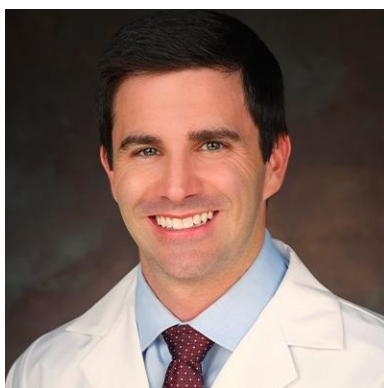


Dr. Burrow's Total Knee Patient Guide



Zac Burrow, MD, DPT

I want you to know that I understand this is a big decision, and it often comes after months or even years of pain, limitation, and frustration.

My goal is simple: **to help you feel better, move better, and get back to the life you enjoy.**

I care deeply about your outcome—not just in the operating room, but in your recovery and long-term success. Every decision we make is centered around what is safest, most effective, and best for *you* as an individual.

This guide is designed to walk you through the process, answer common questions, and help you feel confident and prepared every step of the way. You are not going through this alone—we are a team, and I am committed to supporting you throughout your entire journey.

Thank you for trusting me with your care!

Pictures in this guide were obtained from AAOS, HEP2Go.com, or generated with ChatGPT

General information can also be found at:

- Total Knee Replacement - OrthoInfo – AAOS
<https://orthoinfo.aaos.org/en/treatment/total-knee-replacement>
- Total Knee Replacement - AAHKS
<https://hipkneeinfo.org/knee-care/total-knee-replacement/>
- Video - Total Knee Replacement Animation - OrthoInfo - AAOS
<https://orthoinfo.aaos.org/en/treatment/total-knee-replacement-animation/>

Important Phone Numbers

Dr. Burrow Direct Line: 918-927-3258

- Call for refills of medications, general questions/concerns
- May also use online patient portal
 - MyMobility App is not monitored

Surgery Scheduling: 918-927-3301

- Scheduler will call you to schedule surgery once all clearances are obtained
 - Call for any surgical scheduling questions
 - Cancel, reschedule, etc.

Billing Department: 918-927-3737

- Any billing questions for AOOK

Brace Shop: 918-927-3308

Hospital Pre-Admission Testing:

- Oklahoma Surgical Hospital: 918-477-5073
- St. John Broken Arrow: 918-994-8045

Urgent Surgical Problem: 918-494-2665

Emergency: 911

Knee Anatomy: Understanding Your Joint

Bones

- Three bones come together to form the knee joint:
 - **Femur (thigh bone)**
 - **Tibia (shin bone)**
 - **Patella (kneecap)**

Cartilage

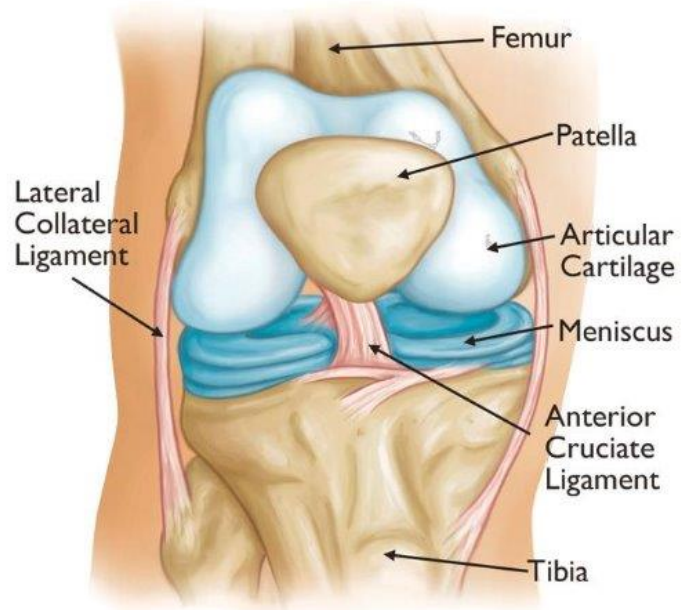
- A **smooth, protective tissue** that covers the ends of the bones
- Helps the bones **glide smoothly without pain** during movement
- Acts as a cushion

Synovial Membrane

- A thin lining inside the knee
- Produces fluid that:
 - Reduces friction
 - Keeps the joint lubricated

Ligaments and Tendons

- **Ligaments:**
 - Connect bone to bone
 - Provide stability
- **Tendons:**
 - Connect muscle to bone
 - Allow movement



Muscles

- Muscles around the knee help with **movement and stability**
- Key muscle groups include:
 - **Quadriceps** (front of the thigh)
 - **Hamstrings** (back of the thigh)
- **What they do:**
 - Help you **straighten and bend your knee**
 - Support the joint during walking, standing, and activity

What Happens in Knee Arthritis

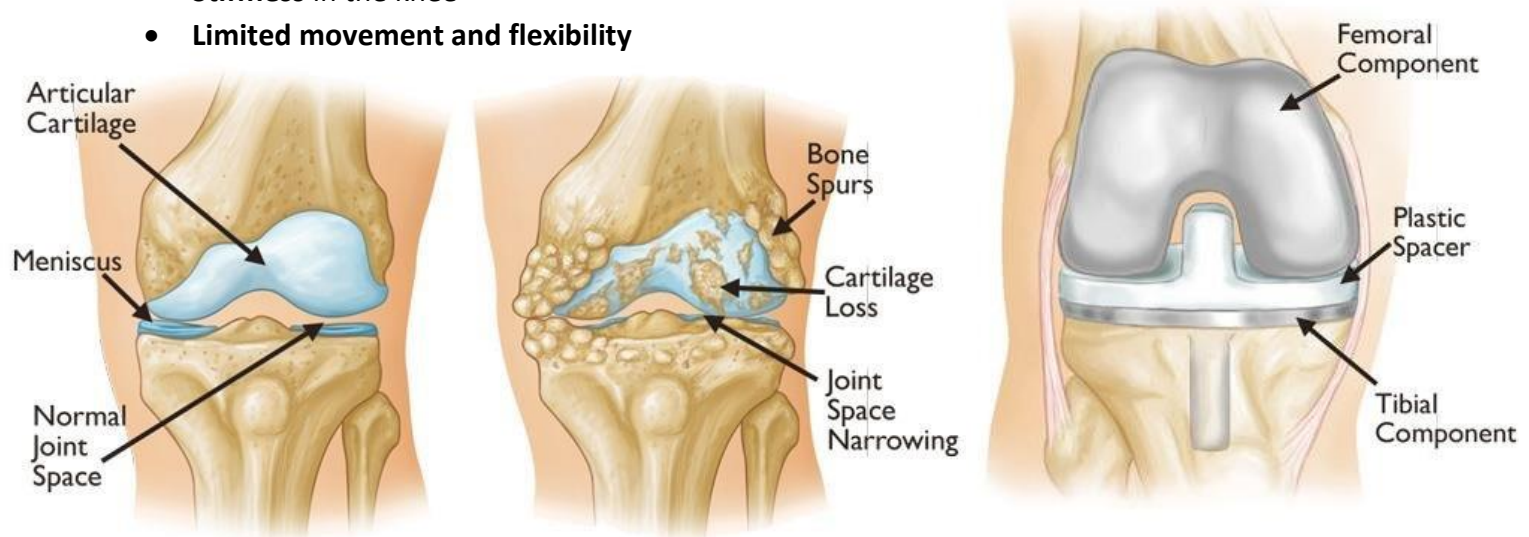
Over time, the knee joint can be worn down, leading to pain and stiffness.

Changes in the Joint

- The **cartilage wears down**
- The bones may begin to **rub together (bone-on-bone)**

What You May Feel

- Increased **inflammation and pain**
- **Stiffness** in the knee
- **Limited movement and flexibility**



What Is a Knee Replacement

Knee replacement surgery is designed to remove the damaged joint and create a smooth, pain-free surface.

What Is Done During Surgery

- The **damaged cartilage and bone are removed**
- The joint is resurfaced with **artificial components**:
 - Metal and plastic parts replace the surfaces of the:
 - **Femur (thigh bone)**
 - **Tibia (shin bone)**
 - **Patella (kneecap)**

Benefits of Knee Replacement

- Reduces or eliminates **pain**
- Improves **movement and flexibility**
- Helps restore **function and daily activity**

Why This Works

- The new joint creates a **smooth, low-friction surface**, allowing your knee to move more comfortably.

Possible Risks With Knee Replacement

While most patients do very well after surgery, it's important to understand potential risks and how to prevent them.

Infection

- At the incision site
- Deep in the joint
- Can occur shortly after surgery or even years later
- **Prevention:**
 - Antibiotics during and after surgery
 - Proper wound care

Blood Clots (DVT or PE)

- **DVT (Deep Vein Thrombosis):** Blood clot in the leg
- **PE (Pulmonary Embolism):** Blood clot that travels to the lungs
- **Prevention:**
 - Blood thinning medications
 - Walking early and often
 - Compression devices or stockings

Implant Problems

- Artificial parts may wear down or loosen over time
- **What this means:**
 - May require **revision (repeat) surgery** in the future

Stiffness or Limited Motion

- Some patients may have difficulty fully bending or fully straightening the knee
- **Management:**
 - Additional physical therapy
 - Rarely, further procedures

Nerve, Blood Vessel, or Soft Tissue Injury

- Rare, but nearby structures may be affected
- **May cause:** Numbness, weakness, circulation issues
- **What is normal:**
 - Some **numbness on the outside of the knee** is common
 - This usually improves over time, but a small numb area may remain permanently

Persistent Pain

- Some patients may continue to have pain after healing
- **Possible causes:** Scar tissue, nerve sensitivity, other unrelated conditions

Less Common but Serious Risks

- Anesthesia complications: nausea, breathing problems, allergic reactions
- Bone fracture: during or after surgery
- Knee instability or kneecap dislocation

Other Unpredictable Risks

- Rare complications can occur including: heart attack, stroke, death, other issues that **cannot be fully predicted**



Immediately After Surgery (Hospital Stay or Outpatient)

Common After Surgery

- Pain and swelling in the operated leg
- A bandage covering your knee incision
- Medications to help with: Pain control & Blood clot prevention

Physical Therapy Starts Early

- Begin **basic exercises within 24 hours**
- Help you **stand and start walking**
- Teach you how to move safely using a **walker**

Hospital Stay

- Most patients stay **1 night in the hospital**
 - Some patients may: Go home the **same day** or may need a **longer hospital stay**

At Home: First Few Weeks After Surgery

Mobility & Walking

- Use a **walker at first**, then transition to a **cane** as you improve
- Walk **short distances multiple times per day**
- Gradually work toward: Longer walks & Climbing stairs safely

Physical Therapy

- We will try to arrange **home health physical therapy**
 - This typically starts the 4th day after you return home
 - *Note: Insurance may limit this option*
- Continue:
 - **Daily home exercises**
 - Use of the **MyMobility App** for guidance

Pain & Swelling

- It is normal to have: Pain (managed with medications and ice) & bruising / swelling
- Swelling will **improve gradually over several weeks**

Help at Home

- You will likely need help with: Cooking, Bathing, Daily activities
- Plan for assistance for the **first 1–2 weeks**

Activity Goals

- Walk several times per day
- Increase activity **slowly and safely**
- Motion Goal: 0-90° at 3 weeks after surgery

Mid-Term Recovery: 6 Weeks to 3 Months

Mobility & Walking

- Walking becomes **easier and more natural**
- Decreased need for a **walker or cane**
- **Better knee motion** and strength

Return to Daily Activities

- Gradual return to normal daily routines
- May begin: Light household tasks
- Driving (*typically around 4–6 weeks, if cleared by your physician*)

What Is Normal

- **Stiffness, swelling, fatigue**, especially after activity
- These symptoms are common and should improve over time

Activity Progression

- Continue to increase activity **gradually**
- Stay consistent with exercises and therapy

Full Recovery: 3 to 12 Months

What to Expect

- Most patients return to **normal daily activities by 3 months**
- Continued improvement in: Strength, Balance, Comfort
- Full recovery may take up to **1 year**

Return to Activities

- Most patients can safely return to:
 - Walking
 - Swimming
 - Biking
 - Other **low-impact activities**

Activities to Avoid

- Running
- High-impact sports
- Activities that place excessive stress on the joint

Your Surgery Journey: Step-by-Step Guide

This section will walk you through what to expect before, during, and after your knee replacement.

Initial Visit

- Your first visit will be in the clinic and we will:
 - Discuss your symptoms
 - Review treatment options
 - Decide if surgery is the right choice for you

Scheduling Surgery

- Dr. Burrow's surgery scheduler will call you within 1 week.
- She will help find a surgery date that works for you
- All clearance letters from outside physicians will need to be obtained prior to scheduling

Pre-Operative Labs & Medical Clearance

- You will have lab work done before surgery
- This helps ensure surgery is safe
- Depending on your medical history, you may need clearance from:
 - Your primary care doctor
 - A cardiologist
 - Another specialist

Joint Camp (MyMobility App)

- Download the MyMobility Patient App on your smartphone or tablet
 - A link will be sent to your phone on the week of your preoperative visit
- This app will:
 - Give step-by-step instructions before and after surgery
 - Provide daily exercises

Important:

- Messages in the app are **not checked**
- Please use the patient portal or call 918-927-3258



Pre-Operative Appointment (2 appointments [1 at clinic, and 1 at hospital])

- This is your final CLINIC visit before surgery
 - We will review the surgical plan and answer any questions/concerns
- You will also have a pre-operative appointment at the HOSPITAL to:
 - Meet with the anesthesiologist and obtain pre-operative lab work

Prepare Your Home

- Remove rugs and tripping hazards
- Make space to safely use a walker or crutches
- Arrange for a **family member or friend to help you at home**

Day of Surgery

- The hospital will call you with:
 - Your arrival time one business day before surgery
- Most patients stay **1 night in the hospital** (*some patients wish to go home the same day*)
 - Additional time can be arranged if needed

After Surgery (In Hospital)

- You will work with **physical therapy the same day**
- They will teach you:
 - Exercises and how to get around safely after your surgery

Returning Home

- Home health services are often arranged for:
 - Nursing care
 - Physical therapy
- This usually starts about **a few days after you return home**
- Home health is **optional**
- Continue your **home exercises as instructed or use the MyMobility App**

Follow-Up Visit

- You will see Dr. Burrow about **2-4 weeks after surgery**
- This visit will:
 - Check your incision, range of motion, X-Rays, and answer questions

Physical Therapy

- After home therapy is complete, you will start outpatient therapy

Before Your Surgery: What You Need to Know

- Please follow these instructions carefully to help your surgery go safely and smoothly.

The Night Before Surgery

- **Do not eat or drink anything after midnight**, unless your anesthesiologist tells you otherwise.
(This includes gum, mints, hard candy, and tobacco.)

Transportation & Planning

- Arrange for a **family member or friend** to:
 - Take you to the hospital on the day of surgery and to pick you up after your hospital stay
- Most patients stay **1 night in the hospital**

What to Wear & Bring

- Wear **loose, comfortable clothing** that is easy to put on and take off
- You will change into a hospital gown for surgery
- You will have a **bandage after surgery**, so plan accordingly
- **Bring with you:**
 - Photo ID
 - Insurance card(s)
 - A list of your current medications and allergies

Personal Items

- Leave **valuables at home** (jewelry, watches, etc.)
- **Remove all jewelry**, including body piercings

Eye Care & Personal Care

- **Do not wear eye makeup**
 - If you wear **contacts or dentures**, bring a container for them
 - You will need to remove them before surgery

Medical Conditions

- **Diabetes:** Check your blood sugar the morning of surgery and bring your glucometer and insulin
- **Asthma:** Bring your **inhaler**

Medications ****If you are unsure, please ask before surgery****

- **Stop these medications 1 week before surgery** (unless told otherwise):
 - Aspirin and aspirin-like medications (Advil, Motrin, Aleve, Ibuprofen, etc.)
 - **Weight loss products** (including GLP-1 medications [hold 1 dose before planned surgery])
- Tell your doctor if you take:
 - **Blood thinners** (such as Plavix, Pradaxa, Eliquis, Xarelto, Coumadin, etc)
 - **Herbal supplements or vitamins**

Pre-Operative Knee Exercises

Exercise pictures and instructions adapted from HEP2go.com

1. Straight Leg Raise

- **Frequency:** 2 times per day
- **Repetitions:** 10
- **Hold:** ~2 seconds

How to perform:

- Lie on your back
- Keep your knee **straight**
- Slowly raise your leg up
- Hold for 2 seconds, then lower slowly



2. Hamstring Stretch

- **Frequency:** 2 times per day
- **Repetitions:** 3
- **Hold:** ~30 seconds

How to perform:

- Sit with your heel resting on the floor
- Keep your knee straight
- Gently lean forward until you feel a stretch in the **back of your thigh and knee**
- Keep your **back straight** (do not round your spine)



3. Heel Slides

- **Frequency:** 2 times per day
- **Repetitions:** 10
- **Hold:** ~2 seconds

How to perform:

- Lie on your back
- Slowly slide your heel toward your buttocks
- Bend your knee as far as comfortable
- Return your leg to the starting position



Nutrition Before and After Surgery

Good nutrition helps your body heal, reduces complications, and improves recovery.

General Guidelines

- If you are on a **specific diet**, continue following it
- Focus on **whole, healthy foods**
- Avoid highly processed foods (fast food, boxed, canned food, etc.)

Recommended Nutrition Timeline

- Start **2 weeks before surgery**
- Continue for **at least 6 weeks after surgery**

Hydration

- Avoid **alcohol and soft drinks**
- Drink **water or tea**
- Goal: **5 servings of 12 oz per day**

Recommended Foods

- **Berries** (1–3 servings/day)
 - Blueberries, Blackberries
 - Frozen options are okay
- **Fruits** (1–2 servings/day)
 - Apples, Avocados
- **Beans** (1-2 servings/day)
 - Green beans
 - Pinto beans
- **Whole Grains** (3 servings/day)
 - Brown rice, Oatmeal
- **Vegetables** (1–2 servings/day)
 - Broccoli, Sweet potatoes
- **Greens** (2 servings/day)
 - Spinach, Kale
- **Nuts** (1 serving/day)
 - Walnuts, Pecans



Protein (Very Important for Healing)

- Lean meats:
 - Grilled chicken / fish
- Whey or soy protein supplements

Post-Operative Wound Care

Proper wound care is important to prevent infection and ensure good healing.

Dressing Care

- Leave your dressing **in place until your follow-up visit (approx. 3 weeks after surgery)**
 - Unless changed by home health nursing
- **No additional wound care is needed**

When to Call the Clinic

Call our office if you notice:

- Drainage **larger than the size of a quarter**
- Fluid **pooling under the dressing**
- Increasing redness around the incision
- **Cloudy or pus-like drainage**



Showering

- You **may shower with your bandage on** (it is waterproof) unless told otherwise by Dr. Burrow
 - If it looks like the bandage is coming off at the edge, do **NOT** let the wound/bandage get wet
- Occasionally an incisional wound vac dressing is used. This stays on for 1 week & should **NOT** get wet

Do NOT Submerge the Wound

- Avoid baths, Hot tubs, Swimming pools, etc. for at least **6 weeks after surgery**

Compression Stockings

- Wear compression stockings for **6 weeks**
- Helps reduce swelling and prevent blood clots

Skin & Incision Care

- Do **NOT** apply lotions, creams, or ointments to your incision for the first **6 weeks**

After the Incision Heals

- Once fully healed, you may use:
 - Any scar creams or vitamin E.
- Use **sunscreen over the incision** to help prevent darkening of the scar
 - *Only after the incision is fully healed*

Ice and Heat After Surgery

Using ice and heat correctly can help reduce pain and swelling during recovery.



Ice (Recommended Early After Surgery)

- **How to use:**
 - Place a **towel or cloth between the ice and your skin**
 - Apply ice for **15–20 minutes at a time**
- **How often:**
 - At least **3–4 times per day**
 - You may use more often if needed
 - Early after surgery:
 - Ice every **1-2 hours** is recommended

Heat (Avoid Early On)

- **Do NOT use heat** in the early post-operative period

Avoid Heat Products Early

- Do NOT use: Ben-Gay, Icy Hot, Etc.

Ice Machine (Optional)

- Ice machines can make icing easier and more consistent
 - Can add compression to improve swelling and pain
- Available for purchase at the brace shop
 - Insurance does not cover ice machines

Activity and Exercise After Surgery

Staying active is important for your recovery, but it's important to do so safely.

Weight Bearing

- You may **put weight on your leg as tolerated**
 - Unless instructed otherwise by Dr. Burrow
- Use your comfort level as a guide

Walking

- Walk around your home **multiple times per day**
- Short, frequent walks are best
 - This helps: Improve circulation, reduce swelling, & Prevent blood clots

Assistive Devices

- Use a **walker or crutches** as directed by physical therapist
 - Continue using them until cleared by physical therapy or surgical team

Driving

- Do **NOT drive while taking pain medication**
- Do **NOT drive until cleared** by your physical therapist or physician
- **Note:** Recovery time may be **longer for right knee replacements**

Exercises: First 2 Weeks After Surgery

Perform these exercises until you begin physical therapy or receive further instructions from your physician.

exercise pictures and instructions were chosen from HEP2go.com

Ankle Pumps

- **Frequency:** 10 times per hour while awake
- **How to perform:**
 - Move your foot **up and down at the ankle joint**
- **Why this helps:**
 - Improves blood flow
 - Helps prevent blood clots



Walking

- Walk using a **walker or crutches**
- **Gradually increase your distance** as tolerated
- **Tips:**
 - Take short, frequent walks
 - Listen to your body—do not overdo it



Incentive Spirometer (Breathing Exercise)

- **Frequency:** 10 times per hour while awake
- **How to perform:**
 - Exhale normally
 - Place your mouth tightly around the mouthpiece
 - Breathe in **slowly and deeply**
 - Watch the marker rise—try to get it as high as possible
 - Hold your breath for **1 second**, then relax
- **Why this helps:**
 - Keeps your lungs clear
 - Helps prevent pneumonia



Heel Slides

- **Frequency:** 3 times per day
- **Repetitions:** 10
- **Hold:** ~2 seconds
- **How to perform:**
 - Sit in a chair and place your foot on a **small towel**
 - Slowly slide your foot **toward you**, bending your knee
 - Hold for 2 seconds
 - Slide your foot back to the starting position
- **Tips:**
 - Move slowly and with control
 - Go as far as comfortable without forcing the motion



Extension Stretches

- **Frequency:** 3 times per day
- **Duration:** Hold for **5–10 minutes**
- **How to perform:**
 - Sit in a chair and place your foot on another chair or stool
 - Let your knee **straighten using gravity**
 - Gently press the back of your knee downward



Straight Leg Raise

- **Frequency:** 3 times per day
- **Repetitions:** 10
- **Hold:** ~2 seconds
- **How to perform:**
 - Lie on your back and keep your knee **straight**
 - Slowly raise your leg
 - Hold for 2 seconds, then lower slowly
- **Important:**
 - It may be difficult to lift your leg at first—**this is normal** . Continue trying and progress gradually



God Bless your recovery! I have already prayed for you during your surgery and will continue to do so. ZPB