time to virologic suppression and greater cumulative HIV burden, increased sexual risk transmission behaviors, increased risk of long-term adverse clinical events, and low adherence to antiretroviral therapy (1, 5, 7, 9). Early retention in HIV care has been found to be associated with time to viral load suppression and 2-year cumulative viral load burden among patients newly initiating HIV medical care (8). In this study, each “no show” clinic visit conveyed a 17% increased risk of delayed viral load suppression. A dose-response relationship has been shown between constancy of visits during the first year (i.e. having an HIV primary care visit in each 3-month quarter) and survival (9). Another study examining care over a two year period has found that mean increase from baseline CD4 counts was significantly greater among those with optimal retention (visits in all 4 six-month intervals) than among those with sub-optimal retention, and that mortality was higher among those with suboptimal retention (10).

In an analysis of 9 years (January 1, 2001 through December 31, 2009) of outpatient HIV care utilization from 17, 425 HIV infected adults enrolled in the HIV Research Network (HIVRN), a consortium of HIV care clinics, Yehia et al. (12) found that 7179 (41.6%) individuals never experienced an interval between outpatient visits longer than 6 months (no gap), 5426 (31.1%) had one or more 7–12-month gaps in care, and 4820 (27.7%) had one or more gaps of longer than 12 months.

#### **CLINICAL RECOMMENDATION STATEMENTS:**

Department of Health and Human Service (HHS) guidelines make recommendations regarding the types and frequency of screenings, laboratory testing, and counseling that should be provided to people living with HIV. Screening, testing, and counseling are delivered through comprehensive HIV medical care visits. The frequency of the medical visit are related to the individual patient’s health status and attainment of health outcomes. Based on the frequency of screenings, testing, and counseling, HIV medical visits should occur every six months.

## ASTHMA MEASURES GROUP OVERVIEW

### 2014 PQRS OPTIONS FOR MEASURES GROUPS:

#### 2014 PQRS MEASURES IN ASTHMA MEASURES GROUP:

- #53. Asthma: Pharmacologic Therapy for Persistent Asthma – Ambulatory Care Setting
- #64. Asthma: Assessment of Asthma Control – Ambulatory Care Setting
- #231. Asthma: Tobacco Use: Screening – Ambulatory Care Setting
- #232. Asthma: Tobacco Use: Intervention – Ambulatory Care Setting

#### 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.

**G8645:** I intend to report the Asthma 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, 2014 OR July 1 through December 31, 2014).
- Patient sample criteria for the Asthma Measures Group are patients aged 5 through 64 years with a specific diagnosis of asthma accompanied by a specific patient encounter:

#### **One of the following diagnosis indicating asthma:**

**ICD-9-CM [for use 1/1/2014 – 9/30/2014]:** 493.00, 493.01, 493.02, 493.10, 493.11, 493.12, 493.20, 493.21, 493.22, 493.81, 493.82, 493.90, 493.91, 493.92

**ICD-10-CM [for use 10/1/2014 - 12/31/2014]:** J45.20, J45.21, J45.22, J45.30, J45.31, J45.32, J45.40, J45.41, J45.42, J45.50, J45.51, J45.52, J45.901, J45.902, J45.909, J45.990, J45.991, J45.998

#### **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

- Report a numerator option on **all applicable** measures within the Asthma Measures Group for each patient within the eligible professional's patient sample.
- Measure #110 need only be reported a minimum of once during the reporting period when the patient's visit included in the patient sample population is between January and March for the 2013-2014 influenza season OR between October and December for the 2014-2015 influenza season. When the patient's office visit is between April and September, Measure #110 is not applicable and will not affect the eligible provider's reporting or performance rate. Measure #110 need only be reported on patients 5 through 64 years of age.
- Instructions for qualifying numerator option reporting for each of the measures within the Asthma 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 G8646:** All quality actions for the applicable measures in the Asthma Measures Group have been performed for this patient

- 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. When a lower rate indicates better performance, such as Measure #164, a 0% performance rate will be counted as satisfactorily reporting (100% performance rate would not 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 groups option.



**Measure #53 (NQF 0047): Asthma: Pharmacologic Therapy for Persistent Asthma – Ambulatory Care Setting**

**DESCRIPTION:**

Percentage of patients aged 5 through 64 years with a diagnosis of persistent asthma who were prescribed long-term control medication

**NUMERATOR:**

Patients who were prescribed long-term control medication

**Numerator Instructions:** Documentation of persistent asthma must be present. One method of identifying persistent asthma is at least daily use of short-acting bronchodilators.

**Definitions:**

**Long-Term Control Medication Includes:**

Patients prescribed inhaled corticosteroids (the preferred long-term control medication at any step of asthma pharmacological therapy).

**OR**

Patients prescribed alternative long-term control medications (inhaled steroid combinations, anti-asthmatic combinations, antibody inhibitor, leukotriene modifiers, mast cell stabilizers, methylxanthines).

**Prescribed** – May include prescription given to the patient for inhaled corticosteroid OR an acceptable alternative long-term control medication at one or more visits in the 12-month period OR patient already taking inhaled corticosteroid OR an acceptable alternative long-term control medication as documented in current medication list.

**Numerator Options:**

Persistent asthma (mild, moderate or severe) (1038F)

**AND**

Inhaled corticosteroids prescribed (4140F)

**OR**

Alternative long-term control medication prescribed (4144F)

**OR**

Documentation of patient reason(s) for not prescribing inhaled corticosteroids or alternative long-term control medication (eg, patient declined, other patient reason) (4140F *with* 2P)

**AND**

Persistent asthma (mild, moderate or severe) (1038F)

**OR**

Intermittent asthma (1039F)

**OR**

Inhaled corticosteroids or alternative long-term control medication **not** prescribed, reason not otherwise specified (4140F *with* 8P)

**AND**

Persistent asthma (mild, moderate or severe) (1038F)

**☐ Measure #64 (NQF 0001): Asthma: Assessment of Asthma Control – Ambulatory Care Setting**

**DESCRIPTION:**

Percentage of patients aged 5 through 64 years with a diagnosis of asthma who were evaluated at least once during the measurement period for asthma control (comprising asthma impairment and asthma risk)

**NUMERATOR:**

Patients who were evaluated at least once during the measurement period for asthma control

**Numerator Instructions:** Completion of a validated questionnaire will also meet the numerator requirement for this component of the measure. Validated questionnaires for asthma assessment include, but are not limited to the Asthma Therapy Assessment Questionnaire [ATAQ], the Asthma Control Questionnaire [ACQ], or the Asthma Control Test [ACT].

The specifications of this numerator enable documentation for the impairment and risk components separately to facilitate quality improvement. Evaluation of asthma impairment and asthma risk must occur during the same medical encounter.

**Definition:**

**Evaluation of Asthma Control** - Documentation of an evaluation of asthma impairment which must include: daytime symptoms AND nighttime awakenings AND interference with normal activity AND short-acting beta<sub>2</sub>-agonist use for symptom control **AND** documentation of asthma risk which must include the number of asthma exacerbations requiring oral systemic corticosteroids in the prior 12 months

**Numerator Options:**

Asthma impairment assessed (2015F)

**AND**

Asthma risk assessed (2016F)

**OR**

Asthma impairment **not** assessed, reason not otherwise specified (2015F *with 8P*)

**OR**

Asthma risk **not** assessed, reason not otherwise specified (2016F *with 8P*)

**Measure #231: Asthma: Tobacco Use: Screening - Ambulatory Care Setting**

**DESCRIPTION:**

Percentage of patients aged 5 through 64 years with a diagnosis of asthma (or their primary caregiver) who were queried about tobacco use and exposure to second hand smoke within their home environment at least once during the one-year measurement period

**NUMERATOR:**

Patients (or their primary caregiver) who were queried about tobacco use and exposure to second hand smoke within their home environment at least once

**Numerator Instructions:** Information regarding tobacco exposure for patients under 18 obtained from a parent or guardian is valid for reporting the numerator. In order to meet the measure, there must be a note in the medical record documenting that the patient was queried about both smoking status AND exposure to environmental smoke in the home environment.

**NUMERATOR NOTE:** For the purpose of this measure, “tobacco user” refers to tobacco smokers and “tobacco non-user” refers to non-smokers (including smokeless tobacco users eg, chew, snuff). Also, the primary caregiver can respond on behalf of the patient if the patient is unable to provide a response (eg, pediatric patient).

**Numerator Options:**

Smoking status and exposure to second hand smoke in the home assessed (**1031F**)

**OR**

Smoking status and exposure to second hand smoke in the home **not** assessed, reason not otherwise specified (**1031F with 8P**)

**☐ Measure #232: Asthma: Tobacco Use: Intervention - Ambulatory Care Setting**

**DESCRIPTION:**

Percentage of patients aged 5 through 64 years with a diagnosis of asthma who were identified as tobacco users (or their primary caregiver) who received tobacco cessation intervention at least once during the one-year measurement period

**NUMERATOR:**

Patients (or their primary caregiver) who received tobacco use cessation intervention

**Numerator Instructions:** Practitioners providing tobacco cessation interventions to a pediatric patient's primary caregiver are still numerator compliant even if the primary caregiver is not the source of second hand smoke in the home.

**Definitions:**

**Tobacco Users** – Tobacco users include patients who currently use tobacco AND patients who do not currently use tobacco, but are exposed to second hand smoke in their home environment.

**Tobacco Use Cessation Intervention** – May include brief counseling (3 minutes or less) and/or pharmacotherapy.

**NUMERATOR NOTE:** For the purpose of this measure, "tobacco user" refers to tobacco smokers and "tobacco non-user" refers to non-smokers (including smokeless tobacco users, eg, chew, snuff). Also, the primary caregiver can respond on behalf of the patient if the patient is unable to provide a response (eg, pediatric patient).

**Numerator Options:**

Tobacco use cessation intervention, counseling (4000F)

**OR**

Tobacco use cessation intervention, pharmacologic therapy (4001F)

**AND**

Current tobacco smoker OR currently exposed to second hand smoke (1032F)

**OR**

Current tobacco non-smoker AND not currently exposed to second hand smoke (1033F)

**OR**

Smoking status and exposure to second hand smoke in the home **not** assessed, reason not given (G8751)

**OR**

Tobacco use cessation intervention, counseling, **not** performed, reason not otherwise specified (4000F with 8P)

**OR**

Tobacco use cessation intervention, pharmacologic therapy, **not** performed, reason not otherwise specified (4001F with 8P)

**AND**

Current tobacco smoker OR currently exposed to second hand smoke (1032F)

## ASTHMA MEASURES GROUP RATIONALE AND CLINICAL RECOMMENDATION STATEMENTS

### **Measure #53 - Asthma: Pharmacologic Therapy for Persistent Asthma – Ambulatory Care Setting**

#### **RATIONALE:**

The following statement is quoted verbatim from the NHLBI/NAEPP guideline (NHLBI, 2007):

“The broad action of ICS on the inflammatory process may account for their efficacy as preventive therapy. Their clinical effects include reduction in severity of symptoms; improvement in asthma control and quality of life; improvement in PEF and spirometry; diminished airway hyper-responsiveness; prevention of exacerbations; reduction in systemic corticosteroid courses; emergency department (ED) care; hospitalizations, and deaths due to asthma; and possibly the attenuation of loss of lung function in adults” (Rafferty P 1985; Haahtela T 1991; Jeffery PK 1992; Van Essesn-Zandvliet EE 1992; Barnes NC 1993; Fabbri L 1993; Gustafsson P 1993; Kamada AK 1996; Suissa S 2000; Pauwels RA 2003; Barnes PJ October 1992)

#### **CLINICAL RECOMMENDATION STATEMENTS:**

The following evidence statements are quoted verbatim from the referenced clinical guidelines:

The Expert Panel recommends that long-term control medications be taken daily on a long-term basis to achieve and maintain control of persistent asthma. The most effective long-term control medications are those that attenuate the underlying inflammation characteristic of asthma. (Evidence A) (NHLBI, 2007)

The Expert Panel concludes that ICS is the most potent and clinically effective long-term control medication for asthma. (Evidence A) (NHLBI, 2007)

The Expert Panel concludes that ICS is the most effective long-term therapy available for patients who have persistent asthma, and, in general, ICS is well tolerated and safe at the recommended dosages. (Evidence A) (NHLBI, 2007)

### **Measure #64 - Asthma: Assessment of Asthma Control – Ambulatory Care Setting**

#### **RATIONALE:**

The goal of asthma therapy is to achieve asthma control. The level of asthma control serves as a basis for treatment modification (i.e., whether or not a patient needs a step up or step down in therapy). Patients with poorly controlled asthma can experience significant asthma burden (Fuhlbrigge AL, 2002), decreased quality of life (Schatz M, 2005), and increased health utilization. (Vollmer WM, 2002; Schatz M, 2005) A large international study found that guideline-defined asthma control can be achieved. In their trial, 30% of the patients achieved total control (defined as absence of asthma symptoms) and 60% achieve well-controlled asthma (defined as low-level of symptoms or rescue medication use. (Bateman ED, 2004) A follow-up to this study found that this control can be maintained, which can lead to a decrease in the use of unscheduled health care visits. (Bateman ED, 2008)

#### **CLINICAL RECOMMENDATION STATEMENTS:**

The following evidence statements are quoted verbatim from the referenced clinical guidelines:

The Expert Panel recommends that asthma control be defined as follows: (Evidence A) (NHLBI, 2007)

- Reduce Impairment
- Prevent chronic and troublesome symptoms (e.g., coughing or breathlessness in the daytime, night, or after exertion)
- Require infrequent use ( $\leq 2$  days a week) of SABA for quick relief of symptoms
- Maintain (near) “normal” pulmonary function
- Maintain normal activity levels (including exercise and other physical activity and attendance at work or school)
- Meet patients’ and families’ expectations of satisfaction with asthma care

- Reduce risk
- Prevent recurrent exacerbations of asthma and minimize the need for ED visits or hospitalizations
- Prevent progressive loss of lung function; for children, prevent reduced lung growth
- Provide optimal pharmacotherapy with minimal or no adverse effects

The Expert Panel recommends that ongoing monitoring of asthma control be performed to determine whether all the goals of therapy are met—that is reducing both impairment and risk. (Evidence B) (NHLBI, 2007)

The Expert Panel recommends that the frequency of visits to a clinician for a review of asthma control is a matter of clinical judgment; in general, patients who have intermittent or mild persistent asthma that has been under control for at least 3 months should be seen by a physician about every 6 months, and patients who have uncontrolled and/or severe persistent asthma and those who need additional supervision to help them follow their treatment plan need to be seen more often. (NHLBI, 2007)

The Expert Panel recommends that symptoms and clinical signs of asthma should be assessed at each health care visit through physical examination and appropriate questions. (EPR-2, 1997) (NHLBI/NAEPP, 2007)

### **Measure #231 - Asthma: Tobacco use: Screening – Ambulatory Care Setting**

#### **RATIONALE:**

Patients with asthma who smoke or are exposed to second hand smoke are at greater risk for experiencing increased frequency in asthma symptoms, a decrease in lung function, and an increased use of health services. (Sippel JM 1999; Eisner MD, 2007) By identifying patients who are tobacco users or who are exposed to second hand smoke, intervention can be offered, resulting in the possibility of decreasing the adverse effects.

#### **CLINICAL RECOMMENDATION STATEMENTS:**

The following evidence statements are quoted verbatim from the referenced clinical guidelines:

The Expert Panel recommends that clinicians advise persons who have asthma not to smoke or be exposed to environmental tobacco smoke (ETS). (Evidence C) (NHLBI, 2007)

Query patients about their smoking status and specifically consider referring to smoking cessation programs adults who smoke and have young children who have asthma in the household. (Evidence B) (NHLBI, 2007)

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 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) (Fiore, Jaen et al., 2008)

### **Measure #232 - Asthma: Tobacco Use: Intervention – Ambulatory Care Setting**

#### **RATIONALE:**

There is good evidence that tobacco screening and brief cessation intervention (including counseling and pharmacotherapy) in both the primary care setting and hospital settings are successful in helping tobacco users quit. (Fiore MC, 2008) Patients who are able to stop smoking or their exposure to second hand smoke may experience an increase in quality of life, a decrease in asthma symptoms, and may not use health resources as often. (NHLBI, 2007)

#### **CLINICAL RECOMMENDATION STATEMENTS:**

The following evidence statements are quoted verbatim from the referenced clinical guidelines:

The Expert Panel recommends that clinicians advise persons who have asthma not to smoke or be exposed to environmental tobacco smoke (ETS). (Evidence C) (NHLBI, 2007)

Query patients about their smoking status and specifically consider referring to smoking cessation programs adults who smoke and have young children who have asthma in the household. (Evidence B) (NHLBI, 2007)

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) (Fiore, Jaen et al., 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) (Fiore MC, 2008)

The interventions found to be effective in this Guideline have been shown to be effective in a variety of populations. In addition, many of the studies supporting these interventions comprised diverse samples of tobacco users. Therefore, interventions identified as effective in this Guideline are recommended for all individuals who use tobacco, except when the medication use is contraindicated or with specific populations in which medication has not been shown to be effective (pregnant women, smokeless tobacco users, light smokers, and adolescents). (Strength of Evidence = B) (Fiore MC, 2008)

## CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD) MEASURES GROUP OVERVIEW

### 2014 PQRS OPTIONS FOR MEASURES GROUPS:

#### 2014 PQRS MEASURES IN COPD MEASURES GROUP:

- #51. Chronic Obstructive Pulmonary Disease (COPD): Spirometry Evaluation
- #52. Chronic Obstructive Pulmonary Disease (COPD): Inhaled Bronchodilator Therapy
- #110. Preventive Care and Screening: Influenza Immunization
- #111. Pneumonia Vaccination Status for Older Adults
- #226. Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention

#### 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.

**G8898:** I intend to report the COPD 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, 2014 **OR** July 1 through December 31, 2014).
- Patient sample criteria for the COPD Measures Group are patients aged  $\geq 18$  years with a specific diagnosis of COPD accompanied by a specific patient encounter:

#### One of the following diagnosis codes indicating COPD:

**ICD-9-CM [for use 1/1/2014 – 9/30/2014]:** 491.0, 491.1, 491.20, 491.21, 491.22, 491.8, 491.9, 492.0, 492.8, 493.20, 493.21, 493.22, 496

**ICD-10-CM [for use 10/1/2014 - 12/31/2014]:** J41.0, J41.1, J41.8, J42, J43.0, J43.1, J43.2, J43.8, J43.9, J44.0, J44.1, J44.9

#### Accompanied by:

**One of the following patient encounter codes:** 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215

- Report a numerator option on **all applicable** measures within the COPD Measures Group for each patient within the eligible professional's patient sample.
- Measure #111 is only applicable for patients 65 years of age and older.
- Measure #110 need only be reported a minimum of once during the reporting period when the patient's visit included in the patient sample population is between January and March for the 2013-2014 influenza season **OR** between October and December for the 2014-2015 influenza season. When the patient's office visit is between April and September, Measure #110 is not applicable and will not affect the eligible provider's reporting or performance rate. Measure #110 need only be reported on patients 18 years and older.
- Instructions for qualifying numerator option reporting for each of the measures within the Chronic Obstructive Pulmonary Disease (COPD) 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 G8757:** All quality actions for the applicable measures in the COPD Measures Group have been performed for this patient

- To report satisfactorily for the COPD 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 Aged 65 Years and Older 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 groups option.

**▲ Measure #51 (NQF 0091): Chronic Obstructive Pulmonary Disease (COPD): Spirometry Evaluation**

**DESCRIPTION:**

Percentage of patients aged 18 years and older with a diagnosis of COPD who had spirometry evaluation results documented

**NUMERATOR:**

Patients with documented spirometry evaluation results in the medical record (FEV<sub>1</sub> and FEV<sub>1</sub>/FVC)

**Numerator Instructions:** Look for most recent documentation of spirometry evaluation results in the medical record; do not limit the search to the reporting period.

**Numerator Options:**

Spirometry results documented and reviewed **(3023F)**

**OR**

Documentation of medical reason(s) for not documenting and reviewing spirometry results  
**(3023F with 1P)**

**OR**

Documentation of patient reason(s) for not documenting and reviewing spirometry results  
**(3023F with 2P)**

**OR**

Documentation of system reason(s) for not documenting and reviewing spirometry results  
**(3023F with 3P)**

**OR**

Spirometry results **not** documented and reviewed, reason not otherwise specified **(3023F with 8P)**

**▲ Measure #52 (NQF 0102): Chronic Obstructive Pulmonary Disease (COPD): Inhaled Bronchodilator Therapy**

**DESCRIPTION:**

Percentage of patients aged 18 years and older with a diagnosis of COPD and who have an FEV<sub>1</sub>/FVC less than 60% and have symptoms who were prescribed an inhaled bronchodilator

**NUMERATOR:**

Patients who were prescribed an inhaled bronchodilator

**Definition:**

**Prescribed** – Includes patients who are currently receiving medication(s) that follow the treatment plan recommended at an encounter during the reporting period, even if the prescription for that medication was ordered prior to the encounter.

**Numerator Options:**

Inhaled bronchodilator prescribed (**4025F**)

**AND**

Spirometry test results demonstrate FEV<sub>1</sub>/FVC < 60% with COPD symptoms (e.g., dyspnea, cough/sputum, wheezing) (**G8924**)

**OR**

Documentation of medical reason(s) for not prescribing an inhaled bronchodilator (**4025F with 1P**)

**OR**

Documentation of patient reason(s) for not prescribing an inhaled bronchodilator (**4025F with 2P**)

**OR**

Documentation of system reason(s) for not prescribing an inhaled bronchodilator (**4025F with 3P**)

**AND**

Spirometry test results demonstrate FEV<sub>1</sub>/FVC < 60% with COPD symptoms (e.g., dyspnea, cough/sputum, wheezing) (**G8924**)

**OR**

Spirometry test results demonstrate FEV<sub>1</sub>/FVC ≥ 60% or patient does not have COPD symptoms (**G8925**)

**OR**

Spirometry test **not** performed or documented, reason not given (**G8926**)

**OR**

Inhaled bronchodilator **not** prescribed, reason not otherwise specified (**4025F with 8P**)

**AND**

Spirometry test results demonstrate FEV<sub>1</sub>/FVC < 60% with COPD symptoms (e.g., dyspnea, cough/sputum, wheezing) (**G8924**)

**▲ Measure #110 (NQF 0041): Preventive Care and Screening: Influenza Immunization**

**DESCRIPTION:**

Percentage of patients aged 6 months and older seen for a visit between October 1 and March 31 who received an influenza immunization OR who reported previous receipt of an influenza immunization

**NUMERATOR:**

Patients who received an influenza immunization OR who reported previous receipt of an influenza immunization

**Numerator Instructions:**

- If reporting this measure between January 1, 2014 and March 31, 2014, G-code **G8482** should be reported when the influenza immunization is ordered or administered to the patient during the months of August, September, October, November, and December of 2013 or January, February, and March of 2014 for the flu season ending March 31, 2014.
- If reporting this measure between October 1, 2014 and December 31, 2014, G-code **G8482** should be reported when the influenza immunization is ordered or administered to the patient during the months of August, September, October, November, and December of 2014 for the flu season ending March 31, 2015.
- Influenza immunizations administered during the month of August or September of a given flu season (either 2013-2014 flu season OR 2014-2015 flu season) can be reported when a visit occurs during the flu season (October 1 - March 31). In these cases, **G8482** should be reported.

**Definition:**

**Previous Receipt** - Receipt of the current season's influenza immunization from another provider OR from same provider prior to the visit to which the measure is applied (typically, prior vaccination would include influenza vaccine given since August 1st).

**Numerator Options:**

Influenza immunization administered or previously received (**G8482**)

**OR**

Influenza immunization was not ordered or administered for reasons documented by clinician (e.g., patient allergy or other medical reason, patient declined or other patient reasons, or other system reasons) (**G8483**)

**OR**

Influenza immunization ordered or recommended (to be given at alternate location or alternate provider); vaccine not available at time of visit (**G0919**)

**OR**

Influenza immunization was not ordered or administered, reason not given (**G8484**)

◆ Measure #111 (NQF 0043): Pneumonia Vaccination Status for Older Adults

**DESCRIPTION:**

Percentage of patients 65 years of age and older who have ever received a pneumococcal vaccine

**NUMERATOR:**

Patients who have ever received a pneumococcal vaccination

**Numerator Options:**

Pneumococcal vaccine administered or previously received (**4040F**)

**OR**

Pneumococcal vaccine was not administered or previously received, reason not otherwise specified (**4040F with 8P**)

**▲ Measure #226 (NQF 0028): Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention**

**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:**

Patient screened for tobacco use AND received tobacco cessation intervention (counseling, pharmacotherapy, or both), if identified as a tobacco user (**4004F**)

**OR**

Current tobacco non-user (**1036F**)

**OR**

Documentation of medical reason(s) for not screening for tobacco use (eg, limited life expectancy, other medical reasons) (**4004F with 1P**)

**OR**

Tobacco screening OR tobacco cessation intervention **not** performed, reason not otherwise specified (**4004F with 8P**)

## CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD) MEASURES GROUP RATIONALE AND CLINICAL RECOMMENDATION STATEMENTS

### **Measure #51 - Chronic Obstructive Pulmonary Disease (COPD): Spirometry Evaluation**

#### **RATIONALE:**

Evaluation of lung function for a patient with COPD is vital to determine what treatments are needed and whether those treatments are effective. COPD is often underdiagnosed and misdiagnosed in the primary care setting. (Tinkelman, 2006) Marked underutilization of spirometry testing has been well documented and is thought to be a contributing factor. (Foster et al, 2007; Yawn et al, 2008; Lee et al, 2006; Damarla et al, 2006) A recent study found that only 32% of patients with a new diagnosis of COPD had undergone spirometry within the previous 2 years to 6 months following diagnosis. (Han et al., 2007) This measure is for patients already diagnosed with COPD, in order to confirm diagnosis.

#### **CLINICAL RECOMMENDATION STATEMENTS:**

A clinical diagnosis of COPD should be considered in any patient who has dyspnea, chronic cough or sputum production, and/or a history of exposure to risk factors for the disease. Spirometry is required to make the diagnosis in this clinical context; the presence of a post-bronchodilator  $FEV_1/FVC < 0.70$  confirms the presence of persistent airflow limitation and thus of COPD. Spirometry is the most reproducible and objective measurement of airflow available. (GOLD, 2011)

For the diagnosis and assessment of COPD, spirometry is the gold standard as it is the most reproducible, standardized, and objective way of measuring airflow limitation.  $FEV_1/FVC < 70\%$  and a post bronchodilator  $FEV_1 < 80\%$  predicted confirms the presence of airflow limitation that is not fully reversible. (NHLBI/WHO)

### **Measure #52 - Chronic Obstructive Pulmonary Disease (COPD): Inhaled Bronchodilator Therapy**

#### **RATIONALE:**

Inhaled bronchodilator therapy is effective in treating and managing the symptoms of COPD, particularly, for those patients with moderate to very severe COPD, and improving a patient's quality of life. The Global Initiative for Chronic Obstructive Lung Disease (GOLD) guidelines recommend inhaled bronchodilators as a cornerstone of COPD symptom management; however, PCPs often turn to other agents as first-line COPD therapy (Barr et al, 2005; Foster et al, 2007). In a recent study of general medicine practices, 154 clinicians completed a survey to identify barriers to implementing seven recommendations from the GOLD guidelines. Adherence was only 54% to prescribing long-acting bronchodilators when  $FEV_1 < 80\%$  predicted (Perez, et al, 2011).

#### **CLINICAL RECOMMENDATION STATEMENTS:**

For stable COPD patients with respiratory symptoms and  $FEV_1 < 60\%$  predicted, ACP, ACCP, ATS, and ERS recommend treatment with inhaled bronchodilators (Grade: strong recommendation, moderate-quality evidence). (Qaseem et al, 2011)

Bronchodilator medications are given on either an as-needed basis or a regular basis to reduce or prevent symptoms (Evidence A). Bronchodilator medications are central to symptom management in COPD. Inhaled therapy is preferred. Long-acting inhaled bronchodilators are convenient and more effective at producing maintained symptom relief than short-acting bronchodilators. (GOLD, 2011)

### **Measure #110 - Preventive Care and Screening: Influenza Immunization**

#### **RATIONALE:**

Annual influenza vaccination is the most effective method for preventing influenza virus infection and its complications. Influenza vaccine is recommended for all persons aged  $\geq 6$  months who do not have contraindications to vaccination.

### **CLINICAL RECOMMENDATION STATEMENTS:**

The following evidence statements are quoted verbatim from the referenced clinical guidelines:

Routine annual influenza vaccination is recommended for all persons aged  $\geq 6$  months. To permit time for production of protective antibody levels, vaccination should optimally occur before onset of influenza activity in the community, and providers should offer vaccination as soon as vaccine is available. Vaccination also should continue to be offered throughout the influenza season. (CDC/ACIP, 2011)

### **Measure #111 - Pneumonia Vaccination Status for Older Adults**

#### **RATIONALE:**

Pneumonia is a common cause of illness and death in the elderly and persons with certain underlying conditions such as heart failure, diabetes, cystic fibrosis, asthma, sickle cell anemia, or chronic obstructive pulmonary disease (NHLBI, 2011). In 1998, an estimated 3,400 adults aged  $> 65$  years died as a result of invasive pneumococcal disease (IPD) (CDC, 2003).

Among the 91.5 million US adults aged  $> 50$  years, 29,500 cases of IPD, 502,600 cases of nonbacteremic pneumococcal pneumonia and 25,400 pneumococcal-related deaths are estimated to occur yearly; annual direct and indirect costs are estimated to total \$3.7 billion and \$1.8 billion, respectively. Pneumococcal disease remains a substantial burden among older US adults, despite increased coverage with 23-valent pneumococcal polysaccharide vaccine, (PPV23) and indirect benefits afforded by PCV7 vaccination of young children (Weycker, et al., 2011).

Vaccination has been found to be effective against bacteremic cases (OR: 0.34; 95% CI: 0.27–0.66) as well as nonbacteremic cases (OR: 0.58; 95% CI: 0.39–0.86). Vaccine effectiveness was highest against bacteremic infections caused by vaccine types (OR: 0.24; 95% CI: 0.09–0.66) (Vila-Corcoles, et al., 2009).

### **CLINICAL RECOMMENDATION STATEMENTS:**

The Advisory Committee on Immunization Practices' (ACIP) Updated Recommendations for Prevention of Invasive Pneumococcal Disease Among Adults Using the 23-Valent Pneumococcal Polysaccharide Vaccine recommends pneumococcal vaccine for all immunocompetent individuals who are 65 and older or otherwise at increased risk for pneumococcal disease. Routine revaccination is not recommended, but a second dose is appropriate for those who received PPV23 before age 65 years for any indication if at least 5 years have passed since their previous dose (USPSTF, 1989; ACIP, 2010).

The major updates for the 2010 update are: 1) the indications for which PPSV23 vaccination is recommended now include smoking and asthma, and 2) routine use of PPSV23 is no longer recommended for Alaska Natives or American Indians aged  $<65$  years unless they have medical or other indications for PPV23.

### **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)

## INFLAMMATORY BOWEL DISEASE (IBD) MEASURES GROUP OVERVIEW

### 2014 PQRS OPTIONS FOR MEASURES GROUPS:

#### **2014 PQRS MEASURES IN INFLAMMATORY BOWEL DISEASE (IBD) MEASURES GROUP:**

- #226. Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention
- #269. Inflammatory Bowel Disease (IBD): Type, Anatomic Location and Activity All Documented
- #270. Inflammatory Bowel Disease (IBD): Preventive Care: Corticosteroid Sparing Therapy
- #271. Inflammatory Bowel Disease (IBD): Preventive Care: Corticosteroid Related Iatrogenic Injury – Bone Loss Assessment
- #272. Inflammatory Bowel Disease (IBD): Preventive Care: Influenza Immunization
- #273. Inflammatory Bowel Disease (IBD): Preventive Care: Pneumococcal Immunization
- #274. Inflammatory Bowel Disease (IBD): Testing for Latent Tuberculosis (TB) Before Initiating Anti-TNF (Tumor Necrosis Factor) Therapy
- #275. Inflammatory Bowel Disease (IBD): Assessment of Hepatitis B Virus (HBV) Status Before Initiating Anti-TNF (Tumor Necrosis Factor) Therapy

#### **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.

**G8899:** I intend to report the Inflammatory Bowel Disease (IBD) Measures Group

- Report the patient sample method:  
**20 Patient Sample Method:** 20 unique patients (a majority of which must be Medicare Part B FFS [fee for service] patients) meeting patient sample criteria for the measures group during the reporting period (January 1 through December 31, 2014 OR July 1 through December 31, 2014).
- Patient sample criteria for the IBD Measures Group are patients aged 18 years and older with a specific diagnosis of IBD accompanied by a specific patient encounter:

#### **One of the following diagnosis codes indicating IBD:**

**ICD-9-CM [for use 1/1/2014 – 9/30/2014]:** 555.0, 555.1, 555.2, 555.9, 556.0, 556.1, 556.2, 556.3, 556.4, 556.5, 556.6, 556.8, 556.9

**ICD-10-CM [for use 10/1/2014 - 12/31/2014]:** K50.00, K50.011, K50.012, K50.013, K50.014, K50.018, K50.019, K50.10, K50.111, K50.112, K50.113, K50.114, K50.118, K50.119, K50.80, K50.811, K50.812, K50.813, K50.814, K50.818, K50.819, K50.90, K50.911, K50.912, K50.913, K50.914, K50.918, K50.919, K51.00, K51.011, K51.012, K51.013, K51.014, K51.018, K51.019, K51.20, K51.211, K51.212, K51.213, K51.214, K51.218, K51.219, K51.30, K51.311, K51.312, K51.313, K51.314, K51.318, K51.319, K51.40, K51.411, K51.412, K51.413, K51.414, K51.418, K51.419, K51.50, K51.511, K51.512, K51.513, K51.514, K51.518, K51.519, K51.80, K51.811, K51.812, K51.813, K51.814, K51.818, K51.819, K51.90, K51.911, K51.912, K51.913, K51.914, K51.918, K51.919

#### **Accompanied by:**

**One of the following patient encounter codes:** 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99406, 99407

- Report a numerator option on all measures within the IBD Measures Group for each patient within the eligible professional's patient sample.

- Instructions for qualifying numerator option reporting for each of the measures within the Inflammatory Bowel Disease (IBD) 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 G8758:** All quality actions for the applicable measures in the Inflammatory Bowel Disease (IBD) Measures Group have been performed for this patient

- To report satisfactorily the IBD Measures Group it requires **all** 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.
- **NOTE:** The detailed instructions in this specification apply exclusively to the reporting and analysis of the included measures under the measures groups option.

**▲ Measure #226 (NQF 0028): Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention**

**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 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 :**

Patient screened for tobacco use AND received tobacco cessation intervention (counseling, pharmacotherapy, or both), if identified as a tobacco user (**4004F**)

**OR**

Current tobacco non-user (**1036F**)

**OR**

Documentation of medical reason(s) for not screening for tobacco use (eg, limited life expectancy, other medical reasons) (**4004F with 1P**)

**OR**

Tobacco screening OR tobacco cessation intervention **not** performed, reason not otherwise specified (**4004F with 8P**)

**Measure #269: Inflammatory Bowel Disease (IBD): Type, Anatomic Location and Activity All Documented**

**DESCRIPTION:**

Percentage of patients aged 18 years and older with a diagnosis of inflammatory bowel disease who have documented the disease type, anatomic location and activity, at least once during the reporting year

**NUMERATOR:**

Patients who were assessed for disease type and anatomic location and activity

**Numerator Instructions:** Patients are considered to have appropriate documentation of inflammatory bowel disease type, anatomic location, **and** activity if all of the following are documented:

- a. Type of inflammatory bowel disease (Crohn's, ulcerative colitis or IBD-unclassified)
- b. Anatomic location of disease based on current or historic endoscopic and/or radiologic data (Note: this element does not prescribe frequency of studies).
- c. Luminal disease activity (quiescent, mild, moderate, severe) and presence of extraintestinal manifestations

**Numerator Options:**

Type, anatomic location, and activity all documented (**G0920**)

**OR**

Documentation of patient reason(s) for not being able to assess (e.g., patient refuses endoscopic and/or radiologic assessment) (**G0921**)

**OR**

**No** documentation of disease type, anatomic location and activity, reason not given (**G0922**)

**Measure #270: Inflammatory Bowel Disease (IBD): Preventive Care: Corticosteroid Sparing Therapy**

**DESCRIPTION:**

Percentage of patients aged 18 years and older with a diagnosis of inflammatory bowel disease who have been managed by corticosteroids greater than or equal to 10 mg/day for 60 or greater consecutive days that have been prescribed corticosteroid sparing therapy in the last reporting year

**NUMERATOR:**

Patients managed with corticosteroids greater than or equal to 10 mg/day for 60 or greater consecutive days AND prescribed a corticosteroid sparing therapy (e.g., thiopurines, methotrexate, or anti-TNF agents)

**Definition:**

**Corticosteroids** - Prednisone equivalents used expressly for the treatment of IBD and not for other indications (including premedication before anti-TNF therapy, non-IBD indications) can be determined using the following: 1 mg of prednisone = 1 mg of prednisolone; 5 mg of cortisone; 4 mg of hydrocortisone; 0.8 mg of triamcinolone; 0.8 mg of methylprednisolone; 0.15 mg of dexamethasone; 0.15 mg of betamethasone.

**Numerator Options:**

Patient receiving corticosteroids greater than or equal to 10 mg/day for 60 or greater consecutive days  
**(G8859)**

**AND**

Corticosteroid sparing therapy prescribed **(4142F)**

**OR**

Patient not receiving corticosteroids greater than or equal to 10 mg/day for 60 or greater consecutive days  
**(3750F)**

**OR**

Patient receiving corticosteroids greater than or equal to 10 mg/day for 60 or greater consecutive days  
**(G8859)**

**AND**

Documentation of medical reason(s) for not treating with corticosteroid sparing therapy (eg, benefits of continuing steroid therapy outweigh the risk of weaning patient off steroids or initiating steroid sparing therapy) **(4142F with 1P)**

**OR**

Patient receiving corticosteroids greater than or equal to 10 mg/day for 60 or greater consecutive days  
**(G8859)**

**AND**

Documentation of patient reason(s) for not treating with corticosteroid sparing therapy (eg, patient refuses to initiate steroid sparing therapy) **(4142F with 2P)**

**OR**

Patient receiving corticosteroids greater than or equal to 10 mg/day for 60 or greater consecutive days  
**(G8859)**

**AND**

Corticosteroid sparing therapy **not** prescribed, reason not otherwise specified **(4142F with 8P)**

**Measure #271: Inflammatory Bowel Disease (IBD): Preventive Care: Corticosteroid Related Iatrogenic Injury – Bone Loss Assessment**

**DESCRIPTION:**

Percentage of patients aged 18 years and older with a diagnosis of inflammatory bowel disease who have received dose of corticosteroids greater than or equal to 10 mg/day for 60 or greater consecutive days and were assessed for risk of bone loss once per the reporting year

**NUMERATOR:**

Patients who have received dose of corticosteroids greater than or equal to 10 mg/day for 60 or greater consecutive days and who were assessed for risk of bone loss

**Definitions:**

**Corticosteroids** - Prednisone equivalents used expressly for the treatment of IBD and not for other indications (including premedication before anti-TNF therapy, non-IBD indications) can be determined using the following: 1 mg of prednisone = 1 mg of prednisolone; 5 mg of cortisone; 4 mg of hydrocortisone; 0.8 mg of triamcinolone; 0.8 mg of methylprednisolone; 0.15 mg of dexamethasone; 0.15 mg of betamethasone.

**Assessed** - Documentation that an assessment for risk of bone loss has been performed or ordered. This includes, but is not limited to, review of systems and medication history, and ordering of Central Dual-energy X-Ray Absorptiometry (DXA) scan.

**Numerator Options:**

Patients who have received dose of corticosteroids greater than or equal to 10 mg/day for 60 or greater consecutive days (**G8860**)

**AND**

Central Dual-energy X-Ray Absorptiometry (DXA) ordered or documented, review of systems and medication history or pharmacologic therapy (other than minerals/vitamins) for osteoporosis prescribed (**G8861**)

**OR**

Patients not receiving corticosteroids greater than or equal to 10 mg/day for 60 or greater consecutive days (**G8862**)

**OR**

Patients who have received dose of corticosteroids greater than or equal to 10 mg/day for 60 or greater consecutive days (**G8860**)

**AND**

Patients **not** assessed for risk of bone loss, reason not given (**G8863**)

**Measure #272: Inflammatory Bowel Disease (IBD): Preventive Care: Influenza Immunization**

**DESCRIPTION:**

Percentage of patients aged 18 years and older with inflammatory bowel disease for whom influenza immunization was recommended, administered or previously received during the reporting year

**NUMERATOR:**

Patients for whom influenza immunization was recommended, administered, or previously received

**Numerator Options:**

Influenza immunization recommended **(4035F)**

**OR**

Influenza immunization ordered or administered **(4037F)**

**OR**

Documentation of medical reason(s) for not recommending influenza immunization (eg, patient allergic reaction, potential adverse drug reaction) **(4035F with 1P)**

**OR**

Documentation of medical reason(s) for not ordering or administering or having previously received influenza immunization (eg, patient allergic reaction, potential adverse drug reaction) **(4037F with 1P)**

**OR**

Documentation of patient reason(s) for not recommending influenza immunization (eg, patient refusal) **(4035F with 2P)**

**OR**

Documentation of patient reason(s) for not administering or having previously received influenza immunization (eg, patient refusal) **(4037F with 2P)**

**OR**

Documentation of system reason(s) for not recommending influenza immunization (eg, vaccine not available) **(4035F with 3P)**

**OR**

Documentation of system reason(s) for not administering or having previously received influenza immunization (eg, vaccine not available) **(4037F with 3P)**

**OR**

Influenza immunization **not** recommended, reason not otherwise specified **(4035F with 8P)**

**OR**

Influenza immunization **not** ordered or administered, reason not otherwise specified **(4037F with 8P)**



**Measure #273: Inflammatory Bowel Disease (IBD): Preventive Care: Pneumococcal Immunization**

**DESCRIPTION:**

Percentage of patients aged 18 years and older with a diagnosis of inflammatory bowel disease that had pneumococcal vaccination administered or previously received

**NUMERATOR:**

Patients for whom pneumococcal vaccine administered or previously received

**Numerator Options:**

Pneumococcal vaccine administered or previously received **(G8864)**

**OR**

Documentation of medical reason(s) for not administering or previously receiving pneumococcal vaccine (e.g., patient allergic reaction, potential adverse drug reaction) **(G8865)**

**OR**

Documentation of patient reason(s) for not administering or previously receiving pneumococcal vaccine (e.g., patient refusal) **(G8866)**

**OR**

Pneumococcal vaccine **not** administered or previously received, reason not given **(G8867)**

**Measure #274: Inflammatory Bowel Disease (IBD): Testing for Latent Tuberculosis (TB) Before Initiating Anti-TNF (Tumor Necrosis Factor) Therapy**

**DESCRIPTION:**

Percentage of patients aged 18 years and older with a diagnosis of inflammatory bowel disease (IBD) for whom a tuberculosis (TB) screening was performed and results interpreted within 6 months prior to receiving a first course of anti-TNF (tumor necrosis factor) therapy

**NUMERATOR:**

Patients who had TB screening performed and results interpreted, within 6 months prior to receiving a first course of anti-TNF therapy

**Definition:**

**First Course of anti-TNF therapy** - the first (ever) course of anti-TNF therapy

**Numerator Options:**

Documentation that tuberculosis (TB) screening test performed and results interpreted (**3510F**)

**AND**

Patients receiving a first course of anti-TNF therapy (**G8868**)

**OR**

Patient not receiving a first course of anti-TNF (tumor necrosis factor) therapy (**6150F**)

**OR**

Documentation of medical reason(s) for not performing TB screening test within 6 months prior to receiving a first course of anti-TNF therapy (eg, patient positive for TB and documentation of past treatment; patient recently completed course of anti-TB therapy) (**3510F with 1P**)

**OR**

Documentation of patient reason(s) for not performing TB screening test within 6 months prior to receiving a first course of anti-TNF therapy (eg, patient declined) (**3510F with 2P**)

**AND**

Patients receiving a first course of anti-TNF therapy (**G8868**)

**OR**

TB screening test not performed within 6 months prior to receiving a first course of anti-TNF therapy, reason not otherwise specified (**3510F with 8P**)

**AND**

Patients receiving a first course of anti-TNF therapy (**G8868**)

**Measure #275: Inflammatory Bowel Disease (IBD): Assessment of Hepatitis B Virus (HBV) Status Before Initiating Anti-TNF (Tumor Necrosis Factor) Therapy**

**DESCRIPTION:**

Percentage of patients aged 18 years and older with a diagnosis of inflammatory bowel disease (IBD) who had Hepatitis B Virus (HBV) status assessed and results interpreted within one year prior to receiving a first course of anti-TNF (tumor necrosis factor) therapy

**NUMERATOR:**

Patients who had HBV status assessed and results interpreted within one year prior to receiving a first course of anti-TNF therapy

**Numerator Instructions:** HBV status must be assessed by one of the following: HBsAG, HBsAG neutralization, HBcAb total, HBcAB IgM, HBsAB.

**Definition:**

**First Course of anti-TNF therapy:** the first (ever) course of anti-TNF therapy

**Numerator Options:**

Hepatitis B Virus (HBV) status assessed and results interpreted within one year prior to receiving a first course of anti-TNF (tumor necrosis factor) therapy **(3517F)**

**OR**

Patient has documented immunity to hepatitis B and is receiving a first course of anti-TNF therapy **(G8869)**

**OR**

Hepatitis B vaccine injection administered or previously received and is receiving a first course of anti-TNF therapy **(G8870)**

**OR**

Patient not receiving a first course of anti-TNF therapy **(G8871)**

**OR**

Documentation of medical reason(s) for not assessing Hepatitis B Virus (HBV) (eg, potential drug interaction, potential for allergic reaction) status within one year prior to receiving first course of anti-TNF therapy **(3517F with 1P)**

**OR**

Documentation of patient reason(s) for not assessing Hepatitis B Virus (HBV) status (eg, patient declined) within one year prior to receiving first course of anti-TNF therapy **(3517F with 2P)**

**OR**

Hepatitis B Virus (HBV) status **not** assessed and results interpreted within one year prior to receiving a first course of anti-TNF (tumor necrosis factor) therapy, reason not otherwise specified **(3517F with 8P)**

## **INFLAMMATORY BOWEL DISEASE (IBD) MEASURES GROUP RATIONALE AND CLINICAL RECOMMENDATION STATEMENTS**

### **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 #269 - Inflammatory Bowel Disease (IBD): Type, Anatomic Location and Activity All Documented**

#### **RATIONALE:**

Therapeutic options are determined by an assessment of the disease location, severity, and extraintestinal complications. In the absence of a "gold standard" for the measurement of disease activity, severity is established on clinical parameters, systemic manifestations, and the global impact of the disease on the individual's quality of life (44,78,79). (Lichtenstein, GR et al. Management of Crohn's Disease in Adults. Am J Gastro. 2009.)

#### **CLINICAL RECOMMENDATION STATEMENTS:**

After the diagnosis of UC or CD has been confirmed, the disease extent should be defined, because it determines the best route for therapy. For UC the extent is defined as the proximal margin of macroscopic inflammation, because

this is most clearly related to the risk of complications, including dilatation and cancer. The implications of limited macroscopic disease with extensive microscopic inflammation remain unclear. For CD both small bowel and colon should be assessed. (Carter MJ, Lobo AJ, Travis SPL)

Guidelines for the management of inflammatory bowel disease in adults. Gut. 2004;53:v1-v16 doi:10.1136/gut.2004.043372). Therapeutic options are determined by an assessment of the disease location, severity, and extraintestinal complications. In the absence of a “gold standard” for the measurement of disease activity, severity is established on clinical parameters, systemic manifestations, and the global impact of the disease on the individual’s quality of. (Lichtenstein, GR et al. Management of Crohn’s Disease in Adults. Am J Gastro. 2009.)

After the diagnosis of UC is confirmed, the anatomic extent is assessed endoscopically. The key question to be addressed at this point is whether the inflammation is “distal” (i.e., limited to below the descending colon and hence within reach of topical therapy) or extends proximal to the descending colon, requiring systemic medication. Therefore, a delineation of the proximal margin of inflammation, if not achieved on initial evaluation, is desirable at some point once the patient’s condition permits. From a practical standpoint, the endoscopic extent and clinical severity of an acute attack determine the approach to therapy. Importantly, a flare-up during which distal disease extends proximally is often a severe episode with the need for early aggressive therapy (51). Although therapeutic decisions are rarely based on histologic severity of inflammation, histology may well be taken into account when planning a surveillance regimen (see below). Based on clinical and endoscopic findings, the severity and extent of the disease are characterized. Severity may be classified as mild, moderate, severe, or fulminant (52, 53). (Kornbluth A, Sachar DB. Ulcerative Colitis Practice Guidelines in Adults: American College of Gastroenterology, Practice Parameters for Committee. Am J Gastro. 2010.)

In addition to the evaluation of colitis extent and activity, a global assessment of the patient should include attention to general health concerns, and quality of life issues that may be influenced by colitis activity as well as by extraintestinal manifestations (EIMs) of the disease. (Kornbluth A, Sachar DB. Ulcerative Colitis Practice Guidelines in Adults: American College of Gastroenterology, Practice Parameters for Committee. Am J Gastro. 2010.)

### **Measure #270 - Inflammatory Bowel Disease (IBD): Preventive Care: Corticosteroid Sparing Therapy**

#### **RATIONALE:**

Thirty to forty percent of patients with moderate to severe IBD have steroid dependent disease. That means that they are unable to taper off steroids without experiencing a flare up. (Crohn’s and Colitis Foundation of America, Corticosteroids, Special Considerations. www.ccfca.org, Jan. 16, 2009). A retrospective study examined whether the treatment of Crohn’s disease (CD) and ulcerative colitis (UC) with immunosuppressant medications was associated with an increased risk of death prior to antitumor necrosis factor therapies. The authors found that patients with both CD and UC are at increased risk of death during periods of current corticosteroid use. In contrast, current treatment with thiopurines was not associated with an increased risk of death. (Lewis J et al. Immunosuppressant Medications and Mortality in Inflammatory Bowel Disease. Am J Gastro.2008;103:1428-1435).

#### **CLINICAL RECOMMENDATION STATEMENTS:**

Long-term treatment with corticosteroids is undesirable. Patients with chronic active corticosteroid-dependent disease (either CD or UC) should be treated with AZA [azathioprine] 2.0 to 3.0 mg/kg/day or 6-MP [6-mercaptopurine] 1.0 to 1.5 mg/kg/day in an effort to lower or preferably eliminate corticosteroid use. Infliximab is another option in this situation, as is combination infliximab/antimetabolite therapy. (Grade A) (American Gastroenterological Association Institute. American Gastroenterological Association Institute Medical Position Statement on Corticosteroids, Immunomodulators, and Infliximab in Inflammatory Bowel Disease. Gastroenterology. 2006;130:935–939.)

Individual patients with either CD or UC who experience a severe flare of disease requiring corticosteroid treatment or require retreatment during the year with another course of corticosteroids should be considered for initiation of therapy with AZA 2.0 to 3.0 mg/kg/day or 6-MP 1.0 to 1.5 mg/kg/day in an effort to avoid future corticosteroid use.

Infliximab is another option in this situation, as is combination infliximab/antimetabolite therapy. (Grade C) (American Gastroenterological Association Institute. American Gastroenterological Association Institute Medical Position Statement on Corticosteroids, Immunomodulators, and Infliximab in Inflammatory Bowel Disease. *Gastroenterology*. 2006;130:935–939.)

Conventional corticosteroids are not efficacious in maintenance treatment of patients with CD (Grade A) or patients with UC (Grade B). (American Gastroenterological Association Institute. American Gastroenterological Association Institute Medical Position Statement on Corticosteroids, Immunomodulators, and Infliximab in Inflammatory Bowel Disease. *Gastroenterology*,2006;130:935–939.)

Corticosteroids should not be used to maintain remission (EL 1a, RG A) (European Crohn's and Colitis Organisation [ECCO, 2006]. European evidence based consensus on the diagnosis and management of Crohn's disease: current management. *Gut*. 2006 Mar;55 Suppl 1:i16-35.)

Conventional corticosteroids should not be used as long-term agents to prevent relapse of CD (Grade A). Budesonide at a dose of 6 mg/day reduces the time to relapse in ileal and/or right colonic disease, but does not provide significant maintenance benefits after 6 months (Grade A). Azathioprine/6-mercaptopurine (Grade B) and methotrexate (Grade B) have demonstrable maintenance benefits after inductive therapy with corticosteroids. (Lichtenstein, GR et al. Management of Crohn's Disease in Adults. *Am J Gastro*. 2009.)

This is the first report from the TREAT Registry, a large, prospective, observational research program designed to address the long term safety of medications, including infliximab, for the treatment of CD. After adjustment for confounding factors including disease severity and the use of other medications, the risk for serious infection or death with infliximab use was similar to that observed with the use of conventional immunomodulators, and was not higher than the overall incidence of serious infections among all CD patients.

The use of prednisone was a strong independent risk factor for both serious infection and death. Likewise, the use of narcotic analgesics also was associated with a significantly increased risk for serious infection. (Lichtenstein GR, Feagan BG, Cohen RD, Salzberg BA, Diamond RH, Chen DM, Pritchard ML, Sandborn WJ. Serious infections and mortality in association with therapies for Crohn's disease: TREAT registry. *Clin Gastroenterol Hepatol*. 2006 May;4(5):621-30.)

### **Measure #271 - Inflammatory Bowel Disease (IBD): Preventive Care: Corticosteroid Related Iatrogenic Injury – Bone Loss Assessment**

#### **RATIONALE:**

Patients with inflammatory bowel disease (IBD) often rely on their gastroenterologist for healthcare maintenance. In addition, the gastroenterologist also provides guidance to the patient's primary care physician on a broad range of issues such as vaccinations, osteoporosis screening, and cancer/dysplasia surveillance. Screening for osteoporosis is based on a combination of individual risk factors, but a history of prolonged (>3 months) steroid use over 10 mg is reason enough to obtain dual-energy x-ray absorptiometry scanning. (Moscandrew M., Mahadevan U., Kane S. General Health Maintenance in IBD. *Inflamm Bowel Dis*. 2009;15:1399–1409.)

Markers of greater osteoporosis and fracture risk include older age, hypogonadism, corticosteroid therapy, and established cirrhosis (American Gastroenterological Association. (2003). American Gastroenterological Association Medical Position Statement: Osteoporosis in Hepatic Disorders. *Gastroenterology*. 125: pp 937-940.)

The decision to measure bone density should follow an individualized approach. It should be considered when it will help the patient decide whether to institute treatment to prevent osteoporotic fracture. It should also be considered in patients receiving glucocorticoid therapy for two months or more and patients with other conditions that place them at high risk for osteoporotic fracture. (NIH)

The most commonly used measurement to diagnose osteoporosis and predict fracture risk is based on assessment of BMD by dualenergy X-ray absorptiometry (DXA). (NIH)

Measurements of BMD made at the hip predict hip fracture better than measurements made at other sites while BMD measurement at the spine predicts spine fracture better than measures at other sites. (NIH)

(National Institutes of Health. Osteoporosis Prevention, Diagnosis and Therapy. NIH Consensus Statement. March 2000;17:1-45.)

#### **CLINICAL RECOMMENDATION STATEMENTS:**

IBD has only a modest effect on BMD, with a pooled Z score of - 0.5 (level A evidence). (AGA, American Gastroenterological Association Medical Position Statement: Guidelines on Osteoporosis in Gastrointestinal Diseases, 2003).

Corticosteroid use is the variable most strongly associated with osteoporosis (level A evidence). However, it is difficult to distinguish corticosteroid use from disease activity in terms of causal impact on bone density, because the two are closely linked. (AGA, American Gastroenterological Association Medical Position Statement: Guidelines on Osteoporosis in Gastrointestinal Diseases. 2003.)

However there is strong evidence that those on long-term steroids of greater than three months have a significant increase risk of fracture (Papaioannou A. et al. All Patients with Inflammatory Bowel Disease Should Have Bone Density Assessment: Pro. Inflammatory Bowel Diseases. 2001.7(2):158-162)

Data on the treatment of osteoporosis in Crohn's disease depend on studies that are not specific to IBD. The evidence levels and recommendation grades are accordingly marked down. Weight bearing, isotonic exercise [EL2b, RG B], stopping smoking [EL3b, RG C], avoiding alcohol excess [EL4, RG D], and maintaining adequate dietary calcium (>1 g/day) [EL2b, RG B] are beneficial. Hormone replacement treatment is no longer generally advised in post-menopausal women with osteoporosis [EL2b, RG B], but regular use of bisphosphonates, calcitonin and its derivatives, and raloxifene may reduce or prevent further bone loss [EL2b, RG C]. Data in men with osteoporosis are less secure but bisphosphonates are probably of value, [EL3b, RG C], and those with low testosterone may benefit from its therapeutic administration [EL3b, RG C]. Routine administration of vitamin D is not warranted [EL3b, RG C]. (Caprilli R. et al. European evidence based consensus on the diagnosis and management of Crohn's disease: special situations. Gut. 2006;55(Supplement 1):i36-i58.)

#### **Measure #272 - Inflammatory Bowel Disease (IBD): Preventive Care: Influenza Immunization**

##### **RATIONALE:**

Live virus vaccines are not appropriate for patients on immunosuppressive therapy, and therefore should be anticipated and given prior to initiating immunosuppression.

Patients with inflammatory bowel disease often rely on their gastroenterologist for health-care maintenance. In addition, the gastroenterologist also provides guidance to the patient's primary care physician on a broad range of issues such as vaccinations, osteoporosis screening, and cancer/dysplasia surveillance. Appropriate vaccinations should be administered to patients with IBD, particularly those likely to receive immunosuppression. (Mosca M., Mahadevan U., Kane S. General Health Maintenance in IBD. (Inflamm Bowel Dis. 2009;15:1399-1409.)

##### **CLINICAL RECOMMENDATION STATEMENTS:**

Vaccination to prevent influenza is particularly important for the following persons, who are at increased risk for severe complications from influenza, or at higher risk for influenza-related outpatient, ED, or hospital visits:

- all children aged 6 months–4 years (59 months);
- all persons aged ≥50 years;

- children and adolescents (aged 6 months–18 years) who are receiving long-term aspirin therapy and who might be at risk for
- experiencing Reye syndrome after influenza virus infection;
- women who will be pregnant during the influenza season;
- adults and children who have chronic pulmonary (including asthma) or cardiovascular (except hypertension), renal, hepatic,
- neurological/neuromuscular, hematologic, or metabolic disorders (including diabetes mellitus);
- adults and children who have immunosuppression (including immunosuppression caused by medications or by HIV); and
- residents of nursing homes and other long-term–care facilities.

(Prevention & Control of Seasonal Influenza with Vaccines - Recommendations of the Advisory Committee on Immunization Practices (ACIP) 2009. MMWR 2009 Jul 24; Early Release: 1-52.)

Routine vaccination status should be reviewed (62). In patients on immunosuppressants, live vaccines are contraindicated, so if these are required they should be administered at the time of UC diagnosis. However, patients on immunosuppressant drugs can and should be vaccinated routinely for influenza and pneumococcal infection, and for tetanus and meningococcus in the appropriate settings (63 – 65). (Kornbluth A, Sachar DB. Ulcerative Colitis Practice Guidelines in Adults: American College of Gastroenterology, Practice Parameters for Committee. Am J Gastro. 2010.)

As noted above, patients with IBD would not be considered to be immune compromised in the absence of severe malnutrition or medical immune suppression. High dose prednisone therapy may be considered a contraindication in the use of live-virus vaccines. Most patients with steroid dependent or refractory IBD respond well to other immunosuppressive agents and are weaned effectively off of corticosteroids.

However, recent trends in the use of steroid-sparing agents such as azathioprine and 6-mercaptopurine are to use higher, more effective doses, whereas the doses of methotrexate used in IBD are often higher than those used for rheumatoid arthritis, psoriasis, or asthma. Consequently, one may not assume the safety of live vaccines in patients treated with these agents. (Sands BE, Cuffari C, Katz J et al. Guidelines for Immunizations in Patients With Inflammatory Bowel Disease. Inflammatory Bowel Diseases.10; 5: 677-692.)

### **Measure #273 - Inflammatory Bowel Disease (IBD): Preventive Care: Pneumococcal Immunization**

#### **RATIONALE:**

Live virus vaccines are not appropriate for patients on immunosuppressive therapy, and therefore should be anticipated and given prior to initiating immunosuppression.

Patients with IBD often rely on their gastroenterologist for health-care maintenance. In addition, the gastroenterologist also provides guidance to the patient's primary care physician on a broad range of issues such as vaccinations, osteoporosis screening, and cancer/dysplasia surveillance. Appropriate vaccinations should be administered to patients with IBD, particularly those likely to receive immunosuppression. (Moscandrew M., Mahadevan U., Kane S. General Health Maintenance in IBD. (Inflamm Bowel Dis. 2009;15:1399–1409.)

#### **CLINICAL RECOMMENDATION STATEMENTS:**

Persons who have conditions associated with decreased immunologic function that increase the risk for severe pneumococcal disease or its complications should be vaccinated. Although the vaccine is not as effective for immunocompromised patients as it is for immunocompetent persons, the potential benefits and safety of the vaccine justify its use. The vaccine is recommended for persons in the following groups: immunocompromised persons aged greater than or equal to 2 years, including persons with HIV infection, leukemia, lymphoma, Hodgkins disease, multiple myeloma, generalized malignancy, chronic renal failure, nephrotic syndrome, or other conditions associated



with immunosuppression (e.g., organ or bone marrow transplantation); and persons receiving immunosuppressive chemotherapy, including long-term systemic corticosteroids. If earlier vaccination status is unknown, immunocompromised persons should be administered pneumococcal vaccine. (Centers for Disease Control and Prevention. Prevention of pneumococcal disease: recommendations of the Advisory Committee on Immunization Practices (ACIP).MMWR 1997;46(No. RR-8): [13].)

Routine vaccination status should be reviewed (62). In patients on immunosuppressants, live vaccines are contraindicated, so if these are required they should be administered at the time of UC diagnosis. However, patients on immunosuppressant drugs can and should be vaccinated routinely for influenza and pneumococcal infection, and for tetanus and meningococcus in the appropriate settings (63 – 65). (Kornbluth A, Sachar DB. Ulcerative Colitis Practice Guidelines in Adults: American College of Gastroenterology, Practice Parameters for Committee. Am J Gastro. 2010.)

As noted above, patients with IBD would not be considered to be immune compromised in the absence of severe malnutrition or medical immune suppression. High dose prednisone therapy may be considered a contraindication in the use of live-virus vaccines. Most patients with steroid dependent or refractory IBD respond well to other immunosuppressive agents and are weaned effectively off of corticosteroids. However, recent trends in the use of steroid-sparing agents such as azathioprine and 6-mercaptopurine are to use higher, more effective doses, whereas the doses of methotrexate used in IBD are often higher than those used for rheumatoid arthritis, psoriasis, or asthma. Consequently, one may not assume the safety of live vaccines in patients treated with these agents. (Sands BE, Cuffari C, Katz J et al. Guidelines for Immunizations in Patients With Inflammatory Bowel Disease. Inflammatory Bowel Diseases. 10; 5. 677-692.)

#### **Measure #274 - Inflammatory Bowel Disease (IBD): Testing for Latent Tuberculosis (TB) Before Initiating Anti-TNF (Tumor Necrosis Factor) Therapy**

##### **RATIONALE:**

Before initiating biologic anti-TNF therapy for a patient with IBD, it is essential to screen the patient for tuberculosis, as research has documented a higher incidence of TB after anti-TNF therapy. All patients being considered for biologic anti-TNF therapy should receive a tuberculin skin test, even if the patient has previously received the BCG vaccination. Test results, in addition to patient risk for TB and other tests, should be used to assess the patient's risk for latent TB infection. This is a patient safety measure.

Opportunity for improvement: While there are a limited number of studies that investigate gaps in care for patients with IBD, the research that does exist identifies opportunities for improvement in care areas: 1) there is a lack of adherence to tuberculosis screening, most noticeably in the use of disease-modifying anti-TNF drugs, and 2) variations in care by practice setting, geographic region and physician specialty.

Golimumab, certolizumab pegol, infliximab and adalimumab may all trigger latent TB. Also, all patients should be monitored during therapy for active TB even if the initial latent TB testing is negative. (See FDA package labeling for these anti-TNF biological agents).

Reactivation of hepatitis B virus has been reported in patients who are carriers of this virus and are taking TNF blocker medicines. (Kaiser T, Moessner J, McHutchison JG, Tillmann HG. Life threatening liver disease during treatment with monoclonal antibodies. BMJ 2009;338:b508.)

##### **CLINICAL RECOMMENDATION STATEMENTS:**

Prior to commencing treatment with anti-TNF, all patients should be screened for TB in accordance with the British Thoracic Society (BTS) guidelines. Active TB needs to be adequately treated before anti-TNF therapy can be started. Prior to commencing anti-TNF therapy, consideration of prophylactic anti-TB therapy (as directed by the BTS guidelines) should be given to patients with evidence of potential latent disease (past history of TB treatment or abnormal chest X-ray raising the possibility of TB) after consultation with a local TB specialist. All patients

commenced on anti-TNF therapies need to be closely monitored for TB. [Level of Evidence C] (J. Ledingham and C. Deighton, on behalf of the British Society for Rheumatology Standards, Guidelines and Audit Working Group (SGAWG). Update on the British Society for Rheumatology guidelines for prescribing TNFa blockers in adults with rheumatoid arthritis (update of previous guidelines of April 2001) *Rheumatology*. 2005; 44(2):157-163.]

In an immunocompromised person (adult or child), the tuberculin skin test (TST) should be the initial test used to detect LTBI. If the TST is positive, the person should be considered to have LTBI.

However, in light of the known problem with false-negative TST results in immunocompromised populations, a clinician still concerned about the possibility of LTBI in an immunocompromised person with a negative initial TST result may perform an IGRA test. If the IGRA (interferon-gamma release assay) result is positive, the person might be considered to have LTBI. If the IGRA result is indeterminate, the test should be repeated to rule out laboratory error. If the repeat test is also indeterminate, the clinician should suspect anergy and rely on the person's history, clinical features, and any other laboratory results to make a decision as to the likelihood of LTBI. Although both IGRAs may be used as described above, there is evidence that the T-SPOT.TB assay may be more sensitive than the QFT-GIT assay in active TB, and this characteristic might be especially relevant in immunocompromised populations. While the approach of accepting either test result (TST or IGRA) as positive will improve the sensitivity of detecting LTBI in immunocompromised populations, there are no data supporting the efficacy of preventive therapy in TST-negative but IGRA-positive individuals. Thus the ©2010-2011 American Gastroenterological Association. All rights reserved. Page 31 of 52 clinician must weigh the potential benefit of detecting more persons with positive test results against the lack of evidence for the benefit of preventive therapy in such persons. (Canada Communicable Disease Report, October 2008.)

Infliximab can reactivate latent HBV. (Esteve M, Saro C, González-Huix F, Suarez F, Forné M, Viver JM. Chronic hepatitis B reactivation following infliximab therapy in Crohn's disease patients: need for primary prophylaxis. *Gut*. 2004 Sep;53(9):1363-5.)

### **Measure #275 - Inflammatory Bowel Disease (IBD): Assessment of Hepatitis B Virus (HBV) Status Before Initiating Anti-TNF (Tumor Necrosis Factor) Therapy**

#### **RATIONALE:**

Before initiating biologic anti-TNF therapy for a patient with IBD, it is essential to screen the patient for HBV, as research has documented reactivation of HBV after anti-TNF therapy. This is a patient safety measure.

Opportunity for improvement: While there are a limited number of studies that investigate gaps in care for patients with IBD, the research that does exist identifies opportunities for improvement in care areas: 1) there is a lack of adherence to documentation of HBV screening, most noticeably in the use of disease-modifying anti-TNF drugs, and 2) variations in care by practice setting, geographic region and physician specialty.

See FDA package labeling for anti-TNF biological agents — golimumab, certolizumab pegol, infliximab and adalimumab.

Reactivation of hepatitis B virus has been reported in patients who are carriers of this virus and are taking TNF blocker medicines. (Kaiser T, Moessner J, McHutchison JG, Tillmann HG. Life threatening liver disease during treatment with monoclonal antibodies. *BMJ*. 2009;338:b508)

#### **CLINICAL RECOMMENDATION STATEMENTS:**

Infliximab can reactivate latent HBV. (Esteve M, Saro C, González-Huix F, Suarez F, Forné M, Viver JM. Chronic hepatitis B reactivation following infliximab therapy in Crohn's disease patients: need for primary prophylaxis. *Gut*. 2004 Sep;53(9):1363-5.)

## SLEEP APNEA MEASURES GROUP OVERVIEW

### 2014 PQRS OPTIONS FOR MEASURES GROUP:

#### 2014 PQRS MEASURES IN SLEEP APNEA MEASURES GROUP:

- #276. Sleep Apnea: Assessment of Sleep Symptoms
- #277. Sleep Apnea: Severity Assessment at Initial Diagnosis
- #278. Sleep Apnea: Positive Airway Pressure Therapy Prescribed
- #279. Sleep Apnea: Assessment of Adherence to Positive Airway Pressure Therapy

#### 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.

**G8900:** I intend to report the Sleep Apnea Measures Group

- Report the patient sample method:  
**20 Patient Sample Method:** 20 unique patients (a majority of which must be Medicare Part B FFS [fee for service] patients) meeting patient sample criteria for the measures group during the reporting period (January 1 through December 31, 2014 **OR** July 1 through December 31, 2014).
- Patient sample criteria for the Sleep Apnea Measures Group are patients aged 18 years and older with a specific diagnosis of Sleep Apnea accompanied by a specific patient encounter:

#### One of the following diagnosis codes indicating Sleep Apnea:

**ICD-9-CM [for use 1/1/2014 – 9/30/2014]:** 327.23, 780.51, 780.53, 780.57

**ICD-10-CM [for use 10/1/2014 – 12/31/2014]:** G47.30, G47.33

#### Accompanied by:

**One of the following patient encounter codes:** 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215

- Report a numerator option on **all** measures within the Sleep Apnea Measures Group for each patient within the eligible professional's patient sample.
- Instructions for qualifying numerator option reporting for each of the measures within the Sleep Apnea 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 G8759:** All quality actions for the applicable measures in the Sleep Apnea Measures Group have been performed for this patient.

- To report satisfactorily the Sleep Apnea Measures Group it requires **all** measures for each patient within the eligible professional's patient sample to be reported a minimum of once during the reporting period. In measures group reporting, measures that are based on patient visits need only be reported a minimum of once per reporting period – they do not need to be reported each visit.
- 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.

- **NOTE:** The detailed instructions in this specification apply exclusively to the reporting and analysis of the included measures under the measures groups option.

**☞ Measure #276: Sleep Apnea: Assessment of Sleep Symptoms**

**DESCRIPTION:**

Percentage of visits for patients aged 18 years and older with a diagnosis of obstructive sleep apnea that includes documentation of an assessment of sleep symptoms, including presence or absence of snoring and daytime sleepiness

**NUMERATOR:**

Patient visits with an assessment of sleep symptoms documented, including presence or absence of snoring and daytime sleepiness

**Numerator Options:**

Sleep apnea symptoms assessed, including presence or absence of snoring and daytime sleepiness  
(**G8839**)

**OR**

Documentation of reason(s) for not performing an assessment of sleep symptoms (e.g., patient didn't have initial daytime sleepiness, patient visits between initial testing and initiation of therapy) (**G8840**)

**OR**

Sleep apnea symptoms **not** assessed, reason not given (**G8841**)

**☞ Measure #277: Sleep Apnea: Severity Assessment at Initial Diagnosis**

**DESCRIPTION:**

Percentage of patients aged 18 years and older with a diagnosis of obstructive sleep apnea who had an apnea hypopnea index (AHI) or a respiratory disturbance index (RDI) measured at the time of initial diagnosis

**NUMERATOR:**

Patients who had an apnea hypopnea index (AHI) or a respiratory disturbance index (RDI) measured at the time of initial diagnosis

**Definitions:**

**Apnea-Hypopnea Index (AHI)** for polysomnography performed in a sleep lab is defined as (Total Apneas + Hypopneas per hour of sleep); Apnea-Hypopnea Index (AHI) for a home sleep study is defined as (Total Apneas + Hypopneas per hour of monitoring).

**Respiratory Disturbance Index (RDI)** - (Total Apneas + Hypopneas + Respiratory Effort Related Arousals per hour of sleep)

**Numerator Options:**

Apnea hypopnea index (AHI) or respiratory disturbance index (RDI) measured at the time of initial diagnosis (**G8842**)

**OR**

Documentation of reason(s) for not measuring an apnea hypopnea index (AHI) or a respiratory disturbance index (RDI) at the time of initial diagnosis (e.g., abnormal anatomy, patient declined, financial, insurance coverage) (**G8843**)

**OR**

Apnea hypopnea index (AHI) or respiratory disturbance index (RDI) **not** measured at the time of initial diagnosis, reason not given (**G8844**)

**☞ Measure #278: Sleep Apnea: Positive Airway Pressure Therapy Prescribed**

**DESCRIPTION:**

Percentage of patients aged 18 years and older with a diagnosis of moderate or severe obstructive sleep apnea who were prescribed positive airway pressure therapy

**NUMERATOR:**

Patients who were prescribed positive airway pressure therapy

**Definition:**

**Moderate or severe sleep apnea** - apnea hypopnea index (AHI) or a respiratory disturbance index (RDI) greater than or equal to 15 episodes per hour of sleep

**Numerator Options:**

Positive airway pressure therapy prescribed (**G8845**)

**AND**

Moderate or severe obstructive sleep apnea (apnea hypopnea index (AHI) or respiratory disturbance index (RDI) of 15 or greater) (**G8846**)

**OR**

Mild obstructive sleep apnea (apnea hypopnea index (AHI) or respiratory disturbance index (RDI) of less than 15) (**G8848**)

**OR**

Documentation of reason(s) for not prescribing positive airway pressure therapy (e.g., patient unable to tolerate, alternative therapies used, patient declined, financial, insurance coverage) (**G8849**)

**AND**

Moderate or severe obstructive sleep apnea (apnea hypopnea index (AHI) or respiratory disturbance index (RDI) of 15 or greater) (**G8846**)

**OR**

Positive airway pressure therapy **not** prescribed, reason not given (**G8850**)

**AND**

Moderate or severe obstructive sleep apnea (apnea hypopnea index (AHI) or respiratory disturbance index (RDI) of 15 or greater) (**G8846**)

**☞ Measure #279: Sleep Apnea: Assessment of Adherence to Positive Airway Pressure Therapy**

**DESCRIPTION:**

Percentage of visits for patients aged 18 years and older with a diagnosis of obstructive sleep apnea who were prescribed positive airway pressure therapy who had documentation that adherence to positive airway pressure therapy was objectively measured

**NUMERATOR:**

Patient visits with documentation that adherence to positive airway pressure therapy was objectively measured

**Definition:** Objectively measured is defined as: positive airway pressure machine-generated measurement of hours of use.

**Numerator Options:**

Objective measurement of adherence to positive airway pressure therapy, documented (**G8851**)

**AND**

Positive airway pressure therapy was prescribed (**G8852**)

**OR**

Positive airway pressure therapy not prescribed (**G8853**)

**OR**

Documentation of reason(s) for not objectively measuring adherence to positive airway pressure therapy (e.g., patient didn't bring data from continuous positive airway pressure [CPAP], therapy not yet initiated, not available on machine) (**G8854**)

**AND**

Positive airway pressure therapy was prescribed (**G8852**)

**OR**

Objective measurement of adherence to positive airway pressure therapy **not** performed, reason not given (**G8855**)

**AND**

Positive airway pressure therapy was prescribed (**G8852**)



## **SLEEP APNEA MEASURES GROUP RATIONALE AND CLINICAL RECOMMENDATION STATEMENTS**

### **Measure #276 - Sleep Apnea: Assessment of Sleep Symptoms**

#### **RATIONALE:**

Snoring occurs in up to 30-50% of adults over the age of 50, and subjective sleepiness occurs in more than 30% of adults (Kushida et al, 2005). Patients diagnosed with obstructive sleep apnea (OSA) should be regularly assessed for changes in symptoms, such as snoring and daytime sleepiness. Sleepiness can be quantified with validated tools such as the Epworth Sleepiness Scale (ESS). Increases in either of these conditions can be signs of poor adherence to treatment, improper mask fit, or indications that additional treatment, such as surgery or medication, is needed. Furthermore, the lack of improvement in sleepiness or snoring may be a reason to discontinue continuous positive airway pressure (CPAP) in follow-up after a therapeutic trial. Alternatively, an increase in CPAP may be implemented to improve snoring or daytime sleepiness. In evaluating daytime sleepiness, it is important to rule out sleep deprivation. Daytime sleepiness, especially with impairment of driving can be a sign of untreated OSA.

There has been considerable research on the impact of CPAP on subjective and objective daytime sleepiness. The majority of these studies have evaluated subjective sleepiness, principally using the (ESS). Of the placebo-controlled trials employing the ESS, most found that CPAP reduced subjective daytime sleepiness. (Gay et al, 2005)

#### **CLINICAL RECOMMENDATION STATEMENTS:**

CPAP is indicated for improving self-reported sleepiness in patients with obstructive sleep apnea (Level 1). This recommendation is based on 10 randomized controlled trials in which CPAP reduced sleepiness more than control procedures in patients with obstructive sleep apnea. The Epworth Sleepiness Scale was used in the vast majority of trials to assess subjective sleepiness. (Kushida et al, 2006)

### **Measure #277 - Sleep Apnea: Severity Assessment at Initial Diagnosis**

#### **RATIONALE:**

For patients with obstructive sleep apnea (OSA), the desired outcome of treatment includes the resolution of the clinical signs and symptoms of OSA and the normalization of the apnea hypopnea index (AHI) and oxyhemoglobin saturation. Physicians treating patients with OSA should calculate the patient's level of severity, which informs risk for other co-morbid conditions and complications. Numerous Level 1 and Level 2 studies have shown that the risk of cardiovascular complications is established for patients with an AHI over 15 (Kushida et al, 2005). Patients with a respiratory disturbance index equal to or greater than 15 are considered to have moderate to severe OSA and should be treated with positive airway pressure therapy.

#### **CLINICAL RECOMMENDATION STATEMENTS:**

Moderate sleep apnea is defined as having an RDI of equal to or greater than 15, but less than 30 episodes per hour of sleep; severe sleep apnea is defined as having an RDI equal to or greater than 30 episodes per hour of sleep. These patients are at higher risk for severe cardiovascular diseases and other co-morbid conditions (Kushida et al, 2006). Polysomnography is indicated for positive airway pressure (PAP) titration in patients with sleep related breathing disorders (Level 1). PSG with CPAP titration is appropriate for patients with any of the following results: a) an RDI of at least 15 per hour, regardless of the patient's symptoms; b) an RDI of at least 5 per hour in a patient with excessive daytime sleepiness. (Kushida et al, 2005)

### **Measure #278 - Sleep Apnea: Positive Airway Pressure Therapy Prescribed**

#### **RATIONALE:**

All patients with moderate to severe obstructive sleep apnea (OSA) should have an initial trial of nasal continuous positive air pressure (CPAP); Level 1 evidence also recommends that patients with severe OSA should have an initial trial of nasal CPAP because greater effectiveness has been shown with this intervention than with the use of

other treatments (Kushida et al, 2006). Level 1 studies also show that CPAP eliminates respiratory disturbances, reducing the apnea hypopnea index (AHI). All of the 11 clinical trials that studied this outcome demonstrated that CPAP was superior to placebo, conservative management, and positional therapy. This effect was demonstrated during follow-up polysomnography (Gay et al, 2006). Treatment with CPAP must be based on a prior diagnosis of OSA established using an acceptable method of diagnosis.

**CLINICAL RECOMMENDATION STATEMENTS:**

CPAP is indicated for the treatment of moderate to severe OSA (Level 1). CPAP is recommended for the treatment of mild OSA (Level 2). CPAP is indicated for improving self-reported sleepiness in patients with OSA (Level 1). This recommendation is based on 10 randomized controlled trials in which CPAP reduced sleepiness more than control procedures in patients with OSA. CPAP is recommended for improving quality of life in patients with OSA. (Kushida et al, 2006) (Level 1 and Level 2 studies)

**Measure #279 - Sleep Apnea: Assessment of Adherence to Positive Airway Pressure Therapy**

**RATIONALE:**

This recommendation is based on overwhelming evidence at all levels indicating patients with obstructive sleep apnea (OSA) overestimate their positive airway pressure use time. Level I and Level II studies indicate that objectively-measured nightly continuous positive airway pressure (CPAP) "time on" ranges from 3.5 hours/night in minimally symptomatic new patients to 7.1 hours/night in established users (Kushida et al, 2006). The success of any positive airway pressure device therapy depends primarily on patient adherence, which can be enhanced by education, proper mask/interface fit, frequent follow-up by the clinician and durable medical equipment provider, and finally, A.W.A.K.E. (Alert Well And Keeping Energetic) meetings (ICSI, 2007). When objective adherence is assessed and an intervention is employed –either in the clinic or via the telephone, use is increased. Meter reads (on the machines) or card reads provide a longitudinal assessment of use and prevent the potential for overuse of stimulant therapy and daytime testing of sleepiness with multiple sleep latency tests.

Numerous studies have shown that patient adherence to CPAP is low or over-estimated by patients. A 2006 study assessed OSA severity, continuous positive airway pressure adherence, and factors associated with CPAP adherence among a group of patients with OSA receiving care at a publicly-funded county hospital. The findings indicated that CPAP adherence was low, with women having a higher likelihood of non-adherence than men. When individuals without follow-up were assumed to be non-adherent, the overall compliance rate was 30.4%, and women were 1.72 (95% CI, 1.03-2.88) times more likely to be noncompliant than men, adjusting for race, marital status, and age (Joo et al, 2007). Another study by Kribbs et al (Level I) found that subjective and covertly monitored objective CPAP adherence were discordant and that OSA patients in the aggregate overestimate subjective CPAP adherence compared with objective adherence measurements obtained by microprocessor. Adherence was arbitrarily defined as  $\geq 4$  hours of CPAP usage for  $\geq 70\%$  of the nights monitored. Although 60% of patients subjectively reported nightly use of CPAP for a mean of 106.9 days, only 16 of 35 (46%) were objectively using CPAP at least 4 hours per night on 70% of the nights. Patients over-estimated actual CPAP use by  $69 \pm 110$  min. (Gay et al, 2005)

**CLINICAL RECOMMENDATION STATEMENTS:**

CPAP usage should be objectively monitored to help assure utilization (Level 1). Close follow-up for PAP usage and problems in patients with obstructive sleep apnea (OSA) by appropriately trained health care providers is indicated to establish effective utilization patterns and remediate problems, if needed. This recommendation is based on 61 studies that examined management paradigms and collected acceptance, utilization, and adverse events; 17 of these studies qualified as Level I. This is especially important during the first few weeks of PAP use and can prove to be beneficial for the longitudinal care of the patient. (Kushida et al, 2006)

## DEMENTIA MEASURES GROUP OVERVIEW

### 2014 PQRS OPTIONS FOR MEASURES GROUPS:

#### 2014 PQRS MEASURES IN DEMENTIA MEASURES GROUP:

- #280. Dementia: Staging of Dementia
- #281. Dementia: Cognitive Assessment
- #282. Dementia: Functional Status Assessment
- #283. Dementia: Neuropsychiatric Symptom Assessment
- #284. Dementia: Management of Neuropsychiatric Symptoms
- #285. Dementia: Screening for Depressive Symptoms
- #286. Dementia: Counseling Regarding Safety Concerns
- #287. Dementia: Counseling Regarding Risks of Driving
- #288. Dementia: Caregiver Education and Support

#### 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.

**G8902:** I intend to report the Dementia 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, 2014 **OR** July 1 through December 31, 2014).
- Patient sample criteria for the Dementia Measures Group are all patients regardless of age, with a specific diagnosis of dementia accompanied by a specific patient encounter:

#### One of the following diagnosis codes indicating Dementia:

**ICD-9-CM [for use 1/1/2014 – 9/30/2014]:** 094.1, 290.0, 290.10, 290.11, 290.12, 290.13, 290.20, 290.21, 290.3, 290.40, 290.41, 290.42, 290.43, 290.8, 290.9, 294.10, 294.11, 294.20, 294.21, 294.8, 331.0, 331.11, 331.19, 331.82

**ICD-10-CM [for use 10/1/2014 – 12/31/2014]:** A52.17, F01.50, F01.51, F02.80, F02.81, F03.90, F03.91, F05, F06.8, G30.0, G30.1, G30.8, G30.9, G31.01, G31.09, G31.83

#### Accompanied by:

**One of the following patient encounter codes:** 90791, 90792, 90832, 90834, 90837, 96116, 96118, 96119, 96120, 96150, 96151, 96152, 96154, 97003, 97004, 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99304, 99305, 99306, 99307, 99308, 99309, 99310, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350

- Report a numerator option on **all** measures within the Dementia Measures Group for each patient within the eligible professional's patient sample.
- Instructions for qualifying numerator option reporting for each of the measures within the Dementia 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 G8761:** All quality actions for the applicable measures in the Dementia Measures Group have been performed for this patient

- To report satisfactorily the Dementia Measures Group it requires **all** measures for each patient within the eligible professional's patient sample to be reported a minimum of once during the reporting period.
- Only patients who had at least two denominator eligible visits during the reporting period will be counted for reporting of this measures group.
- 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.
- **NOTE:** The detailed instructions in this specification apply exclusively to the reporting and analysis of the included measures under the measures groups option.

## ▲ Measure #280: Dementia: Staging of Dementia

### **DESCRIPTION:**

Percentage of patients, regardless of age, with a diagnosis of dementia whose severity of dementia was classified as mild, moderate or severe at least once within a 12 month period

### **NUMERATOR:**

Patients whose severity of dementia was classified as mild, moderate or severe at least once within a 12 month period

**Numerator Instructions:** Dementia severity can be assessed using one of a number of available valid and reliable instruments available from the medical literature. Examples include, but are not limited to:

- Global Deterioration Scale (GDS)
- Functional Assessment Staging Tool (FAST)
- Clinical Dementia Rating (CDR)
- Dementia Severity Rating Scale
- Mini-Mental State Examination (MMSE) [*Note: While simple and quick to administer, the MMSE is a blunt instrument for staging Alzheimer's disease. The MMSE has not been well validated for non-Alzheimer's dementias.*]
- Formal Neuropsychological Evaluation

### **Definitions:**

**Mild dementia** - Can be classified quantitatively as MMSE score of > 18, GDS or FAST stage 4, CDR of 1; qualitatively as being likely to have difficulty with balancing a checkbook, preparing a complex meal, or managing a complicated medication schedule. (APA, 2007)

**Moderate dementia** - Can be classified quantitatively as MMSE score of 10–18, GDS or FAST stages 5 and 6, CDR of 2; qualitatively as experiencing difficulties with simpler food preparation, household cleanup, and yard work and requiring assistance with some aspects of self-care (eg, picking out the proper clothing to wear). (APA, 2007)

**Severe dementia** - Can be classified quantitatively as MMSE score of < 10, GDS or FAST stages 6 and 7, CDR of 3; qualitatively as requiring considerable or total assistance with personal care, such as dressing, bathing, and toileting. (APA, 2007)

**NUMERATOR NOTE:** *The proposed scoring cut-offs listed above are offered only as a guide and are quoted verbatim from the referenced clinical guideline. The scoring and appropriate severity cut-offs for any of these instruments must be interpreted in the context of the patient's age, education, and ethnicity.*

### **Numerator Options:**

Dementia severity classified, mild (**1490F**)

**OR**

Dementia severity classified, moderate (**1491F**)

**OR**

Dementia severity classified, severe (**1493F**)

**OR**

Dementia severity **not** classified, reason not otherwise specified (**1490F with 8P**)

## ▲ Measure #281: Dementia: Cognitive Assessment

### **DESCRIPTION:**

Percentage of patients, regardless of age, with a diagnosis of dementia for whom an assessment of cognition is performed and the results reviewed at least once within a 12 month period

### **NUMERATOR:**

Patients for whom an assessment of cognition is performed and the results reviewed at least once within a 12 month period

#### **Numerator Instructions:**

Cognition can be assessed by the clinician during the patient's clinical history. Cognition can also be assessed by direct examination of the patient using one of a number of instruments, including several originally developed and validated for screening purposes. This can also include, where appropriate, administration to a knowledgeable informant. Examples include, but are not limited to:

- Blessed Orientation-Memory-Concentration Test (BOMC)
- Montreal Cognitive Assessment (MoCA)
- St. Louis University Mental Status Examination (SLUMS)
- Mini-Mental State Examination (MMSE) *[Note: The MMSE has not been well validated for non-Alzheimer's dementias.]*
- Short Informant Questionnaire on Cognitive Decline in the Elderly (IQCODE)
- Ascertain Dementia 8 (AD8) Questionnaire
- Minimum Data Set (MDS) Brief Interview of Mental Status (BIMS) *[Note: Validated for use with nursing home patients only]*
- Formal neuropsychological evaluation

#### **Numerator Options:**

Cognition assessed and reviewed **(1494F)**

**OR**

Documentation of medical reason(s) for not assessing cognition (eg, patient with very advanced stage dementia, other medical reason) **(1494F with 1P)**

**OR**

Documentation of patient reason(s) for not assessing cognition **(1494F with 2P)**

**OR**

Cognition **not** assessed and reviewed, reason not otherwise specified **(1494F with 8P)**

**▲ Measure #282: Dementia: Functional Status Assessment**

**DESCRIPTION:**

Percentage of patients, regardless of age, with a diagnosis of dementia for whom an assessment of functional status is performed and the results reviewed at least once within a 12 month period

**NUMERATOR:**

Patients for whom an assessment of functional status is performed and the results reviewed at least once within a 12 month period

**Numerator Instructions:** Functional status can be assessed by direct examination of the patient or knowledgeable informant. An assessment of functional status should include, at a minimum, an evaluation of the patient's ability to perform instrumental activities of daily living (IADL) and basic activities of daily living (ADL). Functional status can also be assessed using one of a number of available valid and reliable instruments available from the medical literature. Examples include, but are not limited to:

- Lawton IADL Scale
- Barthel ADL Index
- Katz Index of Independence in ADL

**Numerator Options:**

Functional status for dementia assessed and results reviewed **(1175F)**

**OR**

Documentation of medical reason(s) for not assessing and reviewing functional status for dementia (eg, patient is severely impaired and caregiver knowledge is limited, other medical reason)  
**(1175F with 1P)**

**OR**

Functional status for dementia **not** assessed and results **not** reviewed, reason not otherwise specified  
**(1175F with 8P)**

## ▲ Measure #283: Dementia: Neuropsychiatric Symptom Assessment

### **DESCRIPTION:**

Percentage of patients, regardless of age, with a diagnosis of dementia and for whom an assessment of neuropsychiatric symptoms is performed and results reviewed at least once in a 12 month period

### **NUMERATOR:**

Patients for whom an assessment of neuropsychiatric symptoms is performed and results reviewed at least once in a 12 month period

**Numerator Instructions:** Neuropsychiatric symptoms can be assessed by direct examination of the patient or knowledgeable informant.

Examples of reliable and valid instruments that are commonly used in research settings and that can be used to assess behavior include, but are not limited to:

- Dementia Signs and Symptoms (DSS) Scale
- Neuropsychiatric Inventory (NPI)

The assessment of behavioral status may include the assessment of Behavioral and Psychological Symptoms of Dementia (BPSD). For patients residing in nursing homes, it may include an assessment of the behavioral symptom items from the Minimum Data Set (MDS).

### **Definitions:**

The following is a non-exhaustive list of dimensions (based on items included in available validated instruments) that may be evaluated during an assessment of neuropsychiatric symptoms:

#### *Activity disturbances:*

- agitation
- wandering
- purposeless hyperactivity
- verbal or physical aggressiveness
- resistiveness with care
- apathy
- impulsiveness
- socially inappropriate behaviors
- appetite
- eating disturbances
- sleep problems
- diurnal/sleep-wake cycle disturbances
- repetitive behavior

#### *Mood disturbances:*

- anxiety
- dysphoria
- euphoria
- irritability
- mood lability/fluctuations

#### *Thought and perceptual disturbances:*

- having fixed false beliefs (delusions)
- hearing or seeing non-present entities (hallucinations)
- paranoia

### **Numerator Options:**



**OR**

Neuropsychiatric symptoms assessed and results reviewed (**1181F**)

Neuropsychiatric symptoms **not** assessed and results **not** reviewed, reason not otherwise specified (**1181F with 8P**)

**▲ Measure #284: Dementia: Management of Neuropsychiatric Symptoms**

**DESCRIPTION:**

Percentage of patients, regardless of age, with a diagnosis of dementia who have one or more neuropsychiatric symptoms who received or were recommended to receive an intervention for neuropsychiatric symptoms within a 12 month period

**NUMERATOR:**

Patients who received or were recommended to receive an intervention for neuropsychiatric symptoms within a 12 month period

**Numerator Options:**

One or more neuropsychiatric symptoms (**G8947**)

**AND**

Neuropsychiatric intervention ordered (**4525F**)

**OR**

Neuropsychiatric intervention received (**4526F**)

**OR**

No neuropsychiatric symptoms (**G8948**)

**OR**

One or more neuropsychiatric symptoms (**G8947**)

**AND**

Neuropsychiatric intervention **not** ordered, reason not otherwise specified (**4525F with 8P**)

**OR**

Neuropsychiatric intervention **not** received, reason not otherwise specified (**4526F with 8P**)

**▲ Measure #285: Dementia: Screening for Depressive Symptoms**

**DESCRIPTION:**

Percentage of patients, regardless of age, with a diagnosis of dementia who were screened for depressive symptoms within a 12 month period

**NUMERATOR:**

Patients who were screened for depressive symptoms within a 12 month period

**Numerator Instructions:**

In addition to clinical qualitative approaches, dementia patients can be screened for depressive symptoms using one of a number of valid, reliable instruments available from the medical literature. Examples include, but are not limited to:

- Cornell Scale for Depression in Dementia
- Geriatric Depression Scale
- PHQ-9

**Definition:**

**Depressive Symptoms** - Depressive symptoms in a patient with dementia can include: anxiety, sadness, lack of reactivity to pleasant events, irritability, agitation, retardation, multiple physical complaints, acute loss of interest, appetite loss, lack of energy, diurnal variation of mood, difficulty falling asleep, multiple awakenings, during sleep, early morning awakenings, suicide, self-depreciation, pessimism, and mood congruent delusions. Since patients may be unable to describe their symptoms, caregiver report of depressive symptoms should be reviewed and included in the screen for depressive symptoms.

**Numerator Options:**

Screening for depression performed (**3725F**)

**OR**

Screening for depression **not** performed, reason not otherwise specified (**3725F with 8P**)

## ▲ Measure #286: Dementia: Counseling Regarding Safety Concerns

### **DESCRIPTION:**

Percentage of patients, regardless of age, with a diagnosis of dementia or their caregiver(s) who were counseled or referred for counseling regarding safety concerns within a 12 month period

### **NUMERATOR:**

Patients or their caregiver(s) who were counseled or referred for counseling regarding safety concerns within a 12 month period

**Numerator Instructions:** Counseling should include a discussion with the patient and their caregiver(s) regarding one or more of the following common safety concerns and potential risks to the patient. When appropriate, it should also include a recommendation or referral for a home safety evaluation.

*Note: For nursing home patients, different safety concerns might apply.*

A number of organizations have developed educational materials that are recommended to aid implementation of the measure. These materials/tools include:

- Alzheimer's Association Safety Topics. Available on the Alzheimer's Association website.
- Alzheimer's Disease Education and Referral Center's Home Safety for the Alzheimer's Patient. Available on the National Institute on Aging website.

### **Definition:**

**Safety Concerns** - Safety concerns include, but are not limited to:

- Fall risk
- Gait/balance
- Medication management
- Financial management
- Home safety risks that could arise from cooking or smoking
- Physical aggression posing threat to self, family caregiver, or others
- Wandering
- Access to firearms or other weapons
- Access to potentially dangerous materials
- Being left alone in home or locked in room
- Inability to respond rapidly to crisis/household emergencies
- Driving
- Operation of hazardous equipment
- Suicidality
- Abuse or neglect

### **Numerator Options:**

Safety counseling for dementia provided **(6101F)**

**OR**

Safety counseling for dementia ordered **(6102F)**

**OR**

Documentation of medical reason(s) for not providing counseling regarding safety concerns (eg, patient in palliative care, other medical reason) **(6101F with 1P)**

**OR**

Documentation of medical reason(s) for not ordering safety counseling (eg, patient in palliative care, other medical reason) **(6102F with 1P)**

**OR**

Safety counseling for dementia **not** provided, reason not otherwise specified (**6101F with 8P**)  
**OR**  
Safety counseling for dementia **not** ordered, reason not otherwise specified (**6102F with 8P**)

**▲ Measure #287: Dementia: Counseling Regarding Risks of Driving**

**DESCRIPTION:**

Percentage of patients, regardless of age, with a diagnosis of dementia or their caregiver(s) who were counseled regarding the risks of driving and the alternatives to driving at least once within a 12 month period

**NUMERATOR:**

Patients or their caregiver(s) who were counseled regarding the risks of driving and the alternatives to driving at least once within a 12 month period

**Numerator Instructions:**

One resource that includes patient and caregiver education materials that can be used to aid implementation of the measure is the *Physician's Guide to Assessing and Counseling Older Drivers*, developed by the American Medical Association in cooperation with the National Highway Traffic Safety Administration. This document is available on the AMA website.

**Numerator Options:**

Counseling provided regarding risks of driving and the alternatives to driving **(6110F)**

**OR**

Documentation of medical reason(s) for not counseling regarding the risks of driving (eg, patient is no longer driving, other medical reason) **(6110F with 1P)**

**OR**

Counseling regarding risks of driving and alternatives to driving **not** performed, reason not otherwise specified **(6110F with 8P)**

**▲ Measure #288: Dementia: Caregiver Education and Support**

**DESCRIPTION:**

Percentage of patients, regardless of age, with a diagnosis of dementia whose caregiver(s) were provided with education on dementia disease management and health behavior changes AND referred to additional resources for support within a 12 month period

**NUMERATOR:**

Patients whose caregiver(s) were provided with education on dementia disease management and health behavior changes AND referred to additional resources for support within a 12 month period

**Numerator Instructions:**

There are a number of assessment tools available for the caregiver. These should be considered as an integral component of comprehensive caregiver education and support. The American Medical Association has developed a Caregiver Health Self-assessment Questionnaire to help caregivers analyze their own behavior and health risks and, with their physician's help, make decisions that will benefit both the caregiver and the patient. This questionnaire is available on the AMA website.

**Definition:**

**Education** – Education should also include advising the caregiver that he or she is at “increased risk of serious illness (including circulatory and heart conditions and respiratory disease and hypertension), increased physician visits and use of prescription medications, emotional strain, anxiety, and depression.”

**Numerator Options:**

Caregiver provided with education and referred to additional resources for support **(4322F)**

**OR**

Documentation of medical reason(s) for not providing the caregiver with education on disease management and health behavior changes or referring to additional sources for support (eg, patient does not have a caregiver, other medical reason) **(4322F with 1P)**

**OR**

Caregiver **not** provided with education and **not** referred to additional resources for support, reason not otherwise specified **(4322F with 8P)**

## DEMENTIA MEASURES GROUP RATIONALE AND CLINICAL RECOMMENDATION STATEMENTS

### **Measure #280 - Staging of Dementia**

#### **RATIONALE:**

Dementia is characterized by continued and progressive impairment in cognition and function including the evolution of symptoms over time. (APA, 2007)

The treatment varies throughout the disease course. (APA, 2007)

Patients with dementia, therefore, require assessment of disease severity and subsequent treatment specific and appropriate to their current stage of disease. (APA, 2007)

Early stage patients, for example, have special needs and can and should be involved in care planning and referred to community resources. (California Workgroup on Guidelines for Alzheimer's Disease Management, 2008)

Care for late stage patients may focus on improving the quality of life for patients and caregivers, maintaining optimal function and providing maximum comfort. (Third Canadian Consensus Conference on the Diagnosis and Treatment of Dementia, 2008)

#### **CLINICAL RECOMMENDATION STATEMENTS:**

Progressive dementias are generally staged globally according to the level of cognitive and functional impairment, and the same categories may be used to describe the degree of severity of any dementia. However, the staging criteria have not been well validated for non-Alzheimer's dementias. Specific functional staging (FAST staging) has also been developed, is widely used, and can be very useful in tracking the course of Alzheimer's disease and other dementias. The CDR is a commonly used scale to stage dementia severity. The Global Deterioration Scale (GDS) distinguishes three stages in this range. (APA, 2007)

Individuals with "mild" dementia (MMSE score of >18, GDS or FAST stage 4, CDR of 1) are likely to have difficulties with balancing a checkbook, preparing a complex meal, or managing a difficult medication schedule. Those with "moderate" impairment (MMSE score of 10–18, GDS or FAST stages 5 and 6, CDR of 2) also have difficulties with simpler food preparation, household cleanup, and yard work and may require assistance with some aspects of self-care (eg, picking out the proper clothing to wear). Those whose dementia is "severe" (MMSE score of <10, GDS or FAST stages 6 and 7, CDR of 3) require considerable or total assistance with personal care, such as dressing, bathing, and toileting. Research has shown that measurable cognitive abilities remain throughout the course of severe dementia. In the terminal phase, patients become bed bound, develop contractures, require constant care, and may be susceptible to accidents and infectious diseases, which ultimately prove fatal. (APA, 2007)

### **Measure #281 - Cognitive Assessment**

#### **RATIONALE:**

Dementia is often characterized by the gradual onset and continuing cognitive decline in one or more domains including memory, executive function, language, judgment, and spatial abilities. (APA, 2007) Cognitive deterioration represents a major source of morbidity and mortality and poses a significant burden on affected individuals and their caregivers. (NIH, 2010) Although cognitive deterioration follows a different course depending on the type of dementia, significant rates of decline have been reported. For example, one study found that the annual rate of decline for Alzheimer's disease patients was more than four times that of older adults with no cognitive impairment. (Wilson et al., 2010) Nevertheless, measurable cognitive abilities remain throughout the course of dementia. (APA, 2007) Initial and ongoing assessments of cognition are fundamental to the proper management of patients with dementia. These assessments serve as the basis for identifying treatment goals, developing a treatment plan, monitoring the effects of treatment, and modifying treatment as appropriate.



### **CLINICAL RECOMMENDATION STATEMENTS:**

Ongoing assessment includes periodic monitoring of the development and evolution of cognitive and noncognitive psychiatric symptoms and their response to intervention (Category I). Both cognitive and noncognitive neuropsychiatric and behavioral symptoms of dementia tend to evolve over time, so regular monitoring allows detection of new symptoms and adaptation of treatment strategies to current needs...Cognitive symptoms that almost always require assessment include impairments in memory, executive function, language, judgment, and spatial abilities. It is often helpful to track cognitive status with a structured simple examination. (APA, 2007)

Conduct and document an assessment and monitor changes in cognitive status using a reliable and valid instrument. Cognitive status should be reassessed periodically to identify sudden changes, as well as to monitor the potential beneficial or harmful effects of environmental changes, specific medications, or other interventions. Proper assessment requires the use of a standardized, objective instrument that is relatively easy to use, reliable (with less variability between different assessors), and valid (results that would be similar to gold-standard evaluations). (California Workgroup on Guidelines for Alzheimer's Disease Management, 2008)

### **Measure #282 - Functional Status Assessment**

#### **RATIONALE:**

Dementia is characterized by cognitive deficits that cause functional impairment compromising basic and instrumental activities of daily living. Functional decline for dementia patients is progressive and continuous and typically marked by decline in instrumental activities of daily living followed by a slower decline in basic activities of daily living. (Lechowski L et al. *Dement Geriatr Cogn Disord*. 2010;29(1):46-54.) Functional impairment is the main factor negatively impacting quality of life in patients with dementia including reported links to the development of apathy and depression. (Andersen CK, et al. *Health Qual Life Outcomes*. 2004, 2:52., Starkstein SE et al. *Am J Psychiatry*. 2005;162:2086-2093., Boyle PA, et al. *Am J Geriatr Psychiatry*. 2003 Mar-Apr;11(2):214-21.) In addition, decline in basic activities of daily living is an important risk factor for institutionalization and a strong predictor of decreased survival in dementia patients. (Steeman E, et al. *Arch Psychiatr Nurs*. 1997;11, 295-303., Bracco L, et al. *Arch Neurol*. 1994 Dec;51(12):1213-9.) Initial and ongoing assessments of functional status should be conducted to determine baseline level of functioning, monitor changes over time, and to identify strategies to maximize patient's independence.

### **CLINICAL RECOMMENDATION STATEMENTS:**

A detailed assessment of functional status may also aid the clinician in documenting and tracking changes over time as well as providing guidance to the patient and caregivers. Functional status is typically described in terms of the patient's ability to perform instrumental activities of daily living such as shopping, writing checks, basic housework, and activities of daily living such as dressing, bathing, feeding, transferring, and maintaining continence. These regular assessments of recent cognitive and functional status provide a baseline for assessing the effect of any intervention, and they improve the recognition and treatment of acute problems, such as delirium. (APA, 2007)

Conduct and document an assessment and monitor changes in daily functioning, including feeding, bathing, dressing, mobility, toileting, continence, and ability to manage finances and medications...Functional assessment includes evaluation of physical, psychological, and socioeconomic domains. Physical functioning may focus on basic activities of daily living (ADLs) that include feeding, bathing, dressing, mobility, and toileting. Assessment of instrumental (or intermediate) activities of daily living (IADLs) addresses more advanced self-care activities, such as shopping, cooking, and managing finances and medications. Standardized assessment instruments such as the Barthel or Katz indices can provide information on the patient's capacity for self-care and independent living. Proxies or patient surrogates can complete a number of these instruments when necessary. The initial assessment of functional abilities is important to determine a baseline to which future functional deficits may be compared. (California Workgroup on Guidelines for Alzheimer's Disease Management, 2008)

### **Measure #283 - Neuropsychiatric Symptom Assessment**

## **RATIONALE:**

Neuropsychiatric symptoms appear to be common for patients with dementia. In community samples of dementia patients, the prevalence of neuropsychiatric symptoms range from 40-88%. (Lyketsos CG et al. *JAMA*. 2002; 288:1475-1483., Ikeda M et al. *J Neurol Neurosurg Psychiatry*. 2004; 75:146-148., Liu CY et al. *Int Psychogeriatr*. 2007; 19:605-613.) Neuropsychiatric symptoms are also common in long-term care facilities, with prevalence ranges from 80-85%. (Zuidema SU et al. *Int J Geriatr Psychiatry*. 2007; 22:632-638., Kverno KS et al. *J Am Med Dir Assoc*. 2008; 7:509-15.) Neuropsychiatric symptoms of dementia have been associated with accelerated cognitive decline; increased functional impairment; decreased mean survival time; increased co-morbid conditions; increased danger to self; increased danger to others; increased health care service utilization; higher risk for institutionalization; and greater caregiver stress and burden. (Chui HC et al. *Arch Neurol*. 1994; 51:676-681., Weiner MF et al. *Acta Psychiatr Scand*. 2005; 111:367-371., Cummings JL et al. *Neurology*. 1994, 44(12):2308-14. Leger JM et al. *Int Psychogeriatr*. 2002; 14:405-416., Malone ML et al. *J Am Geriatr Soc*. 1993; 41:853-856.,Kunik ME et al. *Gerontologist*. 2003; 43:86-91., Kunik ME et al. *Psychiatr Serv*. 2005; 56:70-75., Steele C et al. *Am J Psychiatry*. 1990; 147:1049-1051., Knopman DS et al. *Neurology*. 1999; 52:718-718., Donaldson C et al. *Int J Geriatr Psychiatry*. 1998; 13:248-256., Miyamoto Y et al. *Int J Geriatr Psychiatry*. 2002; 17:765-773., Snyder L et al. *Am J Alzheimers Dis Other Demen*. 2007; 22:14-19.) An assessment of neuropsychiatric symptoms, therefore, is an important step in the development of a management plan for those with dementia.

## **CLINICAL RECOMMENDATION STATEMENTS:**

It is important for the [clinician] treating a patient with dementia to regularly assess cognitive deficits or behavioral difficulties that potentially pose a danger to the patient or others. (APA, 2007)

Conduct and document an assessment and monitor changes in behavioral symptoms, psychotic symptoms, or depression. (California Workgroup on Guidelines for Alzheimer's Disease Management, 2008)

### **For mild to moderate Alzheimer's disease**

Assessment of patients with mild to moderate AD [Alzheimer's Disease] should include measures of behavior and other neuropsychiatric symptoms. (Grade B, Level 3) (Third Canadian Consensus Conference on the Diagnosis and Treatment of Dementia, 2008)

### **For severe Alzheimer's disease**

Assessment should include cognition (eg, MMSE), function, behaviour, medical status, nutrition, safety and caregiver health. (Grade B, Level 3) (Third Canadian Consensus Conference on the Diagnosis and Treatment of Dementia, 2008)

## **Measure #284 – Management of Neuropsychiatric Symptoms**

## **RATIONALE:**

Neuropsychiatric symptoms appear to be common for patients with dementia. In community samples of dementia patients, the prevalence of neuropsychiatric symptoms range from 40-88%. (Lyketsos CG et al. *JAMA*. 2002; 288:1475-1483., Ikeda M et al. *J Neurol Neurosurg Psychiatry*. 2004; 75:146-148., Liu CY et al. *Int Psychogeriatr*. 2007; 19:605-613.) Neuropsychiatric symptoms are also common in long-term care facilities, with prevalence ranges from 80-85%. (Zuidema SU et al. *Int J Geriatr Psychiatry*. 2007; 22:632-638., Kverno KS et al. *J Am Med Dir Assoc*. 2008; 7:509-15.) Neuropsychiatric symptoms of dementia have been associated with accelerated cognitive decline; increased functional impairment; decreased mean survival time; increased co-morbid conditions; increased danger to self; increased danger to others; increased health care service utilization; higher risk for institutionalization; and greater caregiver stress and burden. (Chui HC et al. *Arch Neurol*. 1994; 51:676-681., Weiner MF et al. *Acta Psychiatr Scand*. 2005; 111:367-371., Cummings JL et al. *Neurology*. 1994, 44(12):2308-14. Leger JM et al. *Int Psychogeriatr*. 2002; 14:405-416., Malone ML et al. *J Am Geriatr Soc*. 1993; 41:853-856.,Kunik ME et al. *Gerontologist*. 2003; 43:86-91., Kunik ME et al. *Psychiatr Serv*. 2005; 56:70-75., Steele C et al. *Am J Psychiatry*. 1990; 147:1049-1051., Knopman DS et al. *Neurology*. 1999; 52:718-718., Donaldson C et al. *Int J Geriatr Psychiatry*.

1998; 13:248-256., Miyamoto Y et al. *Int J Geriatr Psychiatry*. 2002; 17:765-773., Snyder L et al. *Am J Alzheimers Dis Other Demen*. 2007; 22:14-19.) Nonpharmacologic interventions should be considered in all cases and in some will be the mainstay of management. Examples of approaches that may be useful include behavioural management for depression, education programs for caregivers and staff to teach them how to recognize, manage, and sometimes prevent behavioral problems, stress reduction for caregivers, and, for patients living at home, enrollment in adult day programs offering structured activities and social stimulation. The evidence evaluating non-pharmacological interventions varies considerably in quality and amount, but broadly supports an individualized approach that includes one or more such interventions. A management plan that assesses the severity and intrusiveness of problematic behaviors can assist clinicians in determining what pharmacologic or non-pharmacologic interventions might be appropriate. (Lawlor B. *J Clin Psychiatry*. 2004;65(Suppl 11):5–10.) Mild forms of neuropsychiatric symptoms may be alleviated with psychosocial or environmental interventions. For aggressiveness, presentations of psychosis, or agitation, pharmacologic approaches may be more appropriate. (Sink K et al. *JAMA*. 2005;293:596–608.) If pharmacologic approaches are necessary, they should be administered at the lowest effective dose and their use should be reevaluated and their benefit documented on an ongoing basis.

### **CLINICAL RECOMMENDATION STATEMENTS:**

#### **For mild to moderate Alzheimer's disease**

The management of BPSD [Behavioral and Psychological Symptoms of Dementia] should include a careful documentation of behaviours and identification of target symptoms, a search for potential triggers or precipitants, recording of the consequences of the behaviour, an evaluation to rule out treatable or contributory causes, and consideration of the safety of the patient, their caregiver, and others in their environment. (Grade B, Level 3) (Third Canadian Consensus Conference on the Diagnosis and Treatment of Dementia, 2008)

#### **For severe Alzheimer's disease**

The management of BPSD should begin with appropriate assessments, diagnosis, and identification of target symptoms and consideration of safety of the patient, their caregiver and others in their environment. (Grade B, Level 3) (Third Canadian Consensus Conference on the Diagnosis and Treatment of Dementia, 2008)

There are no fully comprehensive consensus guidelines for use of specific non-pharmacological approaches to neuropsychiatric symptoms. Patient heterogeneity, variations in care settings, and the broad range of non-pharmacological interventions having some empirical support impede uniform generalization. However, the following evidence statements serve as the evidence to support the measure and are quoted verbatim from the referenced clinical guidelines.

Nonpharmacologic interventions should be initiated first. Approaches that may be useful for severe Alzheimer disease include behavioural management for depression, and education programs for caregivers and staff to teach them how to recognize behavioural problems and to teach them behaviour-modification techniques. Music therapy and controlled multisensory stimulation (Snoezelen) are useful during treatment sessions, but longer-term benefits have not been demonstrated. (Grade B, Level 1) (Third Canadian Consensus Conference on the Diagnosis and Treatment of Dementia, 2008)

Except for emergency situations, non-pharmacological strategies are the preferred first-line treatment approach for behavioral problems. Medications should be used only as a last resort, if non-pharmacological approaches prove unsuccessful and they are clinically indicated. (California Workgroup on Guidelines for Alzheimer's Disease Management, 2008)

Pharmacologic therapies should be initiated concurrently with nonpharmacologic interventions in the presence of severe depression, psychosis or aggression that puts the patient or others at risk of harm. (Grade B, Level 3) (Third Canadian Consensus Conference on the Diagnosis and Treatment of Dementia, 2008)

### **Measure #285 – Screening for Depressive Symptoms**

### **RATIONALE:**

Depression is one of the most common co-occurring psychiatric conditions in dementia patients, affecting over 50% of patients with Alzheimer's disease. (Starkstein SE et al. *Am J Psychiatry*. 2005;162:2086-2093.) Depression can be reliably detected and quantified, and can be differentiated from the other neuropsychiatric symptoms of dementia. (Lyketsos CG et al. *Dement Geriatr Cogn Disord*. 2004;17:55-64.) The impact of depression is significant with even mild levels of depression in dementia patients associated with higher rates of disability, impaired quality of life, and greater mortality. (APA, 2007) In particular, Alzheimer's disease patients with depression have demonstrated "significantly more severe apathy, delusions, anxiety, pathological affective crying, irritability, deficits in activities of daily living, impairments in social functioning, and parkinsonism than Alzheimer's disease patients without depression." (Starkstein SE et al. *Am J Psychiatry*. 2005;162:2086-2093.) Furthermore, with increasing severity of depression, the severity of psychopathological and neurological impairments in dementia patients increases. (Starkstein SE et al. *Am J Psychiatry*. 2005;162:2086-2093.) Identifying depression in patients with dementia is therefore essential for early intervention and proper management.

### **CLINICAL RECOMMENDATION STATEMENTS:**

Depression is a common, treatable comorbidity in patients with dementia and should be screened for (Guideline). (AAN, 2001)

Ongoing assessment includes periodic monitoring of the development and evolution of cognitive and noncognitive psychiatric symptoms and their response to intervention (Category I)...Among the neuropsychiatric symptoms that require ongoing assessment are depression (including major depression and other depressive syndromes), suicidal ideation or behavior, hallucinations, delusions, agitation, aggressive behavior, disinhibition, sexually inappropriate behavior, anxiety, apathy, and disturbances of appetite and sleep. (APA, 2007)

Conduct and document an assessment and monitor changes in behavioral symptoms, psychotic symptoms, or depression...It is important for health care professionals to be sensitive to symptoms of affective disorders associated with Alzheimer's Disease and to facilitate early intervention. Since administering assessment tests for depression to Alzheimer's Disease patients is often challenging and patients may be unable to describe their symptoms to the [primary care practitioner], gathering data from family members becomes especially important. The Cornell Scale for Depression in Dementia is a useful tool for providers because it captures both patient and caregiver input. (California Workgroup on Guidelines for Alzheimer's Disease Management, 2008)

In patients with serious illness at the end of life, clinicians should regularly assess patients for pain, dyspnea, and depression. (Grade: strong recommendation, moderate quality of evidence.) (ACP, 2008)

### **Measure #286 – Counseling Regarding Safety Concerns**

#### **RATIONALE:**

The vast majority (87%) of individuals with Alzheimer's disease are cared for at home by family members.(Alz Assoc, 2009) "As the disease progresses however, physical features of the home environment may present as a safety hazard or barrier to performing activities of daily living, particularly at the moderate stage of the disease process."(Gitlin LN et al. *Disabil Rehabil*. 2002, Vol. 24 , No. 1-3, Pages 59-71.) Safety concerns should be addressed with patients and their caregivers throughout the course of the disease.

#### **CLINICAL RECOMMENDATION STATEMENTS:**

Recommended assessments include evaluation of suicidality, dangerousness to self and others, and the potential for aggression, as well as evaluation of living conditions, safety of the environment, adequacy of supervision, and evidence of neglect or abuse (Category I). [I]Important safety issues in the management of patients with dementia include interventions to decrease the hazards of wandering and recommendations concerning activities such as cooking, driving, hunting, and the operation of hazardous equipment. Caregivers should be referred to available books [and other materials] that provide advice and guidance about maximizing the safety of the environment for

patients with dementia...As patients become more impaired, they are likely to require more supervision to remain safe, and safety issues should be addressed as part of every evaluation. Families should be advised about the possibility of accidents due to forgetfulness (eg, fires while cooking), of difficulties coping with household emergencies, and of the possibility of wandering. Family members should also be advised to determine whether the patient is handling finances appropriately and to consider taking over the paying of bills and other responsibilities. At this stage of the disease [ie, moderately impaired patients], nearly all patients should not drive. (APA, 2007)

Safety issues such as driving, fall risk, medication management, environmental hazards, wandering, and access to firearms need to be discussed periodically with the patient and caregiver. Safety concerns typically focus on three risks in particular: falling, wandering, and driving. (California Workgroup on Guidelines for Alzheimer's Disease Management, 2008)

### **For mild to moderate Alzheimer's disease**

Assess for safety risks (eg, driving, financial management, medication management, home safety risks that could arise from cooking or smoking, potentially dangerous behaviours such as wandering). (Canadian Consensus Conference on Diagnosis and Treatment of Dementia, 2008)

### **Measure #287 – Counseling Regarding Risks of Driving**

#### **RATIONALE:**

Motor vehicle-related injuries are a leading cause of injury deaths in adults over 65. (AMA Physician's Guide to Assessing and Counseling Older Drivers, 2010) Per mile driven, drivers age 75 and older are involved in significantly more motor vehicle crashes than middle-aged drivers. (AMA Physician's Guide to Assessing and Counseling Older Drivers, 2010) Dementia has a negative impact on driving skills which deteriorate with increasing dementia severity. (AAN, 2010)

Compared with cognitively intact older adults drivers, studies suggest that drivers with dementia have at least a 2-fold greater risk of crashes. (Carr DB et al. *JAMA*. 2010;303(16):1632-1641.) "Physicians can influence their patients' decisions to modify or stop driving. They can also help their patients maintain safe driving skills." (AMA Physician's Guide to Assessing and Counseling Older Drivers, 2010) Clinicians should address the risks of driving in patients with dementia for the safety of the patient and everyone on the road.

#### **CLINICAL RECOMMENDATION STATEMENTS:**

A diagnosis of Alzheimer's disease is not, on its own, a sufficient reason to withdraw driving privileges. The determining factor in withdrawing driving privileges should be an individual's driving ability. (Alzheimer's Association, 2001)

All patients and families should be informed that even mild dementia increases the risk of vehicular accidents (Category I). Mildly impaired patients should be advised to limit their driving to safer situations or to stop driving (Category I), and moderately impaired patients should be instructed not to drive (Category I). Advice about driving cessation should also be communicated to family members, as the implementation of the recommendation often falls on them (Category I). Relevant state laws regarding notification should be followed (Category I). (APA, 2007)

For patients with dementia, consider the following characteristics useful for identifying patients at increased risk for unsafe driving: the Clinical Dementia Rating scale (Level A), a caregiver's rating of a patient's driving ability as marginal or unsafe (Level B), a history of crashes or traffic citations (Level C), reduced driving mileage or self-reported situational avoidance (Level C), Mini-Mental State Examination scores of (California Workgroup on Guidelines for Alzheimer's Disease Management, 2008) or less (Level C), and aggressive or impulsive personality characteristics (Level C). Consider the following characteristics not useful for identifying patients at increased risk for unsafe driving: a patient's self-rating of safe driving ability (Level A) and lack of situational avoidance (Level C). There is insufficient evidence to support or refute the benefit of neuropsychological testing, after controlling for the presence

and severity of dementia, or interventional strategies for drivers with dementia (Level U). Clinicians may present patients and their caregivers with the data showing that, as a group, patients with mild dementia (CDR of 1) are at a substantially higher risk for unsafe driving and thus should strongly consider discontinuing driving. At the very least, patients and their caregivers should prepare for the eventuality of driving cessation as dementia severity increases. (AAN, 2010)

### **Measure #288 – Caregiver Education and Support**

#### **RATIONALE:**

The vast majority (87%) of individuals with Alzheimer's disease are cared for at home by family members. (Alz Assoc, 2009) Chodosh et al. found that greater caregiver knowledge of dementia management was associated with higher care quality. (Chodosh J et al. *J Am Geriatr Soc.* 2007 Aug;55(8):1260-8.) Other studies have indicated that intensive caregiver support in the form of individual and family counseling and on-going telephone counseling results in improved patient health outcomes. (Gaugler JE et al. *J Am Geriatr Soc.* 2005;53:2098–2105., Mittelman MS et al. *Neurology.* 2006;67:1592–1599.) Providing education to caregivers and referring them to additional sources for support is a critically important piece of comprehensive care for patients with dementia.

#### **CLINICAL RECOMMENDATION STATEMENTS:**

Important aspects of psychiatric management include educating patients and families about the illness, its treatment, and sources of additional care and support (eg, support groups, respite care, nursing homes, and other long-term-care facilities) and advising patients and their families of the need for financial and legal planning due to the patient's eventual incapacity (eg, power of attorney for medical and financial decisions, an up-to-date will, and the cost of long-term care) (Category I)... The family should be educated regarding basic principles of care, including 1) recognizing declines in capacity and adjusting expectations appropriately, 2) bringing sudden declines in function and the emergence of new symptoms to professional attention, 3) keeping requests and demands relatively simple, 4) deferring requests if the patient becomes overly upset or angered, 5) avoiding overly complex tasks that may lead to frustration, 6) not confronting patients about their deficits, 7) remaining calm, firm, and supportive and providing redirection if the patient becomes upset, 8) being consistent and avoiding unnecessary change, and 9) providing frequent reminders, explanations, and orientation cues... In addition to providing families with information on support groups, there are a number of benefits of referral to the local chapter or national office of the Alzheimer's Association (1-800-272-3900; <http://www.alz.org>), the Alzheimer's Disease Education and Referral Center (ADEAR) (1-800-438-4380; <http://www.nia.nih.gov/Alzheimers/>), and other support organizations. (APA, 2007).

Studies have shown that education and support for caregivers increases the chances of adherence to treatment recommendations for patients. The PCP should provide information and education about the current stage of the disease process and talk with the patient and family to establish treatment goals. Based on the agreed-upon goals, a discussion regarding the expected effects (positive and negative) of interventions on cognition, mood, and behavior will ensure that the prescribed treatment strategy is appropriate to family values and culture. (California Workgroup on Guidelines for Alzheimer's Disease Management, 2008)

Seamless resource referral and access to critical services for both patients and caregivers are considered essential. The PCP should encourage the caregiver to participate in educational programs, support groups, respite services, and adult day service programs. The local Alzheimer's Association chapter or other local agency support groups and community resources such as the Caregiver Resources Centers should be recommended. (California Workgroup on Guidelines for Alzheimer's Disease Management, 2008)

## PARKINSON'S DISEASE MEASURES GROUP OVERVIEW

### 2014 PQRS OPTIONS FOR MEASURES GROUPS:

#### 2014 PQRS MEASURES IN PARKINSON'S DISEASE MEASURES GROUP:

- #289. Parkinson's Disease: Annual Parkinson's Disease Diagnosis Review
- #290. Parkinson's Disease: Psychiatric Disorders or Disturbances Assessment
- #291. Parkinson's Disease: Cognitive Impairment or Dysfunction Assessment
- #292. Parkinson's Disease: Querying about Sleep Disturbances
- #293. Parkinson's Disease: Rehabilitative Therapy Options
- #294. Parkinson's Disease: Parkinson's Disease Medical and Surgical Treatment Options Reviewed

#### 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.

**G8903:** I intend to report the Parkinson's Disease Measures Group

- Report the patient sample method:  
**20 Patient Sample Method:** 20 unique patients (a majority of which must be Medicare Part B FFS [fee for service] patients) meeting patient sample criteria for the measures group during the reporting period (January 1 through December 31, 2014 OR July 1 through December 31, 2014).
- Patient sample criteria for the Parkinson's Disease Measures Group are patients aged 18 years and older with a specific diagnosis of Parkinson's Disease accompanied by a specific patient encounter:

**The following diagnosis code indicating Parkinson's disease:**

**ICD-9-CM [for use 1/1/2014 – 9/30/2014]:** 332.0

**ICD-10-CM [for use 10/1/2014 - 12/31/2014]:** G20

**Accompanied by:**

**One of the following patient encounter codes:** 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99304, 99305, 99306, 99307, 99308, 99309, 99310

- Report a numerator option on all measures within the Parkinson's Disease Measures Group for each patient within the eligible professional's patient sample.
- Instructions for qualifying numerator option reporting for each of the measures within the Parkinson's 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 G8762:** All quality actions for the applicable measures in the Parkinson's Disease Measures Group have been performed for this patient

- To report satisfactorily the Parkinson's Disease Measures Group it requires all 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.
- **NOTE:** The detailed instructions in this specification apply exclusively to the reporting and analysis of the included measures under the measures groups option.



**Measure #289: Parkinson's Disease: Annual Parkinson's Disease Diagnosis Review**

**DESCRIPTION:**

All patients with a diagnosis of Parkinson's disease who had an annual assessment including a review of current medications (e.g., medications that can produce Parkinson-like signs or symptoms) and a review for the presence of atypical features (e.g., falls at presentation and early in the disease course, poor response to levodopa, symmetry at onset, rapid progression [to Hoehn and Yahr stage 3 in 3 years], lack of tremor or dysautonomia) at least annually

**NUMERATOR:**

All patients who had an annual assessment including a review of current medications and for the presence of atypical features

**Numerator Options:**

Parkinson's disease diagnosis reviewed (**1400F**)

**OR**

Parkinson's disease diagnosis was **not** reviewed, reason not otherwise specified (**1400F with 8P**)

**Measure #290: Parkinson's Disease: Psychiatric Disorders or Disturbances Assessment**

**DESCRIPTION:**

All patients with a diagnosis of Parkinson's disease who were assessed for psychiatric disorders or disturbances (e.g., psychosis, depression, anxiety disorder, apathy, or impulse control disorder) at least annually

**NUMERATOR:**

Patients who were assessed for psychiatric disorders or disturbances (e.g., psychosis, depression, anxiety disorder, apathy, or impulse control disorder) at least annually

**Numerator Options:**

Psychiatric disorders or disturbances assessed **(3700F)**

**OR**

Psychiatric disorders or disturbances **not** assessed, reason not otherwise specified  
**(3700F with 8P)**

**Measure #291: Parkinson's Disease: Cognitive Impairment or Dysfunction Assessment**

**DESCRIPTION:**

All patients with a diagnosis of Parkinson's disease who were assessed for cognitive impairment or dysfunction at least annually

**NUMERATOR:**

Patients who were assessed for cognitive impairment or dysfunction at least annually

**Numerator Options:**

Cognitive impairment or dysfunction assessed **(3720F)**

**OR**

Cognitive impairment or dysfunction was **not** assessed, reason not otherwise specified **(3720F with 8P)**

**Measure #292: Parkinson's Disease: Querying about Sleep Disturbances**

**DESCRIPTION:**

All patients with a diagnosis of Parkinson's disease (or caregivers, as appropriate) who were queried about sleep disturbances at least annually

**NUMERATOR:**

Patients (or caregiver(s), as appropriate) who were queried about sleep disturbances at least annually

**Numerator Options:**

Patient (or caregiver) queried about sleep disturbances **(4328F)**

**OR**

Documentation of medical reason(s) for not querying about sleep disturbances **(4328F with 1P)**

**OR**

Patient (or caregiver) **not** queried about sleep disturbances, reason not otherwise specified **(4328F with 8P)**

## **Measure #293: Parkinson's Disease: Rehabilitative Therapy Options**

### **DESCRIPTION:**

All patients with a diagnosis of Parkinson's Disease (or caregiver(s), as appropriate) who had rehabilitative therapy options (e.g., physical, occupational, or speech therapy) discussed at least annually

### **NUMERATOR:**

Patients (or caregiver(s), as appropriate) who had rehabilitative therapy options (e.g., physical, occupational, or speech therapy) discussed at least annually

#### **Numerator Options:**

Rehabilitative therapy options discussed with patient (or caregiver) **(4400F)**

**OR**

Documentation of medical reason(s) for not discussing rehabilitative therapy options with patient (or caregiver) **(4400F with 1P)**

**OR**

Rehabilitative therapy options **not** discussed with patient (or caregiver), reason not otherwise specified **(4400F with 8P)**

**Measure #294: Parkinson's Disease: Parkinson's Disease Medical and Surgical Treatment Options Reviewed**

**DESCRIPTION:**

All patients with a diagnosis of Parkinson's disease (or caregiver(s), as appropriate) who had the Parkinson's disease treatment options (e.g., non-pharmacological treatment, pharmacological treatment, or surgical treatment) reviewed at least once annually

**NUMERATOR:**

Patients (or caregiver(s), as appropriate) who had the Parkinson's disease treatment options (e.g., non-pharmacological treatment, pharmacological treatment, or surgical treatment) reviewed at least once annually

**Numerator Options:**

Medical and surgical treatment options reviewed with patient (or caregiver) **(4325F)**

**OR**

Medical and surgical treatment options not reviewed with patient (or caregiver) for medical reasons (eg, patient is unable to respond and no informant is available) **(4325F with 1P)**

**OR**

Medical and surgical treatment options **not** reviewed with patient (or caregiver), reasons not specified **(4325F with 8P)**

## **PARKINSON'S DISEASE MEASURES GROUP RATIONALE AND CLINICAL RECOMMENDATION STATEMENTS**

### **Measure #289 - Parkinson's Disease: Annual Parkinson's Disease Diagnosis Review**

#### **RATIONALE:**

Because the diagnosis of Parkinson's disease is clinical with no confirmatory laboratory or imaging study, it is important to review the diagnosis periodically in order to ensure that no atypical features emerge. The emergence of atypical features in a patient previously thought to have Parkinson's disease will influence prognosis and medical treatment. It has been demonstrated that in the course of caring for patients with suspected Parkinson's disease, 10-15% will ultimately have a different pathologic diagnosis. This measure will alert the clinician to the emergence of atypical features in Parkinson's disease and suggest alternate diagnostic possibilities.

Hughes AJ, Daniel SE, Kilford L, Lees AJ. Accuracy of clinical diagnosis of idiopathic Parkinson's disease: a clinico-pathological study of 100 cases. *J Neurol Neurosurg Psychiatry*. 1992 Mar; 55(3):181-4

Hughes AJ, Ben-Shlomo Y, Daniel SE, Lees AJ. What features improve the accuracy of clinical diagnosis in Parkinson's disease: a clinicopathologic study. *Neurology*. 1992 Jun;42(6):1142-6

#### **CLINICAL RECOMMENDATION STATEMENTS:**

The diagnosis of PD should be reviewed regularly (6-12 month intervals seen to review diagnosis) and re-considered if atypical clinical features develop. (Level D (DS)) NICE GL35 (June 2006)

Determining the presence of the following clinical features in early stages of disease should be considered to distinguish PD from other parkinsonian syndromes: 1) falls at presentation and early in the disease course, 2) poor response to levodopa, 3) symmetry at onset, 4) rapid progression (to Hoehn and Yahr stage 3 in 3 years), 5) lack of tremor, and 6) dysautonomia (urinary urgency/incontinence and fecal incontinence, urinary retention requiring catheterization, persistent erectile failure, or symptomatic orthostatic hypotension) (Level B). AAN QSS PD (April 2006)

All veterans with the suspected diagnosis of PD who are also receiving medications known to cause parkinsonism (e.g., neuroleptics) should have a trial of withdrawal of these medications, a trial of low-potency neuroleptic, or documentation in the medical record that the medication could not be withdrawn before making the diagnosis of PD. Cheng #1 (Assessment of medication-induced PD) 2004

AAN QSS PD Diag. (April 2006) Suchowersky O, Reich S, Perlmutter J, Zesiewicz T, Gronseth G, Weiner WJ, Quality Standards Subcommittee of the American Academy of Neurology. Practice parameter: diagnosis and prognosis of new onset Parkinson disease (an evidence-based review): report of the Quality Standards Subcommittee of the American Academy of Neurology. *Neurology* 2006 Apr 11; 66(7):968-75

NICE National Collaborating Centre for Primary Care. National Collaborating Centre for Chronic Conditions. Parkinson's Disease: National Clinical Guideline for Management in Primary and Secondary Care (2006) London: Royal College of Physicians

Cheng Eric, Siderowf Andrew, Swartrauber Kari, Eisa Mahmood, Lee Martin and Vickrey Barbara. Development of Quality of Care Indicators for Parkinson's disease

### **Measure #290 - Parkinson's Disease: Psychiatric Disorders or Disturbances Assessment**

#### **RATIONALE:**

Parkinson's disease is associated with a wide range of psychiatric disorders. Some of these problems are related to the disease itself and some are related to the medications used to treat the disease. These disorders range from

anxiety and depression to psychosis and impulse control disorder. It has been demonstrated that depression, in particular, has been often overlooked as a diagnostic possibility in patients with Parkinson's disease. In fact, it has been demonstrated that depression and other psychiatric disorders are often overlooked in the general medical population. This measure will ensure that the clinician remembers to evaluate the patient for the basis of these psychiatric disorders on a yearly basis.

Marsh L. Neuropsychiatric aspects of Parkinson's disease. *Psychosomatics*. 2000 Jan-Feb;41(1):15-23

Ravina B, Marder K, Fernandez HH, Friedman JH, McDonald W, Murphy D, Aarsland D, Babcock D, Cummings J, Endicott J, Factor S, Galpern W, Lees A, Marsh L, Stacy M, Gwinn-Hardy K, Voon V, Goetz C. Diagnostic criteria for psychosis in Parkinson's disease: report of an NINDS, NIMH work group. *Mov Disord*. 2007 Jun 15;22(8):1061-8

Galpern WR, Stacy M. Management of impulse control disorders in Parkinson's disease. *Curr Treat Options Neurol*. 2007 May;9(3):189-97

Shulman LM, Taback RL, Rabinstein AA, Weiner WJ. Non-recognition of depression and other non-motor symptoms in Parkinson's disease. *Parkinsonism Relat Disord*. 2002 Jan;8(3):193-7

### **CLINICAL RECOMMENDATION STATEMENTS:**

Clinicians should be aware of dopamine dysregulation syndrome, an uncommon disorder in which dopaminergic medication misuse is associated with abnormal behaviors, including hypersexuality, pathological gambling and stereotypic motor acts. This syndrome may be difficult to manage. (Level D) NICE GL35 (Jun 2006).

If a veteran with PD presents with new onset of one of the following symptoms: sad mood, feeling down; insomnia or difficulties with sleep; apathy or loss of interest in pleasurable activities; complains of memory loss; unexplained weight loss of greater than 5% in the past month or 10% over one year; or unexplained fatigue or low energy, then the patient should be asked about or treated for depression, or referred to a mental health professional within two weeks of presentation. (Outcomes Impact 5; Room for Improvement 4; Overall utility rating 4) Cheng 2004

Clinicians should have a low threshold for diagnosing depression in PD. (Level D) NICE GL35 (Jun 2006) All veterans with PD should be reassessed for complications of PD (including, but not limited to functional status, excessive daytime somnolence, speech and swallowing difficulties, dementia, depression, and psychosis) at least on an annual basis. Cheng #10 (Reassessment for complications for PD) 2004

All people with PD and psychosis should receive a general medical evaluation and treatment for any precipitating condition. (Level D) NICE GL35 (Jun 2006)

NICE National Collaborating Centre for Primary Care. National Collaborating Centre for Chronic Conditions. Parkinson's Disease: National Clinical Guideline for Management in Primary and Secondary Care (2006) London: Royal College of Physicians

Cheng Eric, Siderowf Andrew, Swarztrauber Kari, Eisa Mahmood, Lee Martin and Vickrey Barbara. Development of Quality of Care Indicators for Parkinson's disease Movement Disorders Vol. 19, No.2, 2004 (P136-150)

### **Measure #291 - Parkinson's Disease: Cognitive Impairment or Dysfunction Assessment**

#### **RATIONALE:**

Parkinson's disease is associated with cognitive impairment. It is important to assess patients with Parkinson's disease on an annual basis with regard to their cognitive abilities. Clinically significant cognitive difficulties may be present early on in the disease course, but dementia may emerge and be diagnosed later in the course of the disease. However, the insidious onset of cognitive impairment/dementia often occurs over a prolonged period of time.



Emerging cognitive impairment has limited treatment, but is important to identify in terms of the patient's care and responsibilities within the home, socially, or in the work place.

Factor, S. Weiner, W. Parkinson's Disease: Diagnosis and Clinical Management . 2002

#### **CLINICAL RECOMMENDATION STATEMENTS:**

The Mini-Mental State Examination (MMSE) and the Cambridge Cognitive Examination (CAM Cog) should be considered as screening tools for dementia in patients with PD (Level B). AAN QSS (April 2006)

All veterans with PD should be reassessed for complications of PD (including, but not limited to functional status, excessive daytime somnolence, speech and swallowing difficulties, dementia, depression, and psychosis) at least on an annual basis. Cheng #10 (Reassessment for complications for PD) 2004

AAN QSS Mental (April 2006) Miyasaki JM, Shannon K, Voon V, Ravina B, Kleiner-Fisman G, Anderson K, Shulman LM, Gronseth G, Weiner WJ, Quality Standards Subcommittee of the American Academy of Neurology. Practice parameter: evaluation and treatment of depression, psychosis, and dementia in Parkinson disease (an evidence-based review): report of the Quality Standards Subcommittee of the American Academy of Neurology. Neurology 2006 Apr 11;66(7):996-1002

Cheng Eric, Siderowf Andrew, Swartrauber Kari, Eisa Mahmood, Lee Martin and Vickrey Barbara. Development of Quality of Care Indicators for Parkinson's disease Movement Disorders Vol. 19, No.2, 2004 (P136-150) This measure may be used as an accountability measure.

#### **Measure #292 - Parkinson's Disease: Querying about Sleep Disturbances**

##### **RATIONALE:**

Sleep disorders are common in Parkinson's disease and most commonly include sleep fragmentation (80%), restless legs syndrome (20%), REM behavior sleep disorder (>40%), and excessive daytime sleepiness (~50%). Sleep fragmentation could relate to motor symptoms such as tremor and dystonia, restless legs syndrome, depression, anxiety, agitation, urinary frequency, or medication (most notably selegiline but also dopamine agonists). Several approaches to effective therapy are available. Excessive daytime sleepiness could result in sleep attacks or unintended sleep episodes. Such episodes have been described in various situations, including while driving a car. Excessive daytime sleepiness may result from medication (dopamine agonists), dementia, psychosis, or poor nocturnal sleep hygiene and is generally more common in advanced Parkinson's disease.

Medication adjustment and the use of stimulants may be warranted. REM behavior disorder is defined by the patient acting out dreams. The result could be either the patient or spouse moving to a different bedroom. This syndrome is treated with benzodiazepines and other medications. Assessing sleep would be expected to lead to improved morbidity and function.

Comella, C. Sleep disorders in Parkinson's disease. Curr Treat Options Neurol. 2008 May;10(3):215-21.  
Adler CH, Thorpy MJ. Sleep issues in Parkinson's disease. Neurology. 2005 Jun 28;64(12 Suppl 3):S12-20. Iranzo A, Santamaría J, Rye DB, Valdeoriola F, Martí MJ, Muñoz E, Vilaseca I, Tolosa E. Characteristics of idiopathic REM sleep behavior disorder and that associated with MSA and PD. Neurology. 2005 Jul 26;65(2):247-52

#### **CLINICAL RECOMMENDATION STATEMENTS:**

A full sleep history should be taken from people with PD who report sleep disturbance (Level D) NICE GL35 (Jun 2006)

Good sleep hygiene should be advised in people with PD with any sleep disturbance and includes: avoidance of stimulants (for example, coffee, tea, caffeine) in the evening; establishment of a regular pattern of sleep; comfortable

bedding and temperature; provision of assistive devices, such as a bed lever or rails to aid with moving and turning, allowing the person to get more comfortable; restriction of daytime naps; advice about taking regular and appropriate exercise to induce better sleep; a review of all medication and avoidance of any drugs that may affect sleep or alertness, or may interact with other medication (for example, selegiline, antihistamines, H2 antagonists, antipsychotics and sedatives). NICE GL35 (June 2006)

All veterans with PD should be reassessed for complications of PD (including, but not limited to functional status, excessive daytime somnolence, speech and swallowing difficulties, dementia, depression, and psychosis) at least on an annual basis. Cheng #10 (Reassessment for complications for PD) 2004

NICE National Collaborating Centre for Primary Care. National Collaborating Centre for Chronic Conditions. Parkinson's Disease: National Clinical Guideline for Management in Primary and Secondary Care (2006) London: Royal College of Physicians

Cheng Eric, Siderowf Andrew, Swartztrauber Kari, Eisa Mahmood, Lee Martin and Vickrey Barbara. Development of Quality of Care Indicators for Parkinson's disease Movement Disorders Vol. 19, No.2, 2004 (P136-150)

### **Measure #293 - Parkinson's Disease: Rehabilitative Therapy Options**

#### **RATIONALE:**

For those patients with Parkinson's disease who have impaired activities of daily living, therapy options such as physical, occupational, and speech therapy should be offered. Rehabilitative therapies play an important role in improving function and quality of life for these patients. Symptomatic therapy can provide benefit for many years. Patients with Parkinson's disease commonly develop dysarthria.

AAN QSS Neuro Alt (April 2006) Suchowersky O, Gronseth G, Perlmutter J, Reich S, Zesiewicz T, Weiner WJ, Quality Standards Subcommittee of the American Academy of Neurology. Practice parameter: neuroprotective strategies and alternative therapies for Parkinson disease (an evidence-based review): report of the Quality Standards Subcommittee of the American Academy of Neurology. Neurology 2006 Apr 11;66(7):976-82.

Factor, S. Weiner, W. Parkinson's Disease: Diagnosis and Clinical Management. 2002

#### **CLINICAL RECOMMENDATION STATEMENTS:**

Physiotherapy should be available for people with PD. Particular consideration should be given to: gait re-education, improvement of balance and flexibility; enhancement of aerobic capacity; improvement of movement initiation; improvement of functional independence, including mobility and activities of daily living; provision of advice regarding safety in the home environment. (Level B) NICE GL35 (Jun 2006)

Occupational therapy should be available for people with PD. Particular consideration should be given to: maintenance of work and family roles, home care and leisure activities; improvement and maintenance of transfers and mobility; improvement of personal self-care activities, such as eating, drinking, washing, and dressing; cognitive assessment and appropriate intervention. (Level D) NICE GL35 (Jun 2006)

Speech and language therapy should be available for people with PD. Particular consideration should be given to: Improvement of vocal loudness and pitch range, including speech therapy programs such as Lee Silverman Voice Treatment (LSVT) (Level B) NICE GL35 (Jun 2006)

All veterans with PD who have impairment of ADLs or in walking ability should be referred for physical therapy. Cheng et al. #9 (Referral for physical therapy) 2004

For patients with Parkinson's disease complicated by dysarthria, speech therapy may be considered to improve speech volume (Level C). Different exercise modalities, including multidisciplinary rehabilitation, active music therapy, treadmill training, balance training, and "cued" exercise training are probably effective in improving functional outcomes for patients with Parkinson's disease. For patients with Parkinson's disease, exercise therapy may be considered to improve function (Level C). AAN QSS Neuro Alt (April 2006)

NICE National Collaborating Centre for Primary Care. National Collaborating Centre for Chronic Conditions. Parkinson's Disease: National Clinical Guideline for Management in Primary and Secondary Care (2006) London: Royal College of Physicians

Cheng E, Siderowf A, Swartrauber K, Eisa M, Lee M and Vickrey B. Development of Quality of Care Indicators for Parkinson's disease Movement Disorders Vol. 19, No.2, 2004 (P136-150)

AAN QSS Neuro Alt (April 2006) Suchowersky O, Gronseth G, Perlmutter J, Reich S, Zesiewicz T, Weiner WJ, Quality Standards Subcommittee of the American Academy of Neurology. Practice parameter: neuroprotective strategies and alternative therapies for Parkinson disease (an evidence-based review): report of the Quality Standards Subcommittee of the American Academy of Neurology. Neurology 2006 Apr 11; 66(7):976-82.

### **Measure #294 - Parkinson's Disease: Parkinson's Disease Medical and Surgical Treatment Options Reviewed**

#### **RATIONALE:**

There are many different pharmacological, non-pharmacological, and surgical treatment options available for patients diagnosed with Parkinson's disease. Within each type of treatment, there are also multiple factors to be considered when deciding whether a patient with Parkinson's disease is a candidate for the treatment option.

With the advent of newly available pharmacological treatments from many different ongoing clinical trials and studies, the patient's current medication treatment should be reviewed as therapy-based reviews are updated.

AAN QSS Init. Treatment of Parkinson's Disease (Jan 2002) Miyasaki JM, Martin W, Suchowersky O, Weiner WJ, Lang AE. Practice parameter: initiation of treatment for Parkinson's disease: an evidence-based review: Report of the Quality Standards Subcommittee of the American Academy of Neurology. Neurology 2002 Jan 8;58(1):11-7

Anthony E. Lang, Jean-Luc Houeto, Paul Krack, et al. Deep brain stimulation: Preoperative issues Movement Disorders 2006 June; 21(S14): S171-S196

#### **CLINICAL RECOMMENDATION STATEMENTS:**

People with PD should have regular access to the following: clinical monitoring and medication adjustment; a continuing point of contact for support, including home visits when appropriate; a reliable source of information about clinical and social matters of concern to people with PD and their careers which may be provided by a Parkinson's disease nurse specialist. NICE GL35. (June 2006)

With the current evidence it is not possible to decide if the subthalamic nucleus or globus pallidus interna is the preferred target for deep brain stimulation for people with PD, or whether one form of surgery is more effective or safer than the other. In considering the type of surgery, account should be taken of: clinical and lifestyle characteristics of the person with PD; patient preference, after the patient has been informed of the potential benefits and; drawbacks of the different surgical procedures. (Level D) NICE GL35 (June 2006)

NICE National Collaborating Centre for Primary Care. National Collaborating Centre for Chronic Conditions. Parkinson's Disease: National Clinical Guideline for Management in Primary and Secondary Care (2006) London: Royal College of Physicians

## HYPERTENSION (HTN) MEASURES GROUP OVERVIEW

### 2014 PQRS OPTIONS FOR MEASURES GROUPS:

#### 2014 PQRS MEASURES IN HYPERTENSION MEASURES GROUP:

- #226. Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention
- #295. Hypertension: Use of Aspirin or Other Antithrombotic Therapy
- #296. Hypertension: Complete Lipid Profile
- #297. Hypertension: Urine Protein Test
- #298. Hypertension: Annual Serum Creatinine Test
- #299. Hypertension: Diabetes Mellitus Screening Test
- #300. Hypertension: Blood Pressure Control
- #301. Hypertension: Low Density Lipoprotein (LDL-C) Control
- #302. Hypertension: Dietary and Physical Activity Modifications Appropriately Prescribed

#### 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.

**G8904:** I intend to report the Hypertension (HTN) Measures Group

- Report the patient sample method:  
**20 Patient Sample Method:** 20 unique patients (a majority of which must be Medicare Part B FFS [fee for service] patients) meeting patient sample criteria for the measures group during the reporting period (January 1 through December 31, 2014 **OR** July 1 through December 31, 2014).
- Patient sample criteria for the Hypertension Measures Group are patients aged 18 through 90 years with a specific diagnosis of hypertension, and without a diagnosis of stage 5 chronic kidney disease (GFR of < 15ml/min per 1.72 m<sup>2</sup> or end-stage kidney disease), accompanied by a specific patient encounter:

#### One of the following diagnosis codes indicating hypertension:

**ICD-9-CM [for use 1/01/2014-9/30/2014]:** 401.0, 401.1, 401.9, 402.00, 402.01, 402.10, 402.11, 402.90, 402.91, 403.00, 403.10, 403.90, 404.00, 404.01, 404.10, 404.11, 404.90, 404.91

**ICD-10-CM [for use 10/01/2014-12/31/2014]:** I10, I11.0, I11.9, I12.9, I13.0, I13.10

#### Accompanied by:

**One of the following patient encounter codes:** 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99304, 99305, 99306, 99307, 99308, 99309, 99310, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350, G0438, G0439

#### AND NOT

#### Diagnosis for stage 5 chronic kidney disease:

**ICD-9-CM [for use 1/01/2014-9/30/2014]:** 403.01, 403.11, 403.91, 404.02, 404.03, 404.12, 404.13, 404.92, 404.93, 585.5, 585.6

**ICD-10-CM [for use 10/01/2014-12/31/2014]:** I12.0, I13.11, I13.2, N18.5, N18.6

- Report a numerator option on **all applicable** measures within the HTN Measures Group for each patient within the eligible professional's patient sample.
- Applicable measures contain patient demographic criteria specific to the measure. For example, Hypertension: Use of Aspirin or Other Antithrombotic Therapy criteria is applicable *only to patients 30-90 years* within the sample population, while all other measures within this group apply to *all patients 18-90 years*. Reporting measure(s) from the group that are inapplicable to an individual patient will not affect the eligible provider's reporting or performance rate.
- Instructions for qualifying numerator option reporting for each of the measures within the Hypertension (HTN) 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 G8763:** All quality actions for the applicable measures in the Hypertension (HTN) Measures Group have been performed for this patient

- To report satisfactorily the HTN Measures Group it requires **all** measures for each patient within the eligible professional's patient sample to be reported a minimum of once during the reporting period.
- Patients must be seen by the provider for a minimum of 2 visits during the last 24 months with one encounter 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.
- **NOTE:** The detailed instructions in this specification apply exclusively to the reporting and analysis of the included measures under the measures groups option.

**▲ Measure #226 (NQF 0028): Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention**

**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:**

Patient screened for tobacco use AND received tobacco cessation intervention (counseling, pharmacotherapy, or both), if identified as a tobacco user (**4004F**)

**OR**

Current tobacco non-user (**1036F**)

**OR**

Documentation of medical reason(s) for not screening for tobacco use (eg, limited life expectancy, other medical reasons) (**4004F** with **1P**)

**OR**

Tobacco screening OR tobacco cessation intervention **not** performed, reason not otherwise specified (**4004F** with **8P**)

● **Measure #295: Hypertension: Use of Aspirin or Other Antithrombotic Therapy**

**DESCRIPTION:**

Percentage of patients aged 30 through 90 years old with a diagnosis of hypertension and are eligible for aspirin or other antithrombotic therapy who were prescribed aspirin or other antithrombotic therapy

**NUMERATOR:**

Patients who were prescribed aspirin or other antithrombotic therapy

**Numerator Instructions:** Oral antithrombotic therapy consists of aspirin, warfarin, clopidogrel, dabigatran, rivaroxaban, apixaban or combination of aspirin and extended release dipyridamole or prasugrel.

Diagnosis of prior coronary heart disease (CHD), prior ischemic stroke or transient ischemic attack (TIA), prior peripheral artery disease (PAD), and Framingham risk assessment for estimating 10-year risk of developing CHD are used to determine if a patient should be recommended/prescribed aspirin or other antithrombotic therapy or if the patient is at low risk and therefore aspirin or other antithrombotic therapy should not be recommended/prescribed.

Patients who are at low risk of developing CHD, stroke or TIA, or PAD, patients with the level of risk not being sufficient to justify the use of aspirin or other antithrombotic therapy, patients whose risk from aspirin or other antithrombotic therapy exceeds the benefits, patients with a preference not to use aspirin or other antithrombotic, or patients where the treatment of hypertension with standard treatment goals is not clinically appropriate, should be excluded.

**Definitions:**

**Prescribed** - May include recommendation/prescription given to the patient for aspirin or other antithrombotic at one or more visits in the 12 month period OR patient already taking aspirin, warfarin, clopidogrel, dabigatran, rivaroxaban, apixaban, or combination of aspirin and extended release dipyridamole as documented in current medication list.

**Level of risk is not sufficient to justify the use of aspirin or other antithrombotic therapy:** Patients with **no** prior CHD AND **no** prior ischemic stroke TIA, AND **no** PAD, AND have a 10-year risk of developing CHD no greater than 10% as indicated by Framingham risk score (and all elements of Framingham risk calculation are complete) may not have sufficient risk of CHD to justify the use of aspirin. (Note: some individuals with lower levels of risk still may be reasonable candidates for aspirin.)

**Risk from aspirin or other antithrombotic therapy exceeds benefits-** For some patients the risk of bleeding is increased due to co-morbid conditions, advanced age, or poorly controlled hypertension; or in the case of allergy to aspirin or nonsteroidal anti-inflammatory drug.

**Patient preference to not use aspirin-** For some patients for the primary prevention of CHD, there is a tradeoff between preventing myocardial infarctions and causing bleeding events. Patients who place a higher value on preventing bleeding may prefer not to use aspirin.

**Treatment with aspirin is not clinically appropriate due to the goals of care** - For some patients, standard goals of care may not be relevant, such as when the goals of care are predominantly palliative.

**Framingham Risk Score** - A risk assessment tool which uses recent data from the Framingham Heart Study to estimate 10-year risk for "hard" CHD outcomes (myocardial infarction and coronary death). This tool is designed to estimate risk in adults aged 20 and older who do not have heart disease or diabetes.

**Numerator Options:**

Oral aspirin or other antithrombotic therapy prescribed (**G8895**)

**OR**

Documentation of medical reason(s) for not prescribing oral aspirin or other antithrombotic therapy (e.g., patient documented to be low risk, or patient with palliative care goals or treatment of hypertension with standard treatment goals is not clinically appropriate, or for whom risk of aspirin or other antithrombotic therapy exceeds potential benefits such as for individuals whose blood pressure is poorly controlled) **(G8896)**

**OR**

Oral aspirin or other antithrombotic therapy was **not** prescribed, reason not given **(G8897)**



● **Measure #296: Hypertension: Complete Lipid Profile**

**DESCRIPTION:**

Percentage of patients aged 18 through 90 years old with a diagnosis of hypertension who received a complete lipid profile within **60 months**

**NUMERATOR:**

Patients who received at least one lipid profile (including total cholesterol, HDL-C, triglycerides and calculated LDL-C) within **60 months**

**Numerator Instruction:**

Patients for whom the goals of care are predominantly palliative or for whom treatment of hypertension with standard treatment goals is not clinically appropriate should be excluded.

**Definitions:**

**Treatment of hypertension with standard treatment goals is not clinically appropriate** - For some patients, treatment of hypertension with standard goals may not be relevant, as might be the case for a patient with severe Alzheimer's disease.

**NUMERATOR NOTE:** *The performance period for this measure is **60 months**.*

**Numerator Options:**

Lipid panel results documented and reviewed (must include total cholesterol, HDL-C, triglycerides and calculated LDL-C) **(G8767)**

*Note: If LDL-C could not be calculated due to high triglycerides, count as complete lipid profile.*

**OR**

Documentation of medical reason(s) for not performing lipid profile (e.g., patients with palliative goals or for whom treatment of hypertension with standard treatment goals is not clinically appropriate) **(G8768)**

**OR**

Lipid profile **not** performed, reason not given **(G8769)**

● **Measure #297: Hypertension: Urine Protein Test**

**DESCRIPTION:**

Percentage of patients aged 18 through 90 years old with a diagnosis of hypertension who either have chronic kidney disease diagnosis documented or had a urine protein test done within **36 months**

**NUMERATOR:**

Patients who either have chronic kidney disease diagnosis documented OR had a urine protein test done within **36 months**

**Numerator Instructions:** This measure is looking for a urine protein screening test or evidence of existing chronic kidney disease. A urine protein test consists of tests for albuminuria, microalbuminuria, or proteinuria. Patients for whom the goals of care are predominantly palliative or for whom treatment of hypertension with standard treatment goals is not clinically appropriate should be excluded.

**Definitions:**

**Treatment of hypertension with standard treatment goals is not clinically appropriate** - For some patients, treatment of hypertension with standard goals may not be relevant, as might be the case for a patient with severe Alzheimer's disease.

**NUMERATOR NOTE:** *The performance period for this measure is **36 months**.*

**Numerator Options:**

Urine Protein test result documented and reviewed (**G8770**)

**OR**

Documentation of diagnosis of chronic kidney disease (**G8771**)

**OR**

Documentation of medical reason(s) for not performing urine protein test (e.g., patients with palliative goals or for whom treatment of hypertension with standard treatment goals is not clinically appropriate) (**G8772**)

**OR**

Urine protein test was **not** performed, reason not given (**G8773**)

● **Measure #298: Hypertension: Annual Serum Creatinine Test**

**DESCRIPTION:**

Percentage of patients aged 18 through 90 years old with a diagnosis of hypertension who had a serum creatinine test done within **12 months**

**NUMERATOR:**

Patients who had most recent serum creatinine test done within **12 months**

**Numerator Instructions:** Patients for whom the goals of care are predominantly palliative or for whom treatment of hypertension with standard treatment goals is not clinically appropriate should be excluded.

**Definitions:**

**Treatment of hypertension with standard treatment goals is not clinically appropriate** - For some patients, treatment of hypertension with standard goals may not be relevant, as might be the case for a patient with severe Alzheimer's disease.

**NUMERATOR NOTE:** *The performance period for this measure is **12 months**.*

**Numerator Options:**

Serum creatinine test result documented and reviewed (**G8774**)

**OR**

Documentation of medical reason(s) for not performing serum creatinine test (e.g., patients with palliative goals or for whom treatment of hypertension with standard treatment goals is not clinically appropriate) (**G8775**)

**OR**

Serum creatinine test **not** performed, reason not given (**G8776**)

● **Measure #299: Hypertension: Diabetes Mellitus Screening Test**

**DESCRIPTION:**

Percentage of patients aged 18 through 90 years old with a diagnosis of hypertension who had a diabetes screening test within **36 months**

**NUMERATOR:**

Patients who had a diabetes screening test done within **36 months**

**Numerator Instructions:** Diabetes screening test consists of either a fasting glucose measurement, glycosylated hemoglobin test, or a two hour glucose tolerance test (three specimens). Patients for whom the goals of care are predominantly palliative or for whom treatment of hypertension with standard treatment goals is not clinically appropriate should be excluded.

**Definitions:**

**Treatment of hypertension with standard treatment goals is not clinically appropriate** - For some patients, treatment of hypertension with standard goals may not be relevant, as might be the case for a patient with severe Alzheimer's disease.

**NUMERATOR NOTE:** *The performance period for this measure is **36 months**.*

**Numerator Options:**

Diabetes screening test performed (**G8777**)

**OR**

Documentation of medical reason(s) for not performing diabetes screening test (e.g., patients with a diagnosis of diabetes, or with palliative goals or for whom treatment of hypertension with standard treatment goals is not clinically appropriate) (**G8778**)

**OR**

Diabetes screening test **not** performed, reason not given (**G8779**)

● **Measure #300: Hypertension: Blood Pressure Control**

**DESCRIPTION:**

Percentage of patients aged 18 through 90 years old with a diagnosis of hypertension whose most recent blood pressure was under control (< 140/90 mmHg)

**NUMERATOR:**

Patients whose most recent blood pressure was under control

**Numerator Instructions:** If there are multiple blood pressures on the same date of service, use the lowest systolic and lowest diastolic blood pressure on that date as the representative blood pressure. To be “under control”, both systolic and diastolic blood pressures must be below the target values (e.g., for a patient, systolic BP =143 mmHg and diastolic BP =70 mmHg is not “under control”).

Patients for whom the goals of care are predominantly palliative or for whom treatment of hypertension with standard treatment goals is not clinically appropriate should be excluded.

**Definitions:**

**Treatment of hypertension with standard treatment goals is not clinically appropriate -** For some patients, treatment of hypertension with standard goals may not be relevant, as might be the case for a patient with severe Alzheimer’s disease.

***NUMERATOR NOTE:*** *The performance period for this measure is 12 months.*

**Numerator Options:**

Most recent blood pressure under control (**G8886**)

**OR**

Documentation of medical reason(s) for most recent blood pressure not being under control (e.g., patients with palliative goals or for whom treatment of hypertension with standard treatment goals is not clinically appropriate) (**G8887**)

**OR**

Most recent blood pressure not under control, results documented and reviewed (**G8888**)

**OR**

No documentation of blood pressure measurement, reason not given (**G8889**)

● **Measure #301: Hypertension: Low Density Lipoprotein (LDL-C) Control**

**DESCRIPTION:**

Percentage of patients aged 18 through 90 years old with a diagnosis of hypertension whose most recent LDL cholesterol level was under control (at goal)

**NUMERATOR:**

Patients whose most recent LDL-C level was under control during the **60-month** period

**Numerator Instructions:** Patients are considered to have most recent LDL-C level under control if any of the following are documented:

- < 100 mg/dL for those with coronary heart disease, OR stroke or transient ischemic attack, OR peripheral artery disease, OR diabetes
- < 130 mg/dL for those without conditions listed above, but with one or more additional risk factors for CHD (Low HDL (< 40 mg/dL) or on HDL-raising medication, risk age (men ≥ 45 years, women ≥ 55 years), family history of premature CHD, smoking); HDL cholesterol ≥ 60 acts as a negative risk factor
- < 160 mg/dL for those without conditions listed above, **and without additional** risk factors for CHD (Low HDL (< 40 mg/dL) or on HDL-raising medication, risk age (men ≥ 45 years, women ≥ 55 years), family history of premature CHD, smoking); HDL cholesterol ≥ 60 acts as a negative risk factor

Patients for whom the goals of care are predominantly palliative or for whom treatment of hypertension with standard treatment goals is not clinically appropriate should be excluded.

**Definitions:**

**Treatment of hypertension with standard treatment goals is not clinically appropriate** - For some patients, treatment of hypertension with standard goals may not be relevant, as might be the case for a patient with severe Alzheimer's disease.

**NUMERATOR NOTE:** *The performance period for this measure is **60 months**.*

**Numerator Options:**

Most recent LDL-C under control, results documented and reviewed (**G8890**)

**OR**

Documentation of medical reason(s) for most recent LDL-C not under control (e.g., patients with palliative goals or for whom treatment of hypertension with standard treatment goals is not clinically appropriate) (**G8891**)

**OR**

Documentation of medical reason(s) for not performing LDL-C test (e.g., patients with palliative goals or for whom treatment of hypertension with standard treatment goals is not clinically appropriate) (**G8892**)

**OR**

Most recent LDL-C not under control, results documented and reviewed (**G8893**)

**OR**

LDL-C **not** performed, reason not given (**G8894**)

● **Measure #302: Hypertension: Dietary and Physical Activity Modifications Appropriately Prescribed**

**DESCRIPTION:**

Percentage of patients aged 18 through 90 years old with a diagnosis of hypertension who received dietary and physical activity counseling at least once within **12 months**

**NUMERATOR:**

Patients who received dietary and physical activity counseling at least once within **12 months**

**Numerator Instructions:** Patients for whom the goals of care are predominantly palliative or for whom treatment of hypertension with standard treatment goals is not clinically appropriate should be excluded.

**Definitions:**

**Treatment of hypertension with standard treatment goals is not clinically appropriate** - For some patients, treatment of hypertension with standard goals may not be relevant, as might be the case for a patient with severe Alzheimer's disease.

**Counseling** – May include documentation of prescribing any of the following dietary modifications: dietary saturated fat and cholesterol restriction, calorie restriction as part of weight reduction program for overweight/obese patients, DASH eating plan, dietary sodium restriction, increased fruits, vegetables and/or soluble fiber; and documentation of activity status for active patients or discussion of increase exercise or physical activity for inactive patients.

**NUMERATOR NOTE:** *The performance period for this measure is **12 months**.*

**Numerator Options:**

Counseling for Diet and Physical Activity Performed (**G8780**)

**OR**

Documentation of medical reason(s) for patient not receiving counseling for diet and physical activity (e.g., patients with palliative goals or for whom treatment of hypertension with standard treatment goals is not clinically appropriate) (**G8781**)

**OR**

Documentation of patient reason(s) for patient not receiving counseling for diet and physical activity (e.g., patient is not willing to discuss diet or exercise interventions to help control blood pressure, or the patient said he/she refused to make these changes) (**G8949**)

**OR**

Counseling for Diet and Physical Activity **not** performed, reason not given (**G8782**)

## HYPERTENSION MEASURES GROUP RATIONALE AND CLINICAL RECOMMENDATION STATEMENTS

### **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 #295 - Hypertension: Use of Aspirin or Other Antithrombotic Therapy**

#### **RATIONALE:**

The net benefit of aspirin for primary and secondary prevention of cardiovascular and cerebrovascular events depends on the risks for these events and the risk of gastrointestinal or other major bleeding. Thus, decisions about aspirin or other antithrombotic therapy should consider the overall risk these events, the expected reduction in these events produced by the treatment weighed against the risks of increased bleeding.

#### **CLINICAL RECOMMENDATION STATEMENTS:**

- The USPSTF recommends the use of aspirin for men age 45 to 79 years when the potential benefit due to a reduction in myocardial infarctions outweighs the potential harm due to an increase in gastrointestinal



hemorrhage. Grade: A recommendation. USPSTF: Aspirin for the Prevention of Cardiovascular Disease (March 2009)

- The USPSTF recommends the use of aspirin for women age 55 to 79 years when the potential benefit of a reduction in ischemic strokes outweighs the potential harm of an increase in gastrointestinal hemorrhage. Grade: A recommendation. USPSTF: Aspirin for the Prevention of Cardiovascular Disease (March 2009)
- The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of aspirin for cardiovascular disease prevention in men and women 80 years or older. Grade: I statement. USPSTF: Aspirin for the Prevention of Cardiovascular Disease (March 2009)
- For patients with established coronary or other atherosclerotic vascular disease start aspirin 75 to 162 mg/d and continue indefinitely in all patients unless contraindicated. Grade: I (A) recommendation. AHA/ACC Secondary Prevention for Patients With Coronary and Other Vascular Disease (May 2006).
- Consider aspirin therapy (75–162 mg/day) as a primary prevention strategy in those with type 1 or type 2 diabetes at increased cardiovascular risk (10-year risk >10%). This includes most men >50 years of age or women >60 years of age who have at least one additional major risk factor (family history of CVD, hypertension, smoking, dyslipidemia, or albuminuria). Grade: C recommendation. ADA Diabetes Care. 2013 Jan;36 Suppl 1:S11-66. doi: 10.2337/dc13-S011.
- Aspirin should not be recommended for CVD prevention for adults with diabetes at low CVD risk (10-year CVD risk <5%, such as in men <50 and women <60 years of age with no major additional CVD risk factors), since the potential adverse effects from bleeding likely offset the potential benefits. Grade: C recommendation. ADA Diabetes Care. 2013 Jan;36 Suppl 1:S11-66. doi: 10.2337/dc13-S011.
- In patients in these age-groups with multiple other risk factors (e.g., 10-year risk 5–10%), clinical judgment is required. Grade: E recommendation. ADA Diabetes Care. 2013 Jan;36 Suppl 1:S11-66. doi: 10.2337/dc13-S011.
- Use aspirin therapy (75–162 mg/day) as a secondary prevention strategy in those with diabetes with a history of CVD. Grade: A recommendation. ADA Diabetes Care. 2013 Jan;36 Suppl 1:S11-66. doi: 10.2337/dc13-S011.
- For patients with CVD and documented aspirin allergy, clopidogrel (75 mg/day) should be used. Grade: B recommendation. ADA Diabetes Care. 2013 Jan;36 Suppl 1:S11-66. doi: 10.2337/dc13-S011.

### **Measure #296 - Hypertension: Complete Lipid Profile**

#### **RATIONALE:**

Lipid abnormalities contribute to the risk of CVD. Patients with other known CVD risk factors such as hypertension are at increased risk for CVD and should have their lipid levels monitored to better assess CVD risk and/or monitor response to lifestyle or pharmacological treatment.

#### **CLINICAL RECOMMENDATION STATEMENTS:**

- A fasting lipoprotein profile including major blood lipid fractions, i.e., total cholesterol, LDL cholesterol, HDL cholesterol, and triglyceride, should be obtained at least once every 5 years in adults age 20 and over. More frequent measurements are required for persons with multiple risk factors or, in those with 0–1 risk factor, if the LDL level is only slightly below the goal level. **The Adult Treatment Panel III (ATP III) of the National Cholesterol Education Program (2001) (Executive Summary published in JAMA, 2001;285:2486-2497**
- The USPSTF strongly recommends screening men aged 35 and older for lipid disorders. Grade: A recommendation USPSTF: Screening for Lipid Disorders in Adults (June 2008)
- The USPSTF recommends screening men aged 20 to 35 for lipid disorders if they are at increased risk for coronary heart disease. Increased risk is defined as the presence of other CVD risk factors including hypertension. Grade: B recommendation USPSTF: Screening for Lipid Disorders in Adults (June 2008)
- The USPSTF strongly recommends screening women aged 45 and older for lipid disorders if they are at increased risk for coronary heart disease. Increased risk is defined as the presence of other CVD risk factors including hypertension. Grade: A recommendation USPSTF: Screening for Lipid Disorders in Adults (June 2008)

- The USPSTF recommends screening women aged 20 to 45 for lipid disorders if they are at increased risk for coronary heart disease. Increased risk is defined as the presence of other CVD risk factors including hypertension. Grade: B recommendation USPSTF: Screening for Lipid Disorders in Adults (June 2008)

#### **Measure #297 - Hypertension: Urine Protein Test**

##### **RATIONALE:**

Proteinuria in patients with high blood pressure is an indicator of declining kidney function. The presence of proteinuria helps guide the choice of antihypertensive agent(s) and the selection of the goal blood pressure.

##### **CLINICAL RECOMMENDATION STATEMENTS:**

Obtain laboratory tests: urinalysis. Optional: urinary albumin/creatinine ratio. The Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure. (2004) NIH Publication No. 04-5230

#### **Measure #298 - Hypertension: Annual Serum Creatinine Test**

##### **RATIONALE:**

Elevated serum creatinine has been associated with increased mortality in hypertensive persons. Serum creatinine should be used to estimate Glomerular Filtration Rate (GFR) and to stage the level of Chronic Kidney Disease (CKD), if present.

##### **CLINICAL RECOMMENDATION STATEMENTS:**

Obtain laboratory tests: creatinine. The Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure (2004) NIH Publication No. 04-5230.

#### **Measure #299 - Hypertension: Diabetes Mellitus Screening Test**

##### **RATIONALE:**

Type 2 diabetes mellitus and hypertension frequently coexist. Patients with elevated blood pressures are two and a half times more likely to develop diabetes within 5 years, and hypertension is disproportionately higher in diabetics. The presence of diabetes mellitus helps guide the choice of antihypertensive agent(s) and the selection of the goal blood pressure.

##### **CLINICAL RECOMMENDATION STATEMENTS:**

The USPSTF recommends screening for type 2 diabetes in asymptomatic adults with sustained blood pressure (either treated or untreated) greater than 135/80 mm Hg. Grade: B recommendation. USPSTF: Screening for Type 2 Diabetes Mellitus in Adults (June 2008)

Obtain laboratory tests: blood glucose. The Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure (2004) NIH Publication No. 04-5230

#### **Measure #300 - Hypertension: Blood Pressure Control**

##### **RATIONALE:**

Control of hypertension reduces the risk of atherosclerotic cardiovascular disease, stroke, heart failure and renal disease.

##### **CLINICAL RECOMMENDATION STATEMENTS:**

Patients with coronary and other atherosclerotic vascular disease and with blood pressure  $\geq 140/90$  mm Hg should be treated, as tolerated, with blood pressure medication, treating initially with  $\beta$ -blockers and/or ACE inhibitors, with

addition of other drugs as needed to achieve goal blood pressure. (Class I, Level of Evidence: A). AHA/ACCF Secondary Prevention and Risk Reduction Therapy for Patients With Coronary and Other Atherosclerotic Vascular Disease: 2011 Update

The ACCF/AHA/ACP/AATS/PCNA/SCAI/STS Guideline for the Diagnosis and Management of Patients With Stable Ischemic Heart Disease (2012), recommends:

1. In patients with SIHD with blood pressure 140/90 mm Hg or higher, antihypertensive drug therapy should be instituted in addition to or after a trial of lifestyle modifications. (Class I, Level of Evidence: A)
2. The specific medications used for treatment of high blood pressure should be based on specific patient characteristics and may include angiotensin converting enzyme (ACE) inhibitors and/or beta blockers, with addition of other drugs, such as thiazide diuretics or calcium channel blockers, if needed to achieve a goal blood pressure of less than 140/90 mm Hg. (Class I, Level of Evidence: B)

The relationship between BP and risk of CVD events is continuous, consistent, and independent of other risk factors. The higher the BP, the greater the chance of heart attack, heart failure, stroke, and kidney diseases. The presence of each additional risk factor compounds the risk from hypertension. Management of these other risk factors is essential and should follow the established guidelines for controlling these coexisting problems that contribute to overall cardiovascular risk. The Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure. (2004) NIH Publication No. 04-5230

The 2013 American Diabetes Association's Standards of medical care in diabetes--Jan;36 Suppl 1:S11-66. doi: 10.2337/dc13-S011 recommends patients with diabetes and hypertension should be treated to a systolic blood pressure goal of , 140 mmHg. (Level of Evidence: B) Lower systolic targets, such as , 130 mmHg, may be appropriate for certain individuals, such as younger patients, if it can be achieved without undue treatment burden. (Level of Evidence: C) Patients with diabetes should be treated to a diastolic blood pressure, 80 mmHg. (Level of Evidence: B)

### **Measure #301 - Hypertension: Low Density Lipoprotein (LDL-C) Control**

#### **RATIONALE:**

Continuing evidence shows that high total cholesterol and low density lipoprotein cholesterol (LDL-C) levels are strongly related to coronary artery disease (CAD) risk and reductions in LDL-C levels are associated with reduced coronary heart disease (CHD) risk.

#### **CLINICAL RECOMMENDATION STATEMENTS:**

LDL-C should be <100 mg/dL for patients with CHD and CHD Risk Equivalent, <130 mg/dL for patients with Multiple (2+) Risk Factors, and <160 mg/dL for patients with 0–1 Risk Factors. The Adult Treatment Panel III (ATP III) of the National Cholesterol Education Program (2001) (Executive Summary published in JAMA, 2001;285:2486-2497

### **Measure #302 - Hypertension: Dietary and Physical Activity Modifications Appropriately Prescribed**

#### **RATIONALE:**

Limiting dietary cholesterol and saturate fat intake can reduce low density lipoprotein cholesterol (LDL-C). Dietary patterns characterized by a high intake of fruits and vegetables are associated with a lower risk of developing heart disease, stroke, and hypertension. Dietary patterns high in fiber have been associated with decreased risk of cardiovascular disease, and may help to control calorie intake and body weight. Multiple clinical and epidemiological studies demonstrate a relationship between dietary sodium intake and blood pressure. Use of the DASH low sodium diet has been shown to reduce blood pressure. Epidemiological studies suggest that regular aerobic physical activity may be beneficial for both prevention and treatment of hypertension, to enable weight loss, for functional health status, and to diminish all-cause mortality and risk of cardiovascular disease.

**CLINICAL RECOMMENDATION STATEMENTS:**

USPSTF recommends intensive behavioral dietary counseling for adult patients with hyperlipidemia and other known risk factors for cardiovascular and diet-related chronic disease. Intensive counseling can be delivered by primary care clinicians or by referral to other specialists, such as nutritionists or dietitians. (Grade: B recommendation) USPSTF: Behavioral Counseling in Primary Care to Promote a Healthy Diet in Adults at Increased Risk for Cardiovascular Disease (Jan 2003).

Everyone who is able should engage in regular aerobic physical activity such as brisk walking at least 30 minutes per day most days of the week. The Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure. (2004) NIH Publication No. 04-5230.

## CARDIOVASCULAR PREVENTION MEASURES GROUP OVERVIEW

### 2014 PQRS OPTIONS FOR MEASURES GROUPS:

#### 2014 PQRS MEASURES IN CARDIOVASCULAR PREVENTION MEASURES GROUP:

- #2. Diabetes: Low Density Lipoprotein (LDL-C) Control (< 100 mg/dL)
- #204. Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antithrombotic
- #226. Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention
- #236. Controlling High Blood Pressure
- #241. Ischemic Vascular Disease (IVD): Complete Lipid Profile and LDL-C Control (< 100 mg/dL)
- #317. Preventive Care and Screening: Screening for High Blood Pressure and Follow-Up Documented

#### 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.

**G8905:** I intend to report the Cardiovascular Prevention 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, 2014 **OR** July 1 through December 31, 2014).

- Patient sample criteria for the Cardiovascular Prevention Measures Group are patients aged ≥ 18 and older with a specific diagnosis of diabetes or Ischemic Vascular Disease and accompanied by a specific patient encounter:

#### **One of the following diagnosis codes indicating diabetes:**

**ICD-9-CM [for use 1/1/2014 – 9/30/2014]:** 250.00, 250.01, 250.02, 250.03, 250.10, 250.11, 250.12, 250.13, 250.20, 250.21, 250.22, 250.23, 250.30, 250.31, 250.32, 250.33, 250.40, 250.41, 250.42, 250.43, 250.50, 250.51, 250.52, 250.53, 250.60, 250.61, 250.62, 250.63, 250.70, 250.71, 250.72, 250.73, 250.80, 250.81, 250.82, 250.83, 250.90, 250.91, 250.92, 250.93, 357.2, 362.01, 362.02, 362.03, 362.04, 362.05, 362.06, 362.07, 366.41, 648.00, 648.01, 648.02, 648.03, 648.04

**ICD-10-CM [for use 10/1/2014 - 12/31/2014]:** E10.10, E10.11, E10.21, E10.22, E10.29, E10.311, E10.319, E10.321, E10.329, E10.331, E10.339, E10.341, E10.349, E10.351, E10.359, E10.36, E10.39, E10.40, E10.41, E10.42, E10.43, E10.44, E10.49, E10.51, E10.52, E10.59, E10.610, E10.618, E10.620, E10.621, E10.622, E10.628, E10.630, E10.638, E10.641, E10.649, E10.65, E10.69, E10.8, E10.9, E11.00, E11.01, E11.21, E11.22, E11.29, E11.311, E11.319, E11.321, E11.329, E11.331, E11.339, E11.341, E11.349, E11.351, E11.359, E11.36, E11.39, E11.40, E11.41, E11.42, E11.43, E11.44, E11.49, E11.51, E11.52, E11.59, E11.610, E11.618, E11.620, E11.621, E11.622, E11.628, E11.630, E11.638, E11.641, E11.649, E11.65, E11.69, E11.8, E11.9, O24.011, O24.012, O24.013, O24.019, O24.02, O24.03, O24.111, O24.112, O24.113, O24.119, O24.12, O24.13, O24.013, O24.019, O24.02, O24.03, O24.111, O24.112, O24.113, O24.119, O24.12, O24.13

#### AND/OR

#### **One of the following diagnosis codes indicating ischemic vascular disease:**

**ICD-9-CM [for use 1/1/2014 – 9/30/2014]:** 410.11, 410.21, 410.31, 410.41, 410.51, 410.61, 410.71, 410.81, 410.91, 411.0, 411.1, 411.81, 411.89, 413.0, 413.1, 413.9, 414.00, 414.01, 414.02, 414.03, 414.04, 414.05, 414.06, 414.07, 414.2, 414.8, 414.9, 429.2, 433.00, 433.01, 433.10, 433.11, 433.20, 433.21, 433.30,

433.31, 433.80, 433.81, 433.90, 433.91, 434.00, 434.01, 434.10, 434.11, 434.90, 434.91, 444.01, 444.09, 440.1, 440.20, 440.21, 440.22, 440.23, 440.24, 440.29, 440.4, 444.1, 444.21, 444.22, 444.81, 444.89, 444.9, 445.01, 445.02, 445.81, 445.89

**ICD-10-CM [for use 10/1/2014 - 12/31/2014]:** I20.0, I20.1, I20.8, I20.9, I21.01, I21.02, I21.09, I21.11, I21.19, I21.21, I21.29, I21.3, I21.4, I24.0, I24.1, I24.8, I24.9, I25.10, I25.110, I25.111, I25.118, I25.119, I25.5, I25.6, I25.700, I25.701, I25.708, I25.709, I25.710, I25.711, I25.718, I25.719, I25.720, I25.721, I25.728, I25.729, I25.730, I25.731, I25.738, I25.739, I25.750, I25.751, I25.758, I25.759, I25.760, I25.761, I25.768, I25.769, I25.790, I25.791, I25.798, I25.799, I25.810, I25.811, I25.812, I25.82, I25.89, I25.9, I63.00, I63.011, I63.012, I63.019, I63.02, I63.031, I63.032, I63.039, I63.09, I63.10, I63.111, I63.112, I63.119, I63.12, I63.131, I63.132, I63.139, I63.19, I63.20, I63.211, I63.212, I63.219, I63.22, I63.231, I63.232, I63.239, I63.29, I63.30, I63.311, I63.312, I63.319, I63.321, I63.322, I63.329, I63.331, I63.332, I63.339, I63.341, I63.342, I63.349, I63.39, I63.40, I63.411, I63.412, I63.419, I63.421, I63.422, I63.429, I63.431, I63.432, I63.439, I63.441, I63.442, I63.449, I63.49, I63.50, I63.511, I63.512, I63.519, I63.521, I63.522, I63.529, I63.531, I63.532, I63.539, I63.541, I63.542, I63.549, I63.59, I63.6, I63.8, I63.9, I65.01, I65.02, I65.03, I65.09, I65.1, I65.21, I65.22, I65.23, I65.29, I65.8, I65.9, I66.01, I66.02, I66.03, I66.09, I66.11, I66.12, I66.13, I66.19, I66.21, I66.22, I66.23, I66.29, I66.3, I66.8, I66.9, I70.1, I70.201, I70.202, I70.203, I70.208, I70.209, I70.211, I70.212, I70.213, I70.218, I70.219, I70.221, I70.222, I70.223, I70.228, I70.229, I70.231, I70.232, I70.233, I70.234, I70.235, I70.238, I70.239, I70.241, I70.242, I70.243, I70.244, I70.245, I70.248, I70.249, I70.25, I70.261, I70.262, I70.263, I70.268, I70.269, I70.291, I70.292, I70.293, I70.298, I70.299, I70.92, I74.10, I74.11, I74.19, I74.2, I74.3, I74.4, I74.5, I74.8, I74.9, I75.011, I75.012, I75.013, I75.019, I75.021, I75.022, I75.023, I75.029, I75.81, I75.89

**Accompanied by:**

**One of the following patient encounter codes:** 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215

- Report a numerator option on **all applicable** measures within the Cardiovascular Prevention Measures Group for each patient within the sample.
- Applicable measures contain patient demographic criteria specific to the measure. For example, diabetes criteria is applicable *only to patients 18-75 years* within the sample population, while the Tobacco Use: Screening and Cessation Intervention measure within this group applies to *all patients ≥ 18 years and older*. Reporting measure(s) from the group that are inapplicable to an individual patient will not affect the eligible provider's reporting or performance rate.
- Only patients with IVD or diabetes are included in this measures group.
- For patients with diabetes diagnosis, only need to report for those 18 through 75 years of age.
- If patient also has a diagnosis of HTN measure #236 should be reported.

**ICD-9-CM [for use 1/1/2014 – 9/30/2014]:** 401.0, 401.1, 401.9, 402.00, 402.01, 402.10, 402.11, 402.90, 402.91, 403.00, 403.01, 403.10, 403.11, 403.90, 403.91, 404.00, 404.01, 404.02, 404.03, 404.10, 404.11, 404.12, 404.13, 404.90, 404.91, 404.92, 404.93, 405.01, 405.09, 405.10, 405.19, 405.91, 405.99

**ICD-10-CM [for use 10/1/2014 - 12/31/2014]:** I10, I11.0, I11.9, I12.0, I12.9, I13.0, I13.10, I13.11, I13.2, I15.0, I15.1, I15.2, I15.8, I15.9

- If a patient does not have a diagnosis of HTN, measure #317 should be reported.
- The table below illustrates the applicable measures to report based on the denominator criteria the patient meets.

Diagnosis	Has HTN Diagnosis – Report these measures	Does not have HTN Diagnosis – Report these measures
Diabetes only*	2, 226, 236	2, 226, 317
IVD Only	204, 226, 236, 241	204, 226, 241, 317
Diabetes & IVD	2*, 204, 226, 236, 241	2*, 204, 226, 241, 317

\*Only report for patients aged 18-75 years

- Instructions for qualifying numerator option reporting for each of the measures within the Cardiovascular Prevention 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 G8764:** All quality actions for the applicable measures in the Cardiovascular Prevention Measures Group have been performed for this patient

- To report satisfactorily the Cardiovascular Prevention Measures Group 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 Aged 65 Years and Older 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 groups option.

◆ **Measure #2 (NQF 0064): Diabetes: Low Density Lipoprotein (LDL-C) Control (< 100 mg/dL)**

**DESCRIPTION:**

Percentage of patients aged 18-75 years of age with diabetes whose LDL-C was adequately controlled (< 100 mg/dL) during the measurement period

**NUMERATOR:**

Patients whose most recent LDL-C test is < 100 mg/ dL during the measurement period

***NUMERATOR NOTE:*** *The performance period for this measure is 12 months from the date of encounter. Also, the patient is not numerator compliant if the result for the most recent LDL-C test during the measurement period is ≥ 100 mg/dL, or is missing, or if an LDL-C test was not performed during the measurement period.*

**Numerator Options:**

Most recent LDL-C < 100 mg/dL **(3048F)**

**OR**

Most recent LDL-C 100-129 mg/dL **(3049F)**

**OR**

Most recent LDL-C ≥ 130 mg/dL **(3050F)**

**OR**

LDL-C was **not** performed during the performance period (12 months) **(3048F with 8P)**



◆ **Measure #204 (NQF 0068): Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antithrombotic**

**DESCRIPTION:**

Percentage of patients 18 years of age and older who were discharged alive for acute myocardial infarction (AMI), coronary artery bypass graft (CABG) or percutaneous coronary interventions (PCI) in the 12 months prior to the measurement period, or who had an active diagnosis of ischemic vascular disease (IVD) during the measurement period and who had documentation of use of aspirin or another antithrombotic during the measurement period

**NUMERATOR:**

Patients who are using aspirin or another antithrombotic therapy

**Numerator Instructions:** Oral antithrombotic therapy consists of aspirin, clopidogrel or combination of aspirin and extended release dipyridamole.

**NUMERATOR NOTE:** *The performance period for this measure is 12 months from the date of service.*

**Numerator Options:**

Aspirin or another antithrombotic therapy used (**G8598**)

**OR**

Aspirin or another antithrombotic therapy **not** used, reason not given (**G8599**)

**▲ Measure #226 (NQF 0028): Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention**

**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:**

Patient screened for tobacco use AND received tobacco cessation intervention (counseling, pharmacotherapy, or both), if identified as a tobacco user (**4004F**)

**OR**

Current tobacco non-user (**1036F**)

**OR**

Documentation of medical reason(s) for not screening for tobacco use (eg, limited life expectancy, other medical reasons) (**4004F** with **1P**)

**OR**

Tobacco screening OR tobacco cessation intervention **not** performed, reason not otherwise specified (**4004F** with **8P**)

**Measure #236 (NQF 0018): Controlling High Blood Pressure**

**DESCRIPTION:**

Percentage of patients 18 through 85 years of age who had a diagnosis of hypertension (HTN) within the first six months of the measurement period and whose blood pressure (BP) was adequately controlled (< 140/90 mmHg) during the measurement period

**NUMERATOR:**

Patients whose most recent blood pressure is adequately controlled (systolic blood pressure < 140 mmHg and diastolic blood pressure < 90 mmHg) during the measurement period

**Numerator Instructions:** To describe both systolic and diastolic blood pressure values, **each must be reported separately**. If there are multiple blood pressures on the same date of service, use the lowest systolic and lowest diastolic blood pressure on that date as the representative blood pressure.

**NUMERATOR NOTE:** *In reference to the numerator element, only blood pressure readings performed by a clinician in the provider office are acceptable for numerator compliance with this measure. Do not include blood pressure readings that meet the following criteria:*

- Blood pressure readings from the patient's home (including readings directly from monitoring devices).
- Taken during an outpatient visit which was for the sole purpose of having a diagnostic test or surgical procedure performed (e.g., sigmoidoscopy, removal of a mole).
- Obtained the same day as a major diagnostic or surgical procedure (e.g., stress test, administration of IV contrast for a radiology procedure, endoscopy).

*If no blood pressure is recorded during the measurement period, the patient's blood pressure is assumed "not controlled."*

**Numerator Options:**

*Systolic pressure (Select one (1) code from this section):*

Most recent systolic blood pressure < 140 mmHg (G8752)

**OR**

Most recent systolic blood pressure ≥ 140 mmHg (G8753)

**AND**

*Diastolic pressure (Select one (1) code from this section):*

Most recent diastolic blood pressure < 90 mmHg (G8754)

**OR**

Most recent diastolic blood pressure ≥ 90 mmHg (G8755)

**OR**

Documentation of end stage renal disease (ESRD), dialysis, renal transplant or pregnancy (G9231)

**OR**

No documentation of blood pressure measurement, reason not given (G8756)

**◆ Measure #241 (NQF 0075): Ischemic Vascular Disease (IVD): Complete Lipid Profile and LDL-C Control (< 100 mg/dL)**

**DESCRIPTION:**

Percentage of patients 18 years of age and older who were discharged alive for acute myocardial infarction (AMI), coronary artery bypass graft (CABG) or percutaneous coronary interventions (PCI) in the 12 months prior to the measurement period, or who had an active diagnosis of ischemic vascular disease (IVD) during the measurement period, and who had each of the following during the measurement period: a complete lipid profile and LDL-C was adequately controlled (< 100 mg/dL)

**NUMERATOR:**

Patients who received at least one lipid profile (or ALL component tests) with most recent LDL-C < 100 mg/dL

***NUMERATOR NOTE:*** *The performance period for this measure is 12 months from the date of service.*

**Numerator Options:**

Lipid panel results documented and reviewed (must include total cholesterol, HDL-C, triglycerides and calculated LDL-C) **(G8593)**

*Note: If LDL-C could not be calculated due to high triglycerides, count as complete lipid profile.*

**AND**

Most recent LDL-C < 100 mg/dL **(G8595)**

**OR**

Lipid profile **not** performed, reason not given **(G8594)**

**OR**

Lipid panel results documented and reviewed (must include total cholesterol, HDL-C, triglycerides and calculated LDL-C) **(G8593)**

**AND**

Most recent LDL-C  $\geq$  100 mg/dL **(G8597)**

♣ **Measure #317: Preventive Care and Screening: Screening for High Blood Pressure and Follow-Up Documented**

**DESCRIPTION:**

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

**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

**Numerator Note:** *Although recommended screening interval for a normal BP reading is every 2 years, to meet the intent of this measure, a BP screening must be performed once per measurement period. The intent of this measure is to screen patients for high blood pressure and provide recommended follow-up as indicated. Normal blood pressure follow-up is not recommended for patients with clinical or symptomatic hypotension.*

**Definitions:**

**BP Classification:** BP is defined by four BP reading classifications as listed in the “Recommended Blood Pressure Follow-Up” table below including Normal, Pre-Hypertensive, First Hypertensive, and Second Hypertensive Readings.

**Recommended BP Follow-Up:** The current *Report of the Joint National Committee on the Prevention, Detection, Evaluation, and Treatment of High Blood Pressure (JNC)* recommends BP screening intervals, lifestyle modifications and interventions based on BP Classification of the current BP reading as listed in the “Recommended BP Follow-Up” table below.

**Lifestyle Modifications:** The current JNC report outlines lifestyle modifications which must include one or more of the following as indicated: Weight Reduction, DASH Eating Plan, Dietary Sodium Restriction, Increased Physical Activity, or Moderation in Alcohol Consumption.

**Second Hypertensive Reading:** Requires both a BP reading of Systolic BP  $\geq 140$  mmHg OR Diastolic BP  $\geq 90$  mmHg during the current encounter AND a most recent BP reading within the last 12 months Systolic BP  $\geq 140$  mmHg OR Diastolic BP  $\geq 90$  mmHg.

**Second Hypertensive Reading Interventions:** The current JNC report outlines interventions based on BP Readings shown in the “Recommended BP Follow-up” table and must include one or more of the following as indicated: Anti-Hypertensive Pharmacologic Therapy, Laboratory Tests, or Electrocardiogram (ECG).

**Recommended Blood Pressure Follow-Up Table**

BP Classification	Systolic BP mmHg	Diastolic BP mmHg	Recommended Follow-Up (must include all indicated actions for each BP classification)
<b>Normal BP Reading</b>	< 120	AND < 80	<ul style="list-style-type: none"> <li>No Follow-Up required</li> </ul>
<b>Pre-Hypertensive BP Reading</b>	$\geq 120$ AND $\leq 139$	OR $\geq 80$ AND $\leq 89$	<ul style="list-style-type: none"> <li>Rescreen BP within a minimum of 1 year AND Recommend Lifestyle Modifications OR</li> <li>Referral to Alternative / Primary Care Provider</li> </ul>

BP Classification	Systolic BP mmHg	Diastolic BP mmHg	Recommended Follow-Up (must include all indicated actions for each BP classification)
<b>First Hypertensive BP Reading</b>	≥ 140	OR ≥ 90	<ul style="list-style-type: none"> <li>Rescreen BP within a minimum of ≥ 1 day and ≤ 4 weeks AND Recommend Lifestyle Modifications</li> <li>OR</li> <li>Referral to Alternative / Primary Care Provider</li> </ul>
<b>Second Hypertensive BP Reading</b>	≥ 140	OR ≥ 90	<ul style="list-style-type: none"> <li>Recommend Lifestyle Modifications AND one or more of the Second Hypertensive Reading Interventions (see definitions)</li> <li>OR</li> <li>Referral to Alternative / Primary Care Provider</li> </ul>

**Not Eligible** – A patient is **not** eligible if one or more of the following reason(s) are documented:

- Patient has an active diagnosis of hypertension
- Patient refuses to participate (either BP measurement or follow-up)
- Patient is in an urgent or emergent situation where time is of the essence and to delay treatment would jeopardize the patient's health status. This may include but is not limited to severely elevated BP when immediate medical treatment is indicated

**Numerator Options:**

Normal blood pressure reading documented, follow-up not required (**G8783**)

**OR**

Pre-Hypertensive or Hypertensive blood pressure reading documented, AND the indicated follow-up is documented (**G8950**)

**OR**

Blood pressure reading not documented, documentation the patient is not eligible (**G8784**)

**OR**

Pre-Hypertensive or Hypertensive blood pressure reading documented, indicated follow-up not documented, documentation the patient is not eligible (**G8951**)

**OR**

Blood pressure reading **not** documented, reason not given (**G8785**)

**OR**

Pre-Hypertensive or Hypertensive blood pressure reading documented, indicated follow-up **not** documented, reason not given (**G8952**)

## CARDIOVASCULAR PREVENTION MEASURES GROUP RATIONALE AND CLINICAL RECOMMENDATION STATEMENTS

### **Measure #2. Diabetes - Low Density Lipoprotein (LDL-C) Control (< 100 mg/dL)**

#### **RATIONALE:**

Diabetes mellitus (diabetes) is a group of diseases characterized by high blood glucose levels caused by the body's inability to correctly produce or utilize the hormone insulin. It is recognized as a leading cause of death and disability in the U.S. and is highly underreported as a cause of death. Diabetes may cause life-threatening, life-ending or life-altering complications, including poor cholesterol, specifically lipoprotein (LDL). Clinical guidelines recommend lifestyle modifications that include reducing intake of saturated fat, trans fat and cholesterol, weight loss, and increased physical activity (American Diabetes Association 2009). Statin therapy is suggested for eligible patients whose levels are consistently and significantly higher (American Diabetes Association 2009).

#### **CLINICAL RECOMMENDATION STATEMENTS:**

American Diabetes Association (2009): In most adult patients, measure fasting lipid profile at least annually. In adults with low-risk lipid values (LDL cholesterol < 100 mg/dL, HDL cholesterol > 50 mg/dl, and triglycerides < 150 mg/dl), lipid assessments may be repeated every 2 years.

American Association of Clinical Endocrinologists (2007): Aggressive management of dyslipidemia in patients with diabetes mellitus is critical; treat patients to achieve the following goal: LDL-C < 100 mg/dL (< 70 mg/dL is recommended for patients with diabetes mellitus and coronary artery disease).

### **Measure #204 - Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antithrombotic**

#### **RATIONALE:**

Coronary heart disease (CHD) is a major cause of death in the United States – in 2004, it was an underlying or contributing cause of death for 451,300 people (1 of every 5 deaths). Acute myocardial infarction (AMI) was an underlying or contributing cause of death for 156,000 people (American Heart Association 2008). In addition, nearly 16 million people (or 7.3 percent of the American population) had CHD in 2005 (American Heart Association 2008). The cost of cardiovascular diseases and stroke in the United States for 2008 was estimated at \$448.5 billion (American Heart Association 2008). This figure includes health expenditures (direct costs such as the cost of physicians and healthcare practitioners, hospital and nursing home services, medications, home health care and other medical durables) and lost productivity resulting from morbidity and mortality (indirect costs). AMI accounts for 18 percent of hospital discharges and 28 percent of deaths due to heart disease (National Heart, Lung, and Blood Institute 2000). Research has shown that costs associated with cardiovascular disease for hospitals are easily \$156 billion (American Heart Association 2008).

Aspirin treatments reduce MI in men (127 events per 100,000 person-years) and women (17 events per 100,000 person-years) (Grieving et al. 2008). While studies have shown warfarin to be more effective, aspirin is a safer, more convenient, and less expensive form of therapy (Patrono et al. 2004). Aspirin therapy has been shown to directly reduce the odds of cardiovascular events among men by 14 percent and among women by 12 percent (Berger et al. 2006). Aspirin use has been shown to reduce the number of strokes by 20 percent, MI by 30 percent, and other vascular events by 30 percent (Weisman and Graham 2002).

#### **CLINICAL RECOMMENDATION STATEMENTS:**

U.S. Preventive Services Task Force (2009):

The U.S. Preventive Services Task Force (USPSTF) strongly recommends that clinicians discuss aspirin chemoprevention with adults who are at increased risk (5-year risk of greater than or equal to 3 percent) for coronary heart disease (CHD). Discussions with patients should address both the potential benefits and harms of aspirin therapy.

The USPSTF found good evidence that aspirin decreases the incidence of coronary heart disease in adults who are at increased risk for heart disease. They also found good evidence that aspirin increases the incidence of gastrointestinal bleeding and fair evidence that aspirin increases the incidence of hemorrhagic strokes. The USPSTF concluded that the balance of benefits and harms is most favorable in patients at high risk of CHD (5-year risk of greater than or equal to 3 percent) but is also influenced by patient preferences.

USPSTF encourages men age 45 to 79 years to use aspirin when the potential benefit of a reduction in myocardial infarctions outweighs the potential harm of an increase in gastrointestinal hemorrhage. They encourage women age 55 to 79 years to use aspirin when the potential benefit of a reduction in ischemic strokes outweighs the potential harm of an increase in gastrointestinal hemorrhage.

American Diabetes Association (2008):

Use aspirin therapy (75-162 mg/day) as a primary prevention strategy in those with type 1 or 2 diabetes at increased cardiovascular risk, including those who are 40 years of age or who have additional risk factors (family history of CVD, hypertension, smoking, dyslipidemia, or albuminuria).

American Heart Association/American Stroke Association (2006):

AHA/ASA: The use of aspirin is recommended for cardiovascular (including but not specific to stroke) prophylaxis among persons whose risk is sufficiently high for the benefits to outweigh the risks associated with treatment (a 10-year risk of cardiovascular events of 6% to 10%).

American College of Clinical Pharmacy (2004):

For long-term treatment after PCI, the guideline developers recommend aspirin, 75 to 162 mg/day. For long-term treatment after PCI in patients who receive antithrombotic agents such as clopidogrel or warfarin, the guideline developers recommend lower-dose aspirin, 75 to 100 mg/day. For patients with ischemic stroke who are not receiving thrombolysis, the guideline developers recommend early aspirin therapy, 160 to 325 mg/day.

## **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 #236 - Controlling High Blood Pressure**

#### **RATIONALE:**

Hypertension is a very significant health issue in the United States. Fifty million or more Americans have high blood pressure that warrants treatment, according to the National Health and Nutrition Examination Survey (NHANES) survey (Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure 2003). The United States Preventive Services Task Force (USPSTF) recommends that clinicians screen adults aged 18 and older for high blood pressure (United States Preventive Services Task Force 2007).

The most frequent and serious complications of uncontrolled hypertension include coronary heart disease, congestive heart failure, stroke, ruptured aortic aneurysm, renal disease, and retinopathy. The increased risks of hypertension are present in individuals ranging from 40 to 89 years of age. For every 20 mmHg systolic or 10 mmHg diastolic increase in blood pressure, there is a doubling of mortality from both ischemic heart disease and stroke (Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure 2003).

Better control of blood pressure has been shown to significantly reduce the probability that these undesirable and costly outcomes will occur. The relationship between the measure (control of hypertension) and the long-term clinical outcomes listed is well established. In clinical trials, antihypertensive therapy has been associated with reductions in stroke incidence (35-40 percent), myocardial infarction incidence (20-25 percent) and heart failure incidence (>50 percent) (Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure 2003).

#### **CLINICAL RECOMMENDATION STATEMENTS:**

The United States Preventive Services Task Force (2007) recommends screening for high blood pressure in adults age 18 years and older. This is a grade A recommendation.

Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure (2003):  
Treating systolic blood pressure and diastolic blood pressure to targets that are <140/90 mmHg is associated with a decrease in cardiovascular disease complications.

### **Measure #241 - Ischemic Vascular Disease (IVD): Complete Lipid Profile and LDL-C Control (< 100 mg/dL)**

#### **RATIONALE:**

A 10 percent decrease in total cholesterol levels (population wide) may result in an estimated 30 percent reduction in the incidence of coronary heart disease (CHD) (Centers for Disease Control and Prevention 2000). Based on data from the Third Report of the Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults:

- Less than half of persons who qualify for any kind of lipid-modifying treatment for CHD risk reduction are receiving it
- Less than half of even the highest-risk persons, those who have symptomatic CHD, are receiving lipid-lowering treatment
- Only about a third of treated patients are achieving their LDL goal; less than 20 percent of CHD patients are at their LDL goal (National Cholesterol Education Program (NCEP) Expert Panel on Detection, Evaluation, and Treatment of High Blood Pressure 2002)

According to data from the Behavioral Risk Factor Surveillance System (BRFSS) from 1991–2003, the prevalence of cholesterol screening during the preceding 5 years increased from 67.3 percent in 1991 to 73.1 percent in 2003 (Centers for Disease Control and Prevention 2005).

Between 1988–94 and 1999–2002, the age-adjusted mean total serum cholesterol level of adults 20 years of age and older decreased from 206 mg/dL to 203 mg/dL, and LDL cholesterol levels decreased from 129 mg/dL to 123 mg/dL. The mean level of LDL cholesterol for American adults age 20 and older is 123 mg/dL (Carroll et al. 2005). However, even given this decrease, there is still a significant amount of room for improvement.

### **CLINICAL RECOMMENDATION STATEMENTS:**

Third report of the National Cholesterol Education Program (NCEP) Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults (Adult Treatment Panel III). (2001) AND Implications of recent clinical trials for the National Cholesterol Education Program Adult Treatment Panel III guidelines. (2004)

In high-risk persons, the recommended LDL-C goal is < 100 mg/dL.

- An LDL-C goal of < 70 mg/dL is a therapeutic option on the basis of available clinical trial evidence, especially for patients at very high risk.
- If LDL-C is >100 mg/dL, an LDL-lowering drug is indicated simultaneously with lifestyle changes.
- If baseline LDL-C is < 100 mg/dL, institution of an LDL-lowering drug to achieve an LDL-C level < 70 mg/dL is a therapeutic option on the basis of available clinical trial evidence.
- If a high-risk person has high triglycerides or low HDL-C, consideration can be given to combining a fibrate or nicotinic acid with an LDL-lowering drug. When triglycerides are > 200 mg/dL, non-HDL-C is a secondary target of therapy, with a goal 30 mg/dL higher than the identified LDL-C goal.

The U.S. Preventive Services Task Force (USPSTF) strongly recommends screening men aged 35 and older for lipid disorders and recommends screening men aged 20 to 35 for lipid disorders if they are at increased risk for coronary heart disease. The USPSTF also strongly recommends screening women aged 45 and older for lipid disorders if they are at increased risk for coronary heart disease and recommends screening women aged 20 to 45 for lipid disorders if they are at increased risk for coronary heart disease.

### **Measure #317 - Preventive Care and Screening: Screening for High Blood Pressure and Follow-Up Documented**

#### **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.

**CLINICAL RECOMMENDATION STATEMENTS:**

The U.S. Preventive Services Task Force (USPSTF) recommends screening for high blood pressure in adults age 18 years and older. This is a grade A recommendation.

## CATARACTS MEASURES GROUP OVERVIEW

### 2014 PQRS OPTIONS FOR MEASURES GROUPS:

#### 2014 PQRS MEASURES IN CATARACTS MEASURES GROUP:

- #191. Cataracts: 20/40 or Better Visual Acuity within 90 Days Following Cataract Surgery
- #192. Cataracts: Complications within 30 Days Following Cataract Surgery Requiring Additional Surgical Procedures
- #303. Cataracts: Improvement in Patient's Visual Function within 90 Days Following Cataract Surgery
- #304. Cataracts: Patient Satisfaction within 90 Days Following Cataract Surgery

#### 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.

**G8906:** I intend to report the Cataracts Measures Group

- Report the patient sample method:  
**20 Patient Sample Method:** 20 unique procedures (patients – a majority of which must be Medicare Part B FFS [fee for service] patients) meeting patient sample criteria for the measures group during the reporting period (January 1 through December 31, 2014 **OR** July 1 through December 31, 2014).
- Patient sample criteria for the Cataracts Measures Group are patients aged 18 years and older that have a specific procedure for cataract surgery performed:

**One of the following procedure codes indicating cataract surgery:** 66840, 66850, 66852, 66920, 66930, 66940, 66983, 66984

#### **WITHOUT**

Modifier 55 (postoperative management only) OR Modifier 56 (preoperative management only)

- For purposes of satisfactory reporting **all** measures contained within the Cataracts Measures Group, include only procedures performed through September 30 of the reporting period. Procedures performed October 1 through December 31 of the reporting period are not included.
- Measures #191 and #192 need only be reported when the patient also has a diagnosis of uncomplicated cataract. Refer to the measure specification on the following pages for specific codes indicating a diagnosis of uncomplicated cataract for each of these two measures.
- Report a numerator option on **all applicable** measures within the Cataracts Measures Group for each procedure (patient) within the eligible professional's patient sample.
- Instructions for qualifying numerator option reporting for each of the measures within the Cataracts 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 G8765:** All quality actions for the applicable measures in the Cataracts Measures Group have been performed for this patient

This measures group contains one or more inverse measures. An inverse measure is a measure that represents a poor clinical quality action as meeting performance for the measure. For these measures, a lower performance rate indicates a higher quality of clinical care. Composite codes for measures groups that contain inverse measures are only utilized when the appropriate quality clinical care is given.

The composite code for this measures group may be reported when codes in the summary table below are applicable for reporting of each measure within the measures group.

Measure	#191	#192*	#303	#304
<b>QDC options for acceptable use of the composite QDC</b>	4175F	G8628	G0913	G0916

\*Indicates an inverse measure

- To report satisfactorily the Cataracts Measures Group it requires **all applicable** measures for each patient within the eligible professional's patient sample to be reported each time a cataract surgery is performed 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 Aged 65 Years and Older 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. When a lower rate indicates better performance, such as Measure #192, a 0% performance rate will be counted as satisfactorily reporting (100% performance rate would not 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 groups option.

**\* Measure #191 (NQF 0565): Cataracts: 20/40 or Better Visual Acuity within 90 Days Following Cataract Surgery**

**DESCRIPTION:**

Percentage of patients aged 18 years and older with a diagnosis of uncomplicated cataract who had cataract surgery and no significant ocular conditions impacting the visual outcome of surgery and had best-corrected visual acuity of 20/40 or better (distance or near) achieved within 90 days following the cataract surgery

**Note: This is an outcome measure and can be calculated solely using registry data.**

- For patients who receive the cataract surgical procedures specified in the common denominator coding, it should be reported whether or not the patient had best-corrected visual acuity of 20/40 or better achieved within 90 days following cataract surgery.
- Patients who have any of the listed significant ocular conditions [comorbid] in the exclusion criteria should be removed from the denominator; these patients have existing ocular conditions that could impact the outcome of surgery and are not included in the measure calculation for those patients who have best-corrected visual acuity of 20/40 or better (distance or near) achieved within 90 days following the cataract surgery.
- Include only procedures performed through **September 30<sup>th</sup>** of the reporting period. This will allow the post-operative period to occur within the reporting year.

*(Patients with documentation of any of the following significant ocular conditions that impact the visual outcome of surgery prior to date of cataract surgery are excluded from the measure calculation)*

<b>Significant Ocular Condition</b>	<b>Corresponding ICD-9-CM Codes [for use 1/1/2014 – 9/30/2014]</b>
Acute and Subacute Iridocyclitis	364.00, 364.01, 364.02, 364.03, 364.04, 364.05
Amblyopia	368.01, 368.02, 368.03
Burn Confined to Eye and Adnexa	940.0, 940.1, 940.2, 940.3, 940.4, 940.5, 940.9
Cataract Secondary to Ocular Disorders	366.32, 366.33
Central Corneal Ulcer	370.03
Certain Types of Iridocyclitis	364.21, 364.22, 364.23, 364.24, 364.3
Choroidal Degenerations	363.43
Choroidal Detachment	363.72
Choroidal Hemorrhage and Rupture	363.61, 363.62, 363.63
Chorioretinal Scars	363.30, 363.31, 363.32, 363.33, 363.35
Chronic Iridocyclitis	364.10, 364.11
Cloudy Cornea	371.01, 371.02, 371.03, 371.04
Corneal Opacity and Other Disorders of Cornea	371.00, 371.03, 371.04
Corneal Edema	371.20, 371.21, 371.22, 371.23, 371.43, 371.44
Degeneration of Macula and Posterior Pole	362.50, 362.51, 362.52, 362.53, 362.54, 362.55, 362.56, 362.57
Degenerative Disorders of Globe	360.20, 360.21, 360.23, 360.24, 360.29
Diabetic Macular Edema	362.07
Diabetic Retinopathy	362.01, 362.02, 362.03, 362.04, 362.05, 362.06
Disorders of Optic Chiasm	377.51, 377.52, 377.53, 377.54
Disorders of Visual Cortex	377.75
Disseminated Chorioretinitis and Disseminated Retinochoroiditis	363.10, 363.11, 363.12, 363.13, 363.14, 363.15

<b>Significant Ocular Condition</b>	<b>Corresponding ICD-9-CM Codes [for use 1/1/2014 – 9/30/2014]</b>
Focal Chorioretinitis and Focal Retinochoroiditis	363.00, 363.01, 363.03, 363.04, 363.05, 363.06, 363.07, 363.08
Glaucoma	365.10, 365.11, 365.12, 365.13, 365.14, 365.15, 365.20, 365.21, 365.22, 365.23, 365.24, 365.31, 365.32, 365.51, 365.52, 365.59, 365.60, 365.61, 365.62, 365.63, 365.64, 365.65, 365.81, 365.82, 365.83, 365.89
Glaucoma Associated with Congenital Anomalies, Dystrophies, and Systemic Syndromes	365.41, 365.42, 365.43, 365.44, 365.60, 365.61, 365.62, 365.63, 365.64, 365.65, 365.81, 365.82, 365.83, 365.89, 365.9
Hereditary Choroidal Dystrophies	363.50, 363.51, 363.52, 363.53, 363.54, 363.55, 363.56, 363.57
Hereditary Corneal Dystrophies	371.50, 371.51, 371.52, 371.53, 371.54, 371.55, 371.56, 371.57, 371.58
Hereditary Retinal Dystrophies	362.70, 362.71, 362.72, 362.73, 362.74, 362.75, 362.76
Injury to Optic Nerve and Pathways	950.0, 950.1, 950.2, 950.3, 950.9
Moderate or Severe Impairment, Better Eye, Profound Impairment Lesser Eye	369.10, 369.11, 369.12, 369.13, 369.14, 369.15, 369.16, 369.17, 369.18
Nystagmus and Other Irregular Eye Movements	379.51
Open Wound of Eyeball	871.0, 871.1, 871.2, 871.3, 871.4, 871.5, 871.6, 871.7, 871.9, 921.3
Optic Atrophy	377.10, 377.11, 377.12, 377.13, 377.14, 377.15, 377.16
Optic Neuritis	377.30, 377.31, 377.32, 377.33, 377.34, 377.39
Other Background Retinopathy and Retinal Vascular Changes	362.12, 362.16, 362.18
Other Corneal Deformities	371.70, 371.71, 371.72, 371.73
Other Disorders of Optic Nerve	377.41
Other Disorders of Sclera	379.11, 379.12
Other Endophthalmitis	360.11, 360.12, 360.13, 360.14, 360.19
Other Proliferative Retinopathy	362.20, 362.21, 362.22, 362.23, 362.24, 362.25, 362.26, 362.27
Other Retinal Disorders	362.81, 362.82, 362.83, 362.84, 362.85, 362.89
Other and Unspecified Forms of Chorioretinitis and Retinochoroiditis	363.20, 363.21, 363.22
Pathologic Myopia	360.20, 360.21
Prior Penetrating Keratoplasty	371.60, 371.61, 371.62
Profound Impairment, Both Eyes	369.00, 369.01, 369.02, 369.03, 369.04, 369.05, 369.06, 369.07, 369.08
Purulent Endophthalmitis	360.00, 360.01, 360.02, 360.03, 360.04
Retinal Detachment with Retinal Defect	361.00, 361.01, 361.02, 361.03, 361.04, 361.05, 361.06, 361.07
Retinal Vascular Occlusion	362.31, 362.32, 362.35, 362.36
Scleritis and Episcleritis	379.04, 379.05, 379.06, 379.07, 379.09
Separation of Retinal Layers	362.41, 362.42, 362.43

<b>Significant Ocular Condition</b>	<b>Corresponding ICD-9-CM Codes [for use 1/1/2014 – 9/30/2014]</b>
Uveitis	360.11, 360.12
Visual Field Defects	368.41

<b>Significant Ocular Condition</b>	<b>Corresponding ICD-10-CM Codes [for use 10/1/2014 – 12/31/2014]</b>
Acute and Subacute Iridocyclitis	H20.00, H20.011, H20.012, H20.013, H20.019, H20.021, H20.022, H20.023, H20.029, H20.031, H20.032, H20.033, H20.039, H20.041, H20.042, H20.043, H20.049, H20.051, H20.052, H20.053, H20.059
Amblyopia	H53.011, H53.012, H53.013, H53.019, H53.021, H53.022, H53.023, H53.029, H53.031, H53.032, H53.033, H53.039
Burn Confined to Eye and Adnexa	T26.00XA, T26.01XA, T26.02XA, T26.10XA, T26.11XA, T26.12XA, T26.20XA, T26.21XA, T26.22XA, T26.30XA, T26.31XA, T26.32XA, T26.40XA, T26.41XA, T26.42XA, T26.50XA, T26.51XA, T26.52XA, T26.60XA, T26.61XA, T26.62XA, T26.70XA, T26.71XA, T26.72XA, T26.80XA, T26.81XA, T26.82XA, T26.90XA, T26.91XA, T26.92XA
Cataract Secondary to Ocular Disorders	H26.211, H26.212, H26.213, H26.219, H26.221, H26.222, H26.223, H26.229
Central Corneal Ulcer	H16.011, H16.012, H16.013, H16.019
Certain Types of Iridocyclitis	H20.20, H20.21, H20.22, H20.23, H20.811, H20.812, H20.813, H20.819, H20.821, H20.822, H20.823, H20.829, H20.9, H40.40X0
Choroidal Degenerations	H35.33
Choroidal Detachment	H31.411, H31.412, H31.413, H31.419
Choroidal Hemorrhage and Rupture	H31.301, H31.302, H31.303, H31.309, H31.311, H31.312, H31.313, H31.319, H31.321, H31.322, H31.323, H31.329
Chorioretinal Scars	H31.001, H31.002, H31.003, H31.009, H31.011, H31.012, H31.013, H31.019, H31.021, H31.022, H31.023, H31.029, H31.091, H31.092, H31.093, H31.099
Chronic Iridocyclitis	A18.54, H20.10, H20.11, H20.12, H20.13, H20.9
Cloudy Cornea	H17.00, H17.01, H17.02, H17.03, H17.10, H17.11, H17.12, H17.13, H17.811, H17.812, H17.813, H17.819, H17.821, H17.822, H17.823, H17.829
Corneal Opacity and Other Disorders of Cornea	H17.00, H17.01, H17.02, H17.03, H17.10, H17.11, H17.12, H17.13, H17.89, H17.9
Corneal Edema	H18.10, H18.11, H18.12, H18.13, H18.20, H18.221, H18.222, H18.223, H18.229, H18.231, H18.232, H18.233, H18.239, H18.421, H18.422, H18.423, H18.429, H18.43
Degeneration of Macula and Posterior Pole	H35.30, H35.31, H35.32, H35.341, H35.342, H35.343, H35.349, H35.351, H35.352, H35.353, H35.359, H35.361, H35.362, H35.363, H35.369, H35.371, H35.372, H35.373, H35.379, H35.381, H35.382, H35.383, H35.389
Degenerative Disorders of Globe	H44.20, H44.21, H44.22, H44.23, H44.311, H44.312, H44.313, H44.319, H44.321, H44.322, H44.323, H44.329, H44.391, H44.392, H44.393, H44.399



<b>Significant Ocular Condition</b>	<b>Corresponding ICD-10-CM Codes [for use 10/1/2014 – 12/31/2014]</b>
Diabetic Macular Edema	E08.311, E08.321, E08.331, E08.341, E08.351, E09.311, E09.321, E09.331, E09.341, E09.351, E10.311, E10.321, E10.331, E10.341, E10.351, E11.311, E11.321, E11.331, E11.341, E11.351, E13.311, E13.321, E13.331, E13.341, E13.351
Diabetic Retinopathy	E08.311, E08.319, E08.321, E08.329, E08.331, E08.339, E08.341, E08.349, E08.351, E08.359, E09.311, E09.319, E09.321, E09.329, E09.331, E09.339, E09.341, E09.349, E09.351, E09.359, E10.311, E10.319, E10.321, E10.329, E10.331, E10.339, E10.341, E10.349, E10.351, E10.359, E11.311, E11.319, E11.321, E11.329, E11.331, E11.339, E11.341, E11.349, E11.351, E11.359, E13.311, E13.319, E13.321, E13.329, E13.331, E13.339, E13.341, E13.349, E13.351, E13.359
Disorders of Optic Chiasm	H47.41, H47.42, H47.43, H47.49
Disorders of Visual Cortex	H47.611, H47.612, H47.619
Disseminated Chorioretinitis and Disseminated Retinochoroiditis	A18.53, H30.101, H30.102, H30.103, H30.109, H30.111, H30.112, H30.113, H30.119, H30.121, H30.122, H30.123, H30.129, H30.131, H30.132, H30.133, H30.139, H30.141, H30.142, H30.143, H30.149
Focal Chorioretinitis and Focal Retinochoroiditis	H30.001, H30.002, H30.003, H30.009, H30.011, H30.012, H30.013, H30.019, H30.021, H30.022, H30.023, H30.029, H30.031, H30.032, H30.033, H30.039, H30.041, H30.042, H30.043, H30.049

Significant Ocular Condition	Corresponding ICD-10-CM Codes [for use 10/1/2014 – 12/31/2014]
Glaucoma	H40.10X0, H40.10X1, H40.10X2, H40.10X3, H40.10X4, H40.11X0, H40.11X1, H40.11X2, H40.11X3, H40.11X4, H40.1210, H40.1211, H40.1212, H40.1213, H40.1214, H40.1220, H40.1221, H40.1222, H40.1223, H40.1224, H40.1230, H40.1231, H40.1232, H40.1233, H40.1234, H40.1290, H40.1291, H40.1292, H40.1293, H40.1294, H40.1310, H40.1311, H40.1312, H40.1313, H40.1314, H40.1320, H40.1321, H40.1322, H40.1323, H40.1324, H40.1330, H40.1331, H40.1332, H40.1333, H40.1334, H40.1390, H40.1391, H40.1392, H40.1393, H40.1394, H40.1410, H40.1411, H40.1412, H40.1413, H40.1414, H40.1420, H40.1421, H40.1422, H40.1423, H40.1424, H40.1430, H40.1431, H40.1432, H40.1433, H40.1434, H40.1490, H40.1491, H40.1492, H40.1493, H40.1494, H40.151, H40.152, H40.153, H40.159, H40.20X0, H40.20X1, H40.20X2, H40.20X3, H40.20X4, H40.211, H40.212, H40.213, H40.219, H40.2210, H40.2211, H40.2212, H40.2213, H40.2214, H40.2220, H40.2221, H40.2222, H40.2223, H40.2224, H40.2230, H40.2231, H40.2232, H40.2233, H40.2234, H40.2290, H40.2291, H40.2292, H40.2293, H40.2294, H40.231, H40.232, H40.233, H40.239, H40.241, H40.242, H40.243, H40.249, H40.30X0, H40.30X1, H40.30X2, H40.30X3, H40.30X4, H40.31X0, H40.31X1, H40.31X2, H40.31X3, H40.31X4, H40.32X0, H40.32X1, H40.32X2, H40.32X3, H40.32X4, H40.33X0, H40.33X1, H40.33X2, H40.33X3, H40.33X4, H40.40X0, H40.40X1, H40.40X2, H40.40X3, H40.40X4, H40.41X0, H40.41X1, H40.41X2, H40.41X3, H40.41X4, H40.42X0, H40.42X1, H40.42X2, H40.42X3, H40.42X4, H40.43X0, H40.43X1, H40.43X2, H40.43X3, H40.43X4, H40.50X0, H40.50X1, H40.50X2, H40.50X3, H40.50X4, H40.51X0, H40.51X1, H40.51X2, H40.51X3, H40.51X4, H40.52X0, H40.52X1, H40.52X2, H40.52X3, H40.52X4, H40.53X0, H40.53X1, H40.53X2, H40.53X3, H40.53X4, H40.60X0, H40.60X1, H40.60X2, H40.60X3, H40.60X4, H40.61X0, H40.61X1, H40.61X2, H40.61X3, H40.61X4, H40.62X0, H40.62X1, H40.62X2, H40.62X3, H40.62X4, H40.63X0, H40.63X1, H40.63X2, H40.63X3, H40.63X4, H40.811, H40.812, H40.813, H40.819, H40.821, H40.822, H40.823, H40.829, H40.831, H40.832, H40.833, H40.839, H40.89, Q15.0

<b>Significant Ocular Condition</b>	<b>Corresponding ICD-10-CM Codes [for use 10/1/2014 – 12/31/2014]</b>
Glaucoma Associated with Congenital Anomalies, Dystrophies, and Systemic Syndromes	H40.30X0, H40.30X1, H40.30X2, H40.30X3, H40.30X4, H40.31X0, H40.31X1, H40.31X2, H40.31X3, H40.31X4, H40.32X0, H40.32X1, H40.32X2, H40.32X3, H40.32X4, H40.33X0, H40.33X1, H40.33X2, H40.33X3, H40.33X4, H40.40X0, H40.40X1, H40.40X2, H40.40X3, H40.40X4, H40.41X0, H40.41X1, H40.41X2, H40.41X3, H40.41X4, H40.42X0, H40.42X1, H40.42X2, H40.42X3, H40.42X4, H40.43X0, H40.43X1, H40.43X2, H40.43X3, H40.43X4, H40.50X0, H40.50X1, H40.50X2, H40.50X3, H40.50X4, H40.51X0, H40.51X1, H40.51X2, H40.51X3, H40.51X4, H40.52X0, H40.52X1, H40.52X2, H40.52X3, H40.52X4, H40.53X0, H40.53X1, H40.53X2, H40.53X3, H40.53X4, H40.811, H40.812, H40.813, H40.819, H40.821, H40.822, H40.823, H40.829, H40.831, H40.832, H40.833, H40.839, H40.89, H40.9, H42
Hereditary Choroidal Dystrophies	H31.20, H31.21, H31.22, H31.23, H31.29
Hereditary Corneal Dystrophies	H18.50, H18.51, H18.52, H18.53, H18.54, H18.55, H18.59
Hereditary Retinal Dystrophies	H35.50, H35.51, H35.52, H35.53, H35.54, H36
Injury to Optic Nerve and Pathways	S04.011A, S04.012A, S04.019A, S04.02XA, S04.031A, S04.032A, S04.039A, S04.041A, S04.042A, S04.049A
Moderate or Severe Impairment, Better Eye, Profound Impairment Lesser Eye	H54.10, H54.11, H54.12
Nystagmus and Other Irregular Eye Movements	H55.01
Open Wound of Eyeball	S05.10XA, S05.11XA, S05.12XA, S05.20XA, S05.21XA, S05.22XA, S05.30XA, S05.31XA, S05.32XA, S05.50XA, S05.51XA, S05.52XA, S05.60XA, S05.61XA, S05.62XA, S05.70XA, S05.71XA, S05.72XA, S05.8X1A, S05.8X2A, S05.8X9A, S05.90XA, S05.91XA, S05.92XA
Optic Atrophy	H47.20, H47.211, H47.212, H47.213, H47.219, H47.22, H47.231, H47.232, H47.233, H47.239, H47.291, H47.292, H47.293, H47.299
Optic Neuritis	H46.00, H46.01, H46.02, H46.03, H46.10, H46.11, H46.12, H46.13, H46.2, H46.3, H46.8, H46.9
Other Background Retinopathy and Retinal Vascular Changes	H35.021, H35.022, H35.023, H35.029, H35.051, H35.052, H35.053, H35.059, H35.061, H35.062, H35.063, H35.069
Other Corneal Deformities	H18.70, H18.711, H18.712, H18.713, H18.719, H18.721, H18.722, H18.723, H18.729, H18.731, H18.732, H18.733, H18.739, H18.791, H18.792, H18.793, H18.799
Other Disorders of Optic Nerve	H47.011, H47.012, H47.013, H47.019
Other Disorders of Sclera	H15.831, H15.832, H15.833, H15.839, H15.841, H15.842, H15.843, H15.849
Other Endophthalmitis	H16.241, H16.242, H16.243, H16.249, H21.331, H21.332, H21.333, H21.339, H33.121, H33.122, H33.123, H33.129, H44.111, H44.112, H44.113, H44.119, H44.121, H44.122, H44.123, H44.129, H44.131, H44.132, H44.133, H44.139, H44.19

<b>Significant Ocular Condition</b>	<b>Corresponding ICD-10-CM Codes [for use 10/1/2014 – 12/31/2014]</b>
Other Proliferative Retinopathy	H35.101, H35.102, H35.103, H35.109, H35.111, H35.112, H35.113, H35.119, H35.121, H35.122, H35.123, H35.129, H35.131, H35.132, H35.133, H35.139, H35.141, H35.142, H35.143, H35.149, H35.151, H35.152, H35.153, H35.159, H35.161, H35.162, H35.163, H35.169, H35.171, H35.172, H35.173, H35.179
Other Retinal Disorders	H35.60, H35.61, H35.62, H35.63, H35.81, H35.82, H35.89
Other and Unspecified Forms of Choroiditis and Retinochoroiditis	H30.20, H30.21, H30.22, H30.23, H30.811, H30.812, H30.813, H30.819, H30.891, H30.892, H30.893, H30.899, H30.90, H30.91, H30.92, H30.93
Pathologic Myopia	H44.20, H44.21, H44.22, H44.23, H44.30
Prior Penetrating Keratoplasty	H18.601, H18.602, H18.603, H18.609, H18.611, H18.612, H18.613, H18.619, H18.621, H18.622, H18.623, H18.629
Profound Impairment, Both Eyes	H54.0, H54.10
Purulent Endophthalmitis	H44.001, H44.002, H44.003, H44.009, H44.011, H44.012, H44.013, H44.019, H44.021, H44.022, H44.023, H44.029
Retinal Detachment with Retinal Defect	H33.001, H33.002, H33.003, H33.009, H33.011, H33.012, H33.013, H33.019, H33.021, H33.022, H33.023, H33.029, H33.031, H33.032, H33.033, H33.039, H33.041, H33.042, H33.043, H33.049, H33.051, H33.052, H33.053, H33.059, H33.8
Retinal Vascular Occlusion	H34.10, H34.11, H34.12, H34.13, H34.231, H34.232, H34.233, H34.239, H34.811, H34.812, H34.813, H34.819, H34.831, H34.832, H34.833, H34.839
Scleritis and Episcleritis	A18.51, H15.021, H15.022, H15.023, H15.029, H15.031, H15.032, H15.033, H15.039, H15.041, H15.042, H15.043, H15.049, H15.051, H15.052, H15.053, H15.059, H15.091, H15.092, H15.093, H15.099
Separation of Retinal Layers	H35.711, H35.712, H35.713, H35.719, H35.721, H35.722, H35.723, H35.729, H35.731, H35.732, H35.733, H35.739
Uveitis	H44.111, H44.112, H44.113, H44.119, H44.131, H44.132, H44.133, H44.139
Visual Field Defects	H53.411, H53.412, H53.413, H53.419

**NUMERATOR:**

Patients who had best-corrected visual acuity of 20/40 or better (distance or near) achieved within 90 days following cataract surgery

**Numerator Options:**

Best-corrected visual acuity of 20/40 or better (distance or near) achieved within 90 days following cataract surgery (**4175F**)

**OR**

Best-corrected visual acuity of 20/40 or better (distance or near) **not** achieved within 90 days following cataract surgery, reason not otherwise specified (**4175F with 8P**)

**\* Measure #192 (NQF 0564): Cataracts: Complications within 30 Days Following Cataract Surgery Requiring Additional Surgical Procedures**

**DESCRIPTION:**

Percentage of patients aged 18 years and older with a diagnosis of uncomplicated cataract who had cataract surgery and had any of a specified list of surgical procedures in the 30 days following cataract surgery which would indicate the occurrence of any of the following major complications: retained nuclear fragments, endophthalmitis, dislocated or wrong power IOL, retinal detachment, or wound dehiscence

**Note: This is an outcome measure and can be calculated solely using registry data.**

- For patients who receive the cataract surgical procedures specified in the denominator coding, claims should be reviewed to determine if any of the procedure codes listed in the numerator were performed within 30 days of the date of cataract surgery.
- Patients who have any of the listed significant ocular [comorbid] conditions in the exclusion criteria should be removed from the denominator, and not considered as having a complication within 30 days following cataract surgery.

*(Patients with documentation of one or more of the following significant ocular conditions prior to date of cataract surgery are excluded from the measure calculation)*

<b>Significant Ocular Condition</b>	<b>Corresponding ICD-9-CM Codes [for use 1/1/2014 – 9/30/2014]</b>
Acute and Subacute Iridocyclitis	364.00, 364.01, 364.02, 364.03, 364.04, 364.05
Adhesions and Disruptions of Iris and Ciliary Body	364.70, 364.71, 364.72, 364.73, 364.74, 364.75, 364.76, 364.77, 364.81, 364.82, 364.89
Anomalies of Puillary Function	379.42
Aphakia and Other Disorders of Lens	379.32, 379.33, 379.34
Burn Confined to Eye and Adnexa	940.0, 940.1, 940.2, 940.3, 940.4, 940.5, 940.9
Cataract Secondary to Ocular Disorders	366.32, 366.33
Cataract, Congenital	743.30
Cataract, Mature or Hypermature	366.9
Cataract, Posterior Polar	743.31
Central Corneal Ulcer	370.03
Certain Types of Iridocyclitis	364.21, 364.22, 364.23, 364.24, 364.3
Chronic Iridocyclitis	364.10, 364.11
Cloudy Cornea	371.01, 371.02, 371.03, 371.04
Corneal Opacity and Other Disorders of Cornea	371.00, 371.03, 371.04
Corneal Edema	371.20, 371.21, 371.22, 371.23, 371.43, 371.44

<b>Significant Ocular Condition</b>	<b>Corresponding ICD-9-CM Codes [for use 1/1/2014 – 9/30/2014]</b>
Cysts of Iris, Ciliary Body, and Anterior Chamber	364.60, 364.61, 364.62, 364.63, 364.64
Enophthalmos	376.50, 376.51, 376.52
Glaucoma	365.10, 365.11, 365.12, 365.13, 365.14, 365.15, 365.20, 365.21, 365.22, 365.23, 365.24, 365.31, 365.32, 365.51, 365.52, 365.59, 365.60, 365.61, 365.62, 365.63, 365.64, 365.65, 365.81, 365.82, 365.83, 365.89
Hereditary Corneal Dystrophies	371.50, 371.51, 371.52, 371.53, 371.54, 371.55, 371.56, 371.57, 371.58
High Hyperopia	367.0
Hypotony of Eye	360.30, 360.31, 360.32, 360.33, 360.34
Injury to Optic Nerve and Pathways	950.0, 950.1, 950.2, 950.3, 950.9
Open Wound of Eyeball	871.0, 871.1, 871.2, 871.3, 871.4, 871.5, 871.6, 871.7, 871.9, 921.3
Pathologic Myopia	360.20, 360.21
Posterior Lenticonus	743.36
Prior Pars Plana Vitrectomy	67036, 67039, 67040, 67041, 67042, 67043 (patient with history of this procedure)
Pseudoexfoliation Syndrome	365.52
Retrolental Fibroplasias	362.21
Senile Cataract	366.11
Traumatic Cataract	366.20, 366.21, 366.22, 366.23
Use of Systemic Sympathetic Alpha-1a Antagonist Medication for Treatment of Prostatic Hypertrophy	Patient taking tamsulosin hydrochloride
Uveitis	360.11, 360.12
Vascular Disorders of Iris and Ciliary Body	364.42

<b>Significant Ocular Condition</b>	<b>Corresponding ICD-10-CM Codes [for use 10/1/2014 – 12/31/2014]</b>
Acute and Subacute Iridocyclitis	H20.00, H20.011, H20.012, H20.013, H20.019, H20.021, H20.022, H20.023, H20.029, H20.031, H20.032, H20.033, H20.039, H20.041, H20.042, H20.043, H20.049, H20.051, H20.052, H20.053, H20.059

<b>Significant Ocular Condition</b>	<b>Corresponding ICD-10-CM Codes [for use 10/1/2014 – 12/31/2014]</b>
Adhesions and Disruptions of Iris and Ciliary Body	H21.40, H21.41, H21.42, H21.43, H21.501, H21.502, H21.503, H21.509, H21.511, H21.512, H21.513, H21.519, H21.521, H21.522, H21.523, H21.529, H21.531, H21.532, H21.533, H21.539, H21.541, H21.542, H21.543, H21.549, H21.551, H21.552, H21.553, H21.559, H21.561, H21.562, H21.563, H21.569, H21.81, H21.82, H21.89, H22
Anomalies of Puillary Function	H57.03
Aphakia and Other Disorders of Lens	H27.10, H27.111, H27.112, H27.113, H27.119, H27.121, H27.122, H27.123, H27.129, H27.131, H27.132, H27.133, H27.139
Burn Confined to Eye and Adnexa	T26.00XA, T26.01XA, T26.02XA, T26.10XA, T26.11XA, T26.12XA, T26.20XA, T26.21XA, T26.22XA, T26.30XA, T26.31XA, T26.32XA, T26.40XA, T26.41XA, T26.42XA, T26.50XA, T26.51XA, T26.52XA, T26.60XA, T26.61XA, T26.62XA, T26.70XA, T26.71XA, T26.72XA, T26.80XA, T26.81XA, T26.82XA, T26.90XA, T26.91XA, T26.92XA
Cataract Secondary to Ocular Disorders	H26.211, H26.212, H26.213, H26.219, H26.221, H26.222, H26.223, H26.229
Cataract, Congenital	Q12.0
Cataract, Mature or Hypermature	H26.9
Cataract, Posterior Polar	Q12.0
Central Corneal Ulcer	H16.011, H16.012, H16.013, H16.019
Certain Types of Iridocyclitis	H20.20, H20.21, H20.22, H20.23, H20.811, H20.812, H20.813, H20.819, H20.821, H20.822, H20.823, H20.829, H20.9, H40.40X0
Chronic Iridocyclitis	A18.54, H20.10, H20.11, H20.12, H20.13, H20.9
Cloudy Cornea	H17.00, H17.01, H17.02, H17.03, H17.10, H17.11, H17.12, H17.13, H17.811, H17.812, H17.813, H17.819, H17.821, H17.822, H17.823, H17.829
Corneal Opacity and Other Disorders of Cornea	H17.00, H17.01, H17.02, H17.03, H17.10, H17.11, H17.12, H17.13, H17.89, H17.9
Corneal Edema	H18.10, H18.11, H18.12, H18.13, H18.20, H18.221, H18.222, H18.223, H18.229, H18.231, H18.232, H18.233, H18.239, H18.421, H18.422, H18.423, H18.429, H18.43
Cysts of Iris, Ciliary Body, and Anterior Chamber	H21.301, H21.302, H21.303, H21.309, H21.311, H21.312, H21.313, H21.319, H21.321, H21.322, H21.323, H21.329, H21.341, H21.342, H21.343, H21.349, H21.351, H21.352, H21.353, H21.359
Enophthalmos	H05.401, H05.402, H05.403, H05.409, H05.411, H05.412, H05.413, H05.419, H05.421, H05.422, H05.423, H05.429

Significant Ocular Condition	Corresponding ICD-10-CM Codes [for use 10/1/2014 – 12/31/2014]
Glaucoma	H40.10X0, H40.10X1, H40.10X2, H40.10X3, H40.10X4, H40.11X0, H40.11X1, H40.11X2, H40.11X3, H40.11X4, H40.1210, H40.1211, H40.1212, H40.1213, H40.1214, H40.1220, H40.1221, H40.1222, H40.1223, H40.1224, H40.1230, H40.1231, H40.1232, H40.1233, H40.1234, H40.1290, H40.1291, H40.1292, H40.1293, H40.1294, H40.1310, H40.1311, H40.1312, H40.1313, H40.1314, H40.1320, H40.1321, H40.1322, H40.1323, H40.1324, H40.1330, H40.1331, H40.1332, H40.1333, H40.1334, H40.1390, H40.1391, H40.1392, H40.1393, H40.1394, H40.1410, H40.1411, H40.1412, H40.1413, H40.1414, H40.1420, H40.1421, H40.1422, H40.1423, H40.1424, H40.1430, H40.1431, H40.1432, H40.1433, H40.1434, H40.1490, H40.1491, H40.1492, H40.1493, H40.1494, H40.151, H40.152, H40.153, H40.159, H40.20X0, H40.20X1, H40.20X2, H40.20X3, H40.20X4, H40.211, H40.212, H40.213, H40.219, H40.2210, H40.2211, H40.2212, H40.2213, H40.2214, H40.2220, H40.2221, H40.2222, H40.2223, H40.2224, H40.2230, H40.2231, H40.2232, H40.2233, H40.2234, H40.2290, H40.2291, H40.2292, H40.2293, H40.2294, H40.231, H40.232, H40.233, H40.239, H40.241, H40.242, H40.243, H40.249, H40.30X0, H40.30X1, H40.30X2, H40.30X3, H40.30X4, H40.31X0, H40.31X1, H40.31X2, H40.31X3, H40.31X4, H40.32X0, H40.32X1, H40.32X2, H40.32X3, H40.32X4, H40.33X0, H40.33X1, H40.33X2, H40.33X3, H40.33X4, H40.40X0, H40.40X1, H40.40X2, H40.40X3, H40.40X4, H40.41X0, H40.41X1, H40.41X2, H40.41X3, H40.41X4, H40.42X0, H40.42X1, H40.42X2, H40.42X3, H40.42X4, H40.43X0, H40.43X1, H40.43X2, H40.43X3, H40.43X4, H40.50X0, H40.50X1, H40.50X2, H40.50X3, H40.50X4, H40.51X0, H40.51X1, H40.51X2, H40.51X3, H40.51X4, H40.52X0, H40.52X1, H40.52X2, H40.52X3, H40.52X4, H40.53X0, H40.53X1, H40.53X2, H40.53X3, H40.53X4, H40.60X0, H40.60X1, H40.60X2, H40.60X3, H40.60X4, H40.61X0, H40.61X1, H40.61X2, H40.61X3, H40.61X4, H40.62X0, H40.62X1, H40.62X2, H40.62X3, H40.62X4, H40.63X0, H40.63X1, H40.63X2, H40.63X3, H40.63X4, H40.811, H40.812, H40.813, H40.819, H40.821, H40.822, H40.823, H40.829, H40.831, H40.832, H40.833, H40.839, H40.89, Q15.0
Hereditary Corneal Dystrophies	H18.50, H18.51, H18.52, H18.53, H18.54, H18.55, H18.59
High Hyperopia	H52.00, H52.01, H52.02, H52.03



<b>Significant Ocular Condition</b>	<b>Corresponding ICD-10-CM Codes [for use 10/1/2014 – 12/31/2014]</b>
Hypotony of Eye	H44.40, H44.411, H44.412, H44.413, H44.419, H44.421, H44.422, H44.423, H44.429, H44.431, H44.432, H44.433, H44.439, H44.441, H44.442, H44.443, H44.449
Injury to Optic Nerve and Pathways	S04.011A, S04.012A, S04.019A, S04.02XA, S04.031A, S04.032A, S04.039A, S04.041A, S04.042A, S04.049A
Open Wound of Eyeball	S05.10XA, S05.11XA, S05.12XA, S05.20XA, S05.21XA, S05.22XA, S05.30XA, S05.31XA, S05.32XA, S05.50XA, S05.51XA, S05.52XA, S05.60XA, S05.61XA, S05.62XA, S05.70XA, S05.71XA, S05.72XA, S05.8X1A, S05.8X2A, S05.8X9A, S05.90XA, S05.91XA, S05.92XA
Pathologic Myopia	H44.20, H44.21, H44.22, H44.23, H44.30
Posterior Lenticonus	Q12.2, Q12.4, Q12.8
Prior Pars Plana Vitrectomy	67036, 67039, 67040, 67041, 67042, 67043 (patient with history of this procedure)
Pseudoexfoliation Syndrome	H40.1410, H40.1411, H40.1412, H40.1413, H40.1414, H40.1420, H40.1421, H40.1422, H40.1423, H40.1424, H40.1430, H40.1431, H40.1432, H40.1433, H40.1434, H40.1490, H40.1491, H40.1492, H40.1493, H40.1494
Retrolental Fibroplasias	H35.171, H35.172, H35.173, H35.179
Senile Cataract	H25.89
Traumatic Cataract	H26.101, H26.102, H26.103, H26.109, H26.111, H26.112, H26.113, H26.119, H26.121, H26.122, H26.123, H26.129, H26.131, H26.132, H26.133, H26.139
Use of Systemic Sympathetic Alpha-1a Antagonist Medication for Treatment of Prostatic Hypertrophy	Patient taking tamsulosin hydrochloride
Uveitis	H44.111, H44.112, H44.113, H44.119, H44.131, H44.132, H44.133, H44.139
Vascular Disorders of Iris and Ciliary Body	H21.1X1, H21.1X2, H21.1X3, H21.1X9

**NUMERATOR:**

Patients who had one or more specified operative procedures for any of the following major complications within 30 days following cataract surgery: retained nuclear fragments, endophthalmitis, dislocated or wrong power IOL, retinal detachment, or wound dehiscence

**Numerator Instructions:** Codes for major complications (e.g., retained nuclear fragments, endophthalmitis, dislocated or wrong power IOL, retinal detachment, or wound dehiscence): 65235, 65800, 65810, 65815, 65860, 65880, 65900, 65920, 65930, 66030, 66250, 66820, 66825, 66830, 66852, 66986, 67005, 67010, 67015, 67025, 67028, 67030, 67031, 67036, 67039, 67041, 67042, 67043, 67101, 67105, 67107, 67108, 67110, 67112, 67141, 67145, 67250, 67255

**NUMERATOR NOTE:** A lower calculated performance rate for this measure indicates better clinical care or control.

**Numerator Options:**

Surgical procedure performed within 30 days following cataract surgery for major complications (e.g., retained nuclear fragments, endophthalmitis, dislocated or wrong power IOL, retinal detachment or wound dehiscence) **(G8627)**

**OR**

Surgical procedure **not** performed within 30 days following cataract surgery for major complications (e.g., retained nuclear fragments, endophthalmitis, dislocated or wrong power IOL, retinal detachment or wound dehiscence) **(G8628)**

**❖ Measure #303: Cataracts: Improvement in Patient's Visual Function within 90 Days Following Cataract Surgery**

**DESCRIPTION:**

Percentage of patients aged 18 years and older in sample who had cataract surgery and had improvement in visual function achieved within 90 days following the cataract surgery, based on completing a pre-operative and post-operative visual function survey

**Note: This is an outcomes measure and will be calculated solely using registry data.**

- For patients who receive the cataract surgical procedures specified in the denominator coding in the sample, it should be reported whether or not the patient had improvement in visual function achieved within 90 days following the cataract surgery.
- Include only procedures performed through **September 30** of the reporting period. This will allow the post-operative period to occur before registries must submit data to CMS.
- It is the responsibility of a third party, which may be the registry or another third party designated by the eligible professional to administer, receive results, and review the surveys. Each registry must work directly with eligible professionals who wish to report these measures to determine who (a registry or another third party) will be administering, receiving and reviewing the surveys.

**NUMERATOR:**

Patients 18 years and older who had improvement in visual function achieved within 90 days following cataract surgery, based on completing a pre-operative and post-operative visual function survey

**Numerator Options:**

Improvement in visual function achieved within 90 days following cataract surgery (**G0913**)

**OR**

Patient care survey was not completed by patient (**G0914**)

**OR**

Improvement in visual function **not** achieved within 90 days following cataract surgery (**G0915**)

**❖ Measure #304: Cataracts: Patient Satisfaction within 90 Days Following Cataract Surgery**

**DESCRIPTION:**

Percentage of patients aged 18 years and older in sample who had cataract surgery and were satisfied with their care within 90 days following the cataract surgery, based on completion of the Consumer Assessment of Healthcare Providers and Systems Surgical Care Survey

**Note: This is an outcomes measure and will be calculated solely using registry data.**

- For patients who receive the cataract surgical procedures specified in the denominator coding in the sample, it should be reported whether or not the patient was satisfied with their care within 90 days following the cataract surgery.
- Include only procedures performed through **September 30** of the reporting period. This will allow the post-operative period to occur before registries must submit data to CMS.
- It is the responsibility of a third party, which may be the registry or another third party designated by the eligible professional to administer, receive results, and review the surveys. Each registry must work directly with eligible professionals who wish to report these measures to determine who (a registry or another third party) will be administering, receiving and reviewing the surveys.

**NUMERATOR:**

Patients 18 years and older in the sample who were satisfied with their care within 90 days following cataract surgery, based on completion of the Consumer Assessment of Healthcare Providers and Systems Surgical Care Survey

**Numerator Options:**

Satisfaction with care achieved within 90 days following cataract surgery (**G0916**)

**OR**

Patient care survey was not completed by patient (**G0917**)

**OR**

Satisfaction with care **not** achieved within 90 days following cataract surgery (**G0918**)

## CATARACTS MEASURES GROUP RATIONALE AND CLINICAL RECOMMENDATION STATEMENTS

### Measure #191 - Cataracts: 20/40 or Better Visual Acuity within 90 Days Following Cataract Surgery

#### RATIONALE:

##### 1. Scientific basis for measuring visual acuity outcomes after cataract surgery

The only reason to perform cataract surgery (other than for a limited set of medical indications) is to improve a patient's vision and associated functioning. The use of a 20/40 visual acuity threshold is based on several considerations. First, it is the level for unrestricted operation of a motor vehicle in the US. Second, it has been consistently used by the FDA in its assessment for approval of intraocular lens (IOL) and other vision devices. Third, it is the literature standard to denote success in cataract surgery. Fourth, work by West et al in the Salisbury Eye Study suggests that 20/40 is a useful threshold for 50<sup>th</sup> percentile functioning for several vision-related tasks.

Most patients achieve excellent visual acuity after cataract surgery (20/40 or better). This outcome is achieved consistently through careful attention through the accurate measurement of axial length and corneal power and the appropriate selection of an IOL power calculation formula. As such, it reflects the care and diligence with which the surgery is assessed, planned and executed. Failure to achieve this after surgery in eyes without comorbid ocular conditions that would impact the success of the surgery would reflect care that should be assessed for opportunities for improvement.

The exclusion of patients with other ocular and systemic conditions known to increase the risk of an adverse outcome reflects the findings of the two published prediction rule papers for cataract surgery outcomes, by Mangione et al and Steinberg et al. In both papers, the presence of comorbid glaucoma and macular degeneration negatively impacted the likelihood of successful outcomes of surgery. Further, as noted in the prior indicator, exclusion of eyes with ocular conditions that could impact the success of the surgery would NOT eliminate the large majority of eyes undergoing surgery while also minimizing the potential adverse selection that might otherwise occur relative to those patients with the most complex situations who might benefit the most from having surgery to maximize their remaining vision.

##### 2. Evidence of a gap in care

This is an outcome of surgery indicator of direct relevance to patients and referring providers. The available evidence suggests that cataract surgery achieves this in between 86% and 98% of surgeries in eyes without comorbid ocular conditions (this indicator). While small, the volume of cataract surgery in the US of over 2.8 million surgeries suggests that the impact could affect more than 100,000 patients per year. Because of the exclusion of comorbid ocular conditions, one would expect performance on this indicator to be as high as possible, with significantly lower rates suggestive of opportunities for improvement.

The ASCRS National Cataract Database reported that at 3 months postoperatively, 85.5% of all patients had a 20/40 or better best-corrected visual acuity, 57.2% of patients had 20/25 or better postoperative best-corrected visual acuity, and 74.6% of patients were within  $\pm 1.0$  D of target spherical equivalent. Based on 5,788 responses, the mean visual function index score at 3 months postoperatively was 70.3% compared with 55.0% preoperatively. (The score is based on a scale of 0 to 100, with 0 indicating an inability to perform any of the activities.) The European Cataract Outcome Study reported for 1999 that 89% of patients achieved a postoperative visual acuity of 0.5 or more (20/40 or better), the average induced astigmatism was 0.59 D, and 86% of patients had an induced astigmatism within  $\pm 1.0$  D.

The AAO National Eyecare Outcomes Network (NEON) database also found similar rates of success, with an improvement in visual acuity in 92.2% of patients and improvement in VF-14 in over 90% of patients. Best-corrected visual acuity (BCVA) of 20/40 was achieved by 89% of all NEON patients and 96% of NEON patients without preoperative ocular comorbid conditions. Seventy-eight percent of patients were within  $\pm 1.0$  D of target spherical equivalent. Ninety-five percent of patients reported being satisfied with the results of their surgery. Patients who were dissatisfied with the results of their surgery were slightly older and more likely to have ocular comorbidity.

In studies of phacoemulsification cataract surgery performed by ophthalmology residents, the reported range of patients with postoperative BCVA of 20/40 or better is 80% to 91%. If eyes with ocular comorbidities are excluded, the reported range of patients with postoperative BCVA of 20/40 or better is 86% to 98%. (AAO, 2011)

#### **CLINICAL RECOMMENDATION STATEMENTS:**

This is an outcome measure. As such, there are no statements in the guideline specific to this measurement topic.

#### **Measure #192 - Cataracts: Complications within 30 Days Following Cataract Surgery Requiring Additional Surgical Procedures**

##### **RATIONALE:**

1. Scientific basis for assessing short-term complications following cataract surgery. Complications that may result in a permanent loss of vision following cataract surgery are uncommon. This short-term outcome of surgery indicator seeks to identify those complications from surgery that can reasonably be attributed to the surgery and surgeon and which reflect situations which - if untreated - generally result in significant avoidable vision loss that would negatively impact patient functioning. Further, it seeks to reduce surgeon burden and enhance accuracy in reporting by focusing on those significant complications that can be assessed from administrative data alone and which can be captured by the care of another physician or the provision of additional, separately coded, post-operative services. Finally, it focuses on patient safety and monitoring for events that, while hopefully uncommon, can signify important issues in the care being provided. For example, the need to reposition or exchange an intraocular lens (IOL) reflects in part “wrong power” IOL placement, a major patient safety issue.

In order to achieve these ends, the indicator excludes patients with other known, pre-operative ocular conditions that could impact the likelihood of developing a complication. Based on the results of the Cataract Appropriateness Project at RAND, other published studies, and one analysis performed on a national MCO data base, the exclusion codes would preserve over 2/3 of all cataract surgery cases for analysis. Thus, this provides a “clean” indicator that captures care for the large majority of patients undergoing cataract surgery.

2. Evidence for gap in care.

The advances in technology and surgical skills over the last 30 years have made cataract surgery much safer and more effective. An analysis of a single company’s database (commercial age MCO) demonstrated that the rate of complications found for this indicator was approximately 1 to 2%. Nevertheless, as noted above, the occurrence of one of these events is associated with a significant potential for vision loss that is otherwise avoidable. Furthermore, with an annual volume of 2.8 million cataract surgeries in the US, a 2% rate would mean that over 36,000 surgeries are accompanied by these complications (2/3 of 56,000 surgeries).

A synthesis of the literature published prior to 1992 found weighted mean complication rates among all patients undergoing cataract surgery of 0.13% for endophthalmitis, 0.3% for bullous keratopathy, 1.4% clinically detectable CME, 3.5% for angiographically demonstrated CME, 0.7% for retinal detachment, and 1.1% for IOL dislocation. Bullous keratopathy and CME are not included in this indicator because they are conditions that are almost always temporary and resolve without additional intervention through additional procedures and associated care in this population of patients without prior known ocular conditions.

Additional studies similarly demonstrate the low occurrence of complications, including many that are temporary in nature and without a significant impact on patient outcomes. A national survey of over 100 hospitals from 1997 to 1998 found the following results on 18,454 patients 50 years old or older. Seventy-seven percent of these patients had surgery performed by phacoemulsification. Rates for events that occurred during surgery were 4.4% for posterior capsule rupture and vitreous loss, 1.0% for incomplete cortical cleanup, 1.0% for anterior chamber hemorrhage and or collapse, and 0.77% for iris damage. Short-term (within 48 hours) perioperative complications included corneal edema (9.5%), increased IOP (7.9%), uveitis (5.6%), wound leak (1.2%), hyphema (1.1%), and retained lens material (1.1%).

A retrospective study from New Zealand of 1,793 consecutive patients undergoing phacoemulsification reported a rate of 1.8% for posterior capsule rupture and a rate of 1.2% for rhegmatogenous retinal detachment. (AAO, 2006)

#### **CLINICAL RECOMMENDATION STATEMENTS:**

This is an outcome measure. As such, there are no statements in the guideline specific to this measurement topic.

#### **Measure #303 - Cataracts: Improvement in Patient's Visual Function within 90 Days Following Cataract Surgery**

##### **RATIONALE:**

##### 1. Scientific Basis for Measuring Visual Function Outcomes after Cataract Surgery.

Visual function has been described as having multiple components, including central near, intermediate, and distance visual acuity; peripheral vision; visual search; binocular vision; depth perception; contrast sensitivity; perception of color; adaptation; and visual processing speed. Visual function also can be measured in terms of functional disability caused by visual impairment. Many activities are affected by more than one of these visual components.

Health services researchers have increasingly emphasized function and quality of life as the outcomes of treatment that are most critical and applicable to the patient. As previously stated, the primary purpose in managing a patient with cataract is to improve functional vision and the quality of life. In well-designed observational studies, cataract surgery consistently has been shown to have a significant impact on vision-dependent function. The Cataract Patient Outcomes Research Team (PORT) reported that 90% of patients under-going first-eye cataract surgery noted improvement in functional status and satisfaction with vision.

The Activities of Daily Vision Study of elderly patients with a high prevalence of coexisting ocular and medical diseases reported improved visual function in 80% of patients at 12 months after surgery. A National Cataract Study conducted in England of 1,139 patients who had cataract surgery found that preoperative functional impairment varied in relation to gender, age, and visual acuity. Men were more likely to have trouble with driving, glare, and employment, and women were more likely to have difficulties with activities of daily living and recreational activities. Studies have found that regardless of the preoperative visual acuity in the better eye, most patients reported improvement in their ability to perform visually dependent tasks after undergoing cataract surgery.

Several studies have reported an association between improved visual function after cataract surgery and improved health-related quality of life. Visual function plays an important role in physical function, particularly in terms of mobility. The loss of visual function in the elderly is associated with a decline in physical and mental functioning as well as in independence in activities of daily living, including night-time driving, daytime driving, community activities, and home activities. Elderly patients with visual impairment only (and no other physical or mental impairments) were 2.5 times as likely to experience functional decline than elderly patients without visual impairment.

Improved visual function following cataract surgery can ameliorate the progressive deterioration of quality of life seen in elderly patients. In a cohort of 464 patients 65 years old and older, cataract extraction improved visual function and health-related quality of life. Patients with an improvement in their Activities of Daily Vision Scale (ADVS), a brief measure of vision-specific functional status, had from 10% to 59% less decline in nearly all Short Form (SF)-36 dimensions. The SF-36 is a generic global measure of multidimensional health-related quality of life. A nationally representative population of 7,114 persons who were 70 years old and older showed that limitations in vision correlated with decreased functional status. The unadjusted functional score of a person with reported poor vision was four times worse than the score for a person with excellent vision. This difference was comparable with the differences found in other chronic conditions such as arthritis. This relationship with vision persisted, even after adjustment for health, demographics, and economic status. Individuals who rated their vision as other than excellent reported worse functional status, even when controlled for the presence of other medical conditions, education, income, general health status, and other symptoms. By improving visual function, cataract surgery may play an important role in preserving overall functional status, reducing associated injuries and accidents, and preventing

disability in at-risk elderly patients.

An analysis of the Medical Outcomes Study found that having blurred vision more than once or twice a month has a significant impact on functional status and well-being, particularly on problems with work or other daily activities as a result of physical health. This impact was found to be greater than the impact of several other chronic conditions, such as hypertension, history of myocardial infarction, type 2 diabetes mellitus, indigestion, trouble urinating, and headache. In one study, patients planning to undergo cataract surgery assigned a mean preoperative preference value of 0.68 on a scale ranging from 0 to 1 (where 0 is death and 1 is excellent health), indicating that the visual impairment from cataracts had a substantial impact on their quality of life. Visual impairment is an important risk factor for falls and for hip fracture. Specifically, the Study for Osteoporotic Fractures Research Group found that poor depth perception and decreased contrast sensitivity independently increased the risk of hip fracture.

Visual impairment, in particular a decrease of visual acuity and contrast sensitivity, has been shown to be associated with difficulties in driving. In one study, older drivers with visually significant cataract were twice as likely as older drivers without cataract to report reduction in days driven and four times as likely to report difficulties in challenging driving situations. Drivers with visually significant cataract were 2.5 times more likely to have had an at-fault involvement in a motor vehicle crash in the past 5 years compared with drivers without cataract. This association was significant, even after accounting for other factors such as impaired general health, age, mental status deficit or depression. In this study, visually significant cataract was determined by reviewing the participant's medical record and most recent eye examination by an eye care specialist. The study required that cataract in both eyes was the cause of the visual impairment, based on the medical record; an additional inclusion criterion was best-corrected visual acuity in one eye of 20/40 or worse. A further study in the same group demonstrated that drivers with a history of crash involvement were eight times more likely to have a serious contrast sensitivity deficit (defined as a Pelli-Robson score of 1.25 or less) in the worse eye than those who had no history of crash involvement. A severe contrast sensitivity deficit in only one eye was still significantly associated with crash involvement.

Binocular vision is better than the vision of a single eye. The simultaneous use of the two eyes is complex and requires the integration of disparate images from each eye. A study demonstrated that binocular vision resulted in better perception of form, color, and the relationship of the body to the environment, which facilitated manipulation, reaching, and balance, particularly under dim illumination. However, if the vision of one eye is reduced due to cataract, visual performance can fall below the level of monocular vision by a mechanism known as binocular inhibition, which reduces patients' visual acuity and contrast sensitivity. A study of the Framingham Study Cohort found that poor vision in one or both eyes was associated with an increased risk of hip fracture. It also found that patients with good vision in one eye and moderately impaired vision in the other eye had a higher risk of fracture than those with similar visual impairment in both eyes. A study of 150 patients before and after cataract surgery found that poor binocular visual acuity was related to more problems in activities of daily living. Another study, based on patients who reported no beneficial outcomes after first-eye cataract surgery in the National Swedish Cataract Outcome register, found that anisometropia was the reason for the poor outcome in one-third of cases. These studies have shown that second-eye surgery is important to visual and physical function.

In summary, these studies demonstrate that physical function, emotional well-being, and overall quality of life can be enhanced when visual function is restored by cataract extraction.

Improved visual function as a result of cataract surgery includes the following:

- Better optically corrected vision
- Better uncorrected vision with reduced spectacle dependence
- Increased ability to read or do near work
- Reduced glare
- Improved ability to function in dim levels of light
- Improved depth perception and binocular vision
- Improved color vision



Improved physical function as a critical outcome of cataract surgery includes the following:

- Increased ability to perform activities of daily living
- Increased opportunity to continue or resume an occupation
- Increased mobility (walking, driving)

Improved mental health and emotional well-being as a second critical outcome of cataract surgery includes the following benefits:

- Improved self-esteem and independence
- Increased ability to avoid injury
- Increased social contact and ability to participate in social activities
- Relief from fear of blindness

Most patients achieve improved visual function after cataract surgery. This outcome is achieved consistently through careful attention through the patient selection process, accurate measurement of axial length and corneal power, appropriate selection of an IOL power calculation formula, etc. As such, it reflects the care and diligence with which the surgery is assessed, planned and executed. Failure to achieve this after surgery would reflect patterns of patient selection or treatment that should be assessed for opportunities for improvement.

Sometimes cataract surgery is performed for other medical reasons other than to improve impaired visual function caused by cataract. These circumstances include the following: clinically significant anisometropia in the presence of a cataract; when the lens opacity interferes with optimal diagnosis or management of posterior segment conditions, when the lens causes inflammation (phacolysis, phacoanaphylaxis) and when the lens induces angle closure (phacomorphic or phacotopic). In these situations, improved visual function as a result of the removal of the cataract is not expected, because of the pre-existing comorbid conditions.

## 2. Evidence of a Gap in Care

This is an outcome of surgery indicator of direct relevance and import to patients, their families and referring providers. The available evidence suggests that cataract surgery achieves this in about 90% of patients. While the potential for improvement is seemingly small, the volume of cataract surgery in the U.S. of over 2.8 million surgeries means that the impact could affect more than 100,000 patients per year. Ideally, performance on this indicator would be as high as possible, with lower rates suggestive of opportunities for improvement.

## 3. Sampling Strategy

The survey methodology is described as follows. The survey could be administered by a third party or a registry for reporting of PQRS measures to prevent or minimize bias which might be introduced if it is an in-office paper survey with questions asked by the office staff. Options would be provided to the patient, either online survey, mail survey or phone survey (third party or registry only), depending on their preferences and abilities.

The survey would be of a sample of those individuals with cataract surgery. The sample size would be postulated at 20, because this is a well-accepted statistical sample and used by the CMS for reporting on measure groups in PQRS. Because visual function is reported at 90 days after surgery, this would allow physicians to identify 20 cases from January – September for reporting purposes.

## 4. Improvement in Visual Function

The strategy to identify improvement in visual function is as follows. The instrument proposed for visual function evaluation is the Rasch-scaled Short Version of the Visual Function-14, VF-8R. Reliability and validity testing have been performed on the VF-14 as well as the VF-8R. This instrument is scored on a scale of 0-100, with 0 indicating the lack of ability to perform functional activities and 100 indicating complete ability to perform functional activities. The difference between the pre-operative and post-operative scores on the VF-8R indicates a change in functional activities. Improvement in visual function would be defined as an increase in the visual function score between pre-operative and post-operative assessment on the VF-8R in the range of 5 points or greater.

## **CLINICAL RECOMMENDATION STATEMENTS:**

This is an outcomes measure. As such, there are no recommendation statements in the guideline specific to this measurement topic.

### **Measure #304 - Cataracts: Patient Satisfaction within 90 Days Following Cataract Surgery**

#### **RATIONALE:**

Scientific Basis for Measuring Patient Satisfaction after Cataract Surgery Patient satisfaction is a valuable performance indicator for measuring the quality of care delivered by ophthalmologists providing cataract surgery. In the broadest sense, patient satisfaction is an assessment of the patient's experience with the care process delivered by health plans, clinicians, health systems, hospitals, etc. This experience can cover domains as diverse as information/education, interpersonal manner, emotional support, accessibility, convenience, outcomes or results, environment, personalization, involvement in care, finances, etc.

In 1996, The American Academy of Ophthalmology launched the National Eyecare Outcomes Network (NEON) database. From January 1, 1996 through March 30, 2001, 249 ophthalmologists at 114 different practice sites submitted data to the NEON cataract surgery database. Post-operative patient satisfaction responses were collected for 6,154 patients, or about 34.5% of all patients who had pre-operative forms submitted. This assessment was performed at a median of 4.1 weeks postoperatively for all patients enrolled in the database. A 12-item questionnaire was used to assess patient satisfaction. Patient satisfaction was associated with younger age and absence of ocular comorbidity.

Other studies of patient satisfaction after cataract surgery were conducted in Austria and in Spain. The Austrian study found that patients with pre-existing eye disease, including those patients with improved visual acuity after surgery, were the least satisfied with the results of surgery. In these cases, improved patient education prior to surgery could be helpful in improving patient satisfaction. The Spanish study found that patient satisfaction was associated with expectations prior to surgery.

Most patients are satisfied with their care and results after cataract surgery. This outcome is achieved consistently through careful attention through the patient selection process, accurate measurement of axial length and corneal power, appropriate selection of an IOL power calculation formula, etc. As such, it reflects the care and diligence with which the surgery is assessed, planned and executed. Failure to achieve this satisfaction after surgery would reflect patterns of patient selection or treatment that should be assessed for opportunities for improvement.

Use of this indicator in PQRS claims-based reporting method would require some modification to the current reporting of post-operative care for patients undergoing cataract surgery, since this indicator would be operative during the 90 day global period. However, there is a strong and practical precedent for such modifications in that reporting arrangements have previously been made to accommodate co-management of care by different providers during the post-operative period. A similar adjustment to allow for filing of a claim of meeting this goal at one point in the 90 day global period would be sufficient, potentially drawing upon the methods to demarcate the onset of co-management transfer of post-operative care.

Various patient satisfaction instruments exist, but an instrument developed by the program, Consumer Assessment of Healthcare Providers and Systems (CAHPS), Agency for Healthcare Research and Quality develops and supports the use of a comprehensive and evolving family of standardized surveys that ask consumers and patients to report on and evaluate their experiences with health care. These surveys cover topics that are important to consumers, such as the communication skills of providers and the accessibility of services. AHRQ first launched the CAHPS program in October 1995 in response to concerns about the lack of good information about the quality of health plans from the enrollees' perspective. At that time, numerous public and private organizations collected information on enrollee and patient satisfaction, but the surveys varied from sponsor to sponsor and often changed from year to year.

The CAHPS Surgical Care Survey asks adult patients to report on surgical care, surgeons, their staff, and anesthesiologists. It was developed by the American College of Surgeons and the Surgical Quality Alliance to assess patients' experiences before, during, and after surgery. In early 2010, the CAHPS Consortium voted to adopt the Surgical Care Survey as an official CAHPS survey. The Surgical Care Survey expands on the current CAHPS Clinician & Group Survey, which focuses on primary and specialty care, by incorporating domains that are relevant to surgical care, such as informed consent, anesthesia care, and post-operative follow-up. The survey is unique in that it assesses patients' experiences with surgical care in both the inpatient and outpatient settings by asking respondents about their care before, during, and after surgery.

The main purpose of the CAHPS Surgical Care Survey is to address the need to assess and improve the experiences of surgical patients. Like other CAHPS surveys, this questionnaire focuses on aspects of surgical quality that are important to patients and for which patients are the best source of information. The survey results are expected to be useful to everyone with a need for information on the quality of surgeons and surgical care, including patients, practice groups, health plans, insurers, and specialty boards. Patients can use the information to help make better and more informed choices about their surgical care. Practices, health plans, and insurers can use the survey results for quality improvement initiatives and incentives. Specialty boards may use the survey for maintenance of certification.

The composite measures of surgical quality from the S-CAPHS that are most relevant and significant for this physician-level performance measure include:

- How well surgeon communicates with patients before surgery
- How well surgeon communicates with patients after surgery
- Rating of overall care from this surgeon

#### 1. Evidence of a Gap in Care

This is an outcome of surgery indicator of direct relevance and importance to patients, their families and referring providers. The available evidence suggests that cataract surgery achieves this in about 90% of patients. While the potential for improvement appears seemingly small, the volume of cataract surgery in the U.S. of over 2.8 million surgeries means that the impact could affect more than 100,000 patients per year. Ideally performance on this indicator should be as high as possible, with rates lower than 95-100% suggestive of opportunities for improvement.

#### 2. Sampling Strategy

The survey methodology is described as follows. The survey could be administered by a third party or a registry for reporting of PQRS measures to prevent or minimize bias which might be introduced if it is an in office paper survey with questions asked by the office staff. Options would be provided to the patient, either online survey, mail survey or phone survey (third party or registry only), depending on their preferences and abilities.

The survey would be of a sample of those individuals with cataract surgery. The sample size would be postulated at 20, because this is a well-accepted statistical sample and used by the CMS for reporting on measure groups in PQRS. Because patient satisfaction is reported at 90 days after surgery, this would allow physicians to identify 20 cases from January – August for reporting purposes.

#### 3. Definition of Patient Satisfaction

The strategy for defining patient satisfaction is described as follows. CAHPS scores are actually normative scores, that is, they provide relative rankings rather than absolute rankings (where a score is compared with an 'objective criterion'). Patient satisfaction would be defined as a score above the lowest 5% of scores on the CAHPS.

### **CLINICAL RECOMMENDATION STATEMENTS:**

This is an outcomes measure. As such, there are no recommendation statements in the guideline specific to this measurement topic.

## ONCOLOGY MEASURES GROUP OVERVIEW

### 2014 PQRS OPTIONS FOR MEASURES GROUPS:

#### 2014 PQRS MEASURES IN ONCOLOGY MEASURES GROUP:

- #71. Breast Cancer: Hormonal Therapy for Stage IC - IIIC Estrogen Receptor/Progesterone Receptor (ER/PR) Positive Breast Cancer
- #72. Colon Cancer: Chemotherapy for AJCC Stage III Colon Cancer Patients
- #110. Preventive Care and Screening: Influenza Immunization
- #130. Documentation of Current Medications in the Medical Record
- #143. Oncology: Medical and Radiation – Pain Intensity Quantified
- #144. Oncology: Medical and Radiation – Plan of Care for Pain
- #194. Oncology: Cancer Stage Documented
- #226. Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention

#### 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.

**G8977:** I intend to report the Oncology Measures Group

- Report the patient sample method:  
**20 Patient Sample Method:** 20 unique procedures (patients – a majority of which must be Medicare Part B FFS [fee for service] patients) meeting patient sample criteria for the measures group during the reporting period (January 1 through December 31, 2014 OR July 1 through December 31, 2014).
- Patient sample criteria for the Oncology Measures Group are patients aged 18 years and older with a specific diagnosis of cancer, accompanied by a specific patient encounter:

#### One of the following diagnosis codes indicating cancer:

**ICD-9-CM [for use 1/1/2014 – 9/30/2014]:** 140.0, 140.1, 140.3, 140.4, 140.5, 140.6, 140.8, 140.9, 141.0, 141.1, 141.2, 141.3, 141.4, 141.5, 141.6, 141.8, 141.9, 142.0, 142.1, 142.2, 142.8, 142.9, 143.0, 143.1, 143.8, 143.9, 144.0, 144.1, 144.8, 144.9, 145.0, 145.1, 145.2, 145.3, 145.4, 145.5, 145.6, 145.8, 145.9, 146.0, 146.1, 146.2, 146.3, 146.4, 146.5, 146.6, 146.7, 146.8, 146.9, 147.0, 147.1, 147.2, 147.3, 147.8, 147.9, 148.0, 148.1, 148.2, 148.3, 148.8, 148.9, 149.0, 149.1, 149.8, 149.9, 150.0, 150.1, 150.2, 150.3, 150.4, 150.5, 150.8, 150.9, 151.0, 151.1, 151.2, 151.3, 151.4, 151.5, 151.6, 151.8, 151.9, 152.0, 152.1, 152.2, 152.3, 152.8, 152.9, 153.0, 153.1, 153.2, 153.3, 153.4, 153.5, 153.6, 153.7, 153.8, 153.9, 154.0, 154.1, 154.2, 154.3, 154.8, 155.0, 155.1, 155.2, 156.0, 156.1, 156.2, 156.8, 156.9, 157.0, 157.1, 157.2, 157.3, 157.4, 157.8, 157.9, 158.0, 158.8, 158.9, 159.0, 159.1, 159.8, 159.9, 160.0, 160.1, 160.2, 160.3, 160.4, 160.5, 160.8, 160.9, 161.0, 161.1, 161.2, 161.3, 161.8, 161.9, 162.0, 162.2, 162.3, 162.4, 162.5, 162.8, 162.9, 163.0, 163.1, 163.8, 163.9, 164.0, 164.1, 164.2, 164.3, 164.8, 164.9, 165.0, 165.8, 165.9, 170.0, 170.1, 170.2, 170.3, 170.4, 170.5, 170.6, 170.7, 170.8, 170.9, 171.0, 171.2, 171.3, 171.4, 171.5, 171.6, 171.7, 171.8, 171.9, 172.0, 172.1, 172.2, 172.3, 172.4, 172.5, 172.6, 172.7, 172.8, 172.9, 173.00, 173.01, 173.02, 173.09, 173.10, 173.11, 173.12, 173.19, 173.20, 173.21, 173.22, 173.29, 173.30, 173.31, 173.32, 173.39, 173.40, 173.41, 173.42, 173.49, 173.50, 173.51, 173.52, 173.59, 173.60, 173.61, 173.62, 173.69, 173.70, 173.71, 173.72, 173.79, 173.80, 173.81, 173.82, 173.89, 173.90, 173.91, 173.92, 173.99, 174.0, 174.1, 174.2, 174.3, 174.4, 174.5, 174.6, 174.8, 174.9, 175.0, 175.9, 176.0, 176.1, 176.2, 176.3, 176.4, 176.5, 176.8, 176.9, 179, 180.0, 180.1, 180.8, 180.9, 181, 182.0, 182.1, 182.8, 183.0, 183.2, 183.3, 183.4, 183.5, 183.8, 183.9, 184.0, 184.1, 184.2, 184.3, 184.4, 184.8, 184.9, 185, 186.0, 186.9, 187.1, 187.2, 187.3, 187.4, 187.5, 187.6, 187.7, 187.8, 187.9, 188.0, 188.1, 188.2, 188.3, 188.4, 188.5, 188.6, 188.7,

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**ICD-10-CM [for use 10/1/2014 - 12/31/2014]:** C00.0, C00.1, C00.2, C00.3, C00.4, C00.5, C00.6, C00.8, C00.9, C01, C02.0, C02.1, C02.2, C02.3, C02.4, C02.8, C02.9, C03.0, C03.1, C03.9, C04.0, C04.1, C04.8, C04.9, C05.0, C05.1, C05.2, C05.8, C05.9, C06.0, C06.1, C06.2, C06.80, C06.89, C06.9, C07, C08.0, C08.1, C08.9, C09.0, C09.1, C09.8, C09.9, C10.0, C10.1, C10.2, C10.3, C10.4, C10.8, C10.9, C11.0, C11.1, C11.2, C11.3, C11.8, C11.9, C12, C13.0, C13.1, C13.2, C13.8, C13.9, C14.0, C14.2, C14.8, C15.3, C15.4, C15.5, C15.8, C15.9, C16.0, C16.1, C16.2, C16.3, C16.4, C16.5, C16.6, C16.8, C16.9, C17.0, C17.1, C17.2, C17.3, C17.8, C17.9, C18.0, C18.1, C18.2, C18.3, C18.4, C18.5, C18.6, C18.7, C18.8, C18.9, C19, C20, C21.0, C21.1, C21.2, C21.8, C22.0, C22.1, C22.2, C22.3, C22.4, C22.7, C22.8, C22.9, C23, C24.0, C24.1, C24.8, C24.9, C25.0, C25.1, C25.2, C25.3, C25.4, C25.7, C25.8, C25.9, C26.0, C26.1, C26.9, C30.0, C30.1, C31.0, C31.1, C31.2, C31.3, C31.8, C31.9, C32.0, C32.1, C32.2, C32.3, C32.8, C32.9, C33, C34.00, C34.01, C34.02, C34.10, C34.11, C34.12, C34.2, C34.30, C34.31, C34.32, C34.80, C34.81, C34.82, C34.90, C34.91, C34.92, C37, C38.0, C38.1, C38.2, C38.3, C38.4, C38.8, C39.0, C39.9, C40.00, C40.01, C40.02, C40.10, C40.11, C40.12, C40.20, C40.21, C40.22, C40.30, C40.31, C40.32,

C40.80, C40.81, C40.82, C40.90, C40.91, C40.92, C41.0, C41.1, C41.2, C41.3, C41.4, C41.9, C43.0, C43.10, C43.11, C43.12, C43.20, C43.21, C43.22, C43.30, C43.31, C43.39, C43.4, C43.51, C43.52, C43.59, C43.60, C43.61, C43.62, C43.70, C43.71, C43.72, C43.8, C43.9, C44.00, C44.01, C44.02, C44.09, C44.101, C44.102, C44.109, C44.111, C44.112, C44.119, C44.121, C44.122, C44.129, C44.191, C44.192, C44.199, C44.201, C44.202, C44.209, C44.211, C44.212, C44.219, C44.221, C44.222, C44.229, C44.291, C44.292, C44.299, C44.300, C44.301, C44.309, C44.310, C44.311, C44.319, C44.320, C44.321, C44.329, C44.390, C44.391, C44.399, C44.40, C44.41, C44.42, C44.49, C44.500, C44.501, C44.509, C44.510, C44.511, C44.519, C44.520, C44.521, C44.529, C44.590, C44.591, C44.599, C44.601, C44.602, C44.609, C44.611, C44.612, C44.619, C44.621, C44.622, C44.629, C44.691, C44.692, C44.699, C44.701, C44.702, C44.709, C44.711, C44.712, C44.719, C44.721, C44.722, C44.729, C44.791, C44.792, C44.799, C44.80, C44.81, C44.82, C44.89, C44.90, C44.91, C44.92, C44.99, C45.0, C45.1, C45.2, C45.7, C45.9, C46.0, C46.1, C46.2, C46.3, C46.4, C46.50, C46.51, C46.52, C46.7, C46.9, C47.0, C47.10, C47.11, C47.12, C47.20, C47.21, C47.22, C47.3, C47.4, C47.5, C47.6, C47.8, C47.9, C48.0, C48.1, C48.2, C48.8, C49.0, C49.10, C49.11, C49.12, C49.20, C49.21, C49.22, C49.3, C49.4, C49.5, C49.6, C49.8, C49.9, C4A.0, C4A.10, C4A.11, C4A.12, C4A.20, C4A.21, C4A.22, C4A.30, C4A.31, C4A.39, C4A.4, C4A.51, C4A.52, C4A.59, C4A.60, C4A.61, C4A.62, C4A.70, C4A.71, C4A.72, C4A.8, C4A.9, C50.011, C50.012, C50.019, C50.021, C50.022, C50.029, C50.111, C50.112, C50.119, C50.121, C50.122, C50.129, C50.211, C50.212, C50.219, C50.221, C50.222, C50.229, C50.311, C50.312, C50.319, C50.321, C50.322, C50.329, C50.411, C50.412, C50.419, C50.421, C50.422, C50.429, C50.511, C50.512, C50.519, C50.521, C50.522, C50.529, C50.611, C50.612, C50.619, C50.621, C50.622, C50.629, C50.811, C50.812, C50.819, C50.821, C50.822, C50.829, C50.911, C50.912, C50.919, C50.921, C50.922, C50.929, C51.0, C51.1, C51.2, C51.8, C51.9, C52, C53.0, C53.1, C53.8, C53.9, C54.0, C54.1, C54.2, C54.3, C54.8, C54.9, C55, C56.1, C56.2, C56.9, C57.00, C57.01, C57.02, C57.10, C57.11, C57.12, C57.20, C57.21, C57.22, C57.3, C57.4, C57.7, C57.8, C57.9, C58, C60.0, C60.1, C60.2, C60.8, C60.9, C61, C62.00, C62.01, C62.02, C62.10, C62.11, C62.12, C62.90, C62.91, C62.92, C63.00, C63.01, C63.02, C63.10, C63.11, C63.12, C63.2, C63.7, C63.8, C63.9, C64.1, C64.2, C64.9, C65.1, C65.2, C65.9, C66.1, C66.2, C66.9, C67.0, C67.1, C67.2, C67.3, C67.4, C67.5, C67.6, C67.7, C67.8, C67.9, C68.0, C68.1, C68.8, C68.9, C69.00, C69.01, C69.02, C69.10, C69.11, C69.12, C69.20, C69.21, C69.22, C69.30, C69.31, C69.32, C69.40, C69.41, C69.42, C69.50, C69.51, C69.52, C69.60, C69.61, C69.62, C69.80, C69.81, C69.82, C69.90, C69.91, C69.92, C70.0, C70.1, C70.9, C71.0, C71.1, C71.2, C71.3, C71.4, C71.5, C71.6, C71.7, C71.8, C71.9, C72.0, C72.1, C72.20, C72.21, C72.22, C72.30, C72.31, C72.32, C72.40, C72.41, C72.42, C72.50, C72.59, C72.9, C73, C74.00, C74.01, C74.02, C74.10, C74.11, C74.12, C74.90, C74.91, C74.92, C75.0, C75.1, C75.2, C75.3, C75.4, C75.5, C75.8, C75.9, C76.0, C76.1, C76.2, C76.3, C76.40, C76.41, C76.42, C76.50, C76.51, C76.52, C76.8, C77.0, C77.1, C77.2, C77.3, C77.4, C77.5, C77.8, C77.9, C78.00, C78.01, C78.02, C78.1, C78.2, C78.30, C78.39, C78.4, C78.5, C78.6, C78.7, C78.80, C78.89, C79.00, C79.01, C79.02, C79.10, C79.11, C79.19, C79.2, C79.31, C79.32, C79.40, C79.49, C79.51, C79.52, C79.60, C79.61, C79.62, C79.70, C79.71, C79.72, C79.81, C79.82, C79.89, C79.9, C7A.00, C7A.010, C7A.011, C7A.012, C7A.019, C7A.020, C7A.021, C7A.022, C7A.023, C7A.024, C7A.025, C7A.026, C7A.029, C7A.090, C7A.091, C7A.092, C7A.093, C7A.094, C7A.095, C7A.096, C7A.098, C7A.1, C7A.8, C7B.00, C7B.01, C7B.02, C7B.03, C7B.04, C7B.09, C7B.1, C7B.8, C80.0, C80.1, C80.2, C81.00, C81.01, C81.02, C81.03, C81.04, C81.05, C81.06, C81.07, C81.08, C81.09, C81.10, C81.11, C81.12, C81.13, C81.14, C81.15, C81.16, C81.17, C81.18, C81.19, C81.20, C81.21, C81.22, C81.23, C81.24, C81.25, C81.26, C81.27, C81.28, C81.29, C81.30, C81.31, C81.32, C81.33, C81.34, C81.35, C81.36, C81.37, C81.38, C81.39, C81.40, C81.41, C81.42, C81.43, C81.44, C81.45, C81.46, C81.47, C81.48, C81.49, C81.70, C81.71, C81.72, C81.73, C81.74, C81.75, C81.76, C81.77, C81.78, C81.79, C81.90, C81.91, C81.92, C81.93, C81.94, C81.95, C81.96, C81.97, C81.98, C81.99, C82.00, C82.01, C82.02, C82.03, C82.04, C82.05, C82.06, C82.07, C82.08, C82.09, C82.10, C82.11, C82.12, C82.13, C82.14, C82.15, C82.16, C82.17, C82.18, C82.19, C82.20, C82.21, C82.22, C82.23, C82.24, C82.25, C82.26, C82.27, C82.28, C82.29, C82.30, C82.31, C82.32, C82.33, C82.34, C82.35, C82.36, C82.37, C82.38, C82.39, C82.40, C82.41, C82.42, C82.43, C82.44, C82.45, C82.46, C82.47, C82.48, C82.49, C82.50, C82.51, C82.52, C82.53, C82.54, C82.55, C82.56, C82.57, C82.58, C82.59, C82.60, C82.61, C82.62, C82.63, C82.64, C82.65, C82.66, C82.67,

C82.68, C82.69, C82.80, C82.81, C82.82, C82.83, C82.84, C82.85, C82.86, C82.87, C82.88, C82.89, C82.90, C82.91, C82.92, C82.93, C82.94, C82.95, C82.96, C82.97, C82.98, C82.99, C83.00, C83.01, C83.02, C83.03, C83.04, C83.05, C83.06, C83.07, C83.08, C83.09, C83.10, C83.11, C83.12, C83.13, C83.14, C83.15, C83.16, C83.17, C83.18, C83.19, C83.30, C83.31, C83.32, C83.33, C83.34, C83.35, C83.36, C83.37, C83.38, C83.39, C83.50, C83.51, C83.52, C83.53, C83.54, C83.55, C83.56, C83.57, C83.58, C83.59, C83.70, C83.71, C83.72, C83.73, C83.74, C83.75, C83.76, C83.77, C83.78, C83.79, C83.80, C83.81, C83.82, C83.83, C83.84, C83.85, C83.86, C83.87, C83.88, C83.89, C83.90, C83.91, C83.92, C83.93, C83.94, C83.95, C83.96, C83.97, C83.98, C83.99, C84.00, C84.01, C84.02, C84.03, C84.04, C84.05, C84.06, C84.07, C84.08, C84.09, C84.10, C84.11, C84.12, C84.13, C84.14, C84.15, C84.16, C84.17, C84.18, C84.19, C84.40, C84.41, C84.42, C84.43, C84.44, C84.45, C84.46, C84.47, C84.48, C84.49, C84.60, C84.61, C84.62, C84.63, C84.64, C84.65, C84.66, C84.67, C84.68, C84.69, C84.70, C84.71, C84.72, C84.73, C84.74, C84.75, C84.76, C84.77, C84.78, C84.79, C84.90, C84.91, C84.92, C84.93, C84.94, C84.95, C84.96, C84.97, C84.98, C84.99, C84.A0, C84.A1, C84.A2, C84.A3, C84.A4, C84.A5, C84.A6, C84.A7, C84.A8, C84.A9, C84.Z0, C84.Z1, C84.Z2, C84.Z3, C84.Z4, C84.Z5, C84.Z6, C84.Z7, C84.Z8, C84.Z9, C85.10, C85.11, C85.12, C85.13, C85.14, C85.15, C85.16, C85.17, C85.18, C85.19, C85.20, C85.21, C85.22, C85.23, C85.24, C85.25, C85.26, C85.27, C85.28, C85.29, C85.80, C85.81, C85.82, C85.83, C85.84, C85.85, C85.86, C85.87, C85.88, C85.89, C85.90, C85.91, C85.92, C85.93, C85.94, C85.95, C85.96, C85.97, C85.98, C85.99, C86.0, C86.1, C86.2, C86.3, C86.4, C86.5, C86.6, C88.0, C88.2, C88.3, C88.4, C88.8, C88.9, C90.00, C90.01, C90.02, C90.10, C90.11, C90.12, C90.20, C90.21, C90.22, C90.30, C90.31, C90.32, C91.00, C91.01, C91.02, C91.10, C91.11, C91.12, C91.30, C91.31, C91.32, C91.40, C91.41, C91.42, C91.50, C91.51, C91.52, C91.60, C91.61, C91.62, C91.90, C91.91, C91.92, C91.A0, C91.A1, C91.A2, C91.Z0, C91.Z1, C91.Z2, C92.00, C92.01, C92.02, C92.10, C92.11, C92.12, C92.20, C92.21, C92.22, C92.30, C92.31, C92.32, C92.40, C92.41, C92.42, C92.50, C92.51, C92.52, C92.60, C92.61, C92.62, C92.90, C92.91, C92.92, C92.A0, C92.A1, C92.A2, C92.Z0, C92.Z1, C92.Z2, C93.00, C93.01, C93.02, C93.10, C93.11, C93.12, C93.30, C93.31, C93.32, C93.90, C93.91, C93.92, C93.Z0, C93.Z1, C93.Z2, C94.00, C94.01, C94.02, C94.20, C94.21, C94.22, C94.30, C94.31, C94.32, C94.40, C94.41, C94.42, C94.6, C94.80, C94.81, C94.82, C95.00, C95.01, C95.02, C95.10, C95.11, C95.12, C95.90, C95.91, C95.92, C96.0, C96.2, C96.4, C96.5, C96.6, C96.9, C96.A, C96.Z, D37.01, D37.02, D37.030, D37.031, D37.032, D37.039, D37.04, D37.05, D37.09, D37.1, D37.2, D37.3, D37.4, D37.5, D37.6, D37.8, D37.9, D38.0, D38.1, D38.2, D38.3, D38.4, D38.5, D38.6, D39.0, D39.10, D39.11, D39.12, D39.2, D39.8, D39.9, D40.0, D40.10, D40.11, D40.12, D40.8, D40.9, D41.00, D41.01, D41.02, D41.10, D41.11, D41.12, D41.20, D41.21, D41.22, D41.3, D41.4, D41.8, D41.9, D42.0, D42.1, D42.9, D43.0, D43.1, D43.2, D43.3, D43.4, D43.8, D43.9, D44.0, D44.10, D44.11, D44.12, D44.2, D44.3, D44.4, D44.5, D44.6, D44.7, D44.8, D44.9, D45, D46.0, D46.1, D46.20, D46.21, D46.22, D46.4, D46.9, D46.A, D46.B, D46.C, D46.Z, D47.0, D47.1, D47.2, D47.3, D47.4, D47.9, D47.Z1, D47.Z9, D48.0, D48.1, D48.2, D48.3, D48.4, D48.5, D48.60, D48.61, D48.62, D48.7, D48.9, D49.0, D49.1, D49.2, D49.3, D49.4, D49.5, D49.6, D49.7, D49.81, D49.89, D49.9, Q85.00, Q85.01, Q85.02, Q85.03, Q85.09

**Accompanied by:**

**One of the following patient encounter codes:** 77427, 77431, 77432, 77435, 77470

**OR**

**One of the following patient encounter codes:** 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215

**AND**

**One of the following patient encounter codes – Procedure codes:** 51720, 96401, 96402, 96405, 96406, 96409, 96411, 96413, 96415, 96416, 96417, 96420, 96422, 96423, 96425, 96440, 96446, 96450, 96521, 96522, 96523, 96542, 96549

- **Measure #71 only needs to be reported when the patient is female and has the following diagnosis code indicating breast cancer:**  
**ICD-9-CM [for use 1/1/2014 – 9/30/2014]:** 174.0, 174.1, 174.2, 174.3, 174.4, 174.5, 174.6, 174.8, 174.9  
**ICD-10-CM [for use 10/1/2014 - 12/31/2014]:** C50.011, C50.012, C50.019, C50.111, C50.112, C50.119, C50.211, C50.212, C50.219, C50.311, C50.312, C50.319, C50.411, C50.412, C50.419, C50.511, C50.512, C50.519, C50.611, C50.612, C50.619, C50.811, C50.812, C50.819, C50.911, C50.912, C50.919
- **Measure #72 only needs to be reported when the patient is 18 through 80 years old and has the following diagnosis code indicating colon cancer:**  
**ICD-9-CM [for use 1/1/2014 – 9/30/2014]:** 153.0, 153.1, 153.2, 153.3, 153.4, 153.6, 153.7, 153.8, 153.9  
**ICD-10-CM [for use 10/1/2014 - 12/31/2014]:** C18.0, C18.2, C18.3, C18.4, C18.5, C18.6, C18.7, C18.8, C18.9
- Measure #144 only needs to be reported when patients are identified in Measure #143 with pain present (1125F).
- Report a numerator option on **all applicable** measures within the Oncology Measures Group for each patient within the eligible professional's patient sample.
- Instructions for qualifying numerator option reporting for each of the measures within the Oncology 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 G8953:** All quality actions for the applicable measures in the Oncology Measures Group have been performed for this patient

- To report satisfactorily the Oncology Measures Group 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.
- Measure #110 need only be reported a minimum of once during the reporting period when the patient's visit included in the patient sample population is between January and March for the 2013-2014 influenza season **OR** between October and December for the 2014-2015 influenza season. When the patient's office visit is between April and September, Measure #110 is not applicable and will not affect the eligible provider's reporting or performance rate.
- 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., Oncology Measures Group - Measure #71: Breast Cancer: Hormonal Therapy for Stage IC-IIIC Estrogen Receptor/Progesterone Receptor (ER/PR) Positive Breast Cancer 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 groups option.



**Measure #71 (NQF 0387): Breast Cancer: Hormonal Therapy for Stage IC - IIIC Estrogen Receptor/  
Progesterone Receptor (ER/PR) Positive Breast Cancer**

**DESCRIPTION:**

Percentage of female patients aged 18 years and older with Stage IC through IIIC, ER or PR positive breast cancer who were prescribed tamoxifen or aromatase inhibitor (AI) during the 12-month reporting period

**NUMERATOR:**

Patients who were prescribed tamoxifen or aromatase inhibitor (AI) during the 12-month reporting period

**Definition:**

**Prescribed** – Prescribed may include prescription given to the patient for tamoxifen or aromatase inhibitor (AI) at one or more visits in the 12-month period OR patient already taking tamoxifen or aromatase inhibitor (AI) as documented in the current medication list.

**Numerator Options:**

Tamoxifen or aromatase inhibitor (AI) prescribed (**4179F**)

**AND**

AJCC Breast Cancer Stage I, TIC (tumor size > 1 cm to 2 cm), documented (**3374F**)

**OR**

AJCC Breast Cancer Stage II, documented (**3376F**)

**OR**

AJCC Breast Cancer Stage III, documented (**3378F**)

**AND**

Estrogen receptor (ER) or progesterone receptor (PR) positive breast cancer (**3315F**)

**OR**

Documentation of medical reason(s) for not prescribing tamoxifen or aromatase inhibitor (eg, patient's disease has progressed to metastatic, patient is receiving a gonadotropin-releasing hormone analogue, patient has received oophorectomy, patient is currently receiving radiation or chemotherapy, patient's diagnosis date was ≥ 5 years from reporting date, patient's diagnosis date is within 120 days of the end of the 12 month reporting period, other medical reasons) (**4179F with 1P**)

**OR**

Documentation of patient reason(s) for not prescribing tamoxifen or aromatase inhibitor (eg, patient refusal, other patient reasons) (**4179F with 2P**)

**OR**

Documentation of system reason(s) for not prescribing tamoxifen or aromatase inhibitor (eg, patient is currently enrolled in a clinical trial, other system reasons) (**4179F with 3P**)

**AND**

AJCC Breast Cancer Stage I: T1C (tumor size > 1 cm to 2 cm), documented (**3374F**)

**OR**

AJCC Breast Cancer Stage II, documented (**3376F**)

**OR**

AJCC Breast Cancer Stage III, documented (**3378F**)

**AND**

Estrogen receptor (ER) or progesterone receptor (PR) positive breast cancer (**3315F**)

**OR**

**Note:** If reporting numerator option: 3370F or 3372F or 3380F, it is not necessary to report the patient's ER/PR status.

AJCC Breast Cancer Stage 0, documented **(3370F)**

**OR**

AJCC Breast Cancer Stage I: T1 mic, T1a or T1b (tumor size  $\leq$  1 cm), documented **(3372F)**

**OR**

AJCC Breast Cancer Stage IV, documented **(3380F)**

**OR**

Estrogen receptor (ER) and progesterone receptor (PR) negative breast cancer **(3316F)**

**Note:** If reporting numerator option 3316F, it is not necessary to report the patient's AJCC Cancer Stage.

**OR**

No documentation of cancer stage **(3370F with 8P)**

**OR**

No documentation of estrogen receptor (ER) and progesterone receptor (PR) status **(3316F with 8P)**

**OR**

Tamoxifen or aromatase inhibitor **not** prescribed, reason not otherwise specified **(4179F with 8P)**

**AND**

AJCC Breast Cancer Stage I: TIC (tumor size > 1 cm to 2 cm), documented **(3374F)**

**OR**

AJCC Breast Cancer Stage II, documented **(3376F)**

**OR**

AJCC Breast Cancer Stage III, documented **(3378F)**

**AND**

Estrogen receptor (ER) or progesterone receptor (PR) positive breast cancer **(3315F)**

**¥ Measure #72 (NQF 0385): Colon Cancer: Chemotherapy for AJCC Stage III Colon Cancer Patients**

**DESCRIPTION:**

Percentage of patients aged 18 through 80 years with AJCC Stage III colon cancer who are referred for adjuvant chemotherapy, prescribed adjuvant chemotherapy, or have previously received adjuvant chemotherapy within the 12-month reporting period

**NUMERATOR:**

Patients who are referred for chemotherapy, prescribed chemotherapy, or who have previously received adjuvant chemotherapy within the 12-month reporting period

**Definitions:**

**Adjuvant Chemotherapy** – According to current NCCN guidelines, the following therapies are recommended: 5-FU/LV/oxaliplatin (mFOLFOX6) as the standard of care (category 1); bolus 5-FU/LV/oxaliplatin (FLOX, category 1); capecitabine/oxaliplatin (CapeOx, category 1); or single agent capecitabine (category 2A) or 5-FU/LV (category 2A) in patients felt to be inappropriate for oxaliplatin therapy (NCCN, 2012). See clinical recommendation statement for cases where leucovorin is not available.

**Prescribed** – May include prescription ordered for the patient for adjuvant chemotherapy at one or more visits in the 12 month period OR patient already receiving adjuvant chemotherapy as documented in the current medication list.

**Numerator Options:**

Adjuvant chemotherapy referred, prescribed or previously received for AJCC Stage III colon cancer (**G8927**)

**AND**

AJCC Colon Cancer Stage III, documented (**3388F**)

**OR**

Adjuvant chemotherapy **not** prescribed or previously received for documented reasons (e.g., medical comorbidities, diagnosis date more than 5 years prior to the current visit date, patient's cancer has metastasized, medical contraindication/allergy, poor performance status, other medical reasons, patient refusal, other patient reasons, patient is currently enrolled in a clinical trial that precludes prescription of chemotherapy, other system reasons) (**G8928**)

**AND**

AJCC Colon Cancer Stage III, documented (**3388F**)

**OR**

AJCC Colon Cancer Stage 0, documented (**3382F**)

**OR**

AJCC Colon Cancer Stage I, documented (**3384F**)

**OR**

AJCC Colon Cancer Stage II, documented (**3386F**)

**OR**

AJCC Colon Cancer Stage IV, documented (**3390F**)

**OR**

**No** documentation of cancer stage (**3382F with 8P**)

**OR**

Adjuvant chemotherapy **not** prescribed or previously received, reason not given (**G8929**)

**AND**

AJCC Colon Cancer Stage III, documented (**3388F**)

**▲ Measure #110 (NQF 0041): Preventive Care and Screening: Influenza Immunization**

**DESCRIPTION:**

Percentage of patients aged 6 months and older seen for a visit between October 1 and March 31 who received an influenza immunization OR who reported previous receipt of an influenza immunization

**NUMERATOR:**

Patients who received an influenza immunization OR who reported previous receipt of an influenza immunization

**Numerator Instructions:**

- If reporting this measure between January 1, 2014 and March 31, 2014, G-code **G8482** should be reported when the influenza immunization is ordered or administered to the patient during the months of August, September, October, November, and December of 2013 or January, February, and March of 2014 for the flu season ending March 31, 2014.
- If reporting this measure between October 1, 2014 and December 31, 2014, G-code **G8482** should be reported when the influenza immunization is ordered or administered to the patient during the months of August, September, October, November, and December of 2014 for the flu season ending March 31, 2015.
- Influenza immunizations administered during the month of August or September of a given flu season (either 2013-2014 flu season OR 2014-2015 flu season) can be reported when a visit occurs during the flu season (October 1 - March 31). In these cases, **G8482** should be reported.

**Definition:**

**Previous Receipt** - Receipt of the current season's influenza immunization from another provider OR from same provider prior to the visit to which the measure is applied (typically, prior vaccination would include influenza vaccine given since August 1st).

**Numerator Options:**

Influenza immunization administered or previously received (**G8482**)

**OR**

Influenza immunization was not ordered or administered for reasons documented by clinician (e.g., patient allergy or other medical reason, patient declined or other patient reasons, or other system reasons) (**G8483**)

**OR**

Influenza immunization ordered or recommended (to be given at alternate location or alternate provider); vaccine not available at time of visit (**G0919**)

**OR**

Influenza immunization was **not** ordered or administered, reason not given (**G8484**)

**Measure #130 (NQF 0419): Documentation of Current Medications in the Medical Record**

**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 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:**

Eligible professional attests to documenting in the medical record they obtained, updated, or reviewed the patient's current medications (**G8427**)

**OR**

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**

Current list of medications **not** documented as obtained, updated, or reviewed by the eligible professional, reason not given (**G8428**)

**▲ Measure #143 (NQF 0384): Oncology: Medical and Radiation – Pain Intensity Quantified**

**DESCRIPTION:**

Percentage of patient visits, regardless of patient age, with a diagnosis of cancer currently receiving chemotherapy or radiation therapy in which pain intensity is quantified

**NUMERATOR:**

Patient visits in which pain intensity is quantified

**Numerator Instructions:** Pain intensity should be quantified using a standard instrument, such as a 0-10 numerical rating scale, a categorical scale, or the pictorial scale.

**Numerator Options:**

Pain severity quantified; pain present **(1125F)**

**OR**

Pain severity quantified; no pain present **(1126F)**

**OR**

Pain severity **not** documented, reason not otherwise specified **(1125F with 8P)**

**Measure #144 (NQF 0383): Oncology: Medical and Radiation – Plan of Care for Pain**

**DESCRIPTION:**

Percentage of visits for patients, regardless of age, with a diagnosis of cancer currently receiving chemotherapy or radiation therapy who report having pain with a documented plan of care to address pain

**NUMERATOR:**

Patient visits that included a documented plan of care to address pain

**Numerator Instructions:** A documented plan of care may include: use of opioids, non-opioid analgesics, psychological support, patient and/or family education, referral to a pain clinic, or reassessment of pain at an appropriate time interval.

**Numerator Options:**

Plan of care to address pain documented **(0521F)**

**OR**

Plan of care for pain **not** documented, reason not otherwise specified **(0521F with 8P)**

**Measure #194 (NQF 0386): Oncology: Cancer Stage Documented**

**DESCRIPTION:**

Percentage of patients, regardless of age, with a diagnosis of cancer who are seen in the ambulatory setting who have a baseline American Joint Committee on Cancer (AJCC) cancer stage or documentation that the cancer is metastatic in the medical record at least once within during the 12 month reporting period

**NUMERATOR:**

Patients who have a baseline American Joint Committee on Cancer (AJCC)\* cancer stage\*\* or documentation that the cancer is metastatic in the medical record at least once during the 12 month reporting period

**Numerator Instructions:**

\*For certain malignancies, staging or classification systems included in the AJCC Staging Manual would also satisfy the requirements of this measure (e.g., Ann Arbor).

\*\*Cancer stage refers to stage at diagnosis. Documentation that the cancer is metastatic at diagnosis would also satisfy the requirements of the measure.

**Numerator Options:**

American Joint Committee on Cancer (AJCC) stage documented and reviewed **(3300F)**

**OR**

Cancer stage documented in medical record as metastatic and reviewed **(3301F)**

**OR**

Cancer stage **not** documented, reason not otherwise specified **(3301F with 8P)**



**▲ Measure #226 (NQF 0028): Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention**

**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:**

Patient screened for tobacco use AND received tobacco cessation intervention (counseling, pharmacotherapy, or both), if identified as a tobacco user (**4004F**)

**OR**

Current tobacco non-user (**1036F**)

**OR**

Documentation of medical reason(s) for not screening for tobacco use (eg, limited life expectancy, other medical reasons) (**4004F with 1P**)

**OR**

Tobacco screening OR tobacco cessation intervention **not** performed, reason not otherwise specified (**4004F with 8P**)

## ONCOLOGY MEASURES GROUP RATIONALE AND CLINICAL RECOMMENDATION STATEMENTS

### **Measure #71 - Breast Cancer: Hormonal Therapy for Stage IC - IIIC Estrogen Receptor/Progesterone Receptor (ER/PR) Positive Breast Cancer**

#### **RATIONALE:**

Despite evidence suggesting the role of adjuvant endocrine therapy in lowering the risk of tumor recurrence, many female patients who should be receiving this therapy are not. This measure assesses whether patients with a certain stage of breast cancer (IC through IIIC) and ER/PR+ are currently receiving the therapy. There are allowable medical, patient, and system reasons to document instances in which a woman with stage IC through IIIC, ER/PR+ may not be a candidate for the therapy.

#### **CLINICAL RECOMMENDATION STATEMENTS:**

Adjuvant therapy for postmenopausal women with hormone receptor–positive breast cancer should include an aromatase inhibitor in order to lower the risk of tumor recurrence. Aromatase inhibitors are appropriate as initial treatment for women with contraindications to tamoxifen. For all other postmenopausal women, treatment options include 5 years of aromatase inhibitors treatment or sequential therapy consisting of tamoxifen (for either 2 to 3 years or 5 years) followed by aromatase inhibitors for 2 to 3, or 5 years. (ASCO guidelines include narrative rankings) (ASCO, 2009)

Patients intolerant of aromatase inhibitors should receive tamoxifen. Women with hormone receptor–negative tumors should not receive adjuvant endocrine therapy. (ASCO guidelines include narrative rankings) (ASCO, 2009)

Patients with invasive breast cancers that are estrogen or progesterone receptor positive should be considered for adjuvant endocrine therapy regardless of patient age, lymph node status, or whether or not adjuvant chemotherapy is to be administered. (Category 2A) (NCCN, 2011)

The most firmly established adjuvant endocrine therapy is tamoxifen for both premenopausal and postmenopausal women. Prospective, randomized trials demonstrate that the optimal duration of tamoxifen appears to be five years. In patients receiving both tamoxifen and chemotherapy, chemotherapy should be given first, followed by sequential tamoxifen. A number of studies have evaluated aromatase inhibitors in the treatment of postmenopausal women with early-stage breast cancer. (Category 2A) (NCCN, 2011) Patients with lymph node involvement or with tumors greater than 1 cm in diameter are appropriate candidates for adjuvant systemic therapy. (Category 1) For those with lymph node negative, hormone receptor positive breast cancer tumors greater than 1 cm, endocrine therapy with chemotherapy is recommended. (Category 1) (NCCN, 2011)

### **Measure #72 - Colon Cancer: Chemotherapy for AJCC Stage III Colon Cancer Patients**

#### **RATIONALE:**

The receipt of adjuvant chemotherapy in AJCC Stage III colon cancer patients following primary surgical treatment is associated with a significant survival benefit.

#### **CLINICAL RECOMMENDATION STATEMENTS:**

For stage III patients (T1-4, N1-2, M0), the panel recommends 6 months of adjuvant chemotherapy following primary surgical treatment. The treatment options are: 5-FU/LV/oxaliplatin (mFOLFOX6) as the standard of care (category 1); bolus 5-FU/LV/oxaliplatin (FLOX, category 1), capecitabine/oxaliplatin (CapeOx, category 1); or single agent capecitabine (category 2A) or 5-FU/LV (category 2A) in patients felt to be inappropriate for oxaliplatin therapy. (NCCN, 2012)

There is currently a shortage of leucovorin in the United States. There are no specific data to guide management under these circumstances, and all proposed strategies are empiric. The panel recommends several possible options

to help alleviate the problems associated with this shortage. One is the use of levo-leucovorin, which is commonly used in Europe. A dose of 200 mg/m<sup>2</sup> of levo-leucovorin is equivalent to 400 mg/m<sup>2</sup> of standard leucovorin. Another option is for practices or institutions to use lower doses of leucovorin for all doses in all patients, since the panel feels that lower doses are likely to be as efficacious as higher doses, based on several studies. Finally, if none of the above options are available, treatment without leucovorin would be reasonable. (NCCN, 2012)

### **Measure #110 - Preventive Care and Screening: Influenza Immunization**

#### **RATIONALE:**

Annual influenza vaccination is the most effective method for preventing influenza virus infection and its complications. Influenza vaccine is recommended for all persons aged  $\geq 6$  months who do not have contraindications to vaccination.

#### **CLINICAL RECOMMENDATION STATEMENTS:**

The following evidence statements are quoted verbatim from the referenced clinical guidelines:

Routine annual influenza vaccination is recommended for all persons aged  $\geq 6$  months. To permit time for production of protective antibody levels, vaccination should optimally occur before onset of influenza activity in the community, and providers should offer vaccination as soon as vaccine is available. Vaccination also should continue to be offered throughout the influenza season. (CDC/ACIP, 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 of \$1,983 per case. Further findings of The Commonwealth Fund studies additionally identified 11% to 28% of the 4.3 million 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).

The Agency for Healthcare Quality's (AHRQ) The National Healthcare Disparities Report (2008) 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 all 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 2011 National Patient Safety Goals guides providers to maintain and communicate accurate patient medication information guiding elements of performance to obtain and/or update information on the medications the patient is currently taking. 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 #143 - Oncology: Medical and Radiation – Pain Intensity Quantified**

#### **RATIONALE:**

Inadequate cancer pain management is widely prevalent, harmful to the patient, and costly.

#### **CLINICAL RECOMMENDATION STATEMENTS:**

This algorithm begins with the premise that all patients with cancer should be screened for pain during the initial evaluation, at regular intervals, and whenever new therapy is initiated. If pain is present on a screening evaluation, the pain intensity must be quantified by the patient (whenever possible). Since pain is inherently subjective, patient's self report to pain is the current standard of care for assessment. Intensity of pain should be quantified using a 0-10 numerical rating scale, a categorical scale, or a pictorial scale (e.g., The Faces Pain Rating Scale). The Faces Pain Rating Scale may be successful with patients who have difficulty with other scales, for example, children, the elderly, and patients with language or cultural differences or other communication barriers. (NCCN, 2011)

All patients should be routinely screened for pain, and when it is present, pain intensity should be recorded in highly visible ways that facilitate regular review by health care providers. A standard for pain assessment and documentation should be established in each setting to ensure that pain is recognized, documented, and treated promptly. (APS, 2005)

### **Measure #144 - Oncology: Medical and Radiation – Plan of Care for Pain**

#### **RATIONALE:**

Inadequate cancer pain management is widely prevalent, harmful to the patient, and costly.

#### **CLINICAL RECOMMENDATION STATEMENTS:**

If the Pain Rating Scale score is above 0, a comprehensive pain assessment is initiated. (NCCN, 2011)

For management of cancer related pain in adults, the algorithm distinguishes three levels of pain intensity, based on a 0-10 numerical value obtained using numerical or the pictorial rating scale (with 0 being no pain to 10 being the worst pain). The three levels of pain intensity listed in the algorithm are mild pain (1-3); moderate pain (4-6); and severe pain (7-10). (NCCN, 2011)

The [NCCN] guidelines acknowledge the range of complex decisions faced in caring for these patients. As a result, they provide dosing guidelines for opioids, non-opioid analgesics, and adjuvant analgesics. They also provide specific suggestions for titrating and rotating opioids, escalation of opioid dosage, management of opioid adverse effects, and when and how to proceed to other techniques/interventions for the management of cancer pain. (NCCN, 2011)

Treatment must be individualized based on clinical circumstances and patient wishes, with the goal of maximizing function and quality of life. (NCCN, 2011)

Clinicians must respond to pain reports in a manner appropriate to the type of pain (e.g., acute vs. chronic) and setting (e.g., inpatient vs. outpatient)... Appropriate responses may not always include more opioids but rather more detailed assessments, use of nonopioid analgesics or techniques, or nonpharmacologic interventions (e.g., education, relaxation, and use of heat or cold). (APS, 2005)

### **Measure #194 - Oncology: Cancer Stage Documented**

#### **RATIONALE:**

Cancer stage is a critical component in determining treatment options for patients with cancer. Though critically important, cancer stage is not always documented in the medical record. This measure is intended to be reported at least once per 12 month reporting period.

#### **CLINICAL RECOMMENDATION STATEMENTS:**

A simple classification scheme, which can be incorporated into a form for staging and can be universally applied, is the goal of the TNM system as proposed by the [American Joint Committee on Cancer (AJCC).] Thus, examination during the surgical procedure and histologic examination of the surgically removed tissues may identify significant additional indicators of the prognosis of the patient (T, N, and M) as different from what could be discerned clinically before therapy. Because this is that pathologic (pTNM) classification and stage grouping (based on examination of a surgically resected specimen with sufficient tissue to evaluate the highest T, N, or M classification), it is recorded in addition to the clinical classification. It does not replace the clinical classification. Both should be maintained in the patient's permanent medical record. It is intended to provide a means by which this information can readily be communicated to others, to assist in therapeutic decisions, and to help estimate prognosis. (American Joint Committee on Cancer, 2010)

The following represent a sample of guideline recommendation statements supporting the measure for a variety of cancers:

#### *Breast Cancer*

All patients with breast cancer should be assigned a clinical stage of disease, and if appropriate evaluation is available, a pathologic stage of disease. The routine use of staging allows for efficient identification of local treatment options, assists in identifying systemic treatment options, allows the comparison of outcome results across institutions and clinical trials, and provides baseline prognostic information. A central component of the treatment of breast cancer is full knowledge of extent of disease and biologic features. These factors contribute to the determination of the stage of disease, assist in the estimation of the risk that cancer will recur, and provide information that predicts response to therapy (e.g., hormone receptors and human epidermal growth factor receptor 2 [HER2]). (NCCN, 2011)

#### *Colon Cancer*

Some of the criteria that should be included in the report of the pathologic evaluation include the following: grade of the cancer; depth of penetration and extension to adjacent structures (T); number of regional lymph nodes evaluated; number of positive regional lymph nodes (N); an assessment of the presence of distant metastases to other organs, the peritoneum of an abdominal structure, or in non-regional lymph nodes (M); the status of proximal, distal, and radial margins; lymphovascular invasion; perineural invasion; and extra-nodal tumor deposits. (NCCN, 2012)

### **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)

## TOTAL KNEE REPLACEMENT (TKR) MEASURES GROUP OVERVIEW

### 2014 PQRS OPTIONS FOR MEASURES GROUP:

#### 2014 PQRS MEASURES IN TOTAL KNEE REPLACEMENT MEASURES GROUP:

- #350. Total Knee Replacement: Shared Decision-Making: Trial of Conservative (Non-surgical) Therapy
- #351. Total Knee Replacement: Venous Thromboembolic and Cardiovascular Risk Evaluation
- #352. Total Knee Replacement: Preoperative Antibiotic Infusion with Proximal Tourniquet
- #353. Total Knee Replacement: Identification of Implanted Prosthesis in Operative Report

#### 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.

**G9234:** I intend to report the Total Knee Replacement Measures Group

- Report the patient sample method:  
**20 Patient Sample Method:** 20 unique patients (a majority of which must be Medicare Part B FFS [fee for service] patients) meeting patient sample criteria for the measures group during the reporting period (January 1 through December 31, 2014 **OR** July 1 through December 31, 2014).
- Patient sample criteria for the TKR Measures Group are patients regardless of age that have a specific procedure for TKR performed

**One of the following patient procedure codes:** 27438, 27442, 27446, 27447

- Report a numerator option on **all** measures within the TKR Measures Group for each procedure (patient) within the eligible professional's patient sample.
- Instructions for qualifying numerator option reporting for each of the measures within the Total Knee Replacement (TKR) 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 G9233:** All quality actions for the applicable measures in the Total Knee Replacement (TKR) Measures Group have been performed for this patient.

- To report satisfactorily the TKR Measures Group it requires **all** measures for each patient within the eligible professional's patient sample to be reported each time an isolated TKR procedure is performed 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.



- **NOTE:** The detailed instructions in this specification apply exclusively to the reporting and analysis of the included measures under the measures groups option.

**μ Measure #350: Total Knee Replacement: Shared Decision-Making: Trial of Conservative (Non-surgical) Therapy**

**DESCRIPTION:**

Percentage of patients regardless of age or gender undergoing a total knee replacement with documented shared decision-making with discussion of conservative (non-surgical) therapy prior to the procedure

**NUMERATOR:**

Patients with documented shared decision-making including discussion of conservative (non-surgical) therapy (e.g. NSAIDS, analgesics, exercise, injections) prior to the procedure

**Numerator Options:**

Patients with documented shared decision-making including discussion of conservative (non-surgical) therapy prior to the procedure (e.g. NSAIDS, analgesics, exercise, injections) **(G9296)**

**OR**

Shared decision-making including discussion of conservative (non-surgical) therapy prior to the procedure **not** documented, reason not given **(G9297)**

**μ Measure #351: Total Knee Replacement: Venous Thromboembolic and Cardiovascular Risk Evaluation**

**DESCRIPTION:**

Percentage of patients regardless of age or gender undergoing a total knee replacement who are evaluated for the presence or absence of venous thromboembolic and cardiovascular risk factors within 30 days prior to the procedure including history of Deep Vein Thrombosis, Pulmonary Embolism, Myocardial Infarction, Arrhythmia and Stroke

**NUMERATOR:**

Patients who are evaluated for the presence or absence of venous thromboembolic and cardiovascular risk factors within 30 days prior to the procedure including history of DVT, PE, MI, arrhythmia and stroke

**Numerator Options:**

Patients who are evaluated for venous thromboembolic and cardiovascular risk factors within 30 days prior to the procedure including history of DVT, PE, MI, arrhythmia and stroke **(G9298)**

**OR**

Patients who are **not** evaluated for venous thromboembolic and cardiovascular risk factors within 30 days prior to the procedure including history of DVT, PE, MI, arrhythmia and stroke, reason not given **(G9299)**

**μ Measure #352: Total Knee Replacement: Preoperative Antibiotic Infusion with Proximal Tourniquet**

**DESCRIPTION:**

Percentage of patients regardless of age or gender undergoing a total knee replacement who had the prophylactic antibiotic completely infused prior to the inflation of the proximal tourniquet

**NUMERATOR:**

Patients who had the prophylactic antibiotic completely infused prior to the inflation of the proximal tourniquet (tourniquet around the proximal thigh)

**Numerator Options:**

Patients who had the prophylactic antibiotic completely infused prior to the inflation of the proximal tourniquet (**G9301**)

**OR**

Documentation of medical reason(s) for not completely infusing the prophylactic antibiotic prior to the inflation of the proximal tourniquet (e.g., a tourniquet was not used) (**G9300**)

**OR**

Prophylactic antibiotic **not** completely infused prior to the inflation of the proximal tourniquet, reason not given (**G9302**)

**µMeasure #353: Total Knee Replacement: Identification of Implanted Prosthesis in Operative Report**

**DESCRIPTION:**

Percentage of patients regardless of age or gender undergoing a total knee replacement whose operative report identifies the prosthetic implant specifications including the prosthetic implant manufacturer, the brand name of the prosthetic implant and the size of the prosthetic implant

**NUMERATOR:**

Patients whose operative report identifies the prosthetic implant specifications including the prosthetic implant manufacturer, the brand name of the prosthetic implant and the size of the prosthetic implant

**Numerator Options:**

Operative report identifies the prosthetic implant specifications including the prosthetic implant manufacturer, the brand name of the prosthetic implant and the size of the prosthetic implant (**G9304**)

**OR**

Operative report does **not** identify the prosthetic implant specifications including the prosthetic implant manufacturer, the brand name of the prosthetic implant and the size of the prosthetic implant, reason not given (**G9303**)

## TOTAL KNEE REPLACEMENT (TKR) MEASURES GROUP RATIONALE AND CLINICAL RECOMMENDATION STATEMENTS

### **Measure #350 – Total Knee Replacement: Shared Decision Making: Trial of Conservative (Non-surgical) Therapy**

#### **RATIONALE:**

A trial of non-surgical therapy should be used prior to surgery, when possible. Non-surgical therapy may include the use of NSAIDs, other analgesics, exercise, or injections. For patients with severe disability, the patient and surgeon may decide after a thorough review of conservative options that the optimal treatment is to proceed with the operative intervention.

This measure is designed for use by physicians and eligible health care professionals managing ongoing care for all patients undergoing a total knee replacement. This measure addresses the preoperative period.

#### **CLINICAL RECOMMENDATION STATEMENTS:**

*AAOS 2008 Treatment Guideline of Osteoarthritis of the Knee (AAOS, 2008)*

AAOS suggests that patients with symptomatic OA of the knee be encouraged to participate in self-management educational programs. (Level of Evidence II Grade B.)

AAOS recommends that patients with symptomatic OA of the knee who are overweight (BMI >25) should be encouraged to lose weight (a minimum of 5% of body weight) and maintain their weight at a lower level with an appropriate program for dietary modification and exercise. (Level of Evidence I Grade A.)

AAOS recommends that patients with symptomatic OA of the knee be encouraged to participate in low-impact aerobic fitness exercises. (Level of Evidence I Grade A.)

AAOS suggests that patients with symptomatic OA of the knee use patellar taping for short-term relief of pain and improvement in function. (Level of Evidence II Grade B.)

AAOS suggests that patients with symptomatic OA of the knee receive one of the following analgesics for pain unless there are contradictions to this treatment: acetaminophen (<4g/day) or non-steroidal anti-inflammatory drugs (NSAIDs). (Level of Evidence II Grade B.)

AAOS suggests that intra-articular corticosteroids be used for short-term pain relief for patients with symptomatic OA of the knee. (Level of Evidence II Grade B.)

*OARSI 2008 Recommendations for the Management of Hip and Knee Osteoarthritis Part II (Zhang W, Moskowitz RW, Nuki G, Abramson S, et al., 2008)*

Patients with knee OA who are not obtaining adequate pain relief and functional improvement from a combination of non-pharmacological and pharmacological treatment should be considered for joint replacement therapy.

### **Measure #351 - Venous Thromboembolic and Cardiovascular Risk Evaluation**

#### **RATIONALE:**

Prior to a total knee replacement the patient's venous thromboembolic and cardiovascular risk should be evaluated. A population-based study of all Olmstead County, Minnesota, patients undergoing a total hip or knee arthroplasty from 1994 - 2008, reported that patients undergoing a total knee arthroplasty with a previous history of a cardiac event or a thromboembolic event were associated with an increased risk of a 90-day cardiac or thromboembolic event following surgery. (Singh JA, Jensen MR, Harmsen WS, Gabriel SE, Lewallen DG, 2011)

A study using the Danish national resident registries compared all patients undergoing a primary THR and TKR from 1998 – 2007 to control groups not undergoing one of the procedures and found that the AMI rate 2 weeks after TKR was increased 31-fold compared to the control group. (Lalmohamed A, Vestergaard P, Klop C, Grove EL, 2012)

Any preoperative disease state should be identified and managed prior to surgery to minimize the risk of the surgical procedure.

This measure is designed for use by physicians and eligible health care professionals managing ongoing care for all patients undergoing a total knee replacement. This measure addresses the preoperative period.

**CLINICAL RECOMMENDATION STATEMENT:**

*ACC/AHA 2007 Guidelines on Perioperative Cardiovascular Evaluation and Care for the Noncardiac Surgery* (Fleischer LA, Beckman JA, Brown KA, et al. ACC/AHA, 2007)

In patients with known coronary artery disease (CAD) or the new onset of signs or symptoms suggestive of CAD, baseline cardiac assessment should be performed. In the asymptomatic patient, a more extensive assessment of history and physical is warranted in those individuals 50 years of age or older, because the evidence related to the determination of cardiac risk factors and derivation of a Revised Cardiac Risk Index occurred in this population. Preoperative cardiac evaluation must therefore be carefully tailored to the circumstances that have prompted the evaluation and to the nature of the surgical illness.

**Measure #352 - Preoperative Antibiotic Infusion with Proximal Tourniquet**

**RATIONALE:**

The Surgical Care Improvement Project (SCIP) evaluates the timing and appropriateness of the prophylactic antibiotic. This measure evaluates that the prophylactic antibiotic is completely infused prior to the inflation of the tourniquet.

This measure is designed for use by physicians and eligible health care professionals managing ongoing care for all patients undergoing a total knee replacement. This measure addresses the intraoperative period.

**CLINICAL RECOMMENDATION STATEMENT:**

*National Surgical Infection Prevention Project Advisory Statement 2004* (Bratzler DW, Houck PM, 2005)

If a proximal tourniquet is used, the antimicrobial should be completely infused before inflation.

**Measure #353 - Identification of Implanted Prosthesis in Operative Report**

**RATIONALE:**

It is important to capture the type of prosthesis used. The rates of prosthesis failure which will require a revision increases from 10 percent at 10 years to approximately 20 percent at 20 years following surgery. (National Institutes of Health, 2003) The FDA requires appropriate tracking of the device but this information may not be readily available to the surgeon performing the revision. The surgeon performing a future revision needs to be able to identify the prosthesis and size of the prosthesis that were used in the initial surgery, to determine if a complete revision is required or if a partial revision could be performed. The initial operative report should contain the necessary information which will ultimately help the future treating physician who performs the revision surgery.

This measure is designed for use by physicians and eligible health care professionals managing ongoing care for all patients undergoing a total knee replacement. This measure addresses the immediate postoperative period.

**CLINICAL RECOMMENDATION STATEMENT:**

*Medical Device Tracking Requirements 2008* (Federal Register, 2008)

Effective tracking of devices from the manufacturing facility, through the distributor network (including distributors, retailers, rental firms and other commercial enterprises, device user facilities, and licensed practitioners) and ultimately, to the patient is necessary for the effectiveness of remedies prescribed by the act, such as patient notification (section 518 (a) of the act) or device recall (section 518 (e) of the act). 21 CFR 821.1 (b)

## GENERAL SURGERY MEASURES GROUP OVERVIEW

### 2014 PQRS OPTIONS FOR MEASURES GROUPS:

#### 2014 PQRS MEASURES IN GENERAL SURGERY MEASURES GROUP:

- #354. Anastomotic Leak Intervention
- #355. Unplanned Reoperation within the 30 Day Postoperative Period
- #356. Unplanned Hospital Readmission within 30 Days of Principal Procedure
- #357. Surgical Site Infection (SSI)
- #358. Patient-Centered Surgical Risk Assessment and Communication

#### INSTRUCTIONS FOR REPORTING:

- The general surgery measures group is relevant to the following surgical procedures:
  - Ventral Hernia
  - Appendectomy
  - AV Fistula
  - Cholecystectomy
  - Thyroidectomy
  - Mastectomy +/- Lymphadenectomy or Sentinel Lymph Node Biopsy (SLNB)
  - Partial Mastectomy or Breast Biopsy/Lumpectomy +/- Lymphadenectomy or SLNB
  - Bariatric Laparoscopic or Open Roux en Y Gastric Bypass
  - Bariatric Sleeve Gastrectomy
  - Colectomy
- 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.

**G9237:** I intend to report the General Surgery Measures Group

- Report the patient sample method:  
**20 Patient Sample Method:** 20 unique procedures (a majority of which must be Medicare Part B FFS [fee for service] patients) meeting patient sample criteria for the measures group during the reporting period (January 1 through December 31, 2014 OR July 1 through December 31, 2014).
- Patient sample criteria for the General Surgery Measures Group are patients aged 18 years and older that have a specific surgical procedure performed:

**One of the following procedure codes indicating general surgery:** 19101, 19301, 19302, 19303, 19304, 19305, 19306, 19307, 36818, 36819, 36820, 36821, 36825, 36830, 43644, 43645, 43846, 43847, 43775, 44140, 44141, 44143, 44144, 44145, 44146, 44147, 44150, 44151, 44160, 44204, 44205, 44206, 44207, 44208, 44210, 44950, 44960, 44970, 45379, 45380, 45381, 45382, 45383, 45384, 45385, 45386, 45387, 45391, 45392, 47562, 47563, 47564, 47600, 47605, 47610, 49560, 49561, 49565, 49566, 49572, 49585, 49587, 49590, 49652, 49653, 49654, 49655, 49656, 49657, 60200, 60210, 60212, 60220, 60225, 60240, 60252, 60254, 60260, 60270, 60271

- Report a numerator option on **all applicable** measures within the General Surgery Measures Group for each patient within the eligible professional's patient sample.
- Measure #354 need only be reported when the patient has a procedure performed specific to gastric bypass surgery or colectomy as indicated by the following CPT procedure codes: 43644, 43645, 43846, 43847,



43775, 44140, 44141, 44143, 44144, 44145, 44146, 44147, 44150, 44151, 44160, 44204, 44205, 44206, 44207, 44208, 44210

- Instructions for qualifying numerator option reporting for each of the measures within the General Surgery 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 G9235:** All quality actions for the applicable measures in the General Surgery Measures Group have been performed for this patient

This measures group contains one or more inverse measures. An inverse measure is a measure that represents a poor clinical quality action as meeting performance for the measure. For these measures, a lower performance rate indicates a higher quality of clinical care. Composite codes for measures groups that contain inverse measures are only utilized when the appropriate quality clinical care is given.

The composite code for this measures group may be reported when codes in the summary table below are applicable for reporting of each measure within the measures group.

Measure	#354*	#355*	#356*	#357*	#358
<b>QDC options for acceptable use of the composite QDC</b>	G9305	G9307	G9309	G9311	G9316

\*Indicates an inverse measure

- To report satisfactorily for the General Surgery 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.
- The General Surgery Measures Group will be reported as a surgeon-specific, risk-adjusted odds ratio. For a given surgeon, this odds ratio compares the odds of experiencing an event relative to the odds of experiencing this adverse outcome under the care of an average surgeon in the reporting population (i.e., the group of surgeons reporting on each surgical measure within the measures group). The odds ratio will be generated from a hierarchical regression model that adjusts for differences in case-mix and patient severity.

An odds ratio greater than 1.00 for a provider on each individual measure within the measures group means that the odds of experiencing an event are greater for this provider than for his/her peers. An odds ratio less than 1.00 means that the odds of experiencing this adverse outcome are lower for this provider than for his/her peers.

A 95% confidence interval (95% CI) around each odds ratio will be reported. The 95% CI provides the lower and upper bounds on the range of values within which the true value of the odds ratio lies, asymptotically speaking. A narrower confidence interval suggests a more precise estimate than a wide confidence interval. A confidence interval that does not include 1.00 suggests that the odds of experiencing an adverse outcome under a specific provider is statistically significantly better (if the odds ratio is <1.00) or worse (if the odds ratio is >1.00) than his/her peers.

### **Risk Adjustment**

Case-mix adjustment is performed using the following variables (see table below): age, ASA class, emergent/urgent operation, functional status, wound class, preoperative sepsis, dyspnea, ascites, and surgical approach in a random intercept, fixed slope, hierarchical model. Thus, these patient characteristics must be reported. (Please see table at the end of this document)

- **NOTE:** The detailed instructions in this specification apply exclusively to the reporting and analysis of the included measures under the measures groups option.

## 0 Measure #354: Anastomotic Leak Intervention

### **DESCRIPTION:**

Percentage of patients aged 18 years and older who required an anastomotic leak intervention following gastric bypass or colectomy surgery

### **NUMERATOR:**

Intervention (via return to operating room, interventional radiology, or interventional gastroenterology) for presence of leak of endoluminal contents (such as air, fluid, GI contents, or contrast material) through an anastomosis. The presence of an infection/abscess thought to be related to an anastomosis, even if the leak cannot be definitively identified as visualized during an operation, or by contrast extravasation would also be considered an anastomotic leak

***Numerator Note:** A lower calculated performance rate for this measure indicates better clinical care or control.*

### **Numerator Options:**

Intervention for presence of leak of endoluminal contents through an anastomosis required (**G9306**)

### **OR**

Intervention for presence of leak of endoluminal contents through an anastomosis **not** required (**G9305**)

## **0 Measure #355: Unplanned Reoperation within the 30 Day Postoperative Period**

### **DESCRIPTION:**

Percentage of patients aged 18 years and older who had any unplanned reoperation within the 30 day postoperative period

### **NUMERATOR:**

Unplanned return to the operating room for a surgical procedure, for any reason, within 30 days of the principal operative procedure

***Numerator Note:*** A lower calculated performance rate for this measure indicates better clinical care or control.

- This measure is not intended to capture patients who go back to the operating room within 30 days for a follow-up procedure based on the pathology results from the principal operative procedure or concurrent procedure. Examples: Exclude breast biopsies with return for re-excisions; insertion of port-a-cath for chemotherapy.
- The return to the OR may occur at any hospital or surgical facility.

### **Numerator Options:**

Unplanned return to the operating room for a surgical procedure, for any reason, within 30 days of the principal operative procedure **(G9308)**

### **OR**

**No** return to the operating room for a surgical procedure, for any reason, within 30 days of the principal operative procedure **(G9307)**

**0 Measure #356: Unplanned Hospital Readmission within 30 Days of Principal Procedure**

**DESCRIPTION:**

Percentage of patients aged 18 years and older who had an unplanned hospital readmission within 30 days of principal procedure

**NUMERATOR:**

Inpatient readmission to the same hospital for any reason or an outside hospital (if known to the surgeon), within 30 days of the principal surgical procedure

**Note:** A lower calculated performance rate for this measure indicates better clinical care or control.

**Numerator Options:**

Unplanned hospital readmission within 30 days of principal procedure (**G9310**)

**OR**

**No** unplanned hospital readmission within 30 days of principal procedure (**G9309**)

## 0 Measure #357: Surgical Site Infection (SSI)

### **DESCRIPTION:**

Percentage of patients aged 18 years and older who had a surgical site infection (SSI)

### **NUMERATOR:**

Number of patients with a surgical site infection

**Note:** A lower calculated performance rate for this measure indicates better clinical care or control.

### **Definition:**

**Superficial Incisional SSI:** Superficial incisional SSI is an infection that occurs within 30 days after the operation *and* infection involves only skin or subcutaneous tissue of the incision *and* at least *one* of the following:

- Purulent drainage, with or without laboratory confirmation, from the superficial incision
- Organisms isolated from an aseptically obtained culture of fluid or tissue from the superficial incision
- At least one of the following signs or symptoms of infection: pain or tenderness, localized swelling, redness, or heat AND superficial incision is deliberately opened by the surgeon, unless incision is culture-negative
- Diagnosis of superficial incisional SSI by the surgeon or attending physician

**Deep Incisional SSI:** Deep Incision SSI is an infection that occurs within 30 days after the operation and the infection appears to be related to the operation *and* infection involved deep soft tissues (for example, fascial and muscle layers) of the incision *and* at least *one* of the following:

- Purulent drainage from the deep incision but not from the organ/space component of the surgical site
- A deep incision spontaneously dehisces or is deliberately opened by a surgeon when the patient has at least one of the following signs or symptoms: fever (> 38 C), localized pain, or tenderness, unless site is culture-negative
- An abscess or other evidence of infection involving the deep incision is found on direct examination, during re-operation, or by histopathologic or radiologic examination
- Diagnosis of a deep incision SSI by a surgeon or attending physician

**Organ/Space SSI:** Organ/Space SSI is an infection that occurs within 30 days after the operation and the infection appears to be related to the operation *and* the infection involves any part of the anatomy (for example, organs or spaces), other than the incision, which was opened or manipulated during an operation *and* at least *one* of the following:

- Purulent drainage from a drain that is placed through a stab wound into the organ/space.
- Organisms isolated from an aseptically obtained culture of fluid or tissue in the organ/space
- An abscess or other evidence of infection involving the organ/space that is found on direct examination, during re-operation, or by histopathologic or radiologic examination
- Diagnosis of an organ/space SSI by a surgeon or attending physician

### **Numerator Options:**

Surgical site infection (G9312)

**OR**

**No surgical site infection (G9311)**

## 0 Measure #358: Patient-Centered Surgical Risk Assessment and Communication

### **DESCRIPTION:**

Percentage of patients who underwent a non-emergency surgery who had their personalized risks of postoperative complications assessed by their surgical team prior to surgery using a clinical data-based, patient-specific risk calculator and who received personal discussion of those risks with the surgeon

### **NUMERATOR:**

Documentation of empirical, personalized risk assessment based on the patient's risk factors with a validated risk calculator using multi-institutional clinical data, the specific risk calculator used, and communication of risk assessment from risk calculator with the patient and/or family

**Numerator Instructions:** The number of adult patients (age 18 and over) having had non-emergency surgery as defined by CPT codes during the reporting period who had their personalized risk of procedure-specific, 30-day postoperative complications assessed and documented by their surgeon prior to surgery using a clinical data-based, patient-specific risk-calculator\* and who had a documented personal discussion with their surgeon about these risks. The procedure-specific, patient-specific, data-based risk calculator should be based on a validated, risk-adjusted statistical model predicting 30-day postoperative complications (detailed below) for the procedure that the patient is to undergo. Risk calculations should be based on preoperative patient-specific clinical data, and should include the following groups of variables: patient demographic characteristics (e.g., age, gender); relevant lifestyle and clinical risk factors (e.g., smoking status, American Society of Anesthesiologists class, body mass index); patient comorbidities (e.g., diabetes; neurologic event/disease; disseminated cancer); and procedure type.

Postoperative complications should include 30-day risk-adjusted mortality, 30-day risk-adjusted overall morbidity (superficial surgical site infection, deep incisional surgical site infection, wound dehiscence, pneumonia, deep venous thrombosis; pneumonia; renal failure; urinary tract infection; prolonged ventilator dependence; bleeding complications; sepsis; and pulmonary embolism), serious complications (cardiac arrest; myocardial infarction, pneumonia; progressive renal insufficiency; acute renal failure; pulmonary embolism; deep venous thrombosis; return to the operating room deep incisional surgical site infection; organ space surgical site infection; systemic sepsis; unplanned intubation; urinary tract infection; and wound dehiscence), surgical site infection, and average length of stay.

Risk calculators based on multi-institutional, validated clinical data are acceptable for this measure. ACS NSQIP now offers a risk calculator which can be used for operations in every surgical subspecialty (<http://www.riskcalculator.facs.org> ). Examples of other risk calculators acceptable for this measure include, but are not limited to the ACS NSQIP pancreatectomy risk calculator; the ACS NSQIP colorectal surgery risk calculator; and a recent bariatric surgery risk calculator based on ACS NSQIP data. Other risk calculators are available from the Society of Thoracic Surgery.

### **Numerator Options:**

Documentation of patient-specific risk assessment with a risk calculator based on multi-institutional clinical data, the specific risk calculator used, and communication of risk assessment from risk calculator with the patient or family **(G9316)**

### **OR**

Documentation of patient-specific risk assessment with a risk calculator based on multi-institutional clinical data, the specific risk calculator used, and communication of risk assessment from risk calculator with the patient or family **not** completed **(G9317)**

## GENERAL SURGERY MEASURES GROUP RATIONALE AND CLINICAL RECOMMENDATION STATEMENTS

### Measure #354 - Anastomotic Leak Intervention

### Measure #355 - Unplanned Reoperation within the 30 Day Postoperative Period

### Measure #356 - Unplanned Hospital Readmission within 30 Days of Principal Procedure

### Measure #357 - Surgical Site Infection (SSI)

#### **RATIONALE:**

This is an adverse surgical outcome, which is often a preventable cause of harm, thus it is important to measure and report. It is feasible to collect the data and produces reliable and valid results about the quality of care. It is useful and understandable to stakeholders. As highlighted earlier, this measure was developed in a collaborative effort by the American College of Surgeons and the American Board of Surgery. This measure addresses the National Quality Strategy Priorities, and was identified by an expert panel of physician providers to be a critical outcome for this procedure. This measure addresses a high-impact condition as it is one of the most common procedures performed in the U.S. The measure aligns well with the intended use. The care settings include Acute Care Facilities/Hospitals. Data are being collected in a clinical registry that has been in existence for over 5 years, with over 4000 current users. Thus, we are requesting consideration of this measure in the "Registry Reporting" option. The level of analysis is the clinician/individual. All populations are included, except children. The measure allows measurement across the person-centered episode of care out to 30 days after the procedure whether an inpatient, outpatient, or readmitted. The measure addresses disparities in care. The risk adjustment is performed with a parsimonious dataset and aims to allow efficient data collection resources and data reporting. Measures have been harmonized when possible.

#### **CLINICAL RECOMMENDATION STATEMENTS:**

A modified-Delphi methodology using an expert panel of surgeons who are Directors of the American Board of Surgery identified this to be a critical outcome for this surgical procedure (Surgeon Specific Registry Report on Project for ABS MOC Part IV. Unpublished study by the American College of Surgeons in conjunction with the American Board of Surgery, 2011).

### Measure #358 - Patient-Centered Surgical Risk Assessment and Communication

#### **RATIONALE:**

Preoperative risk assessment and communication between surgeons and patients is critical for effective informed consent and shared decision making in surgical care. Shared decision-making is considered an integral component of patient-centered care, especially for preference-sensitive issues. Evidence suggests that there is room for improving communication and the informed consent/shared decision-making processes between physicians and patients. Use of a risk calculator helps improve the quality of the informed consent/shared decision-making process by providing a personalized, customized, empirically-based estimate of a patient's risk of post-operative complications. Moreover, evidence suggests that sharing numeric estimates of patient-specific risk may enhance patient trust in providers. Risk assessment and communication between surgeons and patients is critical to informed and shared decision-making processes in surgical care. Shared decision-making is considered an integral component of patient-centered care, particularly within accountable care organizations.

Evidence suggests that there is room for improving communication and informed/shared decision-making processes between physicians and patients.

Use of a risk calculator may help improve the quality of informed/shared decision-making by providing a personalized, empirically-based estimate of a patient's risk of post-operative complications. Moreover, evidence suggests that sharing numeric estimates of patient-specific risk may enhance patient trust in providers.



**CLINICAL RECOMMENDATION STATEMENTS:**

Preoperative risk assessment and communication between surgeons and patients is critical for effective informed consent and shared decision making in surgical care. Shared decision-making is considered an integral component of patient-centered care, especially for preference-sensitive issues. Evidence suggests that there is room for improving communication and the informed consent/shared decision-making processes between physicians and patients. Use of a risk calculator helps improve the quality of the informed consent/shared decision-making process by providing a personalized, customized, empirically-based estimate of a patient’s risk of post-operative complications. Moreover, evidence suggests that sharing numeric estimates of patient-specific risk may enhance patient trust in providers.

<b>RISK FACTOR DEFINITIONS</b>	
<b>ASA Class</b>	<p>Record the American Society of Anesthesiology (ASA) Physical Status Classification of the patient’s present physical condition on a scale from 1-5 as it appears on the anesthesia record. Most likely there will be a 2<sup>nd</sup> assessment of the ASA class prior to anesthesia induction. If this is available, report this most recent assessment. Some hospitals may note the ASA classification as the ‘Acuity Code’. The classifications are as follows:</p> <p><b>ASA 1</b> - Normal healthy patient <b>ASA 2</b> - Patient with mild systemic disease <b>ASA 3</b> - Patient with severe systemic disease <b>ASA 4</b> - Patient with severe systemic disease that is a constant threat to life <b>ASA 5</b> - Moribund patient who is not expected to survive without the operation <b>None Assigned</b> – For cases performed under local anesthesia that meet inclusion criteria but do not have an ASA class assigned, report as ‘none assigned’.</p>
<b>Emergent</b>	<p><b>Emergency Case:</b> An emergency case is usually performed within a short interval of time (typically &lt;24 hours) between patient diagnosis or the onset of related preoperative symptomatology. It is implied that the patient’s well-being and outcome is potentially threatened by unnecessary delay and the patient’s status could deteriorate unpredictably or rapidly. The Principal Operative Procedure must be performed during the hospital admission for the diagnosis. Patients who are discharged after diagnosis and return for an elective, semi-elective, or urgent procedure related to the diagnosis would not be considered to have had an emergent case. The intent is to identify a patient population with heightened surgical risk due to an ongoing acute process that is currently having a negative impact on the patients’ health and for which continued, potentially rapid deterioration could occur. The increased risk might be partly due to the fact that the procedure is being performed with limited preoperative preparation time and the surgical team does not necessarily have the ability to optimize the patient’s status. The emergency case variable distinguishes between urgent/semi-elective/elective cases and true emergent surgeries. Urgent/semi-elective cases are not considered emergencies. Assign ‘YES’ if the surgeon and/or anesthesiologist report the case as emergent.</p>
<b>Functional Status</b>	<p><b>Functional Health Status:</b> This variable focuses on the patient’s abilities to perform activities of daily living (ADLs) in the 30 days prior to surgery. Activities of daily living are defined as ‘the activities usually performed in the course of a normal day in a person’s life’. ADLs include: bathing, feeding, dressing, toileting, and mobility. Report the <u>best</u> functional status demonstrated by the patient within the 30 days prior to surgery. Report the level of functional health status as defined by the following criteria.</p> <p>(1) <b>Independent:</b> The patient does not require assistance from another person for any activities of daily living. This includes a person who is able to function independently with</p>

	<p>prosthetics, equipment, or devices.</p> <p>(2) <b>Partially dependent:</b> The patient requires some assistance from another person for activities of daily living. This includes a person who utilizes prosthetics, equipment, or devices but still requires some assistance from another person for ADLs.</p> <p>(3) <b>Totally dependent:</b> The patient requires total assistance for all activities of daily living.</p> <p>(4) <b>Unknown:</b> If unable to ascertain the functional status prior to surgery, report as unknown.</p> <p>All patients with psychiatric illnesses should be evaluated for their ability to function with or without assistance with ADLs just as the non-psychiatric patient. For instance, if a patient with schizophrenia is able to care for him/herself without the assistance of nursing care, he/she is considered independent.</p> <p>If there is a change in the patients functional status, (i.e. improvement to worsening) within the 30 days prior to surgery, report the patient's best functional status.</p>
<p><b>Wound class</b></p>	<p>Wound Classification: Indicate whether the primary surgeon has classified the wound as:</p> <p>Multiple surgical procedures performed with <u>different incision sites</u> = Assign wound classification based on the Principal Operative Procedure being reviewed.</p> <p>Example: Principal Operative Procedure: Carotid Endarterectomy (clean) Other Procedure: I &amp; D of an infected right big toe (dirty/infected). The wound class assigned to this case would be clean.</p> <p>Multiple surgical procedures performed through <u>one incision</u> (same operative space) = Assign wound classification based on the assessment of the overall operative space.</p> <p>Example: Principal Operative Procedure: Lysis of adhesions (clean) Other Procedure: cholecystectomy with gross bile spillage (contaminated). The wound class would be contaminated, as the spillage is in the same operative space as the Principal Operative Procedure.</p> <p><u>(1) Clean:</u> An uninfected operative wound in which no inflammation is encountered and the respiratory, alimentary, genital, or uninfected urinary tract is not entered. In addition, clean wounds are primarily closed and, if necessary, drained with closed drainage. Operative incisional wounds that follow nonpenetrating (blunt) trauma should be included in this category if they meet the criteria.</p> <p>Examples of "Clean" cases include mastectomy, vascular bypass graft, exploratory laparotomy, hernia repair, thyroidectomy, total hip or knee replacement, total hip replacements for avascular necrosis, removal of 'old' hardware without evidence of infection. <i>Note: Placement of any drain at the time of surgery does not change the classification of the wound.</i></p> <p><u>(2) Clean/Contaminated:</u> An operative wound in which the respiratory, alimentary, genital or urinary tracts are entered under controlled conditions and without unusual contamination. Specifically, operations involving the biliary tract, appendix, vagina, and oropharynx are included in this category, provided no evidence of infection or major break in technique is encountered.</p>

	<p><i>Examples of “Clean/Contaminated” cases include cholecystectomy, colectomy, colostomy reversals, roux-en-Y, laryngectomy, small bowel resection, transurethral resection of the prostate, Whipple pancreaticoduodenectomy.</i></p> <p><b>(3) Contaminated:</b> Open, fresh, accidental wounds. In addition, operations with major breaks in sterile technique or gross spillage from the gastrointestinal tract, and incisions in which acute, non-purulent inflammation is encountered including necrotic tissue without evidence of purulent drainage (for example dry gangrene) are included in this category.</p> <p><i>Examples of “Contaminated” cases include appendectomy for inflamed appendicitis, bile spillage during cholecystectomy, or open cardiac massage. Open surgical wounds returning to the OR.</i></p> <p><i>Examples of major break in sterile technique include but are not limited to non-sterile equipment or debris found in the operative field.</i></p> <p><b>(4) Dirty/Infected:</b> Old traumatic wounds with retained devitalized tissue and those that involve existing clinical infection or perforated viscera. This definition suggests that the organisms causing postoperative infection were present in the operative field before the operation.</p> <p><i>Examples of “Dirty/Infected” cases include excision and drainage of abscess, perforated bowel, peritonitis, ruptured appendix.</i></p> <p>Wound Class for Non-Skin Incision Surgeries (Natural Orifice): assign the wound classification based on which orifice was entered.</p> <p>Example: appendectomy performed via the vagina would, at minimum, be a clean/contaminated wound class.</p>
<b>Sepsis</b>	<p>Sepsis within 48 hours prior to surgery: Sepsis is a vast clinical entity that takes a variety of forms. The spectrum of disorders spans from relatively mild physiologic abnormalities to septic shock. The intent is to capture the patient population, whose physiology is compromised by an ongoing inflammatory or infectious process, thereby increasing the patient’s risk of complications during or after surgery. Please report the most significant level using the criteria below.</p> <p>1. SIRS (Systemic Inflammatory Response Syndrome): SIRS is a widespread inflammatory response to a variety of severe clinical insults. This syndrome is clinically recognized by the presence of two or more of the following:</p> <ul style="list-style-type: none"> <li>• Temp &gt;38°C (100.4 °F) or &lt; 36 °C (96.8°F)</li> <li>• HR &gt;90 bpm</li> <li>• RR &gt;20 breaths/min or PaCO<sub>2</sub> &lt;32 mmHg(&lt;4.3 kPa)</li> <li>• WBC &gt;12,000 cell/mm<sup>3</sup>, &lt;4000 cells/mm<sup>3</sup>, or &gt;10% immature (band) forms</li> <li>• Anion gap acidosis: this is defined by either: <ul style="list-style-type: none"> <li>- [Na + K] – [Cl + HCO<sup>3</sup> (or serum CO<sub>2</sub>)]. If this number is greater than 16, then an anion gap acidosis is present.</li> <li>- Na – [Cl + HCO<sup>3</sup> (or serum CO<sub>2</sub>)]. If this number is greater than 12, then an anion gap acidosis is present.</li> </ul> </li> </ul> <p>*If anion gap lab values are performed at your facilities lab, ascertain which formula is utilized</p>

	<p>and follow guideline criteria.</p> <p>Sepsis: Sepsis is the systemic response to infection. Report this variable if the patient has clinical signs and symptoms of SIRS listed above and meets either A or B:</p> <p>One of the following:</p> <ul style="list-style-type: none"> <li>• Positive blood culture</li> <li>• Clinical documentation of purulence or positive culture from any site for which there is documentation noting the site as the acute cause of sepsis.</li> </ul> <p><u>OR</u></p> <p>Suspected pre-operative clinical condition of infection or bowel infarction, which leads to the surgical procedure. <u>The findings during the Principal Operative Procedure must confirm this suspected diagnosis with one or more of the following:</u></p> <ul style="list-style-type: none"> <li>• Confirmed infarcted bowel requiring resection</li> <li>• Purulence in the operative site</li> <li>• Enteric contents in the operative site, or</li> <li>• Positive intra-operative cultures</li> </ul>
<b>Dyspnea</b>	<p>Dyspnea: Dyspnea may be symptomatic of numerous disorders that interfere with adequate ventilation or perfusion of the blood with oxygen and is defined as difficult, painful or labored breathing. The intent of this variable is to capture the <u>usual or typical level of dyspnea</u> (patient's baseline), within the 30-days prior to surgery. The intent is not to include patients solely because of an acute respiratory condition leading to intubation prior to surgery, but rather to reflect a chronic disease state.</p> <p>Characterize the patient's dyspnea status when they were in their <u>usual state of health</u>, prior to the onset of the acute illness, within the 30 days prior to surgery.</p> <ol style="list-style-type: none"> <li>(1) No dyspnea</li> <li>(2) Dyspnea upon moderate exertion (for example-is unable to climb one flight of stairs without shortness of breath)</li> <li>(3) Dyspnea at rest (for example: cannot complete a sentence without needing to take a breath)</li> </ol> <p><i>Note:</i> Acute pre-op dyspnea associated with the acute illness will be captured through other variables like pre-op vent dependence, emergency status or ASA Class. The previous requirement that the patient has to themselves state that they are symptomatic has been removed: not all patients are able to verbalize this symptomatology.</p>
<b>Ascites</b>	<p><b>Ascites within 30 days prior to surgery:</b> The presence of fluid accumulation in the peritoneal cavity noted on physical examination, abdominal ultrasound, or abdominal CT/MRI within 30 days prior to the operation. Documentation should state either active or a history of liver disease (for example, jaundice, encephalopathy, hepatomegaly, portal hypertension, liver failure, or spider telangiectasia). Minimal or trace ascites would not qualify; however; malignant ascites (exclusive of liver disease) due to extensive cancer would qualify.</p>

<b>Surgical approach- Laparoscopic vs. Open</b>	<b>Operative Approach:</b> Indicate the final surgical approach. (1) Open (2) Laparoscopic/Robotic (3) Laparoscopic/Robotic Hand Assisted (4) Laparoscopic/Robotic with Unplanned Conversion to Open (5) Unknown
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## OPTIMIZING PATIENT EXPOSURE TO IONIZING RADIATION (OPEIR) MEASURES GROUP OVERVIEW

### 2014 PQRS OPTIONS FOR MEASURES GROUPS:

#### 2014 PQRS MEASURES IN OPTIMIZING PATIENT EXPOSURE TO IONIZING RADIATION (OPEIR) MEASURES GROUP:

- #359. Optimizing Patient Exposure to Ionizing Radiation: Utilization of a Standardized Nomenclature for Computed Tomography (CT) Imaging Description
- #360. Optimizing Patient Exposure to Ionizing Radiation: Count of Potential High Dose Radiation Imaging Studies: Computed Tomography (CT) and Cardiac Nuclear Medicine Studies
- #361. Optimizing Patient Exposure to Ionizing Radiation: Reporting to a Radiation Dose Index Registry
- #362. Optimizing Patient Exposure to Ionizing Radiation: Computed Tomography (CT) Images Available for Patient Follow-up and Comparison Purposes
- #363. Optimizing Patient Exposure to Ionizing Radiation: Search for Prior Computed Tomography (CT) Studies Through a Secure, Authorized, Media-Free, Shared Archive
- #364. Optimizing Patient Exposure to Ionizing Radiation: Appropriateness: Follow-up CT Imaging for Incidentally Detected Pulmonary Nodules According to Recommended Guidelines

#### 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.

**G9238:** I intend to report the Optimizing Patient Exposure to Ionizing Radiation (OPEIR) 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, 2014 **OR** July 1 through December 31, 2014).
- Patient sample criteria for the OPEIR Measures Group are all patients regardless of age, that have a specific CT procedure performed:

**One of the following patient encounter codes:** 70450, 70460, 70470, 70480, 70481, 70482, 70486, 70487, 70488, 70490, 70491, 70492, 70496, 70498, 71250, 71260, 71270, 71275, 72125, 72126, 72127, 72128, 72129, 72130, 72131, 72132, 72133, 72191, 72192, 72193, 72194, 72292, 73200, 73201, 73202, 73206, 73700, 73701, 73702, 73706, 74150, 74160, 74170, 74174, 74175, 74176, 74177, 74178, 74261, 74262, 75571, 75572, 75573, 75574, 75635, 76380, 76497, 77011, 77013, 77078, 78072

- Report a numerator option on **all applicable** measures within the OPEIR Measures Group for each eligible patient within the eligible professional's patient sample.
- Measure #364 only needs to be reported when the patient has a procedure performed specific to the following CPT procedure codes: 71250, 71260, 71270, 71275 with a finding of an incidental pulmonary nodule.
- Instructions for qualifying numerator option reporting for each of the measures within the Optimizing Patient Exposure To Ionizing Radiation (OPEIR) 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 G9236:** All quality actions for the applicable measures in the Optimizing Patient Exposure to Ionizing Radiation (OPEIR) Measures Group have been performed for this patient

- To report satisfactorily the OPEIR Group it requires **all** measures for each patient within the eligible professional's patient sample to be reported each time a procedure is performed 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. 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 Aged 65 Years and Older 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. 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. When a lower rate indicates better performance, such as Measure #123, a 0% performance rate will be counted as satisfactorily reporting (100% performance rate would not 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 groups' option.

**☀ Measure #359: Optimizing Patient Exposure to Ionizing Radiation: Utilization of a Standardized Nomenclature for Computed Tomography (CT) Imaging Description**

**DESCRIPTION:**

Percentage of computed tomography (CT) imaging reports for all patients, regardless of age, with the imaging study named according to a standardized nomenclature and the standardized nomenclature is used in institution's computer systems

**NUMERATOR:**

CT imaging reports with the imaging study named according to a standardized nomenclature and the standardized nomenclature is used in institution's computer systems

**Numerator Instructions:** Standardized nomenclature is used in institution's computer systems, including but not limited:

- computerized physician ordering system
- charge master
- radiology information system
- electronic health record

**NUMERATOR NOTE:** *Use of a standardized nomenclature is meant to enable reporting to a Dose Index Registry. There is no standard lexicon implemented across the board for naming CT exam procedures. To make like comparisons of sites reporting dose index data to a registry, it is necessary to use a specific CT exam name and standardize that across registry participants.*

**Numerator Options:**

Imaging study named according to standardized nomenclature **(G9318)**

**OR**

Documentation of medical reason(s) for not naming CT studies according to a standardized nomenclature provided (e.g., CT studies performed for radiation treatment planning or image-guided radiation treatment delivery) **(G9320)**

**OR**

Imaging study **not** named according to standardized nomenclature, reason not given **(G9319)**



**☀ Measure #360: Optimizing Patient Exposure to Ionizing Radiation: Count of Potential High Dose Radiation Imaging Studies: Computed Tomography (CT) and Cardiac Nuclear Medicine Studies**

**DESCRIPTION:**

Percentage of computed tomography (CT) and cardiac nuclear medicine (myocardial perfusion studies) imaging reports for all patients, regardless of age, that document a count of known previous CT (any type of CT) and cardiac nuclear medicine (myocardial perfusion) studies that the patient has received in the 12-month period prior to the current study

**NUMERATOR:**

CT and cardiac nuclear medicine (myocardial perfusion studies) imaging reports that document a count of known previous CT (any type of CT) and cardiac nuclear medicine (myocardial perfusion) studies that the patient has received in the 12-month period prior to the current study

**Numerator Instructions:** Physicians will need to document in the final report all known previous CT and cardiac nuclear medicine (myocardial perfusion) studies the patient has received in the 12-month period prior to the current study as a count that includes studies from the Radiology Information System, patient-provided radiological history or other source.

**Numerator Options:**

Count of previous CT (any type of CT) and cardiac nuclear medicine (myocardial perfusion) studies documented in the 12-month period prior to the current study (**G9321**)

**OR**

Documentation of medical reason(s) for not counting previous CT and cardiac nuclear medicine (myocardial perfusion) studies (e.g., CT studies performed for radiation treatment planning or image-guided radiation treatment delivery) (**G9323**)

**OR**

Count of previous CT and cardiac nuclear medicine (myocardial perfusion) studies **not** documented in the 12-month period prior to the current study, reason not given (**G9322**)

**☀ Measure #361: Optimizing Patient Exposure to Ionizing Radiation: Reporting to a Radiation Dose Index Registry**

**DESCRIPTION:**

Percentage of total computed tomography (CT) studies performed for all patients, regardless of age, that are reported to a radiation dose index registry AND that include at a minimum selected data elements

**NUMERATOR:**

CT studies performed that are reported to a radiation dose index registry AND that include at a minimum all of the following data elements:

- Manufacturer
- Study description
- Manufacturer's model name
- Patient's weight
- Patient's size/length (height)
- Patient's sex
- Patient's age
- Exposure time
- X-Ray tube current
- Kilovoltage peak (kVp)
- Mean Volume Computed tomography dose index (CTDIvol)
- Dose-length product (DLP)

Detailed information regarding the patient demographic and scanner data elements included in the Digital Imaging and Communication in Medicine (DICOM) header and CT irradiation event data elements included in the DICOM Supplement 127: CT Radiation Dose Reporting (Dose Structured Report) can be found in the Dose Index Registry Data Dictionary available on the American College of Radiology (ACR) Web site at this link:  
<http://www.acr.org/~media/ACR/Documents/PDF/QualitySafety/NRDR/DIR/DataElementsInDIRHeaderSR.pdf>

**Numerator Options:**

CT studies performed reported to a radiation dose index registry with all necessary data elements (**G9327**)

**OR**


CT studies not reported to a radiation dose index registry due to medical reasons (e.g., CT studies performed for radiation treatment planning or image-guided radiation treatment delivery) (**G9325**)

**OR**

CT studies performed **not** reported to a radiation dose index registry, reason not given (**G9326**)

**OR**

All necessary data elements **not** included, reason not given (**G9324**)

 **Measure #362: Optimizing Patient Exposure to Ionizing Radiation: Computed Tomography (CT) Images Available for Patient Follow-up and Comparison Purposes**

**DESCRIPTION:**

Percentage of final reports for computed tomography (CT) studies performed for all patients, regardless of age, which document that Digital Imaging and Communications in Medicine (DICOM) format image data are available to non-affiliated external entities on a secure, media free, reciprocally searchable basis with patient authorization for at least a 12-month period after the study

**NUMERATOR:**

Final reports for CT studies which document that DICOM format image data are available to non-affiliated external entities on a secure, media-free, reciprocally searchable basis with patient authorization for at least a 12-month period after the study

**Numerator Instructions:** This measure is intended for reporting by facilities that have archival abilities through a shared archival system.

**Definitions:**

**Media-free** - Radiology images that are transmitted electronically ONLY, not images recorded on film, CD, or other imaging transmittal form.

**Numerator Options:**

Final report documented that DICOM format image data available to non-affiliated external entities on a secure, media free, reciprocally searchable basis with patient authorization for at least a 12-month period after the study **(G9340)**

**OR**

DICOM format image data availability not documented in final report due to medical reasons (e.g., CT studies performed for radiation treatment planning or image-guided radiation treatment delivery) **(G9328)**

**OR**

DICOM format image data available to non-affiliated external entities on a secure, media free, reciprocally searchable basis with patient authorization for at least a 12-month period after the study **not** documented in final report, reason not given **(G9329)**

**☀ Measure #363: Optimizing Patient Exposure to Ionizing Radiation: Search for Prior Computed Tomography (CT) Imaging Studies Through a Secure, Authorized, Media-Free, Shared Archive**

**DESCRIPTION:**

Percentage of final reports of computed tomography (CT) studies performed for all patients, regardless of age, which document that a search for Digital Imaging and Communications in Medicine (DICOM) format images was conducted for prior patient CT imaging studies completed at non-affiliated external entities within the past 12-months and are available through a secure, authorized, media-free, shared archive prior to an imaging study being performed

**NUMERATOR:**

Final reports of CT studies, which document that a search for DICOM format images was conducted for prior patient CT imaging studies completed at non-affiliated external entities within the past 12-months and are available through a secure, authorized, media-free, shared archive prior to an imaging study being performed

**Numerator Instructions:** This measure is intended for reporting by facilities that have archival abilities through a shared archival system.

**Definitions:**

**Media-free** - Radiology images that are transmitted electronically ONLY, not images recorded on film, CD, or other imaging transmittal form.

**Numerator Options:**

Search conducted for prior patient CT imaging studies completed at non-affiliated external entities within the past 12-months and are available through a secure, authorized, media-free, shared archive prior to an imaging study being performed **(G9341)**

**OR**


Search for prior patient completed DICOM format images not completed due to medical reasons (e.g., CT studies performed for radiation treatment planning or image-guided radiation treatment delivery) **(G9343)**

**OR**

Search for prior patient completed DICOM format images not completed due to system reasons (e.g., facility does not have archival abilities through a shared archival system) **(G9344)**

**OR**

Search conducted for prior patient imaging studies completed at non-affiliated external entities within the past 12-months and are available through a secure, authorized, media-free, shared archive prior to an imaging study being performed **not** completed, reason not given **(G9342)**

 **Measure #364: Optimizing Patient Exposure to Ionizing Radiation: Appropriateness: Follow-up CT Imaging for Incidentally Detected Pulmonary Nodules According to Recommended Guidelines**

**DESCRIPTION:**

Percentage of final reports for CT imaging studies of the thorax for patients aged 18 years and older with documented follow-up recommendations for incidentally detected pulmonary nodules (eg, follow-up CT imaging studies needed or that no follow-up is needed) based at a minimum on nodule size AND patient risk factors

**NUMERATOR:**

Final reports with documented follow-up recommendations for incidentally detected pulmonary nodules (eg, follow-up CT imaging studies needed or that no follow-up is needed) based at a minimum on nodule size AND patient risk factors

**Definitions:**

**Follow-up Recommendations** - No follow-up recommended in the final CT report OR follow-up is recommended within a designated time frame in the final CT report. Recommendations noted in the final CT report should be in accordance with recommended guidelines.

**Numerator Options:**

Follow-up recommendations according to recommended guidelines for incidentally detected pulmonary nodules (e.g., follow-up CT imaging studies needed or that no follow-up is needed) based at a minimum on nodule size AND patient risk factors documented (**G9345**)

**OR**

Follow-up recommendations according to recommended guidelines for incidentally detected pulmonary nodules **not** documented due to medical reasons (e.g., patients with known malignant disease, patients with unexplained fever, CT studies performed for radiation treatment planning or image-guided radiation treatment delivery) (**G9346**)

**OR**

Follow-up recommendations according to recommended guidelines for incidentally detected pulmonary nodules **not** documented, reason not given (**G9347**)

## OPTIMIZING PATIENT EXPOSURE TO IONIZING RADIATION (OPEIR) MEASURES GROUP RATIONALE AND CLINICAL RECOMMENDATION STATEMENTS

### **Measure #359 - Optimizing Patient Exposure to Ionizing Radiation: Utilization of a Standardized Nomenclature for Computed Tomography (CT) Imaging Description**

#### **RATIONALE:**

A uniform structure for capturing, indexing, and retrieving a variety of radiology information may facilitate the structured reporting of radiology reports. This will also permit mining of data for participation in research projects, registries, and quality improvement efforts. (RSNA/SIR, 2008)

#### **CLINICAL RECOMMENDATION STATEMENTS:**

The existence of a standardized lexicon for radiology would enable numerous improvements in the clinical practice of radiology, starting with the ordering of imaging exams, through the use of information in the resulting radiology report. It also makes possible more effective reuse of information for research and educational purposes. (RSNA, 2009)

### **Measure #360 - Optimizing Patient Exposure to Ionizing Radiation: Count of Potential High Dose Radiation Imaging Studies: Computed Tomography (CT) and Cardiac Nuclear Medicine Studies**

#### **RATIONALE:**

Increased CT use has resulted in growing rates of repeat or multiple imaging. (Griffey RT, Sodickson A, 2009)

Physicians may lack important information that could inform their decisions in ordering imaging exams that use ionizing radiation. Ordering physicians may not have access to patients' medical imaging or radiation dose history. Due to insufficient information, physicians may unnecessarily order imaging procedures that have already been conducted. (US Food and Drug Administration, 2010)

#### **CLINICAL RECOMMENDATION STATEMENTS:**

Radiologists, medical physicists, radiologic technologists, and all supervising physicians have a responsibility to minimize radiation dose to individual patients, to staff, and to society as a whole, while maintaining the necessary diagnostic image quality. (ACR, 2008)

### **Measure #361 - Optimizing Patient Exposure to Ionizing Radiation: Reporting to a Radiation Dose Index Registry**

#### **RATIONALE:**

Clinical registries have become an important tool in efforts to improve quality of care. Registries provide a structured mechanism to monitor clinical practice patterns, evaluate healthcare effectiveness and safety, and evaluate patient outcomes. (Gliklich RE, Dreyer NA, 2007) (Bufalino VJ, Masoudi FA, Stranne SK, et al., 2011)

Establishing diagnostic reference levels is vital to helping clinicians determine optimal radiation dosage to produce acceptable image quality. A data registry would allow facilities to compare their CT dose indices to regional and national values enabling imaging providers and the imaging community to measure the effectiveness of dose lowering efforts over time. (ACR, 2008)

#### **CLINICAL RECOMMENDATION STATEMENTS:**

The goal in medical imaging is to obtain image quality consistent with the medical imaging task. Diagnostic reference levels are used to manage the radiation dose to the patient. The medical radiation exposure must be controlled, avoiding unnecessary radiation that does not contribute to the clinical objective of the procedure. By the same token, a dose significantly lower than the reference level may also be cause for concern, since it may indicate that adequate image quality is not being achieved. The specific purpose of the reference level is to provide a benchmark for

comparison, not to define a maximum or minimum exposure limit. For CT, the diagnostic reference levels are based on the volume CT dose index (CTDIvol). (ACR, 2008)

**Measure #362 - Optimizing Patient Exposure to Ionizing Radiation: Computed Tomography (CT) Images Available for Patient Follow-up and Comparison Purposes**

**RATIONALE:**

The current radiology information systems in hospitals generally do not collect or report radiation exposures and the medical imaging devices that communicate with radiology information systems do not currently forward data on the radiation dose received by a patient from each such test. As a result, physicians are uncertain of their patients' cumulative exposure and lifetime attributable risk (LAR), which is problematic when assessing, prioritizing and discussing the risks and benefits associated with their patients' clinical needs. (Sodickson A, Baeyens PF, Andriole KP, et al., 2009)

It has been estimated that between \$3 and \$10 billion are wasted in the United States annually on unnecessary or duplicative imaging studies. Duplicative imaging procedures could be substantially reduced with improved access to existing imaging data. Additionally, universal access to existing imaging studies to retrieve relevant prior images could improve diagnostic specificity for radiologists and potentially further minimize recommendations for follow-up studies. (Monegain, 2009)

**CLINICAL RECOMMENDATION STATEMENTS:**

Core functional requirements for an Internet-based system for sharing medical records:

- (a) methods to ensure privacy and confidentiality of data;
- (b) capability to move and store large data files (eg, images) with the same efficiency and reliability as possible with small data files (eg, text);
- (c) construction of registries, which contain "knowledge" of all fragments of medical information (and their physical location) from all sources for a given patient;
- (d) an ability to match records and accurately reconcile patient identities without a common patient identifier;
- (e) a means to regulate access to data and audit the access;
- (f) a method for moving blocks of data from one location to another; and
- (g) a method to aggregate and consume the data at the point of care.

Optimal patient care requires that care providers and patients be able to create, manage and access comprehensive electronic health records (EHRs) efficiently and securely. The sharing of radiologic images has become a fundamental part of radiology services and is essential for delivering high-quality care. (Flanders AE, 2009)

**Measure #363 - Optimizing Patient Exposure to Ionizing Radiation: Search for Prior Computed Tomography (CT) Studies Through a Secure, Authorized, Media-Free, Shared Archive**

**RATIONALE:**

The current radiology information systems in hospitals generally do not collect or report radiation exposures and the medical imaging devices that communicate with radiology information systems do not currently forward data on the radiation dose received by a patient from each such test. As a result, physicians are uncertain of their patients' cumulative exposure and lifetime attributable risk (LAR), which is problematic when assessing, prioritizing and discussing the risks and benefits associated with their patients' clinical needs. (Sodickson A, Baeyens PF, Andriole KP, et al., 2009)

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- (e) a means to regulate access to data and audit the access;
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#### **Measure #364 - Optimizing Patient Exposure to Ionizing Radiation: Appropriateness: Follow-up CT Imaging for Incidentally Detected Pulmonary Nodules According to Recommended Guidelines**

##### **RATIONALE:**

Pulmonary nodules are commonly encountered in both primary care and specialty settings. Pulmonary nodules require appropriate management to avoid missing early malignancies or conversely subjecting patients to unnecessary follow-up scans. (MacMahon et al., 2005) (ACCP, 2007)

At least 99% of all nodules 4mm or smaller are benign and because such small opacities are common on thin-section CT scans, follow-up CT is not recommended. (Swensen, 2002)

Additionally, there is no conclusive evidence that serial CT studies with early intervention for detected cancers can reduce disease-specific mortality, even in high-risk patients. Therefore, follow-up CT for every small indeterminate nodule is not recommended. (MacMahon et al., 2005)

##### **CLINICAL RECOMMENDATION STATEMENTS:**

Since the decision to perform follow-up studies relies on size, lesion characteristics (eg, morphology), and growth rates (typically described as doubling time), an understanding of these features and their relationship to malignancy should dictate further evaluation. In addition, the patient's risk profile, including age and smoking history, needs to be integrated into the diagnostic algorithm.

##### **Nodule size\* $\leq$ 4 mm**

Low-Risk Patient: no follow-up needed†

High-Risk Patient: follow-up at 12 months; if unchanged, no further follow-up‡

##### **Nodule size >4-6 mm**

Low-Risk Patient: follow-up at CT at 12 months; if unchanged, no further follow-up‡

High-Risk Patient: initial follow-up CT at 6-12 months, then at 18-24 months if no change‡

##### **Nodule size >6-8 mm**

Low-Risk Patient: initial follow-up CT at 6-12 months, then at 18-24 months if no change

High risk Patient: initial follow-up CT at 3-6 months, then at 9-12 and 24 months if no change



**Nodule size >8 mm**

Same for Low- or High-Risk Patient: follow-up CT at around 3, 9, and 24 months, dynamic contrast enhanced CT, PET, and/or biopsy

**Note** – Newly detected indeterminate nodule in persons 35 years of age or older.

**Low-Risk Patient** - minimal or absent history of smoking and of other known risk factors.

**High-Risk Patient** - history of smoking or of other known risk factors.

\* Average of length and width

† The risk of malignancy in this category (<1%) is substantially less than that in a baseline CT scan of an asymptomatic smoker.

‡ Nonsolid (ground-glass) or partly solid nodules may require longer follow-up to exclude indolent adenocarcinoma.

These recommendations apply only to adult patients with nodules that are “incidental” in the sense that they are unrelated to known underlying disease. The following examples describe patients for whom the above guidelines would not apply:

- Patients known to have or suspected of having malignant disease. Patients with a cancer that may be a cause of lung metastases should be cared for according to the relevant protocol or specific clinical situation.
- Young patients. Primary lung cancer is rare in persons under 35 years of age (<1% of all cases), and the risks from radiation exposure are greater than in the older population. Therefore, unless there is a known primary cancer, multiple follow-up CT studies for small incidentally detected nodules should be avoided in young patients.
- Patients with unexplained fever. In certain clinical settings, such a patient presenting with neutropenic fever, the presence of a nodule may indicate active infection, and short-term imaging follow-up or intervention may be appropriate.

Previous CT scans, chest radiographs, and other pertinent imaging studies should be obtained for comparison whenever possible, as they may serve to demonstrate either stability or interval growth of the nodule in question. A low-dose, thin-section, unenhanced technique should be used, with limited longitudinal coverage, when follow-up of a lung nodule is the only indication for the CT examination. (MacMahon et al., 2005)

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