





Contents



Advanced medical imaging	1
MIC services	2
What are CT and MRI?	4
Cardiac Health Assessments	6
CCTA and Calcium Scoring	7
Virtual Colonoscopy	. 8
Lung Cancer Screening	. 9
Diagnostic CT and MRI	
Breast MRI	12
Prostate MRI	13
Why choose MIC?	15
Fee Guide	15

MIC is committed to excellence in advanced medical imaging

MIC is proud to bring the most advanced medical imaging technologies to patients in the Edmonton area through our community-based clinics.

Patients choose our CT and MRI services to get answers quickly and take control of their health. They come back because we go above and beyond.

Our health assessments and diagnostic CT and MRI scans start with a referral from your healthcare practitioner. We take it from there with appointment times that work with your schedule and diagnostic reports to your healthcare practitioner, usually within 24 hours.



MIC works with you and your healthcare practitioner

MIC's advanced imaging services focus on helping you and your healthcare practitioner with proactive management of your health.



We are committed to making the very best in CT and MRI technology available to patients through our:

- Large bore 128 slice CT scanner with low-dose technology to ensure our patients receive high quality exams with minimal radiation exposure.
- Two 1.5T MRI scanners the standard-of-care in hospitals and clinics across Canada.
- 3T MRI the first in an Edmonton medical imaging clinic. This is a significant step forward with improvements in patient comfort and images that are "stunning" according to our radiologists.

MIC offers both health assessment and advanced diagnostic scans in our CT and MRI suites.

CT Health Assessment Scans:

Coronary CT Angiography Calcium Scoring Virtual Colonoscopy Lung Scans

MRI and **CT** Diagnostic Scans

Musculoskeletal Neurological Breast Abdominal Prostate Vascular



What are CT and MRI?

Computed Tomography (CT)

A CT scan combines x-rays and computer technology to produce cross-sectional tomographic images or 'slices' of parts of the body. CT is an important diagnostic and screening tool with images that show much more detail than regular x-rays. This means MIC radiologists can look closely at potential areas of concern.

CT is increasingly being used for preventive medicine or screening for disease — for example, CT colonography for patients with a higher risk of colon cancer, or coronary CT or calcium scoring for patients with higher risk of heart disease.





MIC uses a large bore, 128 slice CT scanner with advanced low-dose technology. This ensures our patients receive high quality exams with minimal radiation exposure.

Magnetic Resonance Imaging (MRI)

MRI is a non-invasive medical test that helps healthcare practitioners diagnose and treat medical conditions.

MRI uses a powerful magnetic field measured in Teslas (T), pulses of radio wave energy and a computer to produce detailed pictures of organs, soft tissues, bone and virtually all other internal body structures.

It is safe for everyone since it does not use ionizing radiation found in x-rays.

MRIs can very effectively detect injuries in bones and soft tissue. The images are much more detailed and may show problems that cannot be seen with other imaging methods.





MIC has two 1.5T MRIs and Edmonton's first 3T MRI which enhances our ability to perform a full range of screening and diagnostic scans.

4 CT & MRI IMAGING 5

Let us take a look

Taking control of your health means looking for issues before they cause a problem. At MIC, we offer health assessments using CT and MRI scanning. These advanced medical technologies help our radiologists look for early signs of heart disease and breast, lung, prostate and colorectal cancer.

Identifying early signs of heart disease

Coronary artery disease (CAD) or atherosclerotic heart disease is the most common type of heart disease and cause of heart attacks. The disease is caused by plaque building up along the inner walls of the arteries of the heart. This narrows the arteries and restricts blood flow to the heart.

Most individuals show no evidence of disease for decades as plaque buildup occurs in their arteries, often resulting in a sudden heart attack. Computed tomography (CT) screening for heart disease saves lives by identifying patients who are at risk of developing heart disease often before they develop any symptoms.

Are you at risk? Some common risk factors for coronary artery disease include:







Diets heavy in saturated fat



Diabetes



Hypertension Physical inactivity



Prolonged stress



Family history of heart disease



Being overweight

Cardiac Health Assessments

MIC offers two cardiac health assessments that look for early indicators of coronary artery disease. The results can reassure you that your coronary arteries are normal, or they can help you and your healthcare provider decide whether you might benefit from changes to your lifestyle and/or medication.

Coronary CT Angiography (CCTA)

CCTA saves lives when it is used to identify coronary artery disease long before a patient experiences any symptoms.

CCTA is a fast, simple, non-invasive test. You will be given an injection of iodine-rich contrast material and a CT scan to examine the arteries that supply blood to your heart. The images created will help your radiologist determine whether your arteries have been narrowed by plague buildup.

Since CCTA can detect both calcified and non-calcified plaque, it shows more signs of heart disease than diagnostic methods such as ECGs or stress tests.

CT Cardiac Calcium Scoring

A CT cardiac calcium scan is a screening test for people who have no symptoms of heart disease.

This non-invasive CT scan produces pictures of the coronary arteries to determine if they are blocked or narrowed by the buildup of calcified plague - an indicator for coronary artery disease (CAD).

The results are expressed as a calcium score. Because calcium is a marker of CAD, the amount of calcium detected will help your healthcare practitioner determine whether you are at risk of developing heart disease.



If you think you might be at risk for coronary artery disease, talk to your health practitioner.

CT & MRI IMAGING CT & MRI IMAGING 7

Cancer Screening

MIC offers four types of screening using CT and MRI scans to detect very small cancers at an early stage when they may respond better to treatment.

Virtual colonoscopies and lung cancer scans are performed on our low-dose CT scanner. Breast and prostate scans are performed on our advanced 3T MRI.

Virtual Colonoscopy

A CT colonography or virtual colonoscopy can be used to screen for precancerous and cancerous growths in the colon or rectum (colorectal cancer), such as polyps or tumours.

The key to surviving colorectal cancer is early detection. Identified early enough, polyps in the colon can be removed before they become cancerous. The most common diagnostic method is the conventional colonoscopy.

A virtual colonoscopy performed by an MIC radiologist is less invasive and is extremely accurate in the detection of polyps or other masses.

Routine screening of the colon should begin at age 50 (age 40 for individuals with a family history of colorectal cancer or other diseases of the bowel). Talk to your healthcare practitioner to see if a virtual colonoscopy is right for you.



I in 4 Albertans will die from cancer & 1 in 2 Albertans will develop cancer.



of all cancers in Alberta.

Breast, colorectal, lung and prostate account for 52%

"CT scanning reduced mortality from lung cancer in these high-risk individuals by 20%"

National Lung Cancer Study, Medical News Today May 7, 2013

Lung Scan

Smokers and former smokers have the highest risk of developing lung cancer. Recent research has shown that routine low-dose CT scanning can reveal early lung cancers while they are potentially curable, even before they cause symptoms or become visible on standard chest x-rays.

The Canadian Task Force on Preventive Health Care (2016) recommends low-dose CT lung cancer screening once/year for up to 3 years in adults who:

- Are 50-74 years of age.
- Are current smokers or former smokers who quit in the last 15 years.
- Have smoked 30 pack-years, which is defined as 1 pack per day for at least 30 years or 2 packs per day for 15 years.

Talk to your healthcare practitioner about the benefits and risks of screening for lung cancer and whether it is right for you.





Diagnostic Scans

Have you been living with undiagnosed pain, a nagging sports injury or unanswered questions?

MIC's radiologists find answers, quickly.

We've put hundreds of professional athletes and weekend warriors back on their feet with a CT or MRI and expert diagnosis from our radiologists. And, we've helped healthcare practitioners develop treatment plans for patients through our diagnostic scans designed to look closely at virtually any part of the body.

With a referral from your healthcare practitioner, you can book your diagnostic scan at MIC. Depending on the type of scan you need, we may be able to get you in the next day.

An early diagnosis means you and your healthcare practitioner can get started on the next steps sometimes in a matter of days.

CT is good for:

- Evaluating lung and chest issues.
- Evaluating the heart and coronary arteries.
- Pinpointing issues with bones.
- Detecting cancers.
- Imaging patients who cannot have an MRI due to metal implants such as surgical clips, metallic fragments, cardiac monitors or pacemakers.
- Faster scanning time.

MRI is good for:

- Imaging the brain, spine, abdomen and soft tissues.
- Evaluating injuries in bones, muscle, cartilage, ligaments and tendons.
- Imaging organs and internal structures such as breasts and prostate.
- Imaging joints such as the shoulder, knee and temporomandibular joint.
- Imaging patients without radiation.



Your healthcare practitioner can give you advice on whether a CT scan or MRI is the best choice for you.

Breast MRI



MIC's powerful new 3T MRI scanner produces very detailed pictures of the breast to supplement screening mammograms and ultrasound, particularly for women at high-risk for breast cancer due to family history.

Breast MRI is the most sophisticated imaging of the structure of the breast and many healthcare practitioners consider it to be the best way to detect the disease in its earliest, most treatable stage.

Breast MRIs help our radiologists determine the extent and staging of breast cancer, to diagnose breast implant rupture and assess the effectiveness of cancer treatment.



Talk to your healthcare practitioner to see if a breast MRI might be right for you.



Prostate MRI

A prostate MRI is non-invasive, uses no radiation and creates very detailed images of the prostate and surrounding tissues.

Prostate MRI is used to:

- Help our radiologists find cancer.
- Measure the size of the prostate or a tumour in the prostate.
- Improve the targeting of biopsies.
- Monitor tumour growth in patients.
- Determine the staging of cancer.
- Monitor patients post-surgery.

An MRI can also be used to see if cancer has spread outside of the prostate, such as to lymph nodes in the pelvis.



Talk to your healthcare practitioner to see if a prostate MRI is right for you.

CT & MRI IMAGING 13

CT & MRI IMAGING





MIC: Your choice for advanced medical imaging

MIC offers patients the very latest medical imaging technologies in two locations.

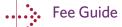
At our Century Park clinic, we have a 128 slice, low-dose CT scanner, a 1.5T MRI and our newest addition, the Siemens MAGNETOM Vida 3T MRI.

We have another 1.5T MRI at our College Plaza Sports Medicine Imaging Clinic.

Every image created in our community-based clinics is reviewed and interpreted by one of our expert radiologists.

These are the same radiologists who interpret thousands of diagnostic imaging exams each year at the University, Mazankowski, Stollery, Royal Alexandra, Grey Nuns, Sturgeon, Strathcona, Ft. Saskatchewan, Leduc and Devon hospitals, the Kaye Edmonton Clinic and the Northeast and East Edmonton community health centres.

We look forward to becoming an active partner in your health.



CT and MRI procedures in community-based clinics are not insured by Alberta Health. The following information will give you an idea of the fees charged. You may be able to claim the cost as part of your extended health benefits or your health spending account.

CT Health Assessment scans start at \$475 and CT diagnostic scans start at \$400.

The price for an MRI depends on the type of scan and whether it is performed on our 1.5T or 3T scanners. MRI scans start at \$650.

We will go over the exact cost when you call to book your appointment.

Call 780.433.1120 or 1.888.880.1121 (toll-free) to book your CT or MRI scan.



To book an appointment:

MIC offers advanced medical imaging services at our Century Park and College Plaza locations. To book an appointment, contact us at:



Ph: 780.433.1120

Toll Free 1.888.880.1121

Fax: 780.433.7286

When you call, please have available:

- Your Alberta Health Care Insurance card
- Your requisition form with your healthcare practitioner's exam instructions

Note: MIC accepts all diagnostic imaging requisitions.





Official Diagnostic Imaging Provider for:





