

# Cardiac Diagnostic Services

## Transthoracic echocardiogram (TTE)

### What is it?

A transthoracic echocardiogram (TTE), also known as cardiac ultrasound or 'echo', is a diagnostic test that uses ultrasound to capture moving images of your heart, using high frequency sound waves that are transmitted into the body. 'Echoes' are received back and displayed on a monitor. The test is performed by a cardiac sonographer. Ultrasound can be safely used to image adults, children and babies, including unborn babies. It is a versatile technique that is helpful in a variety of clinical situations such as:

- › Assessment of heart function e.g. if short of breath
- › Assessment of heart valves e.g. murmur
- › High blood pressure
- › Cardiac rhythm disturbances e.g. atrial fibrillation
- › Stroke or transient ischemic attack (TIA)
- › Congenital heart disease

### How do I prepare?

No special preparation is required. Please continue your usual medication. Wear comfortable clothes that can be easily removed to change into a hospital gown.

### What should I expect?

**A TTE usually takes 30-45 minutes to complete.**

The test takes place in a private room and is performed by a cardiac sonographer. After the test has been explained and verbal consent given, you will be asked to remove all clothing above the waist, to change into a hospital gown and lay on the examination couch. The examination begins by attaching ECG electrodes to monitor your heart rate. The sonographer captures ultrasound images by using a small transducer, positioning and moving it over the chest wall to view your heart from different angles. The gel will feel cold to touch. The sonographer may press firmly, and ask you to hold your breath briefly as images are acquired. A series of images and measurements are made to assess heart size, function and blood-flow across your heart valves.