Hertfordshire and West Essex Integrated Care Board

NHS Herts and West Essex

Integrated Care Board (ICB)

Primary Knee Replacement

July 2022 V1.0

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Description	**Policy for local Evidence Based Interventions procedure**
Superseded Documents (if applicable)	**West Essex CCG – Primary Knee Replacement** **Hertfordshire CCG (Priorities Forum) – Referral criteria for patients from primary care presenting with knee pain due to ostoarthritis, and clinical threshold for elective primary knee replacement surgery**

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Document Control

Version	Page	Details of amendment	Author

The policy should include a contents page, as set out below, and be structured around all of the headings shown (although not necessarily in the same order)

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Appendices:

Each appendix will be numbered to follow on from the policy document.

Policy: **Primary Knee Replacement**

Primary elective knee replacement 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.

Relevant OPCS(s):
W40 – Total prosthetic replacement of knee joint using cement
W41 – Total replacement of knee joint not using cement
W42 – Other total replacement of knee joint

Recommendations
The aims of knee replacement are relief of pain and improvement in function, and this operation can be very successful for the appropriate patients. A small number of patients who have elective knee replacement experience complications which can be devastating and for this reason patients should not be considered for joint replacement until their condition has become chronic and conservative methods have failed.

Guidance to Primary Care on the treatment of knee pain due to osteoarthritis
The Musculoskeletal Services Framework from the Department of Health (DH), and guidance from NICE, the GP Training Network and the National Institute of Health (NIH) Consensus Panel 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 osteoarthitis 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, and there has been evidence of weight reduction to an appropriate weight. Patients who are overweight (BMI 25 – 29.9) or obese (BMI >30) should be encouraged and supported to reduce their BMI [6]. Equally, patients who smoke should be encouraged to stop smoking at least 8 weeks before surgery to reduce the risk of anaesthetic or operative complications.

There are few absolute contraindications for knee replacement other than active local or systemic infection and other medical conditions that substantially increase the risk of serious peri-operative complications or death. Advanced age and obesity are not a contraindication to knee replacement; however, there may be an increased risk of delayed wound healing and peri-operative infection in obese patients. Severe peripheral vascular disease and some neurological impairments are both relative contraindications to knee replacement.

Referral criteria for immediate or urgent referral to orthopaedics services should be based on NICE referral guidance1

NICE recommendations state that the threshold for immediate referral to orthopaedic services is when there is evidence of infection in the knee joint.

Symptoms that are suggestive of a rapid deterioration in the joint or persistent symptoms which are causing severe disability necessitate urgent referral to orthopaedic services.

Referral criteria for routine referral to orthopaedic services

Candidates for elective knee replacement should have:

- Moderate-to-severe persistent pain not adequately relieved by a course of non-surgical management lasting at least 6 months*
- **AND** Clinically significant functional limitation resulting in diminished quality of life*
- **AND** Radiographic evidence of joint damage.

*The severity of pain should be assessed using Oxford Knee Score. http://www.orthopaedicscore.com/scorepages/oxford_knee_score.htm. For patients with a score of 0-19 consideration should be given for orthopaedic surgical opinion and the patient meets local BMI criteria. For patients with a score of 20-29 conservative measures should be continued for 3-6 months, with referral if no improvement after this time.

Guidance for secondary care on thresholds for knee replacement surgery

Evidence suggests that the following patients would benefit from knee replacement surgery6, 7

1. Where the patient complains of
   a. At least intense symptomatology *(please refer to the appendix for a detailed definition)*
   b. **AND** has radiological features of severe disease *(please refer to the appendix for a detailed definition)*
   c. **AND** has demonstrated disease within all three compartments of the knee (tricompartmental) or localised to one compartment plus patello-femoral disease (bicompartmental)

2. Where the patient complains of
   a. At least intense symptomatology
   b. **AND** has radiological features of moderate disease
   c. **AND** is troubled by limited mobility or stability of the knee joint

3. Where the patient complains of
   a. Severe symptomatology
   b. **AND** has radiological features of slight disease
   c. **AND** is troubled by limited mobility or stability of the knee joint

Unicompartmental knee replacement

In some patients with arthritis confined to the medial compartment of the knee a unicompartmental knee replacement (UKR) may be suitable[8]. A UKR is less invasive that TKR, and is associated with a faster recovery and lower risk of postoperative complications

and mortality. However, UKR is also associated with a higher rate of revision. Surgeon usage of UKR has an impact on outcomes, and so cost-effectiveness of the procedure[9]. To achieve the best results, surgeons need to perform a sufficient proportion of knee replacements as UKR.

Recommendations

- UKR may be considered for end-stage, symptomatic osteoarthritis of the knee that is confined to the medial compartment and confirmed by standing X-Ray.
- Initial non-surgical management must have been provided as outlined earlier in this guidance.
- The procedure must be undertaken by a surgeon who can evidence that they complete a minimum of 12 unicompartmental knee replacements per year[9,10].
- Surgeons must have an audit dataset that they will submit to commissioner for review on an annual basis

Patella Resurfacing

We would expect patellar resurfacing to be done at the time of TKR if the patient has anterior knee pain.

Due to lack of sufficient evidence of clinical benefit and cost effectiveness to support routine resurfacing of the patella alone, patellar resurfacing is considered to be LOW PRIORITY and will not be funded. There is no OPCS code for patella resurfacing.

Notes

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.

References

1. National Institute of Clinical Excellence. Primary Care Referral Guidelines for Common Conditions. NICE 2003;London.
2. GP-training.net. Orthopaedic Referral Guidelines
3. National Institute of Health. Consensus Development Program. Dec 2003. See also the National Guideline Clearing House (www.guideline.gov).
4. British Orthopaedic Association. Total Knee Replacement; A Guide to Best Practice. 2001
5. The Musculoskeletal Services Framework – A joint responsibility: doing it differently. Department of Health, 2006
6. Development of explicit criteria for total knee replacement by Escobar A et al.. International Journal of Technology Assessment in Healthcare, 19:1 (2003), p57-70
7. Health-related Quality of Life and Appropriateness of Hip or Knee Joint Replacement by Quintana J et al. Archives of Internal Medicine. 2006; 166:p220-226
8. Unicompartmental knee replacement – Current perspectives Campi S et al. Journal of Clinical Orthopaedics and Trauma 9 (2018) 17-23

9. Cost-effectiveness of unicompartmental compared with total knee replacement: a population-based study using data from the National Joint Registry for England and Wales. Burn E, Liddle AD, Hamilton TW et al. BMJ Open 2018:8:e020977.doi:10.1136/bmjopen-2017-020977
10. Royal College of Surgeons. Commissioning Guide: Painful Osteoarthritis of the knee. 2017
11. http://www.boa.ac.uk/wp-content/uploads/2014/01/tkr_good_practice.pdf

Human Rights and Equalities Legislation has been considered in the formation of this guidance document.

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 ICB policy.