Many women know that heart disease is the number one killer in the United States—of men. But the widespread belief that heart disease is exclusively a man’s problem is a myth. Cardiovascular disease is the number one killer of women as well as men. More American women die each year of cardiovascular disease than of breast cancer, uterine cancer, and lung cancer combined. The American Heart Association has called heart disease in women “the silent epidemic.”

Coronary artery disease (CAD) in women differs from men in many ways. These differences occur in risk factors, diagnosis, and treatment outcomes.

Risk Factors

- **Age**: Data from the Framingham Heart Study indicates that women are consistently about 10 years older than men at the initial diagnosis of CAD, and about 20 years older at the time of a myocardial infarction (MI).

- **Hypertension**: Hypertension is more prevalent in women after age 45 than in men. Elevated systolic blood pressure ranks second to age as a risk factor in women.

- **Lipids**: As in men, an increase in total cholesterol increases the risk of CAD in women. The HDL level (“good” cholesterol) tends to be higher in women at all ages.

- **Smoking**: Women who smoke are at a 2-6 times greater risk of coronary heart disease than non-smokers.

- **Glucose Intolerance**: Glucose intolerance and diabetes are more prevalent in women than in men. They are often associated with obesity and an abnormal lipid profile. Diabetes is a significant independent risk factor for CAD in women and men, but it imparts a 2 times higher risk of CAD in women. It appears that the presence of diabetes erases the protective gender effect.

- **Obesity**: Recent evidence suggests that the distribution of body fat may be a more important determinant of cardiovascular risk than absolute weight. Women with truncal distribution (the so-called “Apple” shape) are at higher risk than those with a peripheral distribution (the so-called “Pear” shape) of body fat.
Diagnostic Considerations

The best method to evaluate women for CAD is unclear. While the sensitivity of exercise testing is similar to men, the false-positive rate is higher. Thallium stress testing significantly improves the diagnostic accuracy. Exercise echocardiography is comparable to thallium. Finally, variant (Prinzmetal) angina with angiographically normal coronary arteries (also called vasospastic angina or Syndrome X) is more common in women than in men.

UNDERWRITING CONSIDERATIONS

- Silent myocardial ischemia (angina) and silent myocardial infarctions (MIs) are more common in women.
- The rate of early death after MI is higher among women than men. Mortality within the first year after symptomatic MI is 45% in women and 10% in men.
- Women who undergo bypass surgery have more cardiomegaly and have more frequent and more severe mitral regurgitation. Thus, they are typically sicker than men at the time of surgery.
- Angiography shows that women have smaller caliber coronary arteries, but have a higher prevalence of single-vessel CAD.

Summary

The underwriting assessment of CAD in women is based on the severity of disease present, prognostic features such as left ventricular function and the presence of cardiac risk factors (the same process as for men). See related Rx for Success issues on these topics for further details on Myocardial Infarction, Coronary Artery Bypass Graft, and Percutaneous Transluminal Angioplasty (PTCA).

To get an idea of how a client with a history of heart disease would be viewed in the underwriting process, use the Ask “Rx”pert Underwriter on the next page for an informal quote.
Ask “Rx”pert Underwriter (Ask Our Expert)

After reading the Rx for Success on Heart Disease in Women, use this form to Ask “Rx”pert Underwriter for an informal quote.

<table>
<thead>
<tr>
<th>Producer</th>
<th>Phone</th>
<th>Fax</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client</td>
<td>Age/DOB</td>
<td>Sex</td>
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If your client has had coronary artery disease, please answer the following:

1. Please list date(s) of the heart attack(s).

_________________________________________________________________________________________________________________

2. Has your client had any of the following?

- [ ] Echocardiogram (Date) ___________________________
- [ ] Coronary catheterization (Date) ___________________________
- [ ] Coronary angioplasty (Date) ___________ # of vessels ______
- [ ] Bypass surgery (Date) ___________________ # of vessels ______
- [ ] Heart failure (Date) ___________________________
- [ ] Arrhythmias (Date) ___________________________

3. Is your client on any medications (including aspirin)?

- [ ] Yes. Please give details. _________________________________________________________________________________________
- [ ] No

4. Has a follow-up stress (exercise) ECG been completed since the heart attack?

- [ ] Yes. Normal (Date) ______________________________________________________________________________________________
- [ ] Yes. Abnormal (Date) ____________________________________________________________________________________________
- [ ] No

5. Has your client had any chest discomfort since the heart attack?

- [ ] Yes. Please give details. _________________________________________________________________________________________
- [ ] No

6. The cause of the irregular heart beat is due to:

- [ ] Abnormal lipid levels
- [ ] Overweight
- [ ] High blood pressure
- [ ] Irregular heart beats
- [ ] Diabetes
- [ ] Elevated homocysteine
- [ ] Peripheral vascular disease
- [ ] Cerebrovascular or carotid disease

7. Has your client smoked cigarettes in the last 12 months?

- [ ] Yes
- [ ] No

8. Does your client have any other major health problems (e.g., stroke, etc.)?

- [ ] Yes. Please give details. _________________________________________________________________________________________
- [ ] No

Please submit the actual tracings and results of all stress electrocardiograms and any further testing if done (thallium, echo, or angiogram).

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