

# TOTAL HIP REPLACEMENT

## PATIENT INFORMATION

This booklet has been designed to give you a basic understanding of a Total Hip Replacement operation. This includes pre and post-operative management and the importance of your physiotherapy program in achieving an optimal outcome. The information contained in this document is a general guide only. It does not take into account your individual circumstances and needs. Your treating surgeon will assess you individually at every stage of your care.

This booklet was developed in consultation with orthopaedic surgeons, Nursing staff, Physiotherapists and Patients of Wangaratta Private Hospital.

## INTRODUCTION

With advancing age, many people experience the pain and stiffness associated with arthritis. There are various forms of arthritis, and the effects on different individuals can vary greatly. Arthritis will always affect joints, such as fingers, wrists, elbows, ankles, knees and hips. When the larger joints, knees and hips are involved, it can become very painful and difficult to move. Small simple tasks can become mammoth tasks once arthritis is a factor. To help overcome the pain and disability of arthritis, total joint replacement surgery is performed. During this surgery, the old diseased joint is removed and a new man made prosthesis, or joint, is inserted.

This booklet explains what happens before, during and after a total hip joint replacement. It is designed to prepare you and your family for the surgery, guide you through rehabilitation choices and facilitate your return to home.

## BEFORE SURGERY

Once you have seen your Orthopaedic Surgeon and the decision to have a Total Hip Replacement has been made, other preparations can begin.

An anaesthetist will contact you to arrange an appointment for you prior to your admission. The Anaesthetist will assess you and discuss the pain relieving techniques that will be used during the operation and the post-operative period. The anaesthetist will also give you a referral to have an ECG and some blood tests.

You will also be contacted by the Pre-admission nurse who will discuss the admission process and your needs whilst a patient in hospital.

### If you take any of the following medication,

- **Blood thinning medication (eg: Aspirin, Plavix, Clopidogrel, Warfarin)**
- **NSAIDS (non-steroidal anti-inflammatory drugs) or**
- **Hormone replacement therapy**
- **Medication for Diabetes control**

**you will need to check with your doctor or anaesthetist when to stop taking these tablets before your operation.**

Please ensure that you notify your doctors rooms if you become ill with a cold / flu, nausea and vomiting, or urinary tract infections at any stage prior to your planned admission date. It is also important to notify your surgeon if you have any cuts, scrapes or bruises to your operative leg prior to your operation.

Smoking should be ceased 2 weeks prior to your surgery.

## OCCUPATIONAL THERAPY

A home visit by the Occupational Therapist may be required to assess the physical layout of your home. They can then give advice and organise equipment, which will enable you to return safely to your home. Your particular needs should be discussed with our Orthopaedic Nurses in the surgeons' rooms, or with our Pre-admission nurse.

## WHAT SHOULD I DO BEFORE MY ADMISSION TO HOSPITAL

It is essential that you complete and return the hospital admission paperwork at least 7 days before your admission to hospital. The Pre-admission nurse will contact you 1 – 4 days prior to your admission to discuss the admission process, and answer any other questions you may have.

### Some handy tips from people who have already undergone Hip Replacement surgery include –

- Re-arrange your cupboards in the kitchen to allow commonly used items to be reached without having to bend
- Stock up the freezer with pre-cooked meals
- Stock up the cupboards
- To avoid bending or twisting, make sure that your toilet paper, shampoo etc are suitably located in the bathroom
- Soap tied on a stocking attached to the shower tap or “soap on a rope” prevents dropping the soap to the shower floor
- Place the clothes you will wear on your return to home in the top drawers and your shoes at the front of your wardrobe
- Raise your bed to a height so that you don't have to lower yourself too far to sit down. This may be achieved by placing another firm mattress on top.
- Move any regularly used items to waist height
- Remove any rugs from the floor (rolled up and pushed to the side wall) as these are easy to catch your feet on and fall
- Arrange high places to sit
- Remove all objects that you may be likely to trip over
- Check any steps that you may use to enter your home – most people manage steps, but rails may be required to assist

With a little forward planning, and help from family and friends, you should be able to manage most normal activities once you are discharged from hospital.

### ADMISSION DAY

On the day you come to hospital, please remember to bring

- All x-rays/ scans (CT/MRI) relevant to the part of your body being operated on
- All your current medications in their original boxes. Bring sufficient medication for your hospital stay and repeat scripts, if you have them
- Your personal toiletries, including soap, shampoo, toothbrush, toothpaste and shaving needs.
- Comfortable secure footwear (if you wish to wear slippers, they must not be slip ons or scuffs. However, as your operated foot may swell a little, they should not be too tight)
- Comfortable day clothes (track suit / leisure suit) for doing your daily physiotherapy
- Your usual night attire (boxer shorts and a singlet are suitable if this is what you would normally wear). Please ensure that all clothing (pyjamas, nighties, dressing gowns) are at least three inches above the ground
- Walking sticks (if you have them)
- This booklet

Please remember to leave all your valuables at home. The hospital assumes no responsibility for valuables including jewellery or money that is misplaced.

You will be admitted to the hospital the evening prior or the day of your surgery. On the morning of your surgery, the nurses will take your vital signs (temperature, blood pressure etc.), and ask you to have a shower with a special solution, prior to assisting you into a hospital gown. After your shower, you will get into bed with a special warming blanket which helps to maintain your body temperature before going to theatre (which is generally a cold environment) - it is important to tell the nursing staff if you feel too hot while this blanket is turned on so they can adjust the temperature.

The Anaesthetist will see you and discuss his/her role in your operation and what type of anaesthetic you will have. Sometimes the anaesthetist will prescribe some medication (a pre-med) to be given to you before you go to theatre.

## SURGERY

The operation begins after you are safely asleep, by removing the old hip joint. The surgeon then cleans the area, ready to receive the new hip pieces. As the hip is a ball and socket type of joint, there are two pieces that must be inserted. The stem and ball is placed firmly into the long bone of the leg, called the femur. A cup or socket is placed into the acetabulum, which is part of the pelvis. The ball then snugly fits into the cup or socket producing your new hip joint.

Below are illustrations of a normal, healthy hip; a hip demonstrating arthritic changes; and a hip with a total hip replacement in place.



Healthy Hip

Arthritic Hip

Total Hip Replacement

On completion of the operation, the surgeon may leave a drain tube inside your thigh which connects to a drainage bottle. This carries away excess fluid and is removed after two days. The blood collected in the bag in the first 6 hours will be reinfused to you.

Immediately after surgery you will stay in recovery (a room adjacent to theatre) until you are fully awake. Normally it will be two to three hours before you return to the ward.

When you wake up, you will find a triangular box, called a Charnley Pillow between your legs, stabilising your new hip. There will also be a drip in your arm to replace fluids and give you pain medication.

You will spend the first 24 hours after your surgery in the High Dependency Unit (HDU) where you will be connected to a monitor for closer observation. As this is a four bed unit, visiting is restricted to your immediate family – flowers are also restricted in this area and mobile phones are not to be used as they interfere with monitoring equipment.

A catheter will be inserted into your bladder to allow closer monitoring of your fluid status after your operation. This is usually removed the next day.

Depending on your age and your previous medical history, you may also have an arterial line in your arm to enable the doctors and nursing staff to monitor you more closely.

Depending on your surgeon's preference, you may be assisted to stand beside the bed on the day of your operation.

Four hours after the operation, you may drink some fluids. The nursing staff will give you crushed ice before starting you with something to drink. You may have a very light diet four hours after you return to HDU. Be sure to tell the nursing staff the minute you feel any nausea as they can give you medication for this through your intravenous drip.

You may have intermittent compression devices attached to your legs to assist with the prevention of blood clots in your legs. Tubigrip, used as a compression stocking, may be applied to your leg during the day. This must not be folded over itself at any time as a tourniquet affect can occur.

## **PAIN RELIEF**

The most commonly used pain relief methods are

- Intrathecal Analgesia – the introduction of small amounts of morphine into the spinal fluid as part of spinal anaesthesia
- Via the intravenous drip or via a patient controlled analgesia pump
- Oral medication

As you are aware, all surgery will involve some amount of discomfort or pain. The level of discomfort or pain is different with each individual and with each type of surgery. We aim to keep your level of discomfort to a minimum.

We will ask you regularly to rate your pain on a scale of 0 to 10, with 0 being no pain, and 10 being the worse pain you have ever had. This allows the nursing staff to determine the type/strength of medication they will give you. You will be given medications regularly for pain, in many different combinations. When taken regularly, pain medication allows you to exercise and move more freely.

**Don't wait for the pain to ease, it doesn't.** It is important to notify the nursing staff if you have any pain immediately, as it is easier to control when the pain score is small.

## **AFTER SURGERY**

Normally you will stay in bed for the day of the operation, lying on your back, with the triangular pillow still between your legs.

The Physiotherapist will visit you once a day. On the first day they will give you bed exercises. If your surgeon allows and you are feeling well enough, they will also teach you to stand with a walking frame and sit out of bed on Day 1. On the second day they demonstrate further walking with a frame out of your room. From Day 2 onwards you will attend the Gym daily for further exercise and walking programs. Depending on your situation, you are likely to learn to walk with walking sticks before you are discharged.

Nursing staff will teach you how to move in bed whilst keeping your new hip in correct alignment. This enables pressure care and hygiene needs to be met when in bed.

Sometimes, on day three or four, it is not unusual to feel a little down or depressed. Many patients have expressed this feeling after major orthopaedic operations. Contributing factors to this include:

- ◆ anxiety about the operation
- ◆ difficulty sleeping in an unfamiliar environment
- ◆ exhaustion from exercises and visitors
- ◆ relief that the operation is over.

It is a normal feeling, and one that will subside over a few days.

## **REHABILITATION**

Preferably you will achieve a physical status that will allow you to be discharged directly home with specific equipment and some additional support. However, depending on your self-care ability, home situation and support network, rehabilitation may be required.

Rehabilitation can be provided at Wangaratta Private Hospital. Your particular needs will be monitored regularly by your Surgeon, Nurses and your Physiotherapist.

## PHYSIOTHERAPY

The role of the Physiotherapist with patients who have undergone hip surgery is to educate and issue exercises aiming to regain hip range of movement and strength, and help avoid unnecessary complications. The Physiotherapist will also teach you how to get in and out of bed and mobilise, and advise you on how much you can bend your hip and how much weight you are allowed to put through your legs.

### When should you start?

To minimise complications, it is recommended that you start exercising the day after your surgery (unless your doctor recommends otherwise).

### How much exercise is too much?

It is important for you to have adequate pain relief to enable you to perform the exercises. You may find the exercises uncomfortable at first; keep trying, but do not overdo it. If you feel pain, stop and relax. If there is pain in your hip after doing the exercises, do LESS the next time. If you are not able to perform the exercises due to pain, you need to inform the Doctors, Nurses or Physiotherapist so your analgesic requirements can be reviewed.

### How often do you exercise?

- The exercises will take only about 10 minutes. Try to exercise three times per day.
- Each exercise should be done five to ten (5-10) times to start with and gradually increased up to fifteen to twenty (15-20) times.

Your wound has not yet healed. The exercises should be done gently, and should not place too much stress or stretch on the wound.

## PRECAUTIONS

Following your total hip replacement, it is important to maintain correct alignment of your new hip. To do this there are two main rules:

- **Do not bend your hip greater than 90°**
  - always sit in a high chair with arm rests
  - don't pick things up from the floor
  - don't lean forward when sitting
  - don't allow your knees to be higher than your hips.
- **Do not take your leg across your body**
  - sleep on your back for the first six weeks.
  - don't cross your legs
  - when lying on your side, place a pillow between your legs
  - don't rotate or turn your leg

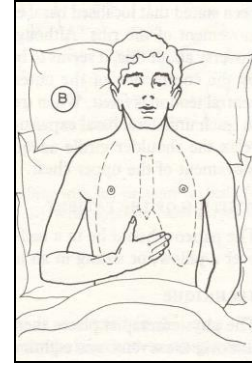
**EXERCISE PROGRAM**

**PHASE 1** –to commence prior to getting out of bed

**Every Hour:**

1. **Breathing exercises**

Take a slow, deep breath.  
Relax.  
Repeat 6 times.  
Have a strong cough.



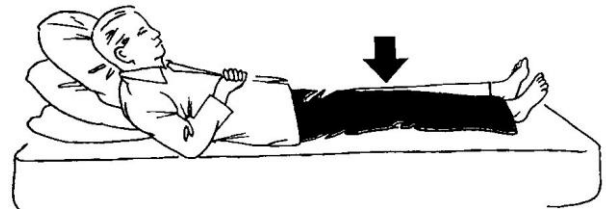
2. **Foot and Ankle pumps**

Move your feet firmly up and down to pump the ankles.  
Repeat 20 times.



3. **Thigh tightening**

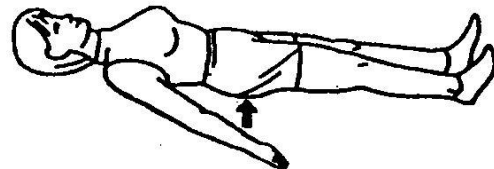
Push the back of your knee into the bed and tighten thigh muscle.  
Hold 3 seconds  
*Repeat 10 -15 times.*



4. **Buttock tightening**

With your legs straight, squeeze your bottom muscles together.  
Hold 3 seconds.

*Repeat 10 -15 times*



**PHASE II** –to commence on the day you get out of bed

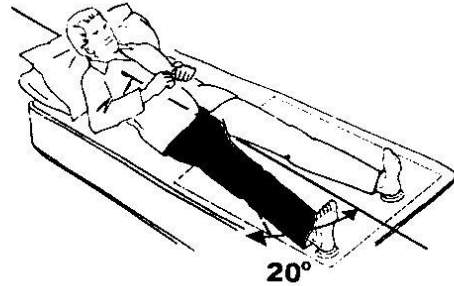
**Bed exercises:**

**Three Times a Day**

**1. Hip Side Glide**

Slide your leg straight out to the side. Make sure toes point towards the ceiling.

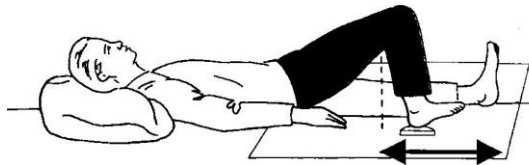
*Repeat 10 - 15 times*



**2. Hip and Knee bends on board**

Gently slide your heel towards your bottom (bending the hip and knee). Your knee should not roll out. Return leg to starting position.

*Repeat 10 - 15 times*

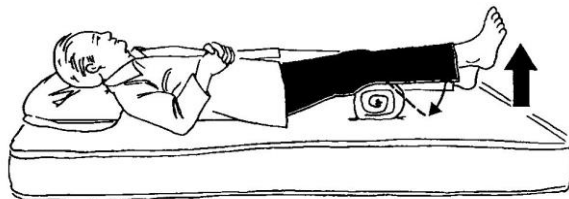


**3. Quads over a roll**

With a firm roll (tin) positioned under your knee, lift your heel to straighten the knee as much as possible. The back of your knee must stay firmly on the roll, as your heel is raised.

Hold 3 seconds.

*Repeat 10 - 15 times*

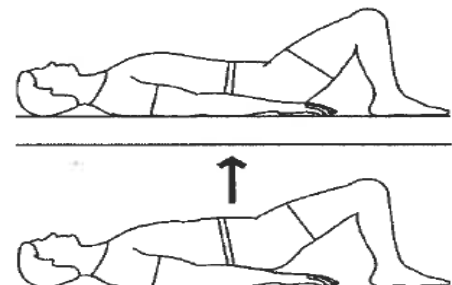


**4. Bridging**

Bend up the un-operated leg, and push down through it to help lift your bottom up off the bed.

Hold 3 seconds.

*Repeat 10 - 15 times*





**EXERCISE PROGRAM**

**PHASE III** -as you improve, your Physiotherapist will progress you to standing exercises

**Standing Exercises:**

*Two Times a Day*

**CONTINUE WITH PHASE II EXERCISES TWICE DAILY**

**Stand with your hands on a table or rail for balance:**

**1. Hip Extension Swings**

Keep trunk straight and take operated leg directly back. Keep your operated leg as straight as you can, tightening the buttocks. Hold 3 seconds, then return to starting position.

Repeat 10 - 15 times



**2. Hip Extension Swings**

Keep toes pointing forward and in line with the other foot. Move your operated leg out to the side, as far as comfortable. Then return to starting position.

Repeat 10 - 15 times



**3. Sideways walking**

Using a bench or table for support practice walking sideways in both directions. Face the bench and use your hands for balance.



**4. Thigh raises**

Lift your knee of the operated leg upward. Keep toes and knee pointing forward.

Your thigh should not reach the horizontal position. Hold 5 seconds, then return to starting position.

**5. Standing Knee bends**

Stand straight and bend the knee of your operated leg, taking your heel towards your bottom. Hold 5 seconds, then return to starting position.



**HINTS FOR MOVING – when getting in / out of bed**

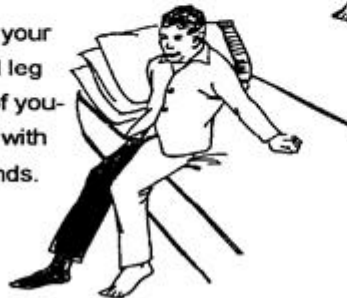
Move to the edge of the bed  
 operated leg side



Leaning back on your hands - swivel.



Keeping your operated leg in front of you - push up with your hands.



Always have your aides nearby.



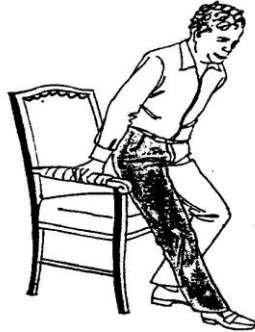
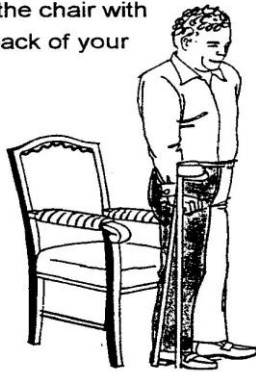
Your Physiotherapist will advise you on how much weight can be put through the operated leg whilst standing.

**WHEN DO I GO HOME?**

Your surgeon, the nurses, the physiotherapist, your family and yourself will be involved in the discussion of when you are ready to go home or to rehabilitation. Usually your stay will be 5 to 6 days in hospital, and we recommend that all patients prepare for discharge in this time span.

**When getting in and out of chairs...**

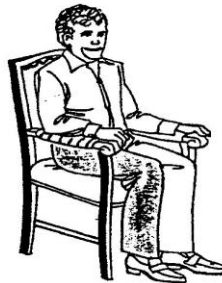
Feel the chair with  
the back of your  
legs



Keep  
operated  
leg in  
front  
of you

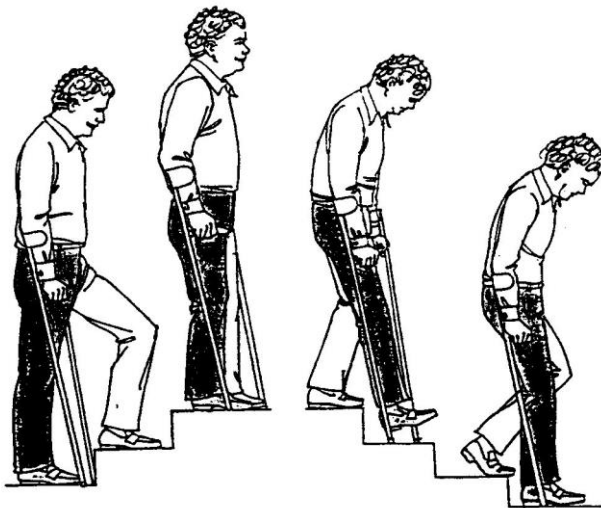


Lean back and use your arms  
to lower you gently into chair



Keep back straight

**When going up and down stairs...**



UP : Good leg, operated leg then frame/crutches.

DOWN : Frame/crutches, operated leg the good leg.



## RECOMMENDATIONS

- Always wear low-heeled supportive shoes with a non-slip sole.
- Walk every day. Remember, frequent short walks are better than one long walk.
- Be careful when walking with crutches or frame in areas where it may be wet.
- Showering is safer than taking a bath. Try using 'soap on a rope', or put a cake of soap in an old stocking, and tie one end to the tap.
- Where possible, choose firm, level paths to walk on.
- Continue wearing your compression stocking for 6 weeks. This can be removed at night and washed, and replaced in the morning. Ensure that it is applied to the limb straight with no wrinkles, and is not folded over as this can lead to constriction
- Any exercise-related discomfort should not be lasting or aggravating. If this is the case, contact your physiotherapist for advice.
- You may require some medication for pain control when you first go home especially before exercising and prior to settling at night

## RECREATION

- Aquatic Physiotherapy is an excellent activity once the wound is completely healed. Do not do breaststroke or sidestroke.
- Bowls can start after 8 - 12 weeks. It is best with delivery on the same side as the hip, with operated leg extended behind.
- Golf can start at 8 - 12 weeks, just remember to avoid excessive bending to pick up balls.
- Tennis - ask your surgeon first, but it may be possible in moderation after 3 months.
- When travelling, remember also that the metal in your hip can activate airport security devices. Airport staff are usually understanding about this.
- Your usual pattern of sexual activity may be resumed when your wound is healed unless your Surgeon advises otherwise. Let your partner take the active role. The most stable position for your hip is on your back, with hips and legs apart.

## LIFESTYLE

- A shower recess is preferable to a bath. Stand with your feet eight to twelve inches apart. If unsteady, use a high shower chair or have a grab rail installed.
- Do not attempt to bend down below your knees. Use a long-handled brush to reach your feet for both washing and drying.
- Use long handled aids to pick up objects from the floor.
- Do not kneel to scrub floors or climb to clean windows or reach high cupboards.
- Avoid vacuuming under beds or tables.
- Space your tasks and take frequent rests
- Use your family members or home help.

## IN THE CAR

- Push the front seat back as far as it will go and tilt it backwards
- Use a cushion if the seat is too low
- Step off the edge of the curb before sitting in the car – lower your bottom in first using the support of the car to lower yourself; remember to keep your operated leg out in front of you with your knee straight.

- Lean back into a semi-lying position and slide backwards towards the driver's seat. Only when you are fully reclined, is it safe for you to bend your operated hip to swing it carefully into the car. Whilst bringing your operated leg into the car you will need to swivel your bottom slowly in the seat to get into a safe position. Extend the leg immediately so that your knee is lower than your hip.
- Do not sit upright in the car and do not sit in the back seat!
- Reverse the procedure to get out

### **FOLLOW-UP**

When you leave hospital you will be given an appointment to see your surgeon approximately 6 weeks after your surgery. Remember to take your x-rays with you. Your Surgeon will be able to confirm what you can and can't do at this appointment.

You may need ongoing physiotherapy as an outpatient to ensure you gain maximal results from your new hip. Discuss this with the Physiotherapist when in hospital.

### **EQUIPMENT AIDS**

Equipment aids that you may need on discharge home can be hired or purchased through Wangaratta Pharmacy. The Physiotherapist will recommend the equipment required for your discharge which could include

- Walking aids – frame, forearm crutches or walking sticks
- High sturdy chairs with arm rests
- Over toilet seats
- Pick up stick
- Possibly a shower chair

Should you have them already at home, please bring your own frame / sticks into hospital so the Physiotherapist can check the height for you.

### **POST ACUTE CARE SERVICES**

If you are elderly or live alone, you may require Home Help and / or Meals on Wheels as you will be unable to perform some basic household duties (eg: making your bed, vacuuming, mowing the lawn). As there are often waiting lists, we suggest that you contact your local council to obtain further information on the services available within your area. These services will be up to you and / or your family to arrange.

The need for District Nursing or Rehabilitation will be assessed by the hospital team, and arrangements for ongoing care made as required in consultation with you and your family.

### **EXPECTATIONS FOLLOWING A TOTAL HIP REPLACEMENT**

The table on the following page is used as a guide to advise patients undergoing a total hip replacement of the key milestones to be achieved during their stay. The Surgeons, Physiotherapists and nursing staff will continue to review your progress during your stay. There may be variations to this program, depending on the type of surgery you have

**EXPECTED PATIENT OUTCOMES FOLLOWING A TOTAL HIP REPLACEMENT**

**Phase 1: Pre and Post operation**

- ◆ After the procedure has been explained, you can state and understanding of the usual pre and post operative care routines, the surgery and its effects
- ◆ Your pain will be in a range that is OK with you, both before and after the operation
- ◆ You will be able to tolerate fluids post operatively, then progress to food the next morning
- ◆ The Doctors, Nurses and Physiotherapists will review your progress

**Phase 2: Post-operative until ready for discharge**

- ◆ The Doctors, Nurses and Physiotherapists will continue to review your progress and once you are ready , will suggest follow-up care, which includes follow-up appointments
- ◆ The Physiotherapist and nursing staff will help you to walk until you can do it by yourself

**Phase 3: Discharge**

- ◆ When you are ready for discharge, equipment will be organised and medications arranged

Key Milestones following a Total Hip Replacement	Pre-op	Op Day	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
Prepared for surgery	√								
Transferred to theatre	√								
Admitted to HDU		√							
Blood from drain tube reinfused		√							
Not feeling sick or in pain		√	√	√	√	√			
Medication given strictly to prevent pain		√	√	√	√				
Chanley pillow between legs when in bed		√	√	√	√	√	√	√	√
Assisted with showering			√	√	√				
Compression device on legs while in bed		√	√	√					
Compression stocking applied to leg		√	√	√	√	√	√	√	√
Drain tube and Urinary catheter removed				√					
Stood out of bed (depending on surgeon preference)			√	√					
Assisted to get in / out of bed		√	√	√					
Walking 5 metres with frame and supervision			√	√					
Phase 1 exercises hourly while awake			√	√					
Sitting out of bed for all meals			√	√	√	√	√	√	√
Phase II exercises practiced twice a day			√	√	√	√	√	√	√
Walking with frame 10 – 20 metres 3 times/day				√	√				
Walking to the toilet overnight				√	√	√			
Attended the gym with the Physiotherapist					√	√	√	√	√
Walking independently with frame for > 25 metres three times a day						√			
Commenced using forearm crutches / walking sticks with supervision						√			
Commenced Phase III exercises							√		
Using sticks / crutches without supervision								√	
Ready for discharge								√	√

Ticks represent where outcomes should occur / Shaded area represents where outcomes will continue