



STAY healthy

CARDIAC ISSUE 2018

Guiding Light

New blood pressure guidelines encourage early preventive steps to reduce risk of heart disease and stroke

Preventing Stroke without Medication

Watchman is an alternative to blood thinners for qualified AFib patients

A Bridge to Therapy

A lifesaving life-support method gets expanded use at UHS



Quick Care

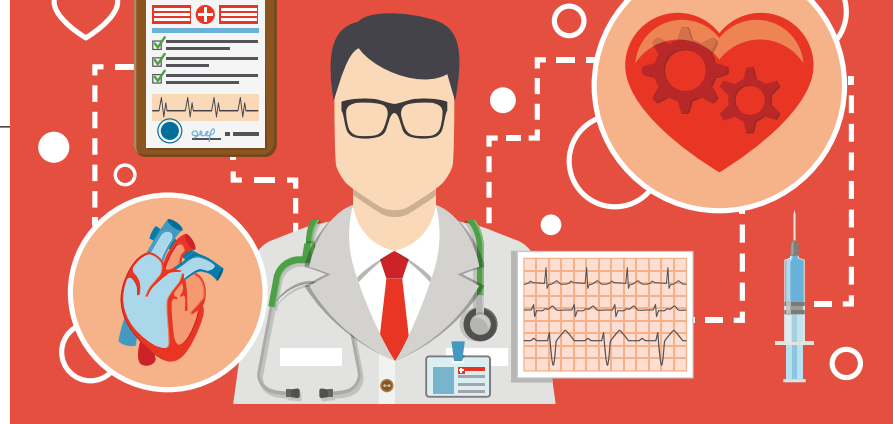
Acute Care Clinic for current patients

If you're a patient of the UHS Heart & Vascular Institute and experience symptoms that have you concerned, you can be seen in the new UHS Cardiology Acute Care Clinic. The clinic is designed to evaluate and treat the most common symptoms experienced by heart patients, and keep you out of the Emergency Department.

The clinic offers same-day or next-day appointments during working hours for an evaluation by UHS' knowledgeable, skilled and experienced cardiology team. These symptoms can include:

- Dizziness
- Palpitations
- High or low blood pressure
- Symptomatic atrial fibrillation
- Edema

>> HELP IS HERE. If you are a patient of the UHS Heart & Vascular Institute and experience any of these symptoms, call UHS Cardiology Acute Care Clinic at **763-6580** to make an appointment. If you feel you need immediate medical attention, call 911.



Reaching Out

Upgrading cardiac services in outlying areas

Ensuring everyone in the community has access to quality heart care is incredibly important at the UHS Heart & Vascular Institute, which is why our services extend beyond the Binghamton area to residents of Delaware, Chenango and Sullivan counties and their surrounding communities.

Physicians at UHS Cardiology Norwich, located at UHS Chenango Memorial Hospital, and UHS Delaware Valley Hospital have always worked closely with their partners in Binghamton to maintain continuity of care, and this year they have taken steps to enhance that partnership.

"It has come to feel more like a true partnership with my colleagues at the UHS Heart & Vascular Institute," says James O'Brien, MD, FACC, cardiologist at UHS Cardiology Norwich. "We serve as an entry point, but we are also able to seamlessly provide access to the specialty services that are available only in the Binghamton area. It's basically an extension of my practice."

Dr. O'Brien also notes that the UHS Cardiology Norwich practice is growing to meet the demands of the community. The practice recently received a grant for a new cardiology care room to increase capacity and see more patients in a timely manner. This grant will also enhance the device clinic and provide a state-of-the-art upgrade for radiological services. Adding this brand new care room, which is expected to be completed by the end of 2018, will also allow the practice to offer cardiac rehab services for the first time.

"We're excited about that because many people decide to forego cardiac rehab just because of the burden of traveling, so we're going to be able to offer that here in everyone's backyard," says Dr. O'Brien.

>> WE ARE IN YOUR NEIGHBORHOOD. For more information on our cardiac services throughout the region, visit uhs.net/care-treatment/heart-vascular-care.

We Got It

UHS earns heart failure response quality award

UHS has earned a "Get With The Guidelines®-Heart Failure Gold Plus Quality Achievement Award" from the American Heart Association for implementing specific quality improvement measures in the care of patients with heart failure.

"Get with the Guidelines" is a national quality improvement endeavor that helps

hospital teams follow the latest research-based standards for care and reducing hospital readmissions for people who have experienced heart failure. Launched in 2005, the program has been successful in improving outcomes and reducing 30-day readmissions.

UHS earned the award by meeting specific quality measures in diagnosis and treatment. These include evaluation of the patient and proper use of medications and aggressive risk-reduction therapies, such as ACE



inhibitors/ARBs, beta-blockers, diuretics and anticoagulants.

Before patients are discharged, they also receive education on managing their heart failure and overall health, schedule a follow-up visit and learn about other transition interventions.

About 5.7 million adults in the United States suffer from heart failure, with the number expected to rise to eight million by 2030, the American Heart Association has reported. Statistics show

that, each year, about 870,000 new cases are diagnosed, and about 50 percent of those individuals diagnosed will die within five years.

However, many heart failure patients can lead full, enjoyable lives when their condition is managed with the right medications or devices, along with lifestyle changes.

>> CALL THE CLINIC. UHS has a specialized heart failure clinic to help patients manage their condition. Call the UHS Heart & Vascular Institute at **763-6580** to learn more.



The Right Side of Bed

Get better sleep to feel fresh and help your heart

You already know that tossing and turning during the night can leave you tired and less alert during the day. But did you know that recent studies have found that sleep issues can also affect you in ways you might not expect, such as impacting your cardiovascular health?

Issues like interrupted sleep or not sleeping enough, as well as sleep disorders such as sleep apnea or insomnia, have been found to increase a person's risk of cardiovascular disease, including high blood pressure and stroke. Researchers have also found that poor or insufficient sleep can lead to obesity—a risk factor for cardiovascular disease—which in turn leads to sleep disorders like sleep apnea, creating a vicious circle.

So what can you do to get a better night's sleep? Try the sleep tips above and see if they help you. Not only will you lower your risk of cardiovascular disease, but you'll also feel refreshed and better equipped to make the most of each day.

>> NEED ZZZs? If these tips don't work for you and you still find yourself struggling to get a good night's sleep, consider talking to your doctor. A referral to the UHS Sleep & Neurodiagnostic Center might be in order.

SLEEP BETTER!



Get regular physical activity However, try to avoid activity right before bed, so you're not energized while trying to fall asleep.



Keep a consistent bed time A sleep routine (which can include dimming the lights, a cup of warm tea or even a bath) will help your body know when it's time to shut down.



Make your bedroom sleep-friendly Keep your bedroom cool and dark and leave your cell phone in another room so you aren't tempted to check it.

The Heart of the Matter

When her doctor recommended heart valve replacement, 66-year-old Southern Tier resident Kimberly Quick was anxious, but she didn't hesitate to follow up with a cardiac surgeon. The operation was a success, and in February of this year she encouraged other women to take charge of their heart health and seek treatment if something doesn't seem right.

Ms. Quick is the latest in a long list of women who have survived heart conditions and been selected to speak at UHS' annual "Wear Red Day," which calls attention to women's heart health issues. She advised her listeners at UHS Vestal — women and men — to take heart symptoms seriously and act on them quickly. "Sometimes you really don't know your true condition," she said. "By following through, I learned how much danger I was in before surgery. Now, following surgery, I've been able to do better than I ever expected."



Most of us are very familiar with the good advice of medical experts: Eat a balanced diet, exercise appropriately for your age and condition, maintain a healthy weight, get a handle on stress and don't smoke. And, as with Ms. Quick and other survivors who have been part of the "Wear Red" Heart Month program, staying alert to the signs and symptoms of heart attack or other problems can be the difference between life and death.

But while it's important to take charge of your heart health, you should also know that you're not in this alone. UHS is ready to be your guide and resource. Over the years, we've pioneered a number of advances in heart care in our region, introducing angioplasty, open-heart surgery and cardiac rehabilitation. We've created trauma, stroke and chest pain centers at UHS Wilson Medical Center, and launched *Stay Healthy* at the Oakdale Mall, where you can learn about fitness, nutrition and smoking cessation.

Perhaps most significantly, in 2014 we integrated all of our cardiac services under one banner, the UHS Heart & Vascular Institute, based at UHS Wilson. The institute is designed to advance the quality and effectiveness of cardiac services, improve the patient experience and coordinate your care every step of the way.

So we hope you'll always think of us as your partner in accessing the best possible options, ensuring that lifesaving care is available whenever needed. We're privileged to be able to treat heart conditions like the one Ms. Quick was born with, while also helping everyone address those forms of heart disease that are preventable. It's our mission, our goal and our commitment, because, for you and all of our patients, our hearts are really in it.

John M. Carrigg
PRESIDENT & CEO OF UHS

GUIDING light

>>NEW BLOOD PRESSURE GUIDELINES ENCOURAGE EARLY PREVENTIVE STEPS TO REDUCE RISK OF HEART DISEASE AND STROKE

Those with readings of **130/80** are now considered to have high blood pressure. Previously, high blood pressure was defined as **140/90**.

It's estimated that 75 million American adults have high blood pressure, also called hypertension. Along with smoking and high cholesterol, these are the top three risk factors for heart disease and stroke. For high blood pressure, studies show that even mild elevation can put you at a higher risk for heart disease, vascular disease and stroke, which makes it essential to detect, evaluate and manage the condition at its earliest stage.

GOING FULL CIRCLE

With this in mind, the American College of Cardiologists (ACC) and the American Heart Association (AHA) recently announced new guidelines for high blood pressure—the first comprehensive update since 2003. The primary change introduces a new category of hypertension called Elevated Blood Pressure. Those with readings of 130/80 are now considered to have high blood pressure. Previously, high blood pressure was defined as 140/90.

“The new category identifies those with mild hypertension, so physicians

can act sooner with early treatment and preventive healthcare,” explains Afzal ur Rehman, MD, PhD, vice president for Cardiovascular Services and Medical Informatics at UHS. “It’s also a wake-up call for patients to do their part by making healthy lifestyle changes and improving medication compliance.”

WHAT GOES UP SHOULD COME DOWN

High blood pressure occurs when coronary arteries that serve the heart become narrowed or blocked from a

buildup of plaque, which includes fat and cholesterol. This causes an increase in pressure from blood flow pushing against blood vessel walls. The added pressure damages artery tissues and, over time, damages the heart and circulatory system, which can result in a heart attack or stroke.

The recently released blood pressure guidelines have actually increased the number of U.S. adults diagnosed with high blood pressure, going from 32 percent in 2016 to 46 percent in 2017. “The increase is because our new guidelines identify patients who were

once considered within the normal blood pressure range, and these people weren't being monitored, screened or educated," Dr. Rehman emphasizes. "The new guidelines identify patients with hypertension at a very early

stage, so we can take steps to prevent progression. With earlier intervention, there is every reason to believe that there will be a significant decrease in the percent of adults who progress to high blood pressure stage 1 or 2. When

we accomplish this, it stands to reason that we'll also see a decrease in those who suffer from heart disease or stroke," Dr. Rehman adds.

Food for Thought

Along with the new guidelines for high blood pressure, announced by the American College of Cardiologists (ACC) and the American Heart Association (AHA), comes renewed emphasis on dietary recommendations to help reduce high blood pressure.

One of the top recommendations is to decrease salt intake, which increases sodium in your bloodstream. This reduces your kidneys' ability to flush out excess water and results in higher blood pressure.

In addition to lowering salt intake, here are more tips from Maureen Kennedy-May, RD, a clinical dietitian at UHS:



Eat more potassium-rich foods, such as bananas, potatoes, avocados and dark leafy vegetables, which help lessen sodium's effects.

Prepare a heart-healthy dinner and plan an extra portion—sometimes called a leapfrog meal—for tomorrow's lunch.



Focus on weight loss.

Ms. Kennedy-May explains, "As weight comes down, blood pressure comes down." Generally speaking, weight loss is a two-step process. First, reduce dietary fat, simple sugar and portions. Second, increase activity. According to the Department of Health and Human Services, the recommendation for most healthy adults is at least 150 minutes of moderate aerobic activity or 75 minutes of vigorous aerobic activity weekly, or a combination of moderate and vigorous activity. Before beginning any activity, Ms. Kennedy-May recommends checking with your primary healthcare provider.



Keep a daily journal of all food and beverages consumed. "Your daily food intake may be surprising when you see it in print," says Ms. Kennedy-May.



Find an app that helps monitor food intake. "Apps may not be as effective or accurate as journaling, but they can help," says Ms. Kennedy-May.

Eat more fresh vegetables.

Focus on a variety of veggies, especially locally grown produce if possible.

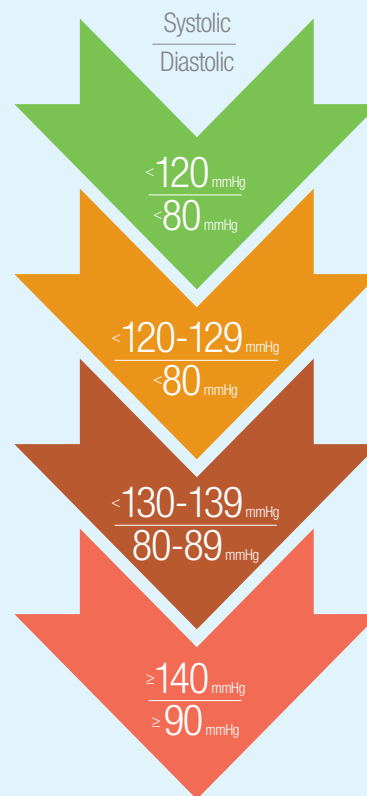


READY FOR YOUR CLOSE UP

Alan Miller, MD, a primary care physician and president of the UHS Medical Group, says: "By identifying patients with even mildly elevated blood pressure, doctors can create more comprehensive and accurate patient cardiac risk profiles. The new guidelines include collecting applicable patient information, then calculating the patient's risk of heart disease or stroke over the next 10 years." The information includes patient age, gender, race, total cholesterol, HDL cholesterol and blood pressure. It also features yes-or-no questions as to whether the patient is currently being treated for high blood pressure, is diagnosed with diabetes or is a smoker.

The calculated result is designed to prompt thorough doctor-patient conversations about primary and non-modifiable cardiac risk factors, such as age, ethnicity and family history of heart disease, as well as secondary and modifiable risk factors, which include lifestyle factors that can be controlled.

Know Your Blood Pressure – And What to do About It*



Normal Blood Pressure

Recommendations: Healthy lifestyle choices and yearly checks.

Elevated Blood Pressure

Recommendations: Healthy lifestyle changes, reassessed in 3-6 months.

High Blood Pressure Stage 1

Recommendations: 10-year heart disease and stroke risk assessment. If less than 10 percent risk, lifestyle changes and reassessed in 3-6 months. If higher, lifestyle changes and medication with monthly follow-ups until blood pressure is controlled.

High Blood Pressure Stage 2

Recommendations: Lifestyle changes and medication, with monthly follow-ups until blood pressure is controlled

*Talk to your doctor for individualized recommendations. Source: American Heart Association News

To help patients understand and manage all these factors, UHS created its Cardiac Prevention Clinic. "The clinic is not only for those who have already had a cardiac event. It's also for those who want to lower their risk factors for an event," Dr. Rehman says.

Between the new hypertension guidelines and the UHS Cardiac

Prevention Clinic, Dr. Rehman feels that the patient gains a strong benefit. "This gives us time to explore nonpharmacological lifestyle changes with follow-up screenings to see if we're getting the job done," Dr. Rehman explains. "If not, we have time to turn to medical therapy. We're ready with options." **SH**

Knowledge is Power

UHS recently opened its Cardiac Prevention Clinic, staffed by Umama Gorski, MD, a specialist focusing on preventive heart care. Clinic sessions are held every Tuesday, from 4 to 6 p.m., at UHS Cardiology – Wilson Square.

The clinic's rationale, says Dr. Gorski, is simple: "Prevention is better than cure." By that, the doctor means that every clinic session focuses on aspects to help lower heart attack risk. Topics include heart-healthy diet, weight loss, quitting cigarettes, cutting back on alcohol and increased physical activity.

"For each clinic attendee, we'll evaluate cardiac risk factors and how we can help lower those risks," Dr. Gorski explains.

For more information about the UHS Cardiac Prevention Clinic, call **763-6580**.



PREVENTING stroke

without medication

By having a Watchman device implanted in his heart, Leonard Williams no longer has to deal with the side effects of blood thinners.

>>WATCHMAN IS AN ALTERNATIVE TO BLOOD THINNERS FOR QUALIFIED AFIB PATIENTS

UHS is one of the few healthcare systems in the region to offer Watchman therapy.

Hear patient Leonard Williams is 90 years old and determined to continue doing the things he enjoys, such as caring for his acre of property on his riding lawn tractor. That's why he chose to undergo a preventive heart procedure that would dramatically decrease his risk of stroke and allow him to stop using blood thinners.

The WWII veteran lives with chronic atrial fibrillation, or AFib, the most commonly diagnosed cause of heart arrhythmia. AFib causes the heart's upper chambers to beat too slow, fast or irregularly, causing blood to pool and clot. These clots can travel to the brain and cause a deadly or debilitating stroke. "For that reason, stroke prevention is always part of our treatment for AFib patients," says Waseem Sajjad, MD, an electrophysiologist at the UHS Heart & Vascular Institute.

In May 2017, Dr. Sajjad, along with a team of UHS heart specialists, implanted a Watchman device in Mr. Williams' heart. Watchman is a screen-and-net-like

device that is delivered via catheter, using a minimally invasive approach. It is designed to permanently block off the left atrial appendage to keep blood clots from escaping. The FDA-approved Watchman device is a clinically proven alternative to long-term blood thinner therapy for stroke risk reduction in patients with non-valvular AFib. About the size of a quarter, it is implanted in the left atrial appendage, where 90 percent of AFib-related blood clots collect. Over time, the body's tissues naturally cover the device, keeping clots from leaving the heart and causing stroke.

The procedure takes one to two hours and is done under general

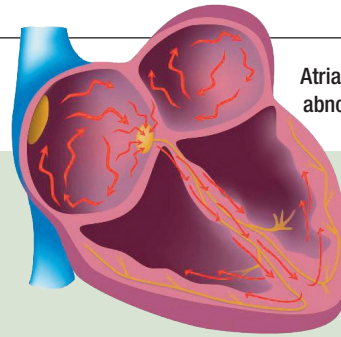
AFib Experts

Atrial fibrillation, or AFib, is the most commonly diagnosed heart rhythm abnormality. Complications from AFib can lead to stroke. Patients experiencing the condition can find specialized diagnoses, treatment and stroke prevention therapies at the UHS Heart & Vascular Institute, located on the campus of UHS Wilson Medical Center in Johnson City.

“Atrial fibrillation is a complex arrhythmia that is highly treatable when in the hands of

an experienced specialist,” says Waseem Sajjad, MD, an electrophysiologist at the institute who is recognized for his expertise in AFib ablation therapy. “We are fortunate to have the full array of services and expertise to address our patients’ needs.”

AFib treatment priorities may include resetting the heart’s rhythm or rate, and lessening the risk of blood clots and stroke. Depending on the patient’s



Atrial fibrillation, or AFib, is a complex heart rhythm abnormality that can lead to stroke if left untreated.

diagnosis and medical history, therapies may include:

- **Rate or rhythm control medication** – A heart specialist carefully tailors a prescription to a patient’s unique AFib diagnosis while monitoring effectiveness.
- **Anticoagulant medication** – Blood thinning drugs such as Coumadin® are prescribed to prevent clotting and stroke.
- **Ablation procedures** – Tiny scars are created on areas of the heart that produce erratic electrical signals

with the goal of restoring normal heart rhythm.

- **Electrical cardioversion** – While under sedation, the patient undergoes a procedure in which an electrical current is delivered to the heart to restore a normal rhythm.
- **Left atrial appendage closure using the Watchman device** – An appendage of the heart where blood clots collect is sealed off, allowing most patients to discontinue blood-thinning medications.

anesthesia. Patients typically remain in the hospital one night and recovery involves healing from a tiny incision in the thigh where the catheter is inserted.

Mr. Williams recovered quickly from the procedure and felt no worse for wear a day later. “It was like going in to get a tooth filled,” he says. “The doctors were amazed how quickly I was back outside.” About seven months later, after visits to the hospital for heart imaging, he was able to stop taking warfarin, a commonly prescribed blood-thinning medication sold under such brand names as Coumadin® and Jantoven®.

WHY AN IMPLANT?

AFib can increase one’s risk of stroke fivefold. Mr. Williams has watched friends become incapacitated by stroke, and he is very frank about his dislike of that prospect. “I’d rather pass,”

he says. Unfortunately, he cannot tolerate the blood thinners that are routinely prescribed to curb that risk in AFib patients.

Blood thinners are effective for many people, but they can cause unwanted side effects in others, explains Dr. Sajjad. In Mr. Williams’ case, they contributed to intestinal bleeding. So he was pleased to discover that the UHS Heart & Vascular Institute, where he receives heart care, is one of the few hospital systems in the region with the expertise and capabilities to offer the Watchman therapy option.

Watchman can reduce stroke risk as effectively as warfarin, the most commonly used blood-thinning drug, Dr. Sajjad says. About 45 days after undergoing the Watchman procedure, 92 percent of patients no longer need to take blood thinners. After one

year, 99 percent of patients are off their medication.

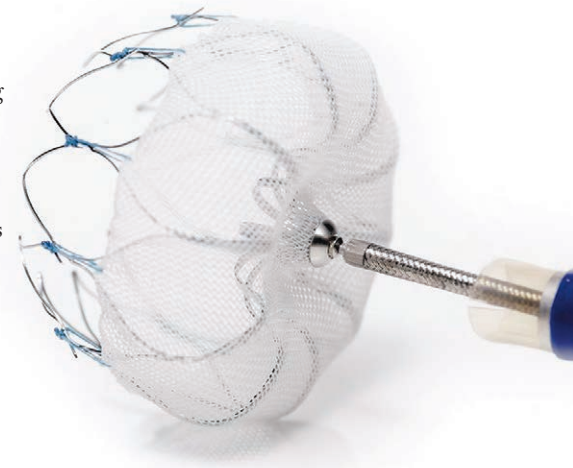
Watchman has additional benefits. “Unlike warfarin, Watchman can also reduce a patient’s long-term risk of bleeding,” Dr. Sajjad explains. “Most patients no longer have to get regular blood tests and cope with the food-and-drink restrictions that come with warfarin.”

AFIB, AGE AND WATCHMAN

Mr. Williams’ advanced age and health history did not prevent him from being a candidate for Watchman, including the fact that he had previously undergone heart bypass and valve replacement surgeries. These surgeries had successfully resolved problems unrelated to his AFib, and he was otherwise healthy and active. This and other factors helped qualify him for the minimally invasive procedure, says Alon Yarkoni, MD, FACC, director of the UHS Structural Heart & Valve Program.

In fact, it’s often older patients who may benefit the most from a medication-free alternative to stroke prevention, Dr. Yarkoni explains. The incidence of both AFib and stroke rise with age, as does the likelihood of being unable to tolerate blood thinners. He notes: “No matter the age, stroke can be incapacitating. That’s why it’s critical that UHS has an experienced, established heart team in place to help ensure the best outcomes for our AFib patients.” **SH**

The FDA-approved Watchman device is a clinically proven alternative to long-term blood thinner therapy.



Should I Be Checked for AFib?

Between two and six million Americans live with AFib, including 9 percent of people over age 65, according to the U.S. Centers for Disease Control and Prevention. AFib can be asymptomatic, but those who do present symptoms may experience one or several of the following:

- Heart palpitations, which may feel like a racing, uncomfortable, irregular heartbeat or a flip-flopping in the chest
- Weakness, fatigue or lack of energy

- Lightheadedness or dizziness
- Confusion
- Shortness of breath
- Chest pain

If you are concerned about possible symptoms of AFib, a primary care physician can perform basic heart function tests to see if referral to a cardiologist is in order.

>> HEART HEALTH QUESTIONS?

Visit uhs.net/find-a-provider to find a doctor near you.

>> **LEARN MORE.** UHS is one of the few healthcare systems in the region to offer Watchman therapy. A team of highly specialized cardiologists, including Drs. Sajjad and Yarkoni, and Afzal ur Rehman, MD, PhD, perform the procedure, using an interdisciplinary approach that brings together specialists from UHS electrophysiology and interventional cardiology disciplines. For information, assistance and assessment, call **763-6547**.

A BRIDGE to therapy

>>A LIFESAVING LIFE-SUPPORT METHOD GETS EXPANDED USE AT UHS

Heat failure occurs when the heart can't pump enough blood to meet the body's demands. This can be chronic, meaning it happens slowly over time. Or it can be acute, happening all of a sudden. For doctors at UHS, the scene is familiar: A patient arrives in the Emergency Department in acute heart failure. Within moments, physicians begin the work of determining what treatment will give the patient the best hope for recovery.

In some cases, this means treatments, such as angioplasty, stenting, surgery or valve repair, which would be too much for a patient who is suffering from heart failure or another critical medical issue. In these situations, doctors at UHS can now turn to *extracorporeal membrane oxygenation*, or ECMO, a method of life support that keeps the patient's blood and organs oxygenated until the patient is stable enough for the treatment that will repair the problem.

According to Ahmed Khan, DO, cardiothoracic surgeon at the UHS Heart & Vascular Institute, ECMO is an essential "bridge to therapy, not a treatment in itself." Dr. Khan explains: "Imagine a 50- to 60-year-old patient who has had a severe heart attack. In addition, his lungs and kidneys are failing. Using ECMO allows us to keep oxygen moving to the kidneys, lungs and other organs, buying time to repair the heart so all of the systems survive."

Without using ECMO, says Dr. Khan, there is a likelihood that even if the heart could be repaired quickly,

How ECMO Works

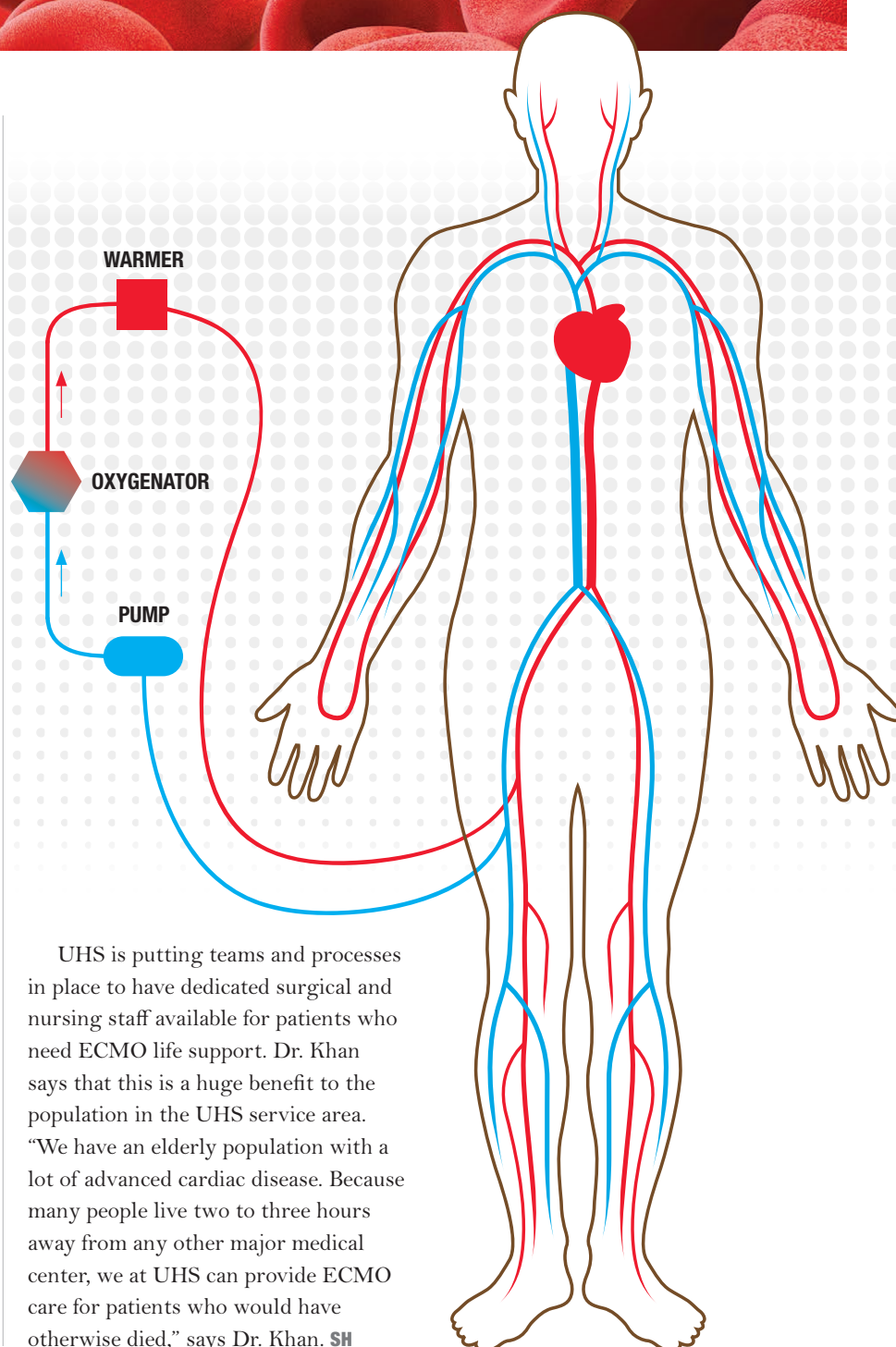
When a patient is experiencing a life-threatening condition such as heart failure or pulmonary failure, extracorporeal membrane oxygenation, or ECMO, can be used to keep their blood oxygenated and allow their heart and lungs to rest. The ECMO machine pumps blood outside the patient's body into a membrane that acts as an artificial lung and oxygenates the blood before sending it back into the patient's body. Two types of ECMO are used, depending on the needs of the patient:

VENO-ARTERIAL (VA) ECMO This is for patients with heart failure. In VA ECMO, the deoxygenated blood is pumped out of the patient's body and passed through a membrane that inserts oxygen. The blood is then heated slightly and sent through a pump that takes over the function of circulating the blood throughout the patient's body.

VENO-VENOUS (VV) ECMO This is for patients with pulmonary failure whose hearts are working well. VV ECMO adds oxygen to the patient's blood, but doesn't require the pump to assist circulation.

failure of the lungs or kidneys could prove fatal.

Heart failure is a common reason to use ECMO, but it is not the only one. Dr. Khan has also used ECMO for lung support in patients who have pulmonary failure due to an H1N1 flu infection, for example.



UHS is putting teams and processes in place to have dedicated surgical and nursing staff available for patients who need ECMO life support. Dr. Khan says that this is a huge benefit to the population in the UHS service area. "We have an elderly population with a lot of advanced cardiac disease. Because many people live two to three hours away from any other major medical center, we at UHS can provide ECMO care for patients who would have otherwise died," says Dr. Khan. **SH**