

<b>Policy Statement:</b>	<b>Primary Total Knee Replacement Surgery</b>
<b>Status:</b>	<b>Threshold</b>

Primary elective total knee replacement (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. This threshold relates to adults.

The aims of TKR are relief of pain and improvement in function. TKR can be very successful for the appropriate patients with over 90% of TKR still in place and functioning well 10 to 15 years after surgery.

### **Guidance to Primary Care on the treatment of knee pain due to osteoarthritis**

The Musculoskeletal Services Framework from the Department of Health (DoH, 2006), and guidance from the National Institute for Health and Care Excellence (NICE) suggests that;

- Management of common musculo-skeletal problems, including knee pain, in primary care is ideal
- Primary Care practitioners need to have direct access to therapy, walking aids, dietetic and health promotion services
- Management within primary care should seek to maximise the benefits of surgery and minimise the complications when this becomes necessary

The initial non-surgical management of knee pain due to osteoarthritis should be provided by a package of care which may include weight reduction, activity modification, patient specific exercise programme, adequate doses of non-steroidal anti-inflammatory drugs (NSAIDs) and analgesics, joint injection, walking aids (contralateral hand), other forms of physical therapies within a package of care. Referral should be considered when other pre-existing medical conditions have been optimised.

### **The CCG will fund referrals where the patient meets the following criteria -**

#### **Criteria for immediate/urgent referral to orthopedic services**

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

Criteria for routine referral to orthopedic services:

- Moderate to severe persistent pain not adequately relieved by an extended course of non-surgical management **AND** clinically significant functional limitation resulting in a diminished quality of life **AND** radiographic evidence of joint damage.

Guidance for secondary care on thresholds for knee replacement surgery

Evidence suggests that the following groups of patients would benefit from TKR:

**The CCG will fund surgery where the patient meets the following criteria -**

1. Where the patient complains of:

Intense or severe symptomatology **AND** has radiological features of severe disease **AND** has demonstrated disease within all three compartments of the knee (tri-compartmental) or localised to one compartment plus patella-femoral disease (bi-compartmental).

**OR**

2. Where the patient complains of:

Intense or severe symptomatology **AND** had radiological features of moderate disease **AND** is troubled by limited mobility or stability of the knee joint.

**OR**

3. Where the patient complains of:

Severe symptomatology **AND** has radiological features of slight disease **AND** is troubled by limited mobility or stability of the knee joint.

Patients who are assessed by the above criteria to be inappropriate for knee replacement surgery should not be listed for surgery.

Patients who partially fulfil the criteria for appropriate knee joint replacement surgery may benefit from the operation and a decision will need to be taken on an individual basis.

For all patients who fulfil all the criteria for surgery as indicated above, or only partially fulfil the appropriate criteria for surgery, clinicians are required to document in the medical record that they have fully informed the patient of the risks and benefits of the procedure, and have offered a patient information leaflet prior to listing the patient for surgery

There is evidence that patients who are morbidly obese (BMI>40) have increased complications following knee surgery. If morbidly obese patients are to have their knee surgery delayed because of their weight, they should be referred into a weight loss programme that meets their specific needs. There is a community weight reduction programme available in West Essex.

## References

1. National Institute for Health and Care Excellence. 'Osteoarthritis: Care and Management.' NICE Clinical Guidance CG177, 2014.
2. National Institute for Health and Care Excellence, 'Osteoarthritis, Scenario Management.' NICE Clinical Knowledge Summaries, updated 2018.
3. British Orthopaedic Association and Royal College of Surgeons, 'Commissioning Guide: Painful Osteoarthritis of the Knee.' 2017.
4. The Musculoskeletal Services Framework – A joint responsibility: doing it differently. Department of Health, 2006

Referral criteria definitions:	
Variable	Definition
<b>Mobility and stability</b>	
Preserved mobility and stable joint	<ul style="list-style-type: none"> <li>Preserved mobility is equivalent to minimum range of movement from 0° to 90°.</li> <li>Stable or not lax is equivalent to an absence of slackness of more than 5mm in the extended joint.</li> </ul>
Limited mobility and / or stable joint	<ul style="list-style-type: none"> <li>Limited mobility is equivalent to a range of movement less than 0° to 90°.</li> <li>Unstable or lax is equivalent to the presence of slackness of more than 5mm in the extended joint.</li> </ul>
<b>Symptomatology</b>	
Slight	<ul style="list-style-type: none"> <li>Sporadic pain</li> <li>Pain when climbing / descending stairs</li> <li>Allows daily activities to be carried out (those requiring great physical activity may be limited)</li> <li>Medication: aspirin, paracetamol or non-steroidal anti-inflammatory drug (NSAID) analgesia to control pain, with no Side-effects.</li> </ul>
Moderate	<ul style="list-style-type: none"> <li>Occasional pain.</li> <li>Pain when walking on level surfaces (half an hour, or standing).</li> <li>Some limitation of daily activities.</li> <li>Medication: aspirin, paracetamol or NSAID to control pain, with no / few side effects.</li> </ul>
Intense	<ul style="list-style-type: none"> <li>Pain of almost continuous nature.</li> <li>Pain when walking short distances on level surfaces or standing for less than half an hour.</li> <li>Daily activities significantly limited.</li> <li>Continuous use of NSAIDs for treatment to take effect. Requires the sporadic use of support systems (walking stick, crutches).</li> </ul>
Severe	<ul style="list-style-type: none"> <li>Continuous pain.</li> <li>Pain when resting.</li> <li>Daily activities significantly limited constantly.</li> <li>Continuous use of analgesics / NSAIDs with adverse effects or no response.</li> <li>Requires more constant use of support systems (walking stick, crutches).</li> </ul>
<b>Radiology</b>	
Slight	Ahlback grade I
Moderate	Ahlback grade II and III
Severe	Ahlback grade IV and V
<b>Localisation</b>	
Unicompartmental	Excluded patello-femoral isolated.
Bicompartmental	Unicompartmental plus patello-femoral.
Tricompartmental	Disease affecting all three compartments of the knee.

**Patients who are not eligible for treatment under this policy may be considered on an individual basis where their GP or consultant believes exceptional circumstances exist that warrant deviation from the rule of this policy. Individual cases will be reviewed as per the CCG policy.**

<b>Approved by (committee):</b>	Health and Care Commissioning Committee
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<b>Produced by:</b>	Consultant in Public Health
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