

## **Clinical Prevention Initiative**

### **Report on the medical practice reporting needs and evidence-based strategies for cardiovascular and geriatric risk interventions**

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## Introduction

The Clinical Prevention Initiative (CPI) is a collaboration between the New Mexico Department of Health (NMDOH), the New Mexico Medical Society (NMMS), and the University of New Mexico Preventive Medicine Residency (UNMPMR) program. The long-term goal of CPI is to improve awareness and delivery of evidence-based clinical preventive services (CPS) in the state of New Mexico.

The focus on clinical preventive services has increased recently in the United States with the development of the National Prevention Strategy created by the Affordable Care Act (ACA) [1]. The goal of this strategy is to improve the health and quality of life by moving the nation from a focus on sickness and disease to one based on prevention and wellness. This is to be accomplished by focusing on four strategic directions including healthy and safe community environments, clinical and community preventive services, empowering people and eliminating health disparities. The ACA further supports implementing clinical preventive services through the mandate of Meaningful Use (MU) of the Electronic Medical Record (EMR), where incentive payments and payment adjustments will be based on the reporting of Clinical Quality Measures (CQMs) into the EMR, many of which are prevention based [2].

It is unclear to what degree medical providers in New Mexico are aware of federal changes to the health care system and how these changes will impact their practice. It is also unclear which prevention guidelines, screenings and interventions providers in the state are using. The CPI project aims to better understand these areas, with the goal of providing guidance in clinical preventive care as the project progresses.

CPI was initially established in NM in 2000 between the NMDOH and NMMS, and included steering committee expertise from a number of other organizational partners [3]. The initial project focused on clinical preventive services for adult pneumococcal vaccination, tobacco use, mammography screening, colorectal cancer screening, screening and treatment of chlamydia and gonorrhea, and problem drinking. Due to funding restraints, the project was forced to be placed on hold.

In 2013, CPI was able to be resumed when funding was made available given the recognized value of this initiative. The goal of CPI remains the same, however the focus has shifted from evaluation of disease specific topics to a patient centered approach using clinical preventive guidelines. This report identifies the medical practice reporting needs and evidence-based strategies for cardiovascular and geriatric risk screening and interventions. Topics covered under cardiovascular risk include screening for tobacco use, obesity, diet, cholesterol, physical activity, use of aspirin, evaluation for abdominal aortic aneurysms, etc. Geriatric risk topics include screening for depression, diabetes, fall prevention, osteoporosis, medication uses, etc.

Material from the following sources were identified, reviewed and are report here as resources for prevention guidelines. These include:

- United States Preventive Services Task Force (USPSTF)
- 2014 Healthcare Effectiveness Data and Information Set (HEDIS) Measures
- 2014 Physician Quality Reporting System (PQRS) Measures List
- Clinical topic-specific guidelines

- The Community Guide

These guidelines and resources were used to create an online survey, with the USPSTF forming the majority of the recommended guidelines queried. The purpose of the survey is to assess what resources providers are using to access prevention guidelines, what types of guidelines providers are following, and what, if any, barriers are present when screening and implementing clinical preventive care. Survey findings will be presented in a future report.

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### **Description of Prevention Guideline Resources**

The following prevention guidelines and resources were evaluated for topics relating to cardiovascular and geriatric risk factors and related screenings and interventions. A brief description of each resource is listed here.

#### ***United States Preventive Services Task Force (USPSTF)***

The USPSTF is an independent panel of non-Federal experts in prevention and evidence-based medicine that reviews clinical preventive health care services and develops recommendations on an ongoing basis for primary care clinicians and health systems [4]. Recommendations are reported by a grading system.

<b>Grade</b>	<b>Definition</b>
A	Recommended. There is high certainty that the net benefit is substantial
B	Recommended. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial
C	Selectively offer or provide this service to individual patients based on professional judgment and patient preferences. There is at least moderate certainty that the net benefit is small
D	Recommends against. There is moderate or high certainty that the service has no net benefit or that the harms outweigh the benefits
I	The current evidence is insufficient to assess the balance of benefits and harms of the service. Evidence is lacking, of poor quality, or conflicting, and the balance of benefits and harms cannot be determined.

#### ***2014 Healthcare Effectiveness Data and Information Set (HEDIS) Measures***

HEDIS is a set of performance measures created by the National Committee for Quality Assurance (NCQA) used to measure the performance of medical care and services of and consist of 75 measures across 8 domains of care [5]. HEDIS allows consumers to compare health plan performance to other plans and to national or regional benchmarks.

2014 HEDIS measures categories include

- Effectiveness of Care
- Access/Availability of Care
- Experience of Care

- Utilization and Relative Resources Use
- Health Plan Descriptive Information

In this report we list measures under 'Effectiveness of Care'.

### ***CQMs for the 2014 PQRS EHR Reporting incentive programs***

CQMs aid the Centers for Medicare and Medicaid services (CMS) to measure and track the quality of health care services by using a wide variety of data associated with a provider's ability to deliver high-quality care or relate to long term goals for health care quality [6]. CQMs measure different components of patient care including: health outcomes, clinical processes, patient safety, efficient use of healthcare resources, care coordination, patient engagements, population and public health, and clinical guidelines. Eligible providers (EPs) participating in Meaningful Use of the EHR are required to report CQMs through their certified EHR. The 2014 PQRS is a specialized reporting program that uses incentive payments and payment adjustments to promote reporting of quality information by EPs and group practices that wish to report their CQMs via EHR [2].

### ***Clinical topic-specific guidelines***

The most current and up to date clinical topic-specific guidelines published by the American Heart Association, American College of Cardiology, The Obesity Society, Joint National Committee, US Department of Health and Human Services, American Geriatrics Society, British Geriatrics Society, the Journal of the American Medical Association, and the Journal of the American Geriatrics Society are reviewed.

### ***The Community Guide***

The Community Guide provides community based interventions for a wide range of topics based on reviews from the community Preventive Services Task Force which uses a scientific systematic review process [7].

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## **Prevention Guidelines by Resource and Topic**

### ***USPSTF guidelines associated with Cardiovascular Risk Screening and Interventions*** [4]

#### **Screening for Abdominal Aortic Aneurysm (2005)**

- One-time screening for abdominal aortic aneurysm (AAA) by ultrasonography in men aged 65 to 75 who have ever smoked (Grade B).
- No recommendation for or against screening for AAA in men aged 65 to 75 who have never smoked (Grade C).
- Recommends against routine screening for AAA in women (Grade D).

#### **Aspirin for the Prevention of Cardiovascular Disease (2009)**

- 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).
- 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).
- 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)
- Recommends against the use of aspirin for stroke prevention in women younger than 55 years and for myocardial infarction prevention in men younger than 45 years (Grade D).

### **Screening for Lipid Disorders in Adults (2008)**

#### **Men**

- Strongly recommends screening men aged 35 and older for lipid disorders (Grade A)
- Screen men aged 20 to 35 for lipid disorders if they are at increased risk for coronary heart disease (Grade B)

#### **Women at Increased Risk**

- Screen women aged 45 and older for lipid disorders if they are at increased risk for coronary heart disease (Grade A).
- Screen women aged 20 to 45 for lipid disorders if they are at increased risk for coronary heart disease (Grade B).

#### **Young Men and All Women Not at Increased Risk**

- No recommendation for or against routine screening for lipid disorders in men aged 20 to 35, or in women aged 20 and older who are not at increased risk for coronary heart disease (Grade C).

### **Behavioral Counseling in Primary Care to Promote a Healthful Diet in Adults at Increased Risk for Cardiovascular Disease (2003)**

- 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)

### **Behavioral Counseling to Promote a Healthful Diet and Physical Activity for Cardiovascular Disease Prevention in Adults (2012)**

- Although the correlation among healthful diet, physical activity, and the incidence of cardiovascular disease is strong, existing evidence indicates that the health benefit of initiating behavioral counseling in the primary care setting to promote a healthful diet and physical activity is small. Clinicians may choose to selectively counsel patients rather than incorporate counseling into the care of all adults in the general population. (Grade C)
- Issues to consider for this recommendation include other risk factors for cardiovascular disease, a patient's readiness for change, social support and community resources that support behavioral change, and other health care and preventive services priorities. Harms may include the lost opportunity to provide other services that have a greater health effect.

### **Screening for the Management of Obesity in Adults (2012)**

- Recommends screening all adults for obesity. Clinicians should offer or refer patients with a body mass index (BMI) of 30 kg/m<sup>2</sup> or higher to intensive, multicomponent behavioral interventions. (Grade B)

### **Counseling and Interventions to Prevent Tobacco Use and Tobacco-Caused Disease in Adults and Pregnant Women**

#### **Adults**

- Recommends that clinicians ask all adults about tobacco use and provide tobacco cessation interventions for those who use tobacco products (Grade A).

#### **Pregnant Women**

- Recommends that clinicians ask all pregnant women about tobacco use and provide augmented, pregnancy-tailored counseling for those who smoke (Grade A).

### ***USPSTF guidelines associated with preventing risks related to the Geriatric population [4]***

In a report titled, '[Reconsidering the Approach to Prevention Recommendations for Older Adults](#),' the USPSTF recognizes the difficulty in applying evidence based model of clinical prevention that focuses on specific disease to the geriatric population [8]. Many geriatric disorders have multiple risk factors and this population is often not represented in clinical trials. Starting in 2005, the USPSTF began to refine its methodology to better address the preventive needs of older adults.

### **Fall Risk Recommendations (2012)**

- Recommends exercise or physical therapy and vitamin D supplementation to prevent falls in community-dwelling adults aged 65 years or older who are at increased risk for falls. (Grade B)
- Does not recommend automatically performing an in-depth multifactorial risk assessment in conjunction with comprehensive management of identified risks to prevent falls in community-dwelling adults aged 65 years or older because the likelihood of benefit is small. In determining whether this service is appropriate in individual cases, patients and clinicians should consider the balance of benefits and harms on the basis of the circumstances of prior falls, comorbid medical conditions, and patient values. (Grade C)

### **Screening for Cognitive Impairment in Older Adults (2014)**

- The evidence is insufficient to recommend for or against routine screening for dementia in older adults. (Grade I)

### **Osteoporosis screening (2011)**

- Recommends screening for osteoporosis in women aged 65 years or older and in younger women whose fracture risk is equal to or greater than that of a 65-year-old white woman who has no additional risk factors. (Grade B)
- The current evidence is insufficient to assess the balance of benefits and harms of screening for osteoporosis in men. (Grade I)

### **Vitamin D and Calcium Supplementation to Prevent Fractures (2013)**

- The current evidence is insufficient to assess the balance of the benefits and harms of combined vitamin D and calcium supplementation for the primary prevention of fractures in premenopausal women or in men. (Grade I)
- The current evidence is insufficient to assess the balance of the benefits and harms of daily supplementation with greater than 400 IU of vit. D3 and greater than 1,000 mg of calcium for the primary prevention of fractures in noninstitutionalized postmenopausal women. (Grade I)
- Recommends against daily supplementation with 400 IU or less of vitamin D3 and 1,000 mg or less of calcium for the primary prevention of fractures in noninstitutionalized postmenopausal women. (Grade D)

### **Depression screening in Adults (2009)**

- Recommends screening adults for depression when staff-assisted depression care supports are in place to assure accurate diagnosis, effective treatment, and follow-up. (Grade B)
- Recommends against routinely screening adults for depression when staff-assisted depression care supports are not in place. There may be considerations that support screening for depression in an individual patient. (Grade C)

### **COPD diagnostic assessment**

- Recommends against screening adults for chronic obstructive pulmonary disease (COPD) using spirometry. (Grade D)
- *Note: HEDIS recommends use of spirometry in diagnosis of COPD*

### **Breast cancer screening**

- Recommends screening mammography for women, with and without clinical breast examination, every 1 to 2 years for women age 40 years and older. **(Grade B)\***currently updating

### **Medications for Risk Reduction of Primary Breast Cancer in Women (2013)**

- Recommends that clinicians engage in shared, informed decision making with women who are at increased risk for breast cancer about medications to reduce their risk. For women who are at increased risk for breast cancer and at low risk for adverse medication effects, clinicians should offer to prescribe risk-reducing medications, such as tamoxifen or raloxifene. **(Grade B)**
- Recommends against the routine use of medications, such as tamoxifen or raloxifene, for risk reduction of primary breast cancer in women who are not at increased risk for breast cancer. (Grade D)

### **Risk Assessment, Genetic Counseling, and Genetic Testing for BRCA-Related Cancer in Women (2013)**

- Recommends that primary care providers screen women who have family members with breast, ovarian, tubal, or peritoneal cancer with one of several screening tools designed to identify a family history that may be associated with an increased risk for potentially harmful mutations in breast cancer susceptibility genes (BRCA1 or BRCA2). Women with positive results should receive genetic counseling and, if indicated after counseling, BRCA testing. (Grade B)



- Recommends against routine genetic counseling or BRCA testing for women whose family history is not associated with an increased risk for potentially harmful mutations in the BRCA1 or BRCA2 genes. (Grade D)

#### **Colorectal cancer screening**

- Recommends screening for colorectal cancer (CRC) using fecal occult blood testing, sigmoidoscopy, or colonoscopy, in adults, beginning at age 50 years and continuing until age 75 years. The risks and benefits of these screening methods vary. (Grade A)
- Recommends against routine screening for colorectal cancer in adults age 76 to 85 years. There may be considerations that support colorectal cancer screening in an individual patient. (Grade C)
- Recommends against screening for colorectal cancer in adults older than age 85 years. (Grade D)
- Recommends against the routine use of aspirin and nonsteroidal anti-inflammatory drugs (NSAIDs) to prevent colorectal cancer in persons at average risk for colorectal cancer. (Grade D)

#### **Cancer screening and other recommendations**

- Recommends against screening for ovarian cancer in women. (Grade D)
- Recommends against screening for cervical cancer in women older than age 65 years who have had adequate prior screening and are not otherwise at high risk for cervical cancer. See the Clinical Considerations for discussion of adequacy of prior screening and risk factors. (Grade D)
- Recommends against PSA-based screening for prostate cancer. (Grade D)
- Recommends against screening for testicular cancer in adolescent or adult males. (Grade D)
- Recommends against the use of beta-carotene supplements, either alone or in combination, for the prevention of cancer or cardiovascular disease. (Grade D)
- The evidence is insufficient to recommend for or against the use of supplements of vitamins A, C, or E; multivitamins with folic acid; or antioxidant combinations for the prevention of cancer or cardiovascular disease. (Grade I)
- The current evidence is insufficient to assess the balance of benefits and harms of using a whole-body skin examination by a primary care clinician or patient skin self-examination for the early detection of cutaneous melanoma, basal cell cancer, or squamous cell skin cancer in the adult general population. (Grade I)

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### ***2014 HEDIS (Healthcare Effectiveness Data and Information Set) Quality Measures associated with Cardiovascular Risk Screening and Interventions [9]***

#### **Effectiveness of Care**

- Adult BMI Assessment
- Cholesterol Management for Patients With Cardiovascular Conditions
- Controlling High Blood Pressure
- Persistence of Beta-Blocker Treatment After a Heart Attack
- Comprehensive Diabetes Care
- Cardiovascular Monitoring for People With Cardiovascular Disease and Schizophrenia

- Physical Activity in Older Adults
- Aspirin Use and Discussion
- Medical Assistance With Smoking and Tobacco Use Cessation

***2014 HEDIS (Healthcare Effectiveness Data and Information Set) Quality Measures associated with preventing risks related to the Geriatric population [9]***

**Effectiveness of Care**

- Breast Cancer Screening
- Cervical Cancer Screening
- Colorectal Cancer Screening
- Glaucoma Screening in Older Adults
- Care for Older Adults
- Chlamydia Screening in Women
- Avoidance of Antibiotic Treatment in Adults With Acute Bronchitis
- Use of Spirometry Testing in the Assessment and Diagnosis of COPD
- Pharmacotherapy Management of COPD Exacerbation
- Osteoporosis Management in Women Who Had a Fracture
- Use of Imaging Studies for Low Back Pain
- Antidepressant Medication Management
- Annual Monitoring for Patients on Persistent Medications
- Medication Reconciliation Post-Discharge
- Potentially Harmful Drug-Disease Interactions in the Elderly
- Use of High-Risk Medications in the Elderly
- Fall Risk Management
- Management of Urinary Incontinence
- Osteoporosis Testing in Older Women in Older Adults
- Flu Vaccinations for Adults Ages 18-64
- Flu Vaccinations for Adults Ages 65 and Older
- Pneumococcal Vaccination Status for Older Adults

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***2014 Physician Quality Reporting System (PQRS) Measures associated with Cardiovascular Risk Screening and Interventions [10]***

**Controlling High Blood Pressure**

**236: Controlling High Blood Pressure**

Percentage of patients 18-85 years of age who had a diagnosis of hypertension and whose blood pressure was adequately controlled (< 140/90mmHg) during the measurement period

**295: Hypertension: Use of Aspirin or Other Antithrombotic Therapy**

Use of Aspirin or Other Antithrombotic Therapy 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

**296: Hypertension: Complete Lipid Profile**

- Complete Lipid Profile Percentage of patients aged 18 through 90 years old with a diagnosis of hypertension who received a complete lipid profile within 60 months
- 297: Hypertension: Urine Protein Test  
Urine Protein Test 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
- 298: Hypertension: Annual Serum Creatinine Test  
Annual Serum Creatinine Test Percentage of patients aged 18 through 90 years old with a diagnosis of hypertension who had a serum creatinine test done within 12 months
- 299: Hypertension: Diabetes Mellitus Screening Test  
Diabetes Mellitus Screening Test Percentage of patients aged 18 through 90 years old with a diagnosis of hypertension who had a diabetes screening test within 36 months
- 300: Hypertension: Blood Pressure Control  
Blood Pressure Control 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)
- 301: Hypertension: LDL-C Control  
Low Density Lipoprotein (LDL-C) Control Percentage of patients aged 18 through 90 years old with a diagnosis of hypertension who had most recent LDL cholesterol level under control (at goal)
- 302: Hypertension: Dietary and Physical Activity Modifications Appropriately Prescribed  
Dietary and Physical Activity Modifications Appropriately Prescribed 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
- 317: Preventive Care and Screening: Screening for High Blood Pressure and Follow-Up Documented  
Screening for High Blood Pressure and Follow-Up Documented 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

#### **Hypertension: Improvement in Blood Pressure**

- 373: Hypertension: Improvement in Blood Pressure  
Improvement in Blood Pressure Percentage of patients aged 18-85 years of age with a diagnosis of hypertension whose blood pressure improved during the measurement period

#### **Weight Assessment & Counseling for Physical Activity for Children & Adolescents**

- 128: Preventive Care and Screening: Body Mass Index (BMI) Screening and Follow-Up  
Body Mass Index (BMI) Screening and Follow-Up 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  $\geq 23$  and  $< 30$ ; Age 18 – 64 years BMI  $\geq 18.5$  and  $< 25$

**239: Weight Assessment and Counseling for Nutrition and Physical Activity for Children and Adolescents**

Percentage of patients 3-17 years of age who had an outpatient visit with a Primary Care Physician (PCP) or Obstetrician/Gynecologist (OB/GYN) and who had evidence of the following during the measurement period. Three rates are reported. - Percentage of patients with height, weight, and body mass index (BMI) percentile documentation - Percentage of patients with counseling for nutrition - Percentage of patients with counseling for physical activity

**Preventive Care & Screening: Cholesterol – Fasting LDL Test Performed**

**316: Preventive Care and Screening:**

Cholesterol – Fasting Low Density Lipoprotein (LDL-C) Test Performed AND Risk-Stratified Fasting LDL-C Percentage of patients aged 20 through 79 years whose risk factors\* have been assessed and a fasting LDL test has been performed AND percentage of patients aged 20 through 79 years who had a fasting LDL-C test performed and whose risk-stratified fasting LDL-C is at or below the recommended LDL-C goal \*There are three criteria for this measure based on the patient's risk category. 1. Highest Level of Risk Coronary Heart Disease (CHD) or CHD Risk Equivalent 2. Moderate Level of Risk Multiple (2+) Risk Factors 3. Lowest Level of Risk 0 or 1 Risk Factor

**Preventive Care & Screening: Risk Stratified Cholesterol – Fasting LDL**

**197: Coronary Artery Disease (CAD): Lipid Control**

Lipid Control 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  $\geq 100$  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

**241: Ischemic Vascular Disease (IVD): Complete Lipid Profile and LDL-C Control ( $< 100$  mg/dL)**

Complete Lipid Profile and LDL-C Control ( $< 100$  mg/dL) 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)

**316: Preventive Care and Screening: Cholesterol – Fasting Low Density Lipoprotein (LDL-C) Test Performed: AND Risk-Stratified Fasting LDL-C**

Cholesterol – Fasting Low Density Lipoprotein (LDL-C) Test Performed AND Risk-Stratified Fasting LDL-C Percentage of patients aged 20 through 79 years whose risk factors\* have been assessed and a fasting LDL test has been performed AND

percentage of patients aged 20 through 79 years who had a fasting LDL-C test performed and whose risk-stratified fasting LDL-C is at or below the recommended LDL-C goal \*There are three criteria for this measure based on the patient's risk category. 1. Highest Level of Risk Coronary Heart Disease (CHD) or CHD Risk Equivalent 2. Moderate Level of Risk Multiple (2+) Risk Factors 3. Lowest Level of Risk 0 or 1 Risk Factor

**2014 Physician Quality Reporting System (PQRS) Measures associated with Geriatric Risk Screening and Interventions [10]**

**Use of High Risk Medication in the Elderly**

**46: Medication Reconciliation**

Percentage of patients aged 65 years and older discharged from any inpatient facility (e.g., hospital, skilled nursing facility, or rehabilitation facility) and seen within 30 days following discharge in the office by the physician, prescribing practitioner, registered nurse, or clinical pharmacist providing on-going care who had a reconciliation of the discharge medications with the current medication list in the outpatient medical record documented

**130: Documentation of Current Medications in the Medical Record**

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

**238: Use of High-Risk Medications in the Elderly**

Percentage of patients 66 years of age and older who were ordered high-risk medications. Two rates are reported. a. Percentage of patients who were ordered at least one high-risk medication. b. Percentage of patients who were ordered at least two different high-risk medications.

**Screening for Future Fall Risk**

**24: Osteoporosis: Communication with the Physician Managing On-going Care Post-Fracture of Hip, Spine or Distal Radius for Men and Women Aged 50 Years and Older**

Communication with the Physician Managing On-going Care Post-Fracture of Hip, Spine or Distal Radius for Men and Women Aged 50 Years and Older: Percentage of patients aged 50 years and older treated for a hip, spine or distal radial fracture with documentation of communication with the physician managing the patient's on-going care that a fracture occurred and that the patient was or should be tested or treated for osteoporosis

**39: Screening or Therapy for Osteoporosis for Women Aged 65 Years and Older**

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

**40: Osteoporosis: Management Following Fracture of Hip, Spine or Distal Radius for Men and Women Aged 50 Years and Older**

- Management Following Fracture of Hip, Spine or Distal Radius for Men and Women Aged 50 Years and Older Percentage of patients aged 50 years and older with fracture of the hip, spine, or distal radius who had a central dual-energy X-ray absorptiometry (DXA) measurement ordered or performed or pharmacologic therapy prescribed
- 154: Falls: Risk Assessment  
Risk Assessment Percentage of patients aged 65 years and older with a history of falls who had a risk assessment for falls completed within 12 months
- 155: Falls: Plan of Care  
Plan of Care Percentage of patients aged 65 years and older with a history of falls who had a plan of care for falls documented within 12 months
- 318: Screening for Future Fall Risk  
Screening for Future Fall Risk Percentage of patients 65 years of age and older who were screened for future fall risk at least once during the measurement period

### **Anti-depressant Medication Management**

- 9: Antidepressant Medication Management  
Percentage of patients 18 years of age and older who were diagnosed with major depression, and who remained on antidepressant medication treatment. Two rates are reported • Effective Acute Phase Treatment Percentage of patients who remained on an antidepressant medication for at least 84 days (12 weeks) • Effective Continuation Phase Treatment Percentage of patients who remained on an antidepressant medication for at least 180 days (6 months)

### **Preventive Care & Screening for Clinical Depression and Follow-up Plan**

- 106: Adult Major Depressive Disorder (MDD): Comprehensive Depression Evaluation: Diagnosis and Severity  
Comprehensive Depression Evaluation Diagnosis and Severity Percentage of patients aged 18 years and older with a new diagnosis or recurrent episode of major depressive disorder (MDD) with evidence that they met the Diagnostic and Statistical Manual of Mental Disorders (DSM)-5 criteria for MDD AND for whom there is an assessment of depression severity during the visit in which a new diagnosis or recurrent episode was identified
- 107: Adult Major Depressive Disorder (MDD): Suicide Risk Assessment  
Suicide Risk Assessment Percentage of patients aged 18 years and older with a diagnosis of major depressive disorder (MDD) with a suicide risk assessment completed during the visit in which a new diagnosis or recurrent episode was identified
- 134: Preventive Care and Screening: Screening for Clinical Depression and Follow-Up Plan  
Screening for Clinical Depression and Follow-Up Plan Percentage of patients aged 12 years and older screened for clinical depression on the date of the encounter using an age appropriate standardized depression screening tool AND if positive, a follow-up plan is documented on the date of the positive screen

248: Substance Use Disorders: Screening for Depression Among Patients with Substance Abuse or Dependence

Screening for Depression Among Patients with Substance Abuse or Dependence  
Percentage of patients aged 18 years and older with a diagnosis of current substance abuse or dependence who were screened for depression within the 12-month reporting period

325: Adult Major Depressive Disorder (MDD): Coordination of Care of Patients with Specific Comorbid Conditions

Coordination of Care of Patients with Specific Comorbid Conditions  
Percentage of medical records of patients aged 18 years and older with a diagnosis of major depressive disorder (MDD) and a specific diagnosed comorbid condition (diabetes, coronary artery disease, ischemic stroke, intracranial hemorrhage, chronic kidney disease [stages 4 or 5], End Stage Renal Disease [ESRD] or congestive heart failure) being treated by another clinician with communication to the clinician treating the comorbid condition

367: Bipolar Disorder and Major Depression: Appraisal for alcohol or chemical substance use

Appraisal for alcohol or chemical substance use  
Percentage of patients with depression or bipolar disorder with evidence of an initial assessment that includes an appraisal for alcohol or chemical substance use

370: Depression: Remission at Twelve Months

Adult patients age 18 and older with major depression or dysthymia and an initial PHQ-9 score > 9 who demonstrate remission at twelve months defined as PHQ-9 score less than 5. This measure applies to both patients with newly diagnosed and existing depression whose current PHQ-9 score indicates a need for treatment

371: Depression: Utilization of the PHQ-9 Tool

Adult patients age 18 and older with the diagnosis of major depression or dysthymia who have a PHQ-9 tool administered at least once during a 4-month period in which there was a qualifying visit

**Dementia – Cognitive Assessment**

280: Dementia: Staging of Dementia

Staging of Dementia  
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

281: Dementia: Cognitive Assessment

Cognitive Assessment  
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

282: Dementia: Functional Status Assessment

Functional Status Assessment  
Percentage of patients, regardless of age, with a diagnosis of dementia for whom an assessment of patient's functional status is performed and the results reviewed at least once within a 12 month period

283: Dementia: Neuropsychiatric Symptom Assessment

- Neuropsychiatric Symptom Assessment Percentage of patients, regardless of age, with a diagnosis of dementia and for whom an assessment of patient's neuropsychiatric symptoms is performed and results reviewed at least once in a 12 month period
- 284: Dementia: Management of Neuropsychiatric Symptoms  
Management of Neuropsychiatric Symptoms 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
- 285: Dementia: Screening for Depressive Symptoms  
Screening for Depressive Symptoms Percentage of patients, regardless of age, with a diagnosis of dementia who were screened for depressive symptoms within a 12 month period
- 286: Dementia: Counseling Regarding Safety Concerns  
Counseling Regarding Safety Concerns 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
- 287: Dementia: Counseling Regarding Risks of Driving  
Counseling Regarding Risks of Driving 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
- 288: Dementia: Caregiver Education and Support  
Caregiver Education and Support 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 sources for support within a 12 month period

#### **Functional Status Assessment for Hip Replacement**

- 218: Functional Deficit: Change in Risk-Adjusted Functional Status for Patients with Hip Impairments  
Change in Risk-Adjusted Functional Status for Patients with Hip Impairments  
Percentage of patients aged 18 or older that receive treatment for a functional deficit secondary to a diagnosis that affects the hip in which the change in their Risk-Adjusted Functional Status is measured
- 376: Functional Status Assessment for Hip Replacement  
Percentage of patients aged 18 years and older with primary total hip arthroplasty (THA) who completed baseline and follow-up (patient-reported) functional status assessments

#### **Functional Status Assessment for Complex Chronic Conditions**

- 217: Functional Deficit: Change in Risk-Adjusted Functional Status for Patients with Knee Impairments  
Change in Risk-Adjusted Functional Status for Patients with Knee Impairments  
Percentage of patients aged 18 or older that receive treatment for a functional



- deficit secondary to a diagnosis that affects the knee in which the change in their Risk-Adjusted Functional Status is measured
- 219: Functional Deficit: Change in Risk-Adjusted Functional Status for Patients with Lower Leg, Foot or Ankle Impairments  
Change in Risk-Adjusted Functional Status for Patients with Lower Leg, Foot or Ankle Impairments Percentage of patients aged 18 or older that receive treatment for a functional deficit secondary to a diagnosis that affects the lower leg, foot or ankle in which the change in their Risk-Adjusted Functional Status is measured
- 220: Functional Deficit: Change in Risk-Adjusted Functional Status for Patients with Lumbar Spine Impairments  
Change in Risk-Adjusted Functional Status for Patients with Lumbar Spine Impairments Percentage of patients aged 18 or older that receive treatment for a functional deficit secondary to a diagnosis that affects the lumbar spine in which the change in their Risk-Adjusted Functional Status is measured
- 221: Functional Deficit: Change in Risk-Adjusted Functional Status for Patients with Shoulder Impairments  
Change in Risk-Adjusted Functional Status for Patients with Shoulder Impairments Percentage of patients aged 18 or older that receive treatment for a functional deficit secondary to a diagnosis that affects the shoulder in which the change in their Risk-Adjusted Functional Status is measured
- 222: Functional Deficit: Change in Risk-Adjusted Functional Status for Patients with Elbow, Wrist or Hand Impairments  
Change in Risk-Adjusted Functional Status for Patients with Elbow, Wrist or Hand Impairments Percentage of patients aged 18 or older that receive treatment for a functional deficit secondary to a diagnosis that affects the elbow, wrist or hand in which the change in their Risk-Adjusted Functional Status is measured
- 223: Functional Deficit: Change in Risk-Adjusted Functional Status for Patients with Neck, Cranium, Mandible, Thoracic Spine, Ribs, or Other General Orthopedic Impairments  
Change in Risk-Adjusted Functional Status for Patients with Neck, Cranium, Mandible, Thoracic Spine, Ribs, or Other General Orthopedic Impairments Percentage of patients aged 18 or older that receive treatment for a functional deficit secondary to a diagnosis that affects the neck, cranium, mandible, thoracic spine, ribs, or other general orthopedic impairment in which the change in their Risk-Adjusted Functional Status is measured
- 375: Functional Status: Assessment for Knee Replacement  
Percentage of patients aged 18 years and older with primary total knee arthroplasty (TKA) who completed baseline and follow-up (patient-reported) functional status assessments
- 377: Functional Status Assessment for Complex Chronic Conditions  
Percentage of patients aged 65 years and older with heart failure who completed initial and follow-up patient-reported functional status assessments

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### ***Clinical Specific Topics: Cardiovascular Risk***

#### **AHA/ACC Guideline on Lifestyle Management to Reduce Cardiovascular Risk**

This report covers recommendations for LDL-C and BP lowering using diet and physical activity. Recommendations are based on systematic reviews of the literature and include:

LDL-C: Advise adults who would benefit from LDL-C lowering to:

- Consume a dietary pattern that emphasizes intake of vegetables, fruits, and whole grains; includes low-fat dairy products, poultry, fish, legumes, nontropical vegetable oils and nuts; and limits intake of sweets, sugar-sweetened beverages, and red meats. (A, I)
  - Adapt this dietary pattern to appropriate calorie requirements, personal and cultural food preferences, and nutritional therapy for other medical conditions (including diabetes mellitus)
  - Achieve this pattern by following plans such as the DASH dietary pattern, the USDA Food Pattern, or the AHA Diet.
- Aim for a dietary pattern that achieves 5% to 6% of calories from saturated fat. (A, I)
- Reduce percent of calories from saturated fat. (A, I)
- Reduce percent of calories from trans fat. (A, I)

BP: Advise adults who would benefit from BP lowering to:

- Consume a dietary pattern that emphasizes intake of vegetables, fruits, and whole grains; includes low-fat dairy products, poultry, fish, legumes, nontropical vegetable oils and nuts; and limits intake of sweets, sugar-sweetened beverages, and red meats. (A, I)
  - Adapt this dietary pattern to appropriate calorie requirements, personal and cultural food preferences, and nutritional therapy for other medical conditions (including diabetes mellitus)
  - Achieve this pattern by following plans such as the DASH dietary pattern, the USDA Food Pattern, or the AHA Diet.
- Lower sodium intake (A, I)
- Consume no more than 2,400 mg of sodium/day; further reduction of sodium intake to 1500 mg/day can result in even greater reduction in BP; and even without achieving these goals, reducing sodium intake by at least 1000 mg/day lowers BP. (B, IIa)
- Combine the DASH dietary pattern with lower sodium intake. (A, I)

Physical Activity:

- Lipids: In general, advise adults to engage in aerobic physical activity to reduce LDL-C and non HDL-C: 3 to 4 sessions a week, lasting on average 40 minutes per session, and involving moderate to vigorous intensity physical activity. (A, IIa)
- BP: In general, advise adults to engage in aerobic physical activity to lower BP: 3 to 4 sessions a week, lasting on average 40 minutes per session, and involving moderate to vigorous intensity physical activity. (A, IIa)

The classification and grading system can be found in the summary of the report.

To view a summary of the report [11]:

[http://my.americanheart.org/idc/groups/ahamamah-public/@wcm/@sop/@smd/documents/downloadable/ucm\\_462826.pdf](http://my.americanheart.org/idc/groups/ahamamah-public/@wcm/@sop/@smd/documents/downloadable/ucm_462826.pdf)

To view the entire report [12]:

<http://circ.ahajournals.org/content/early/2013/11/11/01.cir.0000437740.48606.d1>

### ***Clinical Specific Topics: Obesity***

#### **AHA/ACC/TOS Guideline for the Management of Overweight and Obesity in Adults**

##### **Recommendation 1**

- Measure height and weight and calculate BMI at annual visits or more frequently. (C, I)
- Use the current cutpoints for overweight (BMI 25.0-29.9 kg/m<sup>2</sup>) and obesity (BMI ≥30 kg/m<sup>2</sup>) to identify adults who may be at elevated risk of CVD and the current cutpoints for obesity (BMI ≥30 kg/m<sup>2</sup>) to identify adults who may be at elevated risk of mortality from all causes. (B, I)
- Advise overweight and obese adults that the greater the BMI, the greater the risk of CVD, type 2 diabetes, and all-cause mortality. (B, I)
- Measure waist circumference at annual visits or more frequently in overweight and obese adults. (B, IIa)
  - Advise adults that the greater the waist circumference, the greater the risk of CVD, type 2 diabetes, and all-cause mortality. The cutpoints currently in common use (from either NIH/NHLBI or WHO/IDF) may continue to be used to identify patients who may be at increased risk until further evidence becomes available.

##### **Recommendation 2**

- Counsel overweight and obese adults with cardiovascular risk factors (high BP, hyperlipidemia, and hyperglycemia), that lifestyle changes that produce even modest, sustained weight loss of 3%–5% produce clinically meaningful health benefits, and greater weight losses produce greater benefits. (A, I)
  - Sustained weight loss of 3%–5% is likely to result in clinically meaningful reductions in triglycerides, blood glucose, hemoglobin A1c, and the risk of developing type 2 diabetes.
  - Greater amounts of weight loss will reduce BP, improve LDL-C and HDL-C, and reduce the need for medications to control BP, blood glucose and lipids as well as further reduce triglycerides and blood glucose.

##### **Recommendation 3**

- Counsel overweight and obese adults with cardiovascular risk factors (high BP, hyperlipidemia, and hyperglycemia), that lifestyle changes that produce even modest, sustained weight loss of 3%–5% produce clinically meaningful health benefits, and greater weight losses produce greater benefits. (A, I)

- Sustained weight loss of 3%–5% is likely to result in clinically meaningful reductions in triglycerides, blood glucose, hemoglobin A1c, and the risk of developing type 2 diabetes.
- Greater amounts of weight loss will reduce BP, improve LDL-C and HDL-C, and reduce the need for medications to control BP, blood glucose and lipids as well as further reduce triglycerides and blood glucose.
- Prescribe a calorie-restricted diet for obese and overweight individuals who would benefit from weight loss, based on the patient's preferences and health status, and preferably refer to a nutrition professional for counseling. A variety of dietary approaches can produce weight loss in overweight and obese adults, as presented in CQ3, ES2. (A, I)

#### Recommendation 4

- Advise overweight and obese individuals who would benefit from weight loss to participate for  $\geq 6$  months in a comprehensive lifestyle program that assists participants in adhering to a lower-calorie diet and in increasing physical activity through the use of behavioral strategies. (A, I)
- Prescribe on-site, high-intensity (i.e.,  $\geq 14$  sessions in 6 months) comprehensive weight loss interventions provided in individual or group sessions by a trained interventionist. (A, I)
- Electronically delivered weight loss programs (including by telephone) that include personalized feedback from a trained interventionist† can be prescribed for weight loss but may result in smaller weight loss than face-to-face interventions. (A, IIa)
- Some commercial-based programs that provide a comprehensive lifestyle intervention can be prescribed as an option for weight loss, provided there is peer-reviewed published evidence of their safety and efficacy. (A, IIa)
- Use a very-low-calorie diet (defined as  $< 800$  kcal/d) only in limited circumstances and only when provided by trained practitioners in a medical care setting where medical monitoring and high-intensity lifestyle intervention can be provided. Medical supervision is required because of the rapid rate of weight loss and potential for health complications. (A, IIa)
- Advise overweight and obese individuals who have lost weight to participate long term ( $\geq 1$  year) in a comprehensive weight loss maintenance program. (A, I)
- For weight loss maintenance, prescribe face-to-face or telephone-delivered weight loss maintenance programs that provide regular contact (monthly or more frequently) with a trained interventionist† who helps participants engage in high levels of physical activity (i.e., 200–300 min/wk), monitor body weight regularly (i.e., weekly or more frequently), and consume a reduced-calorie diet (needed to maintain lower body weight). (A, I)

#### Recommendation 5

- Advise adults with a BMI  $\geq 40$  kg/m<sup>2</sup> or BMI  $\geq 35$  kg/m<sup>2</sup> with obesity-related comorbid conditions who are motivated to lose weight and who have not responded to behavioral treatment with or without pharmacotherapy with sufficient weight loss to achieve targeted health outcome goals that bariatric surgery may be an appropriate option to improve health and offer referral to an experienced bariatric surgeon for consultation and evaluation. (A, IIb)

- For individuals with a BMI <35 kg/m<sup>2</sup>, there is insufficient evidence to recommend for or against undergoing bariatric surgical procedures. (No recommendation)
- Advise patients that choice of a specific bariatric surgical procedure may be affected by patient factors, including age, severity of obesity/BMI, obesity-related comorbid conditions, other operative risk factors, risk of short- and long-term complications, behavioral and psychosocial factors, and patient tolerance for risk, as well as provider factors (surgeon and facility). (C, IIb)

The classification and grading system can be found in the summary of the report.

To view a summary of the report [13]:

[http://my.americanheart.org/idc/groups/ahamaph-public/@wcm/@sop/@smd/documents/downloadable/ucm\\_462855.pdf](http://my.americanheart.org/idc/groups/ahamaph-public/@wcm/@sop/@smd/documents/downloadable/ucm_462855.pdf)

To view the entire report [14]:

<http://circ.ahajournals.org/content/early/2013/11/11/01.cir.0000437739.71477.ee>

### ***Clinical Specific Topics: Cholesterol***

#### **ACC/AHA Guideline on the treatment of Blood Cholesterol to Reduce Atherosclerotic Cardiovascular Risk in Adults**

The Key Points of this report include:

- Encouraging adherence to a heart-healthy lifestyle.
- Statin therapy is recommended for adults in groups demonstrated to benefit.
- Statins have an acceptable margin of safety when used in properly selected individuals and appropriately monitored.
- Engaging in a clinician-patient discussion before initiating statin therapy, especially for primary prevention.
- Using the newly developed Pooled Cohort Equations for estimating 10-year ASCVD risk.
- Initiating the appropriate intensity of statin therapy to reduce ASCVD risk.
- Evidence is inadequate to support treatment to specific LDL-C or non-HDL-C treatment goals.
- Regularly monitor patients for adherence to lifestyle and appropriate intensity of statin therapy.
- Nonstatin drug therapy may be considered in selected individuals.

The recommendations and guidelines of this report are extensive. Please view the summary of the report for a full list.

The classification and grading system can be found in the summary of the report.

To view a summary of the report [15]:

[http://my.americanheart.org/idc/groups/ahamaph-public/@wcm/@sop/@smd/documents/downloadable/ucm\\_462857.pdf](http://my.americanheart.org/idc/groups/ahamaph-public/@wcm/@sop/@smd/documents/downloadable/ucm_462857.pdf)

To view the entire report [16]:

<https://circ.ahajournals.org/content/early/2013/11/11/01.cir.0000437738.63853.7a.full.pdf+html>

### ***Clinical Specific Topics: Hypertension***

#### **Evidence – Based Guideline for the Management of High Blood Pressure in Adults (Report from JNC 8) – 2014**

Using a review of randomized controlled trials, this report focuses on addressing three questions.

1. In adults with hypertension, does initiating antihypertensive pharmacologic therapy at specific BP thresholds improve health outcomes? Or more simply put, at what blood pressure should blood pressure medication be started?
2. In adults with hypertension, does treatment with antihypertensive pharmacologic therapy to a specified BP goal lead to improvements in health outcomes? Or, at what blood pressure should you maintain medication?
3. In adults with hypertension, do various antihypertensive drugs or drug classes differ in comparative benefits and harms on specific health outcomes? Or, what medications should doctors use to obtain the goal blood pressure?

#### **9 Recommendations are given in the JNC 8 Hypertension Guidelines**

1. In patients aged  $\geq 60$  years, initiate pharmacologic treatment in systolic BP  $\geq 150$ mmHg or diastolic BP  $\geq 90$ mmHg and treat to a goal systolic BP  $< 150$ mmHg and goal diastolic BP  $< 90$ mmHg. (Strong Recommendation–Grade A)
2. In patients aged  $< 60$  years, initiate pharmacologic treatment at diastolic BP  $\geq 90$ mmHg and treat to a goal  $< 90$ mmHg. (For ages 30–59 years, Strong Recommendation–Grade A; For ages 18–29 years, Expert Opinion–Grade E)
3. In patients aged  $< 60$  years, initiate pharmacologic treatment at systolic BP  $\geq 140$ mmHg and treat to a goal  $< 140$ mmHg. (Expert Opinion–Grade E)
4. In patients aged  $\geq 18$  years with chronic kidney disease, initiate pharmacologic treatment at systolic BP  $\geq 140$ mmHg or diastolic BP  $\geq 90$ mmHg and treat to goal systolic BP  $< 140$ mmHg and goal diastolic BP  $< 90$ mmHg. (Expert Opinion–Grade E)
5. In patients aged  $\geq 18$  years with [diabetes](#), initiate pharmacologic treatment at systolic BP  $\geq 140$ mmHg or diastolic BP  $\geq 90$ mmHg and treat to a goal systolic BP  $< 140$ mmHg and goal diastolic BP  $< 90$ mmHg. (Expert Opinion–Grade E)
6. In the general nonblack population, including those with diabetes, initial antihypertensive treatment should include a thiazide-type diuretic, [CCB](#), [ACE inhibitor](#), or [ARB](#). (Moderate Recommendation–Grade B) This recommendation is different from the JNC 7 in which the panel recommended thiazide-type diuretics as initial therapy for most patients.
7. In the general black population, including those with diabetes, initial antihypertensive treatment should include a thiazide-type diuretic or CCB. (For general black population: Moderate Recommendation - Grade B; for black patients with diabetes: Weak Recommendation–Grade C)

8. In the population aged  $\geq 18$  years with chronic kidney disease, initial (or add-on) antihypertensive treatment should include an ACE inhibitor or ARB to improve kidney outcomes. (Moderate Recommendation–Grade B)
9. If goal BP is not reached within a month of treatment, increase the dose of the initial drug or add a second drug from one of the classes in Recommendation 6. If goal BP cannot be reached with two drugs, add and titrate a third drug from the list provided. Do not use an ACEI and an ARB together in the same patient. If goal BP cannot be reached using only the drugs in Recommendation 6 because of a contraindication or the need to use more than 3 drugs to reach goal BP, antihypertensive drugs from other classes can be used. (Expert Opinion–Grade E)

#### Grading of JNC 8 Recommendations

1. A: Strong Recommendation: There is high certainty based on evidence that the net benefit is substantial.
2. B: Moderate Recommendation: There is moderate certainty based on evidence that the net benefit is moderate to substantial.
3. C: Weak Recommendation: There is at least moderate certainty based on evidence that there is a small net benefit.
4. E: Expert Opinion (“There is insufficient evidence or evidence is unclear or conflicting, but this is what the committee recommends.”) Net benefit is unclear. Balance of benefits and harms cannot be determined because of no evidence, insufficient evidence, unclear evidence, or conflicting evidence, but the committee thought it was important to provide clinical guidance and make a recommendation. Further research is recommended in this area.

To view the entire report [17]:

<http://www.measureuppressuredown.com/HCProf/Find/BPs/JNC8/specialCommunication.pdf>

#### ***Clinical Specific Topics: Diabetes***

##### **Standards of Medical Care in Diabetes – 2014**

This report has an extensive list of recommendations addressing virtually every aspect of diabetic care. To view the recommendations only, refer to the executive summary [18]: [http://care.diabetesjournals.org/content/36/Supplement\\_1/S4.full](http://care.diabetesjournals.org/content/36/Supplement_1/S4.full)

To view the entire report [19]:

[http://care.diabetesjournals.org/content/37/Supplement\\_1/S14.full.pdf+html](http://care.diabetesjournals.org/content/37/Supplement_1/S14.full.pdf+html)

#### ***Clinical Specific Topics: Tobacco***

##### **Treating Tobacco Use & Dependence – 2008 Update**

10 Key Recommendations:

The overarching goal of these recommendations is that clinicians strongly recommend the use of effective tobacco dependence counseling and medication treatments to their patients who use tobacco, and that health systems, insurers, and purchasers assist clinicians in making such effective treatments available.

1. Tobacco dependence is a chronic disease that often requires repeated intervention and multiple attempts to quit. Effective treatments exist, however, that can significantly increase rates of long-term abstinence.
2. It is essential that clinicians and health care delivery systems consistently identify and document tobacco use status and treat every tobacco user seen in a health care setting.
3. Tobacco dependence treatments are effective across a broad range of populations. Clinicians should encourage every patient willing to make a quit attempt to use the counseling treatments and medications recommended in this Guideline.
4. Brief tobacco dependence treatment is effective. Clinicians should offer every patient who uses tobacco at least the brief treatments shown to be effective in this Guideline.
5. Individual, group, and telephone counseling are effective, and their effectiveness increases with treatment intensity. Two components of counseling are especially effective, and clinicians should use these when counseling patients making a quit attempt:
  - a. Practical counseling (problem-solving/skills training)
  - b. Social support delivered as part of treatment
6. Numerous effective medications are available for tobacco dependence, and clinicians should encourage their use by all patients attempting to quit smoking—except when medically contraindicated or with specific populations for which there is insufficient evidence of effectiveness (i.e., pregnant women, smokeless tobacco users, light smokers, and adolescents).
  - a. Seven first-line medications (5 nicotine and 2 non-nicotine) reliably increase long-term smoking abstinence rates:
    - i. Bupropion SR
    - ii. Nicotine gum
    - iii. Nicotine inhaler
    - iv. Nicotine lozenge
    - v. Nicotine nasal spray
    - vi. Nicotine patch
    - vii. Varenicline
  - b. Clinicians also should consider the use of certain combinations of medications identified as effective in this Guideline.
7. Counseling and medication are effective when used by themselves for treating tobacco dependence. The combination of counseling and medication, however, is more effective than either alone. Thus, clinicians should encourage all individuals making a quit attempt to use both counseling and medication.
8. Telephone quitline counseling is effective with diverse populations and has broad reach. Therefore, both clinicians and health care delivery systems should ensure patient access to quitlines and promote quitline use.
9. If a tobacco user currently is unwilling to make a quit attempt, clinicians should use the motivational treatments shown in this Guideline to be effective in increasing future quit attempts.
10. Tobacco dependence treatments are both clinically effective and highly cost-effective relative to interventions for other clinical disorders. Providing coverage for these treatments increases quit rates. Insurers and purchasers should



ensure that all insurance plans include the counseling and medication identified as effective in this Guideline as covered benefits.

To view the full report [20]

<http://bphc.hrsa.gov/buckets/treatingtobacco.pdf>

#### **Pharmacological Treatments for Smoking Cessation – 2014**

Current Treatments: Nicotine Replacement Therapy (NRT), Bupropion, Varenicline

- Metanalysis 267 studies (101,804 patients), Worldwide, Years 1979 - 2012
- Primary outcomes: 1) Smoking abstinence at 6 months, 2) Serious Adverse Events
- All 3 treatments alone better than placebo
- Efficacy: Varenicline = 2 forms of NRT > 1 form of NRT = Bupropion
- Nicotine gum less effective than other NRT forms when used as monotherapy
- No serious adverse events for any treatment vs. placebo
  - Note: FDA Box Warning Bupropion = Neuropsychiatric Events
  - Note: FDA Box Warning Varenicline = Neuropsychiatric & Cardiovascular Events
- The odds ratio (OR) for NRT was 1.84 (95% Bayesian credible interval [CrI], 1.71-1.99); bupropion, 1.82 (95% CrI, 1.60-2.06); and varenicline, 2.88 (95% CrI, 2.40-3.47). Direct comparisons between bupropion and NRT showed no difference in efficacy (OR, 0.99 [95% CrI, 0.86-1.13]).
- Recommend combination of pharmacotherapy & counseling

To view the full report [21]

<http://www.ncbi.nlm.nih.gov/pubmed/24399558>

#### **Electronic Cigarettes – 2014**

Possibly helpful, but more studies needed

- Probably safer than tobacco cigarettes
- Possible side effects: Lipoid Pneumonia, Racing heart, oral/lung irritant, 2<sup>nd</sup> hand nicotine may affect susceptible individuals, addiction.
- Nicotine non-carcinogenic, but addictive
- Currently marketed as “alternative” to cigarettes, rather than a cessation tool
- Unregulated (Ingredients, advertising, age limits, safety profile, public use, etc)

To view the full report [22]

<http://www.ncbi.nlm.nih.gov/pubmed/24399559>

### ***Clinical Specific Topics: Geriatrics***

#### **Patient-Centered Care for Older Adults with Multiple chronic Conditions: A Stepwise Approach from the American Geriatrics Society – 2012**

To view the complete report [23]:

<http://www.americangeriatrics.org/files/documents/MCC.stepwise.approach.pdf>

#### **American Geriatric Society Updated Beers Criteria for Potentially Inappropriate Medications use in Older Adults – 2012**

To view a summary [24]:

<http://www.americangeriatrics.org/files/documents/beers/BeersCriteriaPublicTranslation.pdf>

To view the complete report [25]:

[http://www.americangeriatrics.org/files/documents/beers/2012BeersCriteria\\_JAGS.pdf](http://www.americangeriatrics.org/files/documents/beers/2012BeersCriteria_JAGS.pdf)

#### **Summary of the Updated American Geriatrics Society/British Geriatrics Society Clinical Practice Guidelines for Prevention of Falls in Older Persons – 2010**

To view a list of these 43 recommendations [26]:

[http://www.americangeriatrics.org/files/documents/health\\_care\\_pros/Falls.Summary.Guide.pdf](http://www.americangeriatrics.org/files/documents/health_care_pros/Falls.Summary.Guide.pdf)

To view the summary report [27]:

[http://www.americangeriatrics.org/files/documents/health\\_care\\_pros/JAGS.Falls.Guidelines.pdf](http://www.americangeriatrics.org/files/documents/health_care_pros/JAGS.Falls.Guidelines.pdf)

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### ***The Community Guide: Interventions associated with Cardiovascular Risk Screening and Interventions [7]***

#### **Cardiovascular Disease Prevention and Control**

- Clinical Decision-Support Systems (CDSS) (Recommended)
- Reducing Out-of-Pocket Costs for Cardiovascular Disease Preventive Services for Patients with High Blood Pressure and High Cholesterol (Recommended)
- Team-Based Care to Improve Blood Pressure Control (Recommended)

#### **Diabetes Prevention and Control**

Healthcare system level interventions

- Case Management Interventions to improve glycemic control (Recommended)
- Disease management programs (Recommended)

Self-Management education

- In community gathering places, adults with type 2 diabetes (Recommended)
- In the Home-People with Type 2 Diabetes (Insufficient Evidence)
- In recreational camps (Insufficient Evidence)
- In worksites (Insufficient Evidence)

## **Obesity Prevention and Control**

### Provider-oriented interventions

- Provider education (Insufficient Evidence)
- Provider feedback (Insufficient Evidence)
- Provider reminders (Insufficient Evidence)
- Provider education with a client intervention (Insufficient Evidence)
- Multicomponent provider interventions (Insufficient Evidence)
- Multicomponent provider interventions with client interventions (Insufficient Evidence)

### Interventions in community settings

#### Interventions to reduce screen time

- Behavioral interventions to reduce screen time (Recommended)
- Mass media interventions to reduce screen time (Insufficient Evidence)

### Technology-Supported Interventions

#### Multicomponent Coaching or Counseling Interventions

- To reduce weight (Recommended)
- To maintain weight (Recommended)

### Interventions in specific settings

- Worksite programs (Recommended)

## **Increasing Physical Activity**

### Behavioral and social approaches

- Individually adapted health behavior change programs (Recommended)
- Social support interventions in community settings (Recommended)
- Family based social support (Insufficient Evidence)
- Enhanced school based physical education (Recommended)
- College based physical education and health education (Recommended)

### Campaigns and informational approaches

- Community wide campaigns (Recommended)
- Stand alone mass media campaigns (Insufficient Evidence)

## **Reducing Tobacco Use and Secondhand Smoke Exposure**

- Community education to reduce secondhand smoke exposure in the home (Insufficient Evidence)
- Incentives and competitions to increase smoking cessation
  - When used alone (Insufficient Evidence)
  - When used in combination with a additional interventions (Recommended)
- Internet based cessation interventions (Insufficient Evidence)
- Interventions to increase the unit price for tobacco products (Recommended)
- Mass media cessation contests (Insufficient Evidence)
- Mass-reach health communication interventions (Recommended)
- Mobile phone based cessation interventions (Recommended)
- Reducing out of pocket costs for evidence based cessation treatments (Recommended)
- Smoke free policies (Recommended)
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***The Community Guide: Interventions associated with preventing risks related to the Geriatric population [7]***

**Cancer Prevention and Control**

**Increasing Breast, Cervical, and Colorectal Cancer Screening**

**Client-Oriented Interventions**

- Client Reminders
  - Breast Cancer (Recommended)
  - Cervical Cancer (Recommended)
  - Colorectal Cancer (Recommended)
- Client Incentives
  - Breast Cancer (Insufficient Evidence)
  - Cervical Cancer (Insufficient Evidence)
  - Colorectal Cancer (Insufficient Evidence)
- Small Media
  - Breast Cancer (Recommended)
  - Cervical Cancer (Recommended)
  - Colorectal Cancer (Recommended)
- Mass Media
  - Breast Cancer (Insufficient Evidence)
  - Cervical Cancer (Insufficient Evidence)
  - Colorectal Cancer (Insufficient Evidence)
- Group Education
  - Breast Cancer (Recommended)
  - Cervical Cancer (Insufficient Evidence)
  - Colorectal Cancer (Insufficient Evidence)
- One-on-One Educations
  - Breast Cancer (Recommended)
  - Cervical Cancer (Recommended)
  - Colorectal Cancer (Recommended)
- Reducing Structural Barriers
  - Breast Cancer (Recommended)
  - Cervical Cancer (Insufficient Evidence)
  - Colorectal Cancer (Recommended)
- Reducing Client Out-of-Pocket Costs
  - Breast Cancer (Recommended)
  - Cervical Cancer (Insufficient Evidence)
  - Colorectal Cancer (Insufficient Evidence)

**Provider-Oriented Interventions**

- Provider Assessment and Feedback (Recommended)
- Provider Incentives (Insufficient Evidence)
- Provider Reminder and Recall Systems (Recommended)

**Preventing Skin Cancer**

**Educations and Policy Approaches**

- Healthcare Settings and Providers (Insufficient Evidence)
- Outdoor Occupational Settings (Recommended)
- Outdoor Recreational Settings (Recommended)

**Interventions Targeting Parents and Caregivers**

- Interventions targeting children's parents and caregivers (Insufficient Evidence)

#### Community-Wide Interventions

- Mass Media (Insufficient Evidence)
- Multicomponent community wide interventions (Recommended)

#### Promoting informed decision making for cancer screening

- Promoting informed decision making for cancer screening (Insufficient Evidence)

#### **Improving Mental Health and Addressing Mental Illness**

- Collaborative care for the management of depressive disorders (Recommended)

#### Interventions to reduce Depression among older adults

- Home-based depression care management (Recommended)
- Clinic-based depression care management (Recommended)
- Community-based exercise interventions (Insufficient Evidence)

#### **Increasing Appropriate Vaccination**

##### Universally Recommended Vaccinations

- Enhancing Access to Vaccination Services (Insufficient Evidence)
- Expanded access in healthcare settings when used alone (Recommended)
- Home visits to increase vaccination rates (Recommended)
- Reducing client out of pocket costs (Recommended)

##### Provider or system based interventions

- Health care system based interventions implemented in combination (Recommended)
- Immunization information systems (Recommended)
- Provider assessment and feedback (Recommended)
- Provider education when used alone (Insufficient Evidence)
- Provider reminders (Recommended)
- Standing orders (Recommended)

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