Surgical Threshold Policy

NHS
Cambridgeshire and Peterborough
Clinical Commissioning Group

Primary Knee Replacement Surgery

Scope

This policy covers referrals for primary ***elective***[i] total knee replacement (TKR)[i] to replace some or all of the components of the knee joint with a synthetic implant, and repair damaged weight bearing surfaces. **Note: Revision knee replacement is funded by NHS England and not the CCG.**

Policy

It is the responsibility of referring and treating clinicians to ensure compliance with this policy. Referral proforma should be attached to the patient notes to aid the clinical audit process and provide evidence of compliance with the policy. For patients not meeting the policy criteria, clinicians can apply for funding to the Exceptional Cases Panel by completing the exceptional funding section of the referral proforma.

The CCG will **ONLY** fund referral for consideration of TKR in patients meeting the following criteria.

1. Uncontrolled, intense, persistent pain resulting in substantial impact on quality of life and moderate functional limitations which have failed a reasonable period of maximal conservative treatment as defined in Table 1[ii].

   AND

2. Symptoms ***refractory*** to ***at least 6 months*** conservative management for the condition.

PRIOR CONSERVATIVE MANAGEMENT MUST INCLUDE ALL OF THE FOLLOWING

Medication

- Optimum tolerated doses of analgesic should be used, and patients should have gained an understanding of how to use oral or topical analgesics (Paracetamol, NSAIDs or Opioid analgesics).
- Intra-articular corticosteroid injections could be considered as an adjunct to analgesia.

AND Physiotherapy

- NICE "core" treatments of either guided exercise and muscle strengthening programmes or of supervised physical therapy must have been given.

AND Patient Education and Orthosis

- Patient education such as elimination of damaging influence on knees (by reducing weight loading), activity modification (avoid impact and excessive exercise) and lifestyle adjustment.
- Patients must have been advised about, and/or assessed for, clinically appropriate walking aids and home adaptations.

AND Lifestyle improvement

- It is strongly advised to reduce BMI to less than 35 kg/m^2 as this may reduce complications and improve outcomes. Patients with a BMI greater than 35 kg/m^2 should be routinely offered referral to a weight management service to reduce these risks.

Smoking: Patients who smoke should be advised to attempt to stop smoking and referred to stop-smoking services – **see stop smoking policy.**

Note: physiotherapy may be ineffective in bone-on-bone osteoarthritis and, therefore, physiotherapy/exercises may not be relevant to onward referral.

Knee Resurfacing in conjunction with knee replacement will receive the same tariff as knee replacement (where clinically appropriate and patient meets the criteria for knee replacement).

Knee Resurfacing as a stand-alone procedure is a low priority treatment and will not be funded without exceptional cases panel approval.

Patients' (and carers' as appropriate) expectations of surgery, and the likely degree of additional benefit that may be obtained from surgery compared with continuing conservative management, must have been discussed in primary/intermediate care.

[i]The policy does not affect criteria for Immediate/Urgent Referral to Orthopaedic Services in respect of:

- Evidence of infection in the knee joint.
- Symptoms indicating a rapid deterioration in the joint.
- Persistent symptoms that are causing severe disability.

[ii]Table 1: Classification of surgical criteria

Level of pain	Definition
Slight	▪ Sporadic Pain. ▪ Pain when climbing and descending stairs. ▪ Allows daily activities to be carried out (those requiring great physical ability may be limited). ▪ Medication: Aspirin, Paracetamol or NSAIDs (Non-Steroidal Anti-Inflammatory Drugs) to control pain with no/few side effects.
Moderate	▪ Occasional pain. ▪ Pain when walking on level surfaces (half an hour or standing). ▪ Some limitation of daily activities. ▪ Medication: Aspirin, Paracetamol or NSAIDs to control pain with no/few side effects.
Intense	▪ Pain of almost continuous nature. ▪ Pain when walking short distances on level surfaces or standing less than half an hour. ▪ Activities of daily living (ADL)* significantly limited. ▪ Continuous use of NSAID for treatment to take effect. ▪ Requires the sporadic use of support systems (walking stick, crutches).
Severe	▪ Continuous pain. ▪ Pain when resting. ▪ Activities of daily living* significantly limited constantly. ▪ Continuous use of analgesics-narcotics/NSAIDs with adverse effects or no response. ▪ Requires more constant use of support systems (walking stick, crutches).
Functional limitations	**Definition**
Minor	▪ Functional capacity adequate to conduct normal activities and self-care. ▪ Walking capacity of about one hour. ▪ No aids needed.
Moderate	▪ Functional capacity adequate to perform only a few or none of the normal activities and self-care. ▪ Walking capacity of about one half hour. ▪ Aids such as a cane/walking stick are needed.
Severe	▪ Largely or wholly incapacitated. ▪ Walking capacity of less than half an hour or unable to walk or bedridden. ▪ Aids such as a cane, a walker or wheelchair are required.

***ADL** includes activities such as meal preparation, laundry, housekeeping, shopping, using the phone, driving or using public transport.

Rationale and Evidence

Purpose of TKR and patient selection

TKR is most commonly performed for knee joint failure caused by osteoarthritis (OA); other indications include rheumatoid arthritis (RA), juvenile rheumatoid arthritis, osteonecrosis and other types of inflammatory arthritis. The aims of TKR are relief of pain and improvement in function. TKR can be very successful for selected patients with over 90% of TKRs still in place and functioning well at 10 to 15 years after surgery.

Optimum selection of patients is uncertain and conservative management including supervised/group exercise and physical therapy is effective for the majority affected by osteoarthritis.

Knee Resurfacing

RCTs of knee replacement with resurfacing compared with knee replacement alone show no difference in anterior knee pain or function at follow up. Only case series studies of post-operative knee resurfacing for anterior knee pain have been published and these show mixed finding, with some patients showing improvements, but over half reporting no improvement.

Numbers of People Affected

The prevalence of symptomatic knee osteoarthritis has been estimated at 6.1% of people aged over 30 years and 7.5% of people aged over 55. It has been estimated, based on radiographic evidence, that between 14% and 34% of people over the age of 55 have osteoarthritis of the knee. Knee osteoarthritis is strongly associated with obesity and gender (chiefly affecting women) and is related to types of work that involve frequent squatting.

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Glossary

Arthritis:	Is an inflammation of one or more joints in the body, though the term is used to describe almost all problems associated with the joints.
BMI:	Body Mass Index. Obesity is defined as a BMI greater than30 kg/$m^{2.}$
NSAIDs:	Non-steroidal anti-inflammatory drugs.
Osteoarthritis:	Progressive degeneration of the joint surface causing pain and stiffness.

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