

Patient Reported Outcome Measures for Total Knee Replacement: Measuring What Matters to Patients

Tracking recovery after knee replacement using two PROMs: the Knee Society Score and SF-36v2

Patient-Reported Outcome Measures (PROMs) capture how patients feel and function after treatment — from their own perspective.

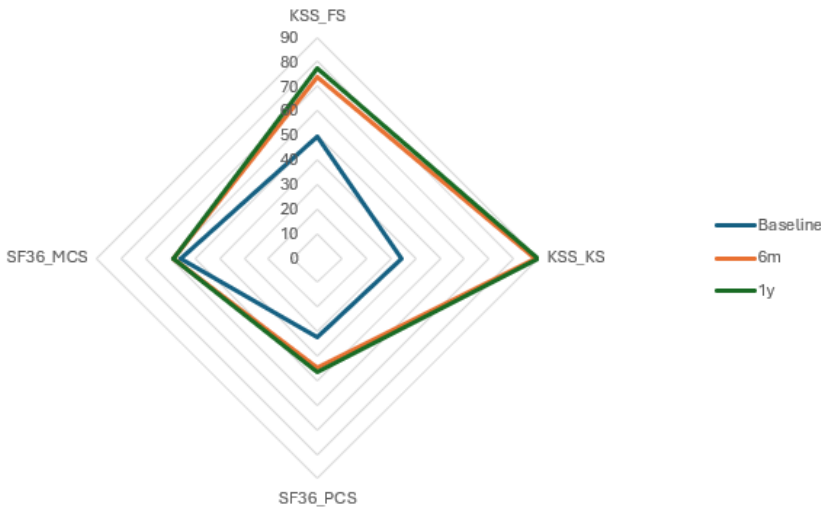
They help us understand recovery beyond clinical tests or X-rays, focusing on **pain, mobility, and quality of life**.

For knee replacement, we use two well-known PROMs:

- **Knee Society Score (KSS)**: measures pain relief and ability to move or perform daily activities.
- **SF-36v2**: (Short Form) measures overall physical and mental wellbeing.

By tracking these scores before surgery (baseline), and again at **6 months** and **1 year**, we can see how patients recover and where care can improve.

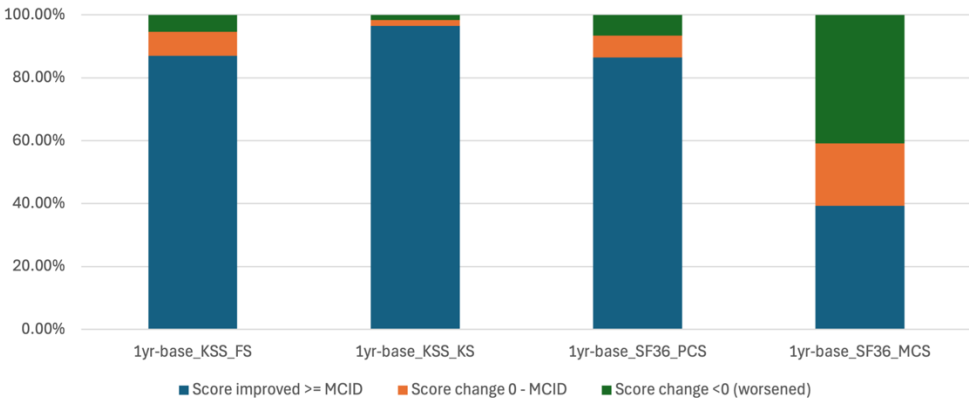
Radar Graph of Changes in Average Absolute PROMs Scores Over Time (KSS & SF-36)



- We examined 3,798 patient’s responses to these PROMs scores from 2015 – 2025
- Most patients showed **clear improvement in their Knee Society Scores (KSS)** at **6 months** and **1 year** after surgery.
- This means they had **less pain, better joint stability**, and could **walk or climb stairs more easily**.
- **Physical health (SF-36 PCS)** also improved, showing patients could **return to daily activities** with less discomfort.
- **Mental wellbeing (SF-36 MCS)** improved slightly, meaning patients **generally felt better overall** after recovery.

Bar Graph - % of Patients Felt Meaningful Improvement After Surgery
MCID = Minimal Clinically Important Difference (9.7 for KSS, 4 for SF-36)

- Most patients showed a **meaningful improvement** in knee function and pain relief one year after surgery.
- Over **96% improved** in their **KSS Knee Score** – reflecting a significant improvement for the vast majority of our patients.
- Fewer patients improved in **mental wellbeing (SF-36 MCS)**, though many still felt slightly better overall
- This likely reflects **ongoing mental health or social challenges** that could be better supported during recovery



These results are part of a **broader set of outcomes that track our quality of care** tracked by the **Value-Driven Outcomes Office**, reflecting **NUH’s ongoing efforts to measure and improve what truly matters to patients**.