## ECHOCARDIOGRAM (Echo)



### What is an Echocardiogram?

An echocardiogram, or "echo" as it is commonly referred to, is an ultrasound of your heart. Sound waves are used to produce an image of your heart. From these images, the size, function and structure of your heart muscle and valves can be assessed. We can also provide information about the pressures within your heart and lungs.

#### How is the Echocardiogram done?

- The Sonographer will ask you to remove all items of clothing from the waist up; ladies will be provided with a gown. Three small electrodes and wires will be placed on your chest, so we can monitor your heart rate. You will be asked to lie on your left side and the lights will be turned down.
- A small transducer with gel on the end will be placed on various positions on your chest. The transducer
  is positioned in between ribs and a small amount of pressure is needed to obtain quality images. During
  the procedure the Sonographer will ask you to change your position and you may be asked to hold your
  breath.
- There are no known risks associated with echocardiograms, as there is no x-ray or radiation involved. You will not feel anything from the ultrasound, however, some people experience slight discomfort due to the position of the transducer in between ribs.
- The test will take approximately 45 minutes.

#### How do I prepare for the test?

- There are no special requirements prior to the test.
- Take all your medications as prescribed, unless otherwise instructed by your doctor.

#### When will I receive my results?

A Cardiologist will review your scan and it will generally be reported on that day. The results of your test will be sent to your referring doctor for discussion. *If you will be seeing your doctor within 24 hours of having the test, please advise reception staff and the Sonographer.* 

#### What do I need to bring to my appointment?

- Your referral from your GP or referring specialist (if it is not already held by us).
- A list of your current medications and dosages
- Any previous x-rays or test results relating to your current condition

# 3 DIMENSIONAL (3D) ECHOCARDIOGRAM



The Gold Coast Heart Centre has purchased state-of- the-art and most advanced Echo ultrasound equipment capable of performing 3 Dimensional echocardiography

3D transthoracic echocardiography is a new technology which has emerged as a powerful and ready-to-use clinical tool in cardiology practice. The Whole Heart can now be acquired as a **Single 3 Dimensional Echo image** over several heart beats!! It is similar to watching a **3D movie of your Heart in real-time**. New innovative 3D technology offers superior image quality and improved accuracy in the assessment of **cardiac volumes**, **cardiac function**, and **Valvular function**. The ability to slice the virtual heart in infinite planes in an anatomically appropriate manner and to reconstruct 3-dimensional images of anatomic structures make 3D echocardiography unique for the understanding of cardiac anatomy. In certain specific situations, 3D echo has been proven to improve diagnostic accuracy and assist in clinical decision making.

3D Transoesophageal echocardiography (3D TOE) is also available and can be performed by cardiologists at the Gold Coast Heart Centre.

Not all patients will benefit from 3D Echo. If the cardiologist decides that there is a clinical indication for 3D echo, the 3D pictures will then be acquired at the end of a normal echocardiogram and will only take a couple of extra minutes. There is no special preparation for the patient.

3D echocardiography is available at the Gold Coast Heart Centre at no extra costs to the patient as adjunct to routine echocardiography.