LESS PAIN
MORE INDEPENDENCE
LIFE-CHANGING CARE

NHS
The Royal Orthopaedic Hospital
NHS Foundation Trust

JOINTCARE
Hip and Knee Centre of Excellence at The Royal Orthopaedic Hospital

Patient Guide For Knees

This book belongs to:

Name:

Your booking information:

Please bring this book with you each time you visit the hospital.

Pre-operative assessment date:

Your surgery date:

Expected date of discharge:

Please return for your post-op check up

Date:

Time:

Any other appointments:

Please call 0121 685 4000 to advise of any problems in attending

Please complete the above dates as you receive letters from the hospital.

Your ticket to come in to hospital

You are coming in to hospital on: / / At this time: : AM PM

Please go to the: department when you arrive

We want you to eat until: : AM PM and not after

We want you to drink clear fluids until: : AM PM and not after
(eg. water, black tea/coffee)

You **must** have a shower or bath at home on the morning of surgery. Do **not** shave the operation site.

Do take these medicines on the morning of surgery:

Do not take these medicines on the morning of surgery:

Your ticket to go home

We expect you to go home on: / / Who is going to take me home:

You will get home by (car/taxi/other)?

You have made the following care arrangements for discharge:

Contents

One
Welcome

What is JointCare?

JointCare is our pathway for all hip and knee replacement patients here at The Royal Orthopaedic Hospital.

JointCare is about improving patient outcomes, patient experience, and speeding up a patient's recovery after surgery. The pathway focuses on patients taking a proactive approach to their own recovery, working on the principles of better preparation and early mobilisation. It also aims to ensure that patients always receive evidence-based care at the right time.

Together you and your surgeon have decided that you should have an operation.

This guide book will explain what to expect and what you need to do to prepare and plan for your operation. It will also explain what you need to do after your operation to enhance your recovery and return to the activities you enjoy as quickly as possible. It is therefore important that you participate in your care, so that jointly we can achieve the best possible outcome after your operation. Remember, everyone is different and some people advance faster than others.

This Patient Guide is a vital part of the programme and we strongly encourage you to read it at your leisure and bring it with you when you come into hospital for your operation.

If you need clarification or have questions for which you are unable to find the answers, please do not hesitate to ask anyone in our team.

You may go home the same day

Did you know you can have your hip or knee replaced and go home on the same day?

We aim for all of our routine hip and knee replacement patients to go home on the day of surgery, or early the day after.

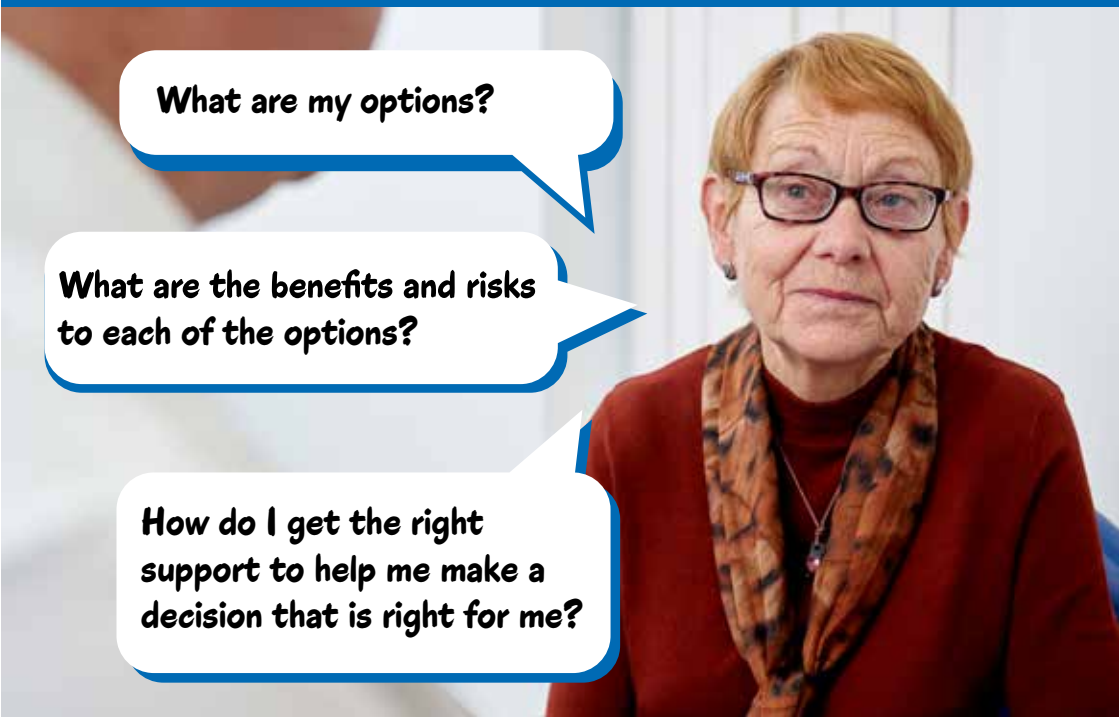
When preparing for your surgery, please also remember to prepare for your discharge from hospital:

- Consider who can take you home on the evening of your surgery or the morning after.
- Do you have someone at home or someone that can stay with you to support you for the first day or two?

Recovering at home

A shorter stay in hospital reduces infection risk and promotes early mobility. This improves your circulation, reduces your risk of blood clots and promotes a faster recovery. You can sleep in your own bed, eat your preferred meals and be in charge of your painkillers.

Please note not everyone will be suitable for day case surgery, it is dependent on individual health and the complexity of the surgery needed. Please speak to your consultant team to find out more.



Get the most out of your appointment

Ask 3 questions...

During your appointment, remember, you're the expert on you. Your clinician is here to help, but it's important to understand all your options. Ask these questions and any others you have to make sure you're getting the support that's right for you.

It's ok to ask questions, we're here to help

For more information visit our website www.roh.nhs.uk/3qs or scan this code

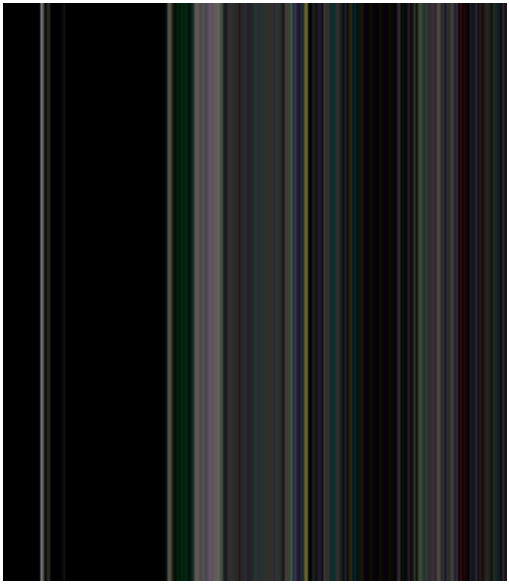
Making the right choice for you.

When you have an appointment with a healthcare professional, you may need to make choices about your healthcare.

If there are different treatment options available to you, your doctor will share their expert opinion on the best option.

You know your personal circumstances best, you may be concerned about how treatments may affect your work or family, you may be a carer or you may have other concerns that the healthcare professional may not be aware of. Talk to them about your concerns and make a shared decision about your care.

Before your appointment, you could use this space to consider what is important to you, including your values, beliefs, hobbies, plans or caring responsibilities. Then, you and your healthcare professional can discuss your options, and, together, you can find the right choice for you. This is known as a shared decision making conversation.



What is important to me?

It's ok to ask questions, we're here to help

Ask 3 questions...

Asking these three questions and considering what matters most to you will help you to choose the option that is best for you.

After your appointment, you might want to talk to your friends and family about what you have discussed. It is okay to change your mind. If you have more questions, please speak to your healthcare professional.

What are my options?

What are the benefits and risks to each of the options?

How do I get the right support to help me make a decision that is right for me?

Patient Pledge

A partners knee agreement

As your healthcare provider we will:

- Treat you with respect and compassion
- Always be honest
- Listen to you
- Provide information to you in a way that you can understand
- Include your family or carer when you would like us to
- Maintain the highest standards in quality and safety
- Deliver all information and care to you in a timely fashion
- Respect your privacy and dignity
- Help you make informed decisions about your care
- Inform you about the benefits and the risks associated with any treatments
- Support you in setting goals for your treatment plan

As a patient I will:

- Treat you with respect and consideration
- Always be honest
- Tell you if I have trouble speaking or reading English
- Educate myself on my condition
- Be an active participant in my treatment
- Inform you of all the medications I am taking
- Participate in decisions about my care
- Inform you of any family, friends or carers that can help me with my care
- Communicate any problems I have in a timely fashion
- Complete appropriate hospital questionnaires to provide valuable feedback

The Orthopaedic Team

At the Royal Orthopaedic Hospital you will be looked after by a dedicated multidisciplinary team including; surgeons, anaesthetists, nurses, therapists, doctors, medical secretaries, physician associates, pharmacists, theatre practitioners, ward clerks, radiographers, porters, catering staff and volunteers.

Our Surgeons and Anaesthetists

The surgical team work alongside dedicated anaesthetic consultants. They have specialist skills in anaesthetising patients undergoing Orthopaedic surgery. For complex surgical procedures there is a high dependency unit to optimise care of patients who are at high risk during their stay in hospital.

The whole Orthopaedic team is committed to providing the highest standard of Orthopaedic care available.

About The Royal Orthopaedic Hospital

Patient consent

Consent is about making sure you understand all you wish to about the operation you are going to have. This includes understanding the choices available as well as the risks and rewards of your preferred treatment.

We want to make sure you have everything you need to make an informed decision.

Data Protection Act

Your name is entered onto our computerised database, enabling us to keep effective clinical records. Under the Data Protection Act you have the right to view any records held by The Royal Orthopaedic Hospital. Please ask a nurse to advise you on the process, 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 will have to pay for this copy.

Chaperone

You have the right to have a chaperone provided by the Hospital, during any examination and certain procedures. You may choose a family member or close friend or carer. You also have the right to choose a carer to be involved in your care.

Smoking

Smoking or vaping is actively discouraged, particularly prior to and immediately after your procedure, as this can increase the risk of complications following surgery. We are a no smoking hospital. We encourage you to discuss giving up smoking with your GP or practice nurse as soon as possible.

Dietary requirements

You will be able to select from a choice of meals. If you have special dietary or cultural needs, please inform a member of our team.

Single-sex accommodation

Privacy and dignity are at the heart of everything we do. We are committed to delivering single-sex accommodation. There are occasions when mixed- sex accommodation is unavoidable, but patients' privacy and dignity will always be assured.

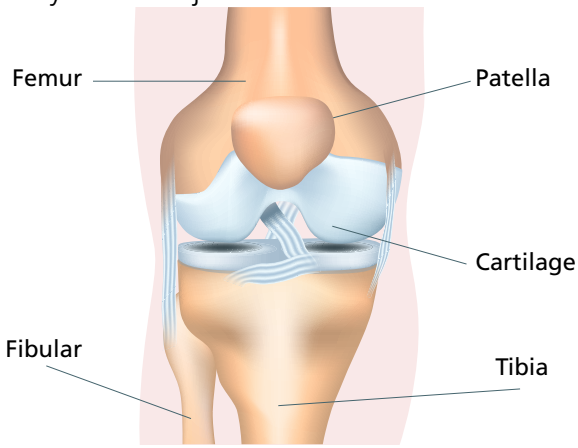
Three

About knee replacement surgery

Why is the operation done?

The normal knee

The knee joint has three parts: your thigh bone (the femur), shin bone (the tibia) and knee cap (the patella). This type of joint is called a hinge joint because your knee joint moves in a similar way to a hinge on a door.



The surfaces on the joint are covered by articular cartilage,

which is a firm slippery material about 3mm thick. A small amount of lubricating fluid is present and aids movement. This allows painless and effortless movement of the joint even under a load.

The knee has four ligaments which hold the joint together and prevent unstable movement. They are tough fibrous bands attached at each end to the bone. Although the knee appears to act as a hinge, it can rotate and stretch in smaller amounts as well.

Knee function

The knee takes your body weight and it must cope with walking, running, crouching, bending and lifting 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. The quadriceps is a big muscle group at the front of the thigh. It straightens 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

As we get older most people will have "wear and tear" arthritis of the knee, although some will have rheumatoid arthritis which also involves other joints. Many factors may contribute to having arthritis; obesity, accidents, vigorous sport or a family history may be important. In osteoarthritis (wear and tear), certain changes occur in the joint. Patients may need a knee replacement due to inflammatory, rheumatoid or osteoarthritis.

- 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.

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.

The artificial joint

The artificial knee joint closely follows the shape of the real joint. It has been designed and tested to replicate the function of the normal knee. There are many designs of artificial knee joint. Your surgeon will choose the most suitable for you.

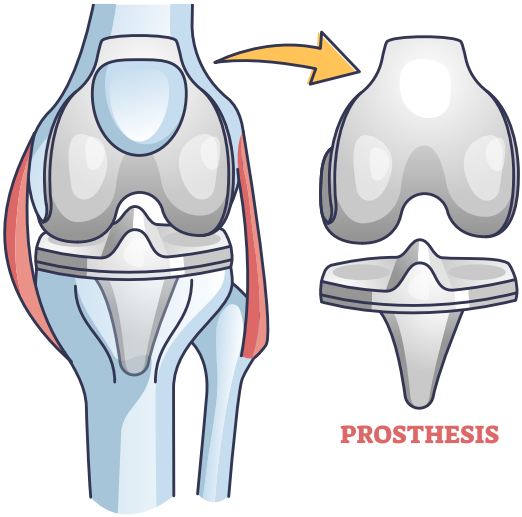
There are various types of knee replacement.

A total knee replacement resurfaces the whole of your knee. This is the most common operation as more than one area of the knee is usually damaged. The kneecap may or may not be re-surfaced depending on the operative findings.

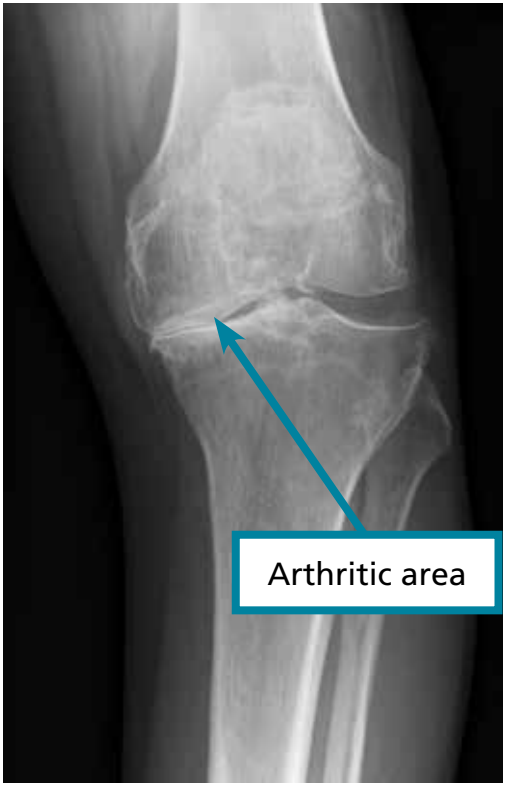
A partial knee replacement resurfaces either

- The inner or outer half of the knee
- Or the joint between the thigh bone and knee cap.

Partial knee replacements only work for those patients with arthritis in one part of the knee. They are not an option if you have inflammatory disease such as rheumatoid arthritis, if the damaged area is more extensive, or if your knee has become very stiff.



TOTAL KNEE REPLACEMENT



Why do I need a knee replacement?

You should consider a knee replacement if

- You have constant pain despite taking painkillers.
- You are unable to do everyday things and so are less independent.
- You cannot walk very far now and may have to use a stick. Stairs can be difficult.
- Your knee is getting stiff and you cannot bend it easily.
- You are unable to work because of your painful knee.

How the operation is done

A knee replacement is a major operation and usually takes approximately 1 – 1 1/2 hours.

During a total knee replacement operation

- The worn surfaces at the bottom end of the thigh bone (femur) and the top end of the shin bone (tibia) are removed.
- The surfaces are covered with metal implants fixed in place with bone cement.
- A smooth plastic insert is fixed to the top of the tibial implant. This ensures that the two surfaces glide smoothly together.
- Sometimes the underside of the knee cap (patella) is also re-surfaced with plastic.
- The layers of soft tissue, muscle and skin are repaired and stitched back together.

Partial knee replacement surgery will be slightly different depending on the part of the knee to be replaced.

You are usually in hospital for one to two nights but some patients are able to go home on the evening of their surgery. 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 knee replacement. Some, however, are less satisfied either because a complication has arisen or their expectations are too high.

Benefits

The aim of a knee replacement is to reduce pain and improve mobility. About 90% of people having a knee replacement rate the result themselves as 'good' or 'excellent'.

Risks

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

General surgical risks

Thromboses and emboli (blood clots)

Blood clots in the leg veins (deep vein thrombosis) and blood clots on the lungs (pulmonary embolus) are a risk associated with joint replacement surgery.

The simplest way of reducing this risk is early mobilisation (exercises and walking).

Whilst in hospital you will also be prescribed blood thinning treatment, usually in the form of injections, to reduce the risk of clot formation. Patients already receiving anti-coagulant therapy will be assessed and advised accordingly.

Urinary problems

Some patients, particularly those who may have previously experienced difficulty passing water, may sometimes need a catheter to be inserted into the bladder prior to or after the operation. There is a small risk of temporary incontinence; particularly in women, following surgery.

Except in certain circumstances, this should be removed the morning after surgery.

Transfusion

Nowadays, blood transfusion following knee replacements is rarely needed. If your blood count is very low or if you are showing symptoms of anaemia (low blood count), the team looking after you

may recommend a blood transfusion. Please see page 24 for more information.

Fat embolism

This is rare and 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.

Superficial infection

You will not be discharged from hospital unless the appearance of the wound is satisfactory. Where possible, the dressing will stay on until the removal of your clips or stitches. After discharge, if you have any concerns about your wound, please call us on 0121 812 3312 8am-4pm Monday - Friday. Out of these hours please call the ward you were discharged from.

Deep infection

A deep infection of the joint most often starts when bacteria gain access to the tissues at the time of surgery and great lengths are taken in theatre to reduce the risks of this happening. Operations are carried out in an ultra- clean air theatre and sterile clothing is worn by the surgical team. You will be given preventative antibiotics at the time of surgery.

Despite all the precautions taken, infections can still occur. An early deep infection (within the first six weeks) may rarely occur and this would require a further operation to clean the joint replacement. Occasionally it would be necessary to take out the joint replacement to resolve the infection. It is likely you would require a course of antibiotics.

An infection can occur at any stage in the life of a knee replacement. 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 ‘bio-film’, which makes it difficult to treat with antibiotics alone. Although the symptoms of infection can often be suppressed with antibiotics the only way to eliminate this deep infection is to remove the artificial implant as described above.

Remember infection is a serious complication. If you develop any new redness around the wound or if the wound leaks after leaving hospital, it is important that you call us on 0121 812 3312 8am - 4pm.

Bruising

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.

Leg swelling

Leg swelling is a normal response to the operation and will settle week by week as your body absorbs the bruising. You should continue to do the exercises detailed on page 56 of this guide book for the first 12 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 contact us for advice.

Medical problems

Complications such as heart attack, stroke or death can occur after knee replacement as with other forms of major surgery. These complications are rare and the anaesthetist will not allow the operation to proceed if it is felt that the risks are significantly higher than normal. In this circumstance, it may be that you are sent for further tests or treatment prior to surgery being performed.

Specific risks

Stiffness and range of movement

Most people are delighted with their knee replacement. Some people describe aching or stiffness in the joint, or have a limp which does not improve. Sometimes the knee may be unstable.

It is vital to follow your rehabilitation programme to achieve the best possible outcome. It can take months to gain a good range of movement. The range achieved varies from person to person. This is due to many factors including;

- Your general health before the operation
- The knee range of movement before the operation
- Your weight
- Any post-operative complications

Fractures

Very rarely, fractures (breaks) of the bone can occur during surgery. These are almost always identified during surgery or on the x-ray taken after surgery. Occasionally this requires further surgery, or you will be asked to reduce your activities for several weeks to allow the fracture to heal.

Nerve Damage

Very occasionally one of the nerves that run past the knee can be damaged during the operation. This can cause foot-drop, or paralysis of other muscles in the leg. Although the nerve often recovers over a period of months, the paralysis can persist.

The skin around either side of the knee can feel numb after the operation – this is normal. The feeling in the skin may or may not recover but knee function will not be adversely affected.

Blood vessel injury

This is extremely rare but serious. It can sometimes be repaired by a vascular surgeon if needed.

Need for further surgery

In the event of a complication you may require further procedures such as a manipulation of a stiff knee, a washout, or a revision procedure.

Reducing the risk of infection in hospital

What you can do to help?

- 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 and if you use a commode do not be afraid to ask for a bowl of water if the nurse does not offer one
- 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
- Inform a nurse if your dressing becomes wet or loose
- 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

Anaesthesia

Preparing yourself for anaesthetic

- It is difficult to separate the risks of anaesthesia from the risks of the operation and your general health. The risks to you depend on whether you have any other illnesses or other factors, such as smoking and weight
- If you smoke, giving up for several weeks before the operation reduces the risk of breathing problems and improves healing of the tissues. If you cannot stop, cutting down will help
- If you are very overweight, reducing your weight will reduce many of the risks of having an operation and anaesthetic

What will happen before my surgery?

You will meet your anaesthetist before your operation. They will ask you questions about your health, previous anaesthetics and usual medicines and will need to check your answers to other questions. They may need to examine your chest with a stethoscope and examine your neck and mouth. Please ask questions and tell them of any worries you may have.

You will receive clear instructions when to stop eating and drinking before your operation. It is very important to follow these or your operation may be delayed or cancelled. Please see the 'Ticket to come into hospital' at the front of this handbook.

Types of anaesthesia during surgery

There are two main types of anaesthesia, general anaesthesia and regional anaesthesia. They are often combined.

General anaesthesia

It is uncommon for general anaesthesia alone to be used for knee surgery. It is usually combined with a spinal anaesthetic or nerve block injections. On occasion a deep sedation technique may be used instead of a general anaesthetic.

A general anaesthetic is a combination of drugs, which are given to make you completely unconscious. During a general anaesthetic the anaesthetist will insert a breathing tube into the back of your throat or

windpipe which will then be removed at the end of surgery as you are waking up. During a general anaesthetic you do not feel anything and will not be aware of what is going on around you.

Modern general anaesthetic is very safe. There are some common side effects and some less common side effects:

Common side effects or complications

- Sore throat
- Nausea or vomiting
- Shivering
- Headache

Less common side effects or complications

- Chest infection
- Muscle pain
- Damage to the teeth, lips or eyes
- Excessive drowsiness

Serious complications related to general anaesthesia are rare but include life threatening allergy to drugs and breathing difficulties and cardiac issues such as heart attack and stroke.

Regional anaesthesia

Regional anaesthesia uses local anaesthetics which are drugs that have a numbing effect. They stop you feeling pain and other sensations in part of your body but on their own do not cause any loss of consciousness.

Spinal anaesthesia

A local anaesthetic is injected through a needle into the fluid surrounding the nerves in your lower back. This will numb your legs and block all sensation in the lower half of your body for a few hours.

If you prefer, during the surgery you can also have drugs that make you feel sleepy and relaxed (sedation). You are likely to have little memory of the time during which you have been given sedation. The level of your sleepiness can be adjusted and you can be easily awakened.

Common side effects

- Shivering
- Itching
- Headache
- Temporary difficulty passing urine - you may find it difficult to empty your bladder normally for as long as the spinal lasts. Your bladder function returns to normal after the spinal wears off. You may require a catheter to be placed in your bladder temporarily, while the spinal wears off and for a short time afterwards. Bowel function is not affected by the spinal.

Nerve damage is a rare complication of spinal anaesthesia. Temporary loss of sensation, pins and needles or sometimes muscle weakness may last for a few days or even weeks but almost all of these make a full recovery in time. Permanent nerve damage is rare (approximately 1 in 50,000 spinals). It has about the same chance of occurring as major complications of having a general anaesthetic.

Pain control after surgery

Pain following your knee operation is inevitable. We aim for your pain to be at an acceptable level to allow you to move around after your surgery and recover.

Pain control is an essential part of your care

The nurses, ward pharmacy team, and acute pain team are able to give you advice and support. Pain relief is available in different forms and strengths. If you are in pain, please let our staff know. If you need support or would like to discuss side effects or preferences for pain relief, please ask a member of our team for help.

Oral medication

When you are able to drink and eat then you may take your painkillers by mouth. Most patients will need to take painkilling medication regularly after surgery to keep their discomfort to a minimum.

Local anaesthetic

Injecting local anaesthetic drugs close to the nerves going to the knee, the spinal region or the operation site blocks painful messages from being sent to the brain. The Anaesthetist will discuss this with you in further detail.

Pharmacy

What is the role of the pharmacist?

The pharmacist visits all the in-patients and checks their drug charts for legibility, safety, drug interactions and effectiveness of each drug prescribed by the doctor. The pharmacist will also check for any drug allergies as well as dispense any newly prescribed items.

Before you come into hospital

You will be seen by a practitioner in the Pre-Operative Assessment Clinic (POAC), who will check what medication you are prescribed and tell you if and when you need to discontinue any of your drugs before surgery. In most cases you will continue on all the drugs usually prescribed by your GP. You may receive a pre-admission phone call from the pharmacy team to confirm your medicines.

You should bring all your usual medication (except controlled drugs) into hospital with you, which will be locked away in a medicine locker beside your bed. It is better to store and bring them in their original containers rather than to decant them or bring in single strips. This is so that we can check your dosage instructions and positively identify them as belonging to you.

We also ask you to purchase paracetamol tablets and senna tablets (for constipation) ready to use after your surgery. They are available at your local chemist and supermarket. All other painkillers will be supplied when you come into hospital.

If your usual medication runs out while in hospital, a further supply will be dispensed from our pharmacy department. If the dosage of any medication has changed then the pharmacy team will supply a new pack or re-label your own pack with new instructions on how to take or use your medication. If any medication has been stopped, then these will be removed and destroyed by pharmacy, where consent has been given. These should not be used during your stay as any deviation from what is prescribed by the hospital doctors can be potentially harmful to your health.

Whilst you are in hospital

Your drugs will be checked, counted and recorded by the nurse on admission. The doctor will prescribe on your drug chart your usual medication and any further drugs that you might need whilst in hospital. These usually consist of anti-sickness medication, antibiotics and analgesia (painkillers) as well as blood thinning injections or tablets. The pharmacist also checks your drug chart and dispenses any regular new treatments prescribed.

Discharge from hospital

Before discharge, the pharmacist will dispense any medications prescribed by the doctor. You may be transferred to the discharge lounge while you wait for your tablets to take home (TTOs).

Blood transfusion

Why might you need a blood transfusion?

Blood contains many different cells. The red cells are essential for carrying oxygen around the body. A lack of these red blood cells is called anaemia.

Most people cope well with losing a moderate amount of blood (e.g. two to three pints from a total of around eight to ten pints). This lost fluid can be replaced with a salt solution. Over the next few weeks your body will make new red blood cells to replace those lost. Medicines such as iron can also help compensate for blood loss. However, if larger amounts are lost, a blood transfusion is the best way of replacing the blood rapidly.

What might I do to reduce my need for blood before an operation?

- Eat a well-balanced diet in the weeks before your operation
- Boost your iron levels - ask your GP or Consultant for advice, especially if you know that you have suffered from low iron levels in the past
- If you are on blood thinning medication such as Warfarin or Aspirin, stopping these drugs may reduce the amount of bleeding. You will be advised if you need to stop these before your operation

Are transfusions safe?

Almost always, yes. The main risk from a transfusion is being given blood of the wrong blood group. A smaller risk is catching an infection. To ensure you receive the right blood, the clinical staff make careful identification checks before any transfusion. They will ask you to state your full name and date of birth. They will then check the details on your wristband to ensure that you receive the right blood. They will regularly monitor you during your transfusion and ask how you feel.

Donated blood will be specially selected to match your own blood for the most important blood groups. But, because your red blood cells carry over 100 different blood groups, an exact match is not possible. About one in every 15-20 patients develops an antibody to the donated blood, and will need to have specially matched blood. If you have a card saying that you need to have special blood, please show it to your nurse and ask them to tell the hospital blood bank.

Fortunately, severe reactions to blood transfusions are extremely rare. But when they do occur, staff are trained to recognise and deal with them.

Please inform us if your religious or spiritual belief prevents you from accepting a blood transfusion.

How will I feel during my blood transfusion?

Most people feel no difference at all during their transfusion. However, some people develop a slight fever, chills or a rash. These are usually due to a mild immune reaction or allergy and are easily treated with Paracetamol, or by giving the blood more slowly.

Other information

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

Four

Preparing for your surgery

Fitness and Diet

Do as much moderate exercise as your pain will allow, but in particular make sure that you do the pre-surgery exercises you have been given. See page 31.

Ensuring that you eat healthily in the days/ weeks before your operation should help you to recover more quickly.

Stop smoking (including e-cigarettes) – your chest needs to be clear for your anaesthetic.

Drink alcohol only in moderation.

If you have been given a waiting well card, you can scan the QR code for more information. Alternatively, you can visit www.roh.nhs.uk/supporting-services/waiting-well

Healthy eating

If you are overweight and your consultant has recommended that you lose weight before your operation it is best to eat a varied healthy diet. This will help maintain your vitamin, mineral and protein levels which is ideal for an operation.

If you want more detailed information please see the NHS Choices website or ask your GP to refer you to a community dietician.

General healthy eating advice

Eat more fruit, vegetables and cereals. Fruit, vegetables and cereals are all rich in vitamins and fibre (roughage). All fruits, vegetables and salads are beneficial and you should try and have 5 portions a day. Wholemeal/ wholegrain foods like wholemeal bread/pasta/rice, porridge, Weetabix and other high fibre cereals, beans, lentils and oats are also good for you to try and keep healthy.

Cut down on sugar

Sugar contains no useful nutrients apart from energy and we can get all the energy we need from other foods. Reduce your intake of sweets and limit adding sugar to foods and drinks. Reduce sugar containing drinks.

Getting ready to return home

It is very important that your home situation is suitable for you to return to following your surgery, especially if you live alone. Here are some things you should do:

- Clean and do the laundry and put it away
- Put clean sheets on the bed
- Prepare meals and freeze them in single serving containers
- Pick up loose rugs and mats
- Ensure everyday items are in reach
- Make sure there is room to walk from room to room without obstacles getting in your way (remember you may be using walking aids)
- You will only be in hospital for a short time. Please avoid having any maintenance work done to your property

Pre-operative assessment process

This will provide you with the opportunity to discuss the medical, nursing and therapy requirements needed to help you plan for your admission to hospital and discharge following surgery.

At the Pre-Operative Assessment Clinic your medical fitness for an anaesthetic will be assessed and any tests required organised.

All patients are screened for MRSA during their Pre-Operative Assessment Clinic appointment. If you are found to be a carrier of MRSA you will be given treatment prior to your operation.

Please inform the nurse if you have been diagnosed in the past with MRSA, C- Diff, VRE, CPE or CJD. Or if you have received treatment in a hospital in this country or abroad, within the last 12 months.

During your appointment you may have some or all of the following:

- Height, Weight, Blood Pressure, Urine test
- A detailed nursing assessment
- An examination of your general health
- An ECG (tracing of your heart)
- Blood tests
- MRSA screening
- Spirometry (breath tests)

Occasionally other tests are required depending on your state of health.

What to bring

- Reading glasses
- All your regular medications

You will be given advice about taking medicines on the day of your operation and will inform you of any that may need to be omitted for a period of time before your surgery. Please avoid using skin cream or moisturiser before your appointment as it can interfere with our medical equipment.

When you have finished all your assessments please do not leave the clinic area without speaking to a nurse, so we can confirm that everything required has been completed. You will be given a bottle of antimicrobial body wash to be used before your surgery. Information on this wash can be found at the end of this handbook.

You will be given a green medication bag to put all your medication in. On admission, please bring in all the medication that you take, including tablets, liquids, capsules, creams, eye drops, inhalers, patches, sprays, injections, and any other medication you may have bought from a chemist, supermarket or health food store. If you have any tablet organiser boxes (dosette), please also bring these in.

If for any reason you cannot attend this appointment it is important to call the clinic on 0121 812 3323 as soon as possible. This assessment helps us to ensure that you are fit enough to have the operation and it cannot go ahead without it.

Your health after your pre-operative assessment

If you become seriously unwell immediately prior to your operation date and are therefore not fit to have your surgery, it is vital that you ring and inform us on 0121 812 3323. You will then be sent a new date for your operation. It is also important that you contact us on this number if your medication changes prior to your admission.

Cough, cold, sore throat

If you develop cold symptoms please contact the nurse in the Pre-Operative Assessment clinic for advice on 0121 812 3323.

Skin

For certain types of surgery it is important that your skin is not broken or damaged in any way, e.g. leg ulcers, rashes, inflamed cuts, as these may be a source of infection. If you develop skin symptoms please contact the nurse in the Pre-Operative Assessment Clinic for advice on 0121 812 3323.

Teeth and gums

If you develop any problems with your teeth or gums prior to the operation please see your dentist and inform the nurse in the Pre-Operative Assessment Clinic on 0121 812 3323.

Urine and digestive system

If your urine becomes unusually smelly or cloudy or you experience pain or burning when passing urine, or if you develop a stomach upset or diarrhoea prior to coming in to hospital, you must inform the nurse in the Pre- Operative Assessment clinic on 0121 812 3323.

It is also vital that you inform us if you have been a patient in another hospital while you are waiting for your operation.

Exercising before surgery

It is important to be as fit as possible before your operation. This will make your recovery more rapid.

You should begin to do the exercises listed below and explained on pages 56 to 60 as soon as possible. It is not harmful for you to do more. Please consider this a minimum amount of exercise prior to your surgery.

You may find some of these exercises difficult at this stage due to pain in your knee, therefore stop any exercise that is too painful or that makes your pain worse.

Activity guidelines pre-op: exercises

1	Ankle pumps (see page 57)	20 reps. twice/day
2	Static quads (knee push-downs) (see page 57)	10 reps. twice/day
3	Inner range quads (see page 57)	10 reps. twice/day
4	Straight leg raise (see page 57)	10 reps. twice/day
5	Heel slides (see page 57)	10 reps. twice/day
6	Mid-range quads (see page 59)	10 reps. twice/day

If you find these exercises difficult, build up to the suggested number **GRADUALLY**.

Packing

Please bring one small bag with you containing only essential items. It should contain:

- This guidebook
- Loose fitting clothes to wear during the day
- Pyjamas or nightdress for night time only
- Washbag containing essential toiletries
- Slippers or comfortable shoes with backs
- Dressing aids (e.g. grabber / helping hand)
- Walking aids (e.g. walking stick or walking frame)
- Books/magazines
- Small amount of money to cover purchases from the hospital shop
- Any regular medication
- Contact details of the person who will be driving you home. Fill this in (page 4)

What to do on the morning of your admission to hospital

On the morning of your operation, have a bath, shower or full wash and wash and dry your hair. Do not apply deodorants, creams, products or make-up as you will be asked to remove it. Do not shave for two days prior to your surgery date any where near the operation site, because this increases the risk of infection.

Keeping Warm reduces the risk of surgical site infection. During cold weather make sure that you are warm on arrival for your surgery. Hospital staff will take measures to keep you warm during your surgery and hospital stay but please ask for extra blankets if you feel you are cooling down.

Please bring in your green medication bag containing all your medications. If you have a repeat prescription request slip normally attached to the green NHS prescription from your GP, please also bring this with you.

Eating

You will be given instructions at your Preop appointment on when to stop eating before your surgery. There is a space on page iv for you to fill these details in as a reminder.

Drinking

It's not safe to operate on people who are dehydrated. If you are very dehydrated your surgery may be cancelled. Aim to drink a small glass of plain water (200 ml) per hour, especially if thirsty, up until your admission time. We will usually encourage you to sip plain water up until the time of surgery. Drinking enough water will help your wound to heal and will reduce your risk of pressure ulcers and blood clots.

Clinical Research

The Royal Orthopaedic Hospital is a knowledge leader in orthopaedics and we are involved in lots of clinical research. From time to time you may be asked if you'd like to be involved in one of our research trials, if this is the case one of our research nurses will contact you with further details. Please do not hesitate to ask your consultant if you have any questions.

Visiting

Visiting hours for wards: 1pm-5pm and 6pm-8pm

Please see the hospital website for any changes to these times

We ask visitors to avoid meal times from 12pm - 1pm and 5pm - 6pm, however relatives, carers and visitors can play a vital role in supporting patients hydration and nutrition. If you would like to visit during a meal time, please discuss this with the ward manager or nurse in charge.

Advice for visitors

- If you plan on visiting a ward but you are unwell with cough, cold, flu, diarrhoea or vomiting symptoms, please stay at home. This limits the spread of potential infections to vulnerable people in the hospital.
- We also ask that visitors do not bring flowers with them. Flowers and stale vase water pose a significant infection risk, so regrettably we cannot allow them on to the ward.
- Young children are discouraged to visit. If you do visit with young children, please ensure they remain with you at all times.
- Please show respect and consideration towards patients and staff whilst you are visiting.
- A patient should have no more than two visitors per bed at any time.
- 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.

Please nominate one family member to liaise with the ward for patient information as this releases the nurses to care for your relative more effectively.

Five
In Hospital

Surgery - what to expect

Day of arrival

On the day of your surgery, please check in at the Admissions and Day Case Unit (ADCU) at the time stated on your admission letter.

A map of our hospital site is included on the inside of the back cover of this guide book.

What to expect - immediately before surgery

- In ADCU you will have your blood pressure, temperature, pulse and oxygen saturation levels recorded
- To help reduce the risk of blood clots you will be measured for compression stockings, which you should wear all the time until you go home or are otherwise instructed
- The anaesthetist and a member of the surgical team will visit you before surgery. The anaesthetist will explain the anaesthetic and methods of pain control. You will have the opportunity to ask any further questions. They will also discuss your consent again prior to surgery
- A member of the surgical team will draw an arrow on your leg to ensure the correct side is operated on. Do not wash off this arrow!
- You may be given pre-operative pain relief. This will help ensure that they are in your bloodstream before surgery
- You will be given an indication of the time you will be going to theatre. 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, one of our team will take you to the changing room. They will then go through a series of safety checks and then one of our theatre team will take over your care
- There will be a final series of checks before you are connected to monitoring equipment
- You will then be given an anaesthetic (as outlined on page 19)

The operation

After you have had your anaesthetic, you will be taken into the operating theatre. The anaesthetist will remain with you at all times, monitoring to ensure you are safe. If you are awake or under light sedation, you will be aware at times of some noises and vibrations. The anaesthetist will be there at all times to reassure you.

What to expect - immediately after surgery

The operation to replace your knee takes approximately 1 - 1.5 hours.

At the end of the surgery, the anaesthetist will wake you up and take you to the recovery area. You may find several items in place to help your recovery. An oxygen mask over your mouth and nose helps your breathing.

The drip in your arm should be removed once you are tolerating food and drinks. Your pain control will be established and your vital signs monitored. Once you are fully awake you will then return to the 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. Your skin will be checked and our team will encourage you to change your position regularly to prevent pressure sores.

Pain management

You may experience some significant discomfort following surgery. You will be given regular painkillers so you are able to do exercises and move your new knee. You should take the pain medication you have been prescribed whether you are in immediate pain or not.

Painkillers include paracetamol, ibuprofen-type drugs (non-steroidal anti- inflammatory drugs) and morphine-like drugs (opioids). Initially, you will need strong painkillers to help you to move. We will give you strong painkillers for one or two days after your surgery.

Please remember to let the doctors and nurses know if your pain is not controlled or if the pain stops you doing your exercises. We may need to alter or increase your painkillers.

Please don't be afraid to ask if you need support managing your pain.

We're here to help you.

Some patients experience side effects. These can include:

- Drowsiness (feeling sleepy)
- Nausea or sickness
- Indigestion (heartburn)
- Constipation

If you have any concerns about your pain or the painkillers that you are given, you may discuss this with your nurse or doctor.

Back on the ward

- The consultant or a member of their team will visit you to review your progress
- You will be encouraged to wash and dress
- A member of the Therapy team will see you and start your exercise regime (see page 56 for the exercises you must perform)
- You will be assessed and may be helped out of the bed to sit in a chair
- If possible the Physiotherapist will help you to start walking
- You will be encouraged to eat and drink
- The dressing on your wound will be checked
- Your pain levels will be assessed and pain relief will be given as appropriate. Please ask a member of staff for further pain relief if you need it
- It is possible the pain medication will make you constipated and so we will give you laxatives to help prevent this
- Throughout your stay please let the nurses know if you have not had your bowels open so they can address the problem

Steps towards discharge

- You will be encouraged to sit in your chair for meals and encouraged to dress in loose fitting, comfortable clothing during the day
- The physiotherapist will continue with your exercises and progress your mobility with a walking frame or elbow crutches
- You will be encouraged to walk to the bathroom for your wash
- Blood tests will be taken
- You will have an x-ray of your new joint
- If you have one, your catheter will be removed
- Please confirm your transport home with your family/friend

Preparing for home

- You will be taught how to go up and down stairs
- You will be encouraged to walk with sticks or elbow crutches independently
- You will be shown how to give the blood thinner injection
- Your wound will be checked
- When you have achieved all of your discharge goals you may move to the discharge lounge to enable our discharge nurses to explain all of your medication, your discharge paperwork and wait for your family/ friend to pick you up

Physiotherapy

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. You may be asked to take part in a group exercise class while on the ward. The Physiotherapy and Occupational Therapy staff will support you in performing the following exercises and activities:

1	Ankle pumps (see page 57)	20 reps
2	Static quads (knee push-downs) (see page 57)	10 reps
3	Inner range quads (see page 57)	10 reps
4	Straight leg raise (see page 57)	10 reps
5	Heel slide (see page 57)	10 reps
6	Mid range quads (see page 59)	10 reps
7	Seated flexion (see page 59)	10 reps
8	Extension stretch (see page 59)	10 mins
9	Heel raises (see page 58)	10 reps
10	Mini squats (see page 58)	10 reps
11	Hamstring curl (see page 58)	10 reps
12	Lunge (see page 58)	10 reps
13	Sit to Stand (see page 67)	10 reps

Activities:

Transfer out of bed (see page 53)

Transfer into bed (see page 53)

Sitting to standing (see page 55)

Stair safety (see page 47)

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Discharge planning

Discharge home from the ward

You may go to the discharge lounge to enable a safe and coordinated discharge. This will allow you time to ask any questions.

We will discuss wound care with you and advise you about when you should make an appointment with your GP Practice Nurse to have your clips or stitches removed. This is usually two weeks after surgery.

You will be given painkillers and will be shown how to use your injection at home (if prescribed). You will be given your regular medications to take home as well as a copy of your discharge letter. An outpatient appointment will be arranged before your discharge, or by letter shortly after discharge. This will be around six weeks following your surgery.

Your goals for going home

✓ Goals are to be met under the guidance of a therapist or nurse. Tick them off as you achive them.

- ☐ Get in and out of bed by yourself
- ☐ Pain is controlled with tablets
- ☐ Get to the bathroom with little or no help
- ☐ Wash and dress yourself with minimal help
- ☐ Walk safely with the use of walking aids
- ☐ Climb and descend stairs
- ☐ Review and finalise arrangements to return home

Outpatient physiotherapy will be arranged for you.

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.

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

Your mobility will be assessed by the Physiotherapy team on the ward, and again if you are seen by ROCS (Royal Orthopaedic Community Scheme), and at your out-patient physiotherapy appointment.

We advise you to continue to use both sticks (or crutches) initially on

discharge. When you feel safe and able to walk without a limp, you can progress to one stick indoors, but continue to use both sticks outdoors at this stage. You should do this as you may become very tired, walk with a limp due to muscle weakness, or come across obstacles such as kerbs, broken pavements, crowds etc.

When walking with one stick remember to hold your stick in the opposite hand to the side of your operation. If you are not allowed to take all your weight on your operated leg you will have been provided with appropriate walking aids by the physiotherapist and advised how to progress.

General wellbeing

- It is not unusual to feel tired and your sleep patterns may take a while to return to normal. Remember to have your rest on the bed every afternoon for about an hour to reduce swelling in your legs and feet
- Your appetite as well as your bowel habits may take a while to recover. Make sure you drink plenty of fluids and try to eat a healthy balanced diet
- Try not to feel frustrated at not being able to do all the things you want straight away. Increase your activity levels gradually. Start with short distances around the house and garden in the first 2 weeks then increase as you feel able
- Avoid tight clothing including belts and tight underwear. Loose garments are generally more comfortable and are a lot easier to put on

Eating

- Due to your reduced activity you may lose your appetite or suffer from indigestion. Small meals taken regularly can help. If you have lost your appetite then milky drinks provide a source of energy and goodness

Medication

- It is important that you continue to take all your medication as instructed
- You will have been given a supply of painkillers to take home. Continue to take these as directed until you no longer feel that you need them. If you require a further supply of painkillers, these will need to be requested from your GP.
- Remember your pain should be controlled enough to allow you to move about comfortably and to be able to practice the exercises to strengthen your knee
- You may have been given tablets or injections to administer to thin your blood. It is important that you continue with these as directed

Compression Stockings

- If you have been told to wear your 'Anti-Embolic' stockings at home, apart from 30 minutes each day, these must be worn day and night for six weeks following your operation. The stockings should be hand- washed and dried away from direct heat to preserve their beneficial effect

Going to the toilet

- For the first two weeks after surgery it is very common for bowel movements to become irregular. This can be due to the effect of analgesia combined with inactivity and a change of routine. This will resolve itself as you get back into your usual routine at home
- However you can help yourself by eating high fibre foods such as fruit, vegetables and wholemeal bread. If necessary try taking a mild laxative for a few days until you return to your normal routine. If you need any further advice regarding your diet please do not hesitate to ask

Washing

- You may use a shower when you feel safe to do so. Please do not have a bath for six weeks

Dressing

- When dressing, sit on the side of the bed or in a suitable chair. This will help your balance
- Collect all the clothes you intend to wear and put them on the bed next to you before you start.Always dress your operated leg first and undress it last

Driving

"How soon you can return to driving will depend on both the type of car you drive (manual or automatic) and how well you are recovering. Before you start driving again, you should no longer be taking strong painkillers that could affect your concentration or reaction time. You must be able to get in and out of the driver's seat safely, use the controls comfortably, and feel confident that you can perform an emergency stop. If you are unsure whether you are ready to drive, do not drive until you have sort guidance from your consultant or physiotherapist. It is ultimately the responsibility of the driver to ensure that they are in control of the vehicle at all times.

For comfort when getting in/out of the car, slide the seat back on its runners, recline the seat slightly to give yourself maximum legroom. It will be easier if the car is parked away from the kerb, so that you get into it on the level. See occupational therapy section page 58. 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. Please be aware that if you drive soon after your surgery and have an accident, insurers may consider you liable for damage."

Sleeping

- Changes in routine and restricted movement can cause difficulty in sleeping. Some people are awakened by the discomfort caused by sudden movement. If this happens, you may wish to take a painkiller to help you sleep

Continuing your activities at home

Safety and avoiding falls - all areas

- Pick up loose rugs, and tack down loose carpeting. Cover slippery surfaces with carpets that are firmly anchored to the floor or that have non-skid backs
- Be aware of all floor hazards such as pets, small objects or uneven surfaces
- Provide good lighting throughout
- Keep extension cords and telephone cords out of pathways. DO NOT run wires under rugs, this is a fire hazard
- DO NOT wear open-toe slippers or shoes without backs. They do not provide adequate support and can lead to slips and falls
- Sit in chairs with arms. It makes it easier to get up
- Rise slowly from either a sitting or lying position in order not to get light-headed
- DO NOT lift heavy objects for the first three months
- Stop and think. Use good judgement

Sitting

Choose a chair that is comfortable for you. Chair arms will help you get up and down safely in the first few weeks after surgery. To sit down and stand up safely, walk to your chair, slowly step back until you feel the back of your legs touching the seat. If you are using crutches, take your arms out of them and hold the handles in one hand before sitting.

To get up from the chair - reverse the process.

Stairs

Always use a handrail if there is one.

Going up - lead up with the un-operated leg, followed by the operated leg and the stick/ crutch.

Going down - lead down with the stick/crutch and the operated leg, followed by the un-operated leg.

A lot of people use this to remember – "Up with the good, down with the bad".

Keep this method up until you feel strong enough to walk upstairs normally. Many patients can manage this between weeks four and six (a few stairs at a time).

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.

Cooking

- 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

Gardening

- Avoid strenuous activity such as digging, pushing a wheelbarrow or mowing the lawn immediately after surgery
- 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

Return to sport, leisure and work

- Low impact sports such as golf, bowls, cycling, swimming and walking may normally be resumed after three months. Check with your consultant at your follow up appointment
- High impact sports, i.e. jogging, singles tennis, squash, jumping activities, football are not recommended therefore are participated in at your own risk
- Return to work usually takes place between 6 and 12 weeks post-operatively
- Heavy manual work may require longer. Discuss with your consultant the implications your knee replacement will have on your work, as it may change how you continue with your employment
- Your physiotherapist can advise you about exercises and choice of sport.

Sexual activity

Unless you have been advised otherwise you should do what feels right for you. Sexual intercourse may be resumed with care when you feel

comfortable. Our clinical staff are comfortable to give you advice. Please ask.

Equipment loan and return

Any equipment that is recommended as a result of the therapy assessment process is provided on a short term loan.

It is your responsibility to return or arrange the return of any loaned equipment at the expiry of the agreed loan. More information is available from your Occupational Therapist.

Consultant follow-up

Your consultant or a member their team will review your progress at your follow-up appointment approximately six 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. There is more information about asking questions on page 3.

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

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 with soap and water unless otherwise advised.

If you have stitches or clips in your wound you will be asked to arrange an appointment with the practice nurse at your GP surgery to remove them. We will give you a letter and some clip removers (if required) to give to the nurse.

If you develop any new redness around the wound or if the wound leaks after leaving hospital, it is important that you telephone the Wound Infection Helpline on 0121 812 3312 8am - 4pm. We would rather see you ourselves than you have to wait to see your GP.

Wound dressing

You will have a Mepilex dressing over your wound which should stay in place for up to 14 days. You will be provided with a dressing to take home should you need a dressing change.

Recognising & preventing potential complications

Infection

Signs	Prevention
• Increased swelling and/or redness at wound site • Change in colour, amount, odour of drainage • Increase in pain in knee • Fever greater than 38°C	• Take proper care of your wound as explained • If visiting the dentist, advise the practice that you have undergone joint replacement surgery. You may need to have antibiotics prior to your dental procedure • Severe infections such as pneumonia may adversely affect your joint replacement. Seek medical help early

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 • Pain, tenderness and heat in the calf muscle of either leg	• Foot or calf pumps • Early mobilisation / walking • Compression stockings • Blood thinners may be prescribed by your 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 pain • Difficult or rapid breathing • Sweating • Confusion	• Prevent blood clot in legs (as above) • Recognise a blood clot in the leg and contact the ROCS team or the ward you were discharged from promptly.

In the event of non-emergency please call our Help Line on 0121 812 3312.

Seven
Occupational Therapy

Importance of Occupational Therapy

The Occupational Therapy team are involved in planning your return home to make sure it is safe and timely. Occupational Therapy remain involved in your care through your admission. The therapy team will set goals for you to be independent with activities of daily living such as getting in and out of bed or washing and dressing and will discuss ongoing support with you if this is required.

Your occupational therapist may provide you with equipment to use at home following assessment. It is important to let the therapy team know if you have questions regarding managing to care for yourself at home after your operation

Transfer - 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

Transfer - out of bed

- Move your body closer to the edge 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 operate leg slightly in front of your good leg (if needed)

Transfer - into the car as a passenger

1

2

3

4

- 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.

Sitting to standing

Choose a chair that is comfortable for you but avoid low seats for the first six to eight weeks after surgery. Chair arms will help you get up and down safely in the first few weeks after surgery. To sit down and stand up safely, walk to your chair, slowly step back until you feel the back of your legs touching the seat. If you are using crutches, take your arms out of them and hold the handles in one hand.

Place your operated leg in front of you and place both hands onto the chair arms. Take your weight through your arms and un-operated leg, then ease yourself down onto the chair.

Once you are sitting, you can bend the knee of your operated leg, so your foot rests on the floor.

To get up from the chair – move your bottom closer to the edge of the seat and reverse the process.

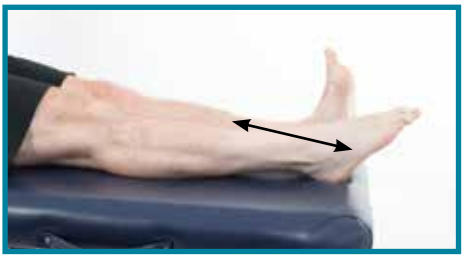
Importance of exercises

It is very important for your continued recovery and successful return to normal activities that you perform your physiotherapy exercises at home and for at least 12 weeks after surgery. It is helpful to continue them beyond 12 weeks, try to build them into your daily routine to maintain the strength in your legs.

Eight
Exercises

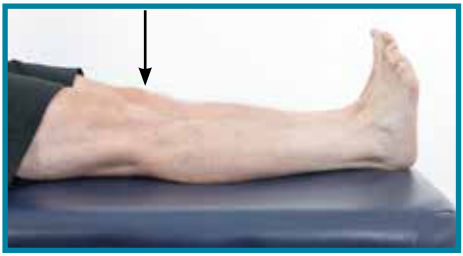
Ankle pumps

Move foot up and down briskly as far as you can go. Repeat 20 times.



Static quads - knee push- downs

Press the knee from the operated leg into the bed, tightening the muscle at the front of the thigh. Hold for 3-5 seconds. Do NOT hold your breath. Repeat 10 times.



Heel slides - (slide heels up and down)

Lying on your back. Bend and straighten your leg, keeping your heel on the bed. Repeat 10 times.

Inner range quads

Place a rolled up towel under your knee. Pull your foot and toes up, tightening your thigh muscle and straightening the knee, while keeping it on the towel. Hold for approx. 5 secs then slowly lower. Repeat 10 times.

Straight leg raise

Lying on your back. Pull the foot and ankle up, straighten the knee and lift the leg approx. 20cm off the bed. Hold for 5 secs then slowly lower. Repeat 10 times.

Heel raises

In standing, hold onto a sturdy support with both hands. Push up on your toes then slowly lower. Repeat 10 times.

Mini squat

In standing, hold onto a sturdy support with both hands. Slowly crouch keeping your back straight and heels on the floor. Repeat 10 times.

Hamstring curl

In standing, hold onto a sturdy support with both hands. Bend your knee, lifting your foot off the floor. Hold for approx. 5 secs then slowly lower. Repeat 10 times.

Lunge

In standing, hold onto a sturdy support. Step the operated leg forwards and bend your knee as much as you can. Repeat 10 times. If able, this exercise can be performed by placing the operated leg onto a step.

Extension stretch

Sitting on a chair, with the leg to be exercised supported as shown. Relax the leg, let it straighten in this position. Stay in this position for up to 10 mins.

Mid range quads

Sitting on an appropriate chair. Pull your foot and toes up, tighten your thigh muscle and straighten your knee, keeping your thigh on the chair. Hold for 5 secs then slowly lower. Repeat 10 times.

Seated Flexion

Sitting in a chair. Place a plastic bag or towel under your foot to help it slide. Slide the foot underneath the chair as far as you can, keeping the sole of your foot in contact with the floor. Remove the bag or towel before you stand. Repeat 10 times.

exercises continue →

Sit to stand

Sit on a sturdy chair with arms. With your feet shoulder width apart, slowly stand up using your arms to help. When upright, return slowly to the chair making sure your sit is slow and controlled. Repeat 10 times.

Exercise Progression: Later on in your recovery, try to use your arms less and less. You are aiming to be able to stand and sit with your arms folded across your chest. Always ensure your movement is slow and controlled.

Sit to stand progression:

Nine
This is your future

Your future - six weeks on

Total knee replacements are performed to give 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.

Now that six weeks or so have passed, normal activities can be resumed.

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 may be climbing stairs normally, one foot after the other.

Work

You should be able to return to work between six and twelve weeks after the operation; however, this will depend upon how much physical activity is involved in your job and how you usually travel to work.

Sports and Hobbies

During your recovery short frequent walks are good exercise. Low impact sports such as swimming, cycling, ballroom dancing and long walks can be resumed after 3 months. However, contact and high impact sports such as football, squash and jogging are not recommended and should be avoided. Gardening is fine but the heavy work should be left for three months.

Flying

Flying too soon after your operation should be avoided owing to the increased risk of deep vein thrombosis (blood clot). If you are planning to travel abroad you should discuss this with your surgeon.

It is difficult to predict whether your knee will set off alarms at security, although a lot of people ask about this. Some do, however it depends largely on how sensitive the machines are set when you walk through. The best advice is to explain the fact that you have a knee replacement before you walk through the machine.

Please be aware that if you go on holiday soon after your surgery and your wound is injured or you acquire an infection, your travel insurance may be affected.

Staff at the Royal Orthopaedic Hospital are here to help and answer any questions you may have, so please do not hesitate to ask at any time.

Ten
Frequently asked questions

Why have I still got swelling?
Healing tissues are more swollen than normal tissue. This swelling may last for several months.

Ankle swelling is due to the fact that each time we take a step the calf muscles contract and help pump blood back to the heart. If you are not putting full weight on the leg, the pump is not as effective and fluid builds up around the ankle. By the end of the day lots of people complain their ankle is more swollen.

What can I do about it?
When sitting the ankle pump exercises work the calf muscles and help pump the fluid away. Try to put equal weight through each leg and "push off" from your toes on each step. Elevate the leg for 20-30 minutes regularly throughout the day, and use an ice pack if you have been advised to do so by your physiotherapist.

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 a different warmth to that of an infection.

Should you develop any problems or concerns about your wound, please contact us for advice rather than contacting your GP on 0121 812 3312.

Signs of infection

- Increased swelling, redness at incision site.
- Change in colour, amount, odour of drainage.
- Increased pain in knee.
- Fever greater than 38°C.

If you have any concerns regarding your wound please call our **Wound Infection Helpline on 0121 812 3312 - Available between 8am - 4pm.**

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 three to four 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. You may sleep in any position that you find comfortable. If lying on your back, do not sleep with a pillow underneath your knee.

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.

Will I have any extra physiotherapy as an outpatient?

You will be referred to outpatient physiotherapy on discharge from the hospital. It is very important that you continue with the exercises you have been taught. Please see pages 56 to 60.

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 to get back.

When can I resume driving?

How soon you can return to driving will depend on both the type of car you drive (manual or automatic) and how well you are recovering. Before you start driving again, you should no longer be taking strong painkillers that could affect your concentration or reaction time. You must be able to get in and out of the driver's seat safely, use the controls comfortably, and feel confident that you can perform an emergency stop. If you are unsure whether you are ready to drive, do not drive until you have sort guidance from your consultant or physiotherapist. It is ultimately the responsibility of the driver to ensure that they are in control of the vehicle at all times.

When can I have sex?
Unless you have been advised otherwise, you should do what feels right for you. Sexual intercourse may be resumed with care when you feel comfortable. Our clinical staff are comfortable to give you advice, please ask.

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 security staff and explain the situation.

When can I fly?
You can complete a short haul flight after six weeks. It is recommended that you do not fly long haul for three months.

Will it get better?

Yes, do not despair! Do remember that most people who have knee replacement surgery have had a knee that has 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.

Eleven
Skin wash instructions

Preparing your skin before surgery

It is important to prepare your skin before surgery to ensure that it is thoroughly cleaned to reduce the amount of bacteria that is normally found on the skin. This will reduce the risk of you developing a deep infection.

When you come to the hospital for your pre- operative assessment, you will be given a bottle of Antimicrobial Whole Body Wash. This is an antiseptic cleanser. If you have any questions, please speak to the nurse who gives it to you.

Please do not use the wash if you have any of the following:

- A known allergy to chlorhexidine gluconate
- An underlying skin condition
- Broken skin or an open wound

The following steps outline the skin preparation process:

Step 1 2 days before surgery	Stop routine shaving of your body. This is to prevent any skin damage which could lead to infection. You can continue to shave your face and neck.
Step 2 1 day before surgery	On the evening, wash your body as described below. You may need somebody to help you to ensure all body areas are covered. Occasionally the solution may cause temporary skin irritation and/or redness. Do not allow this product to come into contact with your eyes, ears or mouth.

Using the wash...

1. Wet your face, wash with undiluted Body Wash. Pay particular attention around your nose, but avoid your eyes, ears and mouth.
2. Wet your body in a shower, or from a clean container filled with running water. Apply the Body Wash to your skin using a clean sponge. Pay particular attention to your armpits, groin areas and buttocks. Leave the solution on for one minute.
3. Rinse off using the shower.
4. Repeat the above process, but also include your hair, again leaving the solution on for 1 minute.
5. After the final rinse, dry thoroughly with a fresh, clean towel and dress in fresh, clean clothes.
6. Ensure your bed linen is fresh and clean.

Once you have started using the solution, please do not apply any other soaps, lotions, moisturisers or makeup. This is because the ingredients often found in personal care products can reduce the effectiveness of the solution.

Step Step 3 On day of surgery	On the morning of your surgery, please repeat the process again, washing your face, body and hair. When dried thoroughly, dress in fresh clean clothes again.

Allergic Reactions

There have been very rare reports of allergic reactions in people who have used products containing chlorhexidine. In some cases these have been severe. If you experience any signs of allergy (rash, breathing difficulties, palpitations, swelling of the lips, tongue or throat), or if you feel ill in any way, seek medical advice immediately. Let the medical team know that you have used this solution.

Twelve
Useful information

The Royal Orthopaedic Hospital contact telephone list

Hospital Switchboard	0121 685 4000
Appointments roh-tr.appointments@nhs.net	0121 812 3200
Pre-Operative Assessment Clinic (POAC)	0121 812 3323
Wound Infection Helpline Available between 8am - 4pm	0121 812 3312
Ward 1	0121 812 3349
Ward 2	0121 812 3359
Ward 3	0121 812 3364
Woodlands Suite (Ward 4)	0121 812 3367
Ward 12	0121 812 3353

ROCS (Royal Orthopaedic Community Scheme)	0121 812 3277
High Dependency Unit	0121 812 3284
Admissions and Day Case Unit (ADCU)	0121 812 3242
PALS (The Patient Advice and Liaison Service)	0121 812 3555
Imaging (X-Ray, MRI)	0121 812 3293
Physiotherapy	0121 812 3500
College Green	0121 812 3500
Occupational Therapy	0121 812 3500
Pharmacy	0121 812 3319

For further information please visit www.roh.nhs.uk

Useful contacts following your hospital discharge

General Practitioner (GP)

For all non emergency medical enquiries please contact your GP.

Red Cross

For the short term loan of equipment including wheelchairs, or short term assistance with domestic tasks such as hoovering, collecting prescriptions or light shopping contact 0844 4122750 or visit

www.redcross.org.uk for more information.

Shopping services

Your local supermarket or grocers are likely to have a delivery service that you may be able to access over the telephone or online. Contact your local shop for details.

Compliments, Concerns and Complaints

All of your Concerns and Complaints are taken seriously. Please do not hesitate to speak to a member of staff if you need support and they will be happy to help you.

If you would like to raise a concern or a complaint, please contact the Patient Advice and Liaison Service (PALS) and Complaints department on 0121 812 3555 or by email on ROH.tr-PALS@nhs.net and they will be able to support you and help to resolve your issue.

Alternatively you can raise a concern online via the website Royal Orthopaedic Hospital - Patient experience (roh.nhs.uk)

Use this section to record any questions or comments you may have.

ROYAL ORTHOPAEDIC CHARITY

The Royal Orthopaedic Charity (ROC) is proud to support the Royal Orthopaedic Hospital's JointCare programme - a wellness-focused approach to hip and knee replacement surgery that helps patients recover faster and return to the things they love.

How ROC Supports JointCare

ROC funds projects that go beyond NHS budgets, including:

- Specialist recliner chairs to aid safe, comfortable physio.
- A therapy room mural creating a brighter, more welcoming space.
- Coffee Catch-Ups bringing patients and staff together to share experiences and support recovery.

"Having a knee replacement has changed my life for the better. I'm walking and cycling pain free, and it's a joy to wake up each morning knowing I no longer have physical restrictions."

Quote from a patient

Get Involved

Every donation to ROC helps enhance care, fund vital equipment, and create recovery focused spaces.

www.rohcharity.org | roc@nhs.net | Social Media @fundROH

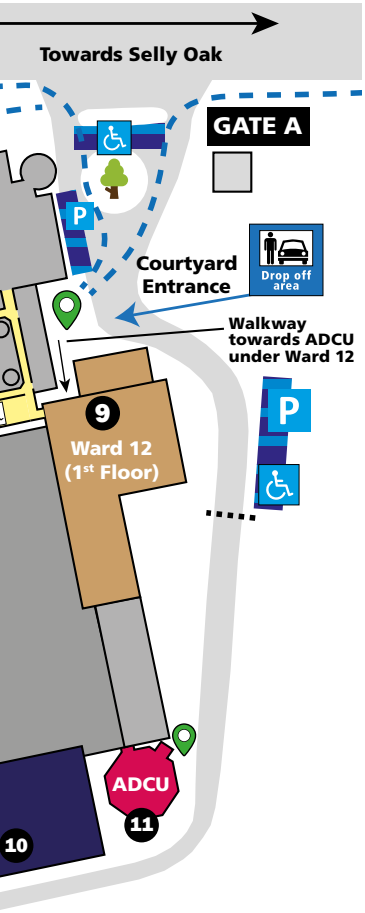
Notes

Notes

Map

KEY

- Entrances A/B/C
- Patient/Visitor Parking
- Drop Off Area
- Car parking for Patient/Visitor Parking
- Charging for electric vehicles
- Blue Badge Parking
- Motorbike Parking
- Bike Parking
- Visitor/ Patient Entry
- Link Corridors
- Outside Walking paths
- Stairs
- Lifts
- Multi-Faith room (Ground Floor)
- Cafe Royale
- Cashpoint
- RVS Coffee shop
- InPost Locker
- Amazon Locker
- Pharmacy



Visit our website for details access guides and useful information about visiting the hospital. www.roh.nhs.uk/contact

***Parking is available on the Bristol road Mon-Sat 7am - 4pm for 3 hours No return within 2 hours. The hospital is not responsible for cars parked on Bristol Road**

Departments	Area	Floor
Admissions and Day Case Unit (ADCU) (Accessed via the walkway under Ward 12)	12	G
Children and Young People's Outpatients (Accessed via stairs or lifts near the main entrance)	1	1
Discharge Lounge	5	G
High Dependence Unit (HDU)	10	G
Hydrotherapy (Accessed via Cafe Royale entrance)	6	G
M.R.I	3	G
Orthotics (Next to the courtyard entrance)	10	G
Outpatients	1	G,1
Pharmacy (Below Ward 2) (Accessed via Cafe Royale entrance)	7	G
Phlebotomy (Accessed via POAC Entrance)	2	G
Pre-Operative Assessment Clinic (POAC)	2	G
Topography (Accessed via POAC Entrance)	2	G
Ward 1 (Below Ward 2) (Accessed via Courtyard entrance)	7	G
Ward 2 (Accessed via Cafe Royale entrance)	7	1
Ward 3 (Above Ward 2) (Accessed via stairs or lifts near Cafe Royale)	7	2
Woodlands Suite (Accessed via Cafe Royale entrance)	8	1
Ward 12 (Accessed via Cafe Royale entrance)	9	1
X-ray	4	G

Map Version 1-2 Oct 24

JOINTCARE

Hip and Knee Centre of Excellence
at The Royal Orthopaedic Hospital

LESS PAIN
MORE INDEPENDENCE
LIFE-CHANGING CARE

NHS
The Royal
Orthopaedic Hospital
NHS Foundation Trust

Reviewed December 2025 V1-3