

Total Joint Replacement: A Breakdown of Costs



Total hip and knee replacement surgeries are effective at easing the pain anddysfunction of arthritis which can limit a person's ability to work and to enjoy leisure activities. Doing simple daily activities like going up and down stairs or putting on socks and shoes become difficult. Research has shown the benefits of total joint replacement surgery include not only resuming daily activities, but also improved quality of life and overall health with fewer days missed from work.

Many people who have total joint replacement surgery often say the surgery is life changing as they regain their independence, return to work, and enjoy recreational activities again. Is it worth the financial cost to have total joint replacement surgery? It is difficult to put a price on these positive outcomes.

Today in the United States, the cost of surgery receives a lot of attention as health care spending reaches an all-time high. Health care transparency continues to be a focus as American consumers are now more conscious of their spending and insurance coverage. Patients are now more often responsible for some portion of their health care bill, so understanding their insurance plans and subsequent bills for treatment are important to know in order to calculate "out-of-pocket" expenses.

How much does a total joint replacement surgery cost?

A recent *New York Times* article compared the cost of a hip replacement in Brussels, Belgium to various cities in the United States. The cost in Brussels was \$13,660 compared to US cities in a range between \$30,000 and \$112,000. **Costs of surgical procedures performed in foreign countries are frequently compared to costs in the US, and it is important to interpret these cautiously.** Regulations regarding standards of infection control, sterilization, medical malpractice and how people pay for health care can differ significantly from country to country. These factors can drastically impact surgical costs.

In the US, the cost of a total joint replacement surgery can be misunderstood as **insurance companies only pay a portion of the amount billed**. This can make it very difficult to identify and truly compare charges. Examining some of the common factors that influence cost including billing practices, implant prices, hospital charges, and costs for services after the hospital stay can help us understand these differences. Additionally, the cost of a surgery can vary significantly based on location. There are many reasons for this such as overhead costs, rent, and other costs specific the region like regulatory burdens, malpractice insurance and facility maintenance.

The surgery doesn't take that long, why so much?

Total joint replacement has costs **before, during and after surgery**. Up to 25 health care providers can have contact with each patient to ensure a successful outcome. Prior to surgery, patients typically have their overall health evaluated by a **team of doctors and nurses** to ensure they can safely undergo surgery. They may be offered assistance with weight loss, smoking cessation or other health risks to take steps to improve their health before surgery so that the outcome is successful.





On the day of surgery, health care professionals prepare patients for surgery before they are taken into the operating room. While in surgery, the patient is cared for by the **surgeon**, **operative staff**, **and anesthesia team** with costs associated with these services and team members.

After surgery, patients are monitored by nurses in the post-acute care unit and then transferred to the orthopaedic floor/room (place you will stay for your time in the facility) where there is another team of providers. Nurses, nursing aides, nutritionists, physical therapists, physical therapy assistants, nurse practitioners, discharge planners and the surgeon all care for the patient after surgery.

At each stage of this process various **supplies, tests, x-rays and medications** are ordered for each patient. A lot of behind the scenes work also occurs to ensure the surgery is a success too. Surgical instruments are sterilized and cleaned in the **sterile processing department**. The medical records and billing department calculate costs which are then sent to insurance companies for payment. All of this work is tracked on **electronic health records systems** which also have a cost to maintain.

Typically, patients will stay in a hospital for a one to three days and then are discharged to home. **There are further costs after you leave the hospital such as physical therapy or if a rehabilitation stay is needed.** If a patient is sent to a skilled nursing facility or inpatient rehabilitation center, costs can increase to over \$20,000 for the time spent in a facility alone. These costs have the potential to double the overall cost of a total joint replacement surgery. Outpatient therapy costs can be significantly less.

In addition to increased cost, inpatient rehabilitation facilities carry significant risk to a patient; there is an increased risk of complications such as infection and readmission to the hospital for patients sent to inpatient facilities. Adverse events can also add significantly to the overall cost of the episode of care. It is important to talk to your physician about what is the best option for you if you are planning on joint replacement. For most people, **it is best to go straight home once you leave the hospital and go to outpatient therapy several days a week**.

What are bundled payments?

One strategy employed by insurance companies to handle the costs of common medical procedures like total joint replacement surgery is by implementing alternative payment models such as "bundled payment" systems. Essentially this means that insurance companies have explored the possibility of covering a surgical procedure in a way that includes all costs (hospital fees, surgeon charge, implant cost, physical therapy, etc.) put together in a **single price tag**. This removes the concept of itemizing the bill for individual services, leaving it up to the hospital, physician or a third-party to manage the spending for all aspects (pre-operative, surgical and post-operative charges) of the surgical procedure.

Are implants expensive?

A significant portion of the overall cost of a total joint replacement can come from the price of the hip or knee implant. **The price for most primary hip and replacement parts generally range from \$3,000-\$10,000.** Hospitals that do a lot of total joint replacement surgeries often pay much less for the same implants than hospitals that do fewer surgeries.







How much does the surgeon make?

A common misconception is that surgeons are paid most of the cost from surgery. A study of over 1,100 patients found a big difference between what patients think their surgeons should be paid versus what is actually paid. The average Medicare reimbursement to the surgeon for a total hip replacement is \$1,375 and is \$1,450 for a total knee replacement. This amount covers all office visits and care for 90 days after surgery and any overhead the physician pays to operate their medical practice. Patients who were surveyed thought the amount surgeons should be reimbursed was over 10 times these amounts. **The actual physician reimbursement represents less than 10% of even the lowest cost surgeries**.

New Technology that Adds Cost

New techniques and technologies are often introduced to the surgical process with the hopes of improving patient care. While innovative, these advancements can increase costs. **Research and costbenefit analyses are very important to help figure out if there are benefits** such as patient safety, cost savings in other areas or an improved outcome for the patient.

To Summarize

Many factors determine the cost of total joint replacement surgery in the U.S.

- People who undergo total joint replacement surgery are cared for by many highly trained healthcare workers before, during and after surgery.
- The cost of a surgery in the US can vary by location or region.
- Costs can be affected by different contractual agreements for implants, medications and other services.
- Costs can also vary based on the size or scope of the facility performing the procedure.
- Implant and rehabilitation costs can make up a significant portion of the cost of a procedure.

In order to decrease the cost of total joint replacement surgery in the future, patients, physicians, insurance companies and surgical facilities will need to work together to continue to provide excellent patient care and achieve excellent outcomes with a focus on the cost to our healthcare system.

References

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