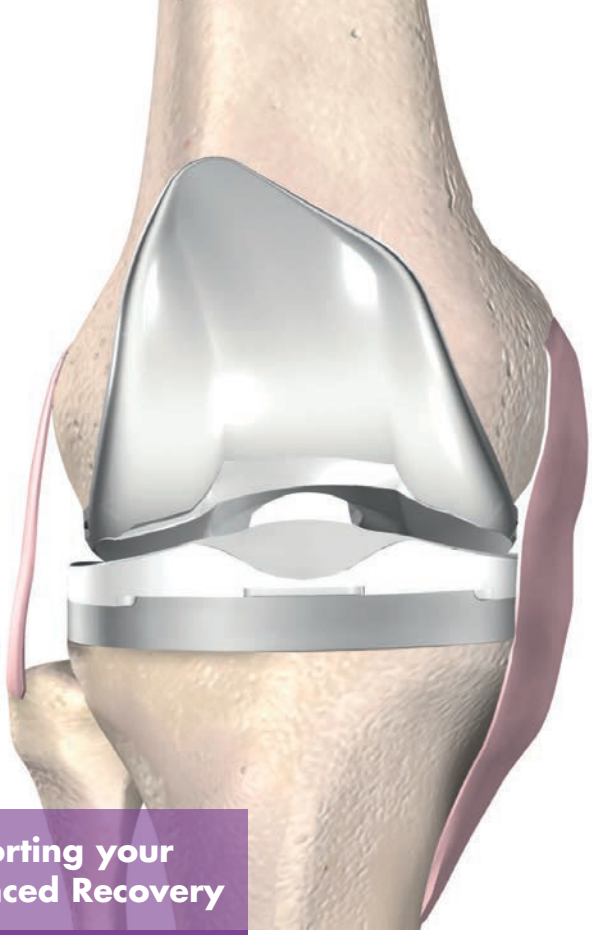


NHS Lothian

Supporting your Enhanced Recovery

Patient Guide for Knees

Before, during and after joint replacement

A patient education initiative provided by The Royal Infirmary of Edinburgh supported by:

stryker

JointPathways™

Your **pathway** to joint replacement success

You will find it useful to bring this guide book with you each time you visit The Royal Infirmary of Edinburgh

Your booking information

This guide book belongs to:

Your surgery date:

Please contact 0131-242-3437/3434 if there are any problems with these dates.

Your post-op follow-up is:

On:

At:

Log in to JointPathways® TV

Access informative and educational videos to help you prepare for your surgery and enhance your recovery.

http://jointpathwaystv.com

Username
RIEKnee

Password
JointPathwaysTV

Contents

Patient Guide for knees

One

Welcome to JointPathways™

What is JointPathways™?

JointPathways™ is a partnership programme between you and the Orthopaedic Department of the Royal Infirmary of Edinburgh.

Enhanced Recovery is about improving patient outcomes and speeding up a patient's recovery after surgery. It results in benefits to both patients and staff. The programme focuses on making sure that patients are active participants in their own recovery process. 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 and 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 for us jointly to 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.

Two

Introduction

A guide to the Royal Infirmary of Edinburgh and the services it provides

About the Royal Infirmary of Edinburgh

The Royal Infirmary of Edinburgh (RIE) is a major acute teaching hospital that provides a full range of acute medical and surgical services for patients across the Lothian region, and specialist services for people from across the south east of Scotland and beyond. For more information about the services it offers and how to get there please see link below:

http://www.nhslothian.scot.nhs.uk/GoingToHospital/Locations/RIE/Pages/default.aspx

The Orthopaedic Department is located within Musculoskeletal services and consists of an outpatient clinic and wards at RIE, outpatient clinic and ward at St Johns Hospital and outpatients clinics at Lauriston Building and at East Lothian Community Hospital. More information is available from:

http://www.nhslothian.scot.nhs.uk/Services/A-Z/Orthopaedics/Pages/default.aspx

The Elective Orthopaedic Unit has 52 inpatient beds, a day case unit, four operating theatres and recovery area, outpatient and pre-admission clinics, x-ray, physiotherapy, occupational therapy and social work services. The unit has a national and international reputation as a major centre for teaching and research, with new and advanced treatment options frequently being incorporated into routine care.

A team of Consultants cover a wide range of elective surgical procedures. The multi-disciplinary teams of doctors, nurses, physiotherapists, occupational therapists and other supporting agencies are committed to providing the highest standard of orthopaedic care available.

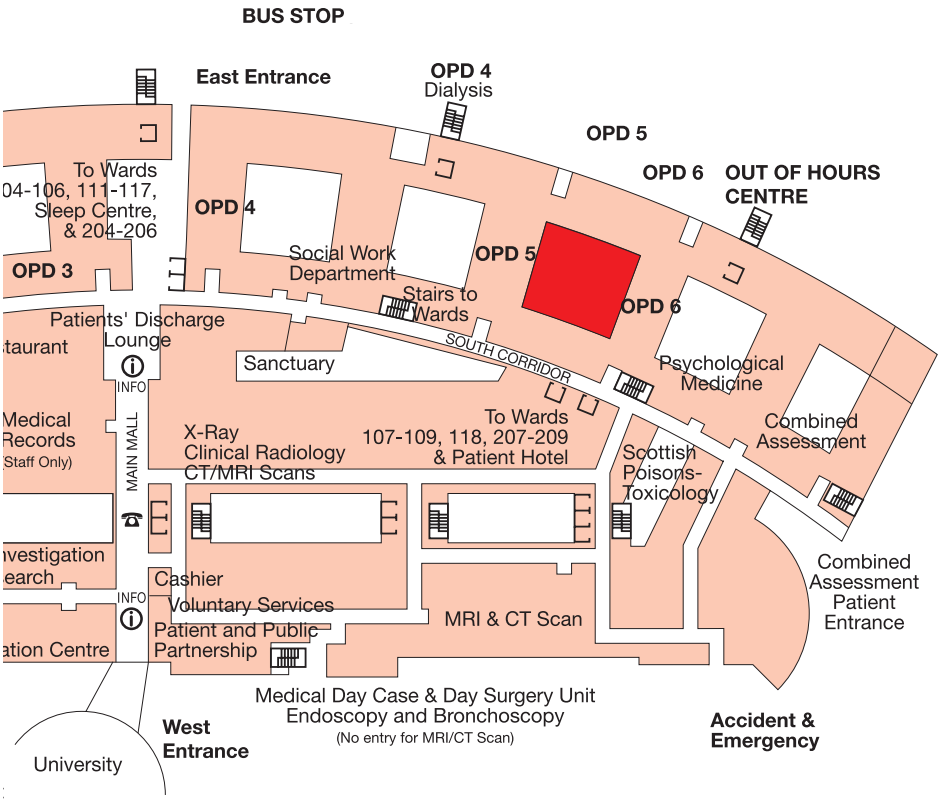
Where is the Orthopaedic Department?

The hospital is situated on the southern outskirts of Edinburgh (51 Little France Crescent, Edinburgh EH16 4SA) and is well served by public transport. For up-to-date information about routes and times, please contact Traveline Scotland 0870 608 2608.

Car parking for patients and visitors at the RIE is provided by Consort Healthcare. Charges are similar to other commercial car parks. The entrances are off Old Dalkeith Road, and are well signposted.

Disabled parking places are available but limited.

The orthopaedic department is situated at the far end of the south corridor past the Sanctuary and above OPD6. See map link:



Our staff

All staff who work at the Royal Infirmary of Edinburgh receive a thorough induction, undertake regular training and development and undergo regular periodic performance reviews.

The Orthopaedic Department is staffed by a multi professional team including medical staff, led by the Clinical Director, nurses, led by the Modern Matron, physiotherapists, occupational therapists and other supporting agencies.

Patient consent

Our commitment to you is to inform you of all aspects of the intended procedure you are to undergo. You will then be required to 'consent' in writing to your procedure.

Following your individual consultation with your surgeon, should you wish for further clarification of any aspects of which you have been informed, please ask the nurse who will either help or arrange for someone else to speak with you.

Data Protection Act

Your name is entered onto our computerised database, enabling us to keep effective clinical records. Under the General Data Protection Regulation (GDPR 2018) you have the right to view any records held by NHS Lothian. Please ask a nurse should you wish to access them.

If you or your representative wish 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 request a chaperone to be present during any procedure or examination. This may be a relative or friend, or another member of staff within the department.

You also have the right to choose a carer to be involved in your care.

Smoking

NHS Lothian has a no smoking policy on any of its premises, therefore the Royal Infirmary of Edinburgh is a smoke-free zone.

Smoking is actively discouraged, particularly prior to and immediately post-operatively, as this can add to complications of surgery. You may find it helpful to discuss giving up smoking with your doctor or practice nurse prior to your admission to hospital.

Dietary requirements

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

Mobile phones

Mobile phones may interfere with some medical equipment, therefore please check with nursing staff prior to use. We ask that you give consideration to the needs of others by keeping ringtones low and avoiding use during rest periods.

Bedside telephone and TV access is available on purchase of card from vending machine positioned in corridor outside the wards. Please note this is run by a private company and any problems should be directed to personnel who attend the clinical areas on a regular basis.

Risk management

The Royal Infirmary of Edinburgh has comprehensive Risk Assessment Policies in place, which ensure that patients safety is assured and that areas of improvement are identified and improvement plans implemented.

This includes targets and standards for the reduction of Healthcare Associated Infection. Achieved through accurate recording, implementation of agreed protocols and such initiatives as hand hygiene compliance.

Plus audits and questionnaires to identify areas that require improvement to enhance patient and user experience.

Manual handling policy

The Royal Infirmary of Edinburgh operates a Non Lifting Policy. Staff are available to assist your mobility needs and are trained in the use of equipment when it is required. Please ask if you need assistance to move.

Single-sex accommodation

Being in mixed-sex hospital accommodation can be difficult for some patients for a variety of personal and cultural reasons. We understand this and strive to treat all patients in privacy and with dignity. For this reason, we have worked to ensure that we provide single-sex accommodation for all patients in the ward areas. Privacy and dignity are at the heart of our policy and they are vital components of quality care.

Patient's Charter

This Charter outlines the level of care and service you would expect to receive from NHS Lothian, assisting you with information on your rights. Also included here are some expectations NHS Lothian, its staff and patients have of you.

Your rights:

- You will be treated courteously during all contact with hospital staff. Your dignity and privacy will also be respected at all times.
- You have the right to be asked if you wish staff in training, who may perform simple procedures, to be part of your care. You equally have the right to refuse attention from these personnel, if you so wish.
- You have the right to give informed consent, prior to any procedure being undertaken. You must be satisfied that a clear explanation of your condition, any treatment, investigation or procedures proposed, including risks and side effects of such actions, has been given. You should be confident that any concerns have been clarified before agreeing to any course of action.
- You have the right to withdraw your consent at any time prior to your operation.
- The nursing staff will always endeavour to be available. Please do not hesitate to inform your nurse should you want them to be present when your consultant visits you.
- You have the right under the Access to Medical Records Act 1990 and the Data Protection Act 1998 to view any records held by this organisation on you.
- We guarantee that any information held, in any format, will be kept confidential.
- We will respect your individuality and attempt to meet your needs, whether these are physical, psychological or spiritual, and we will address you by your preferred name.

- You should feel safe in your environment and to that end the hospital undertakes to provide adequate security for both patients and staff. In the unlikely event that you feel you are or have been bullied or harassed by other patients, relatives or staff you must report this to the nurse-in-charge who will handle your complaint personally.
- The hospital carries out a preventative maintenance programme to ensure all its equipment, plant and facilities are safe to use at all times.
- Your constructive criticisms, complaints, compliments and suggestions will be welcomed, at any time.
- You have the right to be referred to a health professional who you think is acceptable.
- You have the right to seek a second opinion on diagnosis and treatment options, via another consultant or health care professional staff, in agreement with your General Practitioner.
- You may decline to take part in any medical research.
- You have the right to an individual who will advocate on your behalf and who is independent of NHS Lothian. If you need help with this please speak to a member of staff.

Your Responsibility is to:

- Ask questions if you do not understand.
- Follow the advice on treatment regimes given by NHS Lothian's clinical staff and to tell them if you do not intend to follow them.
- Sign the appropriate documentation if you discharge yourself against medical advice.
- Be honest and open with staff, particularly with regard to you and, where relevant, your family's medical history and the medications you are taking. This information will be kept confidential.
- Treat with respect other patients, relatives and health care professionals equally regardless of differences (colour, gender, religion etc.).

- Seek assistance from the nurse-in-charge if you feel you are not being consulted with regards to treatment options.
- We expect people to behave responsibly.

Listening to what you say

Patient Reported Outcome Measures (PROMs)

In order to know if the surgery has improved your quality of life, and to improve our services, we ask all knee replacement patients to fill in short questionnaires before and after their surgery. You will receive the first one at your pre-assessment appointment. The 2 post-op questionnaires will be posted to you with a SAE at 6 and 12 months from your surgery date.

Concerns and complaints

All your comments and complaints are taken seriously, regardless of their nature. Please do not hesitate to point out your dissatisfaction with the service to any member of staff with whom you come into contact with, who will be pleased to assist you.

Alternatively you can ask a member of staff for a "Giving feedback or making a complaint about the NHS" leaflet.

Complaints can also be directed to:

NHS Lothian Complaints Team
2nd Floor
Waverley Gate
2 – 4 Waterloo Place
Edinburgh, EH1 3EG

Telephone 0131 536 3370 (Extension 63370)

Email address feedback@nhslothian.scot.nhs.uk.

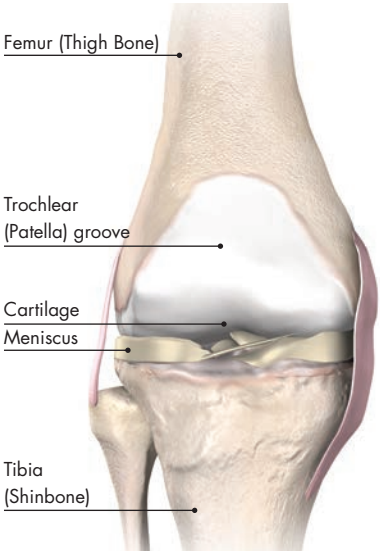
Three

Educational information

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 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 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.

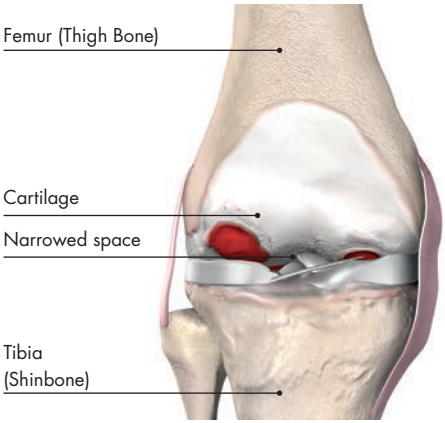
- The smooth cartilage becomes flaky and develops small cracks
- The bone underneath the cartilage becomes denser
- The lining of the joint becomes inflamed and may thicken up

As the arthritis progresses, there may be:

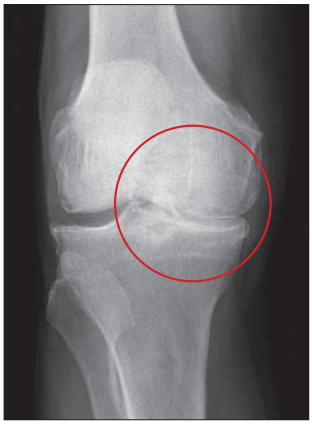
- Severe wear of the cartilage allowing the bones to rub and grate together

- Loss of the joint space
- Formation of bony lumps called osteophytes
- Swelling of the knee
- Knock – knee or bow leg

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



Narrowed joint space due to thinning cartilage



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.

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 two 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. **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 in the form of oral medication or injections which will be continued on discharged from hospital. This combined drug prophylaxis along with early mobilisation has been shown 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. You will be asked to complete a questionnaire about your urinary habits at your pre-operative assessment. This will help identify any patients that may experience urinary problems after the operation.

Transfusion

Blood transfusions following knee replacements are rarely every required. However, if your blood count is very low or if you are showing symptoms of anaemia (low blood count) then the team looking after you may recommend postponing your planned surgery until this is investigated and treated. Further investigations may include checking Iron, Folate and/or Vitamin B12 levels to ensure these are normal.

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.

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.

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.

Swelling

It is likely that your knee and lower leg will swell. This is a normal response to surgery. It may be many months before this settles. Occasionally, the knee will always remain slightly larger than a normal joint.

Some warmth around the knee is another common occurrence and is due to increased blood flow through the tissues during healing. Again, this may take months to settle.

You should continue to do the exercises detailed in this book even if your knee is swollen. Walking can help reduce the swelling, but standing unnecessarily should be avoided.

Using ice can be helpful in reducing swelling and pain, but is not appropriate for everyone. Please be guided by your Physiotherapist.

You should also aim to elevate the leg for 20 – 30 minutes regularly throughout the day.

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.

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.

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.

What you can do to help?

- Publicity about hospital-acquired infection has caused a great deal of concern across the country. We recommend that you and all visitors adhere to the following guidance
- Keeping your hands and body clean is important when you are in hospital. Take personal toiletries and specific skin care preparations if appropriate
- Taking a container of moist anti bacterial hand wipes with you will ensure you always have some available when you need to clean your hands, for example immediately before you eat a meal
- Ensure you always wash your hands after using the toilet 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
- Try to keep the top of your locker and bed table reasonably free from clutter. Too many things left on top make it more difficult for the cleaning staff to clean your locker and bed table properly
- If you visit the bathroom or toilet, and you are concerned that it does not look clean report this immediately to the nurse in charge of the ward. Request it be cleaned before you use it, and use an alternative in the meantime

- Please leave your wound dressing intact at all times do not touch your wound especially when you use the toilet
- Your bed area should be cleaned regularly. If you or your visitors see something that has been missed during cleaning report it to the nurse in charge and request it is cleaned
- Always wear something on your feet when walking around the hospital
- Ask your visitors to wash their hands on arrival to the Ward. If your visitors are feeling unwell, or have had diarrhoea or vomiting in the last 48 hours, they should stay away from the hospital to prevent the spread of infection
- Visitors should avoid sitting on the bed. Please use the chairs provided

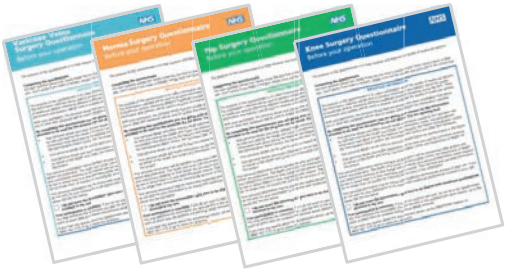
Patient Reported Outcome Measures (PROM's)

What are Patient Reported Outcome Measures?

Patient Reported Outcome Measures, sometimes called 'PROMs', are questionnaires that ask patients about their health before and after an operation. They help to measure the results or outcome of the operation from the patient's point of view.

All NHS patients, wherever they are treated, who are undergoing hip replacement, knee replacement, varicose veins or groin hernia surgery are being invited to fill in these PROMs questionnaires.

The purpose of the questionnaires is to collect information about the quality of healthcare services.
The information collected will be used to produce statistics about the quality of healthcare services offered by different healthcare providers (hospitals) across the NHS. These statistics will be used to measure and improve the quality of healthcare services.



Why are we doing this?

We want to improve the quality of healthcare services wherever we can and it is crucial to ask patients what they think.

Patient Reported Outcome Measures will help the NHS improve still further the quality of services for patients, by taking into account patients' views of quality, and will help hospitals reach the very best standards of care.

What happens next?

You will be asked to fill in a short **Before your operation** questionnaire when you go to hospital. You should read the information on the front cover and, if you wish to, fill in the questionnaire with your answers. Once you have completed the questionnaire, please hand it back to the person who gave it you.

A few months after your surgery you will be sent an **After your operation** questionnaire through the post to fill in and return. Once you have filled in the questionnaire with your answers please post it back to us in the pre-paid envelope. This is freepost and does not require a stamp.

Do I have to take part?

Your help would be greatly appreciated, but it is not compulsory. If you do not wish to take part, do not complete the questionnaire.

Do I have to give my consent to participate?

With your permission, the personal details that you provide and other information held about you in other NHS databases will be used to analyse and interpret the information collected. By completing the **Before your operation** questionnaire you are giving your consent for your data to be used in this way. There is a statement on the front of the questionnaire that you will be given which tells you exactly what you are giving your consent for and how the data will be used.

Your personal information will be handled securely and it will be anonymised after analysis and before any publication. Your personal information will not be released unless required by law or where there is a clear overriding public interest.

Can I change my mind?

Yes, up to the point where the data is analysed and personal details removed. Withdrawing your information will not affect your medical or legal rights in any way. You can do so by contacting the PROMs team by any of the contact methods shown overleaf.

About your information

What will happen to the information I give you?

Your personal details will be held confidentially in accordance with the Data Protection Act. They would only be used as set out on the front page of the **before your operation** questionnaire.

Your details will be used to send you an **after your operation** questionnaire by post.

Your personal information will be held for no longer than 24 months for checking the accuracy of the information and statistics produced. If we want to use your information for anything else, or hold the information for more than 24 months, we will write to you and ask your permission.

Why are other organisations used to help with the programme?

Contractors working on behalf of the Department of Health and the Health and Social Care Information Centre help to handle, process and analyse the information you give. Only organisations with a long track record of expertise in these areas have been chosen to support the collection and reporting of Patient Reported Outcome Measures.

Will my personal details be safe?

Published reports will not contain any personal details. The handling and storage of personal information will be undertaken to the very highest standards.

How to contact us:

You can contact us through any of the means below. If you have any questions or would like more information about Patient Reported Outcome Measures, the questionnaires, confidentiality or how your personal details will be held and used.

Telephone the Freephone helpline: **0800 917 1163**

Visit the PROMs website at: www.quality-health.co.uk/proms

Email: info@quality-health.co.uk

By Post:
Quality Health Limited
Unit 1, Holmewood Business Park
Chesterfield Road
Holmewood
Chesterfield
Derbyshire
S42 5US

THANK YOU FOR YOUR HELP

Four

Getting ready for an operation

Your general health and fitness before your operation

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 pages 67 to 72.

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

Stop smoking – your chest needs to be clear for your anaesthetic.

Avoid alcohol - this increases bleeding.

It is worth making an appointment with your GP for any repeat prescriptions you may need.

Arranging some support for when you return home

If you have not already done so, please plan for when you go home and start to organise and make the necessary arrangements now. These are some things that you need to consider:

Do you live alone? If so, please talk to family and friends to see if they can provide support for your discharge home following your operation.

You need to consider how you will manage responsibilities you have (including pets), shopping, laundry and meals.

It will be useful to stock your freezer/cupboards and change your bed linen/clean the house prior to coming into hospital. Support for these tasks, if required, will need to be purchased through private care agencies.

Please write the name of the person who can support you with these things here:

Preparing your home for your return

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 before you come into hospital:

- 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 and tack down loose carpeting
- Make sure there are no obstacles to prevent you walking safely from room to room

It may be useful to purchase the items detailed below to use when dressing yourself following your knee replacement as you may have difficulty bending down after surgery. It will be easier to dress your operated leg first and undress it last.

Pick up reacher

This will help you put on your underwear and trousers and can be used to pick up items from the floor.

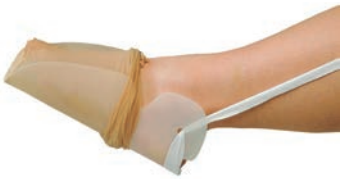
Long handled shoehorn

This will help you put on your shoes without the need to bend down.

Sock aid/tights aid

This will help put on your socks or tights.

If you usually wear socks or pop socks please purchase the sock aid, there is a separate aid for tights.



You can purchase these items online from Amazon, instore at Argos or your local pharmacy may stock them.

Pre-operative assessment clinic

This is your opportunity to discuss any medical, nursing or therapy requirements or concerns prior to your admission to hospital. The Pre-Operative Assessment Clinic (or PAC) is run by a team of specialist nurses.

At the PAC your medical fitness for an anaesthetic will be assessed and any tests required organised. This is a detailed assessment of your health and fitness prior to your operation and therefore it can take several hours to complete. It is therefore vitally important that you attend. **Your planned surgery cannot go ahead without attending this appointment**.

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

- A detailed nursing assessment.
- An x-ray (if required)
- An ECG (tracing of your heart).
- Blood tests.
- MRSA screening.
- Urine sample

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

You may see your consultant, or a member of their surgical team, who will discuss the proposed operation and answer any questions you may have. You will then be asked to sign a consent form.

What to bring

Please bring with you:

- An up to date prescription list and medication
- A list of any alternative / herbal medications you are on

The nurse will advise you 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.

It is extremely important that you inform a member of staff that you are leaving the PAC, even for a short time, so that we know where you are.

When you have finished all your assessments please do not leave the clinic area without speaking to a nurse or the receptionist, so we can confirm that everything required has been completed.

If for any reason you cannot attend the pre admission clinic appointment appointment it is important to call the Waiting List Office on 0131 242 3434/3437 as soon as possible. This assessment helps us to ensure that you are fit enough to have the operation, which 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 the Waiting List on 0131 242 3437 or 0131 242 3434. You will then be sent a new date for your operation.

Cough, cold, sore throat

Before coming into hospital it is important to avoid catching a cold, cough or sore throat. If you develop cold symptoms please contact the nurse in the pre-assessment clinic for advice on 0131 242 3460

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-assessment clinic for advice on 0131 242 3460.

Teeth and gums

If you develop any problems with your teeth or gums, such as a tooth abscess, prior to the operation please see your dentist and inform the nurse in the pre-assessment clinic on 0131 242 3460.

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-assessment clinic (telephone 0131 242 3460).

Please do not come to the hospital if you have a stomach upset or diarrhoea without telephoning the assessment nurse

If your symptoms improve whilst you are on the waiting list please phone your assessment nurse for advice on 0131 242 3460. It may be advisable for you to attend an out-patients clinic to discuss options further with a surgeon or we may recommend that you visit your GP instead.

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

What to pack and bring into hospital

Pack a small bag of clothes and other items (see check list below). These will be placed in a sealed box then taken up to your allocated ward whilst you are in surgery. The ward staff will bring them to your bed space when you arrive on the ward. Label your belongings, particularly your dressing and walking aids. Leave your valuables at home as there is no facility to secure belongings on the ward.

- Knee Replacement Guidebook
- Nightwear: lightweight dressing gown, short pyjamas (men) and/or short night dresses (women)
- Washbag containing toiletries including, soap, face cloths & toothbrush
- Slippers or comfortable shoes with backs*
- Books/magazines
- Small amount of money to cover purchases from the hospital shop
- Bring in a supply of your regular medication in the green bag you were given at PAC
- Contact details of the person who will be driving you home.
- If possible, please pack a second case and ask a visitor to bring in when they visit after your operation
- Loose fitting day clothes to wear during your stay, underwear, trainers/ sturdy shoes*
- Dressing aids if purchased (helping hand, etc.)
- Extra underwear & nightwear

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

What to do on the morning of your admission to hospital

On the morning of your operation, have a bath, shower or full wash - if you wash your hair please dry it before leaving home. Do not apply deodorants, hair products, body sprays (including perfumes) or make-up, as you will be asked to remove it. Remove all nail polish (including shellac nails) before admission. Do not shave your operation site.

Come into the Orthopaedic Admissions Unit which is where you attended PAC (next to Ward 109):

On DAY: _____ DATE: _____

TIME: _____

You are being brought to hospital by: _____

Try to have a light snack before you fast

Please fast from: _____

You may have two cups of clear fluids until: _____

Please take your normal morning medications unless you have been told at PAC not to do so; see below.:

Do not take these medicines on the morning of your surgery:

_____

_____

Please do not bring anything of value such as jewellery, credit cards or cash as we do not have the facilities for safeguarding your property whilst in hospital. NHS Lothian cannot be held responsible for valuables that are not handed in for safe keeping.

Exercising before surgery

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

The following exercises should be commenced from when you are listed for surgery until you have your surgery and some of these may be continued as part of your post-operative exercise programme.

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

Activity guidelines pre-op: exercises

2. Static quads (knee push-downs) (see page 68)
3. Inner range quads (see page 68)
4. Heel Slides (See page 68)
5. Knee extension (long arc) (see page 69)
6. Step-ups (see page 69)
7. Sit to stand (See page 70)

Contact between patients and their relatives and friends

Visiting times are between 2pm - 8pm daily.

- If possible please avoid visiting during protected mealtimes between 5pm and 6pm
- If you have a problem visiting within these times, please ask one of the nurses who will try and make alternative arrangements
- Please show respect and consideration towards patients and staff whilst you are visiting
- Patients may become tired and need to rest. Please remember that other patients may wish to rest or sleep during visiting hours
- A patient should have no more than two visitors per bed at any one 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.

A nominated relative can telephone PAC on 0131 242 3460 between 12pm & 2pm to find out which ward you are going to after surgery. If this information is not available when they call your relative will be advised when to call again.

The ward is fitted with 'Patient Line' which allows access to the phone, TV and internet. This does incur a charge and top up cards are available to buy from dispensing units in the corridor outside the ward.

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Hospital stay

What to expect

Day of arrival

- Arrive at Day of Surgery Unit (DOSA) reception desk at the time stated on your letter. This is the same reception desk as at PAC
- You will be directed to the waiting room. Some people will not go for surgery until late morning or early afternoon, but will be given an indication of approximate time by staff.
- The nurse, anaesthetist and surgeon will see you before you go for your operation.

What to expect - immediately before surgery

The surgeon, anaesthetist & nurse will discuss various aspects of your care.

The surgeon:

- a member of the surgical team will discuss your consent again prior to surgery
- you will have the opportunity to ask any further questions
- they will draw an arrow on your leg to ensure the correct side is operated on; do not wash this arrow off

The anaesthetist:

- will discuss your anaesthetic with you
- they will explain the anaesthetic and methods of pain control following surgery
- You will have the opportunity to ask any further questions

The nurse will:

- go through your theatre checklist and place name bands on your wrists
- they will take/record your blood pressure, temperature, pulse and oxygen saturation levels
- when it is your turn to go to theatre they will collect you from the waiting room and place you in a single sex changing room
- you will be given a theatre gown & paper pants to change into
- to help reduce the risk of blood clots you will be measured for compression stockings, which should be worn at all times until you go home or are otherwise instructed
- the nurse will list your belongings & place them in a sealed box
- when it is time for your operation, one of the nurses will go with you to the theatre
- they will remain with you until the theatre nurse goes over the checklist again and takes over your care

- Sometimes due to unforeseen circumstances your surgery may be cancelled either the night before or after your arrival at the OAU. The Waiting List office will arrange a new date for you.

The operation

When you have been anaesthetised, you will be taken to the operating theatre. During your surgery, the anaesthetist will remain with you at all times, monitoring to ensure you are safe.

What to expect - immediately after surgery

The operation to replace your knee takes about 60-90 minutes.

At the end of the surgery, the anaesthetist will take you to the recovery area until the allocated ward is ready to receive you. You will remain there under the care of a specially trained recovery nurse. You may find several items in place to help your recovery. An oxygen mask over your mouth and nose helps your breathing.

A drip will be in your arm, this replaces any lost fluid which may have occurred during your operation and is used to infuse blood or drugs if required. The drip is usually removed once you are tolerating food and fluids. Your pain control will be established and your vital signs monitored. Your legs may initially feel numb until the anaesthetic wears off, which can mean you may not always know when your bladder is full.

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

Observations including blood pressure, pulse, respiration rate, oxygen levels and temperature will be recorded. The nursing staff will encourage you to change your position regularly to prevent pressure sores. If required you may get out of bed to use the toilet.

Only one or two close family members or friends should visit you at this time.

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.

Painkillers include paracetamol, codeine, 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 score is 4 (moderate) or above or if the pain stops you doing your exercises. We may need to alter or increase your painkillers.

Pain Score

How would you describe your pain?
0 = no pain
1 - 3 =mild pain
4 - 5 = moderate pain
6 - 10 = severe pain

Some patients experience side effects. These can include:

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

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

You can also be referred to the Pain Specialist nurses if your pain is difficult to manage.

Day one to discharge

Day one - after surgery

- You will be assessed and helped out of bed into a chair
- Ensure you drink plenty fluids
- The cannula into your vein will be removed as soon as possible.
- You will be assisted to wash and get dressed
- The dressing on your wound will be checked regularly
- Nursing staff will continue to monitor blood pressure, temp, etc..
- You will be seen by a member of the medical team.
- Your pain levels will be assessed and pain relief will be given as appropriate
- Many of these medications make you constipated and you will be given laxatives to counteract this. These are not optional so please make sure you take these not only during your inpatient stay but when you get home
- Throughout your stay please let the nurses know if you have not opened your bowels so that they can address this in a timeously manner. As this may delay your discharge home
- The physiotherapist will see you and start your exercise regime. (See page 66 for the exercises you must perform)
- Bloods tests and a check X-ray will be taken
- If you have one, your urinary catheter will be removed

Day two and onward

The following days take on a similar pattern with you becoming increasingly independent with mobility and personal care tasks.

- You will be able to walk to the toilet, first with assistance and then on your own

- You will be offered either an assisted wash or shower.
- You will continue with your exercises and you will progress from walking with a zimmer frame to 2 sticks.
- You will practice going up and down stairs before discharge.
- Arrangements for discharge will continue to be put in place.
- You may see an Occupational Therapist if you are having difficulty with your day to day tasks.
- If prescribed, you or your nominee will be taught to give your blood thinning injection prior to discharge.

Before leaving hospital

- Your discharge plans will be discussed and confirmed with you and the whole team.
- Your wound will be assessed by a nurse prior to discharge and dressings supplied, if required.
- You will be given instructions how to care for the wound and when/where to have any clips or sutures removed
- The physio will check that you are familiar and comfortable with your exercise regime and safe going up and down stairs.

You will be given a seven day supply of painkillers and your usual medication with any changes explained

- A follow-up appointment will be given to you, or posted out at a later date.
- You will receive a copy of your discharge letter and a copy will also be posted to your GP.
- You should be familiar with how to change your anti-embolic stockings and be given an extra pair to allow them to be washed and dried. If you have no-one to help with removing and replacing the stockings it is generally better to avoid wearing them after discharge home.

- You will be advised to contact the ward number directly or the arthroplasty advice line if you have any concerns once you are at home.
- Whilst you wait for your relative/friend to collect you, you may be transferred to the discharge lounge.

Post-op exercises

1. Ankle pumps (see page 67)
2. Static quads (knee push-downs) (see page 68)
3. Inner range quads (see page 68)
4. Heel Slides (See page 68)
5. Knee extension (long arc) (see page 69)
6. Step-ups (see page 69)
7. Sit to stand (See page 70)

Occupational therapy

It may be helpful to transfer in and out of bed using the techniques below.

Transfer - out of bed

When getting out of bed:

- Move yourself to the side of the bed
- Slide your legs off the edge of the bed whilst using your arms behind you to move your body around and keeping your legs straight
- Once sitting, place your operate leg slightly in front of your good leg (if needed)
- Place your hands flat on the bed and push up to stand
- Once standing, make sure you have your walking aid and feel steady before moving away from the bed

Transfer - into bed

When getting into bed:

- Step backwards to the middle of the bed until you feel it touching the back of both your legs
- Take one small step forwards with your operated leg (if needed)
- Place your walking aid/s to one side
- Reach back with your arms and sit onto the edge of the bed
- Place your walking aid/s 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

Stair assessment

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

Going up:

Good leg (non-operated leg)

Operated leg

Stick

Going down:

Stick

Operated leg

Good leg

Transfer - into the car as a passenger

- 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
- Place a plastic bag onto the car seat to help you get in and out
- 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 or the dashboard, with your right hand
- Put your operated leg out in front of you, keeping your knee straight, and gently lower yourself on to the edge of the seat with your feet on the ground
- Shuffle backwards towards the driver's side as far as possible
- Either move one leg into the car at a time or move both legs together, depending on which is more comfortable for you
- 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 swing your legs out of the car & move your feet out onto the ground
- Ask the driver to park slightly away from the curb
- It is helpful if someone else can take charge of your walking aids and hand them to you at the right moment
- Consider space in car for any equipment supplied

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Discharge planning

Discharge home from the ward

The nurse will discuss your wound care before you leave the ward. They will tell you whether you have clips or stitches to be removed, which are normally removed 10-12 days after surgery. You will be advised when to make an appointment with the Practice Nurse at your surgery to have the clips or stitches removed. If needed, you will be given wound dressings and a clip remover. If you are unable to get to the GP surgery a District Nurse will be arranged instead.

The discharge will be confirmed with your next of kin.

You will be given painkillers, blood thinning drugs (if prescribed) and your usual medications to go home with and a copy of the doctors letter, which will be sent to them.

Your outpatient appointment will normally be arranged before your discharge. This will be six to eight weeks following your surgery.

If you require outpatient physio this will be arranged by the hospital.

We aim to discharge you before lunchtime. You may be taken to the Discharge Lounge to await your transport or tablets. Light refreshments are available there.

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. A black cab is not recommended.

You need to identify and name the person who is going to be taking you home for when you next attend the hospital.

We expect you to go home on: _____

Who is going to take you home?: _____

Their telephone number is: _____

(It is important that the person you identify to pick you up from hospital can collect you at short notice)

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

Adviceline

This information is designed to help you through the transition from hospital to home but always follow any specific advice given to you by your hospital team.

Most of the information you need will be in this booklet but if you are unsure about anything you can contact the Arthroplasty Adviceline on 0131 536 3724. The Arthroplasty ('arthroplasty' means 'artificial joint') Practitioners are not able to take calls directly but you can leave a message on voicemail. Messages are checked regularly during office hours Monday to Friday. The Adviceline should not be used in an emergency. If you are leaving a message please leave your name, date of birth and contact telephone number.

Remember, an artificial knee is not the same as a normal joint and must be treated carefully. In the first few months, the tissues around the joint will be recovering from the surgery. So, gradually build up the amount of walking and other activities that you do.

It is very important that you have organised the necessary support for when you return home. After major surgery it is a good idea to ask friends or family members to help with simple chores and shopping.

General wellbeing

- Everyone recovers differently, try not to compare yourself to other people. It is also common for recovery to be different from any previous joint replacements
- 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 at least 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 the way. 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 lack of 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 usual 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. 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

TED Stockings

- If you have been told to wear your TEDS or 'Anti-Embolic' stockings at home, these must be worn day and night for six weeks following your operation

  TEDS should be hand-washed and dried away from direct heat to preserve their beneficial effect

- Remember to check skin pressure points for irritation or blisters

Going to the Toilet

- For the first few 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. 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.

Continuing your activities at home

Safety and avoiding falls - all areas

- Pick up loose rugs, and tack down loose carpeting prior to coming into hospital
- Place frequently used cooking supplies and utensils where they can be reached without too much bending or stretching
- Be aware of all floor hazards such as pets, small objects or uneven surfaces
- Provide good lighting throughout
- Keep extension cords and telephone cords from trailing on the ground. 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 if possible. 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

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

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

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

Walking at home

You should aim to gradually increase your walking distance and overall activity level.

You should use two sticks when walking outside initially. You should do this as you may become unduly tired, walk with a limp due to muscle weakness, walk further than anticipated and even come across unforeseen obstacles such as broken pavements, kerbs, crowds etc.

Some people are able to dispense with their second stick outside within the first few weeks of their operation.

When walking inside you may feel that you are able to use only one stick, especially if you are carrying something. You may do this when you are safe and confident. Gradually most people, but not all, are able to walk at least indoors without a stick. This varies from person to person.

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.

Stairs

Always use a handrail if there is one.

Continue with going up and down stairs as you have been taught (up with the unoperated leg, down with the operated leg) 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 housework 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. Gradually reintroduce heavier housework.

- Place frequently used cooking supplies and utensils where they can be reached easily.

Driving

Make sure you can reach and use the pedals without discomfort. Have a trial run without the engine on. Try out all controls and go through the emergency stop procedure. Start with short journeys and when you do a long trip stop regularly to get out and stand up and stretch. You may like to check and confirm your insurance cover.

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 at your follow up appointment
- High impact sports, i.e. jogging, singles tennis, squash, jumping activities, football are not generally recommended therefore are undertaken at your own risk, as are high risk sports
- Return to work is usually possible between 8 to 12 weeks post-operatively, ideally on a phased basis at first
- Heavy manual work may require longer. Your consultant will guide you on this

Your physiotherapist can advise you about exercises and choice of sport.

Swimming

- Once your wound has completely healed you may exercise in the swimming pool eg walking in the shallow end, provided you can easily get in and out of the water

Follow up

Usually one of the Arthroplasty Practitioners will review your progress at your follow-up appointment approximately six to eight weeks after your operation. The Arthroplasty Practitioners are nurses or physiotherapists who specialise in the aftercare of patients who have had joint replacement surgery. 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.

If you are progressing as we would expect, you will be discharged from follow up. Some patients may require regular follow up and are kept under review. In the longer term these reviews will take the form of attending for an x-ray and being asked to complete a questionnaire. You and your GP would then be contacted with the outcome of this review.

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

At home exercises

Walking is the best form of exercise but please continue to perform your physiotherapy exercises as detailed on page 66. No exercise should be forced or painful.

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 your wound is dry with no leakage it does not require a dressing.

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 or if you are unable to get to your surgery we will arrange for a District Nurse to come to your home. We will give you some clip removers (if required) to give to the nurse.

Redressing your wound using an adhesive dressing

Where possible, please ask a friend/relative to assist.

Recognising & preventing potential complications

1. Infection

Signs

- Increased swelling and/or redness at wound site
- Change in colour, amount, odour drainage
- Increase in pain in knee
- Fever higher than 38°C

Prevention

- Take proper care of your wound as explained
- If you are concerned you may have an infection contact the Arthroplasty Adviceline or attend the Emergency Department. We would generally rather you did not have antibiotics for your wound/knee unless there is a very strong suspicion of an infection. If antibiotics are prescribed it is very important that a wound swab is taken before commencing them in order that any bacteria may be identified. We would prefer to be contacted directly if there is any suspicion of an infection.
- If visiting the dentist, advise the practice that you have undergone joint replacement surgery

2. 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

- 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

Prevention

- Foot or calf pumps
- Early mobilisation / walking
- Compression stockings
- Blood thinners may be prescribed by your doctor
- Maintain good fluid intake

3. 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

- Sudden chest pain
- Difficult or rapid breathing
- Sweating
- Confusion

Prevention

- Prevent blood clot in legs (as above)
- Recognise a blood clot in the leg and contact your GP promptly

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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. Have a rest on the bed after lunch for one hour.

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.

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
- You may feel generally unwell

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. Also many people are still sleeping on their backs, which is not their normal sleeping position so sleep patterns are disturbed. You may sleep on your side when you feel comfortable. Most people find it helpful to have a pillow between their legs.

I have a numb patch - is this okay?

Numbness around the incision is due to small superficial nerves being disrupted during the incision. The patch usually gets smaller but there may be a permanent small area of numbness.

My new knee clicks occasionally – is this normal?

This can be normal and it is usually a sign that those swollen tissues are moving over each other differently than before. If this persists or you are concerned then please contact the Arthroplasty Helpline: 0131 536 3724.

When should I stop using a stick?

Stop using the stick when you can walk as well without it as with it. It is better to use a stick if you still have a limp so that you do not get into bad habits that are hard to lose. Limping puts extra strain on your other joints especially your back and other leg. Use the stick in the opposite hand to your operated knee.

Many people take a stick out with them for three to four months after the operation as they find they limp more when they get tired.

How far should I walk?

This varies on your fitness and what your home situation is. You should feel tired not exhausted when you get home, so gradually build up distance, remembering you have to get back. You should aim to gradually increase your walking distance and overall activity level

When is it fine to fly?

Please contact the Adviceline or ask a member of staff before discharge if you are planning to fly in the near future. Long haul flights (more than four hours) should not be undertaken for 12 weeks after knee replacement.

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.

BAA's advice (May '05) is that there should be no problem if your joint is made of titanium.

If you would like a Patient ID card, ask the Arthroplasty Practitioner at your follow-up appointment.

Will it get better?

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

Where do I return my equipment?

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 arrange return of any loaned equipment.

Please contact 0131 529 6300 if you live in Edinburgh, East Lothian or Midlothian.

Or 01506 523335 if you live in West Lothian.

Eight

This is your future

Weeks 7 - 12 onwards

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 12 weeks or so have passed, normal activities can be resumed gradually.

Walking

You may discard sticks as and when you feel comfortable and when your walking is as good without the stick as with it. You may continue to need some support when walking on rough ground or over longer distances. Some people need to use a stick for longer particularly if they are limping without it.

Stairs
By now most people would be climbing stairs normally, one foot after the other.

Remember, everyone recovers at their own pace and may not be able to do everything in the timescales given. It can take up to a year for recovery after knee replacement.

Pre-op

(before your operation) – Exercises 1-7

Post-op

(after your operation) in hospital and once you go home – Exercises 1-7
More advanced exercises 8 – 12. These exercises can be started once you are managing exercise 1-7 easily.

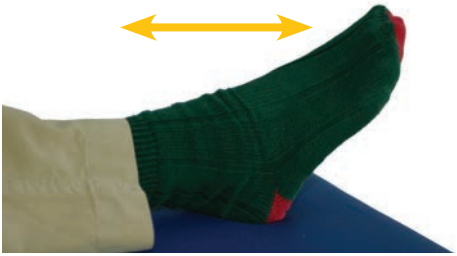
The timeframe for progressing will be different for everyone. No exercise should ever be forced or painful. Build up repetitions gradually. The Practitioners can also advise on returning to specific sporting activities.

Nine

Exercises

1. Ankle pumps

Move ankle up and down as far as you can go. Repeat 20 times, 3-4 times per day.



2. Static quads – knee push-downs

Press knee into bed, tightening the muscle on front of the thigh.

Do NOT hold your breath.

Hold for five seconds.

Repeat 10-15 times.

3. Inner range quads

Lie on a couch or bed with a roll under the affected leg. Lift foot, straightening the knee and hold for five seconds. Do NOT raise your thigh off the roll.

Hold for five seconds.

Repeat 10-15 times.

4. Heel Slides (slide heel up and down)

Lie on couch or bed. Slide heel towards your bottom. Make sure you are reclined for this exercise. Repeat 10 times. It is not the aim to bring your knee up to your chest.

5. Knee extension (long arc)

Sit with back against chair.

Straighten knee.

Repeat 10 times.

6. Step-Ups

Put foot of operated leg on step, straighten that leg. Stand on stair/step. Slowly bend your operated leg, lowering opposite foot to the floor. Return to standing position.

7. Sit to stand (to strengthen thighs and buttocks)

Sit with feet flat on floor, with your bottom at the edge of the chair. Lean forwards then stand up, mainly using your legs, not arms. Slowly sit back down again.

Repeat x10

Gradually increase to 2-3 times daily

8. Knee bends-forward lean

Stand at the bottom of your stairs or in front of a step. Hold the banister or sturdy chair.

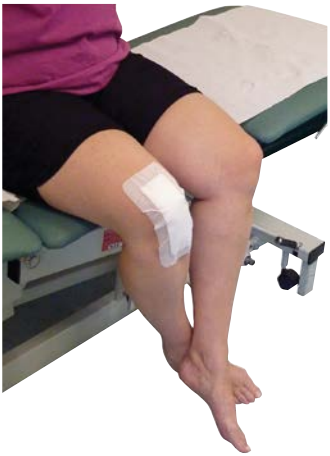
Step up with your operated leg to the bottom step.

Bend your knee forward to feel a strong stretch-hold 10 seconds ,relax.

Repeat x 10 2-3 x day

Gradually increase the length of hold time until 30 seconds

9. Assisted knee flexion



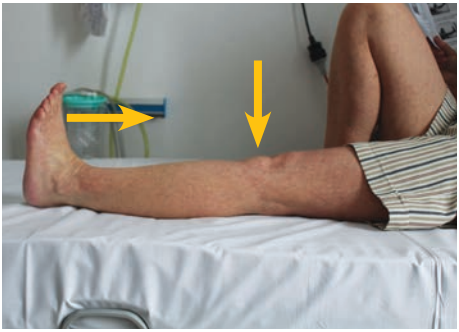
Bend your knee back. Place your good leg over your operated leg and squeeze it into a increased bent position.

Hold 10 seconds, gradually increasing to 30 second hold.

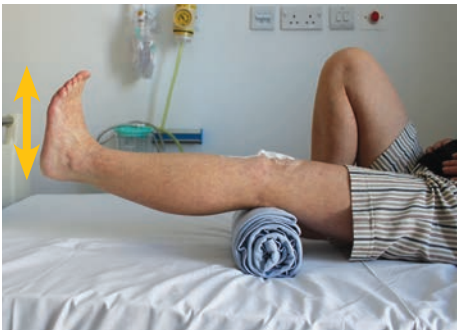
Repeat 10 times, 2-3 times a day.

10. Quadriceps extensions

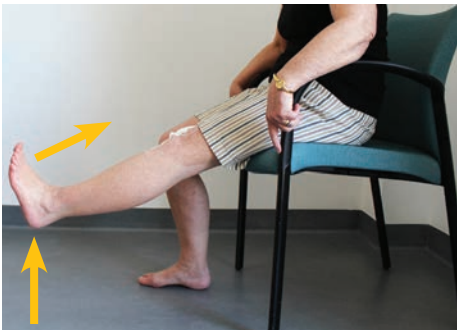
Lying on your back or reclining. Press the back of your knee down onto the bed tensing the muscles at the front of your thigh. At the same time pull your toes up and you should feel the pressure come off your heel. Hold the muscle contraction for about 10 seconds then relax.

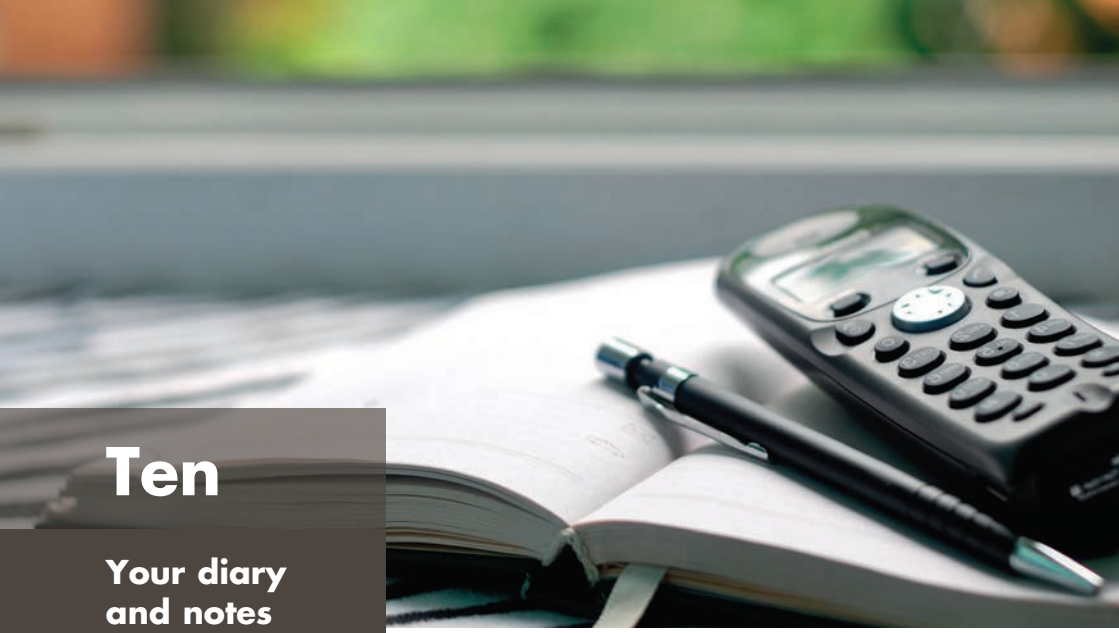


Lying on you back or reclining. Place a block under the back of your knee – a towel is ideal. Press the back of your knee down into the block until your foot lifts. Bring it up as high as you can without lifting your knee and hold it for 10 seconds, before lowering slowly.



Sit on an upright chair with your thigh supported to the knee. Straighten your knee and hold for 10 seconds. Lower slowly.





Ten

Your diary and notes

Useful telephone numbers

Admissions	0131 242 3028
Ambulance control	0300 123 1236
Appointments office	0131 242 3543
Arthroplasty adviceline	0131 536 3724
Arthroplasty questionnaire	0131 242 6462
Day surgery unit	0131 242 3166
Discharge Lounge	0131 242 3844
High Dependency Unit (HDU)	0131 242 1161
Intensive Care Unit (ICU)	0131 242 1181
Occupational therapy dept	0131 242 3464
Outpatient Dept – Lauriston	0131 536 3718
Outpatient Dept (RIE-OPD6)	0131 242 3412
Outpatient Dept (Roodlands Hosp)	0131 536 8343

Outpatient Dept (SJH OPD2)	01506 523 182
Physiotherapy Dept (RIE – OPD6)	0131 242 3481
Pre-assessment/OAU	0131 242 3460
OT equipment return	0131 529 6300 (Edinburgh)
	01506 523 335 (West Lothian)
Ward 209 Base A	0131 242 2091
Ward 209 Base B	0131 242 2097
Ward 220 Base A	0131 242 2130
Ward 220 Base B	0131 242 2098

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