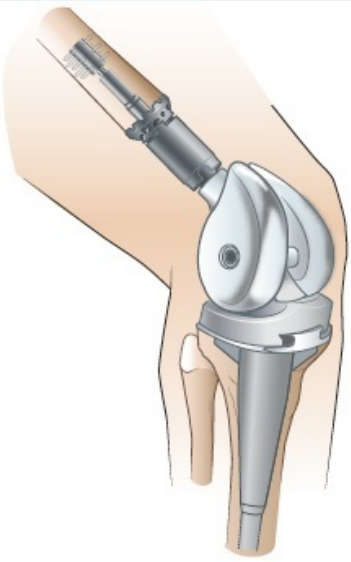
PATIENT GUIDE

Robotic-Assisted Knee Replacement

Preparing for surgery, recovering safely, and returning to everyday life



How to use this guide

Bring this guide to your appointments and on the day of surgery. Write down your questions. Your surgeon's and physiotherapist's personalised instructions always take priority.

For information only. This guide does not replace medical advice.

How to Use This Guide

1 Before Surgery

Review the sections on medicines, preparing your home, and arranging support.

2 On the Day of Surgery

Check what to bring and follow your written instructions about food, drinks, and medicines.

3 Before Discharge

Get a written plan for wound care, movement, medicines, and follow-up appointments.

4 At Home

Follow your personalised plan and watch for warning signs.

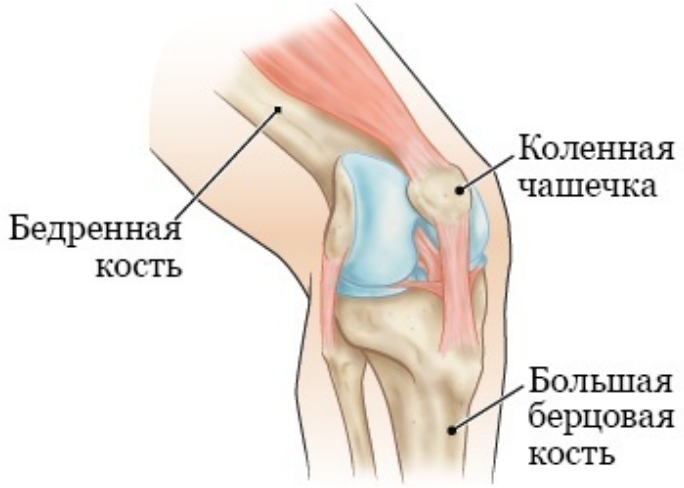
What Varies from Person to Person

- Length of stay, type of anaesthesia, and method of wound closure.
- When to stop eating and drinking.
- Your medicine schedule, weight-bearing limits, and exercise plan.
- When you may drive, fly, return to work, or resume sport.

Find the Information You Need

Page 26 has space for your care team's contact details and your notes.

Understanding the Knee Joint



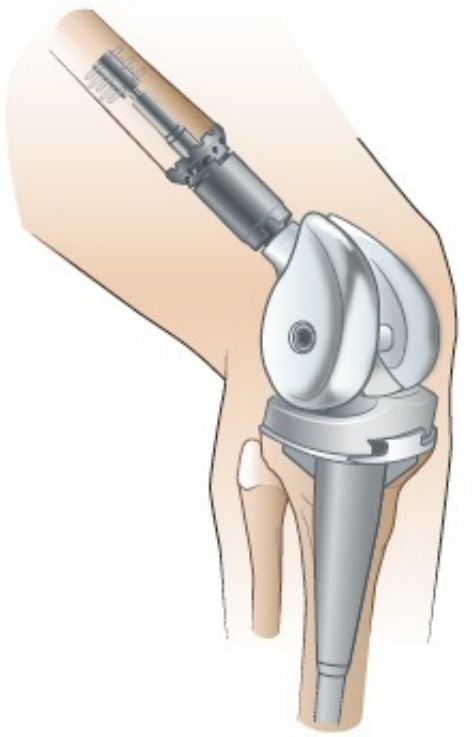
Main Structures

- The thighbone (femur) is above the knee joint.
- The shinbone (tibia) is below the joint.
- The kneecap (patella) protects the front of the knee.
- Cartilage helps the joint surfaces move smoothly.
- Ligaments, tendons, and muscles support movement and stability.

Why Replacement May Be Recommended

Damage to cartilage and bone surfaces can cause pain, stiffness, and limited movement. Surgery is considered after an examination, diagnostic assessment, and review of other treatment options.

What the Surgeon Replaces



During knee replacement, the surgeon removes damaged joint surfaces and fits artificial components. These may include metal parts and a durable polymer spacer.

Role of the Robotic-Assisted System

- Helps account for the anatomy of your knee.
- Supports digital surgical planning.
- Provides the surgeon with information during the procedure.
- It does not perform the operation on its own.

Important to Understand

The surgeon remains in control. Robotic-assisted technology does not guarantee freedom from complications or pain, or a faster recovery. Outcomes depend on your diagnosis, general health, the extent of surgery, and rehabilitation.

Questions Before You Decide

Surgery may be considered when pain and restricted movement significantly affect daily life and other treatments have not provided enough relief.

Ask Your Surgeon

- Why is surgery recommended now?
- Do I need a total or partial knee replacement?
- Which robotic-assisted system will be used?
- What type of implant is planned?
- Which risks are especially relevant to me?
- What alternatives are still available?

Discuss Your Expectations

- What pain is the operation expected to reduce?
- What range of movement is realistic?
- When will rehabilitation begin?
- What help will I need at home?
- What limitations might remain?
- How long might recovery take?

Tell your doctor if your goals involve a specific job, sport, stairs, or long-distance travel.

2-4 Weeks Before Surgery

Medical Records

- Recent scans and reports.
- Results of recent tests.
- History of operations and hospital stays.

Medicine List

- Prescription medicines.
- Over-the-counter medicines.
- Vitamins, herbal products, and supplements.

Important Health Information

- Allergies and previous reactions to anaesthesia.
- Long-term health conditions.
- A pacemaker or other implanted devices.

Recovery Plan

- A responsible adult to accompany you after discharge.
- Transport and help at home.
- Follow-up visits and rehabilitation.

Before any preoperative tests, ask whether you may eat and take your usual medicines that day. Do not follow instructions written for another patient.

Medicines and Safety

Do Not Stop Medicines on Your Own

Some medicines affect blood clotting, blood pressure, blood sugar, or interact with anaesthesia. Get written instructions explaining what to continue, what to change temporarily, and what to take on the morning of surgery.

Make Sure You Mention

- Medicines for diabetes or weight management, including GLP-1 medicines.
- Medicines that affect blood clotting.
- Hormones, pain medicines, and anti-inflammatory medicines.
- Patches, creams, inhalers, and injections.

Get Clear Answers

- When should I take the last dose of each medicine?
- What should I take on the morning of surgery?
- May I take the medicine with water?
- When should I restart my usual medicines after surgery?
- Who should I call if the instructions are unclear?

Smoking, Alcohol, and Sleep Apnoea

1

Smoking and Vaping

Tell your care team if you smoke or use e-cigarettes. This can affect breathing and healing. Ask how to prepare safely for surgery.

2

Alcohol

Tell your care team honestly how often and how much you drink. Suddenly stopping alcohol after regular use can be dangerous. Do not attempt withdrawal without medical support.

3

Sleep Apnoea

Tell the team about diagnosed or possible sleep apnoea. If you use CPAP, ask whether to bring your machine and mask.

If reducing alcohol causes tremor, sweating, anxiety, nausea, insomnia, or confusion, seek urgent medical help.

Prepare Your Home and Support Person

At Home

- [ ] Remove loose rugs and cables from walkways.
- [ ] Make room to use a walker or crutches.
- [ ] Place frequently used items within easy reach.
- [ ] Prepare a sturdy chair with armrests.
- [ ] Discuss handrails, a shower seat, and toilet aids.
- [ ] Prepare simple meals in advance.

Support Person

- [ ] Will be available on the day of surgery.
- [ ] Will help review your discharge instructions.
- [ ] Will arrange safe transport home.
- [ ] Will stay nearby during the first few days if needed.
- [ ] Knows the warning signs and how to contact your care team.
- [ ] Keeps a copy of your discharge summary and medicine list.

Ask your physiotherapist which mobility aids and home equipment are right for you.

The Day Before Surgery

Food and Drinks

Follow only the written instructions from your care team. When to stop eating and drinking depends on your anaesthesia, health, and medicines.

1 Confirm Your Arrival Time

Check the date, address, entrance, and contact number for questions.

2 Prepare Your Medicines

Set aside only the medicines you have been told to take that morning.

3 Follow Skin-Care Instructions

Use the prescribed product and do not apply creams after showering if instructed not to.

4 Rest

Pack in advance and try to get a good night's sleep.

If you accidentally eat, drink, or take a medicine outside your plan, contact the team before travelling.

What to Bring

Documents

- Photo identification.
- Your admission information.
- Scans, reports, and test results.
- A current list of medicines and allergies.

Medical Devices

- Your CPAP machine, if requested.
- Glasses and a case.
- Hearing aids and spare batteries.
- A cane or other mobility aid, if recommended.

Personal Items

- Loose, comfortable clothing.
- Supportive shoes with a closed heel.
- Your phone and charger.
- As few valuables and items of jewellery as possible.

Do not bring loose tablets. Keep medicines in their original packaging or bring a current list with doses.

Before the Operation

1. **Registration** — Your identity, date of birth, and documents are confirmed.
2. **Changing Clothes** — You change into a hospital gown and non-slip socks.
3. **Nursing Assessment** — Your medicines, allergies, and blood pressure are checked, and an intravenous line is placed.
4. **Surgical Side** — The team confirms the procedure again and marks the correct leg.
5. **Anaesthetist** — You discuss the type of anaesthesia, previous reactions, and pain-management plan.

Ask any final questions before anaesthesia begins. Make sure the team knows about every medicine you took today.

During and Immediately After Surgery

In the Operating Room

- The team monitors your breathing, heart rhythm, blood pressure, and oxygen level.
- The surgeon performs the operation and uses the robotic-assisted system as a planning and guidance tool.
- Damaged joint surfaces are replaced with implant components.
- The incision is closed using the surgeon's chosen method and covered with a dressing.

In the Recovery Area

- After surgery, you are moved to a recovery area.
- Staff monitor how you feel, your pain, and sensation in the operated leg.
- Oxygen, compression devices, a catheter, or a drain are used only when clinically indicated.
- Drinking, eating, and movement begin when the team says it is safe.

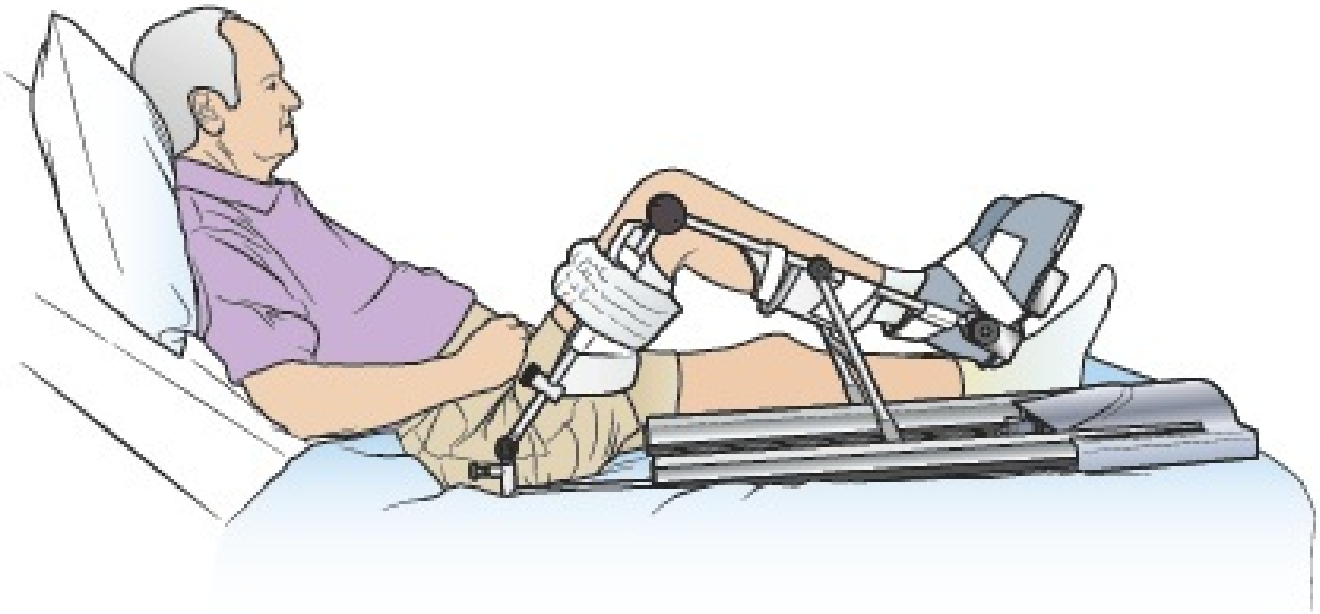
Tubes and devices do not necessarily mean there is a complication. Ask why they are needed and when they are expected to be removed.

The First Days After Surgery

1	**Pain Control**	Tell staff about pain before it becomes severe. Good pain control helps you breathe deeply, get up, and work with your physiotherapist.
2	**Breathing**	Do your breathing exercises and use an incentive spirometer if prescribed.
3	**Movement**	Get up only with permission and help from staff. Use the prescribed mobility aid.
4	**Nutrition**	Return to your usual diet gradually. Protein, vegetables, and adequate fluids support recovery.
5	**Wound**	Look at the dressing with your nurse and ask which changes are expected.

Do not try to stand for the first time on your own. Call staff even if you feel confident.

Continuous Passive Motion (CPM) — Only If Prescribed



What the Machine Does	A CPM machine slowly bends and straightens the knee without active effort from you. It is not used in every recovery programme.
If a CPM Machine Is Prescribed	Your physiotherapist sets the angle, speed, and duration. Do not change the settings yourself. Report sharp pain, numbness, or feeling unwell.

If a CPM machine is not prescribed, this does not mean your recovery is off track.

Before Discharge, Get a Written Plan

- [ ] How to care for your dressing and wound.
- [ ] When you may shower.
- [ ] Which medicines to take and for how long.
- [ ] How to reduce the risk of blood clots.
- [ ] How much weight you may place on the operated leg.
- [ ] Which walker, crutches, or cane to use.
- [ ] Which exercises to do and how often.
- [ ] When your next review is and when sutures or staples will be removed.
- [ ] Who to call during the day, at night, and on weekends.
- [ ] Which symptoms need urgent medical attention.

Look at the wound with your nurse so you can recognise changes once you are home.

Pain, Swelling, and Wound Care

Pain

Take medicines only as listed in your discharge instructions. Contact your care team if the plan does not control your pain or causes significant side effects.

Swelling

Some swelling is expected during the first few weeks. Elevate the leg, apply cold, and use compression only as instructed. New or suddenly worsening swelling needs medical assessment.

Wound

Keep the dressing clean and dry. Do not remove it, apply creams, or soak in a bath unless your team says it is safe.

Medicines and Driving

Do not drive or drink alcohol while taking medicines that cause drowsiness. Do not combine medicines without medical advice.

Do not assess your wound by comparing it with online photos. Contact your care team if it becomes redder, hotter, more painful, or starts to drain.

Day-to-Day Recovery

Movement

Alternate short periods of walking with rest. Keep using your mobility aid until a specialist says you may stop.

Preventing Falls

Take your time, switch on lights, wear supportive shoes, and avoid wet floors.

Nutrition

Eat regularly. Include protein, vegetables, and whole foods unless you have other dietary restrictions.

Constipation

Pain medicines and reduced activity can cause constipation. Ask your doctor about fluids, fibre, and safe treatments.

Sleep and Fatigue

Sleep may be disrupted and fatigue may be noticeable during the first few weeks. Plan your day without overloading yourself.

Emotional Wellbeing

Anxiety, irritability, or low mood can occur after surgery. Discuss persistent or severe symptoms with a healthcare professional.

Recovery is individual. Compare your progress with how you felt on previous days, not with someone else's timeline.

Exercise Safely

Do Not Start Exercises Without Approval

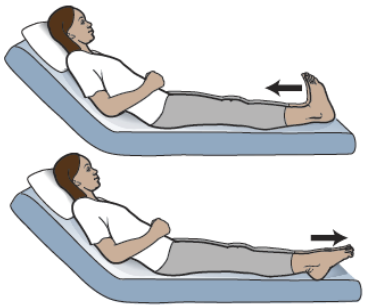
Procedures and restrictions vary. Your physiotherapist must confirm which movements are allowed, how many repetitions to do, and how to increase activity.

- [ ] Wear loose clothing and supportive footwear.
- [ ] Use a level surface and remove obstacles.
- [ ] Breathe normally; do not hold your breath.
- [ ] Move slowly and smoothly.
- [ ] Do not push through sharp pain.
- [ ] Stop if you feel dizzy, weak, or unwell.
- [ ] Tell your physiotherapist which movements cause pain or increase swelling.

The illustrations on the following pages demonstrate movement technique. They do not replace your personalised exercise programme.

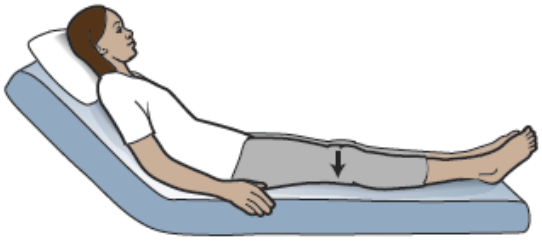
Ankle and Quadriceps

Ankle Pumps



While lying or sitting, slowly pull your toes towards you, then point them away. Move only within the permitted range.

Quadriceps Set



Straighten the leg. Tighten the front thigh muscles and gently press the knee down into the support. Then relax.

Your physiotherapist will set the number of repetitions and how often to exercise.

Hip Muscles and Knee Bending

Gluteal Set

Lie on your back and tighten both buttock muscles at the same time. Hold only as long as advised, then relax.

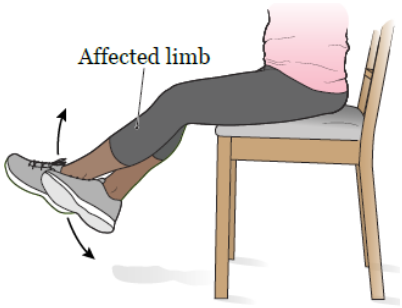
Heel Slide

Slowly slide your heel towards your buttock, bending the knee without sharp pain. Then slowly straighten the leg again.

Do not bend the knee if your surgeon or physiotherapist has restricted this movement.

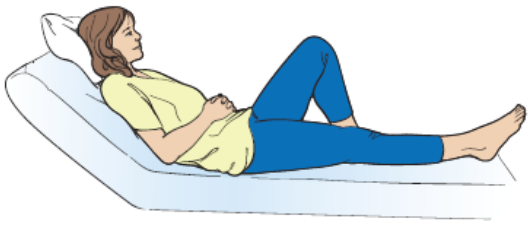
Knee Bending and Preparing for a Leg Raise

Seated Knee Bend and Straighten



Sit securely. If approved, use your unaffected foot to assist the operated leg while controlling the bending and straightening.

Starting Position



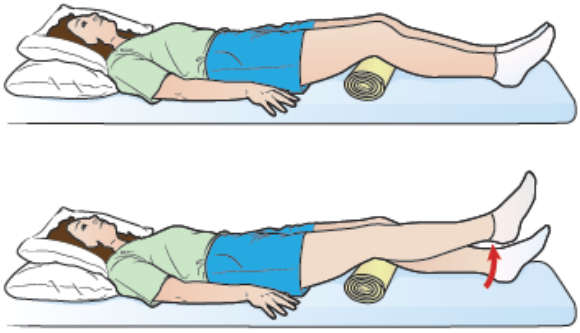
Lie on your back. Bend the unaffected leg and keep the operated leg straight. Keep your pelvis and shoulders supported.

Stop if a movement causes sharp pain or the knee becomes noticeably more swollen.

Leg Raise and Short-Arc Extension

Straight Leg Raise

Keeping the knee straight, slowly lift the leg to the level of the opposite knee. Lower it smoothly.



Short-Arc Knee Extension

Place a roll under the knee. Lift the heel and straighten the lower leg, then lower it slowly.

A straight leg raise may be difficult at first. Do not jerk the leg upward and do not continue without approval from your specialist.

Work, Driving, Travel, and Activity

Driving

Drive only after your doctor approves and you can get in safely, control the pedals, and perform an emergency stop. Never drive while drowsy.

Work

Timing depends on your job. Desk work and work involving prolonged walking, stairs, or heavy lifting require different return-to-work plans.

Travel

Before flying or taking a long journey, agree the timing and blood-clot precautions with your care team. Plan opportunities to move and rest.

Sport

Return to activity gradually. Discuss running, jumping, contact sport, and heavy-impact activities with your surgeon.

The goal is a safe return to the activities that matter to you, not someone else's recovery calendar.

When to Seek Urgent Help

Call Local Emergency Services

- Sudden shortness of breath or difficulty breathing.
- Chest pain, especially with pain or swelling in a leg.
- Loss of consciousness, confusion, or sudden severe weakness.

Contact Your Care Team Without Delay

- A temperature of 38 °C or higher, or chills.
- Increasing redness, warmth, pain, or swelling around the wound.
- Pus-like drainage or an unpleasant smell from the wound.
- New pain, tenderness, or swelling in the calf.
- Numbness, foot weakness, or a change in the colour of the leg or foot.
- A fall or injury involving the operated leg.

Your Contacts

Care team _____

Coordinator _____

Follow-up appointment _____

Before calling, have ready: your surgery date, temperature, when symptoms began, medicine list, and a wound photo if requested.