Brief Interventions for Behavior Change for Women at Risk For Heart Disease
Objectives

• To briefly review major risk factors for cardiovascular disease in women,
• To provide information on strategies for behavior change to improve health, and
• To build skills in the motivational interviewing technique to assist patients in adopting healthier behaviors
Calculate 10-Year Cardiovascular Disease (CVD) Risk

www.framinghamheartstudy.org/risk/gencardio.html#

**FRAMINGHAM HEART STUDY**
A Project of the National Heart, Lung and Blood Institute and Boston University

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### General Cardiovascular Disease (10-year risk)

- **Outcome**
  - CVD (coronary death, myocardial infarction, coronary insufficiency, and stroke, hemorrhagic stroke, transient ischemic attack, peripheral artery disease, and heart failure)

- **Duration of follow-up**
  - Maximum of 12 years, 10-year risk prediction

- **Population of interest**
  - Individuals 30 to 74 years old and without CVD at the baseline exam.

**Calculate Using Lipids**
- Atrial Fibrillation (10-year risk)
- Cardiovascular Disease (30-year risk)
- Congestive Heart Failure
- Coronary

**Calculate Using BMI**
- Interactive Risk Score Calculator using lipids
- Interactive Risk Score Calculator using BMI
Cardiovascular Disease (CVD) Risk Stratification: **High Risk**

- Documented atherosclerotic disease
  - Clinically manifest coronary heart disease
  - Clinically manifest peripheral arterial disease
  - Clinically manifest cerebrovascular disease
  - Abdominal aortic aneurysm
- Diabetes mellitus
- End-stage or chronic kidney disease
- 10-year Framingham cardiovascular disease risk $\geq 10\%$*

*new in 2011

Sources: Mosca 2011, National Heart Lung and Blood Institute
Cardiovascular Disease (CVD) Risk Stratification: At Risk

≥ 1 risk factor for CVD, including (but not limited to):

- Cigarette smoking
- Hypertension: SBP ≥ 120 mm Hg, DBP ≥ 80 mm Hg or treated
- Dyslipidemia
- Family history of premature CVD in a 1st degree relative
  (CVD at < 55 years in a male relative, or < 65 years in a female relative)
- Obesity, especially central obesity
- Physical inactivity
- Poor diet
- Metabolic syndrome
- Advanced subclinical atherosclerosis
- Poor exercise capacity on treadmill test and/or abnormal heart rate recovery after stopping exercise
- Systemic autoimmune collagen-vascular disease
  (e.g. lupus, rheumatoid arthritis)*
- A history of pregnancy-induced hypertension, gestational diabetes, preeclampsia*  
  *new in 2011

Source: Mosca  2011
CVD Risk Stratification:
Ideal Cardiovascular Health

- Total cholesterol < 200 mg/dL
- BP < 120/<80 mm Hg, untreated
- Fasting blood sugar < 100 mg/dL untreated
- Body mass index < 25 kg/m2
- Abstinence from smoking (never or quit > 12 months)
- Physical activity at goal
- DASH (“Dietary Approaches to Stop Hypertension”) - like diet
- Ideal patients are rare in most clinical practices, making up less than 5% of women in most studies

Cultural Competency: Considering the Diversity of Patients

• In addition to race/geographic/ethnic origin, other facets of diversity should be considered, including:
  – Age, language, culture, literacy, disability, frailty, socioeconomic status, occupational status, and religious affiliation

• The root causes of disparities include variations and lack of understanding of health beliefs, cultural values and preferences, and patients’ inability to communicate symptoms in a language other than their own

• Clinicians also should be familiar with patients’ socioeconomic status, which may make attaining a healthy lifestyle and using medications more difficult

Source: Mosca 2011
Adherence to Low Risk Lifestyle Reduces Risk of Cardiac Events

Relative Risk of Coronary Events*

Low Risk Factors: Healthy diet; Non-smoking; Moderate-Vigorous Exercise ≥ 30 minutes daily; Body Mass Index < 25; Moderate Alcohol

*P < .05 compared to expected risk based on known risk factors

Source: Adapted from Akesson 2007, Mosca 2011
Talking about lifestyle change with patients can be very frustrating for both parties.
One Strategy

What is motivational interviewing?

• Motivational interviewing is a collaborative, person-centered form of guiding to elicit and strengthen motivation for change.
• It is a tool that can be integrated into any clinical setting.
Motivational Interviewing: The Data

• Meta-analyses have shown that motivational interviewing had a significant and clinically relevant effect in approximately 3 out of 4 studies.
• 64% of brief encounters showed an effect.
• Motivational interviewing outperforms traditional advice giving in the treatment of a broad range of behavioral problems and diseases.

The following videos show 40-year-old Gina—a smoker whose best friend was recently diagnosed with lung cancer.

Gina has high blood pressure and is currently suffering from hot flashes and missed periods.

These scenarios may be familiar to you. They represent some common interactions between patients and health professionals.

First is a typical approach, followed by a behavioral/motivational interviewing approach.
Sample Video “Typical”

So your smoking friend has been diagnosed with lung cancer. You’ve been smoking for a long time, but you’re not ready to quit yet? Is that—

Video courtesy of The Mt. Sinai Skills and Simulation Center at Case Western Reserve University and Heart Truth-Ohio
Doctors talk in pages and patients listen in sound bites

While clinicians may feel better providing more and more information, it does not necessarily motivate the patient to change.
Sample Video “Behavioral”

I want you to take this ruler, and I'd like for you to tell me how ready you think you are to quit on a scale from 1-12.

Video courtesy of
The Mt. Sinai Skills and Simulation Center at Case Western Reserve University and Heart Truth-Ohio
Debrief

• How did the first video make you feel? Second video?
• What was the difference between the two?
• Is it possible that the “typical” approach turns a patient in the opposite direction, away from change?
• Are the doctor and patient wrestling or dancing? How are they working (or not working) together?
• Which interaction is more likely to result in behavior change?
• The “behavioral” video was just over 3 minutes long. Does that surprise you?
Facilitating Lifestyle and Behavior Change

Advice from a medical provider can be made more effective and likely to be acted on when it is delivered with the patient’s permission, in a neutral tone, and in a manner that supports patient autonomy and choice.
Asking Permission/Patient Autonomy: Sample Questions

• “I know you came in today for your Pap, and I’m really concerned about your blood pressure. Would it be alright if we talked about that also?”

• “I realize that you are in the driver’s seat here with your diabetes. I want to let you know that I am very concerned about ________. I believe that the new medication will help if that is something you are willing to try.”

• “You are the only one who can decide what, if anything, you want to do; and as your provider, ________ is the number one thing you could do to improve your health.”
Facilitating Lifestyle and Behavior Change

Patients are the experts on their life, habits, desires, goals, values, and hopes. Most lifestyle change is more about engaging these motivational elements than about imparting knowledge. **Find out what the patient knows and wants.**
Assessing Patient’s Knowledge: Sample Questions

• “What do you already know or have you heard about how heart disease can be prevented?”
• “What would you like to accomplish regarding your risk factors? Where would you like to be? What thoughts do you have about getting to that point?”
• “What concerns you about the possibility of developing heart disease?”
• “I’ve given you a lot of information here. What are your thoughts about how this applies to you?”
Readiness Ruler

- Useful tool for assessment
- Follow up questions and discussion can elicit change talk
  - “How important is it for you to _______? On a scale from 0-10, where 0 is not at all important and 10 is extremely important where would you say you are?”
  - “Why did you pick a 4 and not a 1?”
  - “What would need to happen for you to get from a 4 to an 8?”
- Can evaluate multiple concepts
  - Importance – Willingness
  - Confidence – Adherence

Not Prepared to Change

Already Changing
Facilitating Lifestyle and Behavior Change

- Listen to your patient’s thoughts and concerns
- Express empathy
- Reassure patient her experience is normal

Click Here to Play Video

Video courtesy of The Mt. Sinai Skills and Simulation Center at Case Western Reserve University and Heart Truth-Ohio
Facilitating Lifestyle and Behavior Change

Give patient the opportunity to tell you what you want to tell them.

Well let’s talk about that for a minute. What are some of the benefits of smoking?

Click Here to Play Video

Video courtesy of
The Mt. Sinai Skills and Simulation Center at Case Western Reserve University and Heart Truth-Ohio
Talking About Change

• If a person talks about her desire, reason, ability, and need to change, she is more likely to change. If she is given the chance to say out loud what she intends to do, she is more likely to do it.

• Ask directly for a response.
  - What concerns do you have about ______?
  - What do you think will work best for you? Why?
  - Where would you like to start?
  - Is this what you are going to do?
Stages of Change
Prochaska & DiClemente

Best Outcome

Maintenance

Pre-Contemplation

Contemplation

Determination

Action

Relapse

Modified from Youth Action & Policy Association NSW Inc (YAPA)
REFLECT:

- “You’d like to start thinking about a plan.”
- “You’re feeling ready.”
- “You would really like to be healthy for yourself and for others.”

Reinforce the “change talk”

Well, you know, it sounds as if you have been doing a lot of thinking about quitting.

Click Here to Play Video

Video courtesy of The Mt. Sinai Skills and Simulation Center at Case Western Reserve University and Heart Truth-Ohio
SUMMARIZE: “Let me see if I got it all. You’re concerned about _____ because of ______. You’d like to change that risk factor and you are planning to_______. Did I get it?”

AFFIRM: “You are the type of person who takes on challenges and you are ready to take on this one!”
This presentation has focused on smoking, but motivational interviewing is also relevant and useful for other behavior modification objectives:

- Nutrition
- Physical Exercise
- Medication Adherence
- Weight Control
- Self-management of Chronic Illness
- Alcohol/Substance Abuse
Time & Money

• Brief interventions of 3 minutes can be integrated into a routine visit, or longer separate counseling sessions can be scheduled
• There may be ways to bill for these brief interventions
## Medicare Preventive Services - 2011

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<tr>
<th>Service</th>
<th>HCPCS/CPT Codes</th>
<th>ICD-9-CM Codes</th>
<th>Who Is Covered</th>
<th>Frequency</th>
<th>Beneficiary Pays</th>
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<tr>
<td>Cardiovascular Disease Screening</td>
<td>80061 – Lipid panel; 82465 – Cholesterol, serum or whole blood, total 83718 – Lipoprotein, direct measurement; HDL cholesterol 84478 - Triglycerides</td>
<td>Contact local Medicare Contractor for guidance</td>
<td>Excludes beneficiaries with cardiovascular disease</td>
<td>Once every 5 years</td>
<td>No copayment/ coinsurance</td>
</tr>
<tr>
<td>Diabetes Screening Tests</td>
<td>82947 – Glucose; quantitative, blood (except reagent strip) 82950 – Glucose; post glucose dose (includes glucose) 82951- Glucose; tolerance test (gtt), 3 specimens (includes glucose)</td>
<td>Contact local Medicare Contractor for guidance</td>
<td>Excludes beneficiaries with diabetes</td>
<td>Based on screening results, may be eligible for up to two screening tests each year</td>
<td>No copayment/ coinsurance</td>
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## Medicare Preventive Services - 2011 (cont.)

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<td>Diabetes Self-Management Training (DSMT)</td>
<td>G0108 – DSMT, individual session, per 30 minutes G0109 – DSMT, group session (2 or more), per 30 minutes</td>
<td>No specific code Contact local Medicare Contractor for guidance</td>
<td>Medicare beneficiaries at risk for complications from diabetes, recently diagnosed with diabetes, or previously diagnosed with diabetes Physician must certify that DSMT is needed</td>
<td>• Up to 10 hours of initial training within a continuous 12-month period • Subsequent years: Up to 2 hours of follow-up training each year after the initial year</td>
<td>Copayment/coinsurance Deductible</td>
</tr>
<tr>
<td>Medical Nutrition Therapy (MNT)</td>
<td>97802, 97803, 97804, G0270, G0271 Services must be provided by registered dietitian or nutrition professional</td>
<td>Contact local Medicare Contractor for guidance</td>
<td>Medicare beneficiaries diagnosed with diabetes or a renal disease</td>
<td>• 1st year: 3 hours of one-on-one counseling • Subsequent years: 2 hours</td>
<td>No copayment/coinsurance</td>
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<td>Smoking and Tobacco-Use Cessation Counseling</td>
<td>99406 – counseling visit; intermediate, greater than 3 minutes up to 10 minutes 99407 – counseling visit; intensive, greater than 10 minutes</td>
<td>Use appropriate code Contact local Medicare Contractor for guidance</td>
<td>Medicare beneficiaries who use tobacco and have a disease or adverse health effect linked to tobacco use or take certain therapeutic agents whose metabolism or dosage is affected by tobacco use</td>
<td>Up to 8 visits per year</td>
<td>No copayment/ coinsurance</td>
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Preventive Services Covered Without Patient Cost-Sharing in Private Health Plans – 2011 Health Reform

Beginning in 2011, under most circumstances, private health plans must cover the following preventive services without patient cost-sharing:

**Cardiovascular health**
- Hypertension screening (adults 18+)
- Lipid disorders screenings (women 45+; younger adults at high risk)
- Aspirin (women 55-79)

**Obesity**
- Screening (all adults)
- Counseling and behavioral interventions (obese adults)
- Body mass index (BMI)

**Type 2 Diabetes screening** (adults w/ elevated blood pressure)

**Tobacco counseling and cessation interventions** (all adults)

Intensive healthy diet counseling (adults w/high cholesterol, CVD risk factors, diet-related chronic disease)

Final Commitment

From what you’ve learned today, what is at least one thing that you will change to help your women patients reduce their risk of heart disease?
The Heart Truth Professional Education Campaign Website
www.womenshealth.gov/heart-truth

Million Hearts Campaign
millionhearts.hhs.gov

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