In the United States, coronary artery bypass is a common procedure to treat coronary artery disease at all ages. There are two main types of bypasses. The first type involves the saphenous vein being removed from the leg, reversed in direction, and then attached into the aorta and coronary artery beyond the blockage. The second type involves freeing one end of the internal mammary artery from the chest wall and attaching it to the coronary artery beyond the blockage. Often when more than one vessel is being bypassed, both types of bypasses are used (with the internal mammary bypassing the left anterior descending coronary artery).

As many as 6 separate grafts may be constructed to the side of the aorta.

Coronary arteries less than 1mm in diameter by angiogram measurement are not suitable for bypass grafting. Indications for CABG are:

1. intractable angina not responding to medical therapy.
2. left main artery disease with greater than 50% stenosis.
3. silent ischemia noted on testing with significant 3-vessel disease.
4. 3-vessel disease with impaired left ventricular function (ejection fraction less than 50%).
5. 2 or 3-vessel disease if one of the vessels involved is the proximal LAD.

Studies have proven improved survival in left main disease and 3-vessel disease with impaired LV function. Most frequent complications from CABG surgery include:

- atrial fibrillation
- peri-operative myocardial infarction
- excessive bleeding
- post-perfusion syndrome
- permanent pacemaker
- pulmonary embolism
- post-pericardiotomy syndrome
- ventricular arrhythmias
- hepatitis (B or C)
- stroke
- congestive heart failure, aortic dissection
- depression

Graft closures remain a limiting factor to the success of CABG. Graft closures immediately after surgery are due to acute thrombosis (clot formation). Closures a few months to years later are due to fibrosis or advancing atherosclerosis. The internal mammary artery graft is more likely to remain open than saphenous vein grafts.

The rating for a history of coronary artery bypass will depend primarily upon the age of the applicant and severity of underlying coronary artery disease. Negative factors include complications from the surgery, recurrent angina, abnormal follow-up treadmill, multiple cardiac risk factors present, and left ventricular dysfunction.

To get an idea of how a client with a history of CABG 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 CABG, use this 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>
</tr>
</tbody>
</table>

If your client has had coronary bypass surgery, please answer the following:

1. Please list date(s) of the bypass surgery.

2. How many vessels were bypassed?

3. Has your client had any of the following?
   - Heart attack (Date:)
   - Coronary angioplasty (PTCA) (Date:)
   - Heart failure (Date:)
   - Valve surgery (Date:)

4. Is your client on any medications (including aspirin)?
   - Yes. Please give details.
   - No

5. Has a follow-up stress (exercise) ECG been completed since the CABG?
   - Yes – normal (Date:)
   - Yes – abnormal (Date:)
   - No

6. Has your client had any chest discomfort since the bypass surgery?
   - Yes. Please give details.
   - No

7. Please check if your client has had any of the following:
   - Abnormal lipid levels
   - Diabetes
   - Overweight
   - Elevated homocysteine
   - High blood pressure
   - Peripheral vascular disease
   - Irregular heart beat
   - Cerebrovascular or carotid disease

8. Has your client smoked cigarettes in the last 12 months?
   - Yes
   - No

9. Does your client have any other major health problems (e.g., cancer, etc.)?
   - Yes. Please give details.
   - No