The Prince Charles Hospital

YOUR GUIDE TO HAVING
CARDIAC
SURGERY
Please keep this book with you throughout your stay in hospital. It is provided for you at no cost. Please take care not to misplace it, as only one copy can be provided for each patient.
Your guide to having cardiac surgery

This book has been designed to help you plan for your cardiac surgery, and to assist you in recovering as quickly as possible. You have an important role in your recovery, and a responsibility to follow the instructions and guidelines given to you by our health care team. You are required to plan for your discharge from hospital before you are admitted. We have provided details for assistance if you need it, however on discharge, most patients are capable of carrying out their own personal care, and will only require help with domestic tasks and driving for a short time.

Your physiotherapy exercises are also included in this book, along with the occupational therapists’ recommendations for returning to your previous activities of daily living. Please keep this book with you and refer to it during your stay in hospital.

Contents

| What to do before your admission to hospital | 4 |
| What to bring with you to hospital | 4 |
| Day of surgery | 5 |
| Recovering from surgery | 6 |
| Preparing for home | 7 |
| Discharge checklist | 7 |
| After you are discharged from hospital | 8 |
| Occupational Therapy – activities of daily living | 8 - 10 |
| Physiotherapy exercises | 11 - 15 |
| Walking program | 15 - 16 |
| The Prince Charles Hospital Foundation | 17 |
What to do before your admission to hospital

- You should start planning your discharge NOW. It is important to have support when you return home. You will require help from family, friends or neighbours with driving, cooking, cleaning and shopping. If you require community services to help you, ask your GP for a referral.

- Organise your own transport to and from hospital. It is not provided by the hospital or the ambulance.

- The Queensland Patient Travel Subsidy Scheme (PTSS) provides financial assistance to patients who need specialist medical services not available in their local area. For eligibility, check with your referring local hospital before your surgery admission. For details go to www.health.qld.gov.au/ptss

- If you require income support, contact Centrelink to ask about your eligibility.

- If your relatives require a family leave certificate it must be obtained from your GP.

- If you are the carer for another person you will need to organise alternative arrangements for their care with family, friends, or ask your GP for services available.

- A list of accommodation for relatives can be obtained from our social work service on (07) 3139 4443 or at www.health.qld.gov.au/tpch/documents/accomm.pdf

- Your surgery cannot take place if you have a fever, cough, cold, or cuts or scratches on your skin. If you have any of these when you are due to have your surgery, please contact the surgical procedure allocation centre on (07) 3139 6690 or see your GP.

- The expected length of stay for a patient is from admission (the day before surgery or the day of surgery) until 5 days after surgery. It is important to appropriately plan for your return home.

What to bring with you to hospital

- Pyjamas (not provided by the hospital)
- Appropriate footwear – these should be comfortable, low heeled and non-slip shoes that fit you well (slippers are available for purchase at the Breeze Café)
- Toiletries – include tissues
- Glasses with case, dentures, hearing aid
- Walking aid
- Small amount of money for phone card, TV or newspaper
- Females should bring a soft comfortable bra (front or back opening without underwire)
- All medications you are currently taking
- Remove all your jewellery and keep your valuables at home in a safe place
- Remove all nail polish (including clear coats of polish, false or acrylic nails)
- If you bring electrical equipment (laptop, iPod, or radio), please be aware The Prince Charles Hospital takes no responsibility for your items, and they must meet electrical safety standards.
Day of surgery

- You must not eat or drink anything from midnight before your operation unless specified by your doctor or anaesthetist.

- Do not take any medications without first discussing it with your nurse or doctor.

- Hair removal will be done in hospital if required. DO NOT attempt to shave or wax yourself as any cuts or abrasions may prevent your surgery from going ahead.

- You will be given a special soap to shower with and a theatre gown to wear.

- You may be given tablets and/or an injection before you are taken to theatre. This is ordered by your anaesthetist and will make you feel drowsy and help you relax.

- Surgery normally takes 4 to 6 hours. Sometimes surgery can be delayed or even postponed due to the emergency needs of other patients.

- Relatives must notify nursing staff of their phone number before the patient leaves the ward for theatre. The surgeon will want to speak to relatives after surgery. Please nominate one person to make enquires about your progress so they can pass on the information to other members of your family.

- There is limited space in the Intensive Care Unit (ICU) waiting area so please wait to be contacted before arriving. The Breeze Café is on the ground floor if you want to wait at the hospital.

- You can only take toiletries, appropriate footwear, dentures, glasses, hearing aid and selected medication with you to ICU. Any other personal items will be securely locked in the ward until you return. Please only bring a small amount of essential belongings with you to hospital.

The patient enquiries number is (07) 3139 4000.
Recovering from surgery

- After your operation, you will wake in ICU, where a nurse will remain with you. You will not be able to speak or drink as a tube will be in your mouth to help with your breathing. As you become more awake, you will be able to breathe for yourself, and the machine will do less work for you until the breathing tube can be removed.

- There will also be a number of other tubes and lines in your body after surgery. These will usually be removed over the next few days.

- The physiotherapist will aim to take you for a walk and sit you out in a chair on the first day after your surgery while in ICU. They will also visit you regularly in the ward.

- When you are well enough, usually 16 to 48 hours after the operation, you will be transferred back to the ward. **Visiting hours in Ward 2E are 10am to 2pm, and 4pm to 8pm.** There is a strict rest period for patients from 2pm to 4pm. Visitors are not permitted at rest period.

- It is normal to have some pain or discomfort after surgery. However it is important to have good control of the pain so you are able to move around, cough, deep breathe and do your physiotherapy exercises. It is best to report your pain early so it can be treated effectively.

- Your surgical wounds will be covered for 4 to 5 days. After your nurse removes these dressings they will be left uncovered to air and heal. If you notice any increase in swelling, redness, discharge or pain please tell your nurse or doctor. Some of your wounds will be closed with dissolvable sutures. There may also be staples that will need to be removed 10 to 14 days after your surgery by your GP.

- Your surgeon may request that you wear a pair of white compression stockings after your operation. These help prevent clots forming in your legs (Deep Vein Thrombosis). While wearing them, ensure there are no folds in the stockings. They are removed for your daily shower and can be washed at this time. Only one pair of compression stockings is provided for each patient. At home they can be hand washed. Do not put them in the dryer or hang in direct sunlight.

- Non-slip socks will be provided. Wear these, or appropriate footwear over your stockings.

- Hand hygiene is essential, especially when recovering from surgery. Please wash your hands regularly.
Preparing for home

• Depending on your operation and how well you recover, it is anticipated you will be discharged home 4 to 6 days after your operation.

• We aim for discharge from the ward to be between 10am and 11am.

• You should have already organised your own transport home, and help for when you get there with meals, driving, domestic tasks and shopping. Make sure the people helping you are aware of your discharge.

• If you are interested, the discharge coordinator will refer you to a cardiac rehabilitation facility in your area if available.

• It is important to understand which medications you will be taking when you are discharged. The doctor, nurse or pharmacist will discuss this with you and answer any questions you have.

• You will be sent to the Transit Lounge if you are waiting to be picked up by private transport. It is staffed by nurses and open 8am to 6pm Monday to Friday.

Discharge checklist

• I have organised my own transport home
• I have been given my discharge medications and understand how to take them
• I have seen the doctor
• I know how to care for my wounds and when to have my stitches or staples removed
• I have been given a staple remover for my GP to remove my staples (if required)
• I have checked all cupboards and drawers for my belongings and they have been packed, including glasses, hearing aid, dentures, and walking aid
• All medications I brought in from home have been returned to me
• Any valuables or trust items have been returned to me
After you are discharged from hospital

- A letter for your GP outlining the surgery you have had, test results, medications, and any follow up required will be posted or electronically sent to your GP.

- Visit your GP 3 to 5 days after discharge so you can have a general check up following your surgery and your wounds can be reviewed.

- If you have staples in your wounds, book an appointment for your GP to remove these at the time your surgeon instructed (usually 10 to 14 days after your operation).

- An outpatient appointment to come back and see your surgeon, if needed, will be posted to you.

- You should receive a letter from your local cardiac rehabilitation centre a few weeks after your surgery if you were referred.

- If you declined to be referred to cardiac rehabilitation while in hospital and have now decided you want to be involved, ask your GP to refer you.

- Clearance for returning to work and driving must be obtained from your GP.

Activities of daily living

Recommended by the occupational therapist ph: (07) 3139 5273

The following are basic guidelines for the safe and gradual return to daily activities following cardiac surgery. Please note that they are guidelines only and do not take into account your own specific cardiac presentation, pre-existing conditions or physical strengths and limitations. Be sure to STOP any activity if you experience pain or discomfort. Consult your GP if you have any specific concerns.

Avoid lifting, pushing or pulling anything that weighs more than 2 to 4kg for the first six weeks following cardiac surgery (as a guide, a full 2 litre milk container weighs about 2kg). Keep any loaded movements close to your body and your elbows tucked in to your sides.

You cannot drive any vehicle or ride a motorised scooter for 6 weeks following cardiac surgery. Commercial drivers will likely have a 12 week driving restriction.
Activities of daily living

Week 1 at home

- Resume showering, washing hair, shaving and dressing. Sit to shower if you need to. Do not use a bath until at least Week 8 due to the need for weight bearing through your arms when getting out.
- Activity level similar to that in hospital – light activities such as reading, TV and computer use, crosswords, sudoku, playing cards, jigsaw puzzles, light craft activities.
- Stairs when necessary – go slowly and rest as required. Use the handrail for balance only. Do not pull yourself up.
- Try to stay at home unless you have medical appointments. Arrange to be driven to your appointments and wear a seatbelt at all times. Use a small pillow if the seatbelt irritates your wound or you are seeking extra sternal support.
- Limit visitors and telephone calls as these can be tiring.
- Make a cup of tea, coffee or light snack. Do not attempt any other cooking or cleaning.

Weeks 2 and 3 at home

- Activities from Week 1 can be upgraded in both time and effort.
- Increase use of stairs if necessary. Rest frequently and don’t hurry.
- Light household activities as tolerated including preparing simple meals, setting the table, washing a light load of dishes, and putting clothes in the washing machine (get someone to remove from the machine for you and peg out).
- Brief outings if you feel up to it.

Weeks 4 and 5 at home

- Continue to upgrade all previous activities in time and effort.
- Resume using public transport – avoid peak periods.
- Remember to spread tasks over the day to avoid fatigue.
- Commence upper limb strengthening exercises as per physiotherapist (page 15)
- Household tasks such as doing a load of washing - remove items from the machine in small lots and commence pegging out light items on a regular clothesline only. Get someone to peg the heavier items for you or use a clothes rack to drape items.
- Make the bed (do not change the bed linen).
- Emptying a small, light rubbish bin. Do not put out whee1ie bin for at least 8 to 12 weeks after surgery.
- Quiet social outings, for example local restaurant, cinema.
- Light gardening, for example tending to plants and light weeding.
Activities of daily living

Week 6 at home
• Continue to upgrade all previous activities in time and effort.
• DO NOT resume driving any vehicle or riding a motorised scooter without approval from your GP.
• Sex can be resumed – but avoid using your arms to support your full body weight until at least 12 weeks post surgery.
• Commence heavier household activities as tolerated, such as sweeping and gentle mopping of the floor, wiping over the bathroom (avoid scrubbing), and hosing off the patio. Avoid vacuuming.
• Start attending your cardiac rehabilitation program.

Weeks 7 and 8 at home
• Drive your car for longer periods (if you have been approved to drive by your GP)
• Gradually and cautiously increase the weights of items you lift as tolerated. Remember to keep the load close to your body, keep your elbows in and stop if you experience pain or discomfort.
• Resume moderate weight bearing through your arms.
• Continue to walk regularly.
• Wash your car in stages, as comfortable, with rest breaks.
• Walk the dog – provided minimal pull to lead.
• Gradually and cautiously return to all household activities such as vacuuming, hanging out heavy laundry, cleaning the bathroom and changing bed linen. Be sure to stop if you experience pain or discomfort.
• Commence mowing the lawn in small sections. Have someone start the mower for you and empty the catcher.

Weeks 9, 10 and 11 at home
• Continue to upgrade all activities in time and effort.
• Continue to gradually increase the weight of items being lifted as tolerated. Remember to keep the load close to your body, keep your elbows in and stop if you experience pain or discomfort.

Week 12 at home
• Upgrade almost all activities to normal, providing you are pain free while doing the task.
• Discuss with your doctor before returning to those activities that were previously a part of your lifestyle, and may be considered high stress to your sternum, including swimming, tennis, golf, cycling, chopping wood, game fishing, and the lifting of heavy weights.
Exercises recommended by the physiotherapist

Aim of exercises
• To ease or prevent back, neck and shoulder pain and stiffness.
• Improve your breathing pattern and keep your lungs clear.
• Improve your stamina, making your normal daily activities easier.
• To reduce your risk factors for coronary artery disease.

What YOU will need to do while you are in hospital
• Regularly every day: Cough, change position in bed and sit out of bed. Do not lie on your side for approximately 6 weeks after surgery.
• Each hour: Do breathing exercises 10 times.
• 3 to 4 times each day: Do arm and trunk exercises.
• 3 to 6 times each day: Walk in the corridor.
• Every day: Increase your walking distance and gradually increase your speed.
• Sit out of bed for all meals.

After you return home
• Continue these exercises for 4 to 6 weeks or until your chest feels back to normal. If you wish you can permanently incorporate them into your normal exercise routine.
• Add in upper limb strengthening exercises 4 weeks after your operation - see page 15 for more details.
• Continue walking regularly - see page 15 to 16.
• If you experience shoulder and neck pain which has not resolved after 6 weeks, tell your GP and you may be referred to a physiotherapist.
• Stop the exercises if you get excessive pain or shortness of breath while exercising, and seek medical advice.

Other forms of exercise
If you are interested in other forms of exercise, for example swimming, cycling or using fitness equipment, discuss these with your physiotherapist or doctor. Swimming can usually be recommenced once your wounds are healed. However, it is recommended that you use stairs or a ladder to enter or exit the pool until 3 months after your surgery, to allow healing of the chest bone.

A complete recovery from open heart surgery usually takes 12 to 20 weeks. You should gradually return to your usual leisure and work activities during this time.

Stair climbing
This is a test performed with the physiotherapist prior to discharge. It is designed to give you confidence to walk up and down stairs that you may encounter in your daily activities. Stairs are not meant to be included in your exercise program.

At home it is important to remember that climbing stairs requires more energy than walking. Therefore, take your time and climb the stairs slowly. If you become tired, short of breath, or dizzy - SIT DOWN and REST. If you have a bedroom upstairs there is no need to change where you sleep, but initially it may be less tiring if you organise your day so that you use the stairs less frequently.
Exercises - where to start

You will start these exercises after your surgery.
Position yourself either:
SITTING - seated well back in the chair with feet flat on the floor, or
STANDING - with feet slightly apart.

Posture
After cardiac surgery, patients often have rounded shoulders and stooped posture. Check your posture in a mirror and ask your family/friends to check you daily.
- Sit or stand up straight
- Stretch the crown of your head towards the ceiling
- Lift your sternum up and out
- Keep your shoulders relaxed but back
- Keep your back straight and tummy tucked in
- Keep your chin tucked in.

Breathing exercises
- Take a deep breath at a moderate rate, allowing the air to swell your ribs out at the sides
- Hold, trying to breathe in a bit more for 2 to 3 seconds
- Relax as you breathe out.

Using your incentive spirometer, breathe in slowly and as deeply as possible. The indicator should be in the blue outlined area – the ‘happy face’
- Hold your breath for 3 to 5 seconds
- Relax as you breathe out
- Rest for a few seconds
- **Repeat 10 times every hour when you are awake**
  - If you feel the need to cough, support your incision by crossing your arms across your chest in a “self-hug”. You are aiming to hold on to either side of your rib cage. Take a large breath in and have a strong cough. If you are unable to hold your chest this way, you may hold a rolled towel or small pillow firmly against the front of your chest.

Circulation
Lying on your back in bed:
- Pump your feet up and down
- Draw circles with your feet without lifting your heels off the bed

- Bend one leg, sliding it up the bed
- Slide it down again
- Repeat 5 times
- Now do the other leg 5 times
Exercises

Shoulder and trunk exercises
Repeat exercises about 5 times EACH. Gradually increase the shoulder and trunk exercises by 3 to 5 repetitions twice a week. Maximum number 20.

Start with arms by your sides:
- Raise both arms up in front of you and lower
- Take a deep breath as you take the arms up and breathe out as you lower them for the first 5 repetitions
- Repeat with arms out to the side.

With hands on your shoulders:
- Circle elbows forward and backwards.

With hands on your shoulders:
- Reach your elbows down to one side and then to the other
- If standing, you can reach your hand down towards one of your knees and then the other.

With your arms resting by your sides:
- Shrug your shoulders up towards your ears and relax
- Now circle your shoulders forward, then backward
- Relax.

With hands on your shoulders:
Bring elbows together in front of your chest, then back behind your chest, bracing your shoulders.

Twist your trunk around to the right ensuring you follow through with your head and neck
Repeat to the left.
Exercises

Neck exercises
• Look up to the ceiling and then put your chin on your chest.

• Turn your head to one side and then to the other.

• Lean your head so that one of your ears moves towards your shoulder.
• Repeat to the other side.

Forearm exercises (RADIAL ARTERY GRAFT SURGERY ONLY)
• Start with your arm by your side
• Bend your hand up to your shoulder and straighten it out again.

• With your elbow bent at a right angle to your body turn your forearm over so your palm is facing up and then over so that your palm is facing down.

• With your elbow bent at a right angle to your body, bend your wrist down, and now bring your hand and fingers upwards, stretching gently.

• Close your hand into a fist and then stretch all your fingers open.
Exercises

Upper limb strengthening - (4 weeks after surgery)
At about 4 weeks after your operation you can start doing the following exercises to improve the strength in your arms and chest. To begin with, repeat the exercises 3 to 5 times each. Gradually increase the number of exercises by 3 to 5 repetitions twice a week - Maximum number is 20.

- Stand at arms length from a wall
- Place your hands on the wall at shoulder level
- Slowly lower your body to the wall and then push away
- If you need to strain to push away, move closer to the wall.

- In a standing position, with a 1 to 2kg weight in your hand, bend your hand up to your shoulder and then raise the weight above your head.

- Lying on your back, arms by your side, with a 1 to 2kg weight in your hand, bend your elbow to 90 degrees
- Now reach up to the ceiling by straightening your elbow. (Use a bag of rice or a water bottle for a weight).

Walking program

After cardiac surgery it is important to gradually build up your physical fitness by some form of regular whole body exercise. Walking is believed to be the best initial exercise when recovering from surgery. WALKING – MAKE IT A HABIT OF A LIFETIME!

By end of Week number: (count weeks from the day of your surgery)

<table>
<thead>
<tr>
<th>Wk no. after surgery</th>
<th>Distance</th>
<th>Time (minutes)</th>
<th>No. of times per day</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (on getting home)</td>
<td>200 – 300 m</td>
<td>5</td>
<td>2 - 3</td>
</tr>
<tr>
<td>2</td>
<td>500 – 600 m</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>1 km</td>
<td>15</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>1.5 km</td>
<td>20</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>2 km</td>
<td>25</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>2.5 km</td>
<td>30</td>
<td>1</td>
</tr>
</tbody>
</table>
Walking program

Start Here
Start by walking 3 to 5 minutes in the hospital corridor. If you get short of breath, REST and when you have recovered, recommence your walk at a slower pace.

Next, Upgrade
Walking at the same pace, gradually increase the time you walk for. This could be done as 3 ten minute walks.

Now Longer
Aim to build up to a total of 30 minutes of walking every day.

Challenge Yourself
Walk on the flat to start with, along the street, park, verandah or hallway. As walking becomes easier, gradually include hills.

Maintain Your Fitness
As you become fitter try to increase the distance and the pace of your walk while maintaining the same 30 minute time period.

Safety rules for walking
- Walk at a normal walking pace ensuring that you are able to talk comfortably throughout. If you can’t - slow down. STOP and REST if you become excessively short of breath or tired. Then start again at a slower pace. See your GP if these feelings do not go away.
- The National Heart Foundation recommends that most people walk a minimum of 30 minutes each day, on most days of the week.
- Not everyone will be able to reach 30 minutes walking - the amount depends on many factors including your age and general health. Your GP or physiotherapist will advise you about how much walking is appropriate for you.
- Wear comfortable, loose fitting clothes that are suitable to the climate. Wear shoes that support and protect your feet and minimise slipping - for example, sandshoes or sneakers.
- Do not walk or exercise until 1 to 2 hours after meals.
- Walk in the cooler parts of the day.
- Drink water before and after your walk, and during if need be.

Other walking programs
- National Heart Foundation – Just Walk It Program - 1300 362 787
- Brisbane City Council – free ‘Gonewalking’ program in many locations (07) 3403 8888
- Check your local council, hospital or community health centre for walking programs
- Ask your GP or check your shopping centre information directory.

Discuss any exercise program with your GP before starting.
Help us find cures and save lives

Breakthroughs in medical research are rare and take significant time and effort. The Prince Charles Hospital is Australia’s largest cardiac service and a world-renowned centre for research.

The dedicated researchers at The Prince Charles Hospital are doctors, nurses, allied health professionals and scientists. They balance busy work and family life with their desire to find cures for some of the most debilitating illnesses facing Queenslanders.

The Prince Charles Hospital Foundation is the charity which supports research at your hospital, including providing funding for projects by experienced researchers as well as fostering the next generation of novice researchers. Our generous donors support research to change the lives of people with heart failure, lung cancer, cystic fibrosis, degraded joints, asthma and mental illness, and unwell husbands, children, mothers, wives and grandfathers.

Our Patron is His Royal Highness Prince Charles. We are governed by a Board of Directors drawn from the corporate community.

The Foundation raises money to find cures and save lives through the Breeze Café, corporate partnerships, fundraising events such as selling the iconic Ekka strawberry sundaes, and through bequests and donations.

Donations to The Prince Charles Hospital Foundation are tax deductible. We offset our administrative costs with our commercial activities such as running the Breeze Café and catering service, so that your donation is dedicated to research.

If you would like to make a donation or find out more:

- Call us on 3139 4636
- Email info@tpchfoundation.org.au
- Write or visit us at Level 1, TPCH Admin Building, 627 Rode Rd, Chermside 4032
- Or donate online at www.tpchfoundation.org.au