York and Scarborough Teaching Hospitals
NHS Foundation Trust

Total Knee Replacement

A guide for patients, relatives and carers

Patient Name .....

Please bring this booklet to all your hospital appointments

ⓘ For more information, please contact one of the telephone numbers on page 4

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Useful Contact Numbers

- Orthopaedic Helpline number 01904 724922
- Orthopaedic Pre-Operative Assessment Clinic: 01904 726591
- Anaesthetic Office: 01904 725399
- The Ward Physiotherapy and Occupational Therapy Team: 01904 725384
- The Outpatient Physiotherapy Dept.: 01904 725389
- Elective Orthopaedic Ward 29: 01904 726029
- The York Orthopaedic Support Group: 01904 430809

  this is a group of former patients who have formed a friendly, enthusiastic support group for people having Joint Replacements.

- Waiting List: 01904 726994
  01904 725541
- Equipment returns:

  Contact the supplier directly (their details should be on a yellow sticker on your equipment or you can phone the numbers below:

York:	01904 645000
North Yorkshire:	01423 554602
East Riding:	08448 936375

Introduction

Please read this booklet fully as the information within it explains about your surgery and will help you give your informed consent to the surgery. You will be asked to sign a consent form at your pre-operative assessment appointment if you wish to proceed with surgery.

Welcome to York Teaching Hospital NHS Foundation Trust

Parking

Car parking is available at all our sites.

Blue badge parking spaces are available near the main entrance of our hospitals. Places are limited.
Blue badge parking is free.

The Trust offers some car parking concessions to visitors and patients. Details are on our website www.yorkhospitals.nhs.uk and on posters around the car parks.

Some people on benefits or with low incomes may be able to get help with travel costs.
For more information, call the Cashier's office:

01904 726524

You can find more travel information on our website at www.yorkhospitals.nhs.uk.

Visiting Times

Our Visiting times at our hospitals are:
11.00 am to 8.00pm every day

The Orthopaedic Team

- Orthopaedic Consultant
- Anaesthetist
- Nurses and healthcare assistants
- Pharmacist
- Physiotherapist
- Occupational Therapist
- Generic Therapy Assistants

Before your surgery

Important Information for Patients

Before you attend your pre-operative assessment and surgery it is advisable to:

- Visit a dentist, to ensure your teeth and gums are healthy. Telephone the pre-operative assessment clinic if you are not registered with a dentist.
- If you have high blood pressure, have your blood pressure taken by your practice nurse.
- Maintain a healthy weight; check your BMI, and if you smoke try to stop. Seek advice from your GP or Practice Nurse for help with these.
- Ensure you have treatment for any infections, leg ulcers, wounds, rashes etc. All above must be healed and dry before Knee Replacement surgery can take place.
- Have pre-operative blood test two to four days before your surgery. Ask staff where your local blood taking facility is. This will be discussed at your pre-assessment appointment.
- At your pre-operative assessment, we will give you carbohydrate drinks (called Nutricia preOp) to take home with you. You will need to take these before you come in for your surgery. The drinks help you recover more quickly from your operation. This is part of what we call “Enhanced Recovery”.

More information about your carbohydrate drinks

When to take Nutricia preOp when you are on a Morning Surgical List

- The **day before** surgery:
  From 6pm drink four cartons of Nutricia preOp.

- The **day of** surgery:
  Take two cartons of Nutricia preOp:
  Please finish them at least two hours before your surgery and before 7am.

When to take Nutricia preOp when you are on an Afternoon Surgical List

- **Before 12 mid-day** on the **day of** surgery
  Drink six cartons. You can bring them with you into hospital if you arrive before then.

Why do I need a knee replacement?

A total knee replacement is performed to replace a diseased or damaged knee joint.

When arthritis occurs the cartilage, which covers the bone of your knee, wears away. This causes the bone to become worn and rough, causing pain and restricted movement. Sometimes this process can cause limping and bowing of your leg.

A knee replacement replaces the worn out top and bottom surfaces of the knee using a metal top section with kneecap and a plastic bottom surface.

What are the benefits of having the operation?

The main aim of a knee replacement is to provide pain relief and allow better walking. In general, all or most of the pain is relieved in approximately 90% of patients.

“New Knees” take time to settle down and feel part of you. You might not get 100% pain relief following your knee replacement, however, arthritic pain is usually greatly reduced and in well motivated patients a good knee bend of well over 90° is achieved. Post-operative physiotherapy is essential if you are to regain full mobility.

What are the risks of having the operation?

There are risk factors which need to be taken into consideration before agreeing to a Knee Replacement:

1. Infection around a new joint (happens in one in 100 cases) is a serious complication. This could lead to amputation in the most severe cases. It is important that you do not have any infection before the operation. For example skin, chest or urinary infections. Decayed teeth or gum disease must be treated before surgery. This is so your surgery can be safely carried out.
2. A small risk to your life (approximately one to two in a 1000) from blood clots (DVTs) that go to the lungs (PE) or other very rare complications such as anaesthetic problems, heart attack or stroke (1 in 300).
3. A small risk of losing your leg (less than one in 5,000).
4. Serious allergic reaction to drugs or anaesthetic (rare or very rare at one in 10,000 to one in 100,000) and problems related to anaesthesia. Your fitness for anaesthetic will be assessed before your surgery.
5. Post-operative thrombosis (blood clot) (less than one in 20). The risk of thrombosis is reduced as much as possible by having a spinal anaesthetic, early mobilisation with the use of elastic stockings to aid your circulation and possibly foot pumps and or anti-coagulation therapy.

6. You may experience some post-operative nausea and sickness, which can be relieved by medication.

7. Nerve or arterial injury (less than one in 100). There are several nerves located around the knee and these can very occasionally be damaged during knee replacement surgery. These nerves supply sensation and power the muscles in the leg.

   Normally the nerves recover themselves over a period of weeks or months. Occasionally the problems can be permanent and may lead to pain, weakness and loss of sensation.

8. Urinary retention (approximately one in 10 cases, but usually resolves after spinal anaesthetic wears off).

9. Chest infection (less than one in 20 cases, usually resolves with antibiotics).

10. Joint stiffness. All patients experience joint stiffness in the weeks and months following surgery. Most patients achieve similar or better range of movement than they had prior to their knee replacement. Knee replacements, however, rarely give normal range of movements.

    A small percentage (less than or equal one in 20) have more prolonged stiffness or reduced range of movement that may persist in the long term.

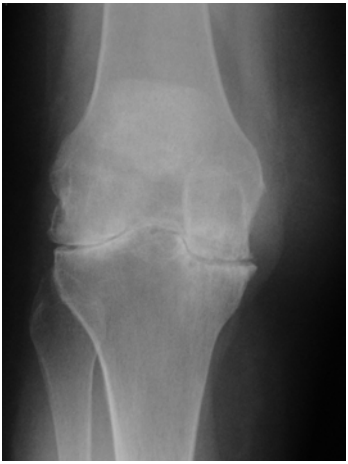
11. Severe loosening of your artificial joint due to wear and tear. Your joint may eventually wear out requiring further surgery. Overall 90 out of 100 of knee replacements last more than 10 years. Premature loosening may occur, needing revision surgery.
12. Clunks, frequent but usually not a problem.
13. Altered sensation around the scar (most patients develop this but do not usually find it a problem).
14. Overall 95 out of 100 patients are very pleased with their knee replacement. Up to one in 10 patients feel that it did not meet their expectations.
15. Fracture: There are occasions when a bone may break during this procedure. Normally these are seen at the time of surgery and are treated with wires or plates (less than one in 100 cases).

Some of these complications may bring forward the need for further surgery.

Overall approximately one in 10 patients have some ongoing pain, one in 10 find it does not meet their expectation and approximately one in 50 sustain a complication that could leave them worse off in the long term.

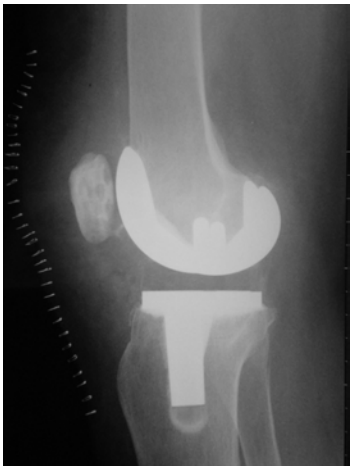
Two to three in 10 patients don’t or can’t kneel on their knee replacement.

Knee joint before and after a joint replacement



Front View

Before the operation



Side view

After the operation

Are there any alternatives to having the operation?

The only alternative to the operation is to live round the pain with non-operative treatments such as painkillers and the use of walking aids.

Discuss other options with your health care professional if you have further questions.

What happens at pre-operative assessment?

Before you are admitted to hospital for your operation, you will be asked to attend a pre-operative assessment. This assessment, which lasts approximately one and a half hours, involves taking a detailed history of your general health, relevant social history, current medication and the difficulties you are experiencing due to your knee problem.

You will need to bring with you to this assessment:

- Your completed Home Environment Questionnaire, which will be forwarded to the Occupational Therapist.
- An up to date repeat prescription of your medicines or the medicines themselves in their original packaging.
- A list of all the illnesses and operations you have had.

You may have several pre-operative investigations, including:

1. Blood tests to check whether you are anaemic and to match your blood in case you need a blood transfusion.
2. An Electrocardiogram (ECG) to check your heart beat.
3. An x-ray of your knee joint, unless an x-ray has been done recently.
4. Your blood pressure, pulse, temperature, respiration, oxygen levels, height, weight and body mass index will all be recorded.
5. MRSA Screening Test**. If you are waiting for your operation for more than 18 weeks following this screening test, then it will need to be repeated (please contact pre-assessment clinic).**

You will have the opportunity to discuss with the nurse carrying out your assessment any worries you may have regarding your proposed operation and your present disability.

Joint School

This is where you will meet some of the Orthopaedic team who will explain about your stay in hospital and assess your mobility and management at home.

Staff will explain the roles of the occupational therapist and physiotherapist. You will be given information on general ward routines and expectations. Staff will demonstrate an initial exercise programme in preparation for surgery.

You will find your exercise programme at the back of this booklet. Please bring it with you when you attend hospital and subsequent Physiotherapy appointments. This will enable you to keep a clear record of your exercise programme as you progress.

Please do not start more advanced exercises until you have been shown by a member of therapy staff.

The Occupational Therapist will review your completed Home Environment Questionnaire with you and will discuss how you are managing at home.

If you are currently struggling at home with any daily tasks, the Occupational Therapist will be able to provide advice and information. You may require a home visit to help address these issues.

It may be necessary to have some temporary equipment or aids at home to help you manage during the early stages of recovery after your surgery. The Occupational Therapist will discuss this with you at Joint School.

To contact the Occupational Therapist please telephone: 01904 725384.

Your Operation

Before coming into Hospital Checklist

Planning ahead

- ☐ Remove loose rugs from around the house
- ☐ Rearrange or remove furniture and other hazards so that you can move around easily with walking aids.
- ☐ Move regularly used items to be easily accessible to avoid bending after your surgery.
- ☐ Arrange care for any family or for your pets.
- ☐ Get shopping in or prepare some frozen meals to use on your return home.
- ☐ Plan for how you will be getting to hospital on your admission day and home from hospital on your day of discharge.
- ☐ Consider arranging for somebody to help you change your surgical stockings as these are not easy to put on or take off by yourself.
- ☐ Remove nail polish before coming into hospital for your operation.
- ☐ Take your carbohydrate drink as advised

Before coming into Hospital Checklist

What to you need to bring with you

- ☐ Pack all medication in original containers to bring to the ward. We cannot accept dosette boxes (your own boxes), but sealed blister packs from a pharmacist are fine. Make sure you have enough medication for seven days. Check you have enough painkillers at home ready for discharge.

- ☐ Pack loose, comfortable day clothes and toiletries. Choose sensible footwear without fastenings, and ensure slippers and shoes have a supportive back. Swelling is normal after surgery so check your footwear has plenty of room to accommodate this.

Admission times and Starving Instructions

Admission times are 7.30am and 11.30am

7.30 admissions - please arrive at ward at 7.30am:

- The nursing staff will meet you on arrival and admit you during the next few hours.
- You will be seen by the surgeon and anaesthetist between 7.30 and 9.00am.
- Please do not eat any food for six hours before 7.00am.
- You can drink clear fluids i.e. Water, tea/coffee (no milk), diluted fruit juice (not fizzy) up to 7.00am.
- Please have your final carbohydrate drink as advised.
- Take all your normal medications unless you have been advised not to. If you are unsure if you should take your medications please ring the Pre-Assessment Clinic on telephone number 01904 726591.

Please note if you admitted at 7.30am you could be on a morning operating list or an all-day operating list. The theatre list will start at 9.00am, but please be aware that you may be waiting until 5pm before you go to theatre.

You are welcome to go off the ward after your admission, however we ask that you get permission from a staff member first and have a mobile phone with you, so you can be contacted if we need to get you back to the ward.

11.30 admissions – please arrive at ward at 11.30am.

- The nursing staff will meet you on arrival and admit you.
- You will be seen by the surgeon and anaesthetist between 12 noon and 2pm.
- Before 8am, you may eat a light breakfast i.e. Bowl of cereal or couple of pieces of toast, with tea/coffee (with milk).
- Please have your final carbohydrate drink as advised.
- You can drink clear fluids i.e. Water, tea/coffee (no milk), diluted fruit juice (not fizzy) up to 12 noon.
- Take all your normal medications unless you have been advised not to. If you are unsure if you should take your medications please ring the Pre-Assessment Clinic on telephone number 01904 726591.

Please be aware that you are on an afternoon list which starts at 2pm and you may not go to theatre until 5pm.

You are welcome to go off the ward after your admission, however we ask that you get permission from a staff member first and have a mobile phone with you, so you can be contacted if we need to get you back to the ward.

On arrival to the Ward

You will be admitted on the day of surgery unless medical reasons prevent this. You will have a chair in the waiting area until you go to theatre.

Over the course of the next few hours, you will see a nurse who will go through the admission documentation with you. They will check that the details are correct and remain unchanged and that you understand what will be happening to you.

An identification bracelet will be placed on your wrist and also a bracelet, which identifies any allergies, if needed.

Blood pressure, pulse, temperature, respirations, oxygen levels will be recorded. Your legs will be measured for the application of elastic stockings, which help to prevent post-operative thrombosis.

At this stage, any worries or queries you have will be discussed.

You will be assessed by your surgeon and you will be asked to sign your consent form if you have not already done so already.

Consent

You will be asked to sign your consent form (FYCON39-1 Total Knee Replacement), to say you agree to the procedure. You will be offered a copy and a copy will be kept in your patient notes.

Keeping comfortably warm at all times

Hospital, especially the operating department, is usually colder than your own home. Please try and keep your body and your skin as warm as comfortably possible. Your body can lose a lot of heat in theatre. Please tell the nursing staff if you are feeling cold.

Keeping your body and skin warm before an operation can:

- Speed up your recovery from anaesthesia
- Improve healing
- Reduce the risk of serious complications
- Reduce uncomfortable shivering after surgery

Anaesthesia for hip or knee replacement

You will be assessed by an anaesthetist before your surgery. It is the anaesthetist who has the final say as to whether or not your operation is to go ahead.

The most common anaesthetic used at our hospitals for hip and knee replacement operations is a spinal anaesthetic. We can also give you a drug that makes you sleepy and relaxed (a sedative); this is adjusted according to how sleepy you wish to be during the operation.

It takes one and a half to four hours for feeling (sensation) to return to the area of your body that is numb.

What is a spinal anaesthetic?

A spinal anaesthetic is a measured injection of local anaesthetic close to the nerves in your lower back.

- your body will go numb from the waist down
- your operation can be carried out without you feeling any pain
- you can also have drugs to make you sleepy and relaxed (this is often referred to as sedation)

Before your operation the anaesthetist will come and see you on the ward. Your medical history will be reviewed and the anaesthetist will discuss the anaesthetic options with you. If a spinal anaesthetic is not suitable for you or you do not want one then the anaesthetist will explain other options. You will also be given a general leaflet on Anaesthetics at pre-operative assessment.

Advantages of a spinal anaesthetic compared to a general anaesthetic

- You should have less sickness and drowsiness after the operation – this means that you may be able to drink and eat sooner.
- Less bleeding therefore potentially less chance of needing a blood transfusion.
- Good pain relief in the period immediately after surgery.
- The option to choose how awake or ‘sleepy’ you would like to be during the procedure.
- Less effect on heart and lungs, reduced risk of chest infections.

What does the operation involve?

A nurse will go through a check list to ensure that you are safely prepared for your operation. They will then escort you to theatre; you will walk or if necessary be taken in a wheelchair.

In a reception area, a theatre nurse will again check that all details are correct and that nothing has been missed. From here, you will be taken into the anaesthetic room, where you will be given your anaesthetic.

The operation itself takes approximately one and a half hours, a revision or complex knee operation takes between two and four hours. After your operation, you will be transferred to the recovery room where a nurse will remain with you until you are safely recovered from your anaesthetic. You may be given tea or coffee and a biscuit if you feel able to.

You will have a drip in your arm giving you intravenous fluids. In addition, some patients may require a blood transfusion.

You will be given antibiotic therapy as a preventative measure against infection.

After the operation

Once safely round from your anaesthetic, a nurse will collect and escort you back to the ward on your bed. Your blood pressure, pulse and temperature will be recorded and your dressing and any drains checked regularly. These observations will continue throughout the rest of the day or night, as necessary.

Oxygen may be given via small nasal tubes for 24 hours post-operatively.

You will be prescribed anticoagulant medication which thins the blood which aids the prevention of deep vein thrombosis. We will give you elastic stockings to wear for two weeks unless we think you are more at risk of developing a blood clot. In this instance you will need to wear them for six weeks.

You may also be given a warming blanket to help your body recover from the surgery.

Your knee will have an Aquacel dressing (a padded, waterproof dressing) in place until your clips are removed.

You may eat and drink as soon as you feel able. Your intravenous drip will be continued until you are drinking, eating and passing urine in adequate amounts.

You may experience incontinence of urine due to your spinal anaesthetic, this is only temporary. You will be given assistance to transfer out of bed to use the toilet as and when required.

A blood sample will be taken to check to see if you are anaemic after your operation.

The day after your operation you will have an x-ray taken of your new joint to allow your surgeon to check that the position of it is satisfactory.

Pain Relief

To do your exercises, it is essential to have good pain control, so you will be encouraged to take medication to minimise your pain. There are many forms of pain relief available and these will be given according to your needs. Anticipate times when your pain may increase e.g. when moving or exercising.

Please ensure that you tell someone if your medication is not working for you, as often it is possible to either change it or give you additional medication to maximise your pain relief.

Very occasionally, a special pump called a PCAS (Patient Controlled Analgesia System) can be used if you have a poor response to oral analgesia.

Strong pain relief is given routinely every twelve hours for forty eight hours, alongside other pain killers.

You will be asked to score your level of pain as described below:

Pain Score	**Description**
0 (none)	No pain at rest **or** on movement
1 – 3 (mild)	No pain at rest **but** slight pain on movement
4 – 7 (moderate)	Intermittent pain at rest **or** moderate pain on movement
8 – 10 (severe)	Continuous pain at rest **or** severe pain on movement

It is proven that the sooner new joints are exercised and used, the better the result. It is important that new knee replacements alter their position frequently.

Your recovery

Day of Surgery (Day 0) – On the ward

- You will be encouraged to eat and drink as soon as you are able
- You will be encouraged to get up two hours after you return to the ward.
- Staff will show you how to move your knee, stand and walk a few steps as you are able.
- You will then be able to sit in a chair. It is important that you can fully straighten your leg as well as bend it. You will be encouraged to rest with your leg straight at intervals throughout the day. A Cryo/Cuff® (icepack) will be used for pain relief and swelling reduction.

- You will be encouraged to exercise independently throughout the day:
  - Take several deep breaths every hour.
  - Start your post-operative circulation exercises:
    a) Ankle movements: move the feet up, down and in circles

    b) Tighten thigh muscles: sit with your legs straight on the bed. Pull your toes up towards you, then tighten up the front of your thigh and press the back of your knee down into the bed.
    c) Clench and squeeze the buttocks: clench your buttocks together, holding the position for five seconds before relaxing.

Post Operation Day 1

You will be encouraged to be as independent as possible:

- You are encouraged get dressed into your normal clothes. Please bring easy-fitting day clothes and well fitting slippers. If you have bought dressing aids, please bring them to the ward.
- Routine pain relief and any other medicines you normally take will be given to you by the Nursing staff.
- You will have an x-ray of your Joint.
- Complete your post-operative exercises as you have been instructed to by the physiotherapist.
- Assistance with mobilising and dressing if needed.
- Nursing staff will be taking regular observations.
- Plans for discharge home are in place including transport home. The hospital does not routinely provide transport to take you home. When it is agreed you are safe to go home please make your own transport arrangements.

Post Operation Day 2

You will be encouraged to:

- Attend to your own personal hygiene needs using your dressing aids.
- Continue with regular walks and exercises with the Physiotherapist.
- Practice step/stairs if necessary.
- Practice your knee bend to a right angle (90 degrees) and your straight leg raise exercises regularly.

You will be seen by therapy staff to practice transfers, for example being able to get in and out of the bed. They will also check that you can manage other activities that you may do in daily life.

Your discharge home will be arranged, but you can only go home if you have completed all assessments safely.

On discharge, take your Cryo/Cuff® home and continue to use it for one week. Cool it in the fridge/freezer.

A pharmacist will visit you on the ward during your admission and check that all your medicines are prescribed for you. They will tell you about any new medicines you have been prescribed, and will be happy to answer any queries you may have.

When can I go home?

The normal length of stay following a TKR is around two days, dependant on your progress and home circumstances. Plans for discharge will be continuing during the whole of your stay and will involve you being seen and assessed by all members of the ward team. These people will include your doctors, nurses, physiotherapists and occupational therapists.
But what we aim for is:

1. A satisfactory wound dressing with no excessive leakage. This dressing remains in place until your clips/stitches come out unless there is heavy leakage. You will be asked to arrange an appointment with your Practice Nurse to remove the stitches or clips around the 12th post-operative day; if you are unable to attend your GP practice we will arrange a District Nurse.
2. For you to be independently getting in and out of bed, walking independently with your walking aid and have completed stair and step assessments if required.
3. For you to be bending your knee to a 90 degree angle. Sometimes, people do go home before they can achieve this, and continuing physiotherapy will be arranged for you as an outpatient.
4. Discharge plans are complete and any equipment you may require for you to be safe at home is available. We can advise you on where to purchase the small items of equipment if you wish to do so.

On Discharge

We aim to discharge you from the ward before 11am.

If you are unable to get transport home before lunch you will be taken to the discharge lounge to wait for your transport home. The discharge lounge is open Monday to Friday 8.00am – 6.00pm.

We are here to help you. Please contact us if you have concerns regarding any aspect of your stay or ongoing care:

Helpline number: 01904 724922

You will be contacted by a nurse after discharge for a telephone assessment to ensure you are managing at home.

Advice for using crutches to get around

Walking

We will normally provide a walking frame for your first attempt at walking until you are safe and steady. This is then usually changed by the therapy staff to crutches or sticks. Most people will manage with two sticks by the time they leave hospital. You may need to use crutches if you have a weight bearing restriction following your surgery.

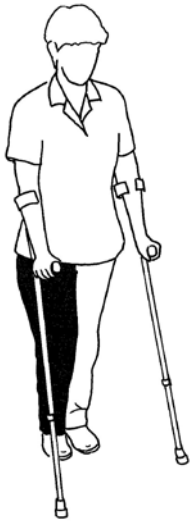
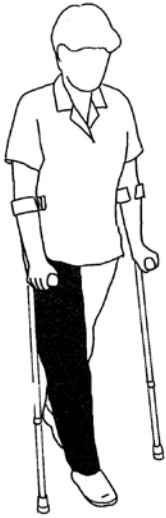
The therapy staff will help and instruct you in the best way to correct your posture and walking and advise you on appropriate exercises for your knee muscles.

When your knee is comfortable and you feel you are not limping, you may begin to use one stick. This must be held in the opposite side to your knee replacement.

Do not discard your walking aid completely until you have been advised to by therapy staff or consultant. If you are using crutches and are partial weight bearing this should be continued until your follow-up appointment with the consultant.

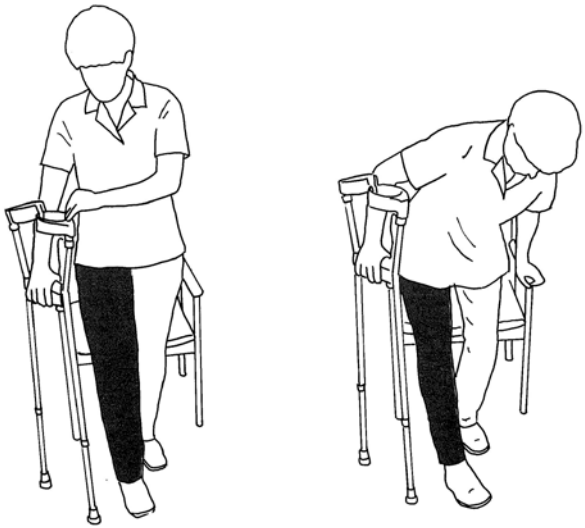
When turning, you must remember not to pivot or twist on your new knee. It is, therefore, important that you pick your feet up with each small step as you turn.

The sequence for walking should be:

		
1. Move the walking aid forward first	2. Then the operated leg	3. Then the unoperated leg

Sitting down

Stand in front of the chair. Take each arm out of the crutches and put them in the ‘H’ position, holding with one hand. Once balanced, reach back for the arm of the chair with the other hand. In a slow and controlled manner, lower yourself in to a sitting position.



Getting out of the chair is the reverse, always remembering to push yourself up with the arms of the chair and not putting your elbow crutches on until you are safely standing up and balanced. The principle is the same for whatever you are sitting on, chair, bed, toilet etc.

Steps or stairs

Before you are discharged from hospital, the therapy staff will show you how to safely manage with steps or stairs, using your walking aid to support the operated leg. At first, this may sound daunting but many patients are surprised that it is easier than they thought. You will soon gain confidence with patience and practice.

Use the banister/handrail if there is one, carrying your stick or crutch in the opposite hand: have one crutch or stick on your arm to lean on and carry the other crutch/stick as in the picture below. You could also give the spare crutch/stick to someone else to carry for you.

Going up stairs

Step up with your un-operated leg first, followed by the operated leg, then finally your sticks or crutches, taking one step at a time.

Going up stairs:

1. Unaffected leg
2. Operated leg
3. Crutch/stick

Going down stairs

Put your sticks or crutches down on the first step, then your operated on leg, followed by the un-operated on leg.

Going down stairs:

1. Crutch/stick
2. Operated leg
3. Unaffected leg

Getting in and out of a car

- Have the car parked away from the kerb so that you do not have to stoop so low to get in.

- Ask the driver to push the passenger seat all the way back and recline it slightly.

- If the seat is too low, you may need a small cushion or pillow to raise you a little.

- Putting a plastic bag or glossy magazine on the seat can help you slide and turn into position.

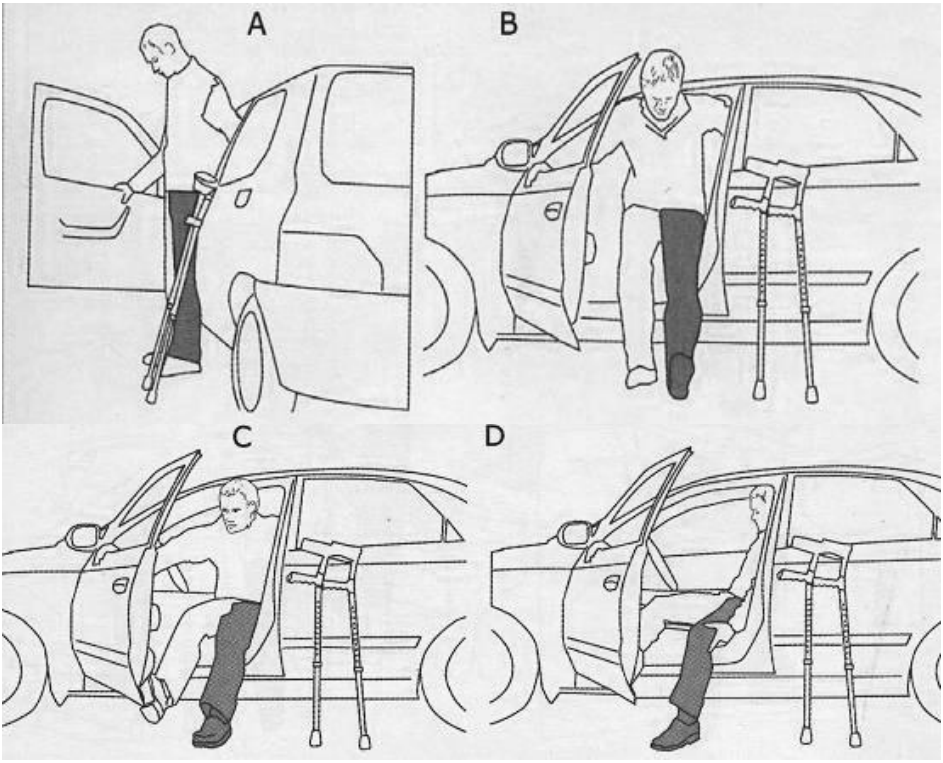
- Reverse the above procedure, to get out of the car.

A. Back up to the car until you feel it against the back of your legs.

B. Carefully lower yourself onto the seat, keeping your operated leg straight out in front of you as you sit down.

C. Slide across the seat towards the handbrake to give yourself sufficient room to get your legs into the car.

D. Turn and bring your legs into the car. Support your operated leg when you bring this into the car.



What happens when I go home?

Recovery is a gradual process, in general it takes six to 12 weeks to get over the operation, but the best results aren't obtained for up to a year.

Most patients are able to return to driving after three weeks. However, the precise time depends on the rate at which an individual recovers. Please check with your consultant at your follow up appointment if you are unsure. Remember, you need a good pain-free bend and to be able to perform an emergency stop to drive safely. It is advisable to contact your insurance company to check that you are covered to drive.

When you go home your progress will depend upon you continuing with your exercise programme. This is essential to get the best results from your total knee replacement. Out-patient Physiotherapy will be organised for you following discharge.

If you notice your calf is painful, swollen, or warm to the touch, please contact ward 29 within 24 hours. These symptoms may be a sign that you are developing a DVT (for more information on DVT, please see the risks of surgery section of this booklet).

Infection

Your artificial joint can be at risk of infection. Because of this, you are reminded to go to your GP if you develop an infection elsewhere in your body, so that it can be treated with the appropriate antibiotics to prevent the infection affecting your artificial joint.

Please contact ward 29 if any of the following occur:

- Excessive bruising around the wound, a certain amount is to be expected.
- Excessive pain at or around the wound site.
- Redness or swelling.
- Discharge or smell from your wound.
- If you feel feverish or have a rise in temperature.
- The wound does not appear to be healing after one week.
- You feel generally unwell.

Follow-up

You will see the consultant at approximately six weeks post-op for a routine follow up appointment. At this point, you can start to resume a normal lifestyle, including driving again and sleeping on your side. Most patients have started to wean off their pain medications and walking aids by this stage, but if you are not ready, please continue with them.

Physiotherapy Guide

Introduction

As a general guide, exercises need to be carried out three to four times a day. Your physiotherapist may need to adjust this frequency to suit your individual need. Aim to do 10 repetitions of each exercise.

Exercises should be carried out strictly as instructed by your physiotherapist. Should you not carry out these exercises as recommended, or do not do them as regularly as you have been requested to, you do so at your own risk and the Trust accepts no liability for such misuse.

Preoperative exercises (1 - 4)

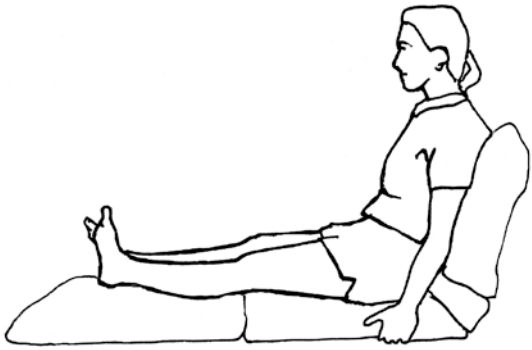
These exercises aim to improve movement in the knee and strengthen your thigh muscles in preparation for your operation.

Ensure all exercises that involve lying down are carried out on a comfortable, supportive and stable surface.

Each position is illustrated in a diagram that accompanies the text.

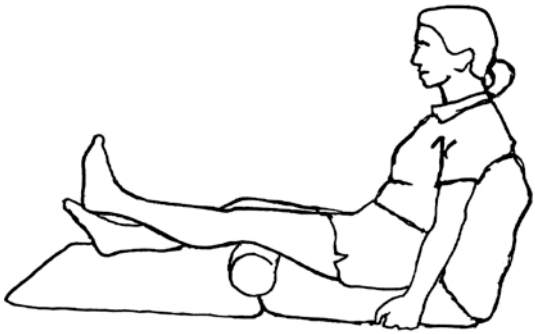
1. Static quads

Sit with your legs straight. Tighten up the front of your thigh, press the back of your knee into the bed and pull your toes up towards you. Hold for five seconds.



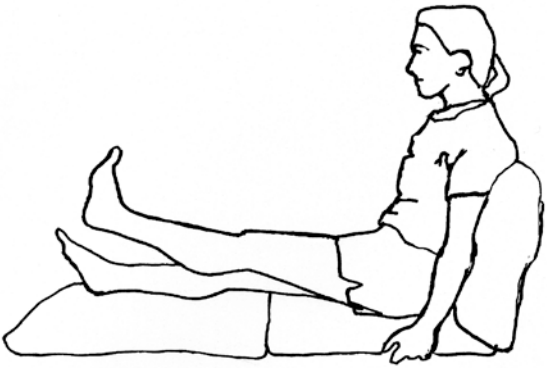
2. Inner range quads

Sit as in exercise one. Put a rolled up towel beneath your knee. Straighten your leg, keeping your knee on the towel. Hold for five seconds and lower slowly.



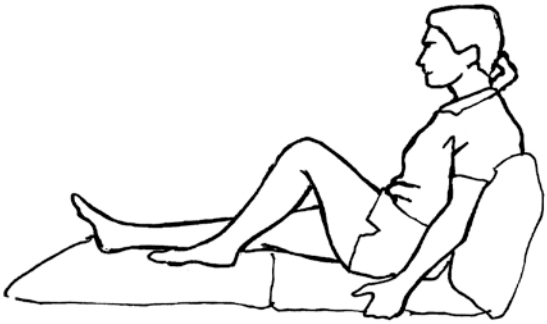
3. Straight leg raise

Sit as in exercise one. Bracing your knee and keeping your leg straight, lift your leg up a few centimetres keeping your toes pointing towards you. Hold for five seconds. Lower slowly.



4. Knee flexion

Sit as in exercise one. Bend your knee so that your heel moves towards your bottom then straighten your leg.



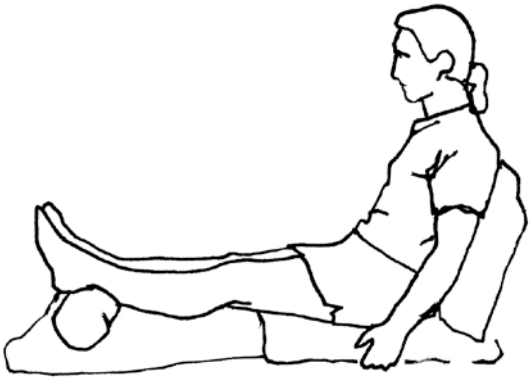
Postoperative exercises

Following your operation you will spend some time resting on the bed, you must **never** rest with a pillow under your operated knee. The physiotherapist will instruct you when you can commence your exercises. Remember to use regular ice packs for 10 minutes at a time and to elevate your knee on a footstool.

Restart your preoperative exercises numbers one to four.

5. Heel prop

Sit with your legs straight and heel propped on a small rolled up towel. Allow the back of your knee to fully straighten and relax. Aim to maintain this position for up to 10 minutes.



6. Knee extension

Sit on a chair; lift your foot up until your leg is fully straight.

Hold for five seconds and slowly lower.

7. Squats

Stand with your feet shoulder width apart.

Bend your knees to 45 degrees and then return to your starting position.

8. Hamstring curls

Standing or lying down on your front, bend your knee backwards, aiming to get your heel towards your bottom.

9. Calf raises

In standing, raise your heels off the floor onto your toes and slowly lower.

10. Assisted knee flexion

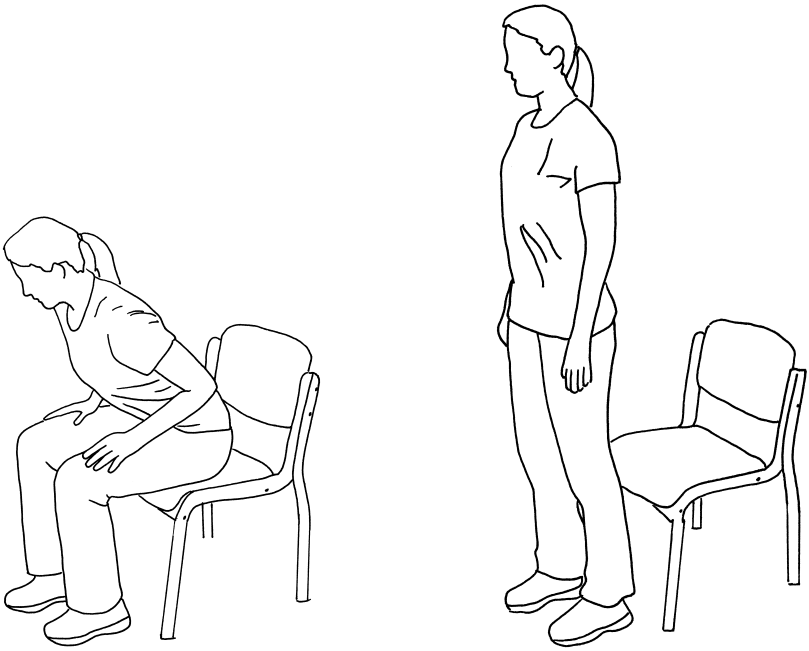
Sit on a chair with a plastic bag under your foot, slide your foot backwards. You can also cross your other leg in front of your operated leg to help the knee to bend.

11. Knee cap movements

Sit with your leg straight and thigh relaxed. Gently move your knee cap from side to side and up and down.

12. Sit to Stand

Sit on a chair, bend forwards from the hips, and practice standing up without using your arms. Sit down again slowly.



Advanced exercises and Stretches

Stretches should be gentle and not painful. Do not attempt these exercises until instructed to do so by your physiotherapist.

13. Hamstring stretch

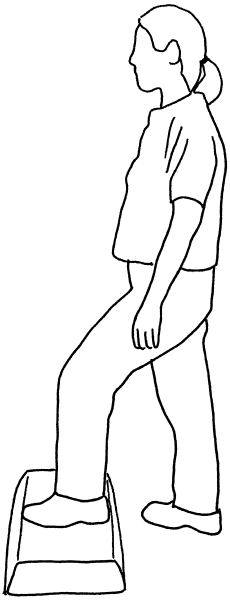
Stand with your operated leg stretched out in front of you, with your knee straight and heel resting on the floor. Gently pull your toes up towards you and then bend forward at the hip until you feel a stretch at the back of your leg. Hold for between 20 and 30 seconds.

14. Calf stretch

Stand with your operated leg behind you, keep your heel flat to the floor, knee straight and foot facing forwards. Gently lean your weight forwards onto your other leg until you feel a stretch in the back of your operated leg. Hold for between 20 and 30 seconds.

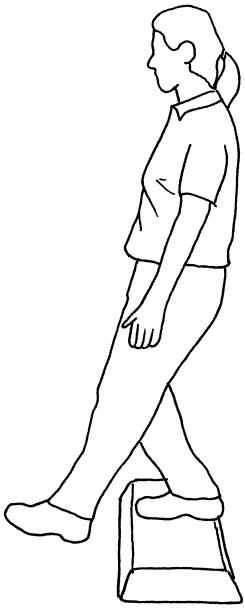
15. Step ups

Place your operated leg onto a step in front of you. Whilst keeping your operated leg there, step up and down with the un-operated leg.



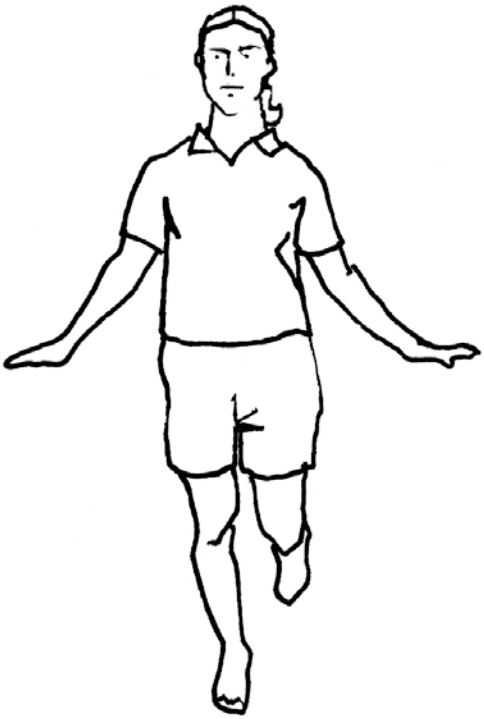
16. Step downs

Stand with both legs on a bottom step facing downwards. Keeping the operated leg on the step, proceed to step down and then up with the un-operated leg.



17. Single leg stand

Practice standing on your operated leg without support. Maintain your balance and aim to improve duration.



Space for your notes

Tell us what you think of this leaflet

We hope that you found this leaflet helpful. If you would like to tell us what you think, please contact:
Rachel Allan, Ward Sister, Ward 29, The York Hospital, Wigginton Road, York, YO31 8HE or telephone 01904 726029.

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Our Trust is committed to teaching, training and research to support the development of health and healthcare in our community. Healthcare students may observe consultations for this purpose. You can opt out if you do not want students to observe. We may also ask you if you would like to be involved in our research.

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PALS offers impartial advice and assistance to patients, their relatives, friends and carers. We can listen to feedback (positive or negative), answer questions and help resolve any concerns about Trust services.

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An answer phone is available out of hours.

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*Image of getting in and out of car kindly provided by Bedford Hospital NHS Trust.
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