RAMSAY
HEALTH CARE

WARRINGAL PRIVATE HOSPITAL

A Guide to Total Knee Replacement Surgery

The Orthopaedic Case Manager will call you 1-2 days prior to your admission.

Created by: Ortho Case Manager Authorised By: Roberts NUM Created: 2006
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Welcome to Warringal Private Hospital.

It is our goal to make your hospital stay as comfortable as possible. We encourage your feedback as this may help us to improve our service. Should you have any queries or concerns during your hospital stay, please do not hesitate to contact one of our staff members.

In your bedside locker you will find a patient information booklet that contains a copy of the Australian Charter of Healthcare rights, along with other information about our hospital and your hospital stay.

The Roberts Unit & The Streeton Unit

Nurse Unit Manager:	Ph: 9251 6562	Roberts Ward
	Ph: 92741310	Streeton Ward
Orthopaedic Case Manager:	Ph: 9450 6999	Roberts Ward
	Ph: 9251 6594	Streeton Ward
Orthopaedic Physiotherapists:	Total Physiocare Heidelberg Ph: 03 9457 7474	
	Physiotherapy at Warringal Private Hospital Ph: 03 9450 6390	
	Australian Sports Physiotherapy Ph: 1300 651 256	

Able Living – for hire of aids from home
Showrooms
679 -681 Whitehorse Rd, Mont Albert (head office)
65-67 Sheehan Rd, Heidelberg West (service and repairs centre)
Ph 1300 225 354

The following information is to be used as a guide to your surgery at Warringal Private Hospital. At times, due to unforeseen circumstances, your experience may differ from the details outlined in this booklet.

Contents Page

What is a total knee replacement?

A total knee replacement is a surgical procedure whereby the diseased knee joint is replaced with an artificial prosthesis. The procedure is performed by separating the muscles and ligaments around the knee. The end of the femur bone is removed and is replaced with a metal shell. The end of the lower leg bone (the tibia) is also removed and replaced with a metal T piece with a plastic top. Depending on the condition of the kneecap, a plastic 'button' may also be added under the kneecap to improve the surface.

Who should have a knee replacement?

A total knee replacement is considered for patients whose knee joints have been severely damaged by either progressive arthritis, trauma or other destructive diseases of the joint.

Osteoarthritis

This condition is the most common type of arthritis. It literally causes the joint to "wear out". Osteoarthritis causes the cartilage to wear away, leaving the bones to rub against each other, which can cause significant pain. It mainly affects people over the age of 50 and people with a family history of osteoarthritis.

Rheumatoid Arthritis

This is a disease that may affect many of the joints in the body. It involves chemical changes in the synovial membrane surrounding the joint (within the capsule), causing it to become thick and inflamed. This causes the breakdown of the cartilage and degeneration which worsens over time.

Trauma

Trauma to the joint can cause the bone and the cartilage to not heal correctly. This can mean that the knee joint will develop arthritis as the rough surface of the cartilage wears away and causes joint degeneration.

What are the risks and complications of a Total Knee Replacement?

Your doctor will discuss with you the risks of the surgery and any complications that you may suffer following the operation. *You will be asked to sign a consent form, and it is important that you understand both the procedure and any risks involved prior to signing this legal document.*

How can I better prepare for Surgery?

Start exercising

It is recommended prior to your surgery that you attend a physio class where you will be taught a series of exercises that will help to strengthen the muscles in your legs. To physically prepare for the surgery you will be given a home exercise program designed by a physiotherapist. This will focus on increasing the strength of the muscles in your legs, your abdominal muscles and your arms. This improved strength will help you to mobilize more easily following your surgery. The physiotherapy instruction will also help you to know what will be expected of you after your surgery.

Decrease Your Alcohol Intake

It is always recommended that you decrease your alcohol intake prior to surgery. Some of the drugs given to you either during or after your operation can interact with any alcohol that is in your system.

Lose Weight (for patients who are overweight)

By losing weight prior to your surgery, it will help to reduce the stress on your new knee joint, and help you to mobilize more freely. Being over-weight can increase your risks of a raised blood pressure and therefore complicate your post-operative period.

Stop Smoking

Cigarette smoking has been proven to increase the time it takes you and your joint to heal. It's a good idea to stop smoking at any stage, but this is a perfect opportunity!

Stop taking some of your medications

Your Surgeon, your physician if you have one, or the Orthopaedic Case Manager may advise you to stop taking certain medications prior to your surgery. For example some anti inflammatories and anticoagulants (blood thinners). If you have any concerns or questions regarding what tablets you are required to stop and when, please discuss with your surgeon.

Have a Dental Check-up

Your teeth need to be in good condition prior to your surgery. An infected tooth or gum may also be a possible source of infection to your new knee. It is important that you have any tooth or gum problems checked by a dentist and be treated with the appropriate antibiotics.

Pre-Operative Pathology

There are tests that your Surgeon will ask you to have prior to your surgery. These will include blood tests, a urine test and also an echocardiogram (ECG). Your Surgeon will provide you with a Pathology Slip and it is important that you have the tests that your Surgeon has requested. These tests are preformed to make sure that you are well prior to surgery. All of the tests can be performed at Dorevitch Pathology.

It is recommended that you have these tests approximately 7 to 10 days prior to your surgery. The results will be forwarded to your Surgeon, Physician (if you have one) and the Case Manager. You will be informed of any abnormalities, and these will be investigated before your surgery.

A Medical Check-up

Your Surgeon may ask you to see one of the Physicians here at the hospital preoperatively either before your admission, or once you have been admitted to the hospital. If you do see one of the Physicians before your admission, the nurses will inform them when you have arrived for your surgery, so they can monitor your progress throughout your hospital stay.

What happens during the Pre Admission Process?

It is the Case Manager's role to ensure that your transition between the hospital and home is made easily. We request that you watch a Physiotherapy and Pre Admission Information session online at

Orthopaedic Services | Warringal Private Hospital

prior to your admission. A separate letter regarding how to access the Information videos can be obtained from your surgeons rooms.

The Case Manager will contact 1-2 days prior to your admission. During this phone call your paperwork will be discussed with you to ensure all the information is correct. You will be given the opportunity to ask any questions that you have. Please ensure you have posted your hospital admission forms back to the hospital as soon as possible prior to your admission into hospital.

The Case Manager will commence the discharge planning process with you. You and your family, your Surgeon, the Nursing Staff and Physiotherapists will all be involved in the discharge planning process. It is important that you are prepared for your discharge home.

Your discharge day will be discussed with you earlier on in your recovery. You will be discharged home when you are medically stable and safe to do so, usually Day 3 or 4 post your operation. **It is important to note that upon discharge it is expected that you organise your own transport, which should be organized prior to coming into the hospital.** ***A passenger vehicle is perfectly safe for this.*** You and your family will be taught by one of the nurses how to get into and out of the car safely prior to discharge. It is important that you keep your family members informed of your pending discharge day.

Our discharge time is strictly 9.30am. The nursing staff will ensure that you are ready for your family at this time.

What should I bring into hospital with me?

Essentials to Bring In For Your Admission

- Medications that you have been taking in their original containers/boxes.
- Prescriptions for your medications if you do not have enough for your hospital stay.
- Recent X-Rays
- All of your health insurance details will need to be noted on your hospital registration form, including your Medicare, Department of Veteran Affairs (VX) number and pharmaceutical benefit number. If you have already given this information, you do not need to provide it again.
- Ensure that you bring this information booklet to the hospital with you.

Personal Requirements

We recommend that you leave your valuable possessions at home. Warringal Private Hospital takes no responsibility for lost or stolen property.

- Short nighties or pyjamas with elastic or drawstring are easier to manage whilst you are in bed. Satin materials often make movement easier in the bed.
- Fitted slippers (not the thong or slip on type).
- Dressing Gown.
- Loose, comfortable clothing such as tracksuit or shorts for your physiotherapy sessions.
- Any aides or equipment that you will routinely use (i.e. orthotic appliances or walking aids). The staff prior to your discharge will order any other equipment that you will require for your discharge.
- Reading material, stationery and a pen.
- Toiletries that you regularly use (face washer and towels are provided).
    - Loose change for the newspaper or magazines. (Large amounts of money and valuables must be left at home.)

What can I expect on admission to Warringal Private Hospital?

Your Surgeon will discuss with you whether you need to be admitted the day before, or the day of your surgery.

- When you arrive at the hospital you will report to Day of Surgical Admissions for formal admission into the hospital if you are coming on the day for surgery or the front reception if you are coming the night before.
- Your height will be measured and your weight and observations will be recorded.

- **If you have requested a single room, it is important to note that every effort will be made to accommodate you.** In some cases you may be asked to share a room with one other patient until a single room becomes available. Please remember that we do our best to provide you with the room you have requested, but due to demand and clinical need, this may not always be possible.
- Your observations will be recorded when you arrive on the Unit.
- The Nurse caring for you will check your paperwork with you again. At Warringal Private Hospital we pride ourselves on being professional and thorough, which may mean you may have to answer some questions more than once. We like to leave no room for error!
- Your Anaesthetist will come to see you before your operation and the types of anaesthetic will be discussed with you prior to your transfer to the operating suite.

What can I expect on the Day of Surgery?

1. You will be Nil by Mouth for approximately 6 – 8 hours prior to your surgery. *This means nothing to eat, chew or drink*.
2. Your medications will be given to you with a sip of water. Please note that some of your medications may not be given to you. We will check with the Anaesthetist first.
3. You may be given a pre medication as ordered by your Anaesthetist. This medication may make you drowsy, and the cot sides of the bed will be raised for your own safety.
4. The nurse will inspect your leg and may need to remove any hair from the knee.
5. Your Surgeon will mark the leg to be operated on with a marker either on the unit, or before you are moved into theatre.
6. A urinary catheter may be inserted prior to your transfer to the operating theatre.
7. You will be transferred to theatre by either walking, wheelchair or on a trolley. or in your bed.

Your surgery will take about 2 – 21/2 hours. Following your surgery, you will be transported to the recovery room, where nursing staff will monitor you while you wake from the anaesthetic. When you are well enough, you will be transported to the Unit, where the nursing staff will continue to monitor you closely. You will not be able to eat or drink for 4 hours after your surgery, depending on the type of Aneasthetic used.

What pain relief will I have when I get back from Surgery?

In order for the nurses to give you adequate pain relief, it is extremely important that you tell the staff when you have pain. To assist in keeping your pain under control your nurse will ask you regularly to score your pain. A number between zero and ten is used to describe the amount of pain you are experiencing. Ten is the worst pain imaginable, and zero is no pain at all.

It is unrealistic to have no pain at all following your surgery. It is your responsibility to tell the nurses when you are experiencing pain and whether the pain relief you have received is effective. Try to use your pain relief as a **preventative rather than a treatment**. Take medication regularly to keep your pain away. If you do not take your pain relief you may not be able to do your exercises and progress with your exercises.

There are many different options available to you following your surgery. The following is a brief outline of the types of pain relief that you *may* receive following your surgery.

Patient Controlled Analgesia/Intravenous Opioid infusion

Patient Controlled Analgesia (PCA for short) gives you control over the pain you may experience after your surgery. Instead of ringing for the nurse when you need pain relief, you will push the button attached to the PCA pump. When you push the button, you will receive a very small dose of pain medicine. If you feel uncomfortable and need more medication simply press and release the button again. Built in timers on the PCA will make sure that your doses are safely limited during the course of your treatment and you cannot give yourself too much. Our primary concerns are your safety and comfort. The PCA guards them both, accurately and safely.

Spinal Narcotics

A spinal narcotic is when a narcotic, such as Morphine and possibly a local anaesthetic are injected into a part of the spine. It is not a continuous infusion. You will notice that you may have decreased movement and sensation following this procedure, but it will return over time. Again, the nursing staff will monitor you closely to ensure the pain relief is effective.

Regional Nerve Block/Ambit pump

This type of block is where a continuous infusion of local anaesthetic into a nerve that will numb the operated area.

Oral Medications

The nurses will offer you regular oral analgesia that can be taken with any of the above infusions. It is advised that you take the regular analgesia offered to you, as it will ensure that you are able to continue with your post-operative physiotherapy program.

What pain relief will I have after the infusions have stopped?

After your infusion has been ceased, you will be given strong oral analgesia. Your nurse will be able to explain to you about the analgesia you are receiving. It is important to ensure that you are taking regular oral analgesia so that you are able to continue with your physiotherapy program.

It is also important to note that following your surgery you will experience some pain. While every effort will be made to keep you as comfortable as possible, **it is important that you tell us if you have pain, and whether the medication is helping you.**

Continuous Passive Motion (CPM)

In order to enhance your rehabilitation, your surgeon may request that you use a continuous passive motion (CPM) machine. It is a device that is fitted to your leg and is placed in bed with you. It slowly and smoothly bends and straightens your knee. You will

use the machine periodically during the day, and it will be adjusted to increase the bend in your knee.

Continuous passive motion is most important in the first few days following surgery. This is the period of time were pain limits what you can do actively with your knee. The CPM supplements what you are unable to do during this period.

Benefits of CPM

1. Improved healing after surgery due to the gentle rhythmic motion of the leg which helps decrease the swelling and increase blood circulation.
2. Less post-operative pain as movement helps to reduce joint stiffness and muscle spasm.
3. Maintains knee range of movement when not actively participating in exercise

The road to recovery…

Your recovery will start on the day of your surgery. Ongoing liaison between the Doctors, Nurses Physiotherapists and other hospital staff will identify any problem areas that need to be addressed. The following is a detailed day by day plan of what you can expect on your road to recovery.

Your Return to the Unit

You will be transferred back to Roberts or Streeton Unit once your condition is stable (i.e. you are awake and your pain is well controlled). It is common for this close observation in the Recovery Room to last an hour or more before transfer back to the Unit.

When you return to the Unit the nurse may check your blood pressure, pulse and oxygen level regularly. These will be attended less frequently as you recover from the anaesthetic.

The nurse will continue to keep you nil by mouth following your surgery for up to four hours, depending on your anaesthetic. This is to ensure that you are well awake before attempting to eat or drink and also to prevent you from experiencing nausea following your surgery. You may have both intravenous (IV) therapy and possibly a wound drain in place. These will remain in place for one or two days, depending on your progress and your Surgeons preference. IV antibiotics will be administered via the drip in your arm as a prophylaxis, to help prevent infection.

You may have a catheter in place following your surgery, which your nurse will secure to your unaffected leg. The catheter will drain urine from your bladder. The catheter may be removed one or two days after your surgery, depending on your progress and your Surgeons preference.

You will begin exercises after you have returned to the Unit. It is very important to regularly perform deep breathing and foot and ankle exercises. The nurses will regularly remind you to do your exercises and it is important that you try to remember to do them also. These exercises will help to prevent respiratory or breathing problems and blood clots in your legs.

Day One

Physiotherapy is an extremely important part of rehabilitation and requires full participation by the patients for optimal outcome. Patients begin simple exercises the day after the operation and then progress with each day after. Some degree of pain, discomfort and stiffness can be expected during the early days of physiotherapy. You will have physiotherapy at least daily during your hospital stay.

- You will walk to the corridor with your physiotherapist on the first day, with the aide of a walking frame.
- You will be expected to perform some simple exercises to get the muscles contracting and the blood circulating in your legs.
- Ice packs will be applied throughout the day.
- Alternate between short periods sitting out of bed and resting in bed.
- The nurses will assist you with your personal care on Day One. You will have a sponge in the bed and your nurse will assist you with your back and your lower limbs.
- You may have blood tests and a check x-ray on Day One. These investigations will usually be attended on the Unit.
- You may still be experiencing some pain despite the pain relief that you may be receiving from your infusion. We ask that you inform the nursing staff should you be experiencing any pain so that we can help you.

Day Two

- Activity begins to increase. Your bed exercises are progressed, to be more specific for the knee. You will stand and walk with a walking frame for 30 + metres with the supervision of the physiotherapist / nurse.
- You will trial forearm crutches if the Physiotherapist deems you to be safe.
- Usually you will be able to weight bear as much as you can tolerate. Your surgeon will inform the staff if this is not the case.
- The nurses will assist you with a shower depending on your progress.
- Your PCA will be ceased and you will be commenced on oral analgesia (as discussed previously).
- If you have had a catheter, the nursing staff will remove it early in the morning.
- You will be encouraged to sit out of bed for all your meals.

- Your Surgeon may ask that your dressing be removed, and your wound re-dressed with a waterproof dressing.

- If you have a drain tube in, this may also be removed on Day 2, by the nursing staff.

- A discharge date will be discussed with you following consultation with your surgeon and the physiotherapists.

Day Three

- Exercises will continue and progress.

- You will walk to the shower with forearm crutches and supervision of your nurse. The nurse will assist you with your shower and help you to dress in your day clothes. You will notice that the nursing staff will begin to encourage your independence with your personal care and mobility. This is to help you prepare for your discharge home.

- You will be encouraged to sit out of bed for all your meals.

- Ensure you continue to accept the regular analgesia that is offered to you.

- The nursing staff will be monitoring both your diet and your bladder and bowel habits. It is important that your bowel function is returned to 'normal' as quickly as possible following your surgery. (Remember that the pain relief you are taking following your surgery may cause you to become constipated. If you are having trouble moving your bowels, please inform the nursing staff.)

- Your wound will continue to be covered with a water proof dressing, which may be changed if necessary.

- The nursing staff may educate you on the safe way to self administer Clexane injections. Your surgeon will indicate to the nursing staff if you will require Clexane injections at home.

- You will be taught how to use crutches on steps and stairs.

- You will be taken to the physio gym for an exercise program and encouraged to regularly attend walks and exercises independently.

Day Four

- Your weight bearing and ambulation distance will be increased.
- Leg exercises are increased to further strengthen your muscles and improve your endurance.
- You will be taught how to negotiate stairs independently.
- You will be taken to the physio gym for an exercise program and encouraged to regularly walk and exercise independently.
- If you are medically stable and safe on your walking aid, you will be discharged today.

What equipment will I need when I go home?

There are several pieces of equipment that you may need to take home with you. Both of the following pieces of equipment can be hired from Warringal Private Hospital's Pharmacy, or an equipment hire facility close to your home. As part of your discharge plan, your Case Manager will check you have the necessary equipment at home, prior to your discharge.

The Raised Toilet Seat

Following your surgery, you may not be able to sit on a low toilet. The raised toilet seat raises the height of the toilet and has two sturdy handles on either side, which will make it easier for you to get up.

The Shower Stool

You may find that you will need to sit in the shower for the first one or two weeks following your surgery. The shower stool is a sturdy piece of equipment with rubber stoppers on its feet that prevent it from slipping in the shower. There are handles on either side that make it easier for you to stand following your shower.

Going Home

Patients are discharged home approximately three to four days after their operation. We ask that your family members take excess belongings and equipment you may need home the day before your discharge. Upon discharge it is expected that you arrange your own transport home. **A passenger vehicle is perfectly safe for this. Discharge time is strictly 9.30am.**

Your Surgeon, Physiotherapist, Nurses and Orthopaedic Case Manager will discuss your discharge early in your recovery so you have adequate time to organize your transport home.

We aim for everyone to be discharged home. Providing that you are progressing well, medically stable and safe to return home, you will not require inpatient rehabilitation. **If physical problems restrict your recovery you may be referred to an inpatient rehabilitation hospital for further treatment. Inpatient rehabilitation is not a necessity following a total knee replacement.** If you do require inpatient rehabilitation at a facility for a period of time, patient transport will be organized by the hospital. Your time spent in hospital will teach you the skills required for you to manage independently at home. When you go home you will be given a home exercise program that will help you to maintain and continue to improve your functional level.

We suggest that a friend or family member stay with you if you usually live on your own.

<u>Discharge Goals</u>

Before you are discharged we aim for you to be able to complete the following:

1. Independent transfers into and out of bed.
2. Bend the knee to 90°, and fully straighten the knee
3. Walk 30 meters with crutches and safely negotiate stairs.
4. Sit comfortably in a chair for at least 60 minutes.
5. Attend to your own hygiene needs. You may require some assistance with setting up.

You will not be discharged until you are medically well and physically safe.

If for some reason you do not fit the criteria to return home, rehab will be discussed then. If you do require a period of time at a rehabilitation facility, you will be required to organize your own transport.

What happens after discharge?

It is important for patients to continue with their exercise programs following discharge from hospital. Patients are expected to continue to work the muscles around the replaced joint to prevent scar tissue formation and maintain muscle strength that is important in joint stability. You will be required to attend an outpatient physiotherapy program to gain an optimal outcome following surgery. Your physiotherapist will let you know when this is required.

Patients should watch for warning signs of infection including fever, abnormal redness, increasing warmth, swelling or unusual pain. Should you experience any of these symptoms, notify your Surgeon immediately. You will be given instructions with regards to your surgical wound on discharge. It is important to report any injury to your knee to the surgeon as soon as possible.

Taking the time to look after your new knee can make a big difference in how quickly and how well you heal. Your goal at home is to return as safely and comfortably to your normal activities as soon as possible.*Commonly Asked Questions*

How long will my leg continue to hurt and swell?

Pain

Pain after a total knee replacement usually decreases rapidly during the first month. Pain felt while sleeping may persist for up to 6 weeks. Stiffness when standing up may be present for as long as 2 years following your knee replacement surgery.

Swelling

Swelling in your feet occurs if you keep your legs in a dependent position for long periods of time. This can be improved by spending time with your feet elevated. Swelling in your knee will remain until your knee overcomes the trauma of surgery. This type of swelling can be controlled by ensuring you balance rest and exercise and with the application of ice. Swelling may persist for 6-12 months post surgery.

How much exercise should I do and how can I tell if I've done too much?

It is important to complete your home exercise program and progress your activity levels. However, in order to give your knee the time required to heal, you need to balance activity and rest and avoid over-exercise. You will know if you have over-exercised if your knee is painful and swollen following activity.

How long do I have to walk with crutches?

Most people are required to use crutches for 3-6 weeks following surgery.

You will be able to walk without crutches when:

- You're confident you can manage on your own
- You can walk un-aided without a limp

- You can walk un-aided without pain and swelling

Walks inside the house without the crutches will not harm the knee but excessive pressure too early can cause pain and swelling.

You may progress to a single crutch when you feel comfortable doing so. The single crutch is to be held on the opposite side from your affected leg.

When can I drive?

You will not be allowed to drive a car for up to 6 weeks following your surgery as the knee control required to do so is not present. Long distance travel in a car should be avoided for the first month following your surgery as this may cause excessive swelling in your operated leg.

When can I swim?

You can safely immerse your knee in water when your wound has totally healed (usually 2-3 weeks, pink skin and no scabs). Prior to this, infection risk is high and soaking the wound may delay wound healing. Hydrotherapy is a great way of exercising.

You must get clearance from your surgeon prior to immersing your knee in water.

How long should I wear stockings?

Your surgeon will tell you if you will need to wear the stockings after discharge. This is thought to reduce the risk of blood clots and any swelling in your legs. You may need help to put the stockings on. Ask one of the nursing staff to show either you or a family member how to apply the stockings.

Should I use heat or ice packs?

Both heat and ice are effective at relieving pain in your knee. Generally it is recommended to use *heat prior to exercise* to increase joint mobility and allow soft tissues to stretch more easily. The application of *ice following exercise* of your knee will help to reduce pain and swelling. You must be guided by your physio post operation when to start applying heat. Ice is most important during the week after your surgery.

Should I inform anyone that I have a knee replacement?

You should alert your dentist that you have a knee replacement in the presence of a dental infection and/or prior to major dental surgery. The security guards at the airport will also need to be informed of your knee replacement. They may ask to see you scar line, so be prepared by wearing loose fitting clothing. Your local doctor / GP should be advised as in the case of changing your GP.

When can I return to work?

You may be able to return to pre-operative employment depending on the demands of your work environment. *Climbing ladders, heavy lifting and other activities involving excessive strain on the knee <u>are not encouraged</u>* during the first 6 weeks.

What is Clexane and will I need to self inject at home?

Clexane is a medication that is injected into the upper most layer of skin of your abdomen (the subcutaneous layer). It is given to you to help prevent a blood clot from forming in your calf. Each surgeon has their own preferences in regards to discharging a patient home on Clexane and the nursing staff will check with your surgeon to see if you will need to self administer Clexane at home.

Total Knee Replacement - Preoperative Exercise Program

The following exercises are designed to address strength and range of movement of your knee. As pain and loss of function have gradually increased, the physical condition of the joint deteriorates. As a result, you may have problems fully straightening and or bending at your hip and also experience weakness of the muscles.

Ideally complete the exercises twice a day. If one of the exercises aggravates your pain, stop that particular exercise. Continue the other exercises as tolerated.

1. Knee Flexion

With towel around heel, gently pull knee upwards with towel until stretch is felt. Repeat 50 times.

2. Hamstring Stretch

Place foot on bed. Slowly lean forward reaching down shin until a stretch is felt in back of thigh. Hold for 20 seconds. Repeat 3 times.

3. Quadriceps Sets

Place a rolled towel under heel. Tighten muscle on top of thigh by pushing knee down into the bed. Repeat 10 times, do 3 sets.

4. Straight Leg Raise

Lean back on hands. Tighten muscle on front of thigh and lift leg 8 – 10 inches from bed, keeping knee locked. Repeat 10 times, do 3 sets.

5. **Quadriceps over Fulcrum**

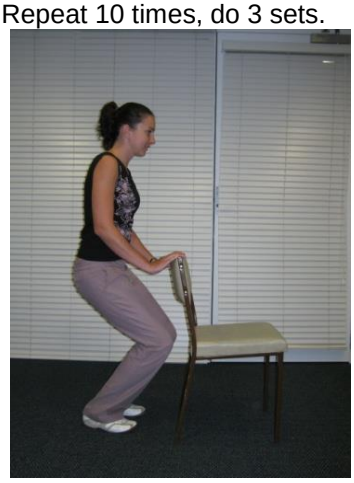
Place rolled towel under knee. Lift foot off bed, keeping back of knee in contact with roll. Hold for 3 seconds, then lower *(as indicated in both pictures below)* Repeat 10 times, do 3 sets.

6. Bridging

Lay on back with knees bent. Dig heels into bed. Slowly raise buttocks from bed, keep stomach tight. Hold for 10 seconds, then lower. Repeat 5 times.

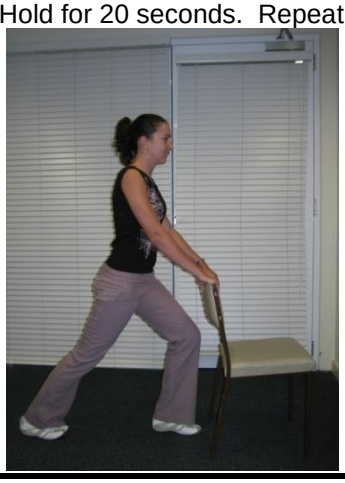
7. Squat

Stand with feet shoulder width apart. Bend knees as far as comfortable, making sure your knees don't bend beyond your toes. (This example is what not to do). Repeat 10 times, do 3 sets.



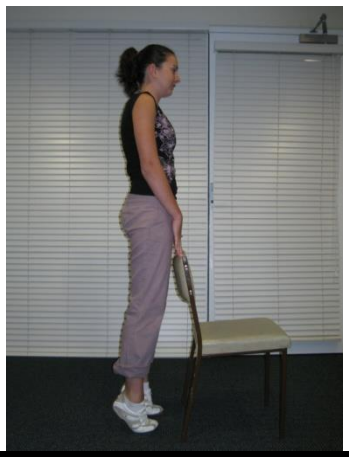
8. Calf Stretch

Place operative leg behind. Keeping back leg straight, with heel on floor, lean into wall until a stretch is felt in calf. Do not turn your foot outwards. Hold for 20 seconds. Repeat 3 times.



9. Standing Bilateral Calf Raises

Hold on to back of chair. Rise up on to ball of feet. There is no need to hold this position. Repeat 15 times.



Your Appointments

Doctors

Name: Date: Time: Location:	Name: Date: Time: Location:
Name: Date: Time: Location:	Name: Date: Time: Location:

Physiotherapist

Name: Date: Time: Location:	Name: Date: Time: Location:
Name: Date: Time: Location:	Name: Date: Time: Location:
Name: Date: Time: Location:	Name: Date: Time: Location:

Orthopaedic Case Manager

Name: Date: Time: Location:

Your Admission to Warringal Private Hospital

Date:
Time:

Your Questions & Notes