How is a Total Knee Replacement Surgery Performed?

**M**ost total knee replacement surgeries take anywhere from 60 to 120 minutes<sup>4</sup> to perform. During that surgical time, the surgeon makes an incision that is typically eight to ten inches in length stretching from the top of the knee to the bottom of the joint. This incision is made either down the center or off to the side of the knee.

The surgeon then exposes the damaged area of the knee joint. During the surgery, the surgeon moves the kneecap (patella) aside and cuts away the damaged bone and cartilage. The surgeon will then replace the resected area with medical device implants that form an artificial joint designed to replicate the movement of a natural knee. A minimally-invasive knee replacement surgery minimizes disruption of tissue surrounding the knee with incision as small as four to six inches<sup>4</sup>. This surgical approach was developed to avoid trauma to the muscles and tendons in the knee and may lead to less postoperative pain and reduced recovery time.



- 4 WebMD, Knee Replacement Surgery: What to Expect, https://www. webmd.com/osteoarthritis/knee-replacement-18/knee-surgerywhat-expect
- 5 Arthritis-Heath, What to Expect After Knee Replacement, https://www.arthritis-health.com/surgery/knee-surgery/whatexpect-after-knee-replacement
- <sup>6</sup> Cleveland Clinic, Joint Replacement: 5 Benefits of Outpatient Surgery, https://health.clevelandclinic.org/joint-replacement-5benefits-of-outpatient-surgery/

# What to Expect After Total Knee Replacement Surgery?

The hospital stay after a total knee replacement surgery is typically one to five days<sup>5</sup>. Some patients may go home the same day of their surgery, but only if they are healthy enough to have their surgery in an outpatient setting and they have the right support at home for an early discharge. Some of the potential benefits of a same day discharge are less pain, lower infection risk, reduced blood transfusions, reduced healthcare cost, and increased patient satisfaction<sup>6</sup>.

There are also several potential risks associated with outpatient total joint surgery. These risks include managing potential complications at home, pain medication management, and potential admission to the hospital.

After surgery, physical therapy may begin the same day and may continue for up to three months<sup>7</sup>. Therapy is crucial to ensure rehabilitation as it assists to strengthen muscles, which in turn helps you to regain motion in the knee joint. You may need crutches, a walker or a cane for up to six weeks following your surgery<sup>7</sup>.

**D**epending on your recovery and your surgeon's recommendations, some patients are able to resume everyday activities like walking, climbing stairs, and driving within four to six weeks after surgery<sup>7</sup>. Low impact sports and activities, such as walking, golf, and swimming, can usually be resumed within twelve weeks after surgery<sup>7</sup>, but only after your doctor approves the activity. Recovery time will vary for each patient.

**F**ollowing your doctor's recommendations and physical therapy schedule will help to facilitate a successful recovery following total knee replacement surgery.

7 Healthline, Recovery Timeline for TKR: Rehabilitation Stages and Physical Therapy, https://www.healthline.com/health/total-kneereplacement-surgery/rehabilitation-timeline

## Total Knee Replacement Replace Knee Pain with the Joy of Living Life





#### Total Knee Replacement

**W**ith over 600,000<sup>1</sup> total knee replacement procedures performed in the United States every year, total knee replacement surgery, also known as knee arthroplasty, is one of the most common joint replacement surgeries<sup>2</sup>.

It is often performed to repair knee damage caused by arthritis or traumatic injury. Damage to the knee from wear and tear could easily lead to daily and debilitating pain that may require surgical intervention. Ask your physician whether a total knee replacement surgery is right for you or a loved one.



- <sup>1</sup> American Academy of Orthopaedic Surgeons, Total Knee Replacement, https://orthoinfo.aaos.org/en/treatment/total-knee-replacement/
- <sup>2</sup> American Academy of Orthopaedic Surgeons, Projected Volume of Primary and Revision Total Joint Replacement in the U.S. 2030 to 2060, (Research News Webpage, 2018), https://aaos-annualmeetingpresskit.org/2018/research-news/sloan\_tir/

#### How Does Your Knee Work?



The knee is the largest hinge joint in the body<sup>3</sup>. It is where the thigh bone (femur) and the shin bone (tibia) meet. The other bones that make up the knee include the fibula, the smaller bone that sits alongside the tibia, and the patella or knee cap. Tendons in the knee connect the bones to muscles and ligaments which join the knee bones together. The bone surfaces where the femur, tibia and patella meet are covered with cartilage, which helps to cushion the knee and keep it running smoothly.

When all parts of the knee are working together, the knee operates smoothly to flex and extend the lower leg. When the knee is diseased, degenerated, or experiences an injury, its natural balance and operation may be disrupted causing pain, weakness or other medical challenges.

<sup>3</sup> Arthritis-Heath, Knee Anatomy, https://www.arthritis-health.com/ types/joint-anatomy/knee-anatomy

### What is a Total Knee Replacement Surgery?



**B**efore considering a knee replacement surgery, many patients may go through a routine of conservative care starting with rest of the knee, lifestyle modification, pain and anti-inflammatory medications, and/or physical therapy. Those for whom this conservative treatment does not provide relief because the cartilage in the knee is too worn or there is damage to the bone surface, may have their physician recommend total knee replacement surgery or knee arthroplasty to alleviate the pain and get you back to living life.

In a total or partial knee replacement surgery, the surgeon removes the damaged cartilage and portions of the thigh bone, shin bone or patella, and replaces them with medical implants designed to replicate the knee joint so that the artificial joint can perform the motion and function of the natural knee without pain or compromise.