

### Also In This Issue

- News on WorldCare
- Woven Scaffolds Could Improve Cartilage Repair

### Better Risk Assessments On the Web

From Brigham and Women's Hospital

Using data collected from over 24,000 initially healthy American women, researchers from Brigham and Women's Hospital have devised a new Web-based formula that more accurately predicts risk of heart attack or stroke among women. In addition to usual risk factors like cholesterol, blood pressure, and smoking, the new Reynolds Risk Score adds information on two new factors, family history of heart attack prior to age 60 and blood level of C-reactive protein (CRP), a measure of artery inflammation.

Using the new risk assessment tool, the researchers found that nearly 50 percent of women in the study who were estimated to be at "intermediate risk" for heart attack or stroke based on current guidelines were in fact at significantly higher or lower risk levels.

For the 10 million American women currently classified at "intermediate risk," use of the Reynolds Risk Score provides doctors and their patients a much clearer picture of who should or should not receive drug therapies such as statins or aspirin, and

Continued on the next page 

*Dear Reader,*

*In this edition of the health update, we bring you more of the latest research and health advice from the leading U.S. hospitals that make up the WorldCare Consortium.*

*Sincerely,*

*Rebika Shaw,*

*Regional Director, Corporate Communications*

### HEALTH NEWS

#### Personality Traits Increase Heart Risk

From Duke University Medical Center

Frequent bouts of depression, anxiety, hostility and anger are known to increase a person's risk for developing heart disease, but a combination of these "negative" personality traits may put people at especially serious risk, according to a study by researchers at Duke University Medical Center in Durham, North Carolina.

Researchers analyzed data on 2,105 military veterans who served in the Vietnam War and took part in the U.S. Air Force Health Study, in which researchers tracked the health of participants for 20 years. None of the men enrolled had heart disease when the study began.

At the start of the study, participants took a personality inventory test, called the Minnesota Multiphasic Personality Inventory, in which they stated whether they thought of themselves as possessing various personality and behavioral traits. At six intervals during the study, the participants underwent physical examinations that recorded health information—including blood pressure rates, cholesterol levels, and body mass index—that can indicate whether someone is at risk for developing coronary heart disease.

The study's senior investigator, Edward C. Suarez, Ph.D., an associate professor of psychiatry, said his team looked for a possible correlation between each individual negative personality trait and development of heart disease, and then for a possible correlation between a combination of the negative personality traits and the development of heart disease.

The researchers found that each negative personality trait, by itself, was significantly associated with increased risk for heart disease. However, when they analyzed all of the traits in combination, they found statistical evidence that the clustering of traits was the best predictor of a person's risk for heart disease. The findings may prompt physicians to include an assessment of personality traits as well as physical health measurements in determining a patient's overall risk for heart disease.

The findings appear in the November/December 2006 issue of the journal *Psychosomatic Medicine*.



WorldCare  
One Cambridge Center  
Cambridge, MA 02142  
Tel. 617.374.9001

## NEWS ON WORLDCARE

### Online Assessments (continued)

highlights the critical impact that can be made on heart disease prevention by diet, exercise, and smoking cessation. Women and their physicians can freely access the Reynolds Risk Score at [ww.ReynoldsRiskScore.org](http://ww.ReynoldsRiskScore.org).

In addition to providing each woman with an estimate of her risk of suffering a future heart attack, stroke, or other major cardiovascular event over the next 10 years, the Reynolds Risk Score website simultaneously shows each woman what her risk would be if she improved each of her individual risk factors to optimal levels. The Reynolds Risk Score also allows each woman to calculate risk as she ages, demonstrating the impact that risk reduction early in life can have on future events.

### Woven Scaffolds Could Improve Cartilage Repair

*From Duke University Medical Center*

Using a unique weaving machine of their design, Duke University Medical Center researchers have created a three-dimensional fabric "scaffold" that could greatly improve the ability of physicians to repair damaged joints with the patient's own stem cells. If further experiments are successful, the scaffold could be used in clinical trials within three or four years. The first joints to be treated this way would likely be hips and shoulders, although the approach should work for cartilage damage in any joint.

Current therapies to repair cartilage damage are not effective, the researchers said. The only bioengineering approach to such joint repair involves removing cartilage cells from patients and then growing them in a laboratory to form

Dubai Wellness Center Announced. At this year's Arab Health Conference, WorldCare and Dubai Health Care City announced the selection of the land for the new Wellness Center to be developed by WorldCare in partnership with Duke University Health System and Partners Health System. The WorldCare Wellness Center will feature a wellness program, state-of-the-art diagnostic services, and luxury hotel and spa.

Self-care Health Information Services Launched. WorldCare has partnered with SelfCareNet to make self-care symptom-based healthcare information available online. Designed to empower members to make informed decisions about their health, the SelfCareNet symptom/injury-based information provides information, decision trees and answers to real life scenarios. The SelfCareNet information is available through select international partners and at [www.worldcare.com](http://www.worldcare.com).

### "Professional and high-quality service" Patient Perspective

*"I was relieved when I discovered that I was well followed and treated by a doctor who is connected to highly qualified hospitals in the States, and well known for their experience research centers... I was amazed by the professionalism and the high quality of the service provided by WorldCare. I strongly recommend any person suffering from a serious disease to use their unique services."*

### About WorldCare

The global health care community has trusted WorldCare since 1994, when it became the first company to offer physician-referred, patient-specific, second opinion e-consultations (telemedicine) for serious illnesses. WorldCare benefits patients around the world by providing access to top physicians, cutting edge medical practices and best medical advice through highly specialized electronic medical opinions from the best medical centers in the United States.

WorldCare – One Cambridge Center – Cambridge, MA 02142

Phone: 617.374.9001 Email: [info@worldcare.com](mailto:info@worldcare.com) Web: [www.worldcare.com](http://www.worldcare.com)

new cartilage. However, it can take several months to grow a piece of cartilage large enough to be implanted back into the patient. Also, this laboratory-grown cartilage is not as durable as native cartilage.

In laboratory tests, the fabric scaffold that the researchers created had the same mechanical properties as native cartilage. In the near future, surgeons will be able to impregnate custom-designed scaffolds with cartilage-forming stem cells and chemicals that stimulate their growth and then implant them

into patients during a single procedure, the researchers said. The cartilage cells will grow throughout the scaffold, and over time the scaffold will slowly dissolve, leaving the new cartilage.

Cartilage is a type of connective tissue that lines the ends of bones, providing cushioning and a smooth surface for their movement within the joint. Damage to cartilage is difficult to treat, because the tissue lacks a supply of blood, nerve and lymph and has limited capacity for repair.



Contact your local WorldCare office if you are interested in obtaining a second opinion from a WorldCare Consortium hospital. Visit [www.WorldCare.com](http://www.WorldCare.com) for more information.