YOUR MEDICAL IMAGING TEST

Patient name: _____ Date: ____ / ____ / ____

Tick ☑ where applicable

Your imaging

Your health professional has requested

- ☐ plain X-ray
- ☐ computed tomography (CT)
- ☐ ultrasound
- ☐ magnetic resonance imaging (MRI)

to further investigate the cause of your

_____

_____

_____

(describe sign or symptom, and specify location in body)

Next steps for you:

_____

_____

Know your imaging options

You and your health professional should work together to decide if medical imaging is necessary, and which type of imaging is best for you. It is important to be well informed before any imaging or other medical investigation. If you have any questions or concerns about your imaging, discuss them with your doctor.

Medical imaging should only be performed if it is likely to improve the management of your health condition or injury.

Questions to ask your health professional

- How will the imaging help my medical condition or injury?
- What does the imaging procedure involve?
- Are there any risks associated with the imaging?
- Are there any other options, particularly ones that do not use radiation?
- How much will the imaging cost?

Practice stamp

NPS MEDICINEWISE

YOUR MEDICAL IMAGING TEST

What is medical imaging and why is it useful?

Medical imaging refers to a range of procedures used to create pictures (images) of the inside of the human body. Imaging usually focuses on a particular part of the body and helps to:

- screen for possible illness or injury
- diagnose the likely cause of symptoms
- monitor health conditions or the effects of treatment.

Types of imaging

There are several types of medical imaging. Each method uses a different technology and creates a different type of image, and each imaging test has different benefits for showing what is happening inside your body.

It is important for you to be well informed before having an imaging procedure, and to talk to your health professional about any questions or concerns you may have.

Plain X-ray

X-rays are a type of ionising radiation used to create two-dimensional images of the inside of the body.

Plain X-rays are the preferred imaging type for identifying bone and joint problems.

Computed tomography (CT)

CT scans use multiple X-rays to create detailed three-dimensional images of the inside of the body.

CT can produce images of every type of body structure (eg, bones, organs, joints), and is used to help diagnose and manage many health conditions. However, precise details of soft tissue (especially the brain, some organs and around joints) are less visible on CT scans, and your health professional may prefer to use magnetic resonance imaging.

Ultrasound

An ultrasound scan uses high-frequency sound waves to produce images that show the structure and movement of organs inside the body. Internal organs that contain air (such as your stomach and intestines) do not show up well on an ultrasound scan.

Because ultrasound does not use radiation it is the preferred imaging type during pregnancy.

Magnetic resonance imaging (MRI)

MRI uses magnetic fields and radio waves to produce detailed three-dimensional images of the inside of the body.

MRI may not be suitable for people with certain types of implants (such as a medicine pump, pacemaker, cochlear implant, stent, aneurysm clip, or joint replacement). If you have an implant that could make an MRI unsafe, the radiologist (health professional trained in the use of imaging technology) may recommend you have a different type of scan.

Imaging and radiation

Plain X-ray and CT use ionising radiation to create images, whereas MRI and ultrasound do not.

We receive a small continuous dose of radiation from our surroundings in daily life (known as background radiation). Exposure to ionising radiation above this background level slightly increases your risk of developing cancer. However, it is important to understand that the amount of radiation used in most imaging procedures is relatively small and that the benefits outweigh the risks when the imaging is necessary to diagnose or manage your disease or injury. The risk of radiation exposure is not the same for everyone, and varies with the type of scan and the part of your body being scanned. You may wish to discuss your individual risk with your health professional.

Talk to your health professional

If you have any questions or concerns about your imaging test, talk to your referring doctor, or with the staff of the radiology clinic you are attending. If, after obtaining all information, you wish to refuse an imaging test, you have the right to do so.

More information

Reliable and detailed information about medical imaging procedures can be found at:

- NPS MedicineWise: nps.org.au/medical-imaging
- RadiologyInfo: radiologyinfo.org
- InsideRadiology: insideradiology.com.au
- Better Health Channel: betterhealth.vic.gov.au
- Virtual Medical Centre: myvmc.com

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