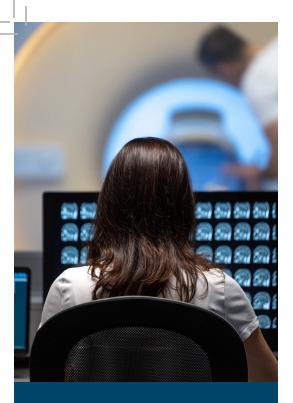




DIAGNOSTIC IMAGING

RADIOLOGY SERVICES



# WHY CHOOSE McLAREN?

At McLaren we are committed to doing what's best for our patients by delivering the highest quality evidenced based care. We offer a multitude of educational classes, support groups, screenings, seminars, and other special events to benefit you and your health.

McLaren is a fully integrated healthcare system including 13 hospitals and countless outpatient sites in Michigan, and we have over 400 employed primary and specialty care physicians.

We also operate Michigan's largest network of cancer centers and providers. Our Karmanos Cancer Institute is one of only 54 national cancer institute designated comprehensive cancer centers in the US.

## **IMAGING SERVICES**

Superior imaging technology and specialized physician review sets a foundation for focused care. McLaren's imaging services utilize advanced technology and tools including 3D mammography (including upright stereotactic biopsy), X-ray, CT scanning and ultrasound so that our team of skilled radiologists can analyze images electronically in high definition and make an accurate diagnosis.

## **3D MAMMOGRAPHY**

Until recently, the best mammogram was a digital mammogram. Featuring next generation technology, 3D mammography imaging acquires a series of images of the compressed breast at different angles. The system produces images that represent thin slices of the breast, allowing radiologists to view slices one millimeter at a time with clarity never before possible.

### **BONE DENSITY SCAN**

A bone density test (also known as bone mass measurement), measures the strength and density of the bones. The measurements are used to determine decreased bone mass, which causes the bones to be more brittle and more prone to break or fracture easily.

Bone density testing can help to detect low bone density before a fracture occurs and they can confirm a diagnosis of osteoporosis if you have already fractured a bone. Osteoporosis is the decrease of bone mass and density due to the depletion of calcium and protein in the bones.

#### CT SCAN

A CT (computed tomography) scan is a non-invasive medical test that uses X-rays to produce multiple images or pictures of the inside of the body and a computer to join them together in cross-sectional views of the area being studied. CT scans of internal organs, bone, soft tissue, and blood vessels provide greater clarity than conventional X-ray exams. CT is considered to be the most versatile of all imaging modalities.

CT scanning is commonly used to diagnose problems such as cancers, cardiovascular disease, infectious disease, trauma, and musculoskeletal disorders. It is also used for orthopedic purposes, such as diagnosing bone fractures and preparing for orthopedic surgery.

## **ECHOCARDIOGRAM**

An Echocardiogram (or cardiac ultrasound) is an ultrasound of the heart. It measures blood flow through the heart and also enables physicians to view the heart valve structure and heart wall function.

## **ECHOCARDIOGRAM** (CONT'D)

It is helpful in determining heart size and ventricular function.

Echocardiography can also detect heart clots and damage after a heart attack. It is often used in conjunction with Doppler Ultrasounds.

## MAGNETIC RESONANCE IMAGING (MRI)

McLaren provides MRI services in a comfortable and caring environment using the latest technology. Every scan is interpreted by a specially trained radiologist. We use a state-of-the-art MRI scanner to take high resolution pictures. These images give your physician important information in diagnosing your medical condition and planning a course of treatment.

### **NUCLEAR MEDICINE**

Nuclear medicine is a subspecialty within the field of radiology that uses very small amounts of radioactive material called a radiopharmaceutical or radiotracer to diagnose disease and other abnormalities within the body.

Depending on the type of nuclear medicine scan you are undergoing, the radiotracer is injected into a vein, swallowed by mouth, or inhaled as a gas. It eventually collects in the area of your body being scanned, where it gives off energy in the form of gamma rays. This energy is detected by a device called a gamma camera and/or probe. These devices work together with a computer to measure the amount of radiotracer absorbed by your body and to produce pictures offering details about both the structure and function of organs and other internal body parts.

#### **ULTRASOUND**

An ultrasound exam, or sonogram, is a safe and generally non-invasive procedure that utilizes high-frequency sound waves to image an internal body structure. Common uses of an ultrasound:

- Abdomen: Ultrasound can be used to detect gallstones, check the health of the liver, kidneys, pancreas, and spleen, and monitor the success of a kidney transplant.
- Blood Vessels (Vascular): Ultrasound exams can reveal enlargements in vessels, blood clots, or narrowing of arteries leading to the brain, which could result in stroke.
- Pelvis: Ultrasound is used to image the uterus, ovaries, and other structures within the pelvis. It may assist in determining the source of pain or bleeding in the female pelvis.
- Pregnancy: Ultrasound is regarded as the gold standard diagnostic exam for monitoring pregnancy.

#### X-RAY

An X-ray (radiograph) is an exam that helps physicians diagnose and treat medical conditions and is the oldest form of medical imaging. A radiograph is produced by using ionizing radiation to produce images of the inside of the body.



1100 S. Van Dyke Rd. Bad Axe, MI 48413 phone (989) 269-9521 fax (989) 269-5209 mclaren.org