

Physiotherapy

following Total Knee Joint Replacement



**ST VINCENT'S
PRIVATE HOSPITAL**
NORTHSIDE

A FACILITY OF ST VINCENT'S HEALTH AUSTRALIA

This information is a general guide only.

Instructions and specific exercises may vary depending on your specific surgery and situation. Your surgeon or physiotherapist will inform you of any further instructions or limitations.

Please ask if there is anything you are unsure about.

Your physiotherapist: _____

Phone: 07 **3326 3000** Pager no. **0104**

Alternative contact: _____



Please contact your nurse if you require an interpreter.

Physiotherapy following Total Knee Joint Replacement

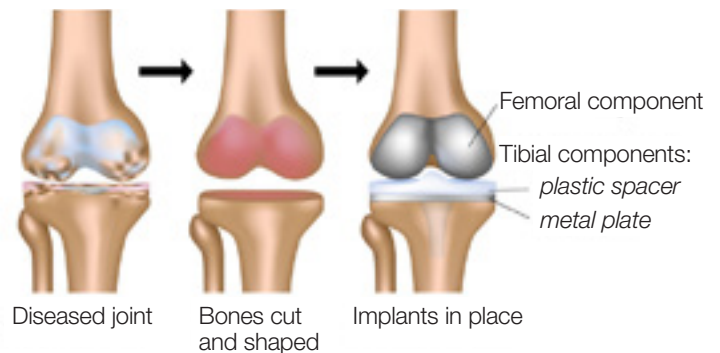
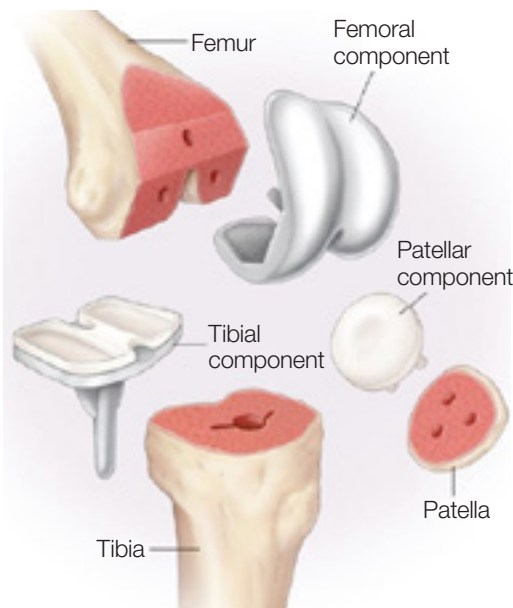
Welcome to St Vincent's Private Hospital Northside

Our Hospital's Orthopaedic Physiotherapy Team will work with you to regain normal function after your operation.

They will provide you with advice and a home exercise program to enable you to continue your rehabilitation at home.

Please take the time to read through the information in this booklet as it is relevant to your wellbeing and rehabilitation.

There is a Notes section at the back of this booklet for any questions you may wish to ask your physiotherapist.



Post-operative rules: *for your safety and care*

- Do not get up or walk without assistance from your nurse until you are informed that you are safe to do so.
- Wear your grip socks or a pair of closed-in shoes/slippers whenever you are walking.
- Do not sit for more than 30 minutes at a time to help prevent excessive swelling in your knee and leg.
- When lying in bed ensure your knee is completely straight at all times. Do not place pillows or towels under your knee or use the bed mechanics to bend the knee.



**Do not place pillows or towel rolls under your knee to sleep.
It is important your knee rests fully straight.**

General post-operative advice: *for your safety and care*

Analgesia

Coordinating your pain relief medication (analgesia) with physiotherapy is optimal for allowing you to participate well in physiotherapy.

Your nurse can inform you of what pain relief options are available to you. If you are on Patient Controlled Analgesia (PCA or 'pain button') it is encouraged that you press your button before we arrive. If you are on tablets, they are more effective when taken at least 30 minutes prior to physiotherapy.

You may wish to record your pain relief medications below and how often you are allowed them:

Swelling

Swelling around the knee is normal after your operation. Managing your swelling is important in the days following your surgery, as excessive swelling will cause more pain and limit your ability to progress.

We recommend that you limit sitting to a maximum of 30 minutes (sitting for meals is usually adequate), ice the knee frequently, lie as flat as possible when resting in bed, wear your stockings, and use foot/leg pumps as advised by your medical team when in bed.

Exercises: *immediate post-operative*

These exercises can be started on the day of your surgery and it is a good idea to practice them before.

● Relaxed deep breathing

- Relax your shoulders and take a slow, deep breath in.
- Hold for three (3) seconds, and then slowly breathe out.
- After five (5) deep breaths have a strong cough, using support if required to decrease the pain associated with coughing.
- Repeat hourly when awake for the first two (2) days after your surgery.



Circulation exercises: *for the prevention of blood clots*

You will have had the risk of Deep Vein Thrombosis (DVT) or blood clots explained to you by your surgeon prior to your operation.

There are a number of measures in place to reduce this risk while in hospital including:

- TED stockings on your legs
- Air pumps on your legs or feet if requested by your surgeon
- Anti-coagulation medication as prescribed by your surgeon
- Early mobilisation (walking as soon as possible).

As well as these measures, we encourage you to perform the following circulation exercises hourly when you are awake.

Foot and ankle pumps

- Move your feet up and down from the ankles.
- Repeat ten (10) times every hour when awake.
- Make sure that you aren't just wiggling your toes, but that your whole foot is moving up and down.



Thigh muscle (quadriceps) squeezes



- Straighten your knees and tighten your thigh muscles.
- Hold for five (5) seconds.
- Repeat ten (10) times every hour when awake.

Bottom squeezes



- Squeeze your buttocks (gluteals) gently together.
- Hold for 3-5 seconds.
- Repeat ten (10) times every hour when awake.

The knee joint is a hinge joint. It bends and straightens. When you walk it transfers your full body weight over your foot.

Therefore your exercises aim to:

1. Straighten your knee.
2. Bend your knee.
3. Strengthen your knee.

Exercises: *to straighten your knee*

● Straightening in standing



- Every time you stand up, straighten the knee fully by squeezing your thigh muscles and pushing your knee backwards.
- Repeat three (3) times prior to walking.

● Thigh muscle (quadriceps) squeezes



- Straighten your knees and tighten your thigh muscles.
- Hold for five (5) seconds.
- Repeat ten (10) times every hour when awake.

● Ankle roll



- Whilst lying in bed place your ankle over a rolled up towel as shown in the picture.
- You should feel a stretch behind the knee. Your physiotherapist will advise you as to how long to remain in this position. _____ minutes



- You may place a bag of ice on your knee during this stretch.

Exercises: *to bend your knee*

● Drop and dangle

- When getting out of bed try to spend a few minutes sitting on the edge of the bed bending the knee.
- Your thigh should be fully supported, and your focus should be on relaxing the thigh muscles so that gravity can allow your knee to slowly bend down.



● Sitting in chair



- Sit at the back of your chair with your knee bent as far as you can.
- Whilst keeping your foot on the floor, slide your bottom to the front of your chair, increasing the bend in your knee.
- Hold for five (5) seconds, then relax.
- Repeat three (3) times when sitting in your chair for meals.

● Knee bending with bedside table



- Sit in a chair with your foot on the rail of your bedside table.
- Pull the table towards you trying to bend your knee further each time.
- Repeat five (5) times each time you sit in a chair for a meal.

Exercises: *to bend your knee* (continued)

● Stand-to-sit bending exercise



- Sit in a chair and bend your knee as far as you can. Mark the position of your foot and the chair.
- Keeping your foot where it is, stand up pushing through your non-operated leg.
- Step back from your marker on the floor
- Slowly sit down increasing the bend in your knee.
- Repeat three (3) times, two (2) times a day.

Exercises: *to strengthen your knee*

● Straight leg raise



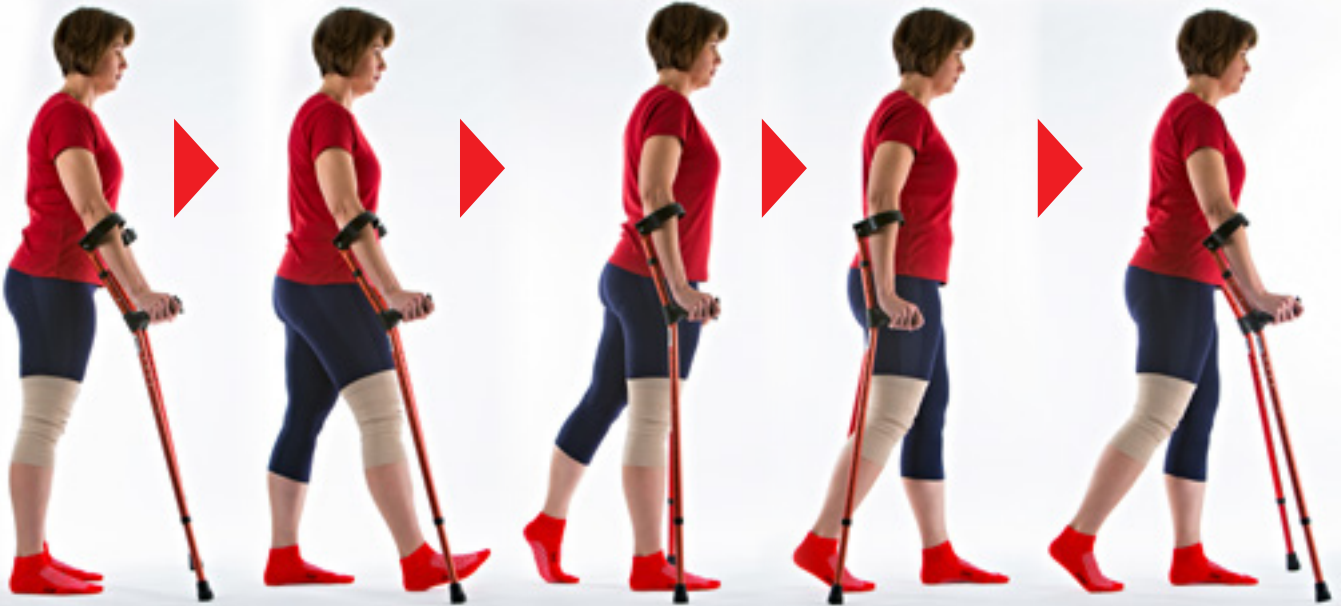
- Lie flat on the bed.
- Bring your toes up towards your head.
- Activate your quadriceps muscle by straightening your knee.
- Then lift your leg up into the air.
- Repeat five (5) times, two (2) times a day.

● Straightening in standing



- Every time you stand up, straighten the knee fully by squeezing your thigh muscles and pushing your knee backwards.
- Repeat three (3) times prior to walking.

Walking



Unless otherwise instructed, you will be encouraged to walk normally and regularly on your leg after your operation.

Initially you will walk with your Physiotherapist or nurse and a mobility aid. Your physiotherapist will progress you through different mobility aids and advise you as to when you are safe to walk by yourself.

A normal walking pattern involves a **stance phase** (i.e. when you stand on and transfer your body over your leg) and a **swing phase** (i.e. when you swing your leg through).

Here are some key points to help facilitate a normal walking pattern.

1. Walk with a heel-toe pattern.
2. When your heel strikes the ground, tighten the quadriceps muscles at the front of your thigh to straighten your knee.
Hold the knee straight while you transfer your weight forward over your foot.
3. Lift your heel first, to help bend your knee in preparation for swing phase. Your toes should be the last part of your foot to leave the floor.
4. Bend your knee through keeping your trunk upright.

Repeat this cycle.

Overview of your Hospital stay

Daily progression

This is a general guide only – your specific needs may alter your daily routine.

Day 0 (Day of your operation)

- Commence circulation exercises as soon as you are awake and alert enough to do so.
- Take five (5) big breaths in every hour to help your lungs recover from the anaesthetic.
- Depending on the time of your surgery, a physiotherapist may help you sit up and go for a short walk.

Day 1 (First day after your operation)

- Mostly spent resting in bed, icing your knee and concentrating on circulation and knee straightening exercises.
- Start walking short distances.
- See your physiotherapist twice.
- If able, sit on edge of bed or chair for lunch and dinner and do knee bending exercises.

Day 2

- See your physiotherapist twice – upgrade your mobility aid e.g. crutches.
- Sit in chair for all meals.
- Increase your walking distance.
- Continue with icing the knee and bed exercises.

Day 3

- See your physiotherapist twice.
- Increase independence and distance with walking. This is a practice day before you go home.
- Stairs assessment.
- Discharge assessment and review of home exercise program and advice.

Day 4

- Discharge to home or rehabilitation facility.

Discharge goals

Generally, you are ready for discharge when:

- You can get in and out of bed yourself, as well as shower and dress independently.
- You are eating and drinking well and have opened your bowels.
- You have achieved a 90 degrees bend in the knee and can lift your leg up off the bed whilst straight.
- You can walk well using crutches (or alternative mobility aid).
- You can go up and down a flight of stairs.
- You can do all of your exercises independently, 2-3 times per day.
- Your pain is well controlled with medication.

Home or rehabilitation

Some people will be able to achieve their discharge goals within 3-5 days and are ready to go home.

In general, if you are well enough to be home, it is better to be at home rather than in a hospital or rehabilitation hospital.

However, some people have complex medical conditions, or are living circumstances where they require a higher level of function to be safely discharged. If this applies to you a period of inpatient rehabilitation may be recommended.

Equipment for home

It is your responsibility to arrange equipment required at home prior to discharge.

Your physiotherapist will advise you on which mobility aid is best and can provide brochures with information about equipment. In addition to a mobility aid you may wish to consider the following.

Over toilet frame

Provides a raised toilet seat height as well as arm rests to help push up from. This makes it easier to get up and down, particularly if you are tall, have had both knees replaced, or your other knee is not very functional.

Transfer bench

Assists if you have a shower over bath set-up. The bench enables you to get in and out of the bath with ease as well as a place to sit whilst showering.

Please be aware that the on-site pharmacy only stocks crutches.

You will need to arrange any additional equipment from an alternative pharmacy or equipment supplier.

Local suppliers

Super Pharmacy Plus

621 Stafford Rd Stafford Q 4053

Phone: 07 **3355 3052**

Think Mobility

2037 Sandgate Rd Virginia Q 4014

Phone: **1300 881 968**

Walk on Wheels

260 Leitchs Rd Brendale Q 4500

Phone: **1300 766 266**

Safe use of crutches

Advice for placing weight through your operated leg

- Using crutches after the operation takes some pressure off the knee and helps to ensure you learn to walk without a limp. The idea is that you 'train' yourself to WALK NORMALLY using the crutches, so that you do not have a limp when you come off them.
- Often you can go onto using just one crutch (in the opposite hand to your operated leg) for short distances around the house. Continue to use the crutches for longer walks or if spending more time on your feet until you have no pain or limp or until your surgeon tells you.

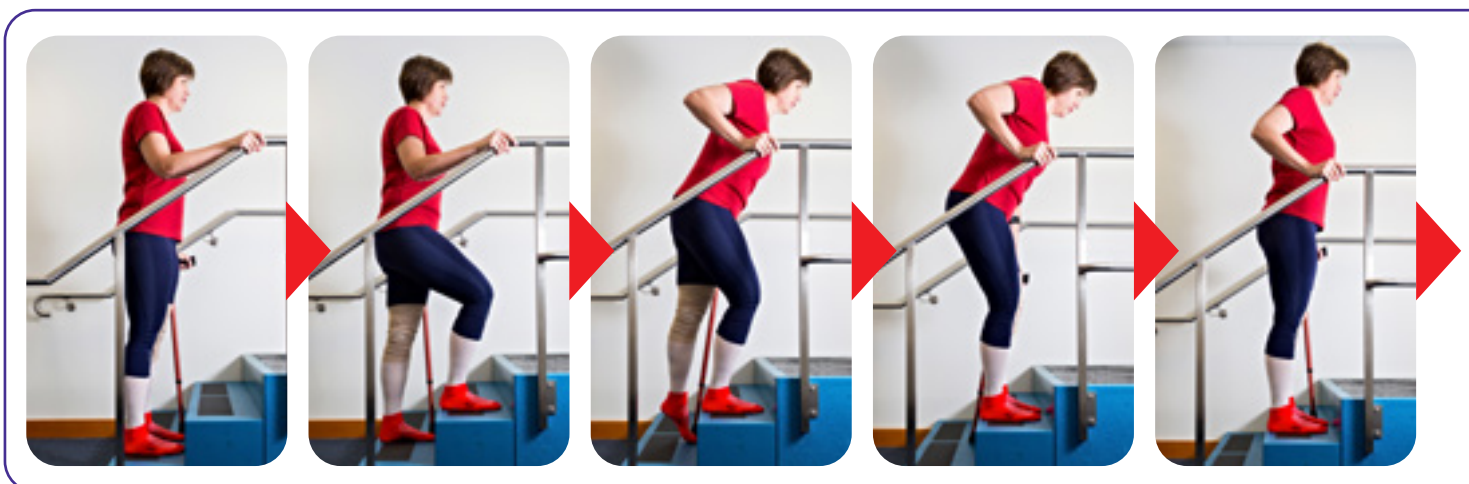
Precautions when using crutches

- Ensure crutches are the correct height for you. Your physiotherapist can check this whilst you are in hospital.
- Use appropriate footwear (no loose footwear).
- Check the rubber stoppers at the bottom of the crutches are not worn away or damaged.
- If walking outside in wet conditions take extra care, and don't rush. Ensure rubber stoppers are dry when entering a building. They can potentially slip on hard floors.

Advice for managing stairs when using crutches

When you are in hospital, your physiotherapist will demonstrate how to go up and down stairs using crutches and you will practice with the physiotherapist present. If you have a rail, use the rail instead of a crutch on that side.

- **Going up stairs:** Good leg first, sore leg next, crutches (*all onto the same step*).
- **Going down stairs:** Crutches first, sore leg next, good leg last (*all onto the same step*).



Frequently asked questions

Should I apply ice to my knee at home?

If indicated by increased pain or swelling, you can continue to ice your knee 3-4 times per day for at least six (6) weeks after surgery. This should be done for 10-20 minutes at a time. To ice, you can use bags filled with ice or two large gel packs wrapped in a pillow case or thin towel. Never apply ice directly to your skin.

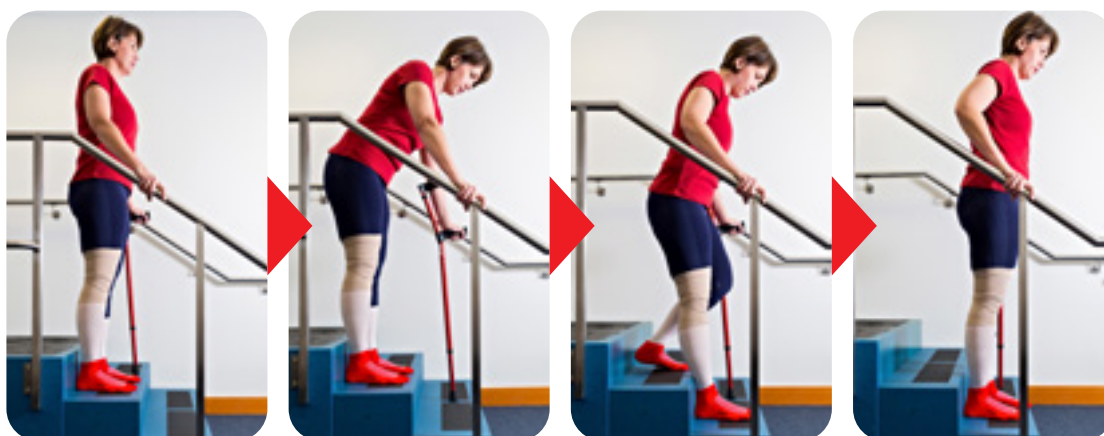
Should I have further physiotherapy once I am home?

You should continue with the exercises that are ticked on this sheet 2-3 times per day, until your next review with your surgeon.

Your surgeon or physiotherapist will advise you if you require physiotherapy prior to this planned review.

How much should I walk and exercise at home?

The key to how much walking you should do once you are home is that you should GRADUALLY increase your walking. Any large jumps in your walking level can aggravate the pain and swelling. If your knee has increased swelling or your pain increases you are probably doing too much. If you are tired and achy then listen to your body and rest. Also remember that you are likely to do more at home than you have been in hospital so make sure you take enough pain relief.



It may help to remember the phrase "Good leg to heaven, sore leg to hell."

St Vincent's Private Hospital Northside

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Phone: 07 3326 3000

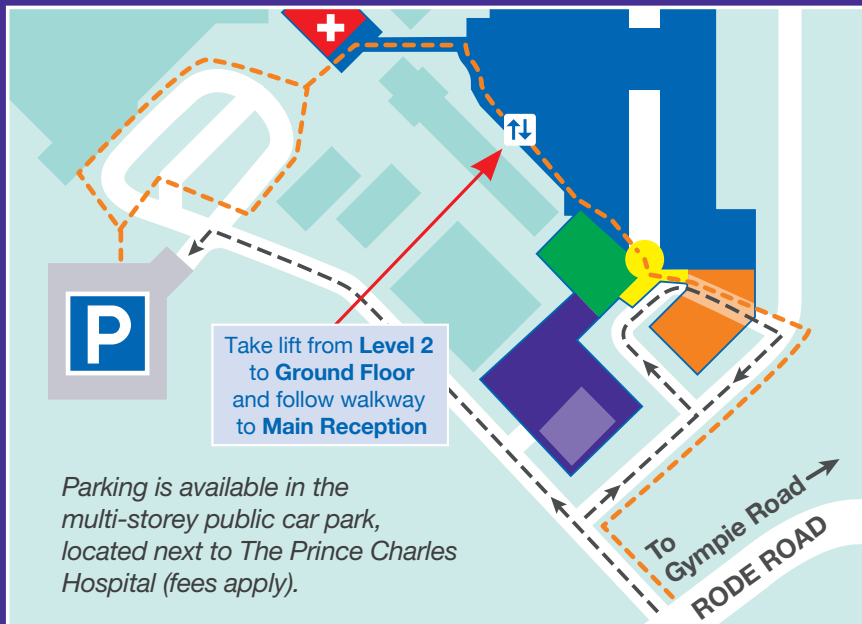
Email: svphn.enquiries@svha.org.au

Website: www.svphn.org.au










 [@stvincentsprivatehospitalnorthside](https://www.facebook.com/stvincentsprivatehospitalnorthside)



Free WiFi available by connecting to **WiFiHotSpot**



Parking is available in the multi-storey public car park, located next to The Prince Charles Hospital (fees apply).

- | | |
|---|---|
|  St Vincent's Private Hospital Northside |  St Vincent's Northside Education Centre |
|  Main Reception/drop-off zone | Level 1 |
|  St Vincent's Northside Medical Centre | - Breast Health Centre |
|  Mary Aikenhead Building | - Consulting Suites |
|  St Vincent's Northside Breast Health Centre | Ground Floor |
| | - Education Training Centre |
| | Lower Ground Floor |
| | - Executive Suites |
-
- | | |
|--|---|
|  Brisbane Northside Private Emergency |  Multi-storey public carpark |
|  The Prince Charles Hospital | - - - Vehicular route |
| | - - - Pedestrian route |



Developed in consultation with our consumers (May 2017)

UNDER THE STEWARDSHIP OF MARY AIKENHEAD MINISTRIES