

Catheterization



Catheterization is used to detect and evaluate conditions of the heart, brain, kidneys, arms and legs. A small catheter is inserted into a major vein and navigated through the body to an area of concern. WMC's catheterization imaging technology is among the most advanced available.

Digital Mammography

Williamson Medical Center Outpatient Imaging offers the latest in digital mammography. With traditional mammography, images are created directly on film; digital mammography takes an electronic image of the breast.



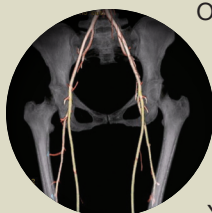
Digital mammography uses less radiation than film mammography, and radiologists can use software to help interpret digital mammograms. WMC's mammography services are accredited through the American College of Radiology and the Food and Drug Administration, and all technologists are registered in mammography.

Interventional Radiology

Interventional radiologists utilize diagnostic images (ultrasound, CT, MRI and others) to guide small instruments through blood vessels or other pathways and administer treatment for a wide range of diseases. Interventional radiology reduces the need for invasive surgical procedures, which reduces recovery time, pain and risk to patients. Common procedures include angioplasty, stent placement and thrombolysis.

MRI and CT

Magnetic resonance imaging uses radio waves and a strong magnetic field to provide remarkably clear and detailed pictures of internal organs and tissue.



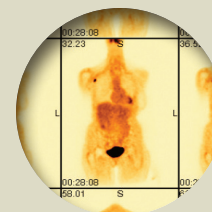
One use is imaging the breast in women who are at high risk of developing breast cancer. Breast MRI is more sensitive than traditional mammography and can detect cancer earlier.

Computed tomography utilizes special X-ray equipment to obtain images from various angles of the body to show cross sections of tissue, organs and bone. Williamson Medical Center's 64-slice VCT scanner captures a

three-dimensional view of individual organs in one second and performs entire body scans in 10 seconds, more than twice as fast as conventional multi-slice CT scanners. The VCT delivers up to 70 percent less radiation to patients than previous scanners.

Nuclear Medicine and Positron Emission Tomography (PET)

Nuclear medicine uses radioactivity to diagnose disease by combining medicine, computer technology and chemistry. Nuclear medicine tests are safe and painless and use radiation exposure equivalent to that of a traditional X-ray.

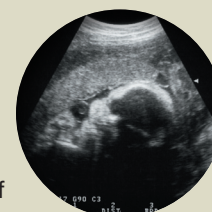


Special cameras detect disease by scanning the body after small amounts of radiopharmaceuticals ("tracers" that are sensitive to the chemical) are introduced. Nuclear medicine differs from other diagnostic tests by detecting disease based on metabolic changes within organs rather than changes in anatomy.

PET is the most effective way to detect cancer and patient response to treatment. It also is used to diagnose certain neurological diseases. PET scanning is used frequently with MRI and CT to provide a full, three-dimensional view and to identify the location of cancer in an organ.

Ultrasound

Ultrasound scanning, or sonography, obtains images through the use of high-frequency sound waves. Ultrasound is often the first procedure used in diagnosing diseases. It also is the standard for confirming pregnancy and evaluating the growth and health of babies prior to birth.



X-ray

X-ray, the most traditional form of diagnostic imaging, is used to view bone fractures and other injuries of the musculoskeletal system.