

## Phase 2 Measures of Cardiovascular Population

In Phase 2, teams reporting on CVD populations will track the core national measures (measures 1-3) along with count of patients with CVD tracked by the clinical information system. "Patients with CVD" is defined as patients with the diagnosis of Hypertension (*ICD9 codes 401-404*), Dyslipidemia (*ICD-9 code 272.4: Other and unspecified hyperlipidemia*), and/or Coronary artery disease (CAD) (*ICD-9 codes 410-414.*) ICD-9 codes are not always accurate, however; and organizations are reminded that clinical judgment should subsequently take precedence when selecting patients to include in a specific diagnostic category. The measures, as currently defined, apply to all adults; i.e., those greater than or equal to 18 years of age. These measures would definitely NOT apply to individuals under 18 years of age, for whom the definitions of hypertension and dyslipidemia differ (and in fact vary as a function of age), and in whom CAD is of course exceedingly rare. Teams are welcome to track any of the additional measures (4-13) as useful to their work.

<b>REQUIRED MEASURES</b>				
<b>Measure</b>	<b>Definition</b>	<b>Data Gathering Plan</b>	<b>Goal</b>	<b>Notes/Comments</b>
1. Hypertensive Patients with appropriate BP control	<p>The number of CVD patients with a</p> <ol style="list-style-type: none"> <li>1. diagnosis of hypertension (but not DM) whose last BP (taken with the last 12 months) was less than 140/90 OR</li> <li>2. diagnosis of hypertension AND DM whose last BP (taken within the last 12 months) was less than 130/80</li> </ol> <p>DIVIDED by the total of CVD patients with hypertension in the clinical information system with a BP in the last 12 months. Multiply by 100 to get a percentage.</p>	<p>On the last workday of each month, search the clinical information system for all CVD patients with a</p> <ol style="list-style-type: none"> <li>1. diagnosis of hypertension (but not DM) whose last BP (taken with the last 12 months) was less than 140/90 OR</li> <li>2. diagnosis of hypertension AND DM whose last BP (taken within the last 12 months) was less than 130/80</li> </ol> <p>Also, count the number of CVD patients with hypertension in the clinical information system with a BP in the last 12 months.</p>	>50%	<p>JNC-VII Ref. 1</p> <p>PECS 3.0 will report separately on the BP results of all CVD patients with DM using the 130/80 limit.</p> <p><i>The definition of this measure has changed from previous years. We now distinguish those patients that have both hypertension and diabetes.</i></p> <p>Note that CVD patients with renal disease should have a BP goal &lt; 130/80.</p>
2. CVD Patients with 2 BP's in Last Year	<p>The number of CVD patients in the clinical information system who have had two BP's in the last 12 months, divided by the total number of CVD patients in the clinical information system. Multiply by 100 to get a percentage</p>	<p>On the last workday of each month, search the clinical information system for all patients with CVD who have had two BP's within the last 12 months. At the same time, count the number of CVD patients.</p>	>90%	<p>JNC-VII Ref. 1</p>

3. Documentation of Self-management Goal Setting	The number of CVD patients in the clinical information system with documented self-management goals in the last 12 months divided by the total number of CVD patients in the clinical information system. Multiply by 100 to get a percentage.	On the last workday of each month, search the clinical information system for all patients with a diagnosis of CVD who have documented self-management goals set with a clinician in the past 12 months. At the same count the number of CVD patients.	>70%	JNC-VII, American Society of Hypertension Guidelines, Lorig et al. Ref. 1, 3, 4
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**ADDITIONAL RECOMMENDED MEASURES: Your team may choose one or more of these to track and report on. You will find that they can be used to enhance care and increase the ability to achieve the required measures above**

<p>4. Patients with appropriate fasting lipid profile documented</p>	<p>The number of CVD patients in the clinical information system with a documented fasting lipid profile within the condition appropriate time frame (1 year for patients with CAD or CAD risk equivalent by ATP III guidelines; 1 year for patients with dyslipidemia and 5 years for patients with hypertension only who are not in high risk category) divided by the total number of CVD patients in the clinical information system. Multiply by 100 to get a percentage.</p>	<p>On the last workday of each month, search the clinical information system for all CVD patients with a documented fasting lipid profile within the condition appropriate time frame (1 year for patients with CAD or CAD risk equivalent by ATP III guidelines; 1 year for patients with dyslipidemia and 5 years for patients with hypertension only who are not in high risk category). At the same time count the total number of patients with a diagnosis of CVD.</p>	<p>&gt;80%</p>	<p>ATP-III Ref. 2</p> <p>NOTE: <i>This measure definition has changed from previous years to align more closely with ATP-III guidelines.</i></p>
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<p>5. Patients with LDL Cholesterol level treated to goal</p>	<p>The number of CVD patients with fasting LDL documented in the appropriate time range and whose last fasting LDL is in appropriate range:</p> <ol style="list-style-type: none"> <li>1. LDL &lt; 100 if CAD or CAD risk equivalent – high risk</li> <li>2. LDL &lt; 130 if 2 or more risk factors without CAD or CAD risk equivalent – moderate risk</li> <li>3. LDL &lt; 160 if 0-1 risk factor without CAD or CAD risk equivalent – low risk</li> </ol> <p>Divided by the number of CVD patients in the clinical information system with fasting LDL documented in the appropriate time range. Multiply by 100 to get a percentage</p>	<p>On the last workday of each month, search the clinical information system for all CVD patients with fasting LDL documented in the appropriate time range whose last fasting LDL is in appropriate range. At the same time count the number of CVD patients with fasting LDL documented in the appropriate time range.</p>	<p>&gt;60%</p>	<p>ATP-III Ref. 2 CAD-Equivalent Risk factors (at least one):</p> <ol style="list-style-type: none"> <li>1. Symptomatic carotid artery disease</li> <li>2. Peripheral arterial disease</li> <li>3. Abdominal aortic aneurysm.</li> <li>4. DM</li> </ol> <p>OR</p> <ol style="list-style-type: none"> <li>5. &gt; 20% ten-year risk (Framingham risk calculation) with 2 or more risk factors listed below</li> </ol> <p>Risk factors:</p> <ol style="list-style-type: none"> <li>1. Cigarette smoking</li> <li>2. Hypertension (BP &gt;140/90 mmHg or on antihypertensive medication)</li> <li>3. Low HDL cholesterol (&lt;40 mg/dL)*</li> <li>4. Family history of premature CAD (CAD in male first degree relative &lt;55 years OR CAD in female first degree relative &lt;65 years)</li> <li>5. Age (men &gt;45 years; women &gt;55 years)</li> </ol> <p>More aggressive treatment goals are clinical options for high-risk and medium risk patients based on recent evidence, reference 15.</p> <p><b>PECS 3 requires that an explicit LDL goal be set in order for patient records to be included in the computation of this measure.</b></p> <p>NOTE: <i>This measure definition has changed from previous years to align more closely with ATP-III guidelines.</i></p>
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<p>6. Aspirin or Other Antithrombotic Agent Use</p>	<p>The number of CVD patients with CAD (no age limit) in the clinical information system who have a current prescription for aspirin or other antithrombotic agent divided by the number of CVD patients with CAD in the clinical information system. Multiply by 100 to get a percentage.</p>	<p>On the last workday of each month, search the clinical information system for all patients with CAD who have a current prescription for aspirin or other antithrombotic agent. At the same time count the number of patients with a diagnosis of CAD.</p>	<p>&gt;90%</p>	<p>AHA/ACC guidelines for secondary prevention Ref. 5; Suitable agents include Warfarin/Coumadin, Plavix (clopidogrel), Ticlid (ticlopidine), low molecular weight heparin, and any newer agents that may become available that are shown to be equivalent or superior to the existing medications.</p>
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<b>Measure</b>	<b>Definition</b>	<b>Data Gathering Plan</b>	<b>Goal</b>	<b>Notes/Comments</b>
7. ACE Inhibitor /ARB Use	The number of CVD patients, age $\geq$ 55, with CAD or DM in the clinical information system who have been prescribed ACE inhibitors or ARBs, divided by the total number of CVD patients, age $\geq$ 55, with CAD or DM in the clinical information system. Multiply by 100 to get a percentage.	On the last workday of each month, search the clinical information system for all CVD patients, age $\geq$ 55, with CAD or DM in the clinical information system who have been prescribed ACE inhibitors or ARBs.. At the same time count the total number of CVD patients, age $\geq$ 55, with CAD or DM.	>70%	AHA/ACC guidelines for secondary prevention Ref. 5 HOPE Study Ref. 6 We believe usual practice ought to be a test of an ACE and if ACE is not tolerated, then try an ARB. In some cases, ARB will be first choice but because of cost of medication, ACEs ought to be a common starting point.
8. Beta Blocker Use	The number of patients with CAD in the clinical information system who have a prescription for a beta blocker, divided by the number of patients with CAD. Multiply by 100 to get a percentage.	On the last workday of each month, search the clinical information system for all patients with CAD in the clinical information system who have a prescription for a beta blocker. At the same time, count the number of patients with a diagnosis of CAD.	>70%	AHA/ACC guidelines for secondary prevention Ref. 5
9. Depression Screening (12 months)	The number of CVD patients in the clinical information system who have been screened for depression in the past 12 months, divided by the total number of CVD patients in the clinical information system. Multiply by 100 to get a percentage.	On the last workday of each month, search the clinical information system for all CVD patients in the clinical information system who have been screened for depression in the past 12 months. At the same time count the total number of CVD patients.	>50%	Depression in Primary Care: Clinical Practice Guideline Ref. 7
10. Patients with 2 HbA1c's in Last Year (at Least 3 Months Apart)	The number of patients with CVD and DM in the clinical information system who have had two HbA1c's (at least 91 days apart) in the last 12 months, divided by the total number of patients with CVD and DM in the clinical information system. Multiply by 100 to get a percentage	On the last workday of each month, search the clinical information system for all patients with a diagnosis of CVD and DM who have had two HbA1c's within the last 12 months (at least 91 days apart). At the same time, count the number of patients with both CVD and DM.	>90%	ADA Clinical Practice Recommendations 2004 Ref. 8

11. Weight Reduction	The number of CVD patients with a BMI >25 at any time in the last 12 months who have lost 10 pounds (by comparing their maximum recorded weight in the 12 months period to their latest recorded weight), divided by the total number of CVD patients who have or had a BMI > 25 at any time in the last 12 months. Multiply by 100 to get a percentage.	On the last workday of each month, search the clinical information system for all CVD patients with a BMI >25 at any time in the last 12 months who have lost 10 pounds (by comparing their maximum recorded weight in the 12 months period to their latest recorded weight). At the same time count the total number of CVD patients who have or had a BMI > 25 at any time in the last 12 months.	>30%	Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults Ref. 9-11  The weight reduction measure needs alignment across conditions. We will consider specific tests with teams in 2005 to guide us to better alignment.
12. Exercise	The number of CVD patients whose last documented exercise rate (within the last 12 months) was 3Xweek @ least 20 minutes, divided by the total number of CVD patients. Multiply by 100 to get a percentage.	On the last workday of each month, search the clinical information system for all CVD patients whose last documented exercise rate (within the last 12 months) was 3Xweek @ least 20 minutes. At the same time count the total number of CVD patients.	>60%	AHA/ACC guidelines for secondary prevention, Ref. 5; Exercise and physical activity in the prevention and treatment of atherosclerotic cardiovascular disease, Ref. 12; Behavioral counseling in primary care promote physical activity, .Ref. 13.  The exercise measure needs alignment across conditions. We will consider a specific test with teams in 2005 to guide us to better alignment.
13. Patients who are current smokers	The number of patients in the registry who are current smokers (documented within the last 12 months), divided by the total number of CVD patients in the registry with smoking status documented within the last 12 months. Multiply by 100 to get percentage.	On the last workday of each month, search the registry for all patients with CVD who are current smokers (documented within the last 12 months). At the same time count the total number of patients with CVD in the registry with smoking status documented within the last 12 months.	<12%	Healthy People 2010 Clinical Practice Guideline for treating tobacco use and dependence Ref. 14 (Note: PECS versions 2.x reported "current smokers" on registry summary reports but in fact based calculations on tobacco use. PECS version 3 will align calculation with the label on the registry summary report.)

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