

Early knee replacement motion guide

A practical companion to your physical therapist's home program. For adults after a primary total knee replacement, once the treating team has approved the movements.

Check your instructions first.

This is not an ACL, meniscus-repair, fracture, revision-surgery, or tendon-repair protocol. Your surgeon's restrictions and your PT's exercise plan take priority.

Bend. Straighten. Activate.

The early focus is restoring comfortable knee motion and thigh-muscle control while managing swelling. Work on both bending and straightening; do not force your knee to match someone else's recovery.

Use the dose your team prescribed

The exercise pages explain technique. Your PT selects repetitions, holds, and daily frequency. Use your current prescription until the plan below is completed; these exercises are not an extra hourly routine.

My operated knee: _____ Surgery date: _____

PT / surgeon: _____

Restrictions / motion targets: _____

Know when to get help

Call emergency services: sudden chest pain or shortness of breath.

Contact your surgical team promptly: new or increasing calf pain/swelling, fever, wound drainage, spreading redness, uncontrolled pain, or new persistent numbness/tingling. Stop the exercise rather than stretching through these symptoms.

This focused guide does not replace your walking, circulation, wound-care, medication, or clot-prevention instructions.

01 / Bend & activate

Heel slide



LEFT / Start with the leg supported. RIGHT / Bend with gentle assistance.

START / Lie or sit securely with the operated leg supported.

MOVE / Slide the heel toward you. If your PT has shown you strap assistance, use your arms gently rather than pulling hard. Ease the leg back out.

NOTICE / Keep the movement controlled. Do not chase a painful bend.

My dose: ____ repetitions · ____ second hold · ____ sessions/day

Quad set



START / Support your leg in the position your PT taught you.

MOVE / Tighten the front of your thigh and gently try to straighten the knee. Relax between efforts.

NOTICE / The strap shown is optional. It should not turn this into a forceful calf stretch.

My dose: ____ repetitions · ____ second hold · ____ sessions/day

02 / Move & straighten

Assisted seated knee motion



LEFT / Assist toward straight. RIGHT / Lower slowly into a comfortable bend.

START / Sit in a stable chair with the thigh supported. Use the other leg to help support the operated leg, as shown.

MOVE / Gently assist the knee toward straight, then lower slowly into a comfortable bend. Use only the range your team has approved.

PROGRESS / Reduce assistance only when your PT confirms you can control the motion. Do not add ankle weights on your own.

My dose: ____ repetitions · ____ second hold · ____ sessions/day

Supported knee straightening

Heel support, no added weight.

If approved, rest the heel/ankle on a small support so the knee can gently relax toward straight. Ask your PT to demonstrate the height, position, and duration. Avoid prolonged resting with a pillow only behind the knee.

My hold: ____ seconds/minutes · ____ sessions/day

PT-selected setup: _____

Do not add a weight over the knee or use heat unless your treating team has specifically recommended it. Use only the hold time your PT selected.

After the session

A mild stretch may be acceptable; sharp or increasing pain is a reason to stop. If symptoms or swelling remain worse afterward or into the next day, reduce the exercise dose and contact your PT for guidance. Follow your team's swelling-management plan.

When straightening remains limited

Optional / PT-directed progression.

Use this weighted stretch only after your PT has assessed the persistent loss of straightening and approved it for your stage of recovery. It is not a routine starting exercise for every knee replacement.



Original demonstration / Bag of rice used as an adjustable external load. Your PT must demonstrate your exact setup.

A gentle, sustained extension stretch

SET UP / Sit securely with the heel/ankle supported and the knee free to straighten. Your PT should show you exactly where to place a sealed bag of rice or another prescribed light load, avoiding the incision and sensitive areas.

HOLD / Relax into a mild stretch behind the knee for the prescribed time. Do not press down with your hands or increase the load to force the knee straight.

STOP / Remove the load for sharp or increasing pain, numbness, tingling, skin irritation, or a change in foot color or temperature. Contact your PT if pain or swelling remains worse afterward.

My PT-selected plan

Approved by: _____ Date: _____
Exact placement / support: _____
Load: _____ Hold: _____ Frequency: _____
Progression / review date: _____

The photo does not prescribe the weight or duration. Do not heat the rice bag for this exercise unless your treating team separately approves heat. Persistent or worsening extension loss needs reassessment, not simply more weight.

Reference: King's College Hospital / Intermediate knee replacement exercises, weighted extension (page 3). Dosing and setup here are deliberately left for the treating PT.

03 / Track the trend

Use the same position and method each time. Ask your PT to demonstrate measurement and record the setup. Without a measuring tool, describe function and symptoms rather than guessing degrees.

Write extension clearly.

0° means straight. Record "lacks 5°" if the knee stops 5° short of straight; record "2° hyperextension" if it goes past straight. Use your PT's target, which may differ from the other knee.

Bending needs vary by activity. Walking uses less flexion than many stairs and chair tasks; 110-120° is not a universal walking requirement. Avoid treating a single number as an early deadline.

Measurement setup: _____

My PT-selected target: _____

Date	Bend (°)	Straightening (e.g., lacks 5°)	Pain / swelling response	Notes / next step

Questions for my next visit: _____

Sources & scope

AAOS / Total Knee Replacement Exercise Guide
 MedlinePlus / Taking care of your new knee joint
 Rowe et al. / Knee motion during functional activities
 MedlinePlus / Knee replacement discharge guidance

Revised October 26, 2026 by Benjamin Harris, DPT. Original demonstration photographs retained. Exercises and dosing must be individualized by the treating team. Educational information; not an individual treatment prescription.