Defining normal

Advanced technology should lead to extraordinary outcomes. Using cutting edge computer simulation, JOURNEY II TKA is designed to restore the function of the normal knee; replicating anatomic shape, position and motion resulting in a smoother recovery, improved function and higher patient satisfaction.1-8
Rediscover normal

The anatomical shape of JOURNEY II TKA is designed to help patients rediscover their normal through a smoother recovery, improved function and higher patient satisfaction.²-⁸
Designing normal

The JOURNEY II Knee System is engineered with state-of-the-art computer simulation and optimization techniques utilized in aerospace and automotive design processes. Smith & Nephew leveraged this technology to create Computer Aided Design (CAD) models and run them through a computer knee simulator (proprietary, enhanced version of LifeMOD/KneeSIM°) to analyze knee implant design impacts on various load-bearing activities; such as, deep knee bend and gait simulation.⁹
Normal shape

Medial concavity and lateral convexity of the tibial geometries restored

Prominent posterior medial lip designed to provide stability in mid-flexion
Convex lateral surface designed to promote native rollback

Medial concavity designed to promote anatomic medial pivot

Accurate replication of anatomic, asymmetric femoral profile

Mechanical axis
Bone resection
3° physiological joint line
The JOURNEY™ II knee is designed with an anterior tibial sulcus intended to restore the native knee’s normal starting AP position and prevent paradoxical motion.

The JOURNEY II knee has an anterior dwell point and 3° varus jointline which has been designed to restore the natural patellar tendon angle and improve patella tracking.
Normal motion

0°
The anatomic position in full extension is designed to reduce paradoxical motion.

1-90°
Concave medial tibia designed to provide stability, while convex lateral is intended to drive external rotation.

90+°
Bi-lateral posterior translation designed to maximize deep flexion.
Rediscover normal

Smother recovery

JOURNEY® II TKA has been demonstrated to significantly improve flexion by enabling range of motion improvement earlier in the recovery period.

Improved function

The normal knee designs of JOURNEY II TKA have shown to deliver improvements in both knee function and motion with increased medial/lateral (M/L) stability mid-flexion.

Higher patient satisfaction

Quicker recovery, improved function and normal kinematic patterns of motion lead to high levels of patient satisfaction.

Economic Value

Patients were 51% less likely to be readmitted to hospital within 30 days, and were 41% less likely to be discharged to a skilled nursing facility when compared with other total knee systems. Patients experienced significantly reduced mean patient hospital costs, and experienced significantly reduced mean length of hospital stay.
References


2. Mayman DJ, Patel AR, Carroll KM. Hospital Related Clinical and Economic Outcomes of a Bicruciate Knee System in Total Knee Arthroplasty Patients. Poster presented at: ISPOR Symposium; May 19-23, 2018; Baltimore, Maryland, USA.


For detailed design information please reference the 00225 JOURNEY® II TKA Design Rationale.

For detailed product information, including indications for use, contraindications, precautions and warnings, please consult the product’s applicable Instructions for Use (IFU) prior to use.