

# Heart Failure Programme

Patient Handbook



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# Preface

Heart Failure (HF) is the leading cause of mortality and morbidity in Singapore. It is estimated that 1 to 2% of the adult population have HF and this rises to 6 to 10% for those above 65 years old. Without prior history of a heart attack, the lifetime risk for developing HF is 1 in 9 for men and 1 in 6 for women above 40 years old.

The HF Integrated Care Pathway (ICP) programme at JurongHealth provides a comprehensive multidisciplinary approach to help patients manage heart failure. Patients get more involved in the management of heart failure through education, easy access to the hospital and resources within the community. Such models of care have been shown to improve a patient's quality of life and reduce hospitalisation and mortality rates.

Our dedicated team of cardiologists, case managers, clinical pharmacists, physiotherapists, occupational therapists, dietitians, palliative care team and social workers are focused in helping you:

- Recognise and detect symptoms early
- Initiate evidence-based treatments
- Customise a treatment plan
- Equip you with self-education
- Customise an individualised dietary plan
- Tailor an exercise regime
- Plan your living wills
- Facilitate smooth transition from hospital to community care

JurongHealth's HF patients can derive short and long term benefits from managing symptoms to physical functionality, quality of life, life expectancy and easy access to healthcare services.

If you are interested in our HF programme and would like to find out more about how we can help you, please contact us at 6716 2222 between 8.30am to 5.00pm (Monday to Friday).

# Commonly-Asked Questions

## How does my heart work?

The heart is a muscle that acts like a pump. It delivers blood filled with oxygen to the body.

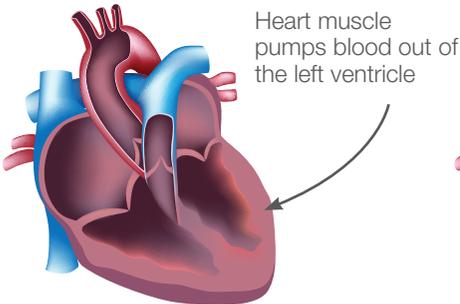
## What is Heart Failure?

It is a state when your heart is unable to pump blood throughout the body. This results in fluid build-up in the lungs, legs and other dependent parts of the body.

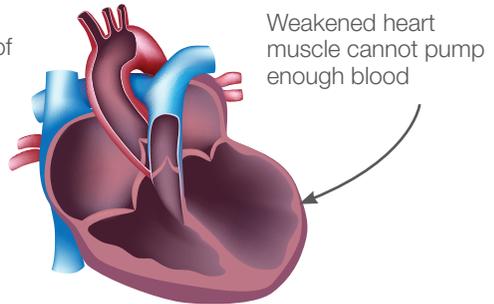
## How do I know the pump function of my heart?

Your doctor will arrange for a test called "echo" to assess the pump function of your heart. A normal pump function is  $>50\%$ .

Normal



Heart Failure



## What are the symptoms of Heart Failure?

- Shortness of breath
- Coughing or wheezing, especially when you exercise or lie down
- Tiredness
- Swelling of the legs
- Weight gain

## What are the causes of Heart Failure?

- Heart attack
- Narrowing of the blood vessels in the heart known as coronary artery disease
- High blood pressure
- Diabetes
- Heart valve disease
- Thyroid problems
- Abnormal heart rhythm
- Alcohol

### Normal Artery

Normal blood flow



### Narrowing of Artery

Abnormal blood flow



## How is it treated?

- Your doctor will give you medicine to strengthen your heart and water pills to get rid of excess fluids
- A low salt diet will be recommended
- The amount of water you consume is monitored
- Surgery or heart devices may be required

## What can I do to manage heart failure?

- Follow your doctor's advice
- Take your medicine regularly
- Weigh yourself daily to check for weight gain
- Eat less salt
- Quit smoking
- Exercise regularly
- Reduce your fluid intake
- Review your health regularly with your doctor



### **What is my dry weight?**

Dry weight is measured when your body has gotten rid of excess fluid such as after you have passed urine or before you have your breakfast.

### **How much salt can I consume?**

We recommend no more than 2g (1 teaspoon) of salt per day. Our dietitian can advise you on this.

### **How much water can I drink?**

This depends on the pump function of your heart. The recommended amount is 4 to 6 cups (1.0 to 1.2 litres) a day. Your doctor will be able to advise you.

### **Can I exercise with Heart Failure?**

Yes, you may join our exercise programme tailored especially for HF patients.

### **My heart is weak, can I engage in sexual activity?**

Generally, you can continue with normal sexual activities but do not have sex if you are feeling breathless or tired. Ask your doctor during your visit.

### **What should I do if I have difficulty breathing?**

- Contact your case manager between 8.30am to 5.00pm (Monday to Friday).
- Our case manager will arrange for you to see a doctor.
- Please proceed to the Emergency Department after office hours. Depending on your condition, you may be admitted for further observation.

### **What should I watch out for?**

- Weight gain of more than 1kg (2 to 3 pounds) a day
- Swelling in the feet/ankles
- Difficulty breathing
- Unable to lie down flat
- Chest pains



### **I live alone and have difficulty coming to a hospital. What can I do?**

We can make special arrangements for you to visit a family doctor in your neighbourhood.

### **Do I need a heart device implanted in my body?**

This will depend on your heart condition. Your doctor will advise you. There are two common devices known as Cardiac Resynchronisation Therapy (CRT) and Implantable Cardioverter Defibrillator (ICD). CRT helps the right and left chambers of your heart pump better while ICD helps to manage the life-threatening rhythms of your heart.



### **Do I require any vaccination and why?**

Heart Failure patients are recommended to get an Influenza vaccine once a year. For Pneumococcal vaccine, one dose is enough, although a booster dose may be required every 5 years. Flu-related complications are higher among patients with heart failure.

### **Do I need a new heart?**

This depends on your heart condition. Your doctor will advise if you need a heart transplant.

### **How do I plan ahead?**

Patients who suffer from end-stage heart failure are referred to the Palliative care team, where treatment wishes and advanced directives (living wills) can be discussed.

### **I have more questions, what should I do?**

- Consult your doctor/case manager at your next appointment.
- Contact us at 6716 2222 during the office hours of 8.30am to 5.00pm (Monday to Friday). We will be glad to answer any of your questions.

# What are the symptoms of heart failure?

The symptoms of heart failure may be mild to severe. They can be constant, or can come and go. These symptoms are due to the changes that occur in your heart and body.

- Shortness of breath, or difficulty breathing at rest, or when lying flat in bed. Shortness of breath occurs when fluid backs up into the lungs (congestion) or when your body does not have enough oxygen-rich blood to let you go on with your activity or exercise without rest. Even though you associate breathing as a lung problem, your heart condition can also cause shortness of breath. In some cases, symptoms can cause you to awake suddenly night and disrupt your normal sleep pattern.
- A dry, hacking cough or wheezing.
- Swollen ankles, legs and abdomen, and weight gain. Poor blood flow to the kidneys causes fluid and water retention, which results in swelling and water weight gain.
- Tiredness (fatigue) and weakness during exercise or activities because the heart is not pumping enough oxygen-rich blood to major organs and muscles.
- Rapid or irregular heartbeats (palpitations). When the heart muscle do not pump well, the heartbeat speeds up to help the heart get enough oxygen-rich blood to major organs and muscles, or the heartbeat may become abnormal.

# Our dedicated team

## Cardiologist

You will be seen by a doctor who specialises in diseases of the heart. Known as a Cardiologist, he/she will confirm the diagnosis and adapt an individualised approach for you. This includes adherence to medications and modifying your lifestyle to reduce disease progression, hospital re-admission and death. It will also help to improve your symptoms and ensure an improved quality of life.

## Case Manager

The case manager coordinates your care from the time of admission, discharge and follow-up sessions. He/she will telephone you to monitor your progress, provide self-care advice to improve your self-management skills and offer caregiver support. Assistance will also be provided to access local community resources.

## Pharmacist

A pharmacist assists the doctor in adjusting your heart failure medication dosage, and monitoring for side effects. You may see a pharmacist in between doctor's appointments to ensure that your medications are at optimal doses.



## **Physiotherapist**

A physiotherapist will guide and show you the correct exercises to do and at the right intensity. In the hospital, a structured 8-week program conducted by the physiotherapist is tailored according to your needs and goals. The exercise program will help you to build your stamina and strength, and help you cope with simple activities such as walking. The exercise needs to be continued at home for you to continue to benefit from the exercise program. The physiotherapist may further provide you with valuable advice on how to maintain physical activity levels at your own time.

## **Occupational Therapist**

An Occupational Therapist aims to help you restore your functional ability by engaging you in everyday activities which include self-care and for leisure. The occupational therapist will provide you with advice and education on a range of topics relating to activities of daily living (ADLs), which may include energy conservation techniques, adaptive equipment training, stress management strategies and lifestyle modifications.

## **Dietitian**

Heart failure is often associated with diabetes, high blood pressure, high cholesterol, obesity, and even malnutrition. These can be controlled with a healthy diet. Your dietitian can customise a healthy eating plan to suit your needs and improve your heart health.

## **Medical Social Worker (MSW)**

Medical social workers assess the psychosocial functioning of patients with heart failure and work with patients' families for intervention when necessary. Interventions include connecting patients and families to essential resources and support in the community, providing financial assistance, counseling and facilitating Advance Care Planning (ACP).

# What is Advance Care Planning?

Advance Care Planning is a voluntary process to discuss on future healthcare planning between an individual, his/her family members and healthcare providers. It aims to explore goals and values of the individual and provide them with an opportunity to think, reflect and plan ahead for future healthcare decisions.

## Frequently Asked Questions

### **What medications should I be on?**

You will be given medications that have been proven to reduce hospitalisations for heart failure and the risk of death. The medication dosage will gradually be increased to target doses that maximise results, subjected to your body's tolerance.

### **What are the side effects of medications?**

Some patients may experience low blood pressure in the form of dizziness and fainting spells, while others may feel tired and lethargic. These symptoms usually do not persist. The medications may also affect the kidneys and the potassium level in the blood.

To monitor for these side effects, we check your blood pressure, heart rate, and conduct blood tests for your kidney function and potassium level regularly to ensure your body is tolerating well to the medications.

### **How much salt can I consume?**

We recommend no more than 1 teaspoon of table salt (2g of sodium) a day and to avoid adding salt to your food. Salt is already found commonly elsewhere in our diet. Your dietitian will advise you on ways to reduce your salt intake.



### **How much fluid can I consume?**

The amount of fluid you can consume depends on the pump function of your heart. The recommended amount is 4 to 6 cups (1.0 to 1.2 litres) a day. Your doctor will be able to advise you.

### **Are there any other dietary restrictions?**

Controlling your cholesterol level is also important in the management of heart failure. A low saturated fat diet is recommended if you have high cholesterol. People with diabetes or kidney disease may also need to adhere to certain dietary restrictions. Your dietitian will advise you on a suitable diet.

### **What is the best exercise I can do at home?**

Walking is a simple exercise that does not require equipment and it can be done with family members and friends. To benefit from a walking exercise, do so at a moderate pace. Physical activity can also be achieved by taking leisure walks at the park, market or shopping centre. Walk as much as you can. It is recommended that you do 150 minutes of moderate physical activity every week.

### **Why do I need to exercise?**

Exercise and physical activity are good for your heart. It improves the efficient use of oxygen in your heart muscles so that your heart pumps better and blood circulation is improved. When exercise is done consistently, people with heart failure show improved effort tolerance, strength, fewer episodes of breathlessness and tiredness during daily activities. These reduce hospital readmissions and improve survival rates. Exercise also improves mood and energy levels.



### **Is it normal to feel more tired than usual?**

People with heart failure may find themselves more tired than usual as they go about their daily activities. An occupational therapist will explore ways to modify these daily activities, advise on suitable equipment for assistance and suggest techniques to conserve energy. These will help you return to daily tasks more easily.

### **I feel worried when I do daily activities. What can I do?**

An occupational therapist can help you identify the reasons behind your worries and develop strategies to manage this anxiety. You may be taught relaxation techniques and ways to modify your lifestyle so that you include activities that relieve stress to help you cope with activities that are most important to you.

### **Do I need any vaccinations and why?**

People with underlying heart failure are at a higher risk of infection such as flu and pneumonia, and its associated complications. You are recommended to get a yearly influenza vaccination. Pneumococcal vaccination is taken once, although a booster dose may be required every 5 years.

### **What should I do if I start having symptoms?**

- Please call your case manager.
- Your case manager may consult the physician to adjust your medications, or arrange an early appointment for you to see the doctor.
- Please proceed to the Emergency Department if your symptoms worsen, or if they occur after office hours.

### **If I have more questions, who can I ask?**

- You may consult your doctor at your next visit.
- You may contact your case manager, who will be glad to assist you.

**Notes:**

**Notes:**

## For more information

### Ng Teng Fong General Hospital and Jurong Community Hospital

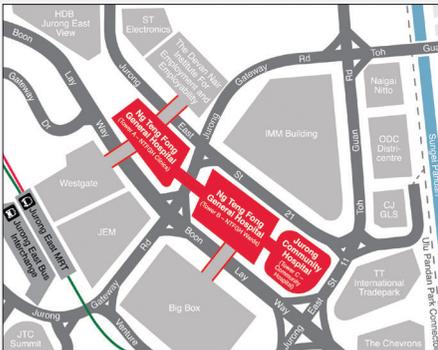
1 Jurong East St 21,  
Singapore 609606  
General enquiries: 6716 2000 Fax: 6716 5500  
www.ntfgh.com.sg

### 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 49, 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

### Jurong Medical Centre

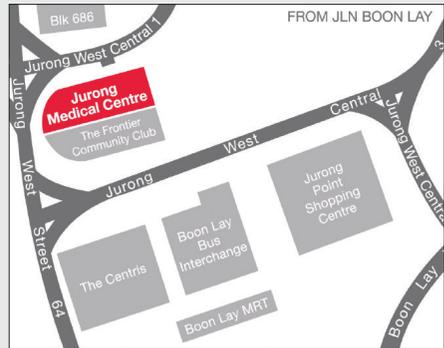
60 Jurong West Central 3,  
Singapore 648346  
General enquiries: 6716 2000 Fax: 6551 7999  
www.jmc.com.sg

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### Getting there



#### By train

Boon Lay MRT Station

#### By bus

SBS 30, 79, 154, 157, 174, 179, 181,  
182, 192, 193, 194, 198, 199, 240, 241,  
242, 243 W/G, 246, 249, 251, 252, 254,  
255, 257, 405  
SMRT 172, 178, 180, 187

#### Disclaimer:

The information in this brochure is meant for educational purposes and should not be used as substitute for medical diagnosis or treatment. Please seek your doctor's advice before starting any treatment or if you have any questions related to your health, physical fitness or medical condition.