### Using Nontraditional Risk Factors in Coronary Heart Disease Risk Assessment

#### Clinical Summary of U.S. Preventive Services Task Force Recommendation

<table>
<thead>
<tr>
<th>Population</th>
<th>Asymptomatic men and women with no history of coronary heart disease (CHD), diabetes, or any CHD risk equivalent</th>
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<tbody>
<tr>
<td>I statement: Insufficient Evidence</td>
<td>No recommendation because of insufficient evidence</td>
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</tbody>
</table>

#### Risk Assessment

This recommendation applies to adult men and women classified at intermediate 10-year risk for CHD (10% to 20%) by traditional risk factors.

#### Importance

Coronary heart disease (CHD) is the most common cause of death in adults in the United States. Treatment to prevent CHD events by modifying risk factors is currently based on the Framingham risk model. If the classification of individuals at intermediate risk could be improved by using additional risk factors, treatment to prevent CHD might be targeted more effectively.

Risk factors not currently part of the Framingham model (nontraditional risk factors) include high sensitivity C-reactive protein (hs-CRP), ankle-brachial index (ABI), leukocyte count, fasting blood glucose level, periodontal disease, carotid intima–media thickness, electron beam computed tomography, homocysteine level, and lipoprotein(a) level.

#### Rationale for No Recommendation

There is insufficient evidence to determine the percentage of intermediate-risk individuals who would be reclassified by screening with nontraditional risk factors, other than hs-CRP and ABI. For individuals reclassified as high-risk on the basis of hs-CRP or ABI scores, data are not available to determine whether they benefit from additional treatments. Little evidence is available to determine the harms of using nontraditional risk factors in screening. Potential harms include lifelong use of medications without proven benefit and psychological and other harms from being misclassified in a higher risk category.

#### Considerations for Practice

Clinicians should continue to use the Framingham model to assess CHD risk and guide risk-based preventive therapy. Adding nontraditional risk factors to CHD assessment would require additional patient and clinical staff time and effort. Routinely screening with nontraditional risk factors could result in lost opportunities to provide other important health services of proven benefit.

#### Relevant USPSTF Recommendations

USPSTF recommendations on risk assessment for CHD, the use of aspirin to prevent cardiovascular disease, and screening for high blood pressure can be accessed at [www.preventiveservices.ahrq.gov](http://www.preventiveservices.ahrq.gov).

For a summary of the evidence systematically reviewed in making these recommendations, the full recommendation statement, and supporting documents please go to [http://www.preventiveservices.ahrq.gov](http://www.preventiveservices.ahrq.gov).

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