

Commissioning Statement:

Condition or Treatment:	Knee Replacement for knee Arthritis
Summary of Intervention:	<p>Many people with knee osteoarthritis do not require joint surgery and can adequately manage their symptoms with compliance to a comprehensive non-surgical programme including appropriate use of analgesia, lifestyle modification, weight reduction and exercise therapy.</p> <p>Clinicians with responsibility for referring a person with osteoarthritis for consideration of joint surgery, should ensure that the person has been offered the recommended non-surgical treatment options (NICE CG177) and meet the criteria listed in this policy.</p> <p>Patients who have persistent or progressive symptoms, despite comprehensive non-operative management and good patient engagement and participation in therapy programmes, should share in the decision for referral for surgical assessment. This should include:</p> <ul style="list-style-type: none"> • Confirmation of willingness to undergo surgery • The benefits and risks of surgery • The potential consequences of not having surgery • Recovery timescales and rehabilitation requirements after surgery
Policy Exclusions:	<p>This policy does not apply to:</p> <ul style="list-style-type: none"> • Children under 16 • Knee replacements required due to acute trauma • Cancer
Commissioning Position:	<p>Referrals for surgical opinion should be made if patients present with one of the following:</p> <ul style="list-style-type: none"> • Patient complains of intense or severe pain (please refer to the classification of symptomology table below) OR • Patient has radiological features of severe degenerative change or bone loss OR • Has demonstrated disease within all three compartments of the knee (tri-compartmental) or localised to one compartment plus patello-femoral disease (bi-compartmental). OR • Patient has radiological features of moderate disease AND is troubled by limited joint mobility

	<p>AND limited stability of the knee joint OR</p> <ul style="list-style-type: none"> Patients who have demonstrated good compliance to a comprehensive non-operative programme including NSAID's and analgesics, weight reduction, lifestyle modification and participation in therapy programmes <p>AND continue to present with moderate to intense symptomology (please refer to the classification of symptomology table below) AND are troubled by limited mobility and/or stability of the knee</p> <p>Classification of pain levels and functional limitations are described in the table below:</p> <p>For Knee Replacement: Classification of Symptoms</p>																		
	<table border="1"> <thead> <tr> <th>Variable</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td colspan="2">Mobility and Stability</td> </tr> <tr> <td>Preserved mobility and stable joint</td> <td>Preserved mobility is equivalent to minimum range from 0° to 90°. Stable or not lax is equivalent to an slackness of more than 5mm in the extended joint.</td> </tr> <tr> <td>Limited mobility and/or stable joint</td> <td>Limited mobility is equivalent to a range of movement to 90o unstable or lax is equivalent to the presence more than 5mm in the extended joint.</td> </tr> <tr> <td colspan="2">Symptomology</td> </tr> <tr> <td>Mild</td> <td>Sporadic pain. Able to carry out daily activities (those requiring great physical activity may be limited). Analgesia medication controls pain with no/few side effects.</td> </tr> <tr> <td>Moderate</td> <td>Occasional pain. Pain walking on level surfaces (half an hour or standing). Some limitation of daily activities. Analgesia medication controls pain with no/few side effects.</td> </tr> <tr> <td>Intense</td> <td>Pain of almost continuous nature. Pain walking short distances on level surfaces or standing for less than half an hour. Daily activities significantly limited. Continuous use of analgesia medication to take effect. Requires the sporadic use of walking aid</td> </tr> <tr> <td>Severe</td> <td>Continuous pain. Pain at rest. Daily activities significantly limited constantly. Continuous use of analgesia medication with adverse effects or poor response. Requires more constant use of walking aid</td> </tr> </tbody> </table>	Variable	Definition	Mobility and Stability		Preserved mobility and stable joint	Preserved mobility is equivalent to minimum range from 0° to 90°. Stable or not lax is equivalent to an slackness of more than 5mm in the extended joint.	Limited mobility and/or stable joint	Limited mobility is equivalent to a range of movement to 90o unstable or lax is equivalent to the presence more than 5mm in the extended joint.	Symptomology		Mild	Sporadic pain. Able to carry out daily activities (those requiring great physical activity may be limited). Analgesia medication controls pain with no/few side effects.	Moderate	Occasional pain. Pain walking on level surfaces (half an hour or standing). Some limitation of daily activities. Analgesia medication controls pain with no/few side effects.	Intense	Pain of almost continuous nature. Pain walking short distances on level surfaces or standing for less than half an hour. Daily activities significantly limited. Continuous use of analgesia medication to take effect. Requires the sporadic use of walking aid	Severe	Continuous pain. Pain at rest. Daily activities significantly limited constantly. Continuous use of analgesia medication with adverse effects or poor response. Requires more constant use of walking aid
Variable	Definition																		
Mobility and Stability																			
Preserved mobility and stable joint	Preserved mobility is equivalent to minimum range from 0° to 90°. Stable or not lax is equivalent to an slackness of more than 5mm in the extended joint.																		
Limited mobility and/or stable joint	Limited mobility is equivalent to a range of movement to 90o unstable or lax is equivalent to the presence more than 5mm in the extended joint.																		
Symptomology																			
Mild	Sporadic pain. Able to carry out daily activities (those requiring great physical activity may be limited). Analgesia medication controls pain with no/few side effects.																		
Moderate	Occasional pain. Pain walking on level surfaces (half an hour or standing). Some limitation of daily activities. Analgesia medication controls pain with no/few side effects.																		
Intense	Pain of almost continuous nature. Pain walking short distances on level surfaces or standing for less than half an hour. Daily activities significantly limited. Continuous use of analgesia medication to take effect. Requires the sporadic use of walking aid																		
Severe	Continuous pain. Pain at rest. Daily activities significantly limited constantly. Continuous use of analgesia medication with adverse effects or poor response. Requires more constant use of walking aid																		

	<p>Rapid joint deformity / leg shortening</p> <p>Oxford Knee Score The Oxford knee score provides a single summed score which reflects the severity of problems that the respondent has with their knee and can be used when considering referral.</p> <p>It may help a clinician assess the severity of knee disease but should not be used as an arbitrary threshold. A score below 20 may indicate severe knee arthritis and it is highly likely that these patients may well require some form of surgical intervention and therefore may benefit from a surgical opinion.</p> <p>The Oxford Knee Score can be found at: http://www.orthopaedicscore.com/scorepages/oxford_knee_score.html</p> <p>Further guidance available at: http://www.bjj.boneandjoint.org.uk/content/89-B/8/1010.full</p> <p>NICE Guidance: https://www.nice.org.uk/guidance/cg177/chapter/1-Recommendations#referral-for-consideration-of-joint-surgery-2 https://www.nice.org.uk/guidance/cg189/chapter/1-Recommendations#identification-and-classification-of-overweight-and-obesity</p> <p>Conservative Management</p> <ul style="list-style-type: none"> • Patients with knee pain, without red flag or acute trauma indications, should be managed in line with the North Yorkshire CCG pathways and should not normally be referred for surgical opinion before all appropriate non-surgical management options have been tried and have not been effective or are judged likely to be ineffective. • Referral should be when other pre-existing medical conditions have been optimised AND conservative measures have been exhausted / failed. • Conservative measures include weight reduction, analgesia, education on OA and the management of symptoms, referral to physiotherapy if required, lifestyle modification such as increased physical activity, exercise, and introducing a walking aid. • Patients who are symptomatically better or who are improving with non-surgical management should not usually be referred for surgical assessment.
--	---

	<p>Shared Decision Making</p> <ul style="list-style-type: none"> • Patients who have persistent or progressive symptoms, despite comprehensive non-operative management and good patient engagement and participation in therapy programmes, should have a shared decision making conversation to consider referral for surgical assessment. • This should include an understanding of rehabilitation requirements and likely duration of recovery and confirmation of willingness to undergo surgery. • The evidence for risks, benefits and differences in outcomes between surgical intervention and continued non-operative management should be included in this conversation, with a discussion of the patient's treatment / outcome goals. • The patient and the clinician should reach a shared decision whether to proceed with referral / surgical intervention. <p>Lifestyle Factors</p> <ul style="list-style-type: none"> • All patients being referred for knee pain should have an assessment of their BMI and smoking status, as well as other 'lifestyle factors' that may influence their long term health outcomes, as part of a 'making every contact count' approach to providing health care services. • All patients who would benefit from a health improvement intervention to address weight management, smoking or other factors should be made a meaningful offer of support for this at appropriate stages in their conservative management and in all instances before referral is made for surgical assessment. • Patients with a BMI of >40 (the super-obese) are at increased risk of surgical complications and careful consideration should be given for surgery • If there are specific indications where delay would increase bone loss and prolong suffering, the individual decision should be made by the clinician, with the patient, balancing the clinical risk against the perceived benefits.
Effective From:	1 July 2021
Summary of evidence/ rationale:	<p>20% of adults over 50 and 40% over 80 years report disability from knee pain secondary to osteoarthritis⁹. The majority of patients present to primary care with symptoms of pain and stiffness which reduces mobility and with associated reduction in quality of life.</p> <p>Osteoarthritis may not be progressive and most patients will not need surgery with their symptoms adequately controlled by non-surgical measures as outlined by NICE ¹ .</p>

	<p>When patient's symptoms are not controlled by up to 3 months of non-operative treatment they become candidates for assessment for joint surgery. The decision to have joint surgery is based on the patient's pre-operative levels of symptoms, their capacity to benefit, their expectation of the outcome and attitude to the risks involved. Patients should make shared decisions with clinicians, using decision support such as the NHS Decision Aid for managing osteoarthritis https://musculoskeletal.cochrane.org/sites/musculoskeletal.cochrane.org/files/public/uploads/What%20are%20my%20options%20for%20managing%20hip%20or%20knee%20osteoarthritis%20%20June%202015.pdf</p> <p>Obesity is an increasing problem in the population and also a significant risk factor for osteoarthritis. It is often associated with comorbidities such as diabetes, ischemic heart disease (IHD), hypertension (HT) and sleep apnoea. Some years ago, an Arthritis Research Campaign Report ⁷ stated that joint surgery is less successful in obese patients because:</p> <ul style="list-style-type: none"> • Obese patients have a significantly higher risk of a range of short-term complications during and immediately after surgery (e.g. longer operations, excess blood loss requiring transfusions, deep vein thrombosis (DVT) and wound complications including infection). • The heavier the patient, the less likely it is that surgery will bring about an improvement in symptoms (e.g. they are less likely to regain normal functioning or reduction in pain and stiffness). • The implant is likely to fail more quickly, requiring further surgery (e.g. within 7 years, obese patients are more than ten times as likely to have an implant failure). • People who have joint replacement surgery because of obesity related osteoarthritis are more likely to gain weight post operatively (despite the new opportunity to lose weight through exercise following reduction in pain levels). <p>It also concluded that "Weight loss and exercise combined have been shown to achieve the same level of symptom relief as joint replacement surgery". A study of obese patients with knee osteoarthritis found that those who dropped their weight by 10% after a combination of diet and exercise reported less pain, better knee function, improved mobility and enhanced quality of life ⁸.</p> <p>A recent extensive literature review advises assessment of "timely weight loss as a part of conservative care"⁹. It confirms in detail the increased risk of many perioperative and postoperative complications associated with obesity (as well as increased costs and length of stay), such as wound healing/infections; respiratory problems; thromboembolic disease; dislocation; need for revision surgery; component malposition; and prosthesis loosening.</p>
Date:	October 2020

Review Date:	July 2023
Contact:	Dr C Ives, Governing Body GP North Yorkshire CCG

Additional Information/References:

1. .Care and Management of Osteoarthritis NICE Clinical Guidelines CG177 Feb 2014
<http://www.nice.org.uk/guidance/CG177/chapter/1-Recommendations#referral-for-consideration-of-joint-surgery->
2. .Optimising Outcomes from Elective Surgery Commissioning Statement
3. .Obesity prevention NICE CG 43 Dec 2006; last amended March 2015
<https://www.nice.org.uk/guidance/cg43>
4. .RightCare shared decision-making tools
5. NHS Choices:
<http://www.nhs.uk/chq/Pages/849.aspx?CategoryID=51&SubCategoryID=165>
6. Royal College of Surgeons Commissioning Guides: Painful osteoarthritis of the knee November 2013
<https://www.rcseng.ac.uk/library-and-publications/rcs-publications/docs/osteoarthritis-knee-guide/>
7. Arthritis Research Campaign: "Osteoarthritis and Obesity" (2009)
<http://www.arthritisresearchuk.org/external-resources/2012/09/17/15/29/osteoarthritis-and-obesity-a-report-by-the-arthritis-research-campaign.aspx>
8. Effects of intensive diet and exercise on knee joint loads, inflammation, and clinical outcomes among overweight and obese adults with knee osteoarthritis: the IDEA randomised controlled trial Messier et al JAMA 310(12) 1263-73 (2013)
<http://www.ncbi.nlm.nih.gov/pubmed/2406501>
9. Obesity and total joint arthroplasty: a literature based review. Journal of Arthroplasty May 2013
[http://www.arthroplastyjournal.org/article/S0883-5403\(13\)00174-5/abstract](http://www.arthroplastyjournal.org/article/S0883-5403(13)00174-5/abstract)