The Mediheal Group of Hospitals is the premier private healthcare chain in the Eastern Africa region. With a strong focus on quality and affordable care, we have been able to expand very fast in the last 10 years. We currently have four hospitals, one each in Nairobi, Eldoret, Nakuru, and Kigali (Rwanda). All these Hospitals offer world-class, tertiary level, diagnostic and therapeutic services. Our group is proud to confirm that we have over 250 beds, 7 operating theaters, 3 MRI machines, and 4 CT scanners amongst other high-tech equipments. This enables us to deal effectively with most medical and surgical patients including but not limited to trauma, orthopedic, neurology, cardiac, renal, gynaecology, and gastroenterology. As an innovative organisation, Mediheal has pioneered in the area of imaging, assisted reproductive techniques, non-invasive pain management, orthopedic and cosmetic surgery. Our patients who come from interiors of Kenya and also as far as from South Sudan, Eastern Uganda, Rwanda, and Burundi, have come to trust us with their healthcare needs. Our respect for patient rights has earned us respect within the community thus, leading us to participate in numerous charitable endeavors that benefit the less fortunate in society.

The Departments of Radiology at Mediheal Group of Hospitals have been characterized by the strength of its clinical leadership, its continuing effort towards chronological advancements, and its ongoing organizational evolution and resource development to ensure that it is optimally structured and equipped to meet present and future medical and scientific challenges. Mediheal is proud to have been the pioneer provider of the state-of-the-art radiology services in this part of the world.

Chairman

Message from Dr. S. R. Mishra
M.S (Obstetrics & Gynecology), India
Dip. Gynec Endoscopy (Germany)

Thank you for taking this effort to browse through this brochure. We hope it informs you and helps you to choose Mediheal Group of Hospitals for quality radiology services when you need them.

The vision of our Chairman Dr. S. R. Mishra is to provide the best services in radiology in Kenya and East Africa region at par with the best institutes in the world. Our paramount mission is to provide competent, courteous, and compassionate clinical services which are uniformly of the highest quality and must be guided by what is best for the patient.

We hope you enjoy reading our brochure and please feel free to discuss any questions you may have with me. I am at your service.

Dr. Devendra Rahangdale
Chief Consultant and Interventional Radiologist, Eldoret

Radiologists at Mediheal Group of Hospitals provide advanced informatics to improve the experience of patients and referring physicians.

From the Department of Radiology
Mediheal Group of Hospitals.

Dr. Sudhi Pradhan
Chief Radiologist, Mediheal Group

Thank you for taking this effort to browse through this brochure. We hope it informs you and helps you to choose Mediheal Group of Hospitals for quality radiology services when you need them.
Doctor’s Profile

* Nairobi Unit
* Eldoret Unit
* Kigali Unit
* Nakuru Unit

**Our Mission**
- To provide international standard medical care within reach of every individual
- To achieve and maintain excellence in health education, research and provision for the benefit of humanity
- To transcend the realm of curative care with a new focus on preventive care
- To build an infrastructure that will create an environment that protects and nurtures our future generations

**Our Vision**
To be the most responsive and innovative healthcare provider thus, positively impacting communities in Africa and beyond.

**Our Values**
- Discipline
- Excellence
- Sense of Urgency
- Innovation
- Respect for People
- Execution

**The Mediheal Radiologist Team**
- Dr. Sudhi Pradhan
  Chief Radiologist, Mediheal Group
- Dr. Devendra Rahangdale
  Chief Consultant and Interventional Radiologist, Eldoret
- Dr. Mehul Sangani
  Consultant Radiologist, Kigali, Rwanda
- Dr. Musila Mutala
  Consultant Radiologist, Nairobi

**The Mediheal Radiographers Team**
- Harmit Sehmi
  Nairobi
- Evelyn Odindi
  Nairobi
- Jeevan Samuel
  Kigali
- Jiju Jyothi Babu
  Eldoret
- Dr. Sudhi Pradhan
  Chief Radiologist, Mediheal Group
- Dr. Devendra Rahangdale
  Chief Consultant and Interventional Radiologist, Eldoret
- Dr. Mehul Sangani
  Consultant Radiologist, Kigali, Rwanda
- Dr. Musila Mutala
  Consultant Radiologist, Nairobi

Areas of special interest: Oncology Imaging, Neuroimaging, CT and USG Guided Intervention.
Radiology is the specialty of medicine that deals with the study and application of imaging technology like X-ray radiography, ultrasound, computed tomography (CT), Positron Emission Tomography (PET) and Magnetic Resonance Imaging (MRI) to diagnose or treat disease. A minimally invasive form of medicine, it allows the doctor to study a patient’s internal system, without making any cuts on the body. Interventional radiology is the performance of (usually minimally invasive) medical procedures with the guidance of imaging technologies. The acquisition of medical imaging is usually carried out by the radiographer or radiologic technologist. The radiologist then interprets or “reads” the images and produces a report of their findings and impression or diagnosis.

The Departments of Radiology at Mediheal hospitals, are a highly specialized full-service departments which strives to meet all patient and clinician needs in diagnostic imaging and image-guided procedures. We strive to provide fellow physicians and surgeons with the tools they need to achieve diagnostic and therapeutic excellence. Ultimately enabling physicians to achieve diagnostic confidence and, many times providing life-saving information.

The Departments of Radiology have been characterized by the strength of its clinical leadership; its continuing effort towards technological advancements and its ongoing organizational evolution and resource development to ensure that it is optimally structured and equipped to meet present and future medical and scientific challenges.

Our paramount mission is to provide competent, courteous, and compassionate clinical services which are uniformly of the highest quality. Our work must always be shaped by high patients, highest ethical principles and we must be guided by what is best for radiology-services at Mediheal Group of Hospitals.

The Departments of Radiodiagnosis & Imaging at Mediheal are recognized as a leader in the field of diagnostic imaging. Our facility includes cutting-edge, multimodal technological resources, including:

- 1.5 Tesla MRI
- 64 Slice CT Scan
- Ultrasound (5 probes)
- Digital X-Ray
- Mammography (Breast X-Ray)
- Interventional Radiology (Fluoroscopy, USG & CT Guided Procedures)
- Bone Densitometry
- Fluoroscopy (Special X-Ray)

All of the diagnostic radiology services are supported by the latest informatics and PACS (Picture Archiving & Communication System) capabilities. This technology is a part of the radiology offer the best care and technology for patients.

Magnetic resonance imaging or MRI is one of the most sophisticated imaging technology available today. Magnetic fields, radio waves, and computer programs are used to image the soft tissues and bony structures of the body. MRI is most useful for investigating various disorders of the brain, the spinal cord, blood vessels, muscles, joints, the heart and blood vessels. MRI is safe, painless, and does not require hospitalization.

**MRI Excellence in 1.5 Tesla:**
- Shorter than ever exam times with iPAT
- Up to 97% acoustic noise reduction with audio comfort
- No patient repositioning with Tim
- Exceptional magnet homogeneity for excellent fat saturation
- Large 50 cm Field of View
- Unparalleled flexibility, accuracy and speed
- Broad range of dedicated applications
- Highest level of diagnostic confidence

**Standard Application Suite**

Our MRI machines are fully equipped with a broad range of dedicated applications. In each clinical field, the Tim Application Suite will help address your clinical needs without additional costs.
### ADVANCED APPLICATIONS

**MAGNETIC RESONANCE IMAGING**

- **Body:** Free-breathing, high-resolution imaging for MRCP, MRU, pancreatic, and pelvic studies, with ease.

- **Angio:** Depict vessel diseases with a wide range of contrast and non-contrast enhanced techniques.

- **Cardiac:** Easily answer clinical questions, from cardiomyopathies to ischemic, and valvular to congenital heart diseases.

- **Breast:** To evaluate lobular cancer, breast implant assessment and therapy monitoring.

- **Onco:** Provide state-of-the-art oncology services for tumor detection and staging of prostate, liver cancers, and more.

- **Pediatric:** Excellent contrast and resolution with age-dependent protocols using ultrafast and motion correction techniques.

- **Body Diffusion Imaging:** High tumor sensitivity without contrast agent.

- **Detect Micro-Hemorrhages:** Reliably visualize micro-hemorrhages, intracranial bleeding, and shearing injuries with syngo SWI (Susceptibility Weighted Imaging).

- **Improved Pre-operative Screening Syngo DTI:** Excellent visualization of brain connectivity for improved pre-operative screening with syngo DTI (Diffusion Tensor Imaging).

- **Advanced Tissue Imaging Syngo Mapit:** Map tissue T1, T2, and T2* in cartilage, liver and any body region in minutes. Determine the best treatment for conditions such as osteo-arthritic pathology at an early stage.

Experience cutting edge MRI with high-end applications in all clinical fields.
Without Blade

With Blade

CSF Flow Study

Cutting edge motion correction

We offer all modern MRI examinations

Routine Studies:
- Brain
- Spine - Cervical / Dorsal / Lumbar
- Joints - Shoulder / Knee / Hip / Ankle / Wrist / Others
- Thorax
- Neck

Special Studies:
- Seizure Protocol
- Stroke Protocol
- Tumor Protocol
- Trigeminal Neuralgia Protocol
- Pituitary (Dynamic Study)
- Orbit
- CSF Flow Studies
- Cardiac Mr

New MR Techniques:
- Diffusion Weighted Imaging
- Diffusion Tensor Imaging
- MR Spectroscopy
- MR Cholangio Pancreatography (MRCP)
- MR Urography
- MR Myelography
- MR Cartilagram

MR Angiography:
- Cerebral
- Cervical
- Pulmonary
- Renal
- Aorta
- Peripheral
- Cerebral venography
- Inferior vena cavaography

Contrast may be needed in some vascular studies

Non-contrast enhanced angiography

Contrast-free thoracic, abdominal, and peripheral angiography providing a set of arterial and venous results.

MR Spectroscopy

To differentiate benign from malignant, characterisation and grading of intracranial SOL.
CT scan is a medical imaging method that employs X-ray tomography. CT scan uses X-ray to generate images which are then processed by computer to obtain series of images. This procedure can be used to diagnose abnormalities of virtually any part of the body. This technique also uses X-rays to visualize various structures in the body but in most areas provides vastly more information than available from X-ray films.

Being essentially painless, the procedure needs no anesthesia; however, in cases of children and patients who are unable to follow instructions, sedation or a short anesthesia may occasionally be necessary.

The time required for most CT scans are less than 10 minutes and most of the time, all that the patient is expected to do is to lie as still as possible and follow simple breathing commands.

After the scan is over, the patient can resume normal activities almost immediately.

We offer all modern examinations: -

**Routine Studies:**
- Brain, PNS
- Neck
- Thorax
- Abdomen & Pelvis
- Spine - Cervical / Dorsal / Lumbar
- Joints - Shoulder / Knee / Hip / Ankle / Wrist / Others
- Extremities

**Special Studies:**
- Angiography: Cerebral, Coronary, Pulmonary, Renal, Aorta & Peripheral.
- 3D Scans for Bones
- HRCT: Lung & Temporal Bones
- Triphasic CT for Abdominal Masses
- Virtual Bronchoscopy
- Virtual Colonoscopy
- CT Cysternography (for CSF Leak)
- CT Enteroclysis
- CT Urography
- Virtual Bronchoscopy
- Virtual Colonoscopy
- Pulmonary Angio
- Renal Angio
- Cerebral Angio
- Coronary Angio
Ultrasound or Sonography can be performed for virtually every part of the body through the use of high frequency sound waves. The sound waves are processed & displayed as a real-time ultrasound image.

In Mediheal we have very high resolution ultrasound machine with colour doppler facility which can images which plays vital role in diagnosis of different diseases.

In most ultrasound examinations, a transducer, a lightweight device which produces sound waves, is placed on the patient's skin. There are also special transducers which can be put into the body cavity to image these areas of the body. In general all ultrasonographic examinations are painless; at most may cause mild discomfort and have no adverse effects. It is generally agreed that with ultrasonography, there is no danger to the unborn child at any stage of pregnancy.

Depending upon the type of examination, ultrasonography may take from 15 minutes to up to a hour especially if color doppler studies are to be done.

Color doppler is similar to ultrasonography, where the radiologist will evaluate diseases of the blood vessels with the use of ultrasonography.

We offer following USG examinations:

**Routine USG Scans:**
- Abdomen
- Pelvis
- Obstetric Scan
- KUB
- Neck
- Breast
- Chest
- Orbit
- Musculoskeletal & Joints
- Trans vaginal Scan (TVS)
- Trans Rectal Scan (TRUS)

**Special USG Scans:**
- Obstetric Anomaly Scan
- Obstetric Doppler
- Follicular Study
- Neonatal Cranial Scan

**USG Doppler Scans:**
- Carotid
- Renal
- Peripheral Arterial & Venous
- ECHO

Radiography (X-ray) can be done for any part of body, like chest, abdomen, pelvis, skull & extremity. It involves exposing a part of the body to a small dose of radiation to produce an image of the internal organs. In Mediheal we use high frequency generator X-ray machines which offers very minimum radiation, the film are then processed through computerized radiography system through which we get high resolution images which makes a diagnosis very easy.

Radiography services offered:

**Routine X-Rays:**
- All parts of body

**Special X-Rays:**
- Barium Swallow, Meal, Follow Through & Enema
- Hysterosalpingography (HSG)
- Intravenous Urography (IVU)
- Retrograde Urography (RGU)
- Micturating Urethrogram (MCU)
- Fistulogram

**Barium Studies**

**Contrast Studies**
Mammography is a simple and safe special type of X-ray imaging used to create detailed images of the breast. Mammography in which we use low dose X-ray, high contrast, high-resolution film & an X-ray system designed specifically for imaging the breasts. Mediheal offers Mammography screening for Breast Cancer detection, on our Siemens Mammomat system. Breast cancer is one of the 3 major risks for women over the age of 40 and a yearly mammogram is the most reliable method of ensuring early diagnosis of this disease, which can be treated effectively, if detected early.

Interventional Radiology, also referred to as Surgical Radiology is a medical sub-specialty of radiology which utilizes minimally-invasive, image-guided procedures to diagnose and treat diseases in nearly every organ system. The concept behind interventional radiology is to diagnose and treat patients using the least invasive techniques currently available in order to minimize risk to the patient and improve health outcomes.

Using X-rays, CT, ultrasound, MRI, and other imaging modalities, interventional radiologists obtain images which are then used to direct interventional instruments throughout the body. These procedures are usually performed using needles and narrow tubes called catheters rather than by making large incisions into the body as in traditional surgery.

Many conditions that once required surgery can now be treated non-surgically by interventional radiologists. By minimizing the physical trauma to the patient, peripheral interventions can reduce infection rates and recovery time, as well as shorten hospital stays.

We offer following non vascular interventional procedures:
- USG Guided FNAC & Biopsy
- TRUS Guided Prostate Biopsy
- TRUS Guided Vaginal Vault and Pelvic FNAC & Biopsy
- USG Guided Drainage Procedures
- USG Guided Obstetric Intervention (Amniocentesis, Chorionic Vilous Sampling)
- USG Guided Nerve Block
- CT Guided FNAC & Biopsy
- CT Guided Drainage Procedure
FAQs

MRI (Magnetic Resonance Imaging)

> What is MRI?
It is a type of scan that uses a powerful magnetic field and radio frequencies. It does not use x-rays.

> Is there any preparation?
There is no preparation necessary for an MRI, to help us provide an efficient service, you could assist us by wearing clothing that does not have metal fastenings: not wearing any jewellery and removing all eye make-up (as this can interfere with scans of the head). You will also be required to complete an MRI safety questionnaire before your scan, please bring any relevant previous x-rays of scans.

> Can anyone have a MRI scan?
Unfortunately, not all patients can have a MRI scan. Any person with a procedure, metal clips on arteries or certain implanted devices cannot have a MRI scan. Women in their first trimester of pregnancy cannot have a MRI scan.

> Is a MRI scan safe?
MRI is a painless and harmless examination that does not use x-rays.

The scanning process
When we are taking the picture, you will hear a sound rather like a vibration, when you hear this noise it is important that you keep your body very still as movement will degrade the quality of the image. Usually there are about 4 or 5 different scans, lasting for 2-8 minutes each and you will be in the scanner for about 45 minutes. You are welcome to bring along your favorite CD or cassette to listen during your scan. Occasionally a special injection of MRI contrast (Gadolinium) may be needed.

> What will happen after the scan?
The report and films will be collected by you or sent to your Doctor. You can arrange to see your referring Doctor to discuss the results of the MRI scan within the next few hours.

COMPUTERISED TOMOGRAPHY (CT SCAN)

> What it is?
ACT scan (computed tomography) also known as CAT scan (computed axial tomography) is a specialized x-ray test. It can give quite clear pictures of the inside of your body. In particular, it can give good picture of "soft" tissues of the body which do not show on ordinary x-ray pictures.

> What is a CT scan used for?
- ACT scan can be done on any section of the head or body
- To detect abnormalities in the body such as tumors, Abscesses, abnormal blood vessels, etc., when they are suspected by symptoms or other tests
- To give a surgeon a clear picture of an area of your body before certain types of surgery
- To pinpoint the exact site tumours prior to radiotherapy
- To help monitor the growth of an unborn child, and check for abnormalities. An ultrasound scan is over. The pictures from the scan are studied by radiologist who sends a report to the doctor who requested the scan or it may be collected by you in one hour time.

> Are there any possible complications?
Complications are rare. The dose of x-ray radiation needed for a CT scan is generally quite low. So, the risk of harm is very small and it is considered a safe test. Rarely, some people have an allergic reaction to the contrast dye which is sometimes used. This can be treated immediately. Very rarely the dye may cause some kidney damage in people who already have kindly problems. Pregnant women, if possible, should not have a CT scan as there is a small risk that X-rays may cause an abnormality to the unborn child.

> What can I expect after the scan?
There are no after effects from the scan. So, you can return to your normal activities as soon as the scan is over. The pictures from the scan are studied by radiologist who sends a report to the doctor who requested the scan or it may be collected by you in one hour time.

ULTRASOUND
An ultrasound scan is a painless test that uses sound waves to create images of organs and structures inside your body. It is a very commonly used test and as it uses sound waves and notradiation, it is thought to be harmless. Ultrasound is a high frequency sound that you cannot hear, but it can be emitted and detected by special machines.

> What is an ultrasound test used for?
- Help to monitor the growth of an unborn child, and check for abnormalities. An ultrasound scan is routine for pregnant women
- Detect abnormalities of heart structure such as the heart values. (An ultrasound scan of the heart is called an echo cardiogram)
- Help to diagnose problems of the liver, gallbladder (such as gallstones. Pancreas, thyroid gland, lymph nodes, ovaries, tests, kidneys, bladder and breast. For Example, it can help to determine if an abnormal lump in one of these organs is a solid humor or fluid-filled cyst
- Detect subnormal widening of blood vessels (aneurysms)

MAMMOGRAM

> What is mammogram?
Mammogram is a simple, safe radiographic (Xray) examination of the breast. The word comes from mamma, meaning breast and graphic, meaning a drawing. The examination products radiographic picture called mammogram usually for detection of breast cancer.

Preparing for the exam:
- Do not use perfume, deodorant, antiperspirant or talcum before the examination
- Premenstrual breast tenderness has subsided, usually just after your period
- Please wear a two piece outfit
- At the time of booking please advise where previous mammogram was done and if possible, allow appropriate time for films to arrive before appointment date

General preparation instructions
- Bring the signed requisition from your doctor. It indicates the type of examination your doctor want us to perform and any other pertinent information. The requisition is not required, if you are having a screening mammograms, are aged 50 to 60 and are referring yourself
- Some examinations take much longer than anticipated and this may cause some difficulty staying on schedule. Please be punctual and allow plenty of time
- Mammogram examinations require appointments. If your doctor’s office has not made an appointment for you, please telephone and arrange one. If you are unable to keep your appointment, telephone to cancel it
- Inform us of any limitation of mobility Mediheat Hospital & Fertility center, is a well advanced, modern and updated hospital having state-of-the-art facilities in all the sub-specialties of medical aternlty situated along the nand road, east Eldoret, the economic capital of rift valley 300km from west of Nambiti serving Western Kenya, Eastern Uganda and Southern Sudan in private sector.

Why choose Mediheat?
At Mediheat Group, we are committed to providing state-of-the-art outpatient and inpatient imaging services using the very latest technology. Patients are scheduled for their scan quickly, drastically reducing the wait time, and care is taken at every step of the way to support, inform and guide every patient we see but it’s the way we treat our patients and referring physicians that really sets us apart. From the warm greeting extended by our front desk staff, to the detail and attention given by our technical staff, to the dedication and concern offered by our Radiologists, each patient is treated with the utmost care. The atmosphere at Mediheat Group of Hospitals is warm and inviting, with a comfortable waiting room. The Hospitals are easy to find and there is always plenty of parking.