

# Robotic Joint Replacement



Robotic joint replacement offers a cutting-edge approach to knee and hip surgery, providing greater precision and potentially improved patient outcomes. By allowing for a more targeted approach, robotic-assisted surgery improves the accuracy of performing a total or partial knee and total hip replacements, resulting in less overall tissue damage.

## What the surgery involves

Using advanced robotic technology, Dr Lambers maps out and executes a precise plan tailored to each patient's anatomy. This targeted replacement reduces trauma to the surrounding tissues, promoting a quicker recovery and maintaining more of the hip or knee's natural movement patterns.

The robotic assistance aids in aligning and positioning the implant with high accuracy, with the aim of improving the prosthetic joint's long-term functionality and lifespan. Some of the available robotic systems are pictured below.





#### What to expect after surgery

After robotic joint replacement surgery, patients can expect to begin walking the same day, often with the aid of crutches or a walker for additional support. Early recovery focuses on regaining mobility, reducing pain, and restoring muscle strength. Physical therapy and a structured exercise program are essential components of recovery, helping to ensure optimal joint function and flexibility.

While every recovery timeline is unique, many patients experience significant improvement within the first two months, often reporting better function and reduced pain compared to their pre-surgery condition. Full recovery and maximum benefit from the surgery can take six to twelve months as the body takes time to fully adapt to the new joint.



# How long will the hospital visit be?

Most patients stay in the hospital for one to three nights following a robotic-assisted replacement procedure. This time allows for initial recovery and ensures that patients receive appropriate postoperative care, including pain management, monitoring for potential complications, and assistance with walking.

# Are there any additional risks in using a robot?

The only additional surgical step is placing thin pins in the bones to guide the robotic alignment. These have the potential to get infected or cause a break of the bone, which is an additional risk, though this is rare.

In a knee replacement there are 2 additional 1cm cuts below the main wound for these pins. In hip replacement these are located on your upper outer hip bone near where a belt may sit that is a little sore for 2 weeks and can rub on clothing. Read more about the symptoms of this in Dr Lambers' research study <u>here</u>.

There is also the unlikely event of a technical error with the robotic machine that means the surgery can no longer be completed using the robot. Depending on which stage of the procedure this occurs your surgery can either be finished using manual instruments, or can be paused and postponed until a day and time that the issue has been rectified.

## **Recovery timeline**

Many patients find they can resume daily activities, like walking and driving, within a few weeks post-surgery, depending on the leg operated on and the type of vehicle they drive. Within two to three months, most patients can comfortably perform many of their regular tasks, though the full recovery period may extend to a year for the joint to reach peak functionality and comfort.

Continuous exercise and rehabilitation play a crucial role in maintaining strength and flexibility throughout recovery.

# Do I need private health insurance?

No, fortunately both Northeast Health Wangaratta and Wangaratta Private Hospital have acquired sophisticated robot technology and were one of the first regional centers to do so. Dr Lambers performs robotic total knee and total hip replacement surgery at both the private and public hospitals.



### Discussing surgery with Dr Lambers

The decision to undergo joint replacement surgery is a personal one, and it is important to take the time you need to fully understand your options. If referred to Dr Lambers, the first conversation will be about whether or not a joint replacement aligns with your health goals and lifestyle. Dr Lambers will answer any questions and support you in making the choice that's right for you.