Healthier Pennine Lancashire

NHS
East Lancashire Hospitals
NHS Trust
A University Teaching Trust

Orthopaedic Patient Guide: Uni Compartmental (Partial) Knee Replacements

An Information Guide

Safe | Personal | Effective

Introduction

About East Lancashire Hospitals NHS Trust

Welcome to the Orthopaedic Department at East Lancashire Hospitals. Our team consists of 20 consultants with specialist skills in hip and knee, foot and ankle and upper limb surgery The Orthopaedic team is committed to providing the highest standard of safe, personal, and effective care available. New and advanced treatment options are frequently incorporated in this rapidly changing field. Surgery for the majority of patients will be undertaken at Burnley General Hospital. For those patients who may need an intensive care unit or high dependency unit surgery will be undertaken at Royal Blackburn Hospital.

Our Team at East Lancashire NHS Trust

The surgical team is supported by a multi-disciplinary team (MDT) of Anaesthetists, Dietitians, Doctors and Enhanced Recovery Nurse, Nurses, Occupational Therapists, Pharmacists, Physiotherapists and Theatre Staff.

Anaesthetist

An Anaesthetist is a doctor who will be responsible for your well-being before, during and after the operation. This includes monitoring your blood pressure, pulse, temperature, breathing, fluid, and blood replacement as required. They will also administer the form of anaesthesia that you will need during the operation. Your Anaesthetist will advise you on which type of anaesthesia would be most appropriate to you.

Dieticians

Dieticians are health professionals who oversee and manage your nutritional requirements during your stay and recovery where needed.

Doctors

There are various levels of doctors that you may see on the ward, ranging from a junior doctor to a consultant surgeon.

Enhanced Recovery Lead Nurse

An enhanced recovery lead nurse works in all specialities with all members of the multi-disciplinary team. They all work together to ensure they provide a safe and effective enhanced recovery programme suitable for each patient. They are continually collecting data and asking for feedback from our patients about their hospital stay giving us the information we need to keep adapting and improving.

Nursing Staff

Nursing staff have different levels of expertise within the ward. Experienced qualified nurses will be able to make decisions with regard to your nursing care.

Introduction

Occupational Therapists & Physiotherapists

Occupational Therapy provides guidance with personal care, mobility, home management (shopping, cooking), vocational activity (employment) and leisure activities.
Physiotherapy is a health care profession which provides services to help people affected by injury, illness or disability through movement and exercise, manual therapy, education, and advice.
Therapy assistants support the delivery of Occupational Therapy and Physiotherapy treatment and work in an integrated way to deliver the best care to you. They are supported by a qualified Physiotherapist and Occupational Therapist.

Pharmacists

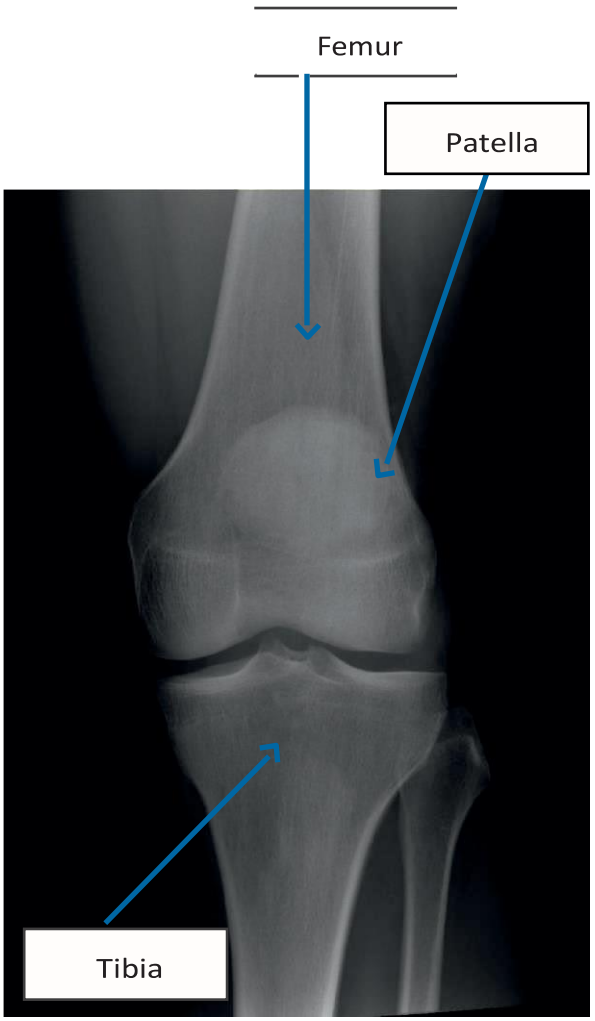
The Pharmacist is fully qualified and registered with the General Pharmaceutical Council (GPhC). The pharmacist visits all the wards and checks drug charts for legibility, safety and effectiveness of each drug prescribed by the doctor. The pharmacist will also check for any drug interactions and dispense any new prescribed items and your tablets to take home.

Theatre Staff

Theatre Staff work with patients and are involved in every stage of a person’s operation including before your operation, assisting the anaesthetist, assisting the Surgeon during your operation and recovery after your operation

Why do patients need a Uni-Compartmental Knee Replacement?

The normal knee



The knee joint is made up of two joints:

- The larger joint is between the tibia (shin bone) and the femur (thigh bone).
  This is known as the tibiofemoral joint.
- The smaller joint is between the patella (kneecap) and the femur otherwise known as the patellofemoral joint.

The surfaces of the joints are covered by articular cartilage, which is a firm, slippery material about 3mm thick.
A small amount of lubricating fluid is also present.
Articular cartilage enables bones of a joint to move painlessly and effortlessly over one another with very little friction, even under load.

The knee has four ligaments which hold the joint together and provides stability. Ligaments are tough fibrous bands and attach at each end to the bone. Although the knee appears to act as a hinge, moving forwards and backwards, it can also rotate in smaller amounts as well.

Knee function

The knee takes your body weight, and it must cope with walking, running, crouching, bending, andlifting objects.
To do this it has powerful muscles and a large range of movement.

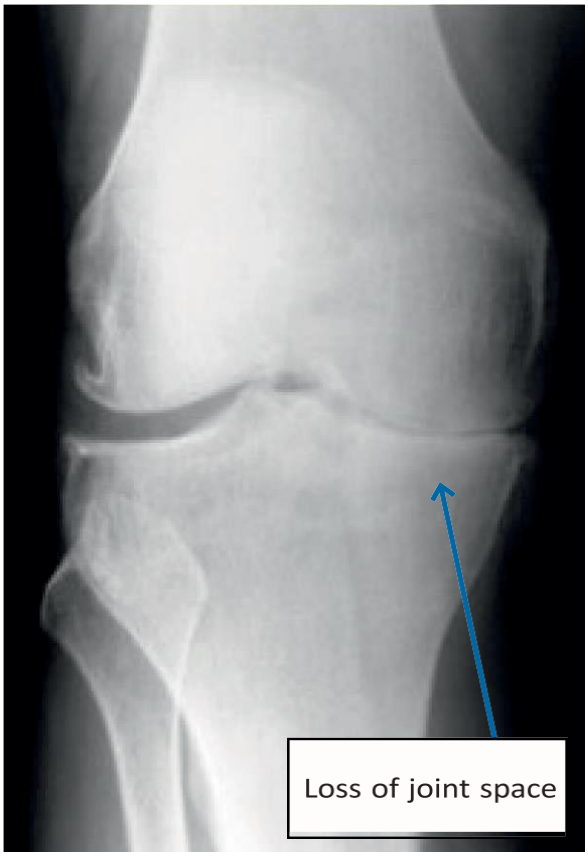
The two most important muscle groups are the quadriceps and the hamstrings.

Four muscles make up the quadriceps and are the big muscle group making up the front of the thigh.
These muscles straighten the knee.

The hamstrings are at the back of the thigh, and they bend the knee.

These muscles control knee movement and are vital for the stability of the joint.

When the knee becomes arthritic



Most of you will have normal age-related changes to the knee joint and may have heard this been referred to as ‘wear and tear.’ This is a form of osteoarthritis of the knee.

Many factors can contribute to having arthritis. Some of these include Obesity, previous accidents, vigorous sport, or a family history.

In osteoarthritis (wear and tear), certain changes occur in the joint.

- The smooth cartilage becomes flaky and develops small cracks.
- The bone underneath the cartilage becomes denser.
- The lining of the joint becomes inflamed and may thicken up.

Some patients will have another form of arthritis called rheumatoid arthritis which often involves other joints too.

As the arthritis progresses, there may be:

- Severe wear of the cartilage allowing the bones to rub and grate together.
- Loss of the joint space.
- Formation of bony lumps called osteophytes.
- Swelling of the knee.
- Knock-knee or bow leg.

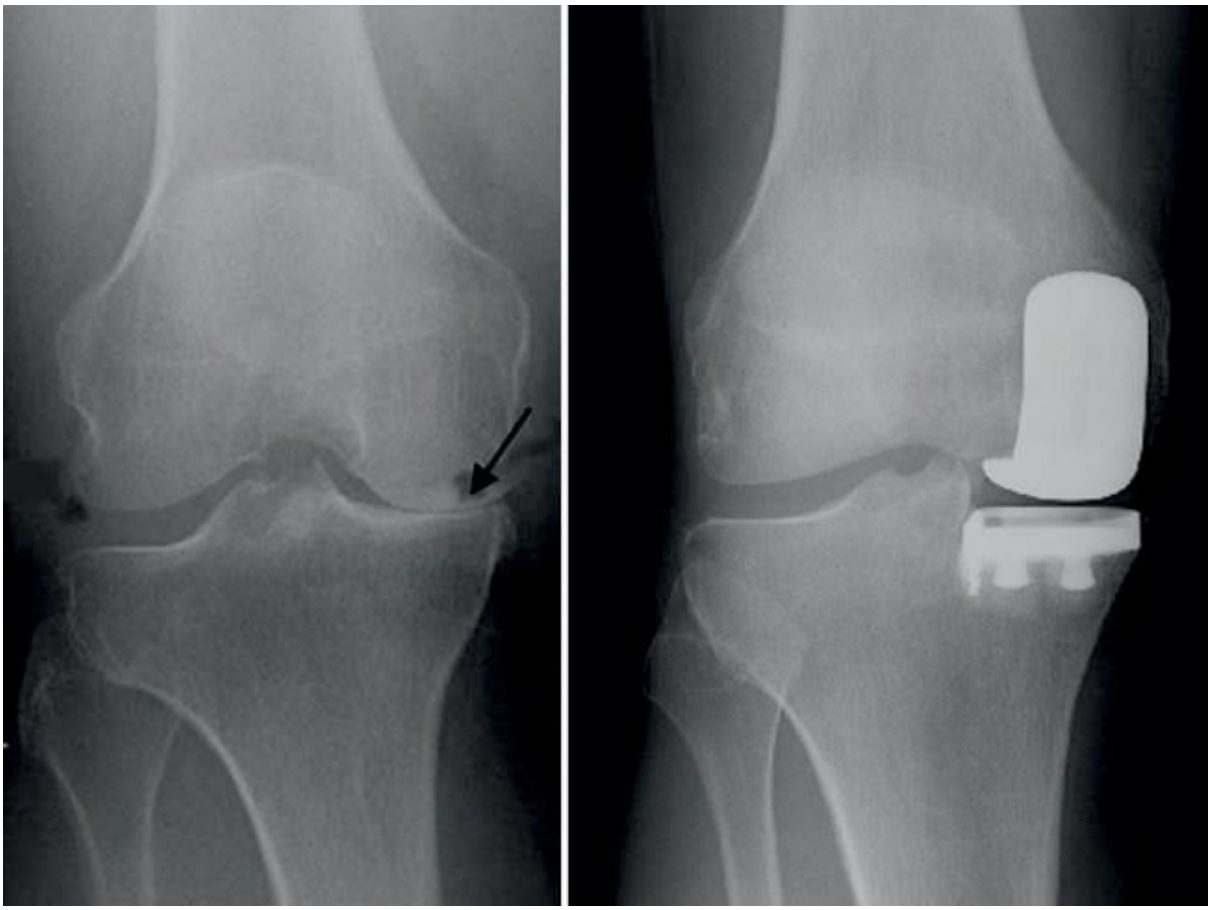
These changes may result in PAIN, LOSS OF MOVEMENT and LOSS OF MUSCLE POWER.

The artificial partial knee joint (Uni-Compartmental (partial) knee replacement)

This type of knee replacement only resurfaces part of the joint that is damaged whereas a total knee replacement resurfaces the full knee. There are many designs of artificial partial knee joints. Your surgeon will choose the most suitable for you. In some cases, a total joint replacement may be required if there is ligament damage or the other compartments of the knee that look more damaged to the visual eye at the time of surgery that was not noticeable on x rays.

The combination of metal and plastic means the joint has low friction, wears very slowly and moves easily with your weight on it. You may be surprised how heavy it feels, but it has to last over 10 years. Remember, only small slithers of bone damaged by arthritis are removed, not the whole knee.

A knee replacement is a major operation. The operation usually takes between 45 minutes to 1½ hours. You are usually in hospital for anything from a day to 2 nights. **You should be prepared to work hard at the exercises given to you by the therapy staff.** Most patients tell us that they are pleased with the result of their partial knee replacement. Some, however, are less satisfied either because a complication has arisen, or their expectations are too high. It can take you 12-18 months to fully recover following a knee replacement.



What can a partial-knee replacement help with?

- You may have a lot of pain which at times is severe and disabling and makes it difficult or impossible to carry out normal daily activities.
- If you cannot walk very far and may have to use a stick. Stairs can also be very difficult.
- Your knee is getting stiff, and you cannot bend it easily.
- Compared with a total knee replacement there are perceived benefits with quicker rehabilitation and the knee feels more “normal” due to preservation of the other compartments.

Risks of Surgery

As with all procedures, this carries some risks and complications. This list is not exhaustive.
Up to 1:5 (20%) of patients has some dissatisfaction after partial knee replacement surgery.

COMMON RISKS: (2-5%)

Pain: the knee will be sore after the operation. If you are in pain, it's important to tell staff so that medicines can be given. Pain will improve with time. Rarely, pain will be a chronic problem & may be due to any of the other complications listed below, or, for no obvious reason. Rarely, some replaced knees can remain painful.

Bleeding: A blood transfusion or iron tablets may occasionally be required. Rarely, the bleeding may form a blood clot or large bruise within the knee which may become painful and require an operation to remove. It is common to see bruising around the knee in the days after surgery and, occasionally, this bruising will extend down the leg, sometimes into the foot.

DVT: (deep vein thrombosis) is a blood clot in a vein. The risks of developing a DVT are greater after any surgery (and especially bone surgery). DVT can pass in the blood stream and be deposited in the lungs (a pulmonary embolism – PE). This is a very serious condition which affects your breathing. Your surgeon may give you medication to try and limit the risk of DVTs from forming. Foot pumps to keep blood circulating around the leg are used until you are mobile. Starting to walk and moving early is one of the best ways to prevent blood clots from forming.

Knee stiffness: may occur after the operation, especially if the knee is stiff before the surgery. Manipulation of the joint (under general anaesthetic) may be necessary.

Leg swelling: Leg swelling is a normal response to the operation and will settle week by week as your body absorbs the bruising this can often cause the whole leg to swell. You should continue to do the exercises in this guidebook for the first six weeks after surgery. You should also aim to lie flat for at least 20 minutes once or twice a day. Walking can help reduce the swelling but standing unnecessarily should be avoided. If the swelling increases or if it is accompanied by tenderness in the calf or groin, a temperature, or breathing problems you should ask your GP for advice.

Progression of arthritis in non-replaced compartments: A partial knee replacement does not protect the whole knee.

Noises and clicks: some people comment they can hear their knee replacement making noises when walking or using the stairs. This is because the implants are metal, and plastic and they can make some noise on movement.

Prosthesis wear: With modern operating techniques and new implants, partial knee replacements last many years. In some cases, they fail earlier. The reason is often unknown. The plastic bearing is the most commonly worn away part.

Revision: When the joint wears out or there has been a complication from the first operation - further knee replacement surgery may be required.

LESS COMMON RISKS: (1-2%)

Infection: You will be given antibiotics at the time of the operation and the procedure will also be performed in sterile conditions (theatre) with sterile equipment. Despite this, infections still occur (1 to 2%). The wound site may become red, hot, and painful. There may also be a discharge of fluid or pus. This is usually treated with antibiotics and an operation to washout the joint may be necessary. In rare cases, the prostheses may be removed and replaced at a later date. The infection can sometimes lead to sepsis (blood infection) and strong antibiotics are required. You will not be discharged from hospital unless the appearance of the wound is satisfactory. After discharge, if your GP or the district nurse has any concerns, he/she should ask your surgeon for a second opinion.

There are two main types of infection MRSA (Methicillin Resistant Staphylococcus Aureus) & MSSA (Methicillin Sensitive Staphylococcus Aureus). These bacteria are carried in the nostrils/skin of around 20% (1 in 5) of the population normally with no issues. When the skin is cut for example during an operation the bacteria can enter the wound and cause further problems.

All patients are screened for MRSA pre-operatively, but you will automatically be given treatment for MSSA prior to your operation.

An infection can occur at any stage in the life of a knee. The reason for this is that any infection in the body can circulate in the blood and settle on the surface of the new knee joint. Once there it forms its own environment, or ‘biofilm’, which makes it difficult to treat with antibiotics alone.

If you develop signs of an infection (e.g. urine or chest infection, tooth abscess, leg ulcer) at any time after your operation, please remind your GP/dentist that you have a partial knee replacement. If your knee suddenly becomes painful, it is important to see your GP so that infection in your partial knee replacement can be ruled out.

Range of movement: After a few months, you should find you have enough movement in your knee to carry out all your normal daily activities. Some people find that it remains difficult to reach down to their feet for example to put on socks and cut toenails, but aids and adaptations are available to help.

Remember infection or reduced function of a knee can be a serious complication. If you develop any new redness around the wound or the wound leaks after leaving hospital, please contact the advanced nurse practitioner’s secretary on 01254 734157.

RARE: (<1%)

PE: a pulmonary embolism is the spread of a blood clot to the lungs and can affect your breathing. This can be fatal.

Allergies: Most joints are made of stainless steel or cobalt chromium and polyethylene. A very small level of nickel is present. It is extremely unlikely that you will have an allergy to your implant even if you have experienced a rash to your watch or earrings. Tell your surgeon if you are concerned.

Fat embolism: This is caused by the fat within the bones (marrow) travelling up into your lungs at the time of surgery and causing breathing problems. Although this can be serious it is most commonly treated with extra oxygen therapy.

Altered leg length: the leg which has been operated upon may appear shorter or longer than the other.

Altered wound healing: the wound may become red, thickened, and painful (keloid scar).

Nerve Damage: efforts are made to prevent this; however, damage to the small nerves of the knee is arisk. This may cause temporary or permanent altered sensation around the knee. There may also be damage to the Peroneal Nerve, this may cause temporary or permanent weakness or altered sensation of the lower leg. Changed sensation to the outer half of the knee and can feel numb for up to 12 months until the nerve fibres recover – this is normal.

Urinary problems: the anaesthetic used can make it difficult to pass water following the knee replacement and sometimes a catheter is inserted into the bladder during the operation. Except in certain circumstances, this should be removed the morning after surgery.

Bone Damage: bone may be broken when the prosthesis (false joint) is inserted. This may require fixation, either at time or at a later operation or the surgeon may simply slow down your activities for several weeks to allow the fracture to heal.

Ectopic bone or heterotopic ossification (extra bone formation): The body may form new bone in the tissues around the knee in response to the trauma of the operation. This tends to occur only in the immediate recovery phase and may lead to long-term stiffness of the joint.

Tendon or ligament damage: care is taken to protect all the structures during surgery but there is a risk of damaging these soft tissues with the instruments. This can lead to some instability of the knee or disability with reduced movements and strength in the knee and may require further surgery.

Bearing dislocation (if mobile bearing used): This usually requires a further open surgical procedure to relocate this bearing.

Blood vessel damage: the vessels at the back of the knee may be damaged and may require further surgery.

Amputation: This can occur if the blood vessels at the back of the knee are damaged.

Death: This very rare complication may occur after any major surgery and from any of the above.

Preventing Venous Thromboembolism (VTE) & Hospital Associated Blood Clots: A guide for patients at East Lancashire Hospitals NHS Trust

VTE is the name given to deep vein thrombosis (DVT) or a pulmonary embolism (PE). A DVT is a thrombus (blood clot) that forms in a deep vein, most commonly in your leg or pelvis and can cause swelling and pain or discolouration of the leg-red, purple, or blue changes.

If a clot becomes dislodged and passes through your circulation and reaches your lungs, this is called a PE and can cause coughing (with blood-stained phlegm), chest pain and breathlessness or collapse. VTE diagnosis requires immediate treatment. If you develop any of these symptoms either in hospital or after discharge, please seek medical advice immediately.

VTE occurs in the general population in about one in 1000 people. You will have heard in the news about DVT in people flying for long periods, but you are actually much more likely to get VTE if you are going into hospital because of illness or for surgery.

In addition to admission to hospital, there are other factors which place you at greater risk of VTE. These include:

- A previous VTE
- A recent diagnosis of cancer
- Certain blood conditions/clotting disorders (antiphospholipid syndrome or factor V Leiden)
- Use of certain contraceptive and hormone replacement tablets
- Being overweight (Body mass index more than 30)
- Not being able to move about
- Being older than 60
- Suffering a significant injury or trauma
- Being pregnant
- After giving birth
- Dehydration
- Smoking
- Varicose veins etc.

A Hospital associated blood clot happens in patients when they are in hospital and can happen up to 90 days after they leave hospital. In fact, about two thirds of all blood clots happen during or in the 90 days after a stay in hospital. Although the risks are small, the consequences can be serious. In the longer term, blood clots can cause painful, long-term swelling and ulcers. They can even lead to death.

If your hospital admission has been planned several weeks in advance, there are some precautions which you can take to reduce your risk of VTE:

- Talk to your doctor about your contraceptive or hormone replacement tablets. Your doctor may consider stopping them in the weeks before your operation or provide advice on temporarily using other methods if you stop using your usual contraceptive.
- Keep a healthy weight and do regular exercise.
- Stop smoking.

When in hospital:

- Keep moving or walking and get out of bed as soon as you can after your operation (discuss with your nurse, doctor, or physiotherapist for more information); leg exercises are valuable.
- Ask to see a physiotherapist for some leg exercises.
- Ask your doctor or nurse: ‘What is being done to reduce my risk of VTE?’
- Drink plenty of fluid to keep hydrated.

The Government recognises the risk of VTE is an important problem in hospitals and has advised doctors and nurses that everyone being admitted to hospital should have a risk assessment completed. Your individual risk of VTE will be assessed by your clinical team. If you are at risk, your doctor or nurse will discuss with you what can be done to reduce your risk and will follow national guidelines and offer you protection against VTE.

The clinical team may ask you to wear a calf or foot pump which is a special inflatable sleeve or cuff around your legs while you are in bed or sitting still in a chair. This will inflate automatically and provide pressure at regular intervals, increasing blood flow out of your legs. If they have been removed for more than three hours they should not be reapplied. Unless agreed by a doctor. Finally, your doctor might consider that you should take an anticoagulant injection or tablet, which reduces the chance of your blood clotting and stop DVT from forming. To be effective, these methods of prevention must be fitted, used, and administered correctly, so if you have any questions or concerns, please ask your doctor for advice.

If you have been advised to continue anticoagulation medicine at home and you need help with administration of injections or tablets, please ask your nurse before discharge. If you develop any signs or symptoms of VTE at home, then seek medical advice immediately, either from your GP (home doctor) or your nearest hospital emergency department. Please follow the precautions that you can take to reduce your risk of VTE at home: Keep moving or walking; leg exercises are valuable; drink plenty of fluid to keep hydrated (unless you have been advised against these by your doctor due to other medical conditions).

Blood transfusion

Receiving a blood transfusion:

Like all medical treatments, a blood transfusion should only be used when really necessary. The decision to give a blood transfusion to a patient is made only after careful consideration. In making that decision, your doctor will balance the risk of you having a blood transfusion against the risk of you not having one. Ask your doctor to explain why you need a transfusion, as there may be alternative treatments available.

If you are interested in finding out more about blood transfusion and have access to the internet, you might find the following website useful: National Blood Services – **www.blood.co.uk**

Reference: Northwest Independent Hospital, Church Hill House, Ballykelly, BT49 0SJ.

Reducing the risk of infection in hospital

What can you do to help?

Publicity about hospital-acquired infection has caused a great deal of concern across the country. We recommend that you and all visitors adhere to the following guidance.

- Keeping your hands and body clean is important when you are in hospital. Take personal toiletries and specific skin care preparations if appropriate.
- Taking a container of moist anti-bacterial hand wipes with you will ensure you always have some available when you need to clean your hands, for example immediately before you eat a meal.
- Ensure you always wash your hands after using the toilet.
- Hospital staff can help protect you by washing their hands, or by cleaning them with special alcohol rub or gel. If a member of staff needs to examine you or perform a procedure, e.g. change your dressing, do not be afraid to ask if they have first washed their hands or used an alcohol rub or gel.
- Try to keep the top of your locker and bed table reasonably free from clutter. Too many things left on top make it more difficult for the cleaning staff to clean your locker and bed table properly.
- If you visit the bathroom or toilet, and you are concerned that it does not look clean report this immediately to the nurse in charge of the ward. Request it be cleaned before you use it and use an alternative in the meantime.
- Your bed area should be cleaned regularly. If you or your visitors see something that has been missed during cleaning report it to the nurse in charge and request it is cleaned.
- Always wear something on your feet when walking around the hospital. You may request slipper socks.
- Ask your visitors to wash their hands on arrival to the Ward.
- Discourage your visitors from sitting on your bed as infection control is extremely important in the orthopaedic unit and visitors' chairs are available.
- If visitors are unwell it is advisable that they refrain from visiting as this may cause further complications for you whilst you are recovering as you are vulnerable to infection.

Your general health and fitness before your operation

It is important that before your operation you help yourself by being as fit and well prepared as possible. You have responsibilities which we expect you to undertake prior to the operation. These include:

Smoking

It is East Lancashire Hospitals NHS Trust policy that smoking is not allowed on the hospital grounds. It is important that you take this opportunity to reduce the amount or give up smoking prior to the operation. This will benefit you during and following your operation, as smoking can affect blood circulation and **delays** healing. Smoking can also increase the risk of chest problems and infection. Advice can be gained from your GP or practice nurse.

Eating a Balanced Diet

It is important that you eat well prior to surgery to help with your post operative recovery. Being well nourished reduces risks of post-op complications and your length of stay in hospital. Try to eat a varied, nutrient rich, balanced diet from when your surgeon tells you that you are going to have surgery. We want to protect your body by eating well. Include regular protein sources in your diet such as lean meats, fish, eggs, beans and pulses, milk and cheese. Muscle loss can occur quickly so try to include some protein at each meal.

Sleep, Rest and Play
Prior to your operation try and keep as active and strong as possible, as this makes it easier using walking aids after the operation. It is important that you talk to others about the operation and not worry, as this will help prepare you mentally for your operation.

Safety
Avoid any trips or falls whilst waiting for your operation. Helpful tips include picking up loose rugs at home, wearing a full shoe and not an open backed shoe. Ensure you drink plenty of water to keep you hydrated and ensure bowels are regular and speak to your GP if you have any concerns.

Skin Care
Look after your skin not just the leg you are having operated on. If you have any cuts, grazes, rashes, or any other skin conditions present on the skin you must ring the ward to inform the staff prior to the day of surgery. This will be assessed by either the nursing staff or the consultant as to whether the operation can go ahead. Do not delay in informing the ward if you have any of the above skin conditions, as leaving it until the day of the operation may result in cancellation leading to wasted theatre time.

East Lancashire Hospitals NHS Trust policies:

Patient Consent
Our commitment to you is to inform you of all aspects of the intended procedure you are to undergo. You will then be required to 'consent' in writing to your procedure.
Following your individual consultation with your surgeon, should you wish for further clarification of any aspects of which you have been informed, please ask, we will be happy to clarify issues.

Data Protection Act
Your name is entered into our computer systems enabling us to keep effective clinical records. Under the Data Protection Act you have the right to view any records held by East Lancashire Hospitals. Please ask a nurse should you wish to access them.
If you or your representative wishes to have copies then you will have to give your written consent for a copy to be made. You may have to pay for this copy.

Dietary requirements
You will have a choice of meals to select from. If you have special dietary needs please inform the Preoperative Assessment Nurse who will notify the ward. Please feel free to remind the ward staff of your needs on your arrival.

Mobile Phones
For the safety, privacy, and dignity of all patients the use of mobile phones is restricted in some areas of the hospital, and you may not be able to use your phone on the ward on which you are placed. Please ask the nurse in charge before you make a call.

Risk Management
East Lancashire Hospitals has comprehensive Risk Assessment Policies in place, which ensure that patient's safety is assured and that areas of improvement are identified, and an improvement plan implemented.

Manual Handling Policy
East Lancashire Hospitals operate a No Lifting Policy. Staff are available to assist your mobility needs and are trained in the use of equipment when it is required. Please ask if you need assistance to move.

Single-sex Accommodation

Being in mixed-sex hospital accommodation can be difficult for some patients for a variety of person and cultural reasons. Here at East Lancashire Hospitals we understand this and strive to treat all patients with privacy and with dignity.. For this reason, we have worked to ensure that we provide single-sex accommodation for all patients wherever possible

- Privacy and dignity are at the heart of our policy, and they are vital components of quality care.
- The over-arching goal is to deliver single-sex accommodation across the service; however the varied needs of different patient groups and clinical settings are recognised.
- There are occasions when mixed-sex accommodation is unavoidable, but patients' privacy and dignity will always be assured.

Patient's Charter

The charter outlines the level of care and service you would expect to receive from East Lancashire Hospitals, assisting you with information on your rights. Also included here are some expectations East Lancashire Hospitals, its staff and patients have of you.

You can expect East Lancashire Hospitals to:

- Provide safe, high-quality healthcare
- Respond to your needs
- Communicate with you
- Involve you in decisions about your care
- Give you information
- Keep your information safe
- Work with you to improve services
- Welcome your comments and let you know the outcomes of complaints

Your responsibility is to:

- Ask questions if you do not understand.
- Follow the advice on treatment regimes given by East Lancs Hospitals' clinical staff and to tell them if you do not intend to follow them.
- Sign the appropriate documentation if you discharge yourself against medical advice.
- Be honest and open with staff, particularly with regard to you and, where relevant, your family's medical history and the medications you are taking. This information will be kept confidential.
- Treat with respect other patients, relatives, and health care professionals equally regardless of differences (colour, gender, religion etc.)
- Seek assistance from the nurse-in-charge if you feel you are not being consulted with regards to treatment options.
- We have a policy of 'zero tolerance' to violence and abuse and anyone behaving inappropriately will be asked to leave the premises.

What happens between now and my surgery?

Optimisation: Exercising before surgery

It is important to be as fit as possible before your operation. It is advised by the National Institute for Health and Care Excellence (NICE) to complete optimisation exercises prior to surgery in order to aid your overall recovery. Keeping the muscles strong and supporting the knee will help to assist your function following the surgery.

This will make your recovery more rapid. The exercises should be commenced from when you are listed for surgery until you have your surgery and some of these you will continue to do as part of your post-operative exercise programme.

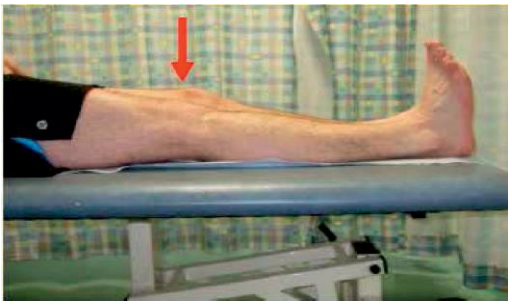
You may find some of these exercises difficult at this stage due to pain in your knee therefore, monitor and stop any exercise that is too painful or that makes your pain worse. Speak to your doctor or physiotherapist if you are concerned about anything.

Always ensure you are stable and safe when doing exercise.

Aim to complete 5-10 repetitions of each exercise, 3-4 times a day.

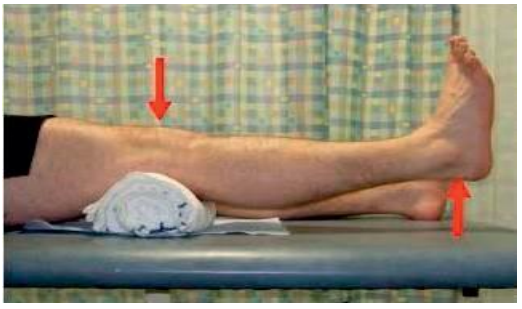
Static Quads

Tighten up the muscles around your knee and push your knee straight, down into the bed.
Also squeeze your buttock muscles together.
Hold for a count of 3 seconds.



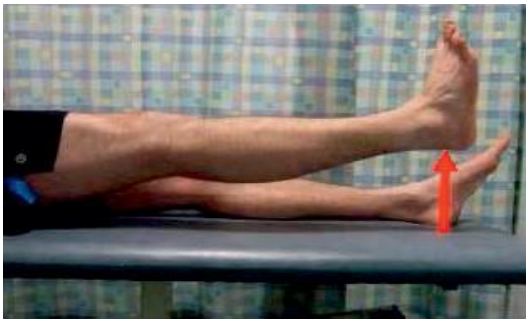
Inner Range Quads

Lie back with a towel rolled up under your knee.
Straighten knee and lift your foot.
Do not lift leg off towel.
Hold for a count of 3 seconds



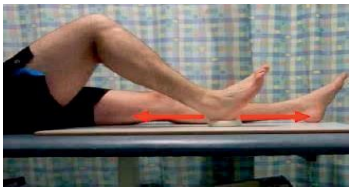
Straight Leg Raise

Tighten up the muscles around your knee and push your knee straight.
Now lift your leg 10cm off the bed.
Hold for a count of 3 seconds



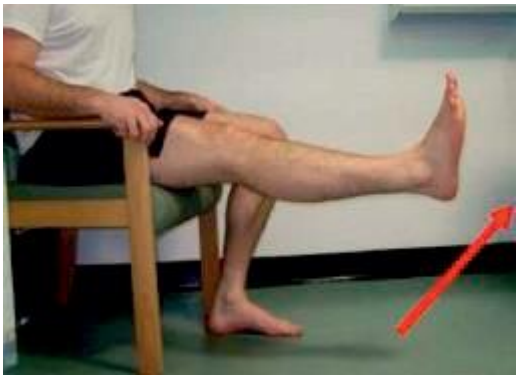
Heel Slides

On a smooth surface slide your heel up and down by bending and straightening your hip and knee.
*Don't force or increase your pain levels
Ask for guidance on how far you should push this is you are not sure.



Knee Extensions

Sit on a chair. Tighten your thigh muscles and straighten your knee. Hold for a count of 3 seconds. Slowly relax your leg back down.



Armchair Push Up

Sit on a firm chair (preferably a dining room chair) Practise standing from a seated position.
To make it easier – sit on the edge of the chair, with the leg not being operated on bent underneath you. Push up into standing using your arms. To make things more challenging- reduce the amount of effort you use through your arms (i.e. use one arm or no arms).

LEVEL ONE

LEVEL TWO

LEVEL THREE

Step Ups

Hold onto a rail
Step up leading with one leg.
Step back down.
Repeat with the other leg.

Other Useful Resources

https://escape-pain.org/I-have-knee-hip-pain

ESCAPE-pain delivers the National Institute for Health and Care Excellence (NICE) core recommendations of exercise and education for the management of osteoarthritis and is referenced in Public Health England (PHE) that is published guidance on musculoskeletal health.

The resources within this electronic webpage help to explain what arthritis is and has video links to some of the exercises advised to complete as above. There are also some additional exercises available.

Please access the website with the address above and review the following:

- Exercise Videos (It is important to read the narrative on 'Top Tips to consider before starting to exercise,' before completing the exercises)
- Educational Videos
- Overview – What is Arthritis? Video Link

Pre-operative Knee School

You will be invited to attend a face-to-face education session which we call the Hip and Knee School. The face-to-face session is based at East Lancs Hospitals and will last approximately 2 hours. It is run by an Assistant Practitioner who specialises in elective Orthopaedic surgery with oversight from an Advanced Nurse Practitioner and aims to fully inform you about uni-knee replacements and your recovery. The session has been developed by the MDT at ELHT. The Assistant Practitioner can be contacted for advice on ward 15 if you have any questions.

Please inform us if your circumstances change and you do not want surgery if you are unwell/ have cuts or breaks in the skin or a cold. A cancellation on the day of surgery costs the taxpayer £6000 for a knee replacement. Please contact elective admission department on the letter you have received.

What to pack and bring into hospital

Pack a small bag of clothes to last 24 hours and other items (see check list below). These will be moved to your bed space whilst you are in surgery and may be kept in your bedside locker.
Label your belongings, particularly your dressing gown and walking aids. Leave your valuables at home as there is no facility to secure belongings on the ward.

- Uni Knee Replacement Guidebook.
- Loose fitting day clothes to wear during your stay.
- Nightwear. Bring a nightdress or pyjamas and a dressing gown as the ward has male and female admissions.
- Toiletries, soap, and a towel as these are not provided.
- Full slippers or comfortable shoes with backs*.
- Dressing aids,
- Elbow crutches, walking aids.
- Books/magazines.
- Small amount of money to cover purchases from the hospital shop. Please do not bring a large amount of money into hospital we cannot take responsibility for the safe storage of valuable items.
- All medication (including inhalers and sprays) should be brought into hospital in the original packages or boxes with the labels on, these will be locked away in a medicine drawer next to your bed area.
- Contact details of the person who will be driving you home.

It is not uncommon for feet to become swollen in the days following surgery so please choose footwear that is adjustable (with laces or Velcro) or is stretchy. Footwear should be clean and have a non-slip sole.

Arranging some support for when you return home

- Planning for discharge is a difficult task prior to your operation as you are probably not sure how quickly you will recover. Therefore it is important that you plan your return home carefully before coming into hospital.
- Some things you may want to think about:
    - Who will be collecting you from hospital? Remember to bring their contact number with you.
    - Stock up with food in the freezer.
    - Ask for help from family or neighbours for shopping on your return.
    - Ensure you have clean bedding on the bed ready for your return, clean up and ensure laundry is done prior to admission.
    - Clear pathways in the house so you don't trip.
    - Organise somebody to look after pets for a short while if you have them.
    - If you think you will need social services for any reason you must tell the nursing staff on admission as your stay will be 2 – 3 days or earlier if fit to be discharged unless your stay is delayed for medical reasons.

Meticillin Sensitive Staphylococcus Aureus (MSSA)

5 days prior to admission

Once you have been given a date for surgery 5 days prior to this you will need to start the body wash and nasal cream. If your surgery date is less than 5 days and you are unable to finish this course prior to surgery then continue whilst you are in hospital until you have completed the 5-day course.

Body wash - Follow the written instructions given in pre op.

Day 1 – wash body
Day 2 – wash body and hair
Day 3 – wash body
Day 4 – wash body and hair
Day 5 – wash body

Nasal Cream - Apply a small amount of the cream (the size of a match head) to the inner surface of the nostril, 3 times daily.

Patient Preload (Carbohydrate Drink) Information

Preload is a sachet of carbohydrate powder. When added to water it is a neutral-tasting carbohydrate drink for pre-operative dietary management for patients undergoing surgery.

Who takes preload? You may be asked to take preload as part of your pre-operative care. Preoperative assessment clinic will advise you and give you sachets and an information leaflet.

When to take Preload:
You will be given 1 sachet of Preload at pre assessment clinic. On the evening before surgery, you will need to have a nutritious meal and drink plenty of fluids. If your admission is at 7.30am you will need to drink your pre-load sachet mixed with water at 6am.

Please follow these instructions unless advised differently by the Pre-Assessment nurse.

Preparation

Step 1: Measure out 400mls (approx. 2/3 of a pint) of water into a jug.
Step 2: Add the contents of 1 sachet of Preload into the jug and stir until the powder has dissolved.
Step 3: Pour into a large glass/beaker and drink

Caution – Please DO NOT take Preload if you are an insulin dependent diabetic.

Frequently asked questions:

Q. Can I have the 6.00am preload if I have been asked to be nil by mouth for 6 hours and clear fluids only 2 hours prior to admission?

A. You can, as long as you just add water and no cordial and have nothing else to drink after the preload at 6.00am

Home Preparation

Activities of Daily Living

Before coming into hospital for your surgery it is advisable that you reorganise your cupboards so that items are at a suitable height to avoid excessive bending. For example, items that are normally kept on the bottom shelf of the fridge should be moved higher up on to the top shelf.
To reduce any risks of falls, remove any clutter or furniture that might get in the way of mobilising around your home. It is advisable to remove rugs so that your walking aids or feet don't catch on the edges.

What to do on the morning of your admission to hospital:

On the morning of your operation, have a bath or shower and wash and dry your hair. Do not apply deodorants, moisturiser, or make-up as you will be asked to remove it. Do not shave your operation site if you cut your skin we will have to cancel the operation.

What to expect next

Day of arrival

Most patients are admitted to the ward on the day of surgery unless informed previously by either your consultant or by letter. You will be met on the ward by the nursing staff and when your bed is available you will be directed to where you need to be. You may be dropped off on the ward by relatives. Relatives are not encouraged to stay on the ward until your operation but may be allowed under certain circumstances.

A nurse will check all details from pre-assessment are correct. If any changes have happened since this assessment then please inform the nursing staff as soon as possible. Your observations will be taken i.e. your blood pressure, pulse, and temperature.

You will be visited by the consultant or his/her team to complete a consent form prior to your operation. This is a yellow form completed by the doctor and signed by you agreeing that the operation can go ahead. The consent form will be explained to you by the doctor together with risks of the operation: - this is normal practice and not to cause you concern. If you have any questions then this is the best time to ask. A member of the surgical team will draw an arrow on your leg to ensure the correct side is operated on. **Do not wash this arrow off!**

You will be visited by the anaesthetist who will discuss the type of anaesthetic and pain relief that will be used for your operation. You will have the opportunity to ask any further questions.

What to expect – immediately before surgery

- On arrival, you will have your blood pressure, temperature, pulse, and oxygen saturation levels recorded.
- Blood thinning medication may be prescribed for two weeks following surgery.
- You will be given an indication of the time you will be going to theatre, but this may change throughout the day for a variety of reasons. Please be patient.
- Theatres run all day so your surgery could be in the afternoon.
- Before you go to theatre, you will be given a theatre gown to wear.
- When it is time for your operation, a member of the nursing staff from theatres or the ward will take you to the theatre reception area.
- Your anaesthetic nurse will then go through a series of safety checks before taking you into the anaesthetic room. These safety checks may appear repetitive but are essential to ensure safe, personal, and effective care.

The operation

When you have been anaesthetised, you will be taken to the operating theatre. While you are sedated a member of the anaesthetic team will remain with you at all times, monitoring to ensure you are safe.

What to expect – immediately after surgery

The operation to replace part of your knee takes about 45 – 60 minutes.
At the end of the surgery, the anaesthetist will wake you up and take you to the recovery area for approximately one hour. You will remain there under the care of a specially trained recovery nurse. You may find several items in place to help your recovery. An oxygen mask over your mouth and nose helping you breathe. Occasionally a tube will have been placed in your bladder (urinary catheter). This is usually in place only for a short time after the operation. At some point you will have an X-Ray to confirm the position of the implant.

You will find your operated leg is firmly wrapped. You may also have pumps attached to your legs to reduce the risk of deep vein thrombosis (DVT). A drip will be in your arm, this replaces any lost fluid which may have occurred during your operation and is used to infuse blood or drugs if required. The drip is usually removed once you are tolerating food and fluids. Your pain control will be established, and your vital signs monitored. Once you are fully awake you will then return to your post-operative ward.

Once back on the ward you will be given regular pain relief by the nursing staff in the form of an injection or tablet as required.

Observations including blood pressure, pulse, respiration rate, oxygen levels and temperature will be recorded. The nursing staff will encourage you to change your position regularly to prevent pressure sores.

Only one or two close family members or friends should visit you at this time if you are planning to stay overnight.

Prevention of blood clots

Most patients will receive Aspirin 75mg once a day for 14 days post-surgery; this may differ for some patients due to medical conditions.

Management of pain following your surgery

Pain following an operation is inevitable, different operations lead to varying degrees of post-operative discomfort and everyone experiences pain differently.
We aim for your pain to be at an acceptable level on movement and should not prevent appropriate function e.g. physiotherapy and mobilisation.

How can we reduce your pain?

The nurses and pain team are able to give you advice and support. Pain relief is available in different forms and strengths.
During your stay in hospital a pain relief management plan will be started which consists of strong pain killers and an anti-sickness tablet. It is important that you inform the nursing staff if you are still having pain as this affects your recovery. You should expect some pain, but the nursing staff will work with you to reduce this to a minimum. Side effects can happen when taking the strong pain killers which could include vomiting, feeling drowsy, confusion, itching and constipation; all of these side effects can be treated by the nursing staff if you inform them of this. Please remember to let the doctors and nurses know if you are in pain or if the pain stops you doing your exercises. We may need to alter or increase your painkillers.

Post-operative complications and precautions taken to avoid them.

The vast majority of patients make a rapid recovery after a partial knee replacement operation and experience no serious problems. However, it is important you understand that a partial knee replacement is a major operation and that complications can occur.

The Enhanced Recovery Programme

The Enhanced Recovery Programme is a modern evidence-based approach that helps patients who are undergoing surgery to recover more quickly. Every member of the team looking after you will be working together to ensure you:

- Are kept fully informed of what is happening at all times to enable you to make informed choices.
- Are as healthy as possible before receiving treatment.
- Receive the best possible care during your operation.
- Receive the best possible care while recovering

The following are the basis of what enhanced recovery will mean to you and your time in hospital:

- Specialist pre-admission screening & information.
- Good pain relief.
- Improved sickness plan.
- Early walking after surgery.
- Less drips, drains & catheters.
- Smaller wounds or keyhole surgery (if appropriate).
- Early eating and drinking after surgery.
- Reduced infection rates.
- Shorter and more comfortable stay in hospital.
- You feel involved in your care

East Lancashire Hospitals would like you to be fully informed and involved in your care from the very beginning. We believe that if we work together to manage your care based on your needs; we can succeed in getting you back to a normal level of activity as soon as possible.

Day of surgery – onwards

Day of surgery

- You will be assisted to wash, and you will get dressed in own clothes.
- Eat and drink normally and we expect you to sit out for one meals.
- If you are drinking sufficiently your drip will be discontinued, if not done so earlier.
- The dressing on your wound will be checked daily but not necessarily changed if not required.
- Your pain levels will be assessed, and pain relief will be given as appropriate.
- You will be given regular pain relief medication by mouth or patches.
- Many of these medications make you constipated and you may need laxatives to counteract this.

Please let the nurses know if you have not had your bowels open so they can address the problem.

- The Physiotherapist will see you and commence your exercises and talk you through the rehabilitation process. (See later on in this guide the exercises you must perform).
- On day one bloods tests may be taken and you may need a blood transfusion or to commence iron tablets.
- Your urinary catheter, if you have one, may also be removed.
- A Physiotherapist or nurse will get you out of bed once you are medically fit to do so and encourage you to walk with the use of a walking aid, such as a walking frame or possibly crutches. You need to commence bed exercises.
- The Physiotherapist will assess and advise you on stairs/or steps as necessary prior to your discharge home.
- Arrangements about returning home will be discussed with you, so be prepared and try to think your plans through prior to the operation. Family and friends are encouraged to play an active part in the discharge plans and may need to give you some extra support initially on your return home.
- A member of the therapy team will come and talk through with you what you will be able to do at home, offering any advice needed, and ensuring realistic goals are set for you to work with.
- You will be expected to practice exercises on your own 2-3 hourly your physiotherapist will check through these with you. They will also give you advice on how to manage at home and weaning from walking aids.
- Physiotherapists and the nursing staff will continue to encourage you to be as self-caring as possible.
- If you have achieved these goals you may be able to go home
- The team will confirm your discharge plans with you.

Safety First

Before going home you will be able to:

- Get in and out of bed, a chair, and a car safely.
- Walk safely with walking aids, if appropriate, as directed by your physiotherapist.
- Wash and dress with appropriate aids as required.
- Use the toilet safely.
- Go up and down steps /stairs safely.
- Continue home exercise programme as appropriate

Falls Risk Information

Research suggests that hospital patients are at a greater risk of falling. Patients in hospital have to adapt to changes in their strength and mobility, both as they become ill and recover. Hospital patients may undergo surgery that affects their mobility or memory, and they may need sedation, pain relief, anaesthetic or other medication, which increases the risk of the falling. Falls can sometimes happen because of a single factor, for example slipping while wearing stockings or fainting. However, most falls are due to a combination of factors.

East Lancashire Hospitals NHS Trust aims to minimise the risk of patients falling during their hospital admission by:

- Working together with patients and their carers to promote safety.
- Giving advice in a simple and practical way.
- Responding quickly to hazards brought to our attention.
- Ensuring that the hospital environment is as safe as possible.
- Assessing each patient's risk of falling and delivering care to manage the risks identified

Some of the following advice may help to reduce the risk of falling in hospital:

- Keep everything you need within reach, including your call bell and avoid stretching or bending.
- Wear your glasses when moving around if you need them.
- Use the call bell to get help if you do not feel safe to walk alone or if you have been advised to do so by the staff.
- Do not try to walk if you feel weak or dizzy. Call for assistance.
- Use your walking aids if you have them.
- Get out of your bed and chair slowly.
- Wear non-slip, well-fitting slippers, or shoes, especially if you are wearing socks or stockings.
- Keep your night light on or put it on when getting out of bed at night.
- Be aware that some hospital furniture has wheels and may move if leant on. If you are transferring on/off furniture with wheels, check the brakes are on.
- Please be patient when staff are busy. **Think:** Safety First.
- Exercise your legs regularly to keep them strong and avoid staying in one position for long periods.
- Make sure any drip stands are on the same side of the bed as the bathroom/commode.
- Avoid clothes which may cause you to trip.
- If you have been identified as being at risk of falls ask staff to explain your individual risk factors and how to manage them

Information for relatives and visitors regarding falls

In the interest of patient safety, it would be a great help if you would report any potential hazards on the ward to the nursing staff. This can include:

- Spills of liquid on the floor.
- Trailing wires or cables.
- Obstacles around the bed or walkways.
- We would also ask that you:
    - Leave the patient's room tidy by replacing chairs.
    - Take unnecessary items home to reduce bedside clutter.
    - Make sure the patient's call bell is within reach.
    - Replace bed tables moved during your visit.
    - Ask staff to replace bedrails if removed during your visit.
    - Report any patient disorientation to the nursing staff.

If your friend/relative will continue to be at risk of falls after discharge from hospital please ask us for more information or a leaflet on falls prevention. Many of the hints and tips on the previous pages may be useful at home too.

Visiting times on ward 15 are:

10.30 – 12.00, 13.30 – 17.00, 18.00 – 20.00

Contact between patients and their relatives and friends.

B22 and B24:

10am – 20.00pm

Please respect mealtimes and quiet hour to aid recovery of patients.

12.30 – 13.30 ***Lunch and quiet hour***

17.00 – 18.00 ***Tea and quiet hour***

These may be extended for compassionate reasons, or restricted if this is appropriate for the patient's needs.

- If you have a problem visiting within these times, please ask one of the nurses who will try and plan to suit both needs.
- Please show respect and consideration towards patients and staff whilst you are visiting.
- Patients may become tired and need to rest. Please remember that other patients may wish to rest or sleep during visiting hours.
- A patient should have no more than two visitors per bed at any time.
- Whilst you are in hospital you will be expected to work with the therapists and nursing staff, and this may include visiting times.
- Please nominate one family member to liaise with the ward via telephone for patient information as these releases the nurses to care for our patients more effectively.
- Visitors are reminded to use the hand gel provided on entry and exit to the ward to prevent cross infection.
  Visitors must not sit on the patient's bed at any time, please use the chairs provided and return them to the appropriate place.
  Relatives can call ward 15 on 01282 804015.
  The ward is fitted with 'Patient Line' which allows access to the phone, TV, and internet. This does incur a charge and top up cards are available to buy outside of the ward.

Discharge planning

Your wound will be assessed by the nurse. They will discuss with you wound care and removal of clips or stiches, which is normally 12 – 14 days after surgery.

You will be advised when to make an appointment with the practice nurse at your surgery to have the clips or stitches removed. If you are unable to get to the GP surgery a district nurse will be arranged instead. You will receive instructions on reviewing your wound dressings.
The discharge will be confirmed with your next of kin.

You will be given painkillers, anti-coagulant drugs and your usual medications to go home with and a copy of the doctor's letter should you need to see him in the following week. You will be given enough for 5 days of a combination of pain killers for you to take home, with instructions on how and when to take these. It is your responsibility to visit or organise somebody to collect more if needed from your GP.

An appointment will be given to you to attend an outpatient appointment at the fracture clinic. This will normally be six to eight weeks following your surgery. A discharge letter will be given to you and a copy of this is sent by the hospital to your GP.

You will be referred to your local out-patient physiotherapy department for follow-up treatment and reviewed at 3-4 weeks following discharge.

Hospital transport is not routinely available and there are strict eligibility criteria for using it. We therefore request that you organise your own transport wherever possible. If you have any concerns, please speak to your nurse.

You may feel that your hospital stay is shorter than you expected, however studies have shown that you will recuperate more quickly when you eat and sleep to your normal pattern. This also lowers the risk of post-operative complications and hospital acquired infections. Therefore, anything that can be done to minimise this risk through careful planning is worth the time and effort.

Back at home

This information is designed to help you through the transition from hospital to home but always follow any specific advice given to you by your hospital team.
Remember, an artificial knee is not as good as a normal joint and must be treated with respect. In the first few months, the tissues around the joint will be recovering from the surgery. So, gradually build up the amount of walking and other activity that you do.

For the first 6 weeks after your operation:

- No baths.
- No driving.
- Be sensible.
- Sit at the right height.
- Take it slowly!

It is very important that you have organised the necessary support for when you return home. After major surgery you may feel that it is a good idea to ask friends or family members to stay with you or to help with simple chores. They will also be on hand to give you moral support as once you have left hospital you may feel isolated and uncertain of what to expect.

When returning home there are some things that you may do to ensure you have a good recovery:

- By taking your pain killers regularly prior to doing exercise you will improve the potential of your ability to complete these exercises.
- Try changing positions regularly to stop the knee stiffening up as it makes it harder to get going again.
- Increase your level of activity during the next weeks and months, by the end of the day you should be tired not exhausted.
- You may find sleeping difficult which is quite normal, try and get back to your normal pattern.
- Drink plenty of fluids and eat a good balanced diet.

Continuing your activities at home

Kitchen Activities

As previously discussed, it is advisable that you reorganise your cupboards so that items are at a suitable height to avoid excessive bending. For example, items that are normally kept on the bottom shelf of the fridge should be moved higher up on to the top shelf. Use microwave or hob.

Getting things from a low cupboard

- If you need to bend down to the oven, fridge, or low cupboard, you will find it easier on your new knee to take that leg behind you while bending the un-operated leg.

Leisure Activities/Driving

- Please discuss with your consultant or physiotherapist any leisure activities you may wish to continue following your knee replacement.
- You will be advised not to drive for a period of time up to 6 weeks, this may be earlier in somecases. We expect you to be sensible about this, legally it is your responsibility to only drive when fit to drive. We suggest you contact your insurance company to inform them of your surgery as they may have their own rules.

Footwear

Following your operation you will be asked to wear flat shoes with an enclosed toe and heel, if these are lace up shoes then you will be issued with elastic laces.

How to get off the floor? (This is only after a fall and not an exercise!)

If you feel your new knee is not strong enough to push on, turn onto your good side, raise yourself up on your elbow and then your hand. Turn forward towards your good side on to all fours.

Crawl to a chair or other solid object, which you can use to help yourself up into a kneeling position. Bend your good knee up, put your foot onto the floor and stand up pushing hard on your hands.

Household jobs

You should avoid all strenuous and taxing jobs immediately after surgery. Only when you feel up to it, should you attempt small chores and even then ideally you should have somebody helping you.

- DO NOT get down on your knees to scrub floors. Use a mop and long-handled brushes.
- Plan ahead! Gather all your cooking supplies at one time. Then, sit to prepare your meal.
- Place frequently used cooking supplies and utensils where they can be reached without too much bending or stretching.
- To provide a better working height, use a high stool, or put cushions on your chair when preparing meals.

Gardening

Avoid strenuous activity such as digging, pushing a wheelbarrow, or mowing the lawn immediately after surgery. You may work at a bench in a greenhouse sitting on a high stool. Avoid the temptation to do too much when you start gardening. Build up your strength, starting with lighter tasks and then progress as your stamina increases.

Driving

DO NOT drive until you are confident about controlling your vehicle and always check with your insurance company. If you don't feel you are able to complete an emergency stop then you are not safe to drive! It is not advisable to drive before six weeks.
Make sure you can reach and use the pedals without discomfort. Have a trial run without the engine on. Try out all controls and go through the emergency stop procedure. Start with short journeys and when you do a long trip stop regularly to get out and stand up and stretch.

Return to sport, leisure, and work

Ask your consultant as different sports may impact differently.

Consultant follow-up

Your consultant or a member of his/her team will review your progress at your follow-up appointment approximately six to eight weeks after your operation. You will either be given the appointment before you leave the ward, or you will be sent a letter informing you of this in the post. We advise that you write down a list of questions prior to this appointment and take them along, as you may not see your consultant again.

Please remember that this booklet is a general guide only and your treatment may vary from this.

Post Op/ At home exercises

Please find the post-operative exercises that you should continue and progress with at home on pages 30-38.

Wound care

You may find that the area around your wound feels numb, tingly, itchy, or slightly hard. This is normal and should disappear over the next few months. During this time, you should protect it from sunlight as it will burn easily.

Avoid the temptation to scratch the area until it is fully healed. You may wash around your wound dressing with soap and water unless otherwise advised.

Stitches or clips are usually removed 12 – 14 days after surgery. It is normal to have some staining on the dressing. If the wound is oozing or bleeding excessively and soaks the dressing, then you will need to have a dressing change. You should contact your GP surgery in this case. The district nurse will be able to visit earlier than planned if necessary. Do not remove the dressing yourself.

Swelling to the operated leg is normal after your surgery. The leg can be up to twice the size as normal due to the trauma caused by the surgery. Applying ice or a bag of frozen peas can help the pain and swelling. Always have a towel over the ice/bag. Continue to exercise the leg but do rest on the bed for an hour during the day. Redness can be part of the healing process, and bruising is normal. A knee replacement never feels the same as a normal knee and it is important you look after it in the long term.

It is essential that you continue doing the exercises that physiotherapy has shown you. Foot and ankle exercises help with the swelling, and regular exercise helps to strengthen your muscles.

Recognising & preventing potential complications

Infection

Signs	Prevention
Increased swelling and/or redness at wound site	Take proper care of your wound as explained
Change in the colour, amount, and odour of the drainage	If visiting the dentist, advise the practice that you have undergone joint replacement surgery
Increase in pain in your knee	
Fever higher than 38 C	

Blood clots

Surgery may cause the blood to slow and pool in the veins in your legs which could cause a clot. If a clot occurs despite preventative measures, you may need hospital treatment to thin the blood further. Prompt treatment usually prevents the more serious complication of pulmonary embolus.

Signs	Prevention
Swelling in thigh, calf or ankle that does not go down with elevation of the leg	Foot or calf pumps
Pain, tenderness, and heat in the calf muscle of either leg.	Early mobilisation/ walking
	Blood thinners will be prescribed by the doctor
	Maintain good fluid intake

Pulmonary Embolus

An unrecognised clot could break away from the vein and travel to the lungs. This is an emergency, and you should call 999 if this is suspected.

Signs	Prevention
Sudden chest pains	Prevent blood clots in legs (as above)
Difficult or rapid breathing	If concerned contact the Advanced Nurse Practitioners' Secretary on 01254 734157 between 8:30 am and 5:00 pm or alternatively, a message can be left on this answer phone, and we will return your call as soon as possible. Over the weekend or if someone fails to contact you within the day please contact your GP or call 111 for advice promptly
Sweating	
Confusion	

Frequently asked questions

Why is my scar warm?

Even when the scar has healed there is still healing going on deep inside. This healing process creates heat, which can be felt on the surface. This may continue for up to six months. This is different warmth to that of an infection.

Why do I get pain lower down my leg?

The tissues take time to settle and referred pain into the shin or behind the knee is quite common.

Why do I stiffen up?

Most people notice that whilst they are moving around they feel quite mobile. After sitting down the knee feels stiff when they stand, and they need to take a few steps before it loosens up. This is because those healing tissues are still swollen and are slower to respond than normal tissue.

Is it normal to have disturbed nights?

Yes, very few people are sleeping through the night at six weeks after the operation. As with sitting you stiffen up and the discomfort then wakes you up.

I have a numb patch – is this okay?

Numbness around the incision is due to small superficial nerves being disrupted during surgery. The patch usually gets smaller but there may be a permanent small area of numbness. It can help to massage the wound with moisturiser over the scar but only do this when fully healed and no signs of scabs.

My new knee clicks occasionally – is this normal?

This can be normal, and it is usually a sign that those swollen tissues are moving over each other differently than before. You should not let this worry you, as again this should improve as healing continues. If you have any concerns please speak to your surgeon.

When should I stop using a stick?

Stop using the stick when you can walk as well without it as with it. It is better to use a stick if you still have a limp so that you do not get into bad habits that are hard to lose. Limping puts extra strain on your other joints especially your back and other leg. Use the stick in the opposite hand to your operated knee.
Many people take a stick out with them for three to four months after the operation as they find they limp more when they get tired.

How far should I walk?

This varies on your fitness and what your home situation is. You should feel tired not exhausted when you get home, so gradually build up distance, remembering you have a return journey to make.

Will I set off the security scanner alarm at the airport?

Most joints are made of stainless steel, and these may set off the alarm. If this happens have a word with the security staff and explain the situation.

Will it get better?

Yes, do not despair! Do remember that most people who have knee replacement surgery have had knees that have bothered them for a long time. Therefore it will take time to recover from surgery and your body to get used to your new knee.

This is your future – week 12 onwards

Total knee replacements are performed to give pain relief in turn giving patients a better quality of life, and most people are keen to return to normality as soon as possible. However, it is most important that you DO NOT do too much too soon so as to allow healing to be as complete as possible. Hence the advice and few rules you were given on your discharge from the hospital.

Walking

You may discard sticks as and when you feel comfortable. You may need some support when walking on rough ground or over longer distances.

Stairs

By now you should be climbing stairs normally, one foot after the other.

After your operation you will be encouraged to be as independent as possible. This is achieved by starting your rehabilitation within a few hours of your operation. During your stay in hospital it is expected that you will be actively involved with your treatment.

Your Uni Compartmental Knee Replacement

Information and Exercises for Patients and Carers

We hope this information will help you prepare for your partial knee replacement surgery and remind you of the physiotherapy needed following the operation.

A physiotherapist will work with you following your operation. The aims before discharge home are to be walking safely with an appropriate walking aid, usually crutches, to be exercising independently to regain knee stability and range of movement, and to manage stairs safely when appropriate.

Day of surgery/1st day post-operation

A physiotherapist will visit you after your operation and encourage you to weight-bear on your operated leg. This may be on the day of surgery if you feel well enough to do so. Early mobilisation reduces the risk of complications such as deep vein thrombosis (DVT) and chest infection following surgery.

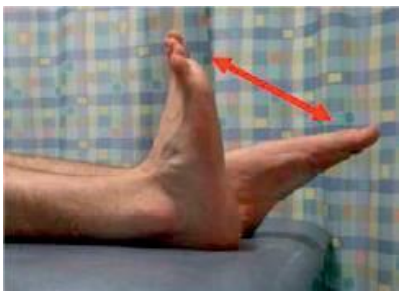
If you need to stay in bed on your first post-operative day you will be encouraged to do deep breathing and circulatory exercises to reduce these risks. Knee exercises can be started immediately after surgery.

Aim to complete 5-10 repetitions of each exercise, 3-4 times a day.
Monitor your levels of pain and discontinue or modify the amount you are completing if you are struggling

N.B. Adequate pain relief is essential to your progress. If your pain levels are too high to walk or complete your exercises you must let a member of the nursing or therapy team know in order that this can be addressed

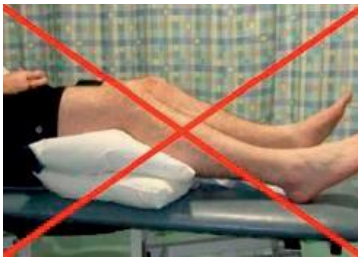
Deep breathing exercises

to reduce the risk of developing a chest infection.
Take 3 deep breaths filling your lungs as much as possible.

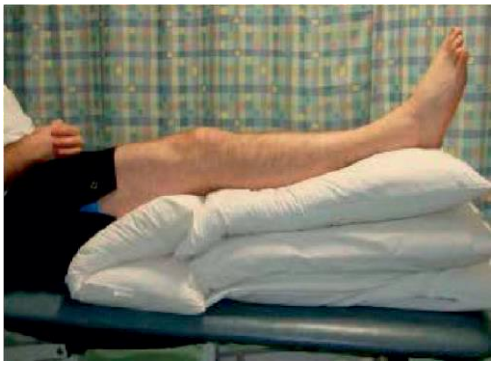


Ankle Pumps

Foot and ankle exercises to improve your circulation.
Move your ankle and down. Circle your ankles around.

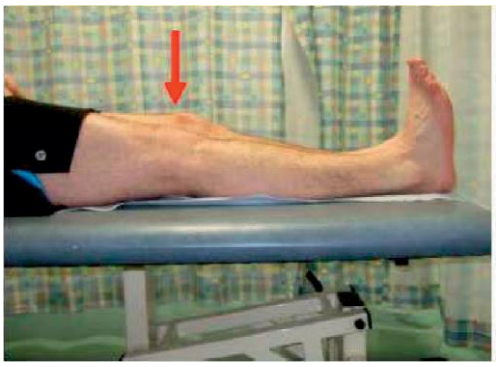


Keep your leg raised when resting for up to one hour, particularly towards the end of the day.
This can help reduce swelling.



Static Quads

Tighten up the muscles around your knee and push your knee straight, down into the bed.
Also squeeze your buttock muscles together.
Hold for a count of 3 seconds.



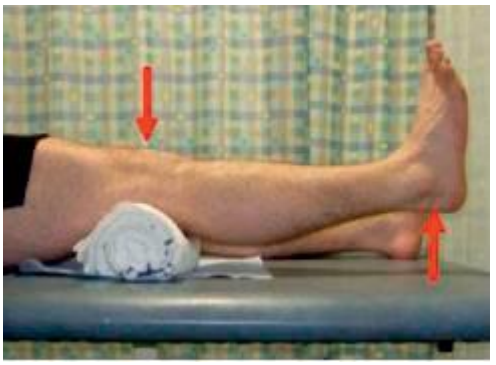
Day 1 or 2 onwards

Continue previous exercises above and add the following or as advised by your therapist:

Inner Range Quads

Lie back with a towel rolled up under your knee.
Straighten knee and lift your foot.
Do not lift leg off towel.
Hold for a count of 3 seconds.

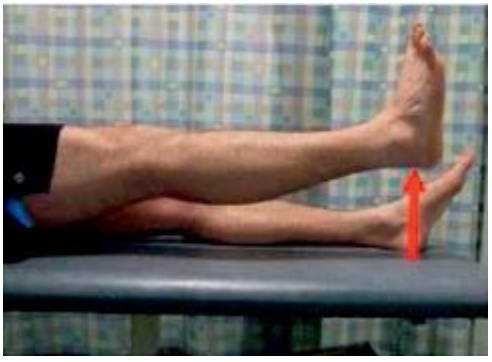
This may be difficult initially post-surgery



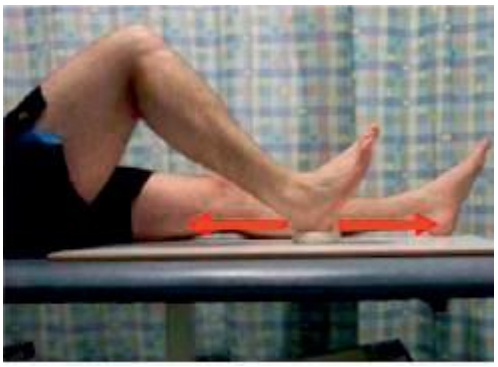
Straight Leg Raise

Tighten up the muscles around your knee and push your knee straight.
Now lift your leg 10cm off the bed.
Hold for a count of 3 seconds

Straight leg raises may not be possible immediately.



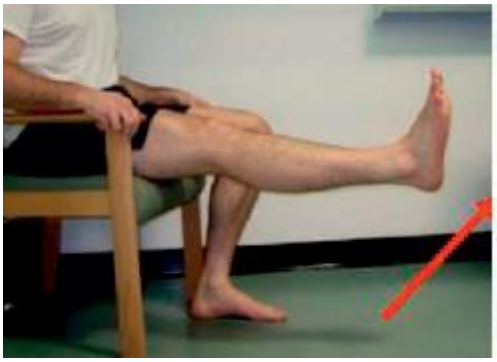
Heel Slides



On a smooth surface slide your heel up and down by bending and straightening your hip and knee.

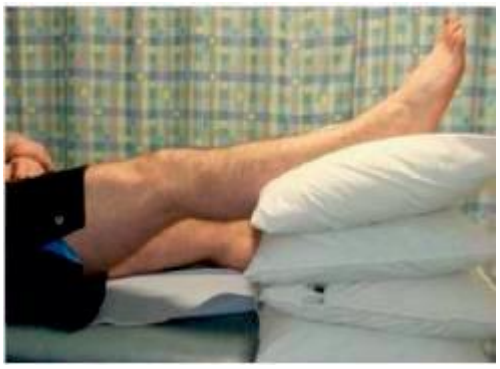
Don't force or increase your pain levels

Ask for guidance on how far you should push this if you are not sure.



Knee Extensions

Sit on a chair.
Tighten your thigh muscles and straighten your knee.
Hold for a count of 3 seconds.
Slowly relax your leg back down.



Lie back, rest your heel on a rolled-up towel.
Leave in this position for up to 30 minutes maximum.
This will stretch the muscles down the back of your knee preventing it becoming fixed in a bent position.

Post Op and After Discharge

The aim of physiotherapy from this point onwards is to help you progress your mobility and exercise program. Before going home your knee should straighten fully and bend to 90 degrees and preferably beyond.
You will be encouraged to walk hourly using the walking aids provided when you are safe to do so.
On discharge it is essential that you continue with your exercise program. You will be referred to your local out-patient physiotherapy department for follow-up treatment, normally about 3 weeks later.

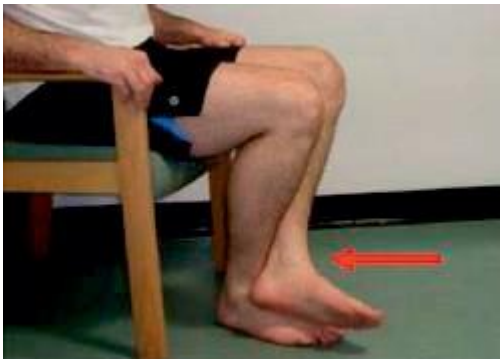
Continue with the exercises provided to you on the ward including:

- Ankle Pumps.
- Static Quads.
- Inner Range Quads.
- Straight Leg raises.
- Heel Slides.
- Knee Extensions

You can progress your exercises slowly with the following knee exercises unless told otherwise.

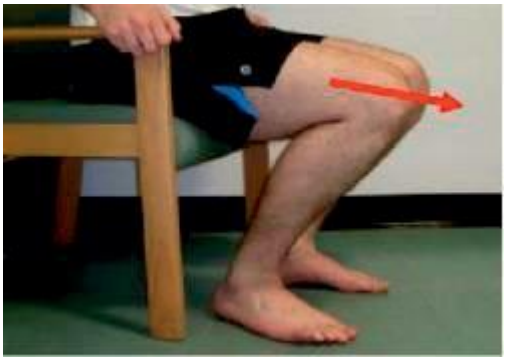
Assisted Knee Flexion

Sit in a chair.



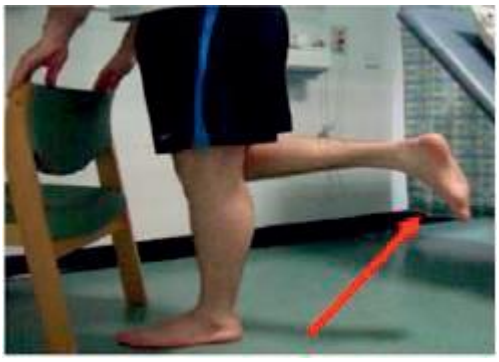
Take your non-operated leg over your operated leg and pull back as far as you can.
Hold for a count of 3 seconds.

And/or



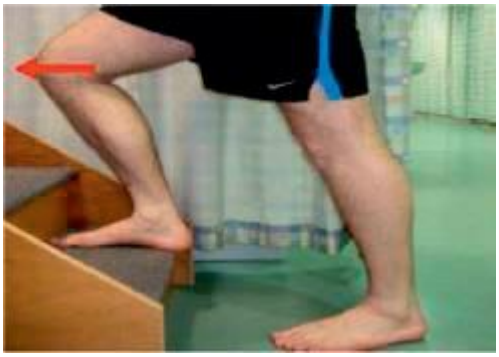
Sit in a chair. Fix the foot of your operated leg on the floor. Keeping that foot still, shift your body forward over the operated leg causing the knee to bend.
Hold for a count of 3 seconds

Single Leg Stance



Stand and hold on to a support.
Bend your knee lifting your foot off the floor.
Try to bring your heel towards your buttock.
Practise balancing for 30 seconds –
keeping hold of the support
Stop if you do not feel stable or safe doing this.

Step Up – assisted flexion



Step your operated leg on to a step.
Keeping that foot still, shift your body forward over the operated leg causing your knee to bend.
Hold for a count of 3 seconds

Armchair Push Up

Sit on a firm chair (preferably a dining room chair)
Practise standing from a seated position.

To make it easier – sit on the edge of the chair, with the unoperated leg bent underneath you. Push up into standing using your arms.

To make things more challenging- reduce the amount of effort you use through your arms (i.e. use one arm or no arms)

LEVEL ONE

LEVEL TWO

LEVEL THREE

Step Ups

Hold onto a rail
Step up leading with your operated leg.
Step back down lading with the unoperated leg.

Hamstring Curls

Hold onto a countertop for support.
Bend your operated leg by lifting your heel towards your bottom.

Knee Bends

Stand holding onto a countertop or table.
Feet shoulder width apart and feet facing forwards
Gently bend your knees whilst keeping your back straight.

Do not force and only go as far as you are comfortable

N.B. You should do 5-10 of each exercise 3 -4 x daily when you return home, unless otherwise instructed by your physiotherapist.

How to use stairs safely at home

This will be practised with the Therapy team before you are discharged. This is to ensure that you can manage this safely with your current walking aids. If you feel anxious about managing this at home it may be useful to have a friend or relative with you initially. You may also wish to write out the routine and stick it to the wall at the top and bottom of your stairs as a reminder.

Walking upstairs:

Hold onto the handrail with one hand
and the crutches with the other.
Lean slightly forwards.
Take a step up with your un-operated leg.
Then step up with your operated leg and crutches together.
Always go one step at a time!

- **Going up:**
  - Good Leg
  - Bad (or operated) leg
  - Crutches

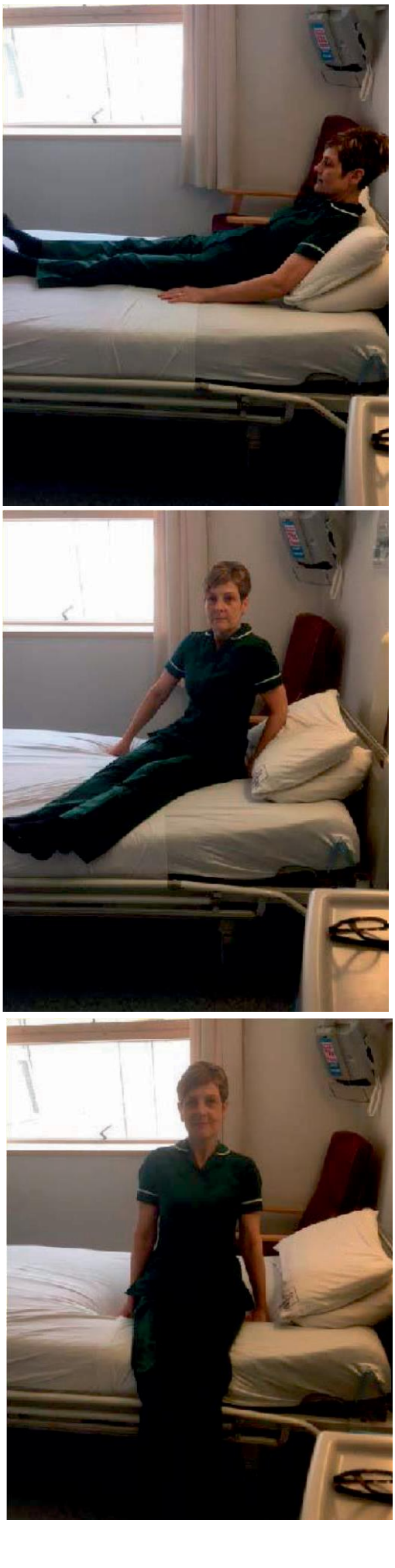
Walking downstairs:

Hold onto the handrail with one hand
and the crutches with the other.
Lean slightly backwards.
Place the crutch on the step below.
Take a step down with your operated leg.
Then take a step down with your un-operated leg.
Always go one step at a time!

- **Going down:**
  - Crutch
  - Bad (or operated) leg
  - Good leg

The same principles can be applied once you no longer require a crutch of stick.

Transfers



Transfer – out of bed

When getting out of bed:

- Move yourself to the side of the bed.
- Slide your legs off the edge of the bed whilst using your arms behind you to move your body around.
- Once sitting, place your operated leg slightly in front of your good leg (if needed).
- Place your crutches in an ‘H’ shape, hold with one hand and push up from the bed using the other arm.
- Once standing, place your arms into both before moving crutches away from the bed.

Transfer – into bed

When getting into bed:

- Step backwards to the middle of the bed until you feel it touching the back of both your legs.
- Take one small step forwards with your operated leg (if needed).
- Remove your crutches, place them into an ‘H’ shape and hold with one hand.
- Reach back with your other arm and sit onto the edge of the bed.
- Place your crutches within easy reach.
- Using your arms behind you, bring your bottom towards the middle of the bed.
- Bring your legs up onto the bed whilst using your arms to help you, turn your body at the same time.
- Once your legs are supported move into the middle of the bed.

Sitting or standing

Practise moving from sitting to standing and back again.

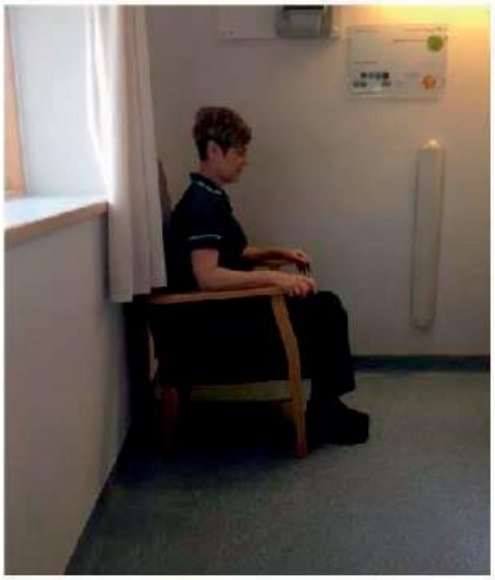
Try to put weight evenly through both legs.

Sit back down in a controlled way.

Gradually use your arms less.

If you are struggling to stand with both knees bent easily, slide your operated leg slightly forwards and then push up using the chair arms.

This applies when sitting back down.



Car Transfers

- Ask the driver of the car to park slightly away from the curb.
- The front passenger seat is the most suitable because it usually offers the most leg room.
- Ensure that the passenger seat is as far back as possible and reclined.
- Position yourself facing away from the car with your legs against the door sill.
- Reach behind you for the back of the seat with your left hand and the cushion of the seat with your right hand.
- Put your operated leg out in front of you and sit on the edge of the seat with your feet on the ground.
- Shuffle backwards towards the driver's side as far as possible.
- Move one leg into the car at a time.
- Once safely seated, adjust the seat so that you are comfortable.
- When you reach your destination, recline the backrest again to enable you to lean back whilst you move your feet out onto the ground.
- It is helpful if someone else can take charge of your walking aids and hand them to you at the right moment



Your Daily Progress Record

Prior to coming into hospital please have a look at the next section of your booklet. This is your 'Daily Progress Record.' Please familiarise yourself with this before your admission. Please remember to bring your booklet with you on your admission day so you can complete your 'Daily Progress Record'

Why we would like you to fill in a Daily Progress Record

We ask all our Enhanced Recovery patients to complete a patient diary.

Using the diary will help you:

- θ Achieve your goals and track your progress
- θ Help you recover quicker, with less complications
- θ Help staff in helping you to get better

How to Use the Daily Progress Record

The diary covers all types of surgery and therefore goes up to 6 days. Once you are ready to go home there is no need to continue the diary.

The nursing staff will explain the diary to you but if you need further help filling it in, please ask.

Please cross the box each time you do the task mentioned. For example, if you sat out in the chair twice:

Sat in the chair twice X X ☐ ☐ ☐ ☐

If you didn't then put the reason why (for example)

If not, why? ***I felt dizzy***

At the end of each day you are asked to mark on the line your overall pain score in the last 24hrs. The smiley face is no pain, and the sad face is the worst pain. Below is an example.

Day 0 - Day of Surgery

Todays date: _____

Ward : _____

Please X the box for each time you have achieved that goal:

Sat out in the chair ☐ ☐ ☐ ☐ ☐ ☐

If not, why?

Walked 60 metres ☐ ☐ ☐ ☐ ☐ ☐

If not, why?

Supplement drinks taken orally ☐ ☐ ☐

(if appropriate)

Did you eat Breakfast Yes ☐

If not, reason?

Did you eat Lunch Yes ☐ No ☐

If not, reason?

Did you eat Dinner Yes ☐ No ☐

If not, reason?

Other

Urinary catheter out Yes ☐ No ☐

Drains out Yes ☐ No ☐

Nasal gastric tube out Yes ☐ No ☐

Bowels/Stoma worked Yes ☐ No ☐

Pain Score

What is your overall pain score today? Please place a cross where you feel this should be on the line below.

Day 1 – Post Surgery

Todays date: _____

Ward: _____

Please X the box for each time you have achieved that goal:

Sat out in the chair ☐ ☐ ☐ ☐ ☐ ☐

If not, why?

Walked 60 metres ☐ ☐ ☐ ☐ ☐ ☐

If not, why?

Supplement drinks taken orally ☐ ☐ ☐
(if appropriate)

Did you eat Breakfast Yes ☐

If not, reason?

Did you eat Lunch Yes ☐ No ☐

If not, reason?

Did you eat Dinner Yes ☐ No ☐

If not, reason?

Other

Urinary catheter out	Yes ☐	No ☐
Drains out	Yes ☐	No ☐
Nasal gastric tube out	Yes ☐	No ☐
Bowels/Stoma worked	Yes ☐	No ☐

Pain Score

What is your overall pain score today? Please place a cross where you feel this should be on the line below.

Day 2 - Post Surgery

Todays date: _____

Ward: _____

Please X the box for each time you have achieved that goal:

Sat out in the chair ☐ ☐ ☐ ☐ ☐ ☐

If not, why?

Walked 60 metres ☐ ☐ ☐ ☐ ☐ ☐

If not, why?

Supplement drinks taken orally ☐ ☐ ☐
(if appropriate)

Day 2 - Post Surgery

Did you eat Breakfast Yes ☐

If not, reason?

Did you eat Lunch Yes ☐ No ☐

If not, reason?

Did you eat Dinner Yes ☐ No ☐

If not, reason?

Other

Urinary catheter out	Yes ☐	No ☐
Drains out	Yes ☐	No ☐
Nasal gastric tube out	Yes ☐	No ☐
Bowels/Stoma worked	Yes ☐	No ☐

Pain Score

What is your overall pain score today? Please place a cross where you feel this should be on the line below.

If you require this document in an alternative format or language, please contact 01254 734157.

Polish
W celu otrzymania tego dokumentu w innym formacie lub języku, prosimy o kontakt z

Punjabi

ਜੇ ਤੁਸੀਂ ਇਸ ਦਸਤਾਵੇਜ਼ ਨੂੰ ਕਿਸੇ ਵਿਕਲਪਿਕ ਫਾਰਮੈਟ ਜਾਂ ਭਾਸ਼ਾ ਵਿੱਚ ਲੋੜੀਂਦੇ ਹੋ, ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸੰਪਰਕ ਕਰੋ

Urdu
اگر آپ کو اس دستاویز کی ایک متبادل شکل (فارمیٹ) یا زبان میں ضرورت ہے تو براہ مہربانی رابطہ کریں

Bengali
আপনি যদি এই প্রচারপত্রটি অন্য কোন আকারে বা অন্য ভাষায় চান, তাহলে যোগাযোগ করবেন

Romanian
Dacă aveţi nevoie de acest document într-un format sau limbă alternativă, vă rugăm să contactaţi

Lithuanian
Norint gauti šį dokumentą kitu formatu ar kita kalba, prašome susisiekti su mumis

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