

**Roper St. Francis
now offers cardiac
scoring.**



Cardiac Calcium Scoring

Elevated calcium levels in the arteries increase the risk of a heart attack. A cardiac screening is a non-invasive, fast test that can identify calcium levels.

“Cardiac calcium scoring is best for patients who are at intermediate risk for heart disease, but are asymptomatic,” says Lars Runquist, MD of Coastal Cardiology. “The results from the test can help determine how aggressively we treat their risk factors. For instance with elevated cholesterol it can help determine if the patient is put on medication or just closely watched.”

At Roper St. Francis cardiac scoring is performed with our 16-slice CT scanner to obtain highly detailed images. The test is extremely accurate in identifying deposits of calcium in the walls of the coronary arteries. The amount of calcification translates into a score by comparing the patient’s results to others of the same age and gender. The score puts the patient into one of five risk categories, ranging from normal to extremely high risk.

- 0..... No identifiable Calcification
- 1-10 Minimal Identifiable Calcification
- 11-100 Mild Calcification
- 101-400..... Moderate Calcification
- 401 and above..... Significant Calcification

Cardiac scoring is recommended for males over age 45 and females over age 55 who have risk factors for heart disease. Patients with a strong family history of heart disease may be recommended as early as age 35 or 45.

All scans are interpreted by a Roper St. Francis board certified radiologist. Results will be sent to the referring physician within 48 hours. The cost of the exam at Roper St. Francis Healthcare is \$250. As a preventive health test, cardiac scoring is not covered by all insurance plans. Patients should contact their insurance carriers for information on coverage.

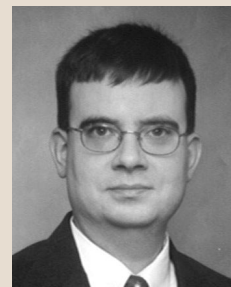
To refer a patient call central scheduling at 402-5000. Appointments are necessary.



Wills Geils, MD

Wills Geils, MD, is a cardiologist with Cardiology Associates. He received his BA from the College of Charleston and MD from the Medical University of South Carolina. Dr. Geils completed his residency at the University of Alabama at Birmingham and his cardiology fellowship at MUSC.

He is board certified in internal medicine, cardiovascular disease and interventional cardiology.



Kevin Beach, MD

Kevin Beach, MD, is a vascular surgeon and member of Coastal Surgical Associates. He received his BS from the University of South Carolina and MD from the Medical University of South Carolina. He completed his residency at the University of Louisville and his vascular fellowship at the University of Tennessee.

Dr. Beach is board certified in general and vascular surgery. He holds certificates in basic life support and advanced cardiac and trauma life support.

Hyperbaric Medicine

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David Skinner, MD
Jay Roberts, MD
John Rand, MD
Wesley Henry, MD

Radiology

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John (Jeb) Hallett Jr., MD
Alton Brown Jr., MD
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Vascular Surgery

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W. Blount Ellison, MD
Bryan Frain, MD
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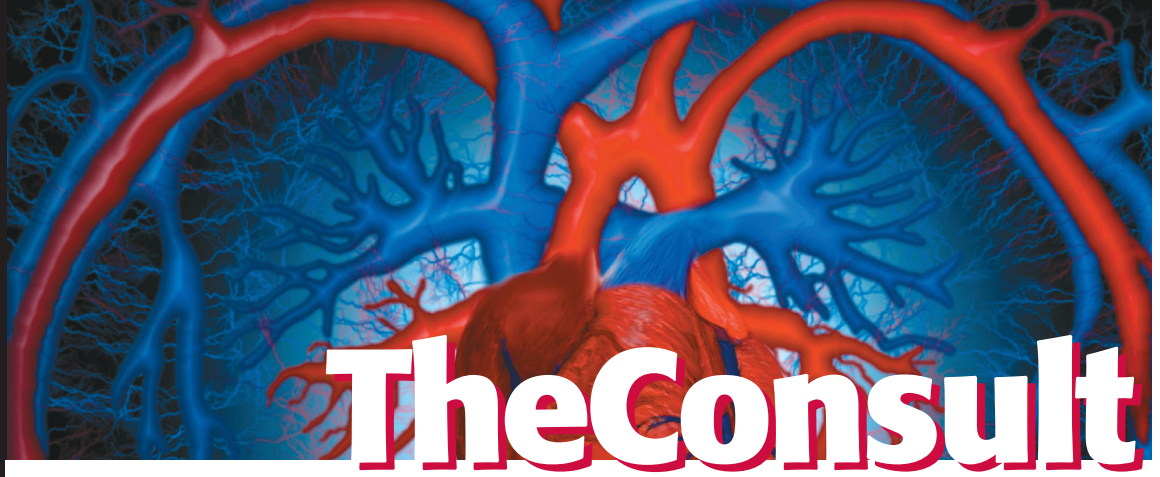
Cardiovascular Disease

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Cardiothoracic Surgery

TheConsult





The Consult

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A Checklist for the Early Detection of Heart and Vascular Disease

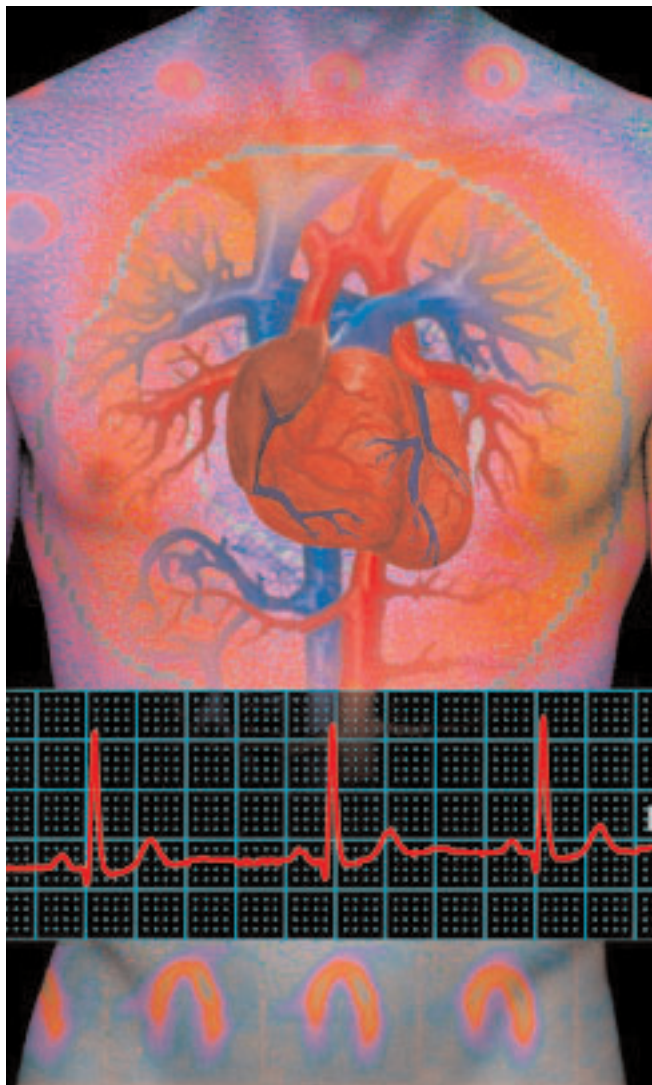
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The Consult is a quarterly newsletter published by Roper St. Francis Heart & Vascular Center for Primary Care Physicians, Radiologists and General Surgeons. The intent of the publication is to alert physicians to new trends in heart and vascular care. Questions or comments should be directed to Jeb Hallett, MD at 720-5665 or Tim Kafer at 720-8347.



The value of early detection for heart and vascular disease is immeasurable. In many cases risk factors can be effectively managed, reducing the occurrence of more serious heart and vascular diseases.

The physicians and staff of the Roper St. Francis Heart & Vascular Center have put together a simple checklist of the most common risk factors in detecting heart and vascular diseases. If the patient shows risk factors Roper St. Francis Healthcare has a wide variety of preventive and diagnostic resources available.

Risk Factors

1. Check and treat **blood pressure** regularly
Classification of Blood Pressure (BP)

Category	SBPmmHg	DBP mmHg
Normal	<120	<80
Prehypertension	120–139	80–89
Hypertension, Stage 1	140–159	90–99
Hypertension, Stage 2	≥ 160	≥ 100

2. Encourage all patients to monitor their **weight** daily and educate them on managing their caloric intake.
3. Check **serum cholesterol** if patient is over 40 with a history of heart disease.

Total Cholesterol	<200 Desirable
	200-239 Borderline high
	>240 High
LDL Cholesterol	Primary Target of Therapy
	<100 Optimal
	100-129 Near optimal/above optimal
	130-159 Borderline high
	160-189 High
	>190 Very high
HDL Cholesterol	Target >60

4. Look for signs of **metabolic syndrome**: elevated waist circumference; elevated triglycerides; reduced HDL-C; If patients show symptoms of any 3 out of the 5 criteria encourage them to collaborate on an unified program (diet, exercise, smoking cessation and medications) that will reduce risk of cardiovascular events.

Measure (any 3 of 5 criteria constitute diagnosis of Metabolic Syndrome)	Categorical Cut Points
Elevated Waist circumference	≥ 40 in. in men ≥ 34 in. in women
Elevated Triglycerides	≥ 150 mg/dl or drug treatment for elevated Triglycerides
Reduced HDL - C	<40 mg/dl in men <50 mg/dl in women
Elevated Blood Pressure	≥ 130 mm Hg systolic BP or ≥ 85 mm Hg diastolic BP or Drug treatment for hypertension
Elevated fasting glucose	≥ 100 mg/dl or drug treatment for elevated glucose

Available Resources

Exercise

Cardiac Rehabilitation programs at both Bon Secours St. Francis and Roper Hospitals offer exercise programs and guidance not only to those recovering from heart disease, but also those with cardiac risk factors. Participants are guided toward personal fitness goals and may choose to participate in risk factor intervention options. Monthly membership fees are reasonable and hours are flexible. Call 724-2993 for more information.



Nutrition Counseling

Individualized nutrition appointments are available at both Roper and Bon Secours St. Francis Hospitals for a wide variety of topics (weight management, lipid management, hypertension, diabetes, Metabolic Syndrome, Celiac Disease, food allergies, etc.) Registered dietitians can give personal advice and guidance on the best food choices, answer questions about dietary supplements and provide specific recommendations to maximize health and wellness. Call the Diabetes and Nutrition Management Center at 402-1099 for more information.

Weight Loss

The weight management program is an 8-week series led by a registered dietitian and behavioral therapist, covering healthy food choices, behavior modification and exercise. Call 724-2424 for more information.

REFERENCES

Blood Pressure:

Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation and Treatment of High Blood Pressure *Hypertension*. 2003 Dec; 42(6): 1206-52

Cholesterol:

Executive Summary of the Third Report of the National Cholesterol Education Program (NCEP) Expert Panel on Detection, Evaluation and Treatment of High Blood Cholesterol in Adults (Adult Treatment Panel III) *JAMA*. 2001;285:2486-2497

Metabolic Syndrome:

Diagnosis and Management of the Metabolic Syndrome. An American Heart Association/National Heart, Lung and Blood Institute Scientific Statement *Circulation*. 2005;112;0000-0000

Risk Factors

Check **blood sugar** annually if patient is overweight or has a family history of diabetes.

Educate **smokers** on the increased risk of heart attack, stroke, peripheral vascular disease (amputation), lung cancer and chronic lung disease and encourage them to join a smoking cessation program.

If the patient has ever smoked or are male and 65 years or older, refer them for an **abdominal aortic aneurysm (AAA)** ultrasound screening. Refer all men and women with a family history of AAA for screening.

For patients with cardiovascular risk factors, including a family history of stroke, check for a **carotid bruit** with a stethoscope and refer for a carotid ultrasound if there are any signs or symptoms of stroke or transient ischemic attacks.

If the patient has leg tiring cramps with walking, refer to an accredited vascular lab to have their **peripheral circulation** checked.

Examine the patient's feet during every office visit. Ulcers are the leading cause of **lower extremity amputations**. Simply telling the patient to remove their shoes and socks in the examining room and taking time to inspect their feet can help prevent foot ulcers or catch them at early stages.

Available Resources

Diabetes Self Management Training

The Roper St. Francis Diabetes Treatment Center (DTC) provides comprehensive diabetes self-management training. Our program's interdisciplinary team of Certified Diabetes Educators assist diabetic patients with the development of a disease management plan. Patients are seen only by physician referral. Call 402-1099 for more information.

Smoking Cessation

Roper St. Francis Heart & Vascular Center offers a Smoking Cessation Program based on the QuitSmart system developed at Duke University Medical Center. The method boasts a 12-month non-relapse rate of 60%. Sessions are held monthly and patients can call 402-CARE to register.

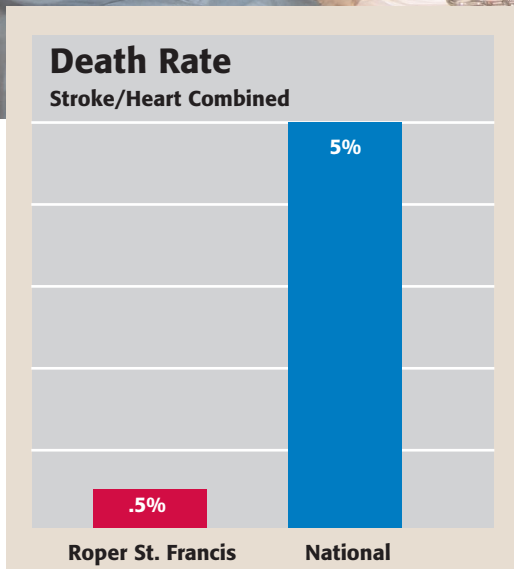
Vascular Screenings

Roper St. Francis Heart & Vascular Center provides free, quarterly vascular assessments including, carotid artery scans, abdominal aortic aneurysm (AAA) and peripheral arterial disease (PAD). Call 866-220-SAVE for the date and location of the next free screening for qualified individuals or call central scheduling at 402-5000 to refer to our accredited vascular labs at Roper and Bon Secours St. Francis Hospitals.

Wound Management

The Wound Management and Prevention Center can assist in caring for soft tissue ulcers, nail/callus care and can help direct the patient to the appropriate service needed. The Center can be reached at 402-1840.

Quality Outcomes



Carotid Endarterectomy is a carefully orchestrated team effort.

Roper St. Francis Heart & Vascular Center's carotid endarterectomy results for 188 patients between January 2004 and September 2005 were excellent and significantly better than a recent multistate analysis of nearly 10,000 cases. Our combined stroke/death rate was only 0.5% compared to 5% for the multistate study.

Reference: "Multistate improvement in process and outcomes of carotid endarterectomy" Journal of Vascular Surgery 2004:39:372.

Less Pain. Quicker Gain.

A new local anesthetic is helping sternotomy and many other surgery patients recover faster and more comfortably. The ON-Q PainBuster supplies effective, post-op pain relief using a pump and catheter system. ON-Q is placed at the surgical site and can be clipped to clothing allowing the patient to move freely while receiving continuous pain relief.

"Localizing pain medication, as with ON-Q, can decrease the side effects of narcotics, including nausea, grogginess and decreased respiration, allowing the patient greater mobility and a quicker return to normal body function," says Mark Weiss, MD, Anesthesiologist. "While we are always looking for new ways to safely improve patient pain management, I believe Roper's biggest advantage is the use of board certified anesthesiologists for every anesthetic, including cardiac and vascular."