Cardiology Services

Jurong Health

Cardiology treats diseases that affect the heart and blood vessels. The human cardiovascular system pumps and circulates blood throughout the body, carrying oxygen and nutrients to all body cells. Cardiovascular diseases develop when there are problems in the cardiovascular system. These include coronary artery disease, heart failure, congenital heart defects, and valvular heart disease.

The following are common heart conditions treated at Ng Teng Fong General Hospital:

Chest pain/breathlessness/palpitations

There are several factors that cause chest pains, breathlessness and palpitations. Depending on the frequency and severity of each case, we will investigate and evaluate each patient's complaints before recommending medication, treatment or surgery.

Abnormal ECGs

Abnormal ECGs may mean many things. From abnormal heart rhythms (arrhythmias) to a faster than normal heart rate (tachycardia), a specialist can investigate this further to determine the cause of the abnormal test result. Treatments will be recommended as necessary.

Cardiac health screening

We provide cardiac health screening for patients and healthy individuals who wish to lower their risk of cardiovascular disease.

*Referrals from polyclinics or private practitioners at our Specialist Clinic.

At Ng Teng Fong General Hospital, we offer these services to patients:

Cardiology specialist consultation

- Chest pain/breathlessness/palpitations
- Abnormal ECGs
- Cardiac health screening
- Heart attack and coronary heart disease
- Cardiac rehabilitation
- Heart failure and cardiomyopathy
- Atrial fibrillation and rhythm disorders
- Valvular heart disease

We also offer multi-disciplinary, sub-specialty clinics to care for and encourage patients to embark on rehabilitation, and provide consultation and a full spectrum of cardiac care to patients and healthy individuals who wish to reduce their risks of cardiovascular diseases.

Emergency services

The close partnership between Ng Teng Fong General Hospital and National University Health System enables us to efficiently attend to time-sensitive emergencies such as acute myocardial infarction and deliver quality care to patients.

Intensive Care Unit

We provide 24-hour inpatient care to patients in several care settings, which include general wards, high dependency and intensive care units.

General cardiology ward services

Inpatient care and treatment are available for patients in the Cardiology ward at Ng Teng Fong General Hospital.

Cardiology tests and procedures

- **Electrocardiogram (ECG)**

  The ECG makes use of electrodes placed on a patient's chest to record the electrical activity of the heart at a specific time.

- **Treadmill stress test**

  The treadmill stress test measures the effect of exercise on the heart and is able to detect for coronary heart disease. A patient's ECG and blood pressure are monitored as exercise on a treadmill.

- **Echocardiogram**

  An echocardiogram makes use of ultrasound waves to produce images of the heart. Such images allow doctors to obtain indepth information on the heart, such as its position, the motion of the walls of the heart, its interior chambers and valves, as well as the blood flow within its chambers. Such information help to determine if the heart valves are functioning well or if abnormalities are present.

- **Treadmill stress echocardiogram**

  The treadmill stress echocardiogram is a combination of an echocardiogram and a treadmill stress test. It uses ultrasound imaging to evaluate how well the heart's muscles are pumping blood into the body during exercise.

  The results from this test will allow your doctor to:

  – Determine how well your heart is pumping
  – Evaluate if there are significant blockages in your heart's arteries
  – Diagnose coronary artery disease
  – Evaluate the progress after a major cardiac episode e.g. heart surgery, heart attack, etc.

- **Dobutamine stress echocardiogram**

  The dobutamine stress echocardiogram is used when a patient's medical condition does not allow him/her to exercise on a treadmill. Dobutamine causes the heart to beat faster and mimics the effects of exercise.

- **Transoesophageal echocardiography**

  Transoesophageal echocardiogram provides doctors with a clearer picture of one's heart. Usually administered when standard echocardiogram has proved insufficient, doctors can view the heart's valves and chambers up close, without interference from the ribs or lungs. During this test, an ultrasound transducer is guided down the patient's throat and into the oesophagus (the tube leading from the mouth to the stomach) to obtain detailed images of the heart.

- **Myocardial perfusion test**

  A myocardial perfusion test evaluates blood flow (perfusion) to the heart muscles (myocardium). It can show how strong the heart is beating and identify areas with poor blood flow. This test is recommended when there is decreased blood flow to the heart, caused by an accumulation of fatty deposits along the arteries or blood vessels. When this happens, blood flow to the heart is compromised when there is physical exertion.

- **Ambulatory blood pressure monitoring**

  This test involves taking regular blood pressure readings of a patient over a 24-hour period.

- **Holter monitoring (ambulatory ECG)**

  This test allows doctors to monitor the electrical activity of the heart continuously for 24 hours. Holter monitoring detects transient and short cardiac arrhythmias and can be used to assess the heart's electrical activity during periods of chest pain.

- **Signal-averaged electrocardiogram (ECG)**

  A signal-averaged ECG is a more detailed type of ECG where multiple ECG tracings are obtained over time to evaluate subtle abnormalities in the heart rhythm that can increase risk for cardiac arrhythmias. These subtle abnormalities are usually not detected on a plain ECG.

- **Tilt table test**

  A tilt table test helps to diagnose the cause of unexplained fainting. It is recommended if unexplained episodes of fainting put patients at high risk of injury due to work environment, medical history, age or other factors. Patients will lie on a table that moves from a horizontal to a vertical position during the test and have their blood pressure and heart rate monitored.

- **Multi-slice cardiac CT (64 slice) and calcium scoring**

  This is a non-invasive imaging test that can capture high resolution, 3-dimensional images of the heart and its vessels. Through it, doctors are able to determine the presence of fatty calcium deposits (plaque) in the coronary arteries and 'soft plaque' in the coronary artery walls that could cause future heart problems. Calcium scoring tests evaluate the risk of future heart disease by detecting calcium deposits in atherosclerotic plaque in the coronary arteries.

- **Implantable loop recorder**

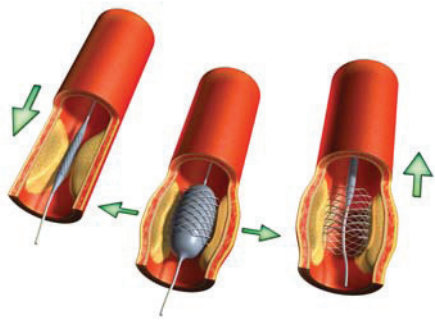
  An implantable loop recorder (ILR), also known as an insertable cardiac monitor, is a long term implantable device used to record heart rhythm for unexplained fainting related to irregular heartbeat or other cardiac-related problems.

- **Coronary angioplasty (or percutaneous coronary intervention)**

  Coronary angioplasty (stenting) or percutaneous coronary intervention is used to treat blockages of the coronary arteries.

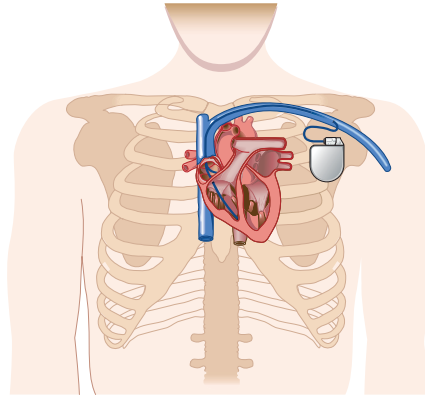
- **Diagnostic coronary angiography (or cardiac catheterisation) and Intra vascular physiological assessment**

  These tests make use of a medical imaging technique to visualise the inside of blood vessels. Doctors inject a radio-opaque contrast agent into the blood vessels to capture images using X-ray-based techniques.



- **Pacemaker implants**

  A pacemaker is a battery device that is implanted under the skin in the left upper chest. Doctors usually recommend pacemaker implants when a patient's heart rate is too slow. Consisting of a pulse generator, which houses the battery and circuitry, the pacemaker also has leads (wires) that are introduced into the heart through the veins in the patient's upper arm. These leads carry electrical impulses to the heart, causing it to beat (contract) at a pre-determined rate set by the pacemaker. On occasions, pacemakers are also advised for patients with severe heart failure.



Other specialist services

- **Electrophysiology service**

  Electrophysiology study (EPS) is sometimes performed to investigate complex, abnormal and irregular heart rhythms. This procedure involves putting electrodes and catheters into the chambers of the heart via the veins in the groin, sometimes the neck, and occasionally arterial assess. Many complex heart rhythm disorders, including conditions that cause very fast or slow heart rate and irregular heart beat can be diagnosed with this test. Treatment can be done through heat application to the abnormal nerve triggers and circuits in the heart chambers via catheters. This is called radio-frequency ablation. We collaborate closely with National University Hospital for this.

- **Pacemaker implant service**

  Some patients with a weak heart benefit from special pacemakers that coordinate and improve the contractile function of the heart. Patients with life-threatening rhythm disorder may also require a shock device implantation known as an implantable cardioverter-defibrillator or ICD. The pacemaker implant service provides the care required after a pacemaker implant.

  The service also offers pacemaker follow-up and programming service to ensure that the implanted pacemaker is functioning optimally.

- **Pacemaker check service**

  Pacemakers are electronic devices that stimulate the heart with electrical impulses to maintain or restore a normal heartbeat. During the pacemaker check, with the programmer ‘wand’ placed on your chest over the device, your heart will be ‘interrogated’ to ensure the device is functioning properly. Parameters and cardiac events will be recorded to optimise programming parameters. This is a non-invasive way to review your device parameters, function, and cardiac events.

- **Smoking cessation service**

  We help smokers manage their addiction and advise steps to help them quit.

- **Weight loss service**

  Obese patients are at higher risk of heart conditions. We offer weight loss programmes to help overweight patients reduce their weight and achieve healthier living.

- **Anticoagulation service**

  Our staff will monitor and administer anticoagulation medication to patients to prevent excessive blood clotting.

- **Patient event monitoring service**

  Patient event monitoring is a procedure where a portable medical device is carried for about a week to record a patient's heart rhythm and any symptoms such as palpitations, chest pain or fainting spells. This is similar to doing an electrocardiogram (ECG). However, the standard ECG only records heartbeat for a few seconds.

For more information

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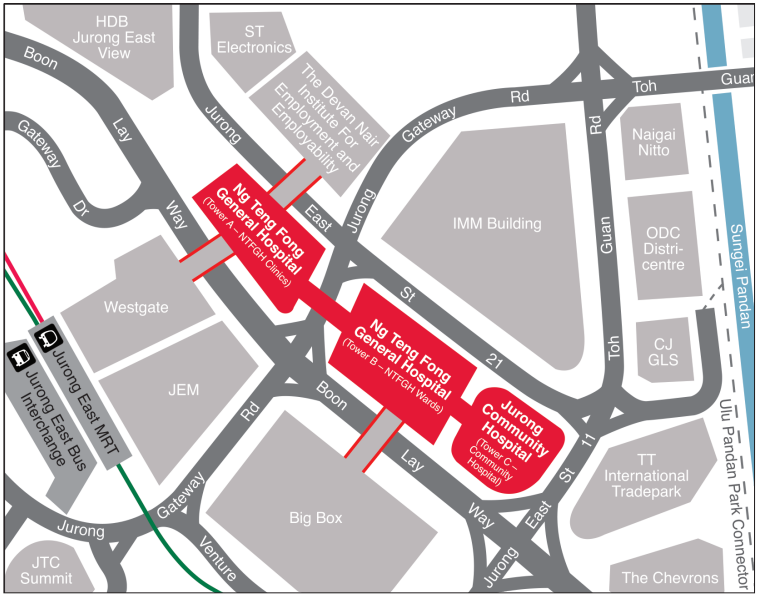
Clinical and appointment line hours (closed on Sundays and public holidays)
For appointments, please call 6716 2222
Monday - Friday 8.00am - 5.30pm, Saturday 8.00am - 12.30pm

For dental appointments, please call 6716 2233
Monday - Thursday 8.00am - 5.30pm, Friday 8.00am - 5.00pm

Getting there



By train

Jurong East MRT Station

By bus

From Jurong East Bus Interchange
SBS 51, 52, 66, 78, 79, 97, 97e, 98, 98M, 105, 143, 143M, 160, 183, 197, 333, 334, 335, 506

Along Boon Lay Way
SBS 99, Private bus service 625