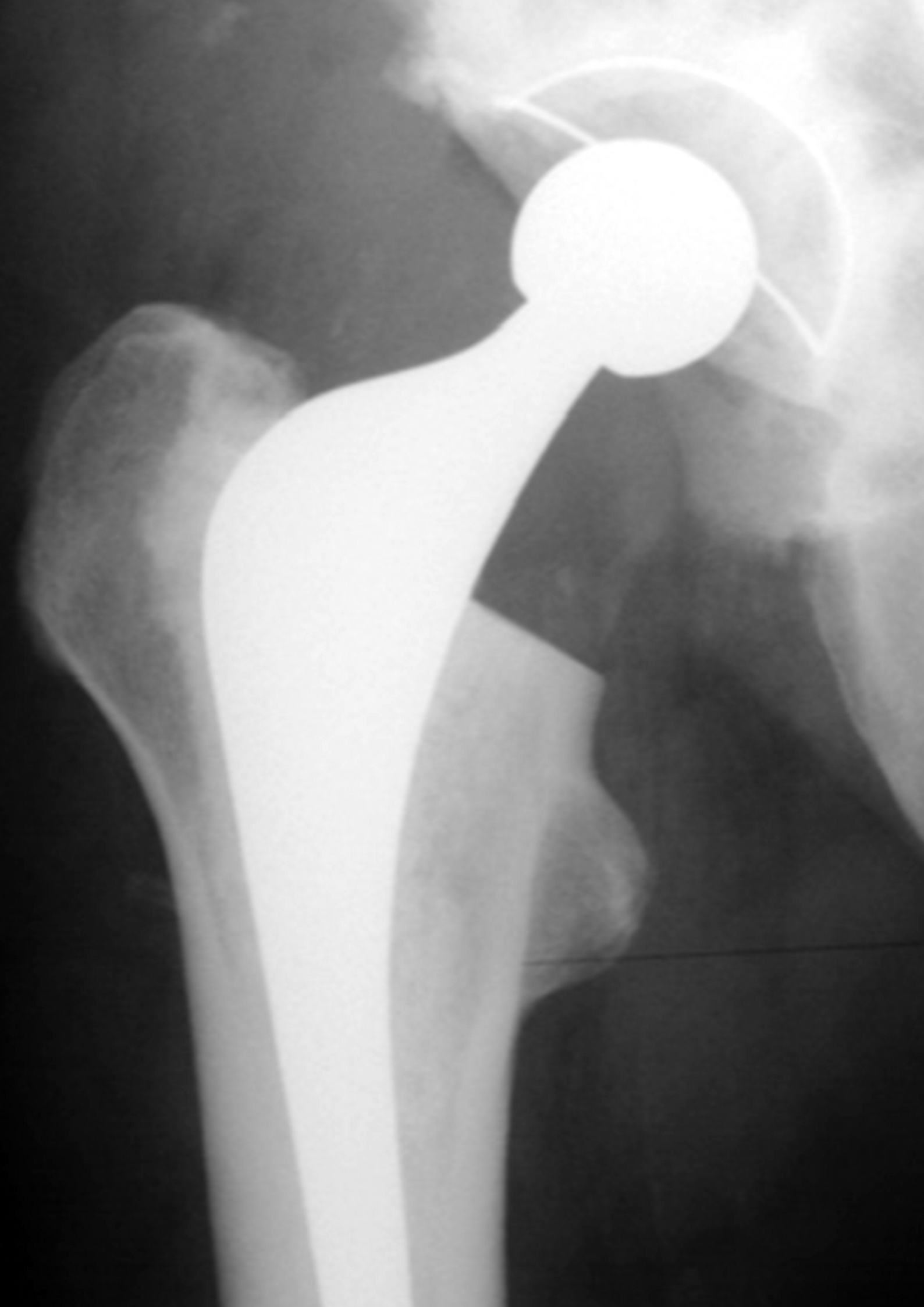
HIP AND KNEE REPLACEMENT: THE HIDDEN BARRIERS

abhi



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INTRODUCTION

Orthopaedic treatments, such as hip and knee replacements, are one of the most commonly performed procedures in the NHS. Many thousands of patients have benefitted from an orthopaedic intervention, restoring their mobility, allowing them to lead full and active lives and get back to work.

For many patients, orthopaedic treatment allows them to return to work rather than being off sick. For the NHS, providing effective and efficient orthopaedic interventions leads to long term savings as patients' health and fitness is restored, avoiding the deterioration of their condition and the eventual requirement for more costly treatments. There are also wider benefits to the UK economy and the Treasury, as more people are able to return to work and make a full economic contribution rather than relying on benefits.

Hip replacements result in a high level of patient satisfaction and are considered to be highly effective. The National Joint Registry has highlighted the results of patient satisfaction assessment which shows that 92% of patients describe themselves as feeling either 'excellent', 'very good' or 'good' six months after treatment. Other measures that assess patient satisfaction (EQ-5D and Oxford Hip Score) also show clear improvements in patient health.[1]

The Lancet described hip replacement as the 'Operation of the Century'.[2] Arthritis Research UK recently published a report that highlighted the impact of musculoskeletal conditions on workforce absence. They found that musculoskeletal conditions were responsible for 20% of all sickness based absence, costing up to £30.6 million absent days per year.[3] Hip and knee operations have a clear role in getting patients back to work as more and more patients receiving an implant are of working age. 20% of female and 25% of male patients receiving a hip replacement are under the age of 60. 19% of women and 18% of men undergoing a total knee replacement are under the age of 60.[4]

There is also a large body of evidence supporting orthopaedic intervention.

- **The economic benefit of hip replacement:** a 5-year follow-up of costs and outcomes in the Exeter Primary Outcomes Study', Fordham et al, 2012.
- **'Predicting the cost-effectiveness of total hip and knee replacement:** a health economic analysis', Jenkins PJ et al, 2013.
- **'Effectiveness of hip or knee replacement surgery in terms of quality-adjusted life years and costs'**, Räsänen et al, 2009.
- **Adding Value: The Economic and Societal Benefits of Medical**

1 http://www.njrcentre.org.uk/njrcentre/Portals/0/Documents/England/Reports/10th_annual_report/NJR%2010th%20Annual%20Report%202013%20B.pdf
2 https://www.ncbi.nlm.nih.gov/pubmed/17964352
3 http://www.nhshealthatwork.co.uk/images/library/files/Bulletins/July_2016_Arthritis_Research_UK_WORKING_WITH_ARTHRITIS_%5bJune_2016%5d_-_Publication_5_July_2016.pdf
4 http://www.mtg.org.uk/major-studies/

Patient comment:

"At the beginning you think it's going to take a long time to get your mobility back, but if you persevere with the exercises they give you, you look back now and you think it doesn't seem to be a long time. I would summarise my life now as being pain free. I have renewed optimism for the future."

- Ian Clarke.[6]

Technology', The Work Foundation, November 2011.[4a]

Alongside this evidence, NICE has published guidance on a total hip replacement that clearly lays out the guidance commissioners should follow.

The British Orthopaedic Association, the clinical body for orthopaedic surgeons, also has a commissioning guideline[5] that sets out how patients should be managed and the treatment that should be offered, including total hip replacement.

Orthopaedic Treatments – the Numbers:

The national joint registry currently has total of 2,055,687 procedures recorded. This covers all orthopaedic interventions, such as hip and knee, ankle, shoulder and elbow replacement. For hip replacement the number is 800,683 primary hip replacements, and 89,023 revisions. For knee replacements the figures are 875,585 primary knee replacements, and 54,287 revisions. The value to patients is clear and well documented.

The Current Situation

Despite evidence to support the benefits of orthopaedic interventions, patients are increasingly struggling to get access to treatment. For patients requiring orthopaedic treatment, the reality of their situation is that they are being denied treatment due to arbitrary limits being placed on patient access.

4a http://www.mtg.org.uk/major-studies/
5 https://www.britishhipsociety.com/uploaded/Pain%20arising%20from%20the%20hip%20in%20adults_11Nov_formatted.pdf
6 http://www.mrniravshah.co.uk/patient-experience/case-studies/total-hip-replacement-case-study/

The ABHI Orthopaedic Industry Group represents manufacturers from the UK's orthopaedics industry. They have seen the impact these changes are having on patients across the NHS.

A series of reports have been published in the press highlighting cases of individual commissioning groups limiting patient access for arbitrary reasons:

- **October 2016: 'Outstanding' CCG to make smokers and obese patients wait six months for surgery[7]**
- **September 2016: Decision to deny surgery to obese patients is like 'racial discrimination'[8]**
- **July 2016: Arthritis patients experience referral delays, audit finds[9]**
- **April 2016: Smokers and obese patients are being denied NHS surgery[10]**
- **March 2016: CCGs consider sweeping restrictions to plug £25m hole[11]**
- **February 2017: Obese patients are denied hip and knee surgery and told to exercise instead as NHS trusts bid to cut costs[12a]**

As we have seen, hip and knee replacements have a large body of evidence supporting their use and have been described as one of the most successful operations currently performed by the NHS. Anecdotal evidence has suggested that patient access is being limited through the implementation of arbitrary thresholds without any clinical evidence to support such policies.

In order to ascertain the scale of this problem the Orthopaedic Industry Group conducted research into NHS commissioning policies, the results of which are set out below.

The Methodology

Identifying Clinical Commissioning Group (CCG) Guidelines: the group executed an audit of every CCG website across the country to identify where they list a limit on patient access. This was carried out in August 2016. Freedom of Information Request (FOI): The group sent a Freedom of Information Request to all 209 English CCGs and all NHS Hospital Trusts.

7 https://www.hsj.co.uk/hsj-local/commissioners/nhs-harrogate-and-rural-district-ccg/outstanding-ccg-to-make-smokers-and-obese-patients-wait-six-months-for-surgery/7011112.article?blocktitle=News-(grid)&contentID=20682
8 https://www.theguardian.com/society/2016/sep/03/hospitals-to-cut-costs-by-denying-surgery-to-smokers-and-the-obese
9 http://www.bbc.co.uk/news/health-36867441
10 http://www.bbc.co.uk/news/business-36109754
11 https://www.hsj.co.uk/hsj-local/commissioners/nhs-redditch-and-bromsgrove-ccg/ccgs-consider-sweeping-restrictions-to-plug-25m-hole/7003405.article?blocktitle=News-(grid)&contentID=20682
12a http://www.dailymail.co.uk/health/article-4251032/Obese-patients-denied-surgery-told-exercise-instead.html#ixzz4awKuJm7g

THE HIDDEN BARRIERS TO PATIENT ACCESS

In order to ascertain the true scale of the problem the Orthopaedic Industry Group looked at all 209 UK Clinical Commissioning Groups (CCGs) website's and gathered information on their publicly available commissioning policies on hip and knee procedures. We also sent an FOI questionnaire to CCGs to ascertain their current commissioning patterns and find out what discussions they have had at Board level regarding orthopaedic commissioning policies.

Previous investigations by the Royal College of Surgeons found that over a third of CCGs have a mandatory threshold limiting patient access on the basis of BMI or smoking.[12] Placing blanket thresholds on patient access is not in line with current commissioning guidelines from the British Orthopaedic Association or commissioning policy supported by the Royal College of Surgeons who have stated that all commissioning policies should be based on clinical need and not arbitrary factors such as whether a patient smokes or their weight.

What we found:

- **141 CCGs out of 209 have published policies**
- **Of those, 98 have some form of threshold**
- **8 have a BMI threshold of 25 – BMI 25 is considered 'overweight'**
- **20 have a BMI threshold of 30 – the lowest BMI classed as 'obese'**
- **Of the CCGs with guidance published, the numbers show 69% have a BMI threshold**
- **47% of all CCGs have a BMI threshold in place**

BMI Explained: Body mass index (BMI) is used to determine a person's weight related health risk. You are considered overweight if your BMI ranges from 25-30 and obese if it is over 30. A UK male at a height of 5'10" would be considered obese at 15 stone. For the average woman, height 5'6", obesity is classed as being 13 stone 2lbs.

The numbers:

	BMI Limit 25	BMI Limit 30	BMI Limit 35	BMI Limit 40
No. of CCGs.	8	20	46	24

12 https://www.rcseng.ac.uk/library-and-publications/college-publications/docs/smokers-soft-targets/

Has patient access been impacted?

In April 2016 the Royal College of Surgeons found that: *"A majority of these mandatory thresholds are for hip and knee replacements. More than one fifth of CCGs (22%) are placing mandatory weight thresholds on referral to hip and knee replacement surgery. This is an increase from data we acquired in 2014 that showed 13% of CCGs surveyed employed such policies for hip and knee replacement surgery."*[13]

Our research, conducted in February 2017, found that the number of CCGs that have a limit based on BMI has risen from 22% to almost 50%. We also found that eight CCGs currently have a threshold of BMI 25. A BMI of 30-39 is classed as obese, 25 is simply 'overweight'. There is no clinical justification for placing a blanket restriction on access to treatment. By setting a low BMI threshold, CCGs are potentially limiting access to thousands of patients.

If you look at rates of obesity in the UK, the Health Survey for England 2014 found that 41% of men and 31% of women were overweight, and 24% of men and 27% of women were obese.[14] The consequence of limiting surgery in this way will have an impact on a huge number of patients.

In the FOI request, CCGs were asked whether or not they have amended their commissioning guidance for hip and knee replacement in the last five years, we found that 50% of all CCGs have changed their commissioning policy. Whilst not all of these changes were related to bringing in BMI thresholds, the increase in number of CCGs with BMI related thresholds from April to August would suggest that this has clearly been an additional factor for many CCGs.

Conclusion and Recommendation

The situation for patients is challenging - from 2014 to 2016 the number of CCGs that have a BMI threshold has more than trebled. Alongside this, 50% of CCGs have reviewed their commissioning policy for hip and knee revision in this time.

For 2015/16 the NHS deficit was £2.45 billion.[15] This is expected to grow as the NHS races to meet their savings target of £22 billion by 2020/21. Critically for patients, however, is the impact of arbitrary limits on access to treatment as a means of making savings. CCGs are increasingly using BMI as a means of limiting access to operations. Vale of York CCG set a limit earlier this year, and when challenged they stated: "The local system is under severe pressure. Hospitals are being warned they will not be paid for surgery if they carry out operations on obese patients who are not exempt from the policy."[16]

All commissioning decisions should be based on the latest and most relevant clinical evidence. The Orthopaedics Industry Group supports the NHS' drive to reduce costs and make savings. But as pointed out by the Royal College of Surgeons previously, there is very little clinical justification for many of these policies and they could lead to legal challenge.[16a]

13 https://www.rcseng.ac.uk/news-and-events/media-centre/press-releases/more-than-one-in-three-areas-of-england-restrict-surgery-for-smokers-and-overweight-patients/
14 http://content.digital.nhs.uk/catalogue/PUB19295
15 https://improvement.nhs.uk/news-alerts/nhs-providers-working-hard-still-under-pressure/
16 http://www.telegraph.co.uk/news/2016/09/02/obese-patients-and-smokers-banned-from-all-routine-operations-by/
16a https://www.rcseng.ac.uk/-/media/files/rcs/news-and-events/is-access-to-surgery-a-postcode-lottery.pdf?la=en

The impact on patients work life should also be taken into account, as patients with musculoskeletal problems are unable to work and make a full contribution to the UK economy.

Recommendations

1	**NHS England should set clear guidelines on the appropriate use of BMI thresholds in commissioning.**
2	**CCGs should have to demonstrate consideration of all relevant commissioning guidance from relevant clinical bodies and NICE when making commissioning policies.**
3	**Patients should be given clear guidance and support, through Healthwatch, as to when they can challenge commissioning decisions that they feel are unfair or inappropriate.**

COMMISSIONING PATTERNS

5 Kent CCGs with low BMI threshold and how they compare to other CCGs:

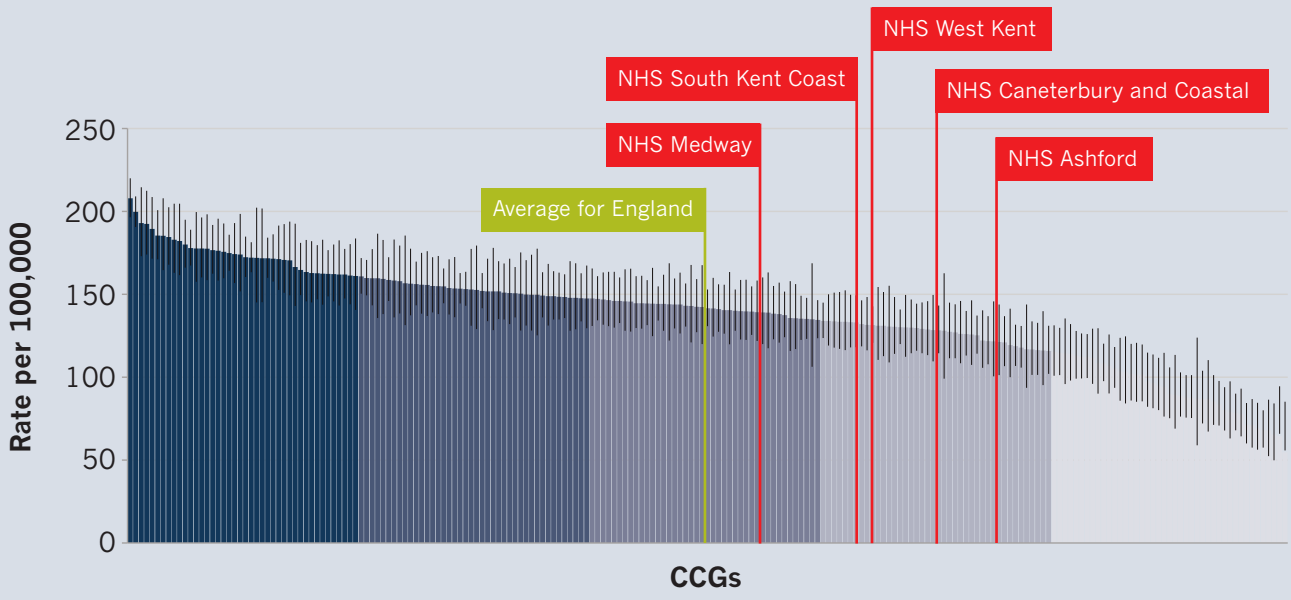
- **NHS Ashford CCG** – bottom 25% commissioning rate
- **NHS Canterbury and Coastal CCG** – bottom 30% commissioning rate
- **NHS Medway CCG** – bottom 50%
- **NHS West Kent CCG** – bottom 40%
- **NHS South Kent Coast CCG** – bottom 40%

Commissioning rates are taken from the Atlas of Variation and looks at all 209 CCGs.[17]

The Kent Experience

Example Kent CCGs: Five of the seven CCGs that have placed a BMI limit of 30 on access to hip and knee replacements are in Kent. All five CCGs in Kent with a BMI of 30 are in the bottom half of commissioners in terms of number of total hip replacements commissioned.

To compare the CCGs to neighbouring CCGs - Hastings and Rother and NHS High Weald Lewes Heavens - we see a clear contrast. Both CCGs are in the top 20% of English Commissioners, with NHS High Weald and Lewes Heavens being the third highest UK commissioner overall.



Patient Access across the Country

For patients, access to hip and knee replacements can be the difference between leading a full and active life and living in severe pain with limited mobility which can render them unable to work. The NHS Plan, published in 2000, put in place waiting time targets for the first time, establishing the 18 Week Waiting Time target. Orthopaedics is highlighted in the plan as an area that has 'particular problems' that have led to long waits.[18] Since 2000 the situation for patients has improved, with the vast majority of patients now receiving their operation within the 18 week waiting limit.

Given the UK's population profile, increased levels of obesity[19] and an aging population[20], it would be expected that the demand for hip and knee operations increases. This would mean the NHS would be carrying out an increasing number of operations each year.

In order to assess the current trends across the NHS we gathered data on:

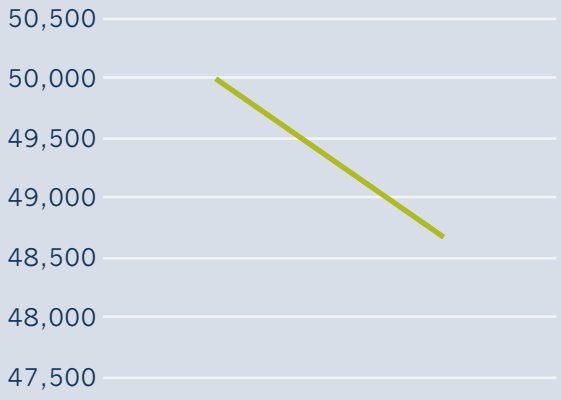
- Commissioner activity, through a Freedom of Information request to Commissioners
- Total number of operations carried out by accessing National Joint Registry Information
- Waiting times from the Patient Association annual survey

Number of procedures commissioned

The first step to treatment is GP referral and the commissioning of a procedure. Hip and knee operations are considered routine commissioning and as such fall under the responsibility of Clinical Commissioning Groups.

As patients cannot receive an operation until

Number of Hip Procedures Commissioned 2014 to 2015



Number of Knee procedures Commissioned 2014-2015

17 https://fingertips.phe.org.uk/documents/Atlas_2015%20Compendium.pdf
18 http://pns.dgs.pt/files/2010/03/pnsuk1.pdf
19 https://www.noo.org.uk/NOO_about_obesity/adult_obesity/UK_prevalence_and_trends
20 https://www.parliament.uk/business/publications/research/key-issues-parliament-2015/social-change/ageing-population/

their procedure is commissioned, the commissioning rates of CCGs are critical to patient access. In order to gain the figures on commissioning rates we sent a FOI request to all CCGs to ask them the total number of hip and knee procedures commissioned in recent years. As CCGs have only been in existence since 2013 they were unable to give data going beyond the past three years.

The response to our request showed the number of hip operations commissioned fell from 2014 to 2015. The number of knee operations commissioned then increased in 2015 from 53,250 to 54,856.

Number of procedures carried out

The national joint registry was established in 2003 to collect information on joint replacement surgery. All hospitals carrying out a relevant procedure are required to input data to the National Joint Registry (NJR).

Each year the NJR publishes figures on the performance of implants and the number of procedures carried. We looked at the total number of operations carried out in England (top table on page 13).[21]

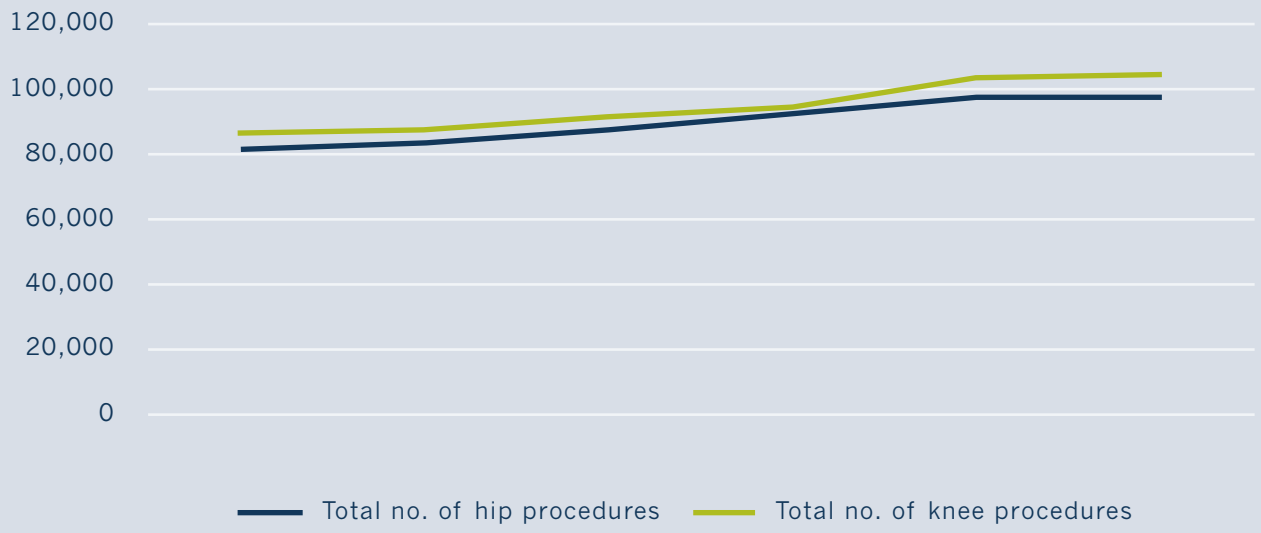
For total hip replacement procedures the number of operations increased by around 5%, year-on-year, between 2012 and 2015. The increase in the number of procedures dropped significantly from 2015 to 2016, with a percentage increase of only 0.2%.

For total knee replacement the percentage change in the number of operations grew to almost 10% from 2014 to 2015. This rate of growth reduced dramatically from 2015 to 2016 as a growth rate of only 1.5% was reported.

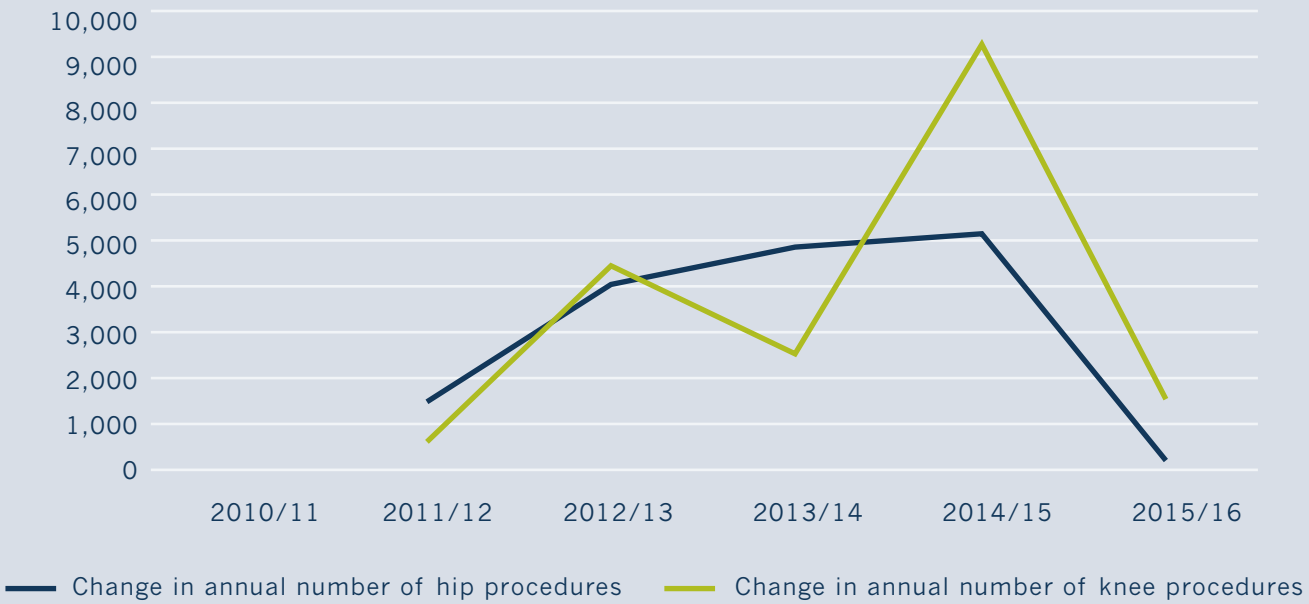
Total procedure	2010 /11	2011 /12	2012 /13	2013 /14	2014 /15	2015 /16
Total no. of hip procedures	81582	83098	87113	91969	97112	97305
Total no. knee procedures	86095	86692	91117	93663	102911	104475
Change in annual number of hip procedures		1516	4015	4856	5143	193
Change in annual number of knee procedures		597	4425	2546	9248	1564
Hip % change		1.80%	4.80%	5.50%	5.60%	0.20%
Knee % change		0.70%	5%	2.80%	9.90%	1.50%

21 http://www.njrreports.org.uk/Data-Completeness-and-quality

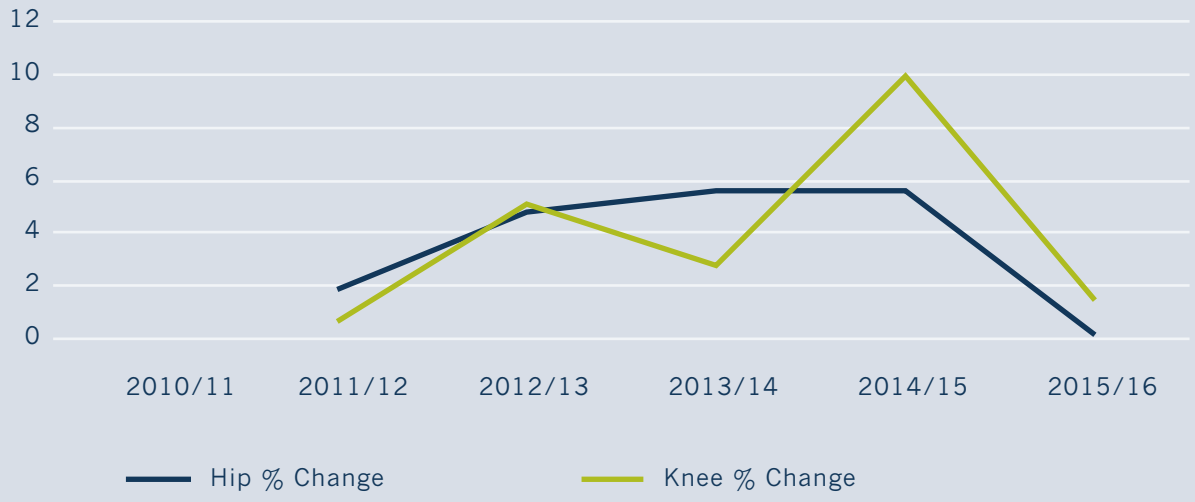
Number of hip and knee procedures per year



Change in total number of procedures



Percentage change in number of procedures



Waiting times (number of days)[22]

	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16
Hip replacement	87.5	93.8	89.1	91.2	103.7	105.2
Knee replacement	88.9	99.2	95	94.8	107	105.4

The Patient's Association collects and distributes figures on the waiting times for various procedures.[23] As we can see from their most recent set of figures, the waiting times for hip and knee replacement have steadily increased from 2010 to 2015. The amount of time patients waited for a knee operation fell slightly from 2014 to 2015.

The Impact of Delaying treatment

There is evidence that shows that delaying treatment leads to worse outcomes.[24] Delays in giving patients access to treatments can lead to a patient's condition worsening unnecessarily, and subsequent morbidity, mortality and litigation. The cost

22 https://www.patients-association.org.uk/wp-content/uploads/2016/11/Waiting-Times-Report-2016-Feeling-the-wait.pdf
23 https://www.patients-association.org.uk/wp-content/uploads/2016/11/Waiting-Times-Report-2016-Feeling-the-wait.pdf

effectiveness of hip and knee replacement on health quality of life is well established. Some studies have shown that total hip and total knee replacement are more effective than many other healthcare interventions.[25]

As the King's Fund has argued, long term conditions can also have an impact on the mental health of patients: 'Research evidence consistently demonstrates that people with long-term conditions are two to three times more likely to experience mental health problems than the general population.'[26] Recent figures have shown that around 14% of the NHS budget is spent on mental health.[27] The King's Fund also highlighted the impact of musculoskeletal conditions on patients: 'Up to 33 per cent of women and more than 20 per cent of men with all types of arthritis may have co-morbid depression'.

Arbitrary barriers to treatment such as obesity and smoking will lead to delays in treatment. It is clear than many CCGs are seeking to limit patient access via BMI thresholds and smoking. The impact of these delays are clear, patients will have worse outcomes and it will add to the cost of procedures.

Conclusion

Analysis has shown two key factors in current commissioning trends and behaviours in relation to hip and knee operations. Where limits are put in place, patients miss out. The example of five Kent CCGs with some of the most stringent thresholds are clear: patients are missing out on treatment. The national picture is equally as worrying – trends are moving towards fewer patients being treated with hip and knee interventions – for which there are no clear reasons.

The long term impact of the current trend is unclear. For patients, their experience of treatment is significantly reduced as they are refused treatment that previously would have been available. The long term impact on the NHS and wider UK welfare spending is likely to be detrimental. With regards to healthcare spending, patients denied access to treatment will often present later requiring a more complicated and expensive treatment. Secondly, there is the negative impact on the welfare system, as people are unable to return to work and are forced to seek welfare payments. The report by Arthritis Research UK demonstrated the impact of musculoskeletal conditions on people's ability to work and showed them to be one of the most common causes of work place absence.[28]

24 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2503628/pdf/annrcse01627-0034.pdf
25 http://www.tandfonline.com/doi/pdf/10.1080/17453670610013501
26 http://www.kingsfund.org.uk/sites/files/kf/field/field_publication_file/long-term-conditions-mental-health-cost-comorbidities-naylor-feb12.pdf
27 https://www.england.nhs.uk/wp-content/uploads/2016/02/Mental-Health-Taskforce-FYFV-final.pdf
28 ttp://www.nhshealthatwork.co.uk/images/library/files/Bulletins/July_2016_Arthritis_Research_UK_WORKING_WITH_ARTHRITIS_[June_2016]_-_Publication_5_July_2016.pdf

Recommendations

1	NHS England should establish a 'Commissioning Review Board' that can look at and assess individual CCG policies based on fairness and existing clinical guidance.
2	NHS England should set guidelines for the publication and development of commissioning policies.
3	CCG commissioning levels should be published on an independent website on an annual basis.
4	CCGs whose commissioning rates are significantly lower than the regional average should be asked to publicly explain the variation.
5	CCGs should be required to explain any blanket threshold (BMI, smoking) and should be assessed on their commissioning rates against other regional CCGs.

"Musculoskeletal injuries, back pain and stress are also common causes of short-term absence"

· Chartered Institute of Professional Development[29]

29 http://www.cipd.co.uk/binaries/absence-management_2015.pdf

SUMMARY AND CONCLUSION

The use of orthopaedic interventions for people with musculoskeletal problems is well proven and has benefitted many millions of people across the world. However, our evidence has pointed towards a system where fewer and fewer patients are able to access the appropriate treatment. Furthermore, our findings show that NHS organisations are increasingly limiting access to orthopaedic treatment as a way of making savings. The implications of this are threefold:

For patients: denial of access to treatment can have a huge impact on patient's lives. Not only are they forced to live in pain, but they also face the distinct possibility of their condition worsening and therefore resulting in a prolonged, avoidable and complicated treatment.

For the NHS: limiting access may help manage cash flow in the short term, but it will lead to additional costs in the future as patients return with more complicated and costly conditions.

For tax payers: the cost of people being out of work is a huge burden on the state. Musculoskeletal conditions are one of the lead causes of workplace absence. Denying patients access to orthopaedic treatment will exacerbate this cost.

The Orthopaedic Industry Group believes that limiting access will not help patients, the NHS or the UK economy. However, as this report highlights, current NHS trends, point to an increasing number of CCGs seeking to place arbitrary limits on access to treatments. This has led the NHS to return to the days of a postcode lottery where patients in one part of the country have a very different experience to patients in another. This is unfair and unacceptable.

RECOMMENDATIONS

Our recommendations would help ensure that patients, regardless of their location, are able to get fair and equitable access to orthopaedic treatments:

1	**NHS England should set clear guidelines on the appropriate use of BMI thresholds in commissioning.**
2	**CCGs should have to demonstrate consideration of all relevant commissioning guidance from relevant clinical bodies and NICE when making commissioning policies.**
3	**Patients should be given clear guidance and support, through Healthwatch, as to when they can challenge commissioning decisions that they feel are unfair or inappropriate.**
4	**NHS England should establish a 'Commissioning Review Board' that can look at and assess individual CCG policies based on fairness and existing clinical guidance.**
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8	**CCGs should be required to explain any blanket threshold (BMI, smoking) and should be assessed on their commissioning rates against other regional CCGs.**

COMMISSIONING GUIDANCE DATABASE

CCG	BMI threshold 25	BMI threshold 30	BMI threshold 35	BMI threshold 40	None
NHS Ashford CCG		✓			
NHS Aylesbury Vale CCG			✓		
NHS Barking & Dagenham CCG					✓
NHS Barnet CCG					✓
NHS Basildon and Brentwood CCG					✓
NHS Bassetlaw CCG					✓
NHS Bedfordshire CCG	✓				
NHS Birmingham CrossCity CCG	✓				
NHS Birmingham South and Central CCG	✓				
NHS Bracknell and Ascot CCG			✓		
NHS Brent CCG				✓	
NHS Bristol CCG			✓		
NHS Bromley CCG				✓	
NHS Bury CCG					✓
NHS Cambridgeshire and Peterborough CCG			✓		
NHS Cannock Chase CCG			✓		
NHS Canterbury and Coastal CCG		✓			
NHS Castle Point, Rayleigh and Rochford CCG					✓
NHS Central London (Westminster) CCG			✓		
NHS Chiltern CCG			✓		
NHS Corby CCG					✓

CCG	BMI threshold 25	BMI threshold 30	BMI threshold 35	BMI threshold 40	None
NHS Coventry and Rugby CCG			✓		
NHS Croydon CCG		✓			
NHS Dorset CCG		✓			
NHS Dudley CCG			✓		
NHS Ealing CCG				✓	
NHS East and North Hertfordshire CCG	✓				
NHS East Leicestershire and Rutland CCG					✓
NHS East Staffordshire CCG			✓		
NHS Eastern Cheshire CCG				✓	
NHS Erewash CCG					✓
NHS Fareham and Gosport CCG			✓		
NHS Gloucestershire CCG					✓
NHS Great Yarmouth & Waveney CCG			✓		
NHS Halton CCG				✓	
NHS Hammersmith and Fulham CCG				✓	
NHS Hardwick CCG					✓
NHS Harrogate and Rural District CCG			✓		
NHS Harrow CCG				✓	
NHS Havering CCG					✓
NHS Herefordshire CCG				✓	
NHS Herts Valleys CCG					✓
NHS Heywood, Middleton & Rochdale CCG					
NHS Hillingdon CCG				✓	
NHS Hounslow CCG				✓	
NHS Ipswich and East Suffolk CCG			✓		

CCG	BMI threshold 25	BMI threshold 30	BMI threshold 35	BMI threshold 40	None
NHS Kingston CCG		✓			
NHS Knowsley CCG				✓	
NHS Leicester City CCG					✓
NHS Lincolnshire East CCG					✓
NHS Liverpool CCG				✓	
NHS Luton CCG		✓			
NHS Mansfield & Ashfield CCG					✓
NHS Medway CCG		✓			
NHS Merton CCG		✓			
NHS Mid Essex CCG					✓
NHS Milton Keynes CCG			✓		
NHS Nene CCG					✓
NHS Newark & Sherwood CCG					✓
NHS Newbury and District CCG			✓		
NHS Newcastle West CCG					✓
NHS North & West Reading CCG			✓		
NHS North Derbyshire CCG					✓
NHS North East Hampshire and Farnham CCG			✓		
NHS North Hampshire CCG			✓		
NHS North Norfolk CCG			✓		
NHS North Somerset CCG		✓			
NHS North Staffordshire CCG					
NHS North Tyneside CCG					
NHS North, East, West Devon CCG					✓
NHS Northumberland CCG			✓		

CCG	BMI threshold 25	BMI threshold 30	BMI threshold 35	BMI threshold 40	None
NHS Norwich CCG			✓		
NHS Nottingham City CCG					✓
NHS Nottingham North & East CCG					✓
NHS Nottingham West CCG					✓
NHS Oldham CCG					✓
NHS Oxfordshire CCG			✓		
NHS Portsmouth CCG			✓		
NHS Redbridge CCG					✓
NHS Redditch and Bromsgrove CCG					✓
NHS Richmond CCG		✓			
NHS Rotherham CCG			✓		
NHS Salford CCG					
NHS Sandwell and West Birmingham CCG	✓				
NHS Scarborough and Ryedale CCG		✓			
NHS Shropshire CCG				✓	
NHS Slough CCG			✓		
NHS Solihull CCG	✓				
NHS Somerset CCG			✓		
NHS South Cheshire CCG				✓	
NHS South Devon and Torbay CCG					✓
NHS South East Staffs and Seisdon and Peninsular CCG			✓		
NHS South Eastern Hampshire CCG			✓		
NHS South Gloucestershire CCG		✓			
NHS South Kent Coast CCG		✓			
NHS South Lincolnshire CCG			✓		

CCG	BMI threshold 25	BMI threshold 30	BMI threshold 35	BMI threshold 40	None
NHS South Norfolk CCG			✓		
NHS South Reading CCG			✓		
NHS South Sefton CCG					
NHS South Warwickshire CCG				✓	
NHS South West Lincolnshire CCG			✓		
NHS South Worcestershire CCG					✓
NHS Southampton City CCG			✓		
NHS Southend CCG				✓	
NHS Southport and Formby CCG				✓	
NHS St Helens CCG				✓	
NHS Stafford and Surrounds CCG			✓		
NHS Stoke on Trent CCG					✓
NHS Surrey Downs CCG					✓
NHS Surrey Heath CCG					
NHS Sutton CCG		✓			
NHS Swindon CCG			✓		
NHS Telford & Wrekin CCG				✓	
NHS Thanet CCG		✓			
NHS Thurrock CCG					
NHS Vale of York CCG		✓			
NHS Vale Royal CCG				✓	
NHS Wakefield CCG			✓		
NHS Walsall CCG	✓				
NHS Wandsworth CCG		✓			
NHS Warrington CCG				✓	

CCG	BMI threshold 25	BMI threshold 30	BMI threshold 35	BMI threshold 40	None
NHS West Cheshire CCG				✓	
NHS West Hampshire CCG			✓		
NHS West Kent CCG		✓			
NHS West Leicestershire CCG					✓
NHS West London (K&C & QPP) CCG				✓	
NHS West Norfolk CCG			✓		
NHS West Suffolk CCG			✓		
NHS Windsor, Ascot and Maidenhead CCG			✓		
NHS Wirral CCG				✓	
NHS Wokingham CCG			✓		
NHS Wolverhampton CCG	✓				
NHS Wyre Forest CCG					✓
NHS Sunderland CCG					✓
NHS Wiltshire CCG			✓		
NHS Camden CCG					✓
NHS Coastal West Sussex CCG			✓		
NHS Dartford, Gravesham and Swanley CCG		✓			
NHS East Riding of Yorkshire CCG			✓		
NHS Enfield CCG					✓
NHS Haringey CCG					✓
NHS Hull CCG			✓		
NHS Islington CCG					✓
NHS Leeds North CCG					✓
NHS Leeds South and East CCG					✓
NHS Leeds West CCG					✓

CCG	BMI threshold 25	BMI threshold 30	BMI threshold 35	BMI threshold 40	None
NHS North East Lincolnshire CCG					✓
NHS Swale CCG		✓			

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Adler Ortho (UK) Ltd
Aquilant Orthopaedics
B. Braun Medical Ltd
CeramTec UK Ltd
Corin Ltd
Depuy Synthes UK
Heraeus Medical
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Mathys Orthopaedics Ltd
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