

Cardiovascular Perspectives

Munson Medical Center is Expanding Advanced Cardiovascular Care in Northern Michigan



Dino Recchia, MD, FACC

Welcome to the 2016 edition of Cardiovascular Perspectives. Our team of cardiologists and cardiothoracic surgeons continue to bring new and exciting additions to the cardiovascular services offered at the Webber Heart Center at Munson Medical Center. We are continually adding cutting-edge techniques and expanding services in order to provide the highest quality, advanced cardiac care to patients in northern Michigan.

Expanding Heart Services in the Region

Earlier this year, we received a \$3 million gift from the Maxon Foundation. We are using that gift to renovate buildings in Traverse City and Grayling into outpatient heart clinics, allowing more patients to receive timely cardiovascular care close to home.

Munson Medical Center's team-based cardiology practice, Traverse Heart and Vascular, is expanding onto first floor space vacated by the hospital's Infusion Clinic when it moved to the Cowell Family Cancer Center. We'll be converting the ground floor into a rapid access clinic, a diagnostic testing center, subspecialty clinics, and new lab space. The Heart Failure Clinic and Structural Heart Clinic also will move from the hospital into this space.

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Future Impact on Population Health

More than 40 percent of the U.S. population is expected to have some form of cardiovascular disease by 2030. Having access to high quality cardiovascular services stands to have the greatest impact on population health going forward.

Traverse Heart and Vascular Facts

THV cardiologists:

- Follow **28,000** patients in northern Michigan
- Perform **41,000** patient visits annually
- Travel to **9** outreach clinics in the region
- Perform **17,000** outreach clinic visits a year

One THV cardiologist making a 150-mile round trip saves each patient seen in the clinic that day a collective 3,000 miles of driving. We drive, so your cardiac patients don't have to.

In Grayling, an existing medical office building has been purchased across from Munson Healthcare Grayling Hospital and is being renovated into a dedicated cardiology clinic. With dedicated cardiology space, we will be able to expand times for cardiologists to see patients in Grayling.

In August, we will open a new cardiology clinic in downtown Indian River. Two of our cardiologists will travel to Indian River twice a month to see patients in that area, saving them the drive to Traverse City for diagnostic or follow-up care.

All of these renovations and expansion will allow us to see more patients on a daily basis and provide more rapid assessment of patients who have an urgent need.

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Patient Satisfaction at Webber Heart Center Leads the Nation

What Webber Heart Center Patients Have to Say*

Between January and March 2016, more than 300 patients gave their stay on the three inpatient cardiac floors of the Webber Heart Center the highest possible ratings.

Here are recent results, as reported by Press Ganey:

Question	Rank
Overall rating of the care given:	99th percentile
Likelihood of recommending hospital	99th percentile
Staff worked together to care for you	99th percentile

(Percentiles are based on scores compared to other hospitals in Press Ganey's large database.)

We were **impressed** with every staff member. Kudos to all!

If any hospital stay can be described as great this one was **super great** in all areas.

What else can be said but **they saved my life**. I love all of them!

I live 20 miles south of Alpena and **would travel five times as far** for your treatment.

Every doctor who talked to me was **upbeat, positive**, very explanatory and always took time to ask if we had any questions – very happy with them!

All the physicians were very **skilled to the highest level**.

Fantastic staff – nurses, doctors, housekeeping, food service – all treated me great. I felt very well taken care of!

Great care, **respectful, calmed all fears**, showed that they really loved their job and worked to make everything go smoothly.

This is a **GREAT** hospital. I can't say enough good things about the facility or the treatment. **THANK** you.

They treated me as if I was **the only person there**. My husband has a hard time walking – they even took him in a wheelchair all the way to my room.

All of the nurses and aides impressed me greatly with their **expertise and kindness**. I haven't ever had such a good experience in a hospital and I've been in many. **A++++** to the staff!

All nurses, doctors, and aides were **courteous**. You could see them pull together making the patients' time "lovely." Thank you for this experience.

I **appreciate** the heart center and their skills. My wife has been on the heart floor. They gave her back to me three times. She has A-fib. Very comfortable and **reassuring**.

All the caregivers were **friendly, kind, knowledgeable** and **professional**.

(A sampling of patient comments from March and April 2016)



Stress Testing: Using the Right Test for the Right Disease

Several options are available when ordering a stress test for your patients. Following are some general guidelines to help you choose the most appropriate test.



Low Risk Patients with Normal EKGs

The test of choice for these patients is a treadmill stress test only, with no imaging. "The treadmill test will provide information on functional capacity and ischemic EKG changes," said **Anna Booher, MD, FACC**. "If test results are normal, this may be all

that is needed for your patient." Treadmill stress tests may be done at any Traverse Heart & Vascular (THV) office, or at your local hospital.

Intermediate to High Risk Patients with Abnormal Treadmill Stress Test

If your patient's treadmill stress test is abnormal or he or she is at intermediate or high risk of heart disease, a stress test with imaging is appropriate. Two options are available:

- Exercise stress test on treadmill
- Pharmacologic stress test



Patients with Left Bundle Branch Block

A cardiolute treadmill stress test should not be ordered for LBBB patients because of a higher false positive rate. "A Lexiscan® (regadenoson) cardiolute can be done in the right situation," said **Anne Hepner, MD, FACC**.

Patients Who Cannot Exercise

If your patient cannot exercise adequately because of severe lung disease, obesity, arthritis, diabetes, chronic kidney disease or any other medical condition, two options are available:

- A dobutamine stress echocardiogram (DSE) can be performed in the hospital using an IV line to inject dobutamine to increase the patient's heart rate to mimic the effects of exercise on the heart. This test will assess the heart's function and structures under stress.
- A cardiac nuclear perfusion study with Lexiscan can be ordered to vasodilate the arteries of the heart, mimicking peak stress to find perfusion mismatches before and after stress. Lexiscan is given by IV in preparation for a myocardial perfusion imaging (MPI) test. This test can be performed in a THV office or local hospital.

Choosing an Imaging Modality

Exercise stress echocardiography

Radiation is not associated with this test, making it preferable for younger patients. An exercise stress echocardiogram tends to be more specific and has fewer false positives. As a noninvasive imaging modality, it can miss small areas of ischemia. It is best used to evaluate valvular heart disease as well as LV and RV function.

Nuclear stress perfusion

This modality is indicated for patients with inadequate echo imaging or prior nuclear studies that can be used for comparison. It may be more sensitive and have more false positives. It also provides information on LV function for people who should not receive dobutamine for an exercise stress echocardiogram. "Less commonly, patients with triple vessel disease can have "balanced ischemia" where all segments are less perfused and the study can sometimes look normal, however, ECG changes and chest pain will often occur," Hepner said.

For more information about stress testing, contact Drs. Booher or Hepner at **231-935-5800**.

What to Do When Patients Present with Syncope or Palpitations

If a patient tells you “I blacked out,” it is time to ask a series of pointed questions, says Cardiologist **Brian D. Jaffe, MD, FACC**, who also specializes in electrophysiology.



Syncope is a complete loss of consciousness. A diagnosis of uncontrolled syncope can have significant repercussions for a patient, including thousands of dollars of wasted treatment and loss of driving privileges for six months. Syncope used to be considered a problem of brain function, but “more commonly it is caused by inadequate blood flow to the brain,” Jaffe said.

Tests that are often ordered for syncope include a CT scan of the brain and an ultrasound of the carotid arteries. “With a normal physical exam and no seizure history, these are almost never positive and seldom give the diagnosis,” Jaffe said. “The clinical history almost always tells you what happened. What was the scenario? Was it day or night? What was their posture? Were they turning their head? Were they under emotional strain? What activity had they been doing? Are they taking their medication correctly? Were they dehydrated?”

Vasovagal syncope – marked by low blood pressure, low heart rate, nausea, lightheadedness, and blurred vision – is usually harmless, requires no treatment, and is resolved with patient education. “It’s a hard-wired reflex almost always triggered by a sudden emotional response,” Jaffe said. “There are many, many really good fainters who have been successfully taught what to do. Number one – if your blood pressure is dropping, lie down.”

Carotid hypersensitivity also may be the culprit, especially in older people whose carotid pressure sensors are stiffer. A tight collar or sharp turning of the head can cause pressure receptors in the carotid artery to send an inappropriate signal to the brain. The solution for carotid hypersensitivity is a pacemaker, which yields immediate results.

If both of those have been ruled out and a heart rhythm pattern is dangerously fast or slow, an EKG is in order. “Most of the time the EKG looks normal,” Jaffe said. “That’s when we move to a longer period of monitoring. It used to be that we would use a 24-hour Holter monitor, but that very seldom was long enough to capture what we needed to see.”



Jaffe now recommends a new month-long patch monitor. The slim peel-and-stick Zio or SEEQ Mobile Cardiac Telemetry System are worn on the chest; patients can shower or swim with them. They last for two weeks, then are replaced by a second patch monitor. The continuous, wireless data collection works quite well, Jaffe said.

If month-long surveillance does not yield a cause for syncope, then an implantable loop recorder is suggested. A tiny incision is made in the chest, a miniature device is implanted, two stitches close the incision, and the device records continuously for three years. “It takes two minutes, it costs \$3,000 and it will usually get you an answer,” Jaffe said.

Cardiologist’s Tip: Do not order a tilt table test after one episode of syncope. This test should be limited to recurrent, unexplained episodes of syncope. The sensitivity and specificity of tilt table testing with isoproterenol or nitroglycerin challenge is just 80 percent.

Palpitations: When to Make a Cardiac Referral

Often patients who complain of heart palpitations do not need a cardiac referral, Jaffe said. A thorough clinical history should help determine if palpitations are of medical concern. For instance, if a patient consumes three pots of coffee a day and has no other cardiac symptoms, their palpitations are usually caffeine driven and easily diagnosed and resolved.

Palpitations associated with exercise should be carefully investigated with monitoring or stress testing. Sudden onset/sudden offset palpitations usually correspond to fixed circuits – atrial tachycardias, AV nodal and AV reentrant tachycardias.

The arrhythmia corresponding to palpitations can be very elusive, but there are now many more recording tools to capture them – the 24-hour Holter and month-long event recorders described above may be very helpful, and finally, apps that turn a smart phone into an accurate ECG recording device can capture the most infrequent ones.

"If a patient has palpitations with syncope or chest pain, we have to take it seriously," Jaffe said. When palpitations correspond with tachycardia, it's important to first determine if the problem is structural through a stress echocardiogram.

"If it is not structural, it is almost always an electrical problem and the patient needs to see an electrophysiologist," Jaffe said. "If patients have very rapid, regular palpitations with sudden onset and offset, if they say 'I think I'm going to pass out' and have shortness of breath, those are all signs they have an abnormal circuit. I'd love to see those patients early in their work up."

Is it Really AFib? It's Worth a Second Look

Atrial fibrillation (AFib) is the #1 ICD-10 diagnosis at Munson Medical Center and the most common cardiac diagnosis in people ages 65 - 75. AFib can be effectively treated with drugs, ablation, or "benign neglect."

But, is it really AFib?

If you have a patient with a long-standing or new diagnosis of AFib, electrophysiologists at the Webber Heart Center suggest it's worth a second look to be certain.



"AFib is often used as a catchphrase for all types of different arrhythmias," said Cardiologist **Robert Kennedy, MD**, who specializes in electrophysiology. "It's important to not assume that all arrhythmias are AFib. It could be atrial flutter, atrial tachycardia, or supraventricular tachycardia (SVT). These are usually curable arrhythmias and may not need dangerous anticoagulants or antiarrhythmics. We can treat those conditions with ablation, which in these types of cases are 90 - 100 percent curative."

"A lot of referrals I see have been treated for years for AFib before they eventually make it to me," Kennedy said. "I sometimes determine it was atrial flutter the whole time. We could have saved that patient 10 to 20 years of chronic pharmacologic treatment."

"If you question it, take a step back," he advised. "Is this AFib? Have a rhythm expert take a look at the EKG, especially if the patient is under octogenarian. A symptomatic patient wants an improved quality of life and this can result in a huge quality of life change for that patient."

"After a thoughtful clinical history and assessment for structural abnormalities, a referral to an electrophysiologist is the cheapest and fastest way to figure it out," he added. "A heart rhythm study and then ablation is a Class 1A indication for symptomatic arrhythmias. This is contrary to what has been taught before the modern day of electrophysiology. Electrophysiology is a new field that was just starting when my generation was in medical school. Today, we can destroy arrhythmias with ablation, which results in an immediate, permanent solution, avoiding the need for chronic antiarrhythmic medication."



"If you have any questions, don't hesitate to ask myself or **Dr. (Brian) Jaffe** to check it out. Humans can detect nuances not always recognized by a computer's interpretation of an EKG," Kennedy added. "Computers are good, but they don't know the big picture. Other extracardiac factors, such as hypertension, obesity, sleep apnea, hyperthyroidism, or alcohol/drug use, can distract the EKG vectors. After years of looking at these, there is a regularity to it. We know that certain patients won't have a textbook presentation."

"There are clearly different treatment strategies for each type of arrhythmia," Kennedy said. "If it is atrial flutter, we can skip all the other steps and go to ablation. SVT is a very similar concept and can be treated with ablation. Atrial tachycardia can be effectively treated as well. These may not require pharmacologic management."

Ablation performed in the electrophysiology lab at the Webber Heart Center can be completed in 30 minutes to an hour on an outpatient basis, with immediate correction of the arrhythmia.

What's the difference between a cardiologist and an electrophysiologist?

An electrophysiologist is a cardiologist who specializes in the study of the electrical activities of the heart. They have completed two more years of fellowship beyond a general cardiology fellowship. They are trained to perform interventional cardiac electrophysiology studies and surgical device implantations.

Munson Heart Failure Clinic is Improving Hundreds of Lives

Heart failure requires comprehensive disease management with frequent, sometimes daily, patient interaction to maintain a stable condition. Munson Medical Center opened a patient-centered, team-based Heart Failure Clinic three years ago to respond to this growing need.

The clinic experienced a 71 percent increase in patients between 2014 and 2015, and currently follows more than 400 heart failure patients. The program is expected to grow by another 41 percent this year.

Patients receive specialized treatment from a multidisciplinary team led by **Dino Recchia, MD, FACC**, who holds board certification in advanced heart failure and transplant cardiology. Other team members include heart failure certified nurse practitioner Nancy Harris, MSN, FNP, specially trained RNs Sheila Falk and Mary McManemy, Pharmacist Heather Tolfree, Pharm.D, and administrative assistant Rhonda Purchase.

“Our patients have complex advanced heart failure combined with multiple medical comorbidities,” Harris said. “Treatment can be difficult for patients and their families to understand and implement. We spend a great deal of time with them, both over the phone and with frequent follow-up visits, including same day care options.”

The Heart Failure Clinic is designated as an LVAD (left ventricular assist device) shared care institution with Spectrum Health, University of Michigan, and Henry Ford Hospital. This allows patients with implanted pumps to receive some of their care locally, saving them long trips downstate for follow-up care.

The clinic also manages patients with pulmonary hypertension and has a close relationship with both the University of Michigan and Spectrum Health pulmonary hypertension programs.

The growth of technology and medication options in the treatment of heart failure and pulmonary hypertension in the last several years is impressive.

Since February 2015, 14 patients have received a CardioMEMs device, the first FDA-approved implanted wireless pulmonary artery pressure monitor. This device allows clinic staff to review real time readings of each patient’s pressure and interact in a timely manner to prevent heart failure decompensation and the need for hospitalization. As long as patients are near a cell phone tower, they can travel anywhere in the world and transmit daily readings back to the clinic. “This daily monitoring has reduced hospitalizations for these patients to almost zero,” Recchia said.

The overall Heart Failure Clinic program has been highly successful in reducing hospital re-admission rates. Munson Medical Center has the lowest 30-day readmission rate in the nation (see graph, page 7).



Heart Failure Clinic Team

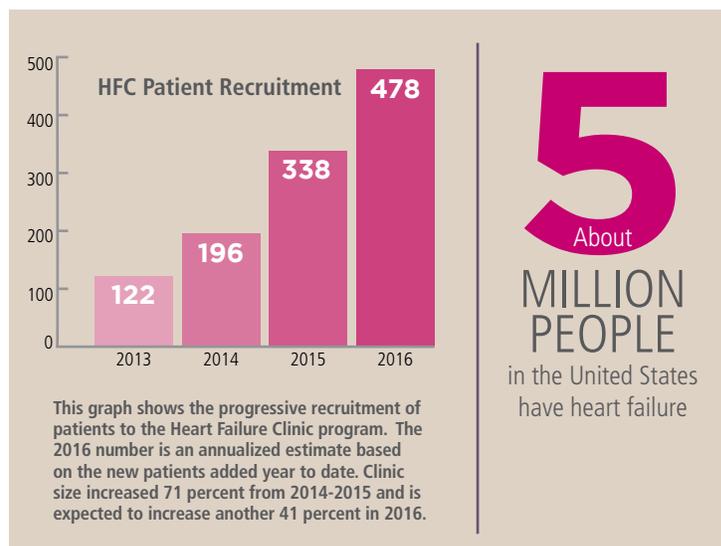
New Medications

Two new medications have shown benefit in decreasing both cardiovascular death rate and risk of hospitalization for heart failure.

Entresto is the first in a new class of drugs called angiotensin receptor neprilysin inhibitors, or ARNIs. It combines valsartan with sacubitril, which blocks the activity of neprilysin, an enzyme that contributes to the breakdown of natriuretic peptides. “Natriuretic peptides help maintain sodium and fluid balance,” Harris said.

Corlanor is approved for use in select people with chronic heart failure. It can be used in conjunction with beta blockers at the highest dose they can tolerate. It allows for further reduction in heart rate without hypotensive side effects.

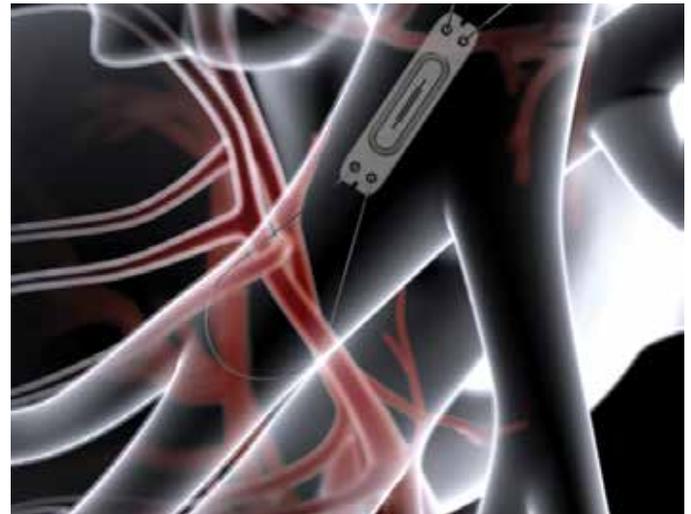
Several new medications also have been approved in the last few years for treatment of pulmonary arterial hypertension (PAH), including inhaled and oral options. The PAH program at Munson Medical Center has grown significantly with many patients now benefiting from treatment that greatly improves their quality of life.



Lisa's Story

Lisa Aldrich, 52, is a walking testimonial for the life-changing care taking place for PAH patients. When Lisa first came to the Heart Failure Clinic, she was on oxygen 24 hours a day, could not walk 100 feet without having to stop, was depressed, discouraged, defiant, and living on disability income. Under the watchful care of the Heart Failure Clinic staff, Lisa's condition improved dramatically with medication. She no longer needed supplemental oxygen and was feeling well enough to begin volunteering at Munson Medical Center as an ambassador, greeting patients and wheeling them where they needed to go. That was 2½ years ago. Today, Lisa is a Munson Medical Center employee, working 20 hours a week delivering food trays to patients.

"It feels so good to work again after nine years of not working," she said. "I didn't expect it to go this well. I take a fair amount of medication, but I feel good. It's really improved my quality of life. I'm happy and I'm grateful."



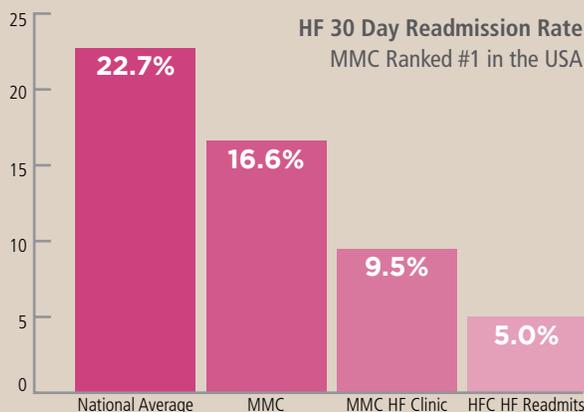
Save the Date:
Saturday, November 5, 2016 | 7:30 am - 4:30 pm

Cardiovascular Update for Primary Care Providers

The fourth annual Cardiovascular Update for Primary Care Providers will give primary care, emergency medicine, hospital medicine physicians, PA/NPs, and nurses practical tools and resources, including the most current developments in the diagnosis, treatment, and management of cardiovascular disease.

Please save the date and watch for more information and registration details.

Location:
Grand Traverse Resort
100 Grand Traverse Village Blvd.
Acme, MI 49610



Cardiologist Profile: Kevin J. Clayton, DO, FACC

Cardiologist Kevin J. Clayton spent part of his youth growing up on a Central Lake farm that has been in his family since 1907. His goal throughout medical school and during the early years of his practice was to return to northern Michigan, and in 1993 he joined the medical staff at Munson Medical Center. Last October, his twin brother, Bevin, an Emergency Medicine physician, joined him on staff in Traverse City.

“It’s wonderful to have him here – he is a great ER doctor,” Dr. Clayton said.

Kevin, Bevin and their three sisters were raised by hard-working parents. Their father was a brick layer whose handiwork can still be seen in the herringbone pattern on the front of the Captain’s Quarters in downtown Traverse City. Their mother, Doris, in addition to raising five children, earned a master’s degree in education and taught remedial reading to special education students in Central Lake, where she is still remembered with great fondness.

The Clayton twins attended Michigan State University College of Osteopathic Medicine together. Dr. Clayton put himself through medical school working as an electrician’s apprentice while going to school fulltime. He completed his internship, residency, and fellowship in cardiology in Lansing.

He and his wife of 32 years, Janell, are the parents of two grown daughters, Kelly and Kendra. They raised their girls on horseback, spending many weekends and vacations trail riding and camping. “Michigan has one of the best horse trail systems,” he said. “There’s a horse camp every 20 miles from Empire to Oscoda and a loop from Grayling to Cheboygan. We spent a lot of weekends doing that.”

The Claytons have six horses for trail riding and dressage. They also enjoy traveling to remote mountain locations in Newfoundland, Nova Scotia, and the Rockies for camping, horseback riding, and bird dog hunting. With nearly 30 years of cardiology experience,



Dr. Clayton is one of just a few interventional cardiologists in Michigan trained to open chronic total occlusions (CTO) using a specialized, lengthy and challenging percutaneous procedure. This procedure is an option worth considering for some patients who have been told nothing more can be done following a failed coronary bypass graft.

“The most fulfilling part of my job – the part I like the most – is to take someone in acute distress and turn them around. I like to take people with lifestyle-limiting symptoms and improve their situation to the point where they have little to no lifestyle limitations.”

“As physicians, we can’t guarantee quantity of life, but improving quality of life is gratifying for us and the patient,” he added.

Cardiothoracic Surgeon Profile: Shelly Lall, MD

Cardiothoracic Surgeon Shelly Lall, MD, her husband, Jonathan Pawlak, and their two English Labradors, Duff and Dack, hopped into the family's red Mini Cooper in July for a "Mini Takes the States" cross country rally that took them from Atlanta, Ga. to Palm Springs, Calif., via the Upper Peninsula. They joined about 1,000 other Mini Cooper enthusiasts for the back roads journey.

A native of Wellsville, N.Y., Dr. Lall loves small towns. After completing her cardiothoracic surgery fellowship at the University of Maryland Medical System in Baltimore, Md. in 2012, she wanted to move to a more rural area that offered two things: snow and a major medical center. She found what she was looking for at Munson Medical Center and joined the nationally-recognized Cardiothoracic Surgeons of Grand Traverse in August 2012.

Doing so fulfilled a goal she set for herself in the third grade when she wrote an essay about wanting to become an open heart surgeon after being inspired by a baby cousin's life-saving open heart procedure. "I lightly explored other options, but nothing else fit," she said. Her choice was confirmed when she heard a heart surgeon talk about transplants. She soon found herself in the OR with him, gaining valuable experience and earning his trust to the point where he allowed her, as a first year medical student, to close leg incisions as he proceeded with open heart cases.

Today, the OR is her second home and her heart belongs to surgery. "I love the technical aspects," she said.



"Every surgery has 750 steps and curve balls are thrown at you all of the time. I like maneuvering around that safely for the patient. There's always a way to do it better and every patient is different."

"In surgery, I'm fixing an immediate problem," she added. "I like the ability to help people and see a result. A lot of my soul and my energy go into every patient."

And, when she needs to think through a complicated medical problem, she turns to her newest outlet – knitting. "I'm good with my hands. My hands can be busy with something while my mind is consumed with a problem and I'm thinking, 'what else could I do?'"

When she's not knitting or fixing hearts, Dr. Lall and her husband are discovering the finer points of raising chickens and enjoy hiking and snowshoeing with their labs, affectionately known as "the boys."

Dr. Lall specializes in general thoracic and cardiac surgery, including surgery of the heart, aorta, lungs, esophagus, and chest wall. She is board certified by the American Board of Thoracic Surgery and the American Board of Surgery. Dr. Lall is a 2003 graduate of the University of Rochester School of

Medicine & Dentistry in Rochester, N.Y. and completed her general surgery internship and residency at Pennsylvania State University.

Dr. Lall enjoys the team approach to cardiovascular care that exists at Munson Medical Center and invites primary care providers to contact her directly to discuss patients.



continued from page 1

Patient Satisfaction Hits the Top Percentile

The entire care delivery team at the Webber Heart Center strives to not only provide the highest quality clinical care, but also to treat each patient with kindness and respect. So, we were delighted to see that we ranked in the 99th percentile for patient satisfaction by Press Ganey – the highest ranking possible. Patient ratings of our strengths included quality of care, effectiveness of the health care team, and likelihood of recommending Munson Medical Center to others.

Our non-invasive imaging team interpreted more than 35,000 cardiac imaging studies last year. In this issue, they offer suggestions on choice of stress testing modality. As imaging technology continues to advance, choosing the right test for your patient can be challenging at times. I am confident you will find these insights useful in your daily practice.

Palpitations and syncope are common presenting symptoms in many different clinical scenarios and evaluating these patients can be challenging. Our electrophysiology team highlights newer smart devices that are changing the way we approach this difficult clinical problem. In addition, they offer some points to remember when it comes to managing patients with atrial fibrillation. Our arrhythmia ablation program continues to grow. The number of ablation procedures over the last few years has more than doubled.

Our heart failure program has grown by more than 70 percent in the last year and now manages more than 450 patients with complex heart failure syndromes. The Heart Failure Clinic also provides expert evaluation and management for patients with pulmonary hypertension of all types. The heart failure team is integrating the newest heart failure therapies into their armamentarium of treatment options for this difficult group of patients.



Rendering of new outpatient cardiology lobby.

Munson Medical Center continues to be successful in achieving one of the lowest 30-day heart failure readmission rates in the country.

Our interventional cardiology team continues to advance percutaneous treatment options for patients with coronary artery disease. Munson Medical Center has consistently achieved outcomes for PCI that are better than most hospitals in the country.

We are very proud of our growing collaboration with both the University of Michigan and Spectrum Health. This combined effort has created the opportunity for children and adults with congenital heart disease to receive expert consultation and follow up close to home through clinics housed in the Webber Heart Center. This affords a tremendous benefit for patients and their families who appreciate not having to make the long journey downstate to receive this level of care.

This issue heralds a new feature spotlighting the more personal side of our cardiologists and cardiothoracic surgeons. We will continue to profile members of our team in coming editions.

Finally, we invite you to attend the Fourth Annual Cardiovascular Update for Primary Care Providers on November 5th. We received a lot of great feedback from the first three events and look forward to another successful conference this fall.

I hope you enjoy this edition of Cardiovascular Perspectives. Feel free to contact me with any questions or comments.

Sincerely,

Dino Recchia, MD, FACC
Chairman, Department of Cardiology
Munson Medical Center
drecchia@mhc.net

Percutaneous Coronary Intervention

Volumes (October 2014 through September 2015): 1,090

Complications MMC compared to like hospitals in the United States

In-hospital risk-adjusted mortality rate 22 percent lower

Peri-procedural MI 78 percent lower

Emergent CABG same

Coronary perforation 75 percent lower

Renal failure requiring dialysis 25 percent lower

Pediatric and Adult Congenital Clinics Held in Northern Michigan

In collaboration with Munson Healthcare, four pediatric cardiologists travel to northern Michigan to hold regular specialty clinics so children and adults with congenital heart disease in the region do not have to travel far for specialty care.

Adult Congenital Heart Program Clinic

University of Michigan Congenital Cardiology has held pediatric clinics in Traverse City since 1978. The Adult Congenital Heart Program formally joined this outreach two years ago. With advances in surgery and medicine more than 20 years ago, the number of adults living with a congenital heart condition now exceeds the number of children with such a condition.

U-M pediatric cardiologist **Mark D. Norris, MD**, sees adult patients every 3 - 4 months at Munson Medical Center, including working with Munson sonographers who perform ultrasound echocardiograms for these individuals. Adult patients also are seen as needed in Ann Arbor, usually within two weeks.

“Any heart condition that was present in childhood, even if discovered as an adult, is appropriate for our clinic,” Norris said. “Individuals with congenital heart conditions, including those requiring heart surgery during childhood, should be seen at least intermittently by a congenital heart specialist, even if that person feels fine. Specific conditions include tetralogy of Fallot, coarctation of the aorta, and transposition of the great arteries. This is supported by the American Heart Association guidelines for Adult Congenital Heart Disease. In addition to routine follow-up, pre-pregnancy counseling, and cardiac care during pregnancy are included in this clinic.”

Norris cross-trained in both pediatric and adult internal medicine, followed by congenital cardiology training, to serve in this role.

“The ability of the medical team, including the congenital surgeons, to improve the outcomes and quality of life for individuals born with heart conditions has never been better and is continually improving,” he added. “I find great fulfillment in contributing to the continuum of care across the age spectrum.”

For more information, contact Norris at **734-936-6266**, the Adult Congenital Heart Program at **877-720-3983**, or go to umvcv.org/medical-services/congenital-heart-disease.

Pediatric Clinics

Catherine L. Webb, MD, a pediatric cardiologist from University of Michigan, holds monthly pediatric cardiology clinics at the Munson Healthcare Specialty Clinic in Traverse City, usually on the fourth Thursday of the month. Webb also collaborates in the care of adults with congenital heart disease. Webb completed her residency in pediatrics and her pediatric cardiology fellowship at the University of Michigan Health System.



McDonald Dick, II, MD, a U-M pediatric cardiologist who started outreach pediatric cardiology clinics in Traverse City 37 years ago, continues to see patients at the Specialty Clinic about three times a year.

Contact Information

- For U-M pediatric cardiology appointments at the Specialty Clinic in Traverse City, call **231-935-8125**.
- For UMHS emergency pediatric cardiology consultation at any time, call the UMHS paging at **734-936-4000** and ask for the pediatric cardiology consult fellow on call.

Kim Lee, MD, FACC, a pediatric cardiologist from Helen DeVos Children’s Hospital in Grand Rapids with more than 24 years of experience, specializes in diagnosing and treating cardiovascular issues affecting children of all ages. He holds a monthly specialty clinic in the Cardiac Diagnostic Suite at Munson Medical Center, usually on the third Thursday of the month. For consultation or to make a referral, contact Helen DeVos Children’s Hospital at **616-267-9150**.

Meet the Webber Heart Center Team

The Webber Heart Center team provides preventive, interventional, and ongoing comprehensive care for patients with cardiac conditions.

Cardiothoracic Surgeons of Grand Traverse 231-935-5730

Daniel H. Drake, MD
Shelly C. Lall, MD
R. Glade Smith, MD
Mack C. Stirling, MD

Traverse Heart & Vascular 800-637-4033

Todd R. Adams, DO, FACC	Michael J. Howe, MD, FACC
Thomas C. Andrews, MD, FACC	Brian D. Jaffe, MD, FACC
John N. Beattie, MD, FACC	Robert Kennedy, MD
Daniel L. Bonifacio, DO, FACC	Steven T. Mast, MD, FACC
Anna M. Booher, MD, FACC	M.R.S. Nair, MD, FACC
Kevin J. Clayton, DO, FACC	Anthony B. Ochoa, MD, FACC
Roberto A. Corpus, MD, FACC, FSCAI	Dino Recchia, MD, FACC
Mark A. Elliott, MD, FACC	Michael E. Schulte, MD, FACC
James Martin Fox, MD, FACC	Nicklaus K. Slocum, MD, FACC, FSCAI
Anne M. Hepner, MD, FACC	John A. Varner, DO, FACC

How to Refer Patients

To refer patients for consultation, specialized care, or for a physician consult, please contact a physician at the numbers noted here. For 24/7 hospital transfers, please call **800-468-6766**.

Traverse Heart & Vascular clinic locations:

Cadillac, Charlevoix, Frankfort, Gaylord, Grayling, Indian River, Kalkaska, Manistee, Prudenville, and Traverse City