

PATIENT INFORMATION

Knee Replacements

Introduction

This booklet is designed to give you a general understanding of what happens before and after your operation. It will help you to prepare yourself for the operation and also show you how you can assist in your recovery.

If you are given this booklet before your operation, please bring it with you when you come for any clinic appointments and your admission.

Keep this booklet in a safe place, as you will probably wish to refer to it from time to time. If there is anything that you do not understand, please ask a member of the orthopaedic staff.

Why do I need a knee replacement?

There are 2 main reasons why you may need a knee replacement:

- **Osteoarthritis:** the most common form of arthritis. It is normally associated with wear and tear of the joint, resulting in pain, restricted movement or stiffness.
- **Rheumatoid Arthritis:** this usually affects all the joints including the hands and feet and causes the joint to deteriorate and swell.

The purpose of a knee replacement is to replace the worn and damaged bones of the knee and aims to relieve pain and restore movement. The decision to replace the knee is normally made when the patient has restricted movement affecting daily life or when painkillers no longer control the pain.

Types of knee replacement

There are two main types of knee replacement that we use at the West Suffolk Hospital.

- **Total Knee Replacement (TKR):** A conventional total knee replacement where the end of the femur (thigh bone) and the top of the tibia (shin bone) are replaced with new metal components. The back of your patella (knee cap) may be resurfaced.
- **Unicondylar Knee Replacement (UKR):** Used in patients that have arthritis in a specific part of the knee joint. Only part of the knee joint is replaced.

Pre-Screening Clinic

Having been advised that you require a Total Knee Replacement you will attend a pre-screening clinic where your name will be added to the waiting list and you will be asked to complete a questionnaire about your general health and current medication. This appointment will hopefully allow us to pick up any potential problems and deal with them before you are admitted for your operation.

Pre-admission process

Joint Replacement Information Group

The first step towards your admission is the Joint Replacement Information Group. The aim of this group is to provide important information to prepare you for your surgery. This also offers a further opportunity to ask questions and hopefully allay any fears or anxiety.

Pre-Operative Assessment

You will be called to a Pre-Operative Assessment up to 6 weeks prior to your admission. At this clinic, you will be seen by the medical team in order to make sure you are fit for the operation, and the rehabilitation team to prepare you for your post-operative rehabilitation. The staff in the clinic will carry out a number of tests including blood pressure measurement, taking swabs to check for MRSA and testing urine samples. You will also see a doctor who will examine you. You will have blood tests, a heart tracing (ECG) and further x-rays of your hip if required. It is also an opportunity for us to plan for your safe and timely discharge from the ward after your hip replacement.

Occasionally problems are detected at this appointment that we do not have the time to resolve before your operation and so your operation may need to be postponed.

To avoid the disappointment of this happening there are some things you can do to help prepare yourself.

Be aware of your health: If you suffer from any dizzy spells, breathing problems, chest pain or any new or unusual symptoms it is important to get these checked out by your GP. You may need to undergo further investigations or start taking some medication. It is also important that you inform the hospital if you are awaiting any investigations for heart or breathing problems or if you are waiting to have another operation.

Diet: It is important that you have a healthy diet leading up to and after your knee replacement as this will help with the healing process. If you are overweight you could use the time waiting for your knee replacement to try and lose some weight. It is useful in reducing your pain, the wear and tear in your knee, and you will find the rehabilitation easier.

Smoking: The West Suffolk Hospital is a smoke-free site. Smoke-free means that smoking is not permitted anywhere on site and applies to all staff, patients and visitors. Nicotine Replacement Therapy (NRT) should be taken into hospital by inpatients who smoke. You will not be allowed to smoke during your stay. Although we recognise that it is difficult to give up smoking, it is advisable to do so before your operation. Smoking increases your risk of developing a chest infection following anaesthetic and can also delay the healing process. If you feel unable to give up on your own, your GP can offer you support.

High blood pressure: If you know that you take medication for high blood pressure then we would advise you that visit your GP or practice nurse regularly until your operation date to get your blood pressure checked. If you have your blood pressure checked, please ensure your GP surgery writes the readings down – please bring these with you to the Pre-Admission Clinic.

Wounds: If you have any wounds (e.g. leg ulcers) or any breaks in the skin, they must be completely healed before the consultant will operate. Any open areas leave your new knee vulnerable to infection. If you have the district nurses visiting to dress any wounds, please bring their paperwork with you to the pre-operative assessment. If you notice a break in your skin after your pre-operative assessment, please contact the clinic to get the wound reviewed to confirm your surgery can proceed.

This information leaflet: The staff at the Pre-Admission Clinic will write important information in this booklet during the appointment. Please therefore bring it with you to all appointments regarding your knee replacement.

Ward admission

All beds are allocated to patients waiting to come in for surgery. The ward will only ring you if there is a problem so please arrive on the ward by the time given on your admission letter.

It is important that you remember to bring with you:

- All the medication that you are taking (If you have your medication in a dosset box please do not bring this with you, make sure all medication is in its original packet).
- Any details of next of kin, if not already provided.
- Wash things – flannel, soap, toothpaste, tooth brush, comb, razor, towel.
- Clothes – day clothes and night-wear, including socks, stockings, shoes and slippers –avoid heels and flip-flops. Loose clothes are advisable.
- Current walking aid such as sticks, frame, crutches. Please label these with your name.
- Hearing aids and glasses.
- This information leaflet.

Visiting hours

Please contact the ward for information regarding visiting times.

During this time you will be receiving your essential rehabilitation, which may result in you not being available to see your visitors so please ensure your visitors are aware of this.

Before the operation

- You will see your consultant prior to your operation where you will be asked to sign your consent form.
- Your leg will be 'marked' for the operation by drawing an arrow pointing to your knee.
- An anaesthetist will assess you for the anaesthetic.
- You are not allowed to eat or drink from midnight. This includes eating sweets or chewing gum. If your operation is in the afternoon, you may be allowed a light breakfast. Details of your 'nil-by-mouth' requirements are on your admission letter.
- Please do not leave the ward or bed area whilst waiting for your operation – there will be a number of orthopaedic staff that need to see you before you have your surgery.

- The staff will run through a checklist prior to taking you to the operating theatre. You may be asked the same questions on several occasions – please bear with us, it is to ensure that there are no mistakes.
- You will be formally assessed for your risk of developing a VTE (venous thrombo-embolism) otherwise known as a blood clot.

Surgery and after care

The knee replacement usually takes around 1 ½ hours to complete. You are likely to be away from the ward for a minimum of 2-3 hours in total.

When you wake you will be in the recovery area. They will keep you here for 1 to 2 hours to be closely monitored whilst you recover. They will monitor your heart rate, blood pressure, oxygen levels, as well as monitoring your wound and pain levels.

You will go back to the ward from recovery and may be quite sleepy when you return to the ward.

You will notice a number of things attached to you, which may include:

- A dressing over your knee with either clips or stitches holding your wound together.
- Some orthopaedic consultants insert a drain into the wound during the operation. This is a tube, which drains away any excess blood and fluid. It can be collected and re-infused to prevent further blood transfusions. Other consultants prefer to wrap the knee in a very tight compression bandage.
- Oxygen – usually through two prongs which sit just inside your nostrils.
- A drip will be running to provide fluids. As you have been nil by mouth prior to the surgery, we need to make sure that you are not dehydrated.
- A PCA (Patient Controlled Analgesia). This is a morphine pump that allows you to administer your painkillers as and when required. It does have a safety lockout to prevent any over-dosing.
- You may also have a catheter in your bladder if necessary. It will be removed when you are able to walk to the toilet or the next morning.

The staff on the ward will regularly check your blood pressure, temperature, oxygen levels and ask you to score your pain on a scale from 0 to 10.

Pain control

All knee replacements will now have a local anaesthetic injected during their surgery as part of their post-operative pain relief. This should last for several hours.

You will be asked if you require regular painkillers during your stay. It is important that you take these to aid your rehabilitation. It is reasonable to expect some pain as you have had major surgery but your pain will be kept under control. Please inform the doctors or nurses if it is too painful to do your exercises.

Risk of deep vein thrombosis (DVT)

There is a small risk with any major surgery that you may develop a VTE (venous thrombo-embolism). This is a potentially dangerous blood clot in your calf. You will be formally assessed for your risk of developing a VTE. Should you meet the necessary

criteria you may be prescribed medication for up to 6 weeks after the operation as a preventative measure. A separate information leaflet will be given to you should this be the case. You will also wear compression stockings whilst in hospital and do the circulation exercises to prevent against VTEs.

Wound

Your wound will be held with either stitches or clips (staples). Your District or Practice Nurse removes these 10-14 days after the operation. There will be a dressing over the wound until it is healed to prevent infection. This will only be changed as necessary.

Swelling and bruising

You are likely to experience swelling and bruising for up to 3 months after the operation. You should continue with your circulation exercises and regular leg elevation to help with this.

You may also notice that your knee clicks after the surgery. This is nothing to be concerned about.

Infection

There is always a small risk that you may pick up an infection with surgery. We minimise the risk in several ways:

- Operations are carried out in 'ultra-clean' theatre. Highly sterilised operating theatres and equipment are used.
- Antibiotics are given during the operation and 3 doses are given after the operation. You will be given extra antibiotics if you need a catheter.
- Every patient is screened for MRSA prior to admission and no patient with MRSA is allowed onto the elective orthopaedic ward.
- Staff wear disposable aprons and gloves if inspecting the wound.
- Equipment is thoroughly cleaned and disinfected.
- Side rooms are available for isolation if required.
- Visitors should not sit on beds
- All visitors, staff and patients should use alcohol gel on entry/exit to ward and bays
- Visitors are kindly asked to stay away if you have had or been in contact with the norovirus for at least 48 hours. If unsure, before visiting, please ring the ward.

Length of stay and discharge plans

The average stay for a patient having a total knee replacement is 3 days after the operation. This may be affected by other medical conditions you may have and your home situation. You could go home as early as 2 days after the surgery.

You will have a routine x-ray to check the knee replacement. You are discharged from the hospital when all members of the team are happy with your discharge, including you.

You will not be able to drive for 6-8 weeks after the operation.

Most patients do not require social services input after their operation. However, if you do have any concerns, please discuss this with the staff when you attend the pre-admission

assessment.

Joint care programme

An essential part of your recovery is taking part in our Joint Care Programme which starts when you attend the Joint Replacement Information Group for the pre-operative advice.

On the ward you will be required to dress in day clothes during the day rather than nightwear. You will also be asked to eat your meals in the day room.

Follow-up clinic appointments

You will be given a follow-up clinic appointment 6-8 weeks later. This will be given to you on the ward, or sent later in the post. It is at this point that you need to check with your consultant about returning to normal activities and resuming driving.

Rehabilitation

The Rehabilitation Team consists of Physiotherapists, Occupational Therapists and Rehabilitation Assistants. They will assist you in getting up and mobile after your operation and provide you with advice and exercises to help you get home safely.

You will see the rehabilitation teams both before and after your operation, on the following occasions:

1. **Joint Replacement Information Group:** during this session we will explain how you can plan to manage at home after your operation and we will be available for any questions.
2. **Pre-operative Assessment:** we will discuss your individual needs that may affect you after your operation. This is to see if you need equipment and provide advice about how to make life easier and safer for your return home after your surgery.
3. **After your operation:** following your operation we will assess your mobility and check the necessary arrangements for your return home. Prior to your discharge home we will ensure you can manage your activities of daily living.

OT questionnaire

When you are invited to attend the Joint Replacement Information Group you will be given a questionnaire to complete which will ask for details of your home circumstances and furniture heights. It is essential that you complete this form and bring it with you to the pre-operative assessment, as it forms the basis for the OT's assessment.

Furniture

You will need to avoid using low furniture after your knee replacement because your knee will be stiff and difficult to bend immediately after your surgery. It will be hard to stand up from a low height. When seen by the rehab team during the pre-operative assessment you will be given advice on the recommended height of furniture you should use. We will focus on the main furniture you use, including your bed, chair, toilet and bath and advise on ways of making sure these are the correct height.

Bed: If this is too low, you could use an alternative bed.

Chair: Use a firm chair with arms both sides. If chair is low, place an extra cushion or firm piece of foam on it to raise the height of the seat. You could borrow a suitable height chair from friend or family.

Toilet: If needed, the OT will provide a raised seat to place on your toilet to ensure it is the correct height.

Bath: You will not be able to sit in the bottom of the bath or get in/out the conventional way initially following your operation. The options are using a walk-in shower or having a strip wash. If your bath is suitable the OT can loan you a board that sits across the bath allowing you to sit over the bath.

Personal care: You may find your knee is a little stiff after your operation, however getting yourself washed and dressed should not present too many problems. It can be a good form of gentle exercise, bending your knee to get your lower garments on. The OT will review this after your operation.

Activities of daily living

There are a number of normal daily activities you will need to reconsider in preparation for your return home after the operation. You may have some difficulty with these immediately after your operation but you should be able to resume either within a couple of weeks, or a couple of months. We will advise you individually on these timescales.

Kitchen: Immediately after your operation it is likely that you will be using walking aids. As a result you will have difficulty carrying items, so you will need to consider having assistance with cooking. It is worth planning the layout of your kitchenware so that commonly used items are accessible without having to bend down, and eating your meals in the kitchen so you don't have to carry your dinner.

It may be useful to stock up on ready meals in the freezer, as you initially may not feel like cooking on your return home. Also consider using a microwave if you have one, as you will not be able to bend down to your oven if this is low.

Housework and shopping: You will find it difficult to complete heavy cleaning tasks on your return home due to your need for walking aids. You will need to arrange assistance for tasks such as vacuuming, cleaning, shopping (you may be able to have this delivered) and heavy laundry. If doing laundry, it is easier to load/unload onto top of machine and to hang clothes indoors.

Driving: You cannot drive for 6 – 8 weeks after your operation, so you will need to organise alternative travel arrangements. You may travel in a car as a front seat passenger. You should have the go-ahead from your consultant before driving. We would advise that you check with your insurance company prior to resuming driving.

Getting moving after the operation

- You will begin to get moving within 24 hours of your surgery. You may even be able to move around within a few hours of your surgery.
- You will be taught how to use a walking aid (frame, crutches or sticks) and will need help initially when you get mobile. You will soon be independently walking around the ward with your aid.

- The physiotherapists will show you how to manage stairs and/or steps when you are mobile.
- You should expect to get up and dressed each morning so you can get back to a normal daily routine as soon as possible.

Continual Passive Motion (CPM)

- As well as doing your exercises, you may be put on the CPM machine following your operation if your knee is stiff. The CPM is designed to help bend and straighten your knee, but it is not a substitute for your exercises. It only passively moves your knee and does not exercise the muscles.
- It is essential that you continue your exercises to strengthen your leg.

Ice therapy (cryotherapy)

- Ice is a useful tool at reducing swelling and pain. You may have a 'cryocuff' applied to your knee during your stay to help with this.
- If you wish to continue this at home, you can either use an ice pack (ice cubes in a bag) or commercially available ice pack. To use an ice pack, place a bag of ice cubes, or frozen peas in a damp pillowcase or tea-towel and apply to your knee for no longer than 20 minutes two or three times a day. Avoid using ice therapy if you have any skin problems or altered sensation around the knee.

Exercise programme

You will need to do exercises for your knee before and after the operation. These are essential in improving your outcome following the surgery. You will do exercises for circulation, strengthening and the movement in your knee.

You should restart these as soon as possible after the operation. You must continue these exercises for at least 8 weeks after the operation.

Range of movement in your knee

It is important that you are able to move your knee well after the operation in order to be able to manage at home. It is also important for walking and managing steps and stairs.

The aim is to achieve 90° knee flexion (bending) and being able to get your knee straight (0° extension) by the time you are discharged from the ward, so it is very important you do the exercises.

Deep breathing exercises

After an anaesthetic it is important to take some deep breaths to minimise the retention of secretions in the lungs. During normal activity, our bodies do this automatically, so take 3-4 deep breaths every hour until you are up and walking about on the ward with the physiotherapists.

Circulation exercises

In the recovery period after an operation, your circulation tends to slow down, putting you at risk of developing a DVT. You should move your ankles up and down and around in circles 10 times every hour. You can also tighten your buttock muscles 10 times each hour too.

Knee exercises

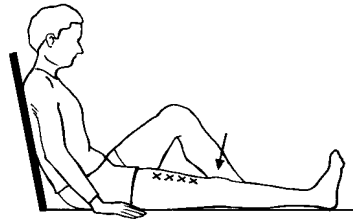
You must do these exercises **every hour** whilst you are in hospital and **3-4 times a day** at home before and after the operation.

Static quadriceps exercise

Sit upright with your operated leg out in front of you. Bring your toes towards you and press your knee down into the bed by tightening your thigh muscles.

Hold for 5 seconds.

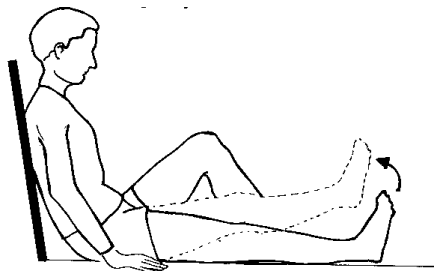
Repeat 10 times.



Straight leg raise

Sitting with your operated leg out in front of you with your knee bent. Tighten your thigh muscles and lift your leg 6 inches off the bed. Hold for 5 seconds and lower slowly to the bed.

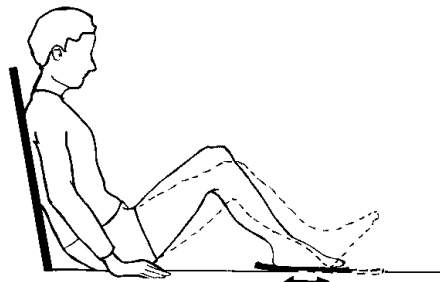
Repeat 10 times.



Knee flexion in lying

Sit with your operated leg out in front of you on the bed. Slide your heel up and down, bending and straightening your knee. You can help by putting your hands around your shin to gently assist knee bending. It is important that you bend it as much as possible each time.

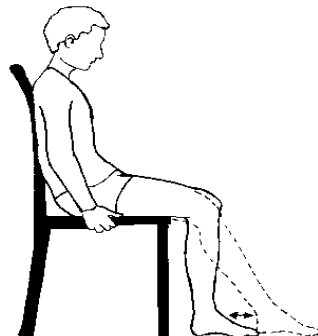
Repeat 10 times.



Knee flexion in a chair

Sit upright in a chair with your feet on the floor. Straighten and lift your operated leg out in front of you and hold it for 5 seconds. Slowly lower your foot to the floor and slide your heel back under the chair as far as possible.

Repeat 10 times.



Stairs and steps

You will probably need to negotiate a flight of stairs or a doorstep on your return home. The physiotherapists will show you how to manage this safely prior to your discharge.

When using stairs, if there is a banister/rail, please use it!

There is a simple sequence to follow that will aid you. Please move one step at a time.

Ascending stairs/steps

1. Good (un-operated) leg first;
2. Bad (operated) leg
3. Sticks/crutches on the step last

Descending stairs/steps

1. Sticks/crutches down onto next step
2. Bad (operated leg) down
3. Good (un-operated leg) down last.

Discharge criteria

By the time you are ready to leave hospital, you should be able to do the following:

- Walking with aids and be able to manage steps or stairs
- Have 90° knee flexion
- Be able to straighten your knee fully
- Be able to do a straight leg raise (see exercises)
- Be able to get on and off the bed, chair and toilet

Outpatient physiotherapy

Outpatient physiotherapy will be arranged for you to continue the progress that you have made in hospital. You will need to continue your exercises at home to maintain or improve your knee bend and muscle strength.

You will either be given an appointment before you leave, or you will be contacted when you get home. We will arrange your appointment at your local hospital or clinic. If you have not been contacted about follow up physiotherapy within 2 weeks please contact our department.

Discharge advice

- Continue using 2 sticks for the first couple of weeks. Once confident with your walking, you can use one stick in the opposite hand to your operated leg. You should aim to be walking outdoors with 1 stick by 6 weeks.
- Gradually increase the distance that you walk, within your own limits. Go for short walks regularly rather than one long one. Avoid prolonged standing.
- Sit with your leg on a stool to minimise the swelling, but bend it over the edge of the chair frequently so that your knee does not become too stiff.
- Avoid putting a pillow under your knee in bed as it encourages your knee to become fixed in a bent position.
- Practise your exercises regularly.

- Use ice if required to help with swelling.
- You will be discharged with painkillers, but do see your GP if you feel that your pain is not well controlled when you get home.

Activities

- **Flying:** you are not allowed to undertake long-haul flights for 90 days (around 3 months) and should speak to your Consultant about flying short-haul flights before this point.
- **Journeys:** travelling by car should not present a problem, but you should take regular rest breaks to maintain circulation and prevent your knee from becoming stiff.
- **Kneeling:** most patients find that kneeling is virtually impossible after knee replacement surgery, and many of our consultants advise against it entirely.
- **Active hobbies:** you should refrain from taking part in active hobbies for 6-8 weeks, but should be able to return after this. Please speak to your OT or consultant for specific advice.

Equipment

If required the rehab team will organise the loan of equipment for you to use following your knee replacement. This will be arranged at the pre-operative assessment and will be provided from a local equipment store.

Equipment store telephone number.....

Please contact the equipment store to find out when your equipment will be delivered or you can collect it before your operation and arrange return once you no longer require it. We would anticipate you will need it for no more than 6 weeks after your surgery.

Preparation for your admission

- Arrange for someone to stay with you for a few days following your discharge home after your operation.
- Ensure you have suitable height furniture.
- Recommended furniture height.....
- Make arrangements for assistance with the heavier domestic tasks and shopping.
- Remember no driving for 6—8 weeks.

We would like to remind you that this is only a general guide. Every patient is an individual and their care is tailored towards their needs and so may differ slightly from the information provided in this leaflet.

If you have any questions please do not hesitate in contacting us on the numbers below. We will try to answer your questions to the best of our ability.

Pre-Operative Assessment	01284 712810
Physiotherapy Department	01284 713300
Occupational Therapy Department	01284 713560

Post-discharge Advice Helpline

01284 713924

Ward F4

01284 713290

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