



Total Knee Replacement

Robot-assisted primary knee replacement planned around your anatomy

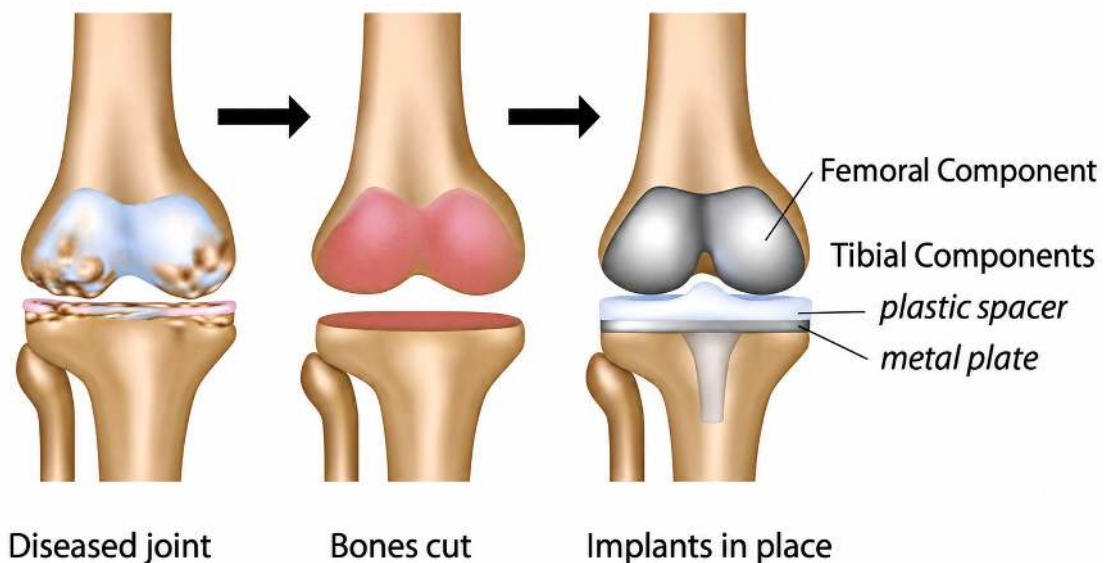
Why you have been given this sheet

This guide explains why knee replacement may be recommended, how robotic technology assists planning and execution, and what recovery usually involves. It supports your discussion with the surgical team and complements - but does not replace - formal consent. Your operation and recovery plan will be tailored to you.

When is knee replacement considered?

A total knee replacement is considered when persistent knee pain, stiffness or deformity substantially limits walking, sleep, independence or quality of life despite appropriate non-operative care. Osteoarthritis is the most common reason; inflammatory arthritis, osteonecrosis and selected post-traumatic conditions may also damage the joint.

Total Knee Replacement



The worn joint surfaces are reshaped and resurfaced with metal components separated by a highly engineered polyethylene bearing.

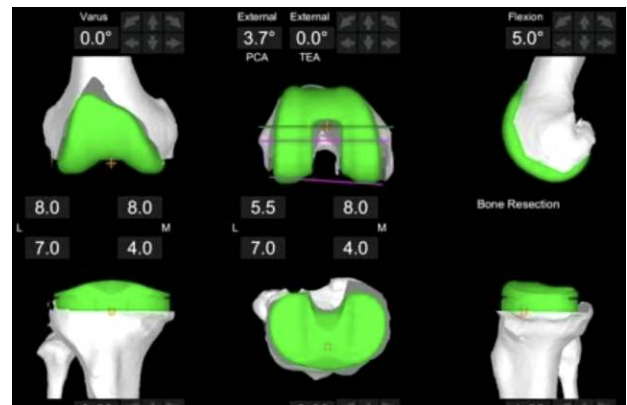
The decision is based on the whole picture

- Pain, stiffness and loss of function - not the X-ray alone - are the main reasons to proceed.
- Exercise, weight management, medication, walking aids and injections may help, but they cannot restore worn cartilage.
- The aim is durable pain relief, straighter and more confident walking, and better function; no operation can promise a completely normal or pain-free knee.

Robotic precision with the surgeon in control

A replacement planned around your knee

The robotic system creates a three-dimensional plan and provides real-time information in theatre. It helps the surgeon measure alignment, joint gaps and ligament tension before committing to bone cuts.



The surgeon remains in control

The robot is a precision tool. It does not operate independently: the surgeon approves the plan, controls every step and can modify or abandon the robotic plan if safety requires.

What robotic assistance adds

- Patient-specific planning using the shape and alignment of your own knee.
- Highly reproducible bone resections and more accurate component positioning, with fewer alignment outliers than conventional instrumentation.
- Real-time assessment of flexion and extension gaps, supporting balanced ligament tension through the range of movement.
- The ability to fine-tune implant size, rotation, slope and alignment before the final components are inserted.
- A record of the planned and achieved reconstruction. The intended benefit is a well-balanced, stable and natural-feeling knee.

Anaesthetic and duration

The procedure commonly takes about 1-2 hours. Spinal anaesthesia with sedation is often used, although the anaesthetic team will select the safest plan for your health.

Moving early and rebuilding strength

Your usual pathway

Within hours Stand and walk with nursing and physiotherapy staff, usually with a frame or crutches.

Day 1 Practise safe walking, transfers, knee movement and stairs. Regular exercises begin immediately.

1-3 nights Most patients go home once pain is controlled and mobility is safe; timing depends on medical recovery and home support.

2 weeks Wound review. Swelling and bruising are still common. Walking aids are reduced as balance and confidence improve.

6 weeks Surgeon review with X-rays, progression of strength and movement, and a more individual return-to-activity plan.

3-12 months Strength, stamina, confidence and the sense that the knee belongs to you continue to improve.

Pain, swelling and knee movement

The first weeks require active rehabilitation. Regular analgesia, ice, elevation, short frequent walks and prescribed exercises help control swelling and restore movement. Early progress varies. A useful knee does not require a perfect number, but regaining extension and steadily improving flexion are important.

Blood-clot prevention

Early walking, hydration and an individual blood-thinning plan reduce the risk of deep-vein thrombosis and pulmonary embolism. Your physician balances clotting and bleeding risks before recommending the agent and duration.

Protecting the wound

Keep the dressing clean and follow the team's instructions. Increasing redness, persistent drainage, fever or rapidly worsening pain requires prompt review. Dental and other infection questions should be discussed with your treating team.

Driving, work and activity

- Drive only when you are off sedating medication, can enter and exit safely, and can perform an emergency stop. Timing should be confirmed at review.
- Desk-based work often resumes before heavy manual work; the exact timing depends on symptoms, commute and job demands.
- Low-impact exercise such as cycling, swimming, golf and controlled gym work is encouraged after staged rehabilitation. Running, jumping and high-impact sport may accelerate wear or provoke symptoms.

Recovery is an active process

Full weight bearing does not mean full recovery. The implant is stable, but the wound, muscles, balance, movement and confidence still need time. Short, regular activity and steady progression are more useful than testing the knee with one large effort.

What Australian patients report

The figures below are from the Australian Orthopaedic Association National Joint Replacement Registry (AOANJRR) and describe large groups with osteoarthritis - not an individual guarantee or a result specific to one surgeon or robotic system.

85.7% satisfied or very satisfied at 6 months	92.5% reported being much or a little better	21-24 to 36-37 mean Oxford Knee Score at 6 months
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Australian longevity benchmark

Registry results vary by age and prosthesis. Modern total knee combinations with 20-year data show cumulative revision rates of approximately 4.9-7.8% at 10 years and 6.1-11.1% at 15 years. In other words, most remain unrevised, but implant choice, diagnosis, age, activity, fixation and patient factors matter.

Possible complications

- Expected or usually manageable: wound pain, bruising and swelling; nausea, constipation or urinary retention; stiffness, weakness, clicking or numbness beside the scar.
- Less common: infection, blood clot or pulmonary embolism, fracture, nerve or vessel injury, bleeding or transfusion, instability, persistent pain, reduced movement or manipulation under anaesthesia, implant loosening or wear, and later revision surgery.

Seek urgent medical advice

Contact the treating team urgently for fever, increasing wound redness or drainage, sudden severe knee pain or deformity, new calf swelling, chest pain, shortness of breath, or new neurological symptoms.

Your surgical team

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David has performed joint replacement surgery for more than 20 years. He leads the surgical team and uses robotic planning and intraoperative assessment to refine implant position, alignment and ligament balance for the individual knee.

Selected references

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Maryvale • Warragul • Peninsula • Rosebud

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Mulgrave Private Hospital
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