

Equality Analysis

(Health Inequalities, Human Rights, Social Value)

Policy Knee Arthroscopy for Acute Knee Injury

Before completing this equality analysis it is recommended that you:

- ✓ Contact your equality and diversity lead for advice and support
- ✓ Take time to read the accompanying policy and guidance document on how to complete an equality analysis

1. Background

EA Title	Policy Knee Arthroscopy for Acute Knee Injury		
EA Author	David King	Team	Equality and Diversity
Date Started		Date Completed	
EA Version	1	Reviewed by E&D	

What are the intended outcomes of this work? Include outline of objectives and function aims

The Knee

The 3 bones that meet in the knee are the:

- thigh bone (femur)
- shin bone (tibia)
- kneecap (patella)

These bones are connected by 4 ligaments – 2 collateral ligaments on the sides of the knee and 2 cruciate ligaments inside the knee.

Ligaments are tough bands of connective tissue. The ligaments in the knee hold the bones together and help keep the knee stable.

The menisci are thick pads of cartilage tissue within the knee which act as shock absorbers to absorb body weight and help improve smooth movement and stability of the knee.

The two main areas within the knee which may be damaged by an acute injury include:

1. Menisci (cartilage)
2. Ligaments

1. Menisci.

What is the knee meniscus?

The menisci are thick pads of cartilage tissue within the knee which act as shock absorbers to absorb body weight and help improve smooth movement and stability of the knee. Each knee joint contains a medial and lateral meniscus (inner and outer meniscus).

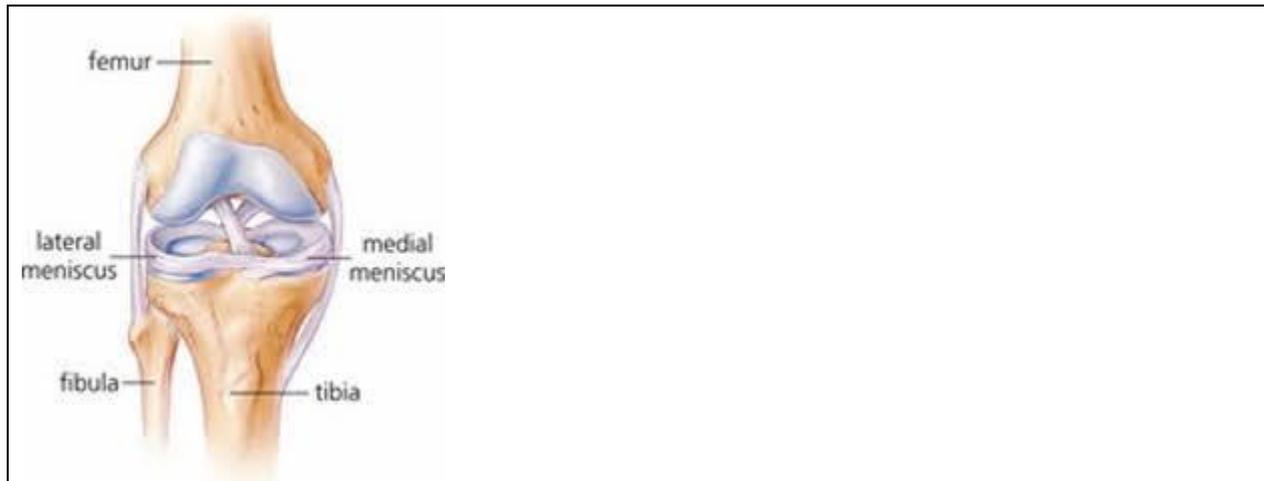


Figure 1. The Knee Joint

What is a meniscal injury?

There are varying degrees of damage a patient can do to the menisci. These range from bruising the menisci through to having large tears of the menisci. Meniscal tears can occur during sporting activities through twisting the knee whilst the foot is still in contact with the ground. In severe injuries, other parts of the knee may also be damaged in addition to a meniscal tear. For example, a patient may also sprain or tear a ligament. Meniscal cartilage does not always heal very well once it is torn. This is mainly because the central area of the meniscus does not have a good blood supply. The outer edge of each meniscus has some blood vessels, but the area in the centre has no direct blood supply.

Conservative Treatment

The PRICE protocol is effective for most sports-related injuries.

PRICE stands for Protection, Rest, Ice, Compression, and Elevation.

- Protection – protect the affected area from further injury – for example, by using a support.
- Rest – avoid exercise and reduce your daily physical activity. Using crutches or a walking stick may help if you can't put weight on your ankle or knee. A sling may help if you've injured your shoulder.
- Ice – apply an ice pack to the affected area for 15-20 minutes every two to three hours. A bag of frozen peas, or similar, will work well. Wrap the ice pack in a towel so that it doesn't directly touch your skin and cause an ice burn.
- Compression – use elastic compression bandages during the day to limit swelling.
- Elevation – keep the injured body part raised above the level of your heart whenever possible. This may also help reduce swelling.

Non-steroidal anti-inflammatory medicines. Drugs like aspirin and ibuprofen reduce pain and swelling.

Physiotherapy for those whose symptoms do not resolve.

Surgical Treatment

Procedure. Knee arthroscopy is one of the most commonly performed surgical procedures. In it, a miniature camera is inserted through a small incision (portal). This provides a clear view of the inside of the knee. The orthopaedic surgeon, then inserts miniature surgical instruments through other portals to trim or repair the tear.

- Partial meniscectomy. In this procedure, the damaged meniscus tissue is trimmed away.
- Meniscus repair. Some meniscus tears can be repaired by suturing (stitching) the torn pieces together. Whether a tear can be successfully treated with repair depends upon the type of tear, as well as the overall condition of the injured meniscus. Because the meniscus must heal back together, recovery time for a repair is much longer than from a meniscectomy.

Risks of meniscal surgery

The knee may not be exactly like it was before the injury, and the patient may still have some pain and swelling.

This may be because of other injuries to the knee, such as tears or injuries to ligaments, which happened at the same time as or after the injury.

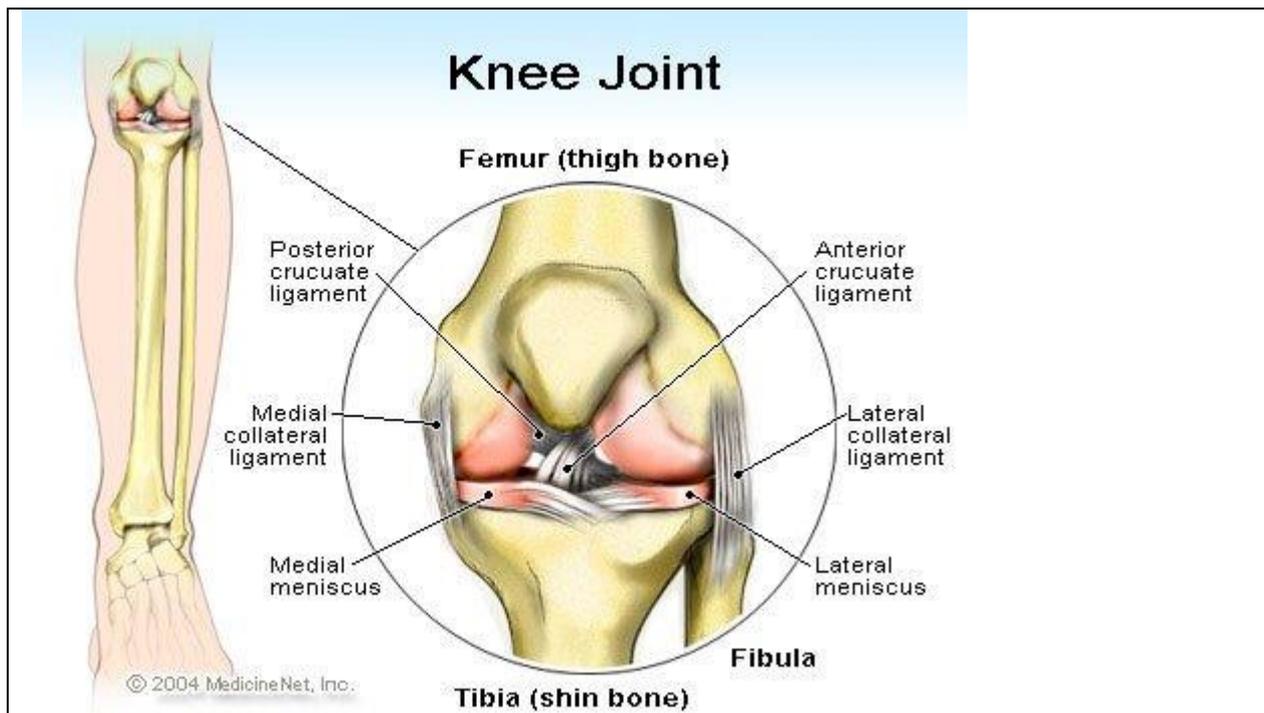
As with all types of surgery, there are some small risks associated with knee surgery, including infection, a blood clot, knee pain, and knee weakness and stiffness.

2. Ligaments (Anterior Cruciate Ligament (ACL); Posterior Cruciate Ligament (PCL); Collateral Ligaments R/LCL)

What are the Knee Ligaments?

The Ligaments found within the knee are tough bands of tissue joining the thigh bone to the shin bone at the knee joint.

The ligaments run diagonally through the inside of the knee and around each side which give the knee joint stability. It also helps to control the back-and-forth movement of the lower leg.



Ligament injuries

Knee injuries can occur during sports such as skiing, tennis, squash, football and rugby. Ligament injuries, in particular Anterior Cruciate Ligament (ACL) injuries are one of the most common types of knee injuries, accounting for around 40% of all sports injuries.

A patient may tear the knee ligaments if the lower leg extends forwards too much. It can also be torn if the knee and lower leg are twisted.

Common causes of a ligament injury include:

- landing incorrectly from a jump
- stopping suddenly
- changing direction suddenly
- having a collision, such as during a football tackle

Conservative management

The PRICE protocol is effective for most sports-related injuries. PRICE stands for Protection, Rest, Ice, Compression, and Elevation.

- Protection – protect the affected area from further injury – for example, by using a support.
- Rest – avoid exercise and reduce your daily physical activity. Using crutches or a walking stick may help if you can't put weight on your ankle or knee. A sling may help if you've injured your shoulder.
- Ice – apply an ice pack to the affected area for 15-20 minutes every two to three hours. A bag of frozen peas, or similar, will work well. Wrap the ice pack in a towel so that it doesn't directly touch your skin and cause an ice burn.

- Compression – use elastic compression bandages during the day to limit swelling.
- Elevation – keep the injured body part raised above the level of your heart whenever possible. This may also help reduce swelling.

Non-steroidal anti-inflammatory medicines. Drugs like aspirin and ibuprofen reduce pain and swelling.

Physiotherapy for those whose symptoms do not resolve.

Reconstructive Ligament surgery

A torn ligament cannot be repaired by stitching it back together, but it can be reconstructed by attaching (grafting) new tissue on to it.

The ligament, for example the ACL, may be reconstructed by removing what remains of the torn ligament and replacing it with a tendon from another area of the leg, such as the hamstring or patellar tendon.

The patellar tendon attaches the bottom of the kneecap (patella) to the top of the shinbone (tibia).

Risks of ligament surgery

The knee may not be exactly like it was before the injury, and you may still have some pain and swelling. This may be because of other injuries to the knee, such as tears or injuries to the cartilage, which happened at the same time as or after the ligament injury.

As with all types of surgery, there are some small risks associated with knee surgery, including infection, a blood clot, knee pain, and knee weakness and stiffness.

Evidence Review

There was **no NICE Guidance identified** which reviewed this surgical intervention, and no systematic reviews were identified.

Utsaerts et al. (2016) produced a follow-up paper to their RCT, which is considered high quality with long follow-up.

In this high quality randomised controlled trial, with minimal loss to follow-up, a strategy of rehabilitation plus early ACL reconstruction did not provide better results at five years than a strategy of initial rehabilitation with the option of having a later ACL reconstruction. Results did not differ between knees surgically reconstructed early or late and those treated with rehabilitation alone. These results should encourage clinicians and young active adult patients to consider rehabilitation as a primary treatment option after an acute ACL tear.

Frobell et al (2013) found there was no increased risk of osteoarthritis or meniscal surgery if the ACL injury was treated with physiotherapy alone compared with if it was treated with surgery. Neither was there any difference in patients' experiences of function, activity level, quality of life, pain, symptoms or general health.

Measures included Knee injury and osteoarthritis outcome score (KOOS), the Medical Outcomes Study 36-item short-form health survey (SF-36), short-form health survey (SF-36), and the Tegner activity scale. In the full analysis set, the mean change in KOOS4 score from baseline to five years was 42.9 points for patients assigned to rehabilitation plus early anterior cruciate ligament reconstruction and 44.9 points for those assigned to rehabilitation plus optional delayed reconstruction (between group difference 2.0 points, 95% confidence interval -8.5 to 4.5; P=0.54 after adjustment for the baseline score). No statistically significant differences in KOOS4, any of the five individual subscales of KOOS, SF-36, or Tegner activity scale between the two treatment strategies were identified at five years or in the change between two and five years.

In conclusion, the evidence does not support the use of surgical repair as a primary treatment immediately following injury. However, in cases where conservative treatment over 3 months has failed: physiotherapy; analgesia and PRICE, then the current evidence demonstrates that knee arthroscopy with ligament / menisci repair may be clinically appropriate.

Activity data 2018/19

Number of Procedures	BSOL	Sandwell

Who will be affected by this work? e.g. staff, patients, service users, partner organisations etc.

Knee Arthroscopy for Acute Knee injury is only commissioned in the following clinical circumstances:

- The patient **does not** have degenerative knee disease AND
- The patient has experienced an acute knee injury AND
- Following the acute knee injury the patient has undergone clinician verified conservative treatment with physiotherapy; analgesia and PRICE which has failed AND

- The patient continues to have mechanical symptoms which are causing functional impairment.

Degenerative knee disease is an inclusive term, which many consider synonymous with osteoarthritis. The term degenerative knee disease is used to explicitly include patients with knee pain, particularly if they are >35 years old, with or without:

- Imaging evidence of osteoarthritis
- Meniscus tears
- Locking, clicking, or other mechanical symptoms except persistent objective locked knee **OR**
- Acute or subacute onset of symptoms

N.B. Functional impairment is defined as interfering with activities of daily living, i.e. walking; sleeping; eating.

Investigations for suspected or proven malignancy are outside the scope of this policy and should be treated in line with the relevant cancer pathway.

This means **(for patients who DO NOT meet the above criteria)** the CCG will **only** fund the treatment if an Individual Funding Request (IFR) application proves exceptional clinical need and that is supported by the CCG.

2. Research		
What evidence have you identified and considered? This can include national research, surveys, reports, NICE guidelines, focus groups, pilot activity evaluations, clinical experts or working groups, JSNA or other equality analyses.		
Research/Publications	Working Groups	Clinical Experts
[1] Treatment for acute anterior cruciate ligament tear: five-year outcome of randomised trial. BMJ 2013; 346 doi: https://doi.org/10.1136/bmj.f232		
[2] Mutsaerts ELAR, van Eck CF, van de Graaf VA, Doornberg JN, van den Bekerom MPJ. Surgical interventions for meniscal tears: a closer look at the evidence. Arch Orthop Trauma Surg 2016;136:361-37		

<p>[3] Smith TO, Davies L, Hing CB (2010) Early versus delayed surgery for anterior cruciate ligament reconstruction: a systematic review and meta-analysis. <i>Knee Surg Sports Traumatol Arthrosc</i> 18:304–311</p> <p>[4] Webb,R., Brammah,T., Lunt,M., et al. (2004) Opportunities for prevention of 'clinically significant' knee pain: results from a population-based cross sectional survey. <i>Journal of Public Health (Oxford)</i>. 26(3), 277-284</p> <p>[5] Brophy RH, Zeltser D, Wright RW, et al. Anterior cruciate ligament reconstruction and concomitant articular cartilage injury: incidence and treatment. <i>Arthroscopy</i>. 2010;26:112-120. http://www.ncbi.nlm.nih.gov/pubmed/20117635?tool=bestpractice.com</p> <p>[6] Bowers AL, Spindler KP, McCarty EC, et al. Height, weight, and BMI predict intra-articular injuries observed during ACL reconstruction: evaluation of 456 cases from a prospective ACL database. <i>Clin J Sport Med</i>. 2005;15:9-13. http://www.ncbi.nlm.nih.gov/pubmed/15654185?tool=bestpractice.com</p> <p>[7] Mandalia V, Fogg AJ, Chari R, et al. Bone bruising of the knee. <i>Clin Radiol</i>. 2005;60:627-636. https://bestpractice.bmj.com/topics/en-gb/589/complications#referencePop109</p> <p>[8] Rodkey WG, Steadman JR, Li ST. A clinical study of collagen meniscus implants to restore the injured meniscus. <i>Clin Orthop Relat Res</i>. 1999:S281-92. http://www.ncbi.nlm.nih.gov/pubmed/10546653?tool=bestpractice.com</p> <p>[9] NHS website: https://www.nhs.uk/conditions/arthroscopy/</p> <p>[10] Kruseman N, Geesink RGT, van der Linden AJ <i>et al</i>. Acute knee injuries: diagnostic & treatment management proposals. http://arnos.unimasas.nl/show.cgi?fig1?46875</p> <p>[11] Steve Bollen: Injuries of the sporting knee - Epidemiology of knee injuries: diagnosis and triage https://bjsm.bmj.com/content/34/3/227.2</p>		
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3. Impact and Evidence:
<p>In the following boxes detail the findings and impact identified (positive or negative) within the research detailed above; this should also include any identified health inequalities which exist in relation to this work.</p>
<p>Age: Describe age related impact and evidence. This can include safeguarding, consent and welfare issues:</p> <p>There is a link to those who participate in high impact sports and are subject to repetitive stress injury such as skiing, tennis, squash, football and rugby and therefore may be at a higher risk of getting injured. Also, those who with certain occupations that put constant repetitive pressure and stress on the joints such as kneeling, squatting may also be at an increased risk.</p> <p>The chance of developing degenerative knee disease such as osteoarthritis increases with age as the ability of cartilage to heal decreases as you age. However, this must be balanced against the need to adhere to the clinical effectiveness evidence with those who suffer from this condition. The opportunity for any exceptional cases to be considered via IFR remains and will ensure treatment is available.</p>
<p>Disability: Describe disability related impact and evidence. This can include attitudinal, physical, communication and social barriers as well as mental health/ learning disabilities, cognitive impairments:</p> <p>A link can be made with degenerative conditions such as osteoarthritis where the person experiencing is likely to have a disability. Limiting this procedure may have an impact upon this group however the procedure may not be clinically viable to treat the osteoarthritis and other treatments to relieve symptoms available. The decision must be balanced against the need to adhere to the clinical effectiveness evidence, the potential risks and the overall benefit for the patient after surgery.</p>
<p>Gender reassignment (including transgender): Describe any impact and evidence on transgender people. This can include issues such as privacy of data and harassment:</p> <p style="text-align: center;">No impact identified</p>
<p>Marriage and civil partnership: Describe any impact and evidence in relation to marriage and civil partnership. This can include working arrangements, part-time working, and caring responsibilities:</p> <p style="text-align: center;">No impact identified</p>

3. Impact and Evidence:
<p>Pregnancy and maternity: Describe any impact and evidence on pregnancy and maternity. This can include working arrangements, part-time working, and caring responsibilities:</p> <p style="text-align: center;">No impact identified</p>
<p>Race: Describe race related impact and evidence. This can include information on different ethnic groups, Roma gypsies, Irish travellers, nationalities, cultures, and language barriers:</p> <p style="text-align: center;">No impact identified</p>
<p>Religion or belief: Describe any religion, belief or no belief impact and evidence. This can include dietary needs, consent and end of life issues:</p> <p style="text-align: center;">No impact identified</p>
<p>Sex: Describe any impact and evidence on men and women. This could include access to services and employment:</p> <p>Whilst there is no data available it is more common females may suffer or be more prone to this condition.</p>
<p>Sexual orientation: Describe any impact and evidence on heterosexual people as well as lesbian, gay and bisexual people. This could include access to services and employment, attitudinal and social barriers:</p> <p style="text-align: center;">No impact identified</p>
<p>Carers: Describe any impact and evidence on part-time working, shift-patterns, general caring responsibilities:</p> <p style="text-align: center;">No impact identified</p>
<p>Other disadvantaged groups: Describe any impact and evidence on groups experiencing disadvantage and barriers to access and outcomes. This can include</p>

3. Impact and Evidence:
<p>lower socio-economic status, resident status (migrants, asylum seekers), homeless, looked after children, single parent households, victims of domestic abuse, victims of drugs / alcohol abuse: (This list is not exhaustive)</p> <p>No impact identified on the basis of the information available. Some interventions may not be suitable where the patient is homeless / of no fixed abode.</p>

4. Health Inequalities	Yes/No	Evidence
Could health inequalities be created or persist by the proposals?	No	This condition is not linked to a health inequality.
Is there any impact for groups or communities living in particular geographical areas?	No	No impact identified
Is there any impact for groups or communities affected by unemployment, lower educational attainment, low income, or poor access to green spaces?	No	No impact identified
How will you ensure the proposals reduce health inequalities?		
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5. FREDA Principles/ Human Rights	Question	Response
Fairness – Fair and equal access to services	How will this respect a person's entitlement to access this service?	This decision has been made in line with clinical recommendation.
Respect – right to have private and family life respected	How will the person's right to respect for private and family life, confidentiality and consent be upheld?	No evidence of impact for this policy
Equality – right not to be discriminated against based on your protected characteristics	How will this process ensure that people are not discriminated against and have their needs met and identified?	No discrimination identified
	How will this affect a person's right to freedom of thought, conscience and religion?	N/A

Dignity – the right not to be treated in a degrading way	How will you ensure that individuals are not being treated in an inhuman or degrading way?	Policy will be applied with due regard to this consideration.
Autonomy – right to respect for private & family life; being able to make informed decisions and choices	How will individuals have the opportunity to be involved in discussions and decisions about their own healthcare?	An individual can discuss the impact with their GP and has the option for an IFR request to be made
Right to Life	Will or could it affect someone's right to life? How?	No evidence of impact for this policy
Right to Liberty	Will or could someone be deprived of their liberty? How?	No evidence of impact for this policy

6. Social Value	
Consider how you might use the opportunity to improve health and reduce health inequalities and so achieve wider public benefits, through action on the social determinants of health.	
Marmot Policy Objective	What actions are you able to build into the procurement activity and/or contract to achieve wider public benefits?
Enable all people to have control over their lives and maximise their capabilities	none
Create fair employment and good work for all	none
Create and develop health and sustainable places and communities	none
Strengthen the role and impact of ill-health prevention	none

7. Engagement, Involvement and Consultation		
If relevant, please state what engagement activity has been undertaken and the date and with which protected groups:		
Engagement Activity	Protected Characteristic/ Group/ Community	Date
For each engagement activity, please state the key feedback and how this will shape policy / service decisions (E.g. patient told us So we will):		
As part of the process further targeted engagement is planned with representative groups from among Sandwell, Birmingham and Solihull Patients. In addition, it has been identified that patient and clinician information is key in ensuring that the harmonised treatment policies review delivers effective outcomes. To this end an information briefing sheets on each procedure will be developed to give more		

information on the procedure, eligibility criteria and signposting to further information sources, such as NHS Choices. These information sheets are also designed to help facilitate discussions between GPs and patients. Information briefing sheets have already been tested and uploaded onto the GP systems for the first 45 harmonised treatment policies for Birmingham and Solihull. Due regard will be given to both the accessible information standard and the potential need to translate such leaflets into relevant local languages.

8. Summary of Analysis

Considering the evidence and engagement activity you listed above, please summarise the impact of your work:

The restriction of this policy may have an impact on those who would wish to receive the treatments for a degenerative condition such as osteoarthritis. However, the decision must be balanced against the need to adhere to the clinical effectiveness evidence, the potential risks and the overall benefit for the patient after surgery.

Clinical evidence also does not support the use of surgical repair as a primary treatment immediately following injury only in cases where conservative treatment over three months has failed: physiotherapy; analgesia and PRICE, then the current evidence demonstrates that knee arthroscopy with ligament / menisci repair may be clinically appropriate.

Investigations for suspected or proven malignancy are outside the scope of this policy and should be treated in line with the relevant cancer pathway.

The opportunity for any exceptional cases to be considered via IFR remains and will ensure treatment is available.

9. Mitigations and Changes :

Please give an outline of what you are going to do, based on the gaps, challenges and opportunities you have identified in the summary of analysis section. This might include action(s) to mitigate against any actual or potential adverse impacts, reduce health inequalities, or promote social value. Identify the **recommendations** and any **changes** to the proposal arising from the equality analysis.

None identified

10. Contract Monitoring and Key Performance Indicators

Detail how and when the service will be monitored and what key equality performance indicators or reporting requirements will be included within the contract (refer to NHS Standard Contract SC12 and 13):

This policy is not linked to a contract however, prospective providers remain bound by their contracts with the CCG.

11. Procurement

Detail the key equality, health inequalities, human rights, and social value criteria that will be included as part of the procurement activity (to evaluate the providers ability to deliver the service in line with these areas):

N/A

12. Publication

How will you share the findings of the Equality Analysis?

This can include: reports into committee or Governing Body, feedback to stakeholders including patients and the public, publication on the web pages. All Equality Analysis should be recommended for publication unless they are deemed to contain sensitive information.

Publication on the CCG's website.

Following approval all finalised Equality Analysis should be sent to the Communications and Engagement team for publication: bsol.comms@nhs.net

13. Sign Off

The Equality Analysis will need to go through a process of **quality assurance** by the Senior Manager for Equality Diversity and Inclusion or the Manager for Equality Diversity and Inclusion prior to approval from the delegated committee

Name

Date

Quality Assured By:		
Which Committee will be considering the findings and signing off the EA?		
Minute number (to be inserted following presentation to committee)		

Please send to Balvinder Everitt or Michelle Dunne, Equality, Diversity and Inclusion for Quality Assurance.

Once you have committee sign off, please send to Caroline Higgs, Communications & Engagement Team for publication: bsol.comms@nhs.net