# UHS

## a picture of health

**UHS** Anticoagulation Clinic helps Joyce Thomas maintain a healthy blood flow

### center of attention

**UHS Chest Pain Center** saves lives

### advances in cardiology

How UHS is keeping on the cutting edge of cardiac care

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## CARDIAC ISSUE 2013



### staying power **Around the system**



### baby, it's cold outside cold weather raises your risk of heart attack

Doctors have long believed that more heart attacks happen during the winter than in any other season, although the evidence of this seasonal trend was largely anecdotal. Researchers called this the "Christmas coronary."

A recent study done by the National Registry of Myocardial Infarction confirms this suspicion. The study tracked more than 250,000 heart attack cases and found that 53 percent more heart attacks occurred in the winter than in the summer. The most heart attacks were recorded in winter, followed by fall, then spring and finally summer.

Doctors believe the cold is the main factor, as it can raise blood pressure and put stress on the heart. But other research suggests there is more to it than just temperature because in warm states there is a 36 percent increase in heart attacks during the winter. Researchers are still not sure why this is, although they suspect it is related to a rise in flu and seasonal depression, as well as changes in people's diet and exercise habits during the winter season.

Don't let the winter cold harm you. Reduce your risk of a heart attack by eating right, exercising regularly and properly preparing for cold weather.

## where the heart is cardiac care in your community

The Thursday Cardiology Clinic at UHS Delaware Valley Hospital's visiting specialist center recently celebrated its first anniversary. The clinic, staffed by James K. O'Brien, MD, FACC, makes cardiac consultations, testing and follow-up convenient for Walton-area residents. Cardiac testing such as basic EKGs, echocardiograms, and short- and long-term heart monitoring is available on-site. UHS Delaware Valley Hospital also has cardiac and pulmonary rehabilitation and maintenance programs.

For Norwich-area residents, UHS Chenango Memorial Hospital offers cardiology treatment and testing by two physicians: medical director John R. Brereton, MD, FACP, and Dr. O'Brien. Cardiac testing at this location includes routine and nuclear stress tests, EKG, arrhythmia (irregular heartbeat) detection, cardiac ultrasound (echocardiography), plus cardiac device follow-up testing and programming.

ALL HEART ... For a cardiologist or cardiac testing appointment at UHS Chenango Memorial Hospital, contact UHS Cardiology Norwich at 337-4215. For an appointment at the UHS Delaware Valley Hospital Cardiology Clinic, call 865-2400.

## **going for the gold** UHS WILSON EARNS AWARD FROM THE AMERICAN HEART ASSOCIATION

UHS Wilson Medical Center consistently meets exceptionally high standards in treating heart failure patients, according to the American Heart Association (AHA). The AHA recently awarded UHS the Get With The Guidelines<sup>®</sup> – Heart Failure Gold Plus Quality Achievement Award. To receive the award, hospitals must meet stringent standards for at least 24 consecutive months.

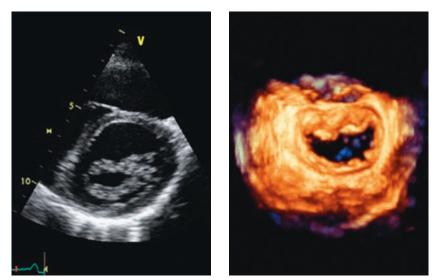
"This is a testament to the high quality of care patients receive from our multidisciplinary team," says Kim Pilarchik, UHS director of Cardiac Services. "Last year we earned the Silver Plus Award, and the team has remained focused and dedicated enough to reach the Gold standard in 2012. It's an amazing achievement that definitely helps to improve the lives of our patients and their families."

According to Emily Dorval, RN, a UHS nurse manager and the Heart Failure Team leader, the AHA guidelines advise treating hospitalized heart failure patients with certain therapies, such as cholesterol-lowering drugs, beta-blockers, ACE inhibitors, aspirin, diuretics and anticoagulants. The guidelines also suggest providing patients with discharge instructions that may include drug or alcohol counseling and smoking cessation information, as well as referrals for cardiac rehabilitation.



## moving pictures

REAL-TIME 3-D ECHOCARDIOGRAPHY ENHANCES VALVE SURGERY



3-D echocardiography imaging (right) allows surgeons to better visualize heart valve function than 2-D imaging (left).

Cardiac surgeons at UHS Wilson Medical Center can now examine beating hearts in three dimensions, in real time, evaluating how heart valves perform immediately before and after they are repaired or replaced. Surgeons are using the next generation of 3-D echocardiography in the operating room as a powerful imaging tool.

Earlier 3-D echocardiography required significant computer processing time, producing images that cardiologists had to wait for. This lag time limited the utility of the technology until recently, when instant imaging became available. The latest version of the technology uses trans-esophageal ultrasound to provide real-time images of the beating heart that the surgeon can evaluate immediately.

"The primary role of this technology is to better appreciate the abnormalities of the heart valves, especially the mitral valve. Sometimes these are fairly subtle and it's important to see what's wrong when the heart is beating," explains James Vincens, MD, a cardiologist with Cardiology Associates in Johnson City. "When the surgeon actually sees the valve, it's when the patient is on bypass and the heart is not The fact that the heart is beating requires us to have a faster acquisition of information that changes from second to second.

-James Vincens, MD

beating. This technology gives the surgeon the opportunity to more clearly identify the problem with the valve and more accurately assess the function after it has been repaired."

**IN A HEARTBEAT** ... To make an appointment with Dr. Vincens or his colleagues at Cardiology Associates, call **770-8600**.

## resources for heart health

Heart disease has long been a major health problem in America, but that doesn't mean you or your family have to accept it as your destiny. There is a lot of good news out there about heart health, and a lot you can do to avoid the leading risk factors associated with heart conditions.

Over the past 35 years, age-adjusted mortality from cardiovascular disease has declined 50 percent. This marked reduction reflects advances in



the prevention, diagnosis and treatment of many of the most common cardiovascular conditions. Thanks to the development of new medications and procedures to address heart-related issues, the reduction in cardiovascular deaths has become one of the great success stories of modern medicine. There are many types of cardiovascular disease, from atherosclerosis to atrial fibrillation to heart failure to stroke. And over the past few decades, scientists and doctors have invented, formulated and developed a host of new approaches to prevent and treat these and other heart-related conditions.

A full range of healthcare for your heart is available right here in Greater Binghamton. Every year our heart program becomes more sophisticated, adding new diagnostic tools and treatment options that can prolong life — and improve the quality of life — for many patients. Recent advances in interventional cardiology and cardiac surgery have included the use of drug-coated stents, implantable defibrillators and beating-heart surgery, along with improvements in echocardiography, or ultrasound, for a clearer picture of heart function.

UHS also maintains an anticoagulation clinic, which uses the latest medications to help patients maintain a healthy blood flow. Additionally, our Chest Pain Center specializes in comprehensively evaluating, diagnosing and treating patients who come to the emergency room with borderline symptoms and who may be on the verge of heart attacks.

In fact, our work has been recognized by the American Heart Association, which has presented us with the Gold Plus Quality Achievement Award for meeting the highest standards of treatment for heart-failure patients.

But we're just as proud of our leadership position in giving you the edge you need to prevent cardiovascular disease in the first place. Through Stay Healthy at the Oakdale Mall, our website (**www.uhs.net**), and the pages of this magazine along with its companion website and e-newsletter, you can learn the steps you can take to maintain the best possible heart health for a lifetime. Most of these you already know, but they bear repeating: Don't smoke or use tobacco, exercise for 30 minutes most days of the week, eat a heart-healthy diet, maintain a healthy weight and get regular health screenings.

So stay in touch with all of the information available to you today regarding cardiovascular fitness, and remember that, by taking a few important steps and accessing the resources of your heart care provider, you can do all that is possible to be a picture of health.

Matthew J. Salanger President and CEO of UHS



## a picture of health

UHS ANTICOAGULATION CLINIC HELPS OUTPATIENTS MAINTAIN A HEALTHY BLOOD FLOW

When something is this simple and everyone is so personable, it's very easy to follow through.

—Joyce Thomas, UHS Anticoagulation Clinic patient

oyce Thomas, 67, loves a good movie — something with a handsome leading man and maybe a complex plot that takes its time to unwind. When it comes to her health, however, she wants matters handled quickly and by a cast of medical experts who get right to the point. So after Ms. Thomas was diagnosed with atrial fibrillation and her cardiologist prescribed the anticoagulant drug warfarin (commonly known by its brand name, Coumadin) to decrease her risk of heart attack, stroke and blood clots, she was not happy about the requisite blood draws to test her clotting levels. As she describes, the appointments took too much time, too much blood and entirely too much waiting around for lab results.

When the UHS Anticoagulation Clinic opened in October 2012, now conveniently located at UHS Vestal, Ms. Thomas was among the first patients to make an appointment. Her review after the clinic's premiere? Four stars! "My levels are checked with just a finger stick, the results are immediate and I get so much personal attention," Ms. Thomas explains. "I'm not always the best patient. But when something is this simple and everyone is so personable, it's very easy to follow through."

The personal attention is by plan, explains Jacob Thompson, PharmD, MS, associate director of Pharmacy. "Testing blood levels during a doctor's visit gives the physician about 15 minutes for a full diagnostic assessment — physiologically and medically. At the clinic, the entire

appointment is dedicated solely to your anticoagulation medication. There's time for education, questions and open communication about any issues or concerns."

#### **DOCTOR-APPROVED**

In 2008, The Joint Commission, the preeminent accrediting body for healthcare facilities, added a new requirement to its National Patient Safety Goals: An organization should reduce the likelihood of patient harm associated with the use of anticoagulation therapy. The stipulation was designed to decrease known dangers associated with these high-risk drugs — risks that increase without proper and ongoing therapy management. For example, if a patient's anticoagulation dosage is too high, there's increased risk of severe bleeding. If too low, there's risk of developing a clot, which in turn increases risk for stroke, deep vein thrombosis, pulmonary embolism and other serious conditions.

As an accredited hospital with The Joint Commission's Gold Seal of Approval, UHS Wilson Medical Center promptly initiated an inpatient program to increase safety and effective use of anticoagulation medication. Highly specialized pharmacists assumed responsibility for managing inpatients' blood tests, dosage adjustments, patient education and communication with physicians.

"Eventually, our doctors, as well as our patients, asked us to expand with an outpatient setting," Dr. Thompson says. "We had strong data supporting the fact that our pharmacists were best skilled and trained to manage anticoagulation therapy — because they know the drugs. We suspected that opening the clinic would further advance outpatient care as well. Today the clinic is less than a year old, and already the data surpasses our predictions."

#### **IMPROVING THE SYSTEM**

Mirroring its inpatient system, UHS staffed the outpatient clinic with specially qualified and trained pharmacists who focus solely on each individual patient's anticoagulation needs while also eliminating the typically long waiting times for results and dosage adjustments. "By specially qualified, we mean pharmacists experienced in clinical settings, or in my case, a doctor of pharmacy with a specialized residency," says Lyndsay Wormuth, PharmD, ambulatory care clinical pharmacy specialist at the UHS Anticoagulation Clinic.

"In our scenario, I'm qualified to perform the test, get the results and change the dose or write a prescription. It all happens right here — with no waiting," Dr. Wormuth says.

While efficiency, speed and convenience are benefits that patients highly value, Dr. Wormuth stresses that the clinic's mission goes further. "Anticoagulants come with significant risks if not carefully monitored. Monitoring includes blood tests and also time to talk with a patient and hear about lifestyle changes."

Dr. Wormuth wants to hear about a patient's new or altered prescription therapy, since many drugs, like antibiotics, affect a patient's anticoagulant dosage. She's also looking for diet changes. "Let's say you're on a new diet and eating more leafy green vegetables. These foods are high in vitamin K, which the body uses to help clot blood — essentially the opposite of what we're trying to do with anticoagulants. When I hear about these kinds of changes, I know how to adjust medication."

#### PHONE IT IN

When Lyndsay Wormuth, PharmD, ambulatory care clinical pharmacy specialist at the UHS Anticoagulation Clinic, consults with a new patient, she's quick to stress that the communication lines are open. "I want patients to feel good about calling the clinic with concerns or questions, so we can take care of things right away," she says.

#### Here are Dr. Wormuth's top reasons to call the clinic:

- **1.** You begin or stop taking a medication, including over-the-counter drugs or vitamin supplements. Some medications weaken or strengthen an anticoagulant's effect.
- **2.** You are trying to become pregnant or are pregnant. Anticoagulants can increase risk of birth defects.
- **3.** You are scheduled for surgery or dental work. Anticoagulants can increase bleeding, so your dosage may need to be temporarily adjusted. Also, be sure to tell your doctor or dentist that you take an anticoagulant.
- **4.** You significantly alter your diet. Some foods, particularly those high in vitamin K, can decrease an anticoagulant's effects. You also want to discuss increased alcohol drinking.
- 5. You notice more bruises than usual, which may signal a need for a dosage adjustment.

In case of an emergency, Dr. Wormuth also urges her patients to carry a medical ID card with their name, phone number, address and medication name, as well as the UHS Anticoagulant Clinic's contact information.



Joyce Thomas meets with pharmacist Lyndsay Wormuth in the Anticoagulation Clinic.

All this open communication includes quick access to Dr. Wormuth via phone, should a question or issue pop up. As Ms. Thomas explains, "At first I saw or talked with Dr. Wormuth almost weekly, because my levels were out of whack. She knew what to do and got me to that magic number. Now I only see her monthly, but if something does come up, it's a good feeling to know that Dr. Wormuth is only a phone call away."

FREE FLOWING ... To make an appointment at the UHS Anticoagulation Clinic, call **763-6494**. Pharmacists at the clinic will work with your doctor to get you to the right levels. Read more about anticoagulation management at www.uhsstayhealthymagazine.com.



## center of atten

UHS CHEST PAIN CENTER SAVES LIVES



- Shortness of breath: This sign may or may not include chest discomfort.
- Additional signs: Symptoms vary, and are especially different in men and women. Less-obvious symptoms may include sudden and unexplained sweating, lightheadedness, nausea and/or vomiting or extreme fatigue.

Cardiologist Nicholas J. Stamato, MD, FACC, reviews a patient's EKG with radiology technologist Michelle Hoadley in UHS Wilson Medical Center's cardiac catheterization lab.

UHS www.uhs.net

## tion

espite significant advances in the diagnosis and treatment of heart disease, approximately 600,000 Americans die each year from a heart attack — often due to delayed care.

Time is frequently lost because the patient does not know the signs of a heart attack and when to call **911**. The American Heart Association estimates that half of all people suffering a heart attack wait more than two hours before seeking help. Because delayed treatment leads to damaged heart muscle, those hours can mean the difference between death or other serious consequences and a full recovery.

Even when patients heed the early warning signs of a heart attack, diagnosis may be delayed when the patient is first examined. Sometimes the patient is not in obvious distress or early tests deliver false negative results for heart attack. More than 35,000 heart attack patients annually initially present with inconclusive or false-negative test results.

The Chest Pain Center at UHS Wilson Medical Center specializes in comprehensively evaluating, diagnosing and treating this subset of chest pain patients — those with borderline symptoms and inconclusive test results who may be on the verge of having full-blown heart attacks. The Chest Pain

Stephen Gomez, MD, explains that while the ED is the first line of defense for patients who may be having a heart attack, the Chest Pain Center is the next stop for patients with inconclusive results.

Center is the region's only such facility accredited by the Society of Cardiovascular Patient Care.

#### THE RIGHT PLACE AT THE RIGHT TIME

When a patient at the UHS Wilson

Medical Center Emergency Department is diagnosed with inconclusive chest pain, he or she is typically transferred to the Chest Pain Center in the hospital. There, a highly trained team of cardiac specialists continues to observe, evaluate and treat him or her. "These patients appear to have a low level of risk for heart attack. But appearances can be deceiving and the chest pain is real," says Stephen Gomez, MD, UHS director of Emergency Medicine. "We're not willing to take chances. So, the safer solution is to transfer these low-risk patients to our Chest Pain Center for focused observation."

Combating risk of misdiagnosis due to false negative tests tops the list of Chest Pain Center benefits, according to Nicholas J. Stamato, MD, FACC, director of cardiology at UHS Wilson Medical Center. "This system saves lives. For many patients who are about to have a heart attack, their first EKG and blood test come back normal," Dr. Stamato explains. "Before the center, these patients were

> often sent home, where they later suffered a heart attack. Now, when we suspect anything abnormal, these patients move to our Chest Pain Center. They're released once we're sure the pain is not heartrelated. Or, if something should happen, they're in the right place for immediate treatment — during the critical early stages of their heart attack, when treatment is most effective."

#### THE GOLD STANDARD

To earn accreditation from the Society of Cardiovascular Patient Care, the Chest Pain Center went through a rigorous, multidisciplinary process. The center was judged on eight key elements, which

#### SAFETY FIRST

Michael lannone, 78, felt an uncomfortable pressure in his chest — not a crushing pain, but a worrisome tightness. "Too often people think it's something other than their heart, and they wait too long," he says. "I don't take chances with my health."

Mr. Iannone headed straight for the UHS Wilson Medical Center Emergency Department (ED), where preliminary blood tests and an EKG showed no signs of heart attack. However, because Mr. Iannone has a history of heart disease, which has been successfully managed with medication since 1995, he was transferred to Wilson's Chest Pain Center.

After several hours of observation and additional testing, the center team determined that Mr. lannone's heart was fine and the chest discomfort was due to acid reflux, which was alleviated by adjusting his medications. "I was good to go, and that was great news. But the best part is that I left the center with peace of mind," Mr. lannone says.

collectively demonstrate the hospital's commitment to fast, efficient and expert care of patients experiencing chest pain. "It means that our physicians and staff know the latest protocols for diagnosing and treating cardiac patients, resulting in the highest possible quality of care," explains Kim Pilarchik, director of Cardiac Services. "And that includes caring for patients with symptoms that don't point to an obvious heart attack."

The accreditation, explains Dr. Gomez, strengthens the center's ability to meet the highest possible level of care. "To maintain accreditation, we must continually assess our Chest Pain Center program," he says. "Heart care is a dynamic process; it's not static. And to stay on the cutting edge, we have to grow with the knowledge and technology available."

An additional benefit of accreditation, Ms. Pilarchik adds, is increased coordination between the Chest Pain Center and local emergency medical system (EMS) personnel. "This has always been a strong partnership, because every minute counts for a heart patient," she says. "But to achieve this level of accreditation, we had to create an even stronger relationship."

If extended observation and testing in the Chest Pain Center does eventually prove that a patient is about to suffer a heart attack, says Dr. Stamato, "The patient is in a place that is dedicated to treating heart attacks. Very rapidly, these patients begin the right treatment. It all happens quickly — whatever they need."

TAKE HEART ... If you suspect you may be having a heart attack, call 911 immediately. Evaluation can begin in the ambulance. To learn more about the UHS Chest Pain Center, see www.uhsstayhealthymagazine.com.



## advances in cardiology

#### HOW UHS IS KEEPING ON THE CUTTING EDGE OF CARDIAC CARE

edicine is always moving forward. Protocols change, research illuminates, technology improves and techniques are perfected. Hisham Kashou, MD, of UHS Cardiology Vestal, discussed advances in cardiology with UHS Stay Healthy Magazine.

#### INTERVENTIONAL CARDIOLOGY

Cardiac stenting has been the gold standard for treating heart attacks and opening blocked arteries for nearly two decades, and it keeps getting better. "The stents and balloons are much more deliverable, so they can be deployed in smaller vessels than just five years ago," says Dr. Kashou. He also explains that the latest generation of drug-coated stents (mesh cages that hold vessels open) are improving outcomes and reducing the recurrence of narrowing of the arteries.

On the horizon in a few years are biodegradable stents that dissolve months after they are implanted. Additionally, a new technique for replacing heart valves using a catheter threaded through a vessel, rather than surgically, was recently approved by the FDA and is being slowly rolled out to medical centers across the country. Dr. Kashou says UHS is preparing to offer this procedure, starting with a valve clinic.

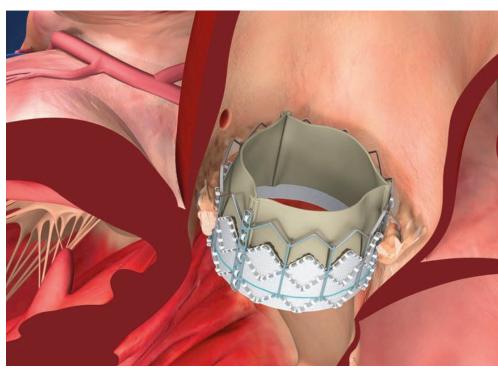
#### PREVENTION

Dr. Kashou notes that management of risk factors for heart disease, including hypertension, high cholesterol and high blood sugar, has gotten more aggressive in recent years. For example, target LDL ("bad" cholesterol) counts have dropped from under 100 to under 70 in high-risk patients. Cardiologists and primary care providers have also put more emphasis on helping patients understand the importance of exercise, a healthy diet, avoiding tobacco and making lifestyle changes when necessary. "The lower the cholesterol, the lower the blood pressure, the less risk of heart attack and stroke," says Dr. Kashou. "Exercise and weight loss are part of the formula."

#### **IMPLANTABLE DEVICES**

Patients with weak heart muscles or certain types of arrhythmia (irregular heartbeat) who meet stringent criteria may benefit from implantable defibrillators.

Hisham Kashou, MD, understands the importance of staying current in cardiology.



Minimally-invasive heart valve replacement can be performed via catheterization.

The newest devices have improved vastly over earlier devices, according to Dr. Kashou. They are smaller, longer lasting and double as pacemakers. "When they first came out, they were quite bulky, but they are now much smaller and the battery can last up to seven to eight years," he says. "In addition, they now have pacing capacity in them."

After implantation, patients need to follow up at a device clinic to have their device checked and adjusted, if necessary. There are clinics available at Cardiology Associates and UHS Vestal.

#### IMAGING

Echocardiography (ultrasound of the heart) produces clearer images than ever, providing physicians with comprehensive information about a patient's heart. (See page 3 for information on 3-D echocardiography in the operating room.) The addition of trans-esophageal echocardiography, where the probe is inserted through the patient's

mouth, produces a more detailed look at the heart, according to Dr. Kashou.

The stress test has been part of a standard cardiac workup for years. During the test, the patient's heart is examined using echocardiography before and after the patient runs on a treadmill. Newer options make the stress test available to more patients, says Dr. Kashou. The nuclear stress test employs an injection of a radioactive substance to create additional contrast that a radiologist can interpret for patients with subtle anatomical changes. A chemical stress test provides an alternative for patients who, due to age or disability, cannot walk on the treadmill.

**HEART SMART** ... To make an appointment with Dr. Kashou or another cardiologist at UHS Cardiology Vestal, call **729-8833**.

Cardiology is a very dynamic field that is always changing, and here at UHS, we are always trying to improve things and implement new innovations.

—Hisham Kashou, MD

