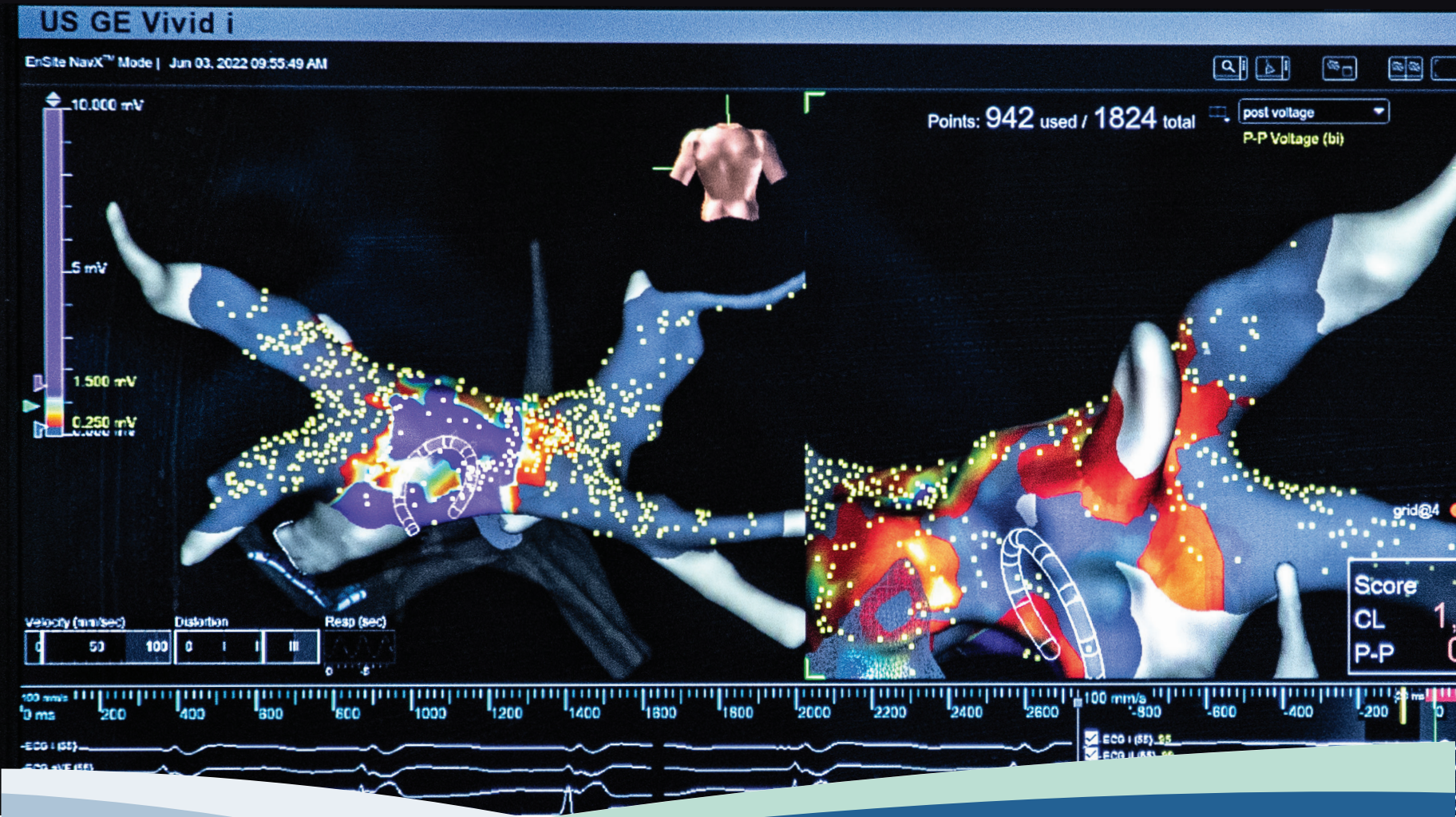
Fairfield Medical Center

CLINICAL Connections

A Publication for Providers & Staff



Summer 2022

Pictured: Alexander Hattoum, MD, performs a cardiac EP study and ablation in FMC's hybrid OR

On the cover: HD Grid technology senses electrical activity in all directions to provide the most precise location for EP treatment.

SETTING THE PACE

As the population ages and the average life expectancy lengthens, the increased prevalence of arrhythmia – particularly atrial fibrillation – is a global phenomenon. In response, Fairfield Medical Center is expanding electrophysiology services to meet a growing demand for this cardiac subspecialty. Most notably, the recent introduction of new technology, coupled with staff physician recruitment, is broadening access to advanced treatment options.

"We're now able to do many exciting new interventions that previously required outside referral to other centers," said Alexander Hattoum, MD, an electrophysiologist who has joined ranks with long-time EP pillar Michael Reinig, DO. "Dr. Reinig has established incredible community relationships and an excellent program here, and in addition to doubling our ability to service the area, our overlapping skill sets and collaborating expansion efforts will strongly benefit patient care."

At the forefront of Fairfield Medical Center's technological advancements is the implementation of the Abbott EnSite X EP System. Generally speaking, cardiac mapping systems employ minimally invasive catheters to construct a detailed model of the heart's inner surface using electrical impulses. This high-resolution map then allows specialists to visualize, track and ablate abnormal electrical activity from any chamber of the heart, including the epicardium and within vessels, without the use of x-ray. Unique to this particular system, however, is the availability of real time feedback collected via high density, data-gathering catheters, or HD Grid. This mechanism not only tracks the strength and timing of local electrical activity, but the direction as well, allowing for more accurate and comprehensive identification of the misfires and abnormal circuits responsible for cardiac arrhythmias.

"With this mapping system, we can essentially become a one-stop arrhythmia center for the region," Dr. Hattoum explained. "It significantly expands our options for AFib intervention, particularly for those who experience recurrence after a prior procedure, as well as our ability to treat any number of arrhythmias."

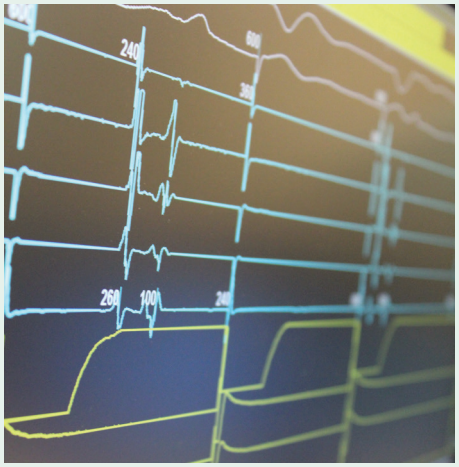
In addition to enhanced ablation procedures, the technology's electrical recording system allows for improved cardiac resynchronization therapy using physiologic-based pacing. This technique reduces certain side effects associated with paced rhythms and involves placing the ventricular lead in a way that engages the cardiac conduction system, generating a pulse that makes the heart contract in a natural, synchronized way.

Beyond the immediate expansion of services warranted by the mapping system, it also paves the way for the future of electrophysiology at FMC, including:

- Hybrid surgical and endovascular ablations, formed in conjunction with cardiothoracic surgeons to treat long-standing, persistent AFib caused by electrical activity on the exterior and interior of the heart.
- Left atrial appendage (LAA) closure using the implantable Watchman device for patients at risk for cardioembolic stroke and ineligible for anticoagulation therapy.
- Pulse (electric) field ablation, or PFA, which destroys the targeted cell's metabolic activity and electrical conduction within a single heartbeat while leaving the structural elements intact with minimal inflammation.

"This thriving growth aligns Fairfield Medical Center with the armamentarium of major academic centers, and it's all possible because of the collective effort of our dedicated staff, amazing care teams and collaborative physicians," Dr. Hattoum shared. "I've been to many hospitals throughout my 9+ years of training, and we have something unique here in our relationships with each other that impacts patient care in the best way."

FMC's full-time electrophysiology team includes specialty nurses and x-ray technologists dedicated specifically to EP expansion.



Treatable Arrhythmias

- **Atrial fibrillation** – AFib is most commonly caused by scarring or irregular impulses from the pulmonary veins. If initial electrical isolation of these triggers is unsuccessful, recurrence may be caused by very small areas of reconnection within the vessels. High density cardiac mapping data allows for definitive identification and quick ablation of these areas using heat-based radiofrequency energy.

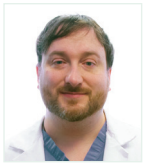
- **Supraventricular tachycardias (SVT)** – Originating from either the left or right atrium, SVT is historically difficult to localize. With this mapping system, we can now effectively trace and treat all types of SVTs.

- **Ventricular tachycardias (VT) and premature ventricular contractions (PVC)** – These arrhythmias originate from the ventricular chamber and are most commonly caused by irregular impulses or scarring. Scar-based VT may occur following a heart attack and can be particularly dangerous, with the rapid heart rhythm leading to a loss of pulse. Our complex ablation program can now track and eliminate this threat for patients.

To learn more about FMC's complex ablation program or to refer a patient to our electrophysiology team, please contact Fairfield Healthcare Professionals Cardiology at 740-689-4480.

Patient Case Study – Treating Double Arrhythmias

By Alexander Hattoum, MD
FHP Cardiology



Alexander Hattoum, MD

A 71-year-old patient presented with symptomatic atrial fibrillation (AFib) requiring multiple cardioversions as well as frequent premature ventricular contractions (PVCs). An event monitor confirmed the presence of persistent AFib and showed a 30% PVC burden and a 16-beat run of ventricular tachycardia (VT). Symptoms included excessive daytime fatigue, loss of exercise capacity and shortness of breath with minimal exertion. These arrhythmias were captured before any major decline in cardiac function occurred.

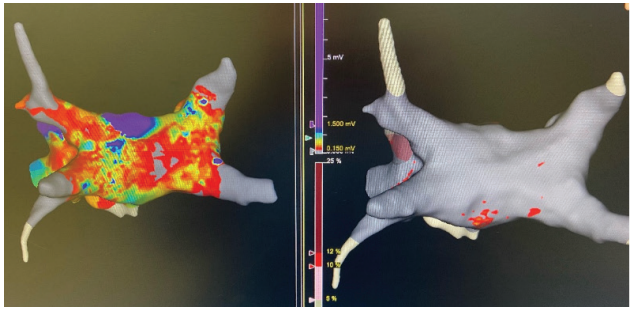
During mapping and fine point localization, it was discovered that scarring of the pulmonary veins and posterior wall were dual sources of AFib, requiring isolation of both structures. Typically, initial AFib ablation isolates the veins alone. With our complex ablation program, we were able to complete both the wall and the veins in the same procedure.

Additionally, the primary source of PVC was identified on the cardiac papillary muscle. Advanced intracardiac echocardiography (ICE) imaging was used to isolate the mapping location and pinpoint catheter-tissue contact, allowing for the performance of a papillary muscle VT ablation using adequate energy delivery while ensuring the preservation of delicate anatomical structures.

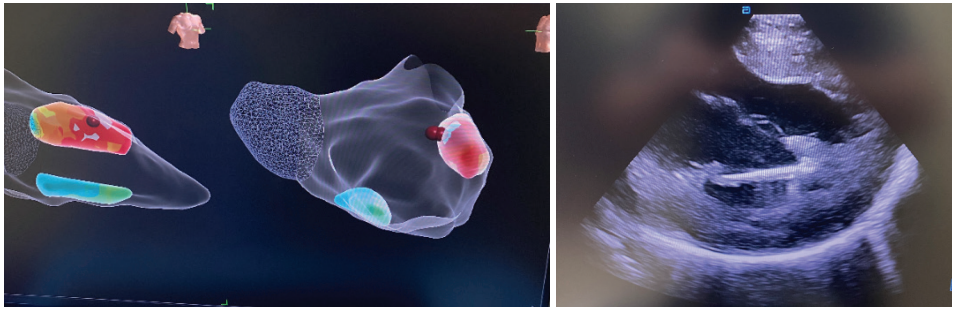
The procedure was performed in approximately 3-4 hours, and the patient was discharged the next day with a normal regular sinus rhythm. This case illustrates the significant benefit of FMC's enhanced electrophysiology capabilities.

Case Images

ECG indicates (1) PVCs causing temporary loss of ventricular function and (2) AFib with heart irregularity causing loss of atrial function



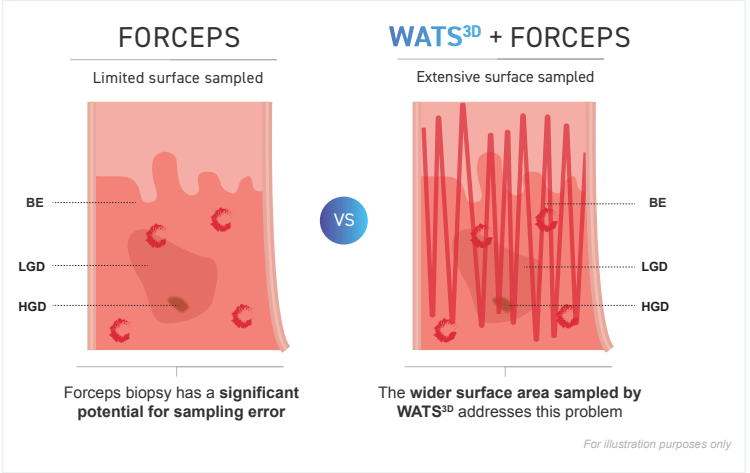
Mapping system identifies sources of AFib: Areas of red indicate low voltage (consistent wih scar tissue), while areas of violet indicate normal voltage and presumably healthy myocardium. Transient zones vary by conduction.



Mapping system isolates source of PVC (left), while ICE imaging is used to guide the introduction of the catheter to avoid damage to delicate cardiac structures.

New Diagnostic Technology to Improve Esophageal Cancer Detection

The FMC Heartburn Center has added the WATS3D® diagnostic tool to endoscopy procedures in order to improve the chances of early esophageal cancer detection. This tool, which is used during an upper endoscopy or EGD uses specially designed brushes to collect larger, more complete samples than a traditional biopsy alone. WATS3D® also uses 3D imaging and advanced lab analysis, including artificial intelligence, to identify and rank precancerous cells, ensuring a more accurate diagnosis. Much like other diagnostic screenings for cancer, WATS3D® helps prevent esophageal cancer by identifying precancerous cells that can then be resected, treated with radio frequency ablation or both.



Benefits of WATS3D® include:

- Better tissue sampling from a larger surface area, resulting in less risk of missing precancerous cells
- Collection of deep mucosal tissue where dysplasia begins
- Improved analysis technology for more accurate and definitive diagnosis
- Increased consistency with more information – 3D images and cytology specimens – available for pathologists

"Esophageal cancer can be such a devastating diagnosis, since it is often diagnosed at an advanced stage and progresses rapidly," said Heather Luttrell, RN, BSN, coordinator of the FMC Heartburn Center. "Since the progression from those initial cellular changes to esophageal cancer is a very slow process, it gives us the opportunity to catch those early changes with WATS3D® biopsies, so we can help prevent a devastating cancer diagnosis for our patients."

If your patient is suffering from chronic gastroesophageal reflux disease symptoms, our Heartburn Center offers free consultations. Patients and providers can call 740-689-6486.

Breaking Barriers Through Alternative and Augmentative Communication

When a patient cannot rely on their oral speech, alternative and augmentative communication (AAC) is used. AAC allows individuals to incorporate their full communication abilities, which may include gestures, manual signs, any existing speech and aided communication. From letter boards to computer software, FMC's speech therapy team utilizes a variety of AAC methods to further communication, the most recent of which is high-tech AAC.

High-tech AAC is a dynamic computer software and app that offers a variety of communication styles, including picture-based or text-to-speech. For individuals who cannot utilize computer software that requires touch or movement of a mouse, eye tracking modules are available. The speech pathologists at FMC offer a variety of AAC programs for patients, including PRC-Saltillo, Saltillo and Tobii-Dynavox.

Benefits of AAC:

- Develop early language skills
- Increased social interactions
- Decreased communication barriers
- Potential facilitation of the development of spoken language

Individuals at any age who encounter difficulty communicating through speech due to acquired or congenital disabilities would benefit from AAC. Some of these conditions include autism, cerebral palsy, neurological disease such as ALS, hearing impairment, genetic syndromes, intellectual disability, multiple disabilities, head injury and stroke.

To make a referral to one of our dedicated speech pathologists or to learn more, call 740-687-8602 or fax 740-687-8857.

Rib Plating Reduces Pain, Promotes Healing

Tyrone Galbreath, DO

Rib fractures are most commonly caused by chest trauma, with the geriatric population exhibiting a significantly greater risk of mortality and morbidity. While conservative management and analgesia remains adequate for isolated rib fractures, patients with multiple or displaced rib fractures may greatly benefit from rib plating.

During the procedure, rib fractures are reduced and stabilized using titanium plates, and pain management techniques, including cold probe treatment of nerves and infiltration of long-acting local anesthetic, are used to improve pain scores. Performance within 2-3 days of initial trauma is associated with reduced hospitalization and rates of complication, less pneumonia and more expeditious recovery.

While stabilized fractures will still take approximately 6-8 weeks to heal, rib plating is associated with less impairment of pulmonary function and improved mobility, allowing patients to return to normal activities sooner and with greater comfort than permitted by conservative treatment.

"In addition to short-term benefits, this procedure offers long-term benefits as well," explained cardiothoracic surgeon Tyrone Galbreath, DO. "Rib plating can decrease the risk of unstable healing of the fractures, disabling neuropathic pain and the need for additional procedures, like lung decortication, down the road."

To contact Fairfield Healthcare Professionals Cardiothoracic Surgery, please call 740-681-9020.

Change in PAT Guidelines for Endoscopic Gastroenterology Procedures

FHP Gastroenterology has recently changed its PAT requirements for endoscopic gastroenterology procedures to reflect the current pre-admission testing guidelines for low-risk procedures.

Previously, an EKG and chest x-rays were required for every patient undergoing an endoscopic gastroenterology procedure. With the new guidelines, only patients with comorbidities pertaining to the heart or lungs will be required to obtain an EKG and chest x-rays.

The changes will:

- Streamline pre-admission testing for low-risk patients
- Allow for timely scheduling of low-risk procedures

"These changes reflect the current guidelines for endoscopy and importantly classify endoscopy as low-risk procedures," said Seth Levin, DO, of FHP Gastroenterology. "This change allows us to reduce the patients' time requirements by eliminating unnecessary tests and relieve the referring providers from questions or complaints from the patients."

If you have any questions or concerns related to the change in guidelines, or to see the updated pre-admission guidelines in full, please contact FHP Gastroenterology at 740-687-9182.

Bariatric Surgery in the Treatment of Type 2 Diabetes

Obesity is defined by an abnormal or excessive body fat accumulation and identified by a body mass index (BMI) of 30 or higher.[1, 2]

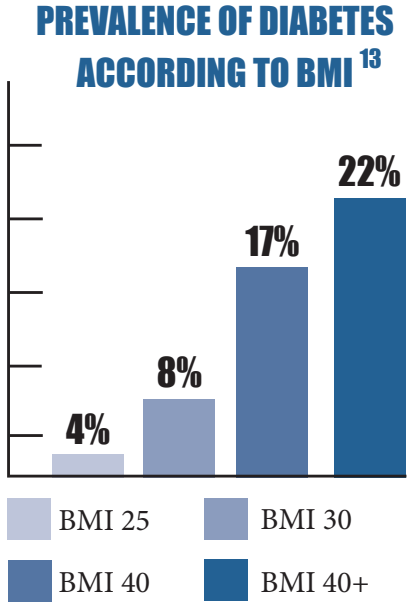
- Research shows that hormonal changes with obesity make it very challenging for patients to lose a significant amount of weight and keep it off.[3] As a patient's BMI rises, so does the prevalence of type 2 diabetes.[4]
- Improving or resolving a patient's type 2 diabetes condition, even if only for a short period of time, provides a better health situation. The longer a patient has type 2 diabetes, the more challenging it is to manage the disease and more likely it is that other health issues are present.[5]

Can bariatric surgery help treat type 2 diabetes in severly obese patients?
The American Heart Association & International Diabetes Federation recognize bariatric surgery as an official treatment for type 2 diabetes.[6] According to an Ethicon-funded STAMPEDE study, bariatric surgery with medical therapy resulted in[7]:

- More effective management of poorly controlled diabetes than with intensive medical treatment alone.
- 31% of gastric bypass patients and 23% of sleeve gastrectomy patients achieved glycemic control without medications within 5 years post-surgery.

Bariatric surgery drives the strongest, most durable weight loss results versus other obesity treatment options. In many cases, early remission of type 2 diabetes occurs days after surgery.

To refer your patient to FMC Bariatric Services, please call 740-475-0442.



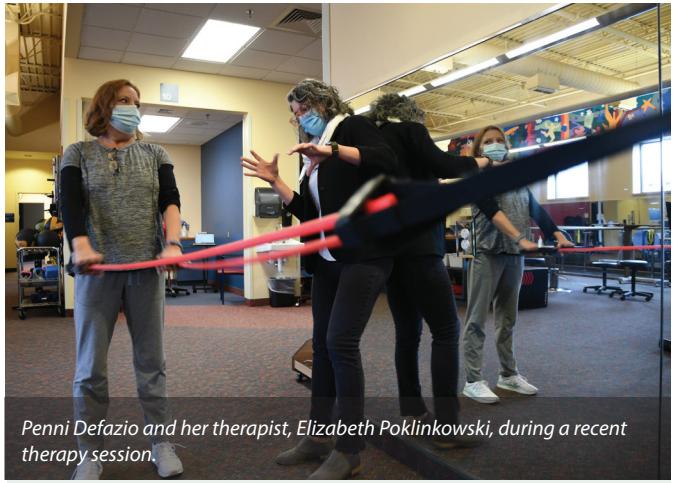
Treatment	Average Weight Loss	Average Weight Loss
Diet & Exercise	-0.1% at 2 years[8]	-1.6% at 10 years[8]
Drug Therapy	3% at 1 year[9]	-2.5% at 4 years[9]

Surgery	Excess Weight Loss at 3 Years	Excess Weight Loss at 5 Years
Gastric Bypass	71%[10]	61%[11]
Sleeve Gastrectomy	66%[12]	50%[11]

Reference: 1. American Obesity Association Fact Sheet. Obesity in the U.S. May 2, 2005. obesity.org. **2.** World Health Organization (WHO). Obesity and Overweight: Fact Sheet. 2014. **3.** Kaplan L, et al. *Bariatric Times.* 2012;9(4);12-13. **4.** Stommel M, et al. *Obesity*. 2010;18(9);1821-1826. **5.** Garci ́a-Perez LE, et al. *Diabetes Ther.* 2013;4:175-194. **6.** Rubino R, et al. Diabetes Care. 2016;39. (6)861-877. **7.** Schauer PR, et al. *N Engl J Med.* 2017;376:641-51. **8.** Sjostrom L. et al. *N Engl J Med.* 2004:351(26):2683-2693. **9.** Xenical [prescribing information], South San Francisco, CA: Genetech, Inc.; 2010. **10.** Garb J. et al. *Obes Surg.* 2009;19(10):1447-1455. **11.** Hoelscher D. et al. *J. Acad. Nutr. Diet.* 2013;113(10)1387. **12.** Fischer L, et al. *Obes Surg.* 2012; 22(5); 721-731. **13.** Stommel M, et al. *Obesity*. 2010;18(9);1821-1826.

To read more stories about patients at Fairfield Medical Center, scan the QR code.

FMC Helps Patients Manage Chronic Pain through Physical Therapy



Penni Defazio and her therapist, Elizabeth Poklinkowski, during a recent therapy session.

Chronic pain is a condition that is often misunderstood and can go untreated since the cause and symptoms can vary from patient to patient. Trauma, injury, diabetes and fibromyalgia are all common causes of chronic pain, but sometimes the cause is not easily identifiable. Chronic pain that goes undiagnosed and untreated can lead to anxiety, decreased activity levels, job loss and disability.

After years of struggling to find relief, Lancaster resident Penni Defazio started effectively managing chronic pain in her back and left leg through physical therapy at Fairfield Medical Center's Outpatient Therapy Services. While the cause of Penni's chronic pain is unknown, she does suffer from conditions that impact her physical, emotional and psychological well-being, including fibromyalgia, anxiety and depression.

Penni's therapy began shortly after she ended up in the Emergency Department at FMC due to an acute episode that was causing excruciating pain in her lower back and left leg. "After that attack, I was in so much pain that I could barely sit for more than a few minutes," Penni said. "My driving was limited; I could no longer drive my stick shift car or help take care of my grandchildren."

With a recommendation from her rheumatologist, Penni began working with FMC physical therapist Elizabeth Poklinkowski, PT, DPT, to develop a rehabilitation plan that would build her tolerance to activity and strengthen her back and legs. "She responded well to McKenzie repeated motions exercises, which are meant to take pressure off of the nerves that are flared up," Elizabeth said. "After getting her pain under control, we focused on improving her activity tolerance and her endurance through strength training. When muscles are weak, they tighten up or spasm, which was causing nerve impingement in Penni's case."

In addition to physical therapy, Elizabeth also recommended a few podcasts about the psychology of chronic pain. One of the podcasts included an interview with clinical psychologist Dr. Rachel Zoffness, who treats patients with chronic pain. "I do a lot of pain education with my patients, and this podcast episode reinforces the education we do in the clinic in an interesting and lighthearted way," Elizabeth explained. "I also think it's helpful for people with chronic pain to know that there are other people who are dealing with similar experiences because pain is so isolating."

Penni said Elizabeth's guidance was transformative in helping her to better manage her chronic pain. She is now back to enjoying many of the activities she loves, including playing with her grandchildren, hiking and walking at local parks. "It was like a lightbulb went off," Penni said. "I recently got a gym membership and I am working out regularly. I still have some pain, but I feel so much better. I feel like I finally have my life back."

Alternative Therapies For Pain Management

The following complementary approaches are offered at FMC and may be helpful in managing chronic pain:

- Physical therapy
- Medical management of chronic pain
- Injection therapy
- Electrical stimulation
- Emotional and psychological support

Learn how Outpatient Therapy Services can help your patient manage their chronic pain through rehabilitation by calling 740-687-8602.

FMC Advancing Lung Cancer Diagnosis, Treatment

With lung cancer leading the way in cancer deaths for both men and women, screening high-risk patients early and investing in technology that can detect and biopsy the smallest of suspicious nodules are two ways that Fairfield Medical Center is working to increase lung cancer survivorship.

Patient Patty Swinehart, 58, knows firsthand the importance of early detection. Last April, Patty's primary care provider strongly encouraged her to undergo a low-dose computed tomography (LDCT) with FMC's Imaging Department. As a former smoker, Patty was a prime candidate for the screening, which has been found to provide early detection of lung cancer in people at high risk of the disease. Within hours of the screening, Patty had her results, which showed two spots on her lung. With a diagnosis of stage 3 lung cancer, Patty's care team – oncologist Kanwaljit Singh, MD, of FHP Hematology & Oncology, Mark Becker, MD, of FHP Radiation Oncology and pulmonologist Jarrod Bruce, MD, of FHP Pulmonology & Critical Care – moved quickly, developing an aggressive treatment plan that involved simultaneous chemotherapy and radiation treatments. As a final step in eradicating her cancer, Patty underwent a surgical lung resection, which was performed by P. Aryeh Cohen, MD, of FHP Cardiothoracic Surgery. During the procedure, Dr. Cohen removed three lymph nodes and a small piece of Patty's lung. By November, Patty was finished with her cancer treatments and back to work.

"Without the lung scan program, my cancer could have gone further and would have spread further," Patty said. "My team was optimistic that my treatment program would work. I'm grateful for every doctor – everybody who was involved."

Within the past year, FMC has made two critical investments in state-of-the-art technology that are improving cancer survival rates for patients, all while keeping their care close to home. In 2021, with the help of a $1 million donation from the Fairfield Medical Center Foundation, FMC purchased a Varian TrueBeam® linear accelerator (pictured top right), which is used to deliver external beam radiation to almost any area of the body, precisely targeting cancer cells with less damage to surrounding healthy tissue.

Several months later, FMC launched its Robotic Surgery program through the addition of the da Vinci XI Surgical System and ION Endoluminal System. FMC is one of only three centers in the state to offer peripheral lung biopsy using the ION Endoluminal System, which can take biopsy samples from suspicious lung nodules, regardless of size or location, almost immediately after detection. The ability to reach these lesions with accuracy and precision is leading to earlier diagnoses, expedited treatment and improved outcomes for patients like Patty who are facing lung cancer.

Is Your Patient a Candidate for a Lung Cancer Screening?

Patients who meet the following criteria may be at an increased risk for developing lung cancer and are considered a prime candidate for LDCT lung cancer screening:

- Age 50-80
- Current smoker or has quit in the past 15 years
- Have smoked at least one pack per day for 20 years or two packs per day for 10 years

To learn more about FMC's lung cancer screening program, call 740-689-6889. To learn more about expedited robotic bronchoscopy or to make a referral, call 740-681-9020.

Patient Experience

The following comments were submitted by FMC patients and compiled through Press Ganey.

Mark Becker, MD, FHP Radiation Oncology

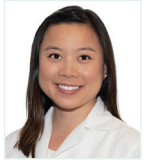
"Dr. Becker and his entire practice is very professional, excellent and cheerful. As a cancer patient... that's important!"

Alexander Hattoum, MD, FHP Cardiology

"This was my first visit with Dr. Hattoum and he explained the procedure he was planning on doing to me in great detail and answered all questions I had."

Jeff Pearch, DO, FHP Psychiatry & Health Psychology

"Dr. Pearch is a great doctor. He is very knowledgeable, helpful and kind. He and his staff are THE BEST!"



Rachel Pan, MD, FHP Neurology

"Great visit. Dr. Pan was very thorough and took her time. I never felt rushed and I've never had a doctor take this much time with me. She seemed like she was genuinely concerned with my condition."

Scott Johnson, MD, FHP General Surgery at River View

"Dr. Johnson is an excellent doctor and I have complete faith in his care. He is one of the nicest doctors I have ever seen. He spends time talking to you about things that are important to you."

Kyle Lester, DO, FHP Urology

"I had a very high quality experience with Dr. Kyle Lester and his office."

Bethany Smith, PA, FHP General Surgery at River View

"Bethany genuinely seems to care about my wellbeing, a trait that is lost on some providers."

Provider & Office Updates

Evan Cohn, MD

Alicia Philip, CNP

Cheryl Athey, CNP

Jonathan Corbett, MD

Kyle Lester, DO

Andrew Ng, MD

FHP Urology Welcomes New Providers

FHP Urology has welcomed two new providers to the practice – Evan Cohn, MD, and Alicia Philip, CNP, who are contracted with Central Ohio Urology Group (COUG).

Dr. Cohn along with Alicia and Cheryl Athey, CNP, provide full time in-office coverage for FHP Urology. Jonathan Corbett, MD; Kyle Lester, DO, and Andrew Ng, MD, will continue to provide additional support through weekly rotations as FHP Urology providers. Other providers contracted through COUG will maintain additional support to the office and provide on-call weekend coverage.

For more information, contact our providers via PerfectServe, or call the FHP Urology office at 740-689-4945.

FMC Acquires Whetstone Medical Clinic in Millersport

Whetstone Medical Clinic will be joining the Fairfield Medical Center/ Fairfield Healthcare Professionals family this September. Established in 1957 by Drs. Anna and Paul Whetstone, the clinic has served the Millersport community for decades. Following the Whetstones' retirements in 2000, their son, Dr. James Whetstone, assumed operation of the clinic. We look forward to Dr. Whetstone and his team joining FMC this fall.

WE'VE MOVED

Office Relocations

The following offices have recently moved to new locations:

- **FHP Hematology Oncology** - FMC Pavilion, Suite 301, 135 N. Ewing St., Lancaster
- **FHP Sleep Medicine** - FMC Pavilion, Suite 204, 135 N. Ewing St., Lancaster
- **FMC Residency Clinic** - FMC Pavilion, Suite 304, 135 N. Ewing St., Lancaster

Quick Reference

Fairfield Medical Center

401 N. Ewing St., Lancaster, OH 43130
740-687-8000
fmchealth.org

Located in Lancaster, OH, we are a nonprofit organization that provides full-service, general acute health services.

We serve more than 250,000 residents in Fairfield, Pickaway, Perry, Hocking and Athens counties.

In addition to our Main and River Valley campuses, we have more than a dozen satellite locations specializing in primary care, specialty care, urgent care, lab and imaging.

Fairfield Healthcare Professionals (FHP) is a multispecialty medical group of more than 90 providers owned and operated by FMC.

Clinical Connections is designed to share information about Fairfield Medical Center's medical staff, services and capabilities with healthcare providers in southeastern Ohio.

If there is anything you would like to learn more about, or if you would like to be removed from our mailing list, please call 740-687-6929.

Fairfield Medical Center

401 N. Ewing St.
Lancaster, OH 43130-3371
fmchealth.org

Whatever you're searching for ...

rheumatology care

you can find it *here.*

Through a personalized treatment plan, our rheumatology team will collaborate with you in the care of patients who are experiencing long-lasting pain from an injury or an underlying rheumatic condition.

Conditions treated include:

- Rheumatoid arthritis
- Osteoarthritis
- Psoriatic arthritis
- Musculoskeletal pain disorders
- Osteoporosis
- Gout
- Fibromyalgia
- Ankylosing spondylitis
- Tendonitis
- Vasculitis
- Muscle strains
- Lupus

Fairfield Healthcare Professionals
An Affiliate of Fairfield Medical Center

To make a referral, call 740-689-6408.