A Patient's Guide to Total Knee Replacement
This leaflet provides information, which may help you prepare for your admission to hospital. Treatment is always planned on an individual basis, so your experience may differ slightly from the information given. If you are having a partial knee replacement, for example, uni-compartmental knee replacement or patello-femoral knee replacement, the information in this booklet is still relevant for you but reference is made throughout to total knee replacement (TKR).

Our staff are here to help and answer any questions you may have, therefore please do not hesitate to ask at any time.

**Why do I need a TKR?**

There are many conditions which require a knee replacement. The most common is osteoarthritis. This means that the cartilage of the knee has worn out, resulting in the top of the shinbone (tibia) and the bottom of the thigh bone (femur) rubbing together. This is very painful and stops you being able to move your knee as you once did.

**Are there any alternatives to a TKR?**

Before suggesting surgery your doctor may have offered several alternative treatments including medication, physiotherapy, weight loss, walking aids or other operations. Only when these treatments no longer control your pain will your doctor suggest a TKR.
What is a TKR?

A TKR involves removing the end of the thigh bone, and the top of the shinbone, and replacing them with prostheses (artificial knee implants). The artificial knee is usually made of metal alloy and high density plastic.
How will a TKR help?

After your operation, you should experience some pain relief, which should improve your ability to walk.

Are there risks associated with a TKR operation?

There are some risks associated with this operation and although rare, it is important that you understand them.

Deep Vein Thrombosis (DVT)

A DVT is a blood clot in the deep veins of the calf or the top of the inner thigh. To reduce the risk of developing a DVT, you will be given stockings to help with your circulation and medication that thins the blood. The physiotherapist and nursing staff will show you how to exercise your legs and ensure that you start to move about quickly after your operation.

If a clot develops and part of it breaks off, it can travel to the lungs where it is termed a Pulmonary Embolus (PE). A PE is potentially life threatening so everything is done to prevent a DVT from developing.

Infection

There is a small chance of an infection and all possible precautions are taken to avoid infection during your operation. A superficial skin infection is treated with antibiotics, however, if the TKR becomes infected, it may need to be replaced at a later date.
Foot weakness

Pressure on the nerve near the outside edge of the knee joint can cause weakness of the foot. If this happens the problem usually resolves itself and it is rare for the weakness to remain.

Loosening

Over a period of time your artificial knee joint may become loose and further surgery may be required to correct this. An average TKR is expected to last between 10 and 20 years.

Stiffness

Stiffness and inability to move the joint satisfactorily are possible complications. You will be shown exercises to improve the joint movement.

If you are worried about any of these risks, please speak to the hospital doctor before your operation for further advice.
Before coming into hospital

Please read this leaflet in conjunction with the ‘Before you come into hospital’ leaflet.

Pre-assessment

Shortly before your operation you will be asked to attend a pre-assessment screening and may require a further pre-assessment appointment. This is a medical examination to make sure you are well enough for surgery and to consent to an operation. This may include an occupational therapy assessment although not all patients having knee replacements need to see the occupational therapist. You may be told if you are suitable for our Enhanced Recovery Programme, in which case you will be given some additional information.

Contraceptive Pill or Hormone Replacement Therapy (HRT)

Depending on what treatment you are having, women may need to stop taking the contraceptive pill, or HRT six weeks before treatment. You are advised to discuss this with your GP.

Transport

Please ensure that suitable arrangements are made for your transport to and from the hospital as you will be unable to drive after surgery. Your operation may invalidate your insurance so you should notify your insurance provider of your forthcoming operation. Patients with knee problems can be more at risk pre-operatively because the knees do not respond quickly enough or are too inflexible to use the pedals safely.
What will happen when you arrive at hospital?

You will be admitted to hospital on the day you have your surgery. Occasionally, it is necessary for patients to have further tests before surgery. If this is the case, you will be asked to come in the day before.

On admission, you will be greeted by a member of the ward team. You will also see several members of the treating team at this time. If you have any questions, please ask a member of staff.

The day of your operation

You will be told not to eat or drink for approximately six hours prior to your operation, depending on the anaesthetist’s instructions. Failure to follow these instructions will result in your operation being delayed or even cancelled. The anaesthetist will come to see you before your operation. If you are on any regular medication please ask the anaesthetist what you can take on the day of surgery.

Our porters will take you to the operating theatre and a nurse will accompany you and hand you over to the care of the theatre team. The operation is usually carried out under general anaesthetic and the procedure usually takes between one and one and a half hours. You may be away from the ward longer than this as you will be taken to the recovery area and cared for there until you are well enough to return to the ward.
How will I feel after the operation?

After the operation you will feel some pain and discomfort, which will be helped by medication.

You may have the following:

- A bulky bandage on your knee
- Small drainage tubes coming from your wound
- A drip to replace lost fluids
- An oxygen mask

All will be removed as soon as possible after surgery.

Getting back on your feet

After your operation, the physiotherapist will teach you the first stage of your exercises. They will also help you out of bed and you may take a few steps and sit in your chair. Over the next few days you will be taught further exercises, how to walk using appropriate aids and how to climb stairs. Swelling and pain around the knee in your operated leg are normal following a knee replacement. To counteract these, take your pain killers regularly as prescribed by the clinician and always sit with your legs/feet elevated. Do not stand in one position for long as gravity will make your knee swell even more.
**Advice on walking**

You will usually start walking on the first or second day after your operation. The physiotherapist will advise you on what weight you are allowed to take on your operated leg. Initially you should have the supervision of either a physiotherapist or a nurse when walking and you will be advised when you are considered to be safe enough to walk by yourself. It is important that you practise and improve your walking pattern while on the ward. The physiotherapist will advise you on what walking aids to use and how long to use them for. They will also advise you on how to progress your walking.

The sequence for walking is:

- Move walking aid(s) forward
- Step forward with your operated leg
- Step up to (or past) your operated leg
You can turn around in either direction but you must prevent twisting or pivoting on your new knee. You should therefore lift your feet with each step and step around with small steps.

It is important to maintain mobility and fitness. The distance one walks varies from person to person. You will not injure your knee by walking but you need to monitor any swelling. If the knee swells too much it is time to rest with your legs up. You need to reduce the swelling before you exercise. If the knee is too tight, exercising will be difficult. If your walking has been limited, it is best to gradually increase your distance and speed.

**Advice on stairs**

During your hospital stay, the physiotherapist will show you how to climb the stairs (if applicable).

Always use walking aids and if present a rail(s) or banister(s) to support and assist you while going up or down the stairs. If you do not have rails on your stairs, you should mention this at the pre-admission clinic.

**Going up**

- Go up one step with your non-operated leg
- Take your operated leg up one step to join the other leg
- Bring your stick(s)/crutch(es) up to the step
**Going down**

- Take your stick(s)/crutch(es) down one step
- Place your operated leg down one step beside your walking aids
- Bring your non-operated leg down one step to meet the other

**Sitting**

Choose a firm, upright chair, preferably with arms. The ideal height of your chair depends on your height. If you do not have a suitable chair, try and borrow one or use firm cushions to raise the height of the seat.

When sitting, your knees should be lower than your hips to assist you getting up and out of the chair. Avoid low, soft sofas and armchairs.

To get out of a chair in the early stages when your knee bend is painful, push yourself up on the arms of the chair, taking most of your weight on your un-operated leg. Regain your balance and then get your crutches or sticks. Reverse the procedure to sit down.

Use the same method to get on/off the toilet. You may need to use a toilet frame or other equipment as assessed by the occupational therapist.
**Kneeling**

Kneeling is not advisable for several months following your operation, after which, you may kneel down as you feel able. You may find it more comfortable to kneel on a pad or cushion.

Many patients find they cannot kneel after their operation either because it is uncomfortable or because they are experiencing a strange sensation. You must take this into consideration if you kneel a lot due to your work or hobbies.

**Dressing**

Dress sitting on a chair or the bed. It is easier to dress your operated leg first and undress it last. It is advisable to wear good supportive shoes with low heels (you may find slip-on shoes easier to manage) and to avoid tight corsets.

**Household tasks**

Sit for as many jobs as possible. A high stool is useful so that you can still reach the worktops. If you are unable to carry items, a kitchen trolley may be helpful. For several weeks after your operation you are likely to need help from your spouse, relatives or friends with activities such as shopping, doing the laundry and vacuuming. If this is not possible, please discuss it at the pre-admission clinic.
Getting in and out of a car

If possible, get in to the car from a driveway or the road, rather than up on a kerb. The passenger seat should be as far back as possible and slightly reclined. With the passenger door open, back up to the car until you feel the seat at the back of your knees and gently lower yourself down. Lift your bottom back towards the driver’s seat to give you plenty of room to swing your legs in. To get out of the car, reverse the above procedure.

Going home

Most people go home four to five nights after the operation although this varies for every patient. Prior to your discharge, it is our aim that you will be able to bend your knee to a 90 degree angle (right angle) independently and be able to maintain this with a home exercise programme.

Advice on exercise

When you get home, it is very important that you continue to do all the exercises taught to you while in hospital, as advised by the physiotherapist. This is to ensure that your knee does not get stiff and to make sure that it continues to strengthen once you are home.
Exercises

The following exercises should be performed three times per day for at least 12 weeks and supervision by a therapist may be useful. These exercises will help knee range and strength and should be performed pre and post-operatively.

Please note: these exercises may worsen your pain initially.

Pain following a knee replacement remains for many weeks and is normal for everyone. Take pain killers before you exercise to try and reduce the after-effects.

Sit on a chair with a towel under one foot. Slide the foot under the chair as far as you can. Move your knee forward keeping the sole of your foot in contact with the floor. Hold for approximately 10 seconds.

Repeat 10 times.
Sitting on a chair, with the leg to be exercised supported on a chair as shown, let your leg straighten in this position. Hold for approximately 15 seconds.

Repeat 10 times.

Sit on the floor with your legs straight out in front of you. Put a band around your foot. Bend your knee as far as possible. Gently pull the band to bend your knee a little more. Hold for approximately 10 seconds.

Repeat 10 times.

Sitting on a chair, with the leg to be exercised supported on a chair as shown, let your leg straighten in this position. Hold for approximately 15 seconds.

Repeat 10 times, three times per day.
Sit on a chair with one leg straight in front of you. Place your hand on your thigh just above the knee cap. Lean forward keeping your back straight. Straighten your knee, assisting the stretch with your hands. Hold for approximately 15 seconds.

Repeat three times, three times per day.

Sit on a chair. Pull your toes up, tighten your thigh muscle and straighten your knee. Hold for approximately five seconds and slowly relax your leg.

Repeat 10 times.
Lie on your back. Bend your leg, place a cushion under your knee and keep your other leg straight on the bed. Exercise your straight leg by pulling your foot and toes up, tightening your thigh muscle and straightening the knee (keep your knee on the cushion). Hold for approximately five seconds and slowly relax. To make the exercise harder, put a small weight around your ankle.

Repeat 10 times.
Resuming normal life

You may start driving once you have spoken to the clinician in clinic, which is usually six to eight weeks after your surgery.

You should be able to return to work between six and twelve weeks after the operation, but this depends on the nature of your work and how you usually get there.

This is a major operation and you may tire quickly. This is normal and your strength will gradually return over the next few months.

Outpatient/follow up appointments

Before leaving the hospital you will be given an outpatient appointment for approximately six to eight weeks time. You will be seen by one of the clinicians in the consultant's team.

No smoking policy

This hospital has a no smoking policy. Patients and visitors are requested not to smoke in the hospital buildings or in the grounds around the hospital.

We suggest you bring this leaflet with you when you come to hospital and use it as a guide.
If you have any further questions or concerns please contact the relevant department on the numbers given below:

**Joint Replacement Unit**
020 8909 5279

**Pre-assessment clinic**
020 8909 5630

**Physiotherapy**
020 8909 5519

**Occupational therapy**
020 8909 5480

**Patient Advice and Liaison Service (PALS)**
020 8909 5439