Vasectomy and Female Sterilisation Services

1. Purpose

1.1. This document aims to assess the sterilisation services offered by ENHCCG against the CCG prioritisation framework to support decision making with regard to future commissioning.

2. Background & Scope

2.1. The AQP vasectomy contracts come to an end June 2017. Currently we jointly procure vasectomy with Herts Valleys CCG, who is lead commissioner for Vasectomy. At the current time there are only three active providers delivering the service. The Parkwood Surgery and Tollgate Clinic had no referrals for the entirety of the three year contract.

2.2. Female sterilisation is currently provided in the acute trust setting only. As the CCG vasectomy contract is ending and there is also a need to assess the priority of female sterilisation, we will be assessing both of these procedures against the CCG prioritisation framework.

2.3. This document will aim to guide decision making of the CCG Governing Body by evaluating against the CCG prioritisation framework. The scope of this document is to discuss vasectomy and female sterilisation carried out in community and acute providers. We are primarily discussing non-scalpel vasectomy and bilateral endoscopic fallopian tube clipping as these are the preferred options of the providers at present.

3. Options Presented

3.1. Three options are presented:
- Option 1: Continue with the current model of both acute and community provided vasectomy and female sterilisation.
- Option 2: Only fund vasectomy and female sterilisation on a case by case basis, such as in exceptional circumstances.
- Option 3: Only fund female sterilisation on a case by case basis, such as in exceptional circumstances, and only fund vasectomy in community providers, unless there are exceptional circumstances.
4. Assessment against CCG Prioritisation Framework

<table>
<thead>
<tr>
<th>Strategic Fit</th>
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<tbody>
<tr>
<td>Is the CCG mandated to commission the service/national ‘must do’, is it a NICE TAG, how does the service fit with the delivery of current national targets for the CCG, how does the service align with the CCG strategic plan (including planned shifts of services/activity to community/self-care/management), STP and Health and Wellbeing Board priorities.</td>
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<tr>
<td>Very low</td>
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<td>X (Both)</td>
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NHS Constitution

- The NHS constitution states that the NHS should work across organisational boundaries and so contraceptive services must be considered across the system.
- Other CCGs either have, or have considered restricting the commissioning sterilisation services as alternative forms of contraception are widely available free of charge, and for those that prefer sterilisation, this is available privately. This may conflict with the NHS Constitution in that access to services should be based on clinical need not ability to pay.

CCG Operational Plan

“All commissioning organisations, across the STP footprint are committed to designing and delivering high quality services at optimum cost which meet local needs and the increasing demand on services.”

- The decision as to the future of sterilisation services should consider delivery at optimum cost across the system, whilst ensuring high quality services. The Board also should consider the possibility of increased demand on GP practices and sexual health services should access to sterilisation be limited. This is likely to be approximately 720 extra people on monitored forms of contraception in 15 years time.

Health and Wellbeing Board

- The Hertfordshire Health and Wellbeing Strategy has three main priorities – healthy living, promoting independence and flourishing communities. Under “flourishing communities” they list “helping all families to thrive” and “improving emotional wellbeing” as part of this. Family planning and preventing unintended pregnancy could support families to thrive and improve their emotional wellbeing.

STP

- Herts Valleys CCG has decided to limit access to all sterilisation services, on the basis that a range of other contraceptive services are available free of charge. The Board will develop a policy stating the CCG deem this to be a low priority procedure and would not routinely be funded, however clinically exceptional cases could still apply for funding via IFR process.
Assessment of the existing evidence and strength of that evidence that the service may be effective compared to other existing or standard treatment.

<table>
<thead>
<tr>
<th>Clinical Effectiveness</th>
<th>Very low</th>
<th>Low</th>
<th>Moderate</th>
<th>High</th>
<th>Very High</th>
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<tr>
<td>Both (Both)</td>
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Both vasectomy and female sterilisation have been ranked “High” in this section as the evidence suggests that they are two of the most reliable methods of contraception when looking at rates of unintended pregnancy. There are however many other forms of contraception that provide reliable and safe contraception for the majority of those that use them, and the groups that are eligible for sterilisation tend to have significantly lower contraceptive failure rates than other groups. Both male and female sterilisations are permanent and after the first 3 months require no input from the user.

Figure 1 and 2 show the effectiveness of various types of contraception with regard to failure rates per year of typical use. Of note both forms of sterilisation are in the top 3 for efficacy, with failure rates of 0.5% and 0.15% per year compared to male condoms with a failure rate of 15% and oral contraceptives (the most popular contraceptive choice in ENHCCG) with a failure rate of 8%. It should be noted however that the failure rate of 8-15% for these methods is based on the whole population, including those that may not have completed their families. For example, the failure rate for the COCP (when used perfectly) is estimated to be only 3 pregnancies per 1,000 women per year. However, the typical failure rate is higher due to imperfect use, which is more likely in certain groups, including adolescents and those in their 20s. An American study showed the lowest contraceptive failure rates in married couples aged over 30. It is likely that those who have completed their families have an even lower failure rate. Sterilisation is only currently available on the NHS for those who have completed their families and understand that the effectiveness of reversal of the procedure is poor, and reversal will not be routinely funded by the NHS. This means the groups eligible for sterilisation are also the group least likely to have a failure on other forms of contraception.

The Implant is the most clinically effective contraceptive and has a failure rate of 0.05%. However uptake of this method is low with only 11.53% currently choosing this contraceptive (this figure might increase if sterilisation was not routinely offered).

There have been a number of studies into the clinical effectiveness of different contraceptives. Most consider contraceptives in terms of ‘Typical Use’ and ‘Perfect Use’ and take into account the fact that not everyone will utilise their chosen form of contraception perfectly. ‘Typical Use’ is the average use of contraception across the population.

A disadvantage of sterilisation compared to barrier forms of contraception such as condoms is that they are not effective in protecting against STIs.
Figure 1: Failure Rates of contraceptives with 'Typical Use' and 'Perfect Use'. Source: http://www.arhp.org/Publications-and-Resources/Clinical-Proceedings/Breaking-the-Contraceptive-Barrier/Use-Knowledge

Figure 2: Failure Rates of contraceptive methods with 'Typical Use'. Source: https://www.cdc.gov/reproductivehealth/contraception/index.htm
Vasectomy
The vasectomy procedure is a minor operation in which the tubes that carry sperm from a man’s testicles to the penis are cut, blocked or sealed. The procedure on average takes 15 minutes and only requires a local anaesthetic. Alternative contraception is required for the first 3 months and the failure rate is 0.15% in the first year. Scalpel free vasectomy is a relatively non-invasive procedure and carries minimal risk.

Female Sterilisation
Female sterilisation is a somewhat more invasive procedure normally requiring a general anaesthetic and endoscopic abdominal approach (for bilateral endoscopic clipping). The recovery period is also slightly longer and a woman following the procedure may not be able to return to work for 5 days. Due to the requirement for general anaesthesia and more invasive nature, the procedure carries more risk than vasectomy but is still considered to be quite safe. As with vasectomy, alternative contraception is required for 3 months, and the failure rate is 0.5% in the first year.

Anticipated Health Benefits/Health Gain
Overview of the size of the potential benefits that the population accessing this service can expect, in terms of increase in life expectancy, improved quality of life in those with long-term conditions and recovery from acute illness or injury.

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<tr>
<th>Very low</th>
<th>Low</th>
<th>Moderate</th>
<th>High</th>
<th>Very High</th>
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<td>X (Both)</td>
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The main health benefit associated with contraception is protection against unintended pregnancy, rather than affecting life expectancy, significant disability or acute or long term illness or injury. As stated above, the likelihood of contraceptive failure in this cohort is likely to be significantly lower than in the wider population.

Dis-benefits of unintended pregnancy include:

Continuing with an unintended Pregnancy
- Mother may not be in optimal health for childbearing and there may be a negative psychological impact on both the mother and child. This is likely to be of low likelihood as in most cases parents bond with their babies. A British study published in 2017 found that in 4343 unplanned pregnancies, 3087 were happy with the pregnancy, 475 were ambivalent, and 781 were unhappy.
- An infant’s health may be negatively impacted by a delay in initiating prenatal care. This delay is more likely to occur in younger and more disadvantaged groups, and less likely in those with stable relationships.

Abortion
- Associated surgical risks (haemorrhage, uterine perforation, cervical injury and infection) and possible psychological impact on the individual post procedure.

Pregnancy after the age of 35
Those accessing sterilisation services tend to be older (see figures 3 & 4, Appendix
A). Pregnancy associated complications increase with age, particularly after 35:

- Increased risk of pregnancy related complication and health problems (including high blood pressure and multiple birth). The infant has a higher risk of congenital abnormality such as Down’s syndrome, as well as intrauterine growth restriction and preterm birth.

**Health Risks associated with Contraception**

Each form of contraception has a certain level of risk associated with their use. This is why an appropriate form of contraception is chosen in consultation with a clinician to offer the least risk for a specific individual.

- Sterilisation has a low risk of surgical complications which is more significant for female sterilisation as it is carried out under GA.
- COCs (Combined oral contraceptives), the most common form of contraception used in Hertfordshire, increase risk of cervical cancer and thrombosis.

**Health Risks associated with sterilisation**

- Vasectomy: Vasectomy is generally considered a safe procedure.
- Female sterilisation:
  - If technical difficulties arise during a laparoscopy, the operation may need to be converted to an open procedure. The risk of laparotomy is increased if the patient is obese or has had previous abdominal surgery. The risk of having to proceed to a laparotomy during laparoscopy due to major complications has been reported as 1.9 in 1,000 procedures; however, there are no large recent studies.
  - The risk of death associated with laparoscopy has been reported as 1 in 12,000 procedures. Again, this figure is not based on recent studies.
  - After tubal occlusion, women should be advised to seek medical advice if they have abdominal pain or vaginal bleeding or if they think they might be pregnant, due to risk of ectopic pregnancy.
  - Sterilisation is associated with an increased rate of hysterectomy, although the reasons for this are unknown. There is no evidence to suggest sterilisation causes significant hormonal change or a worsening of menstrual problems, although women may report this.

**Cost Effectiveness (inc. comparison to alternative models of care)**

| Is there evidence or expectation of a return in investment? How does this compare in terms of cost effectiveness to alternative services/service models for the same patient group or conditions? |
|---|---|---|---|---|
| Very low | Low | Moderate | High | Very High |
| X (Female Sterilisation) | X (Acute Vasectomy) | X (Community Vasectomy) |

Female Sterilisation is considered to be ‘very low’ priority in terms of cost effectiveness as it is the second most expensive form of contraception when compared to other methods of female contraceptives. Community vasectomy in comparison is relatively low cost and therefore considered ‘high’ priority for cost effectiveness (See Figure 3 and 4). Acute vasectomy is more expensive than most...
other options and therefore it is classed as a ‘low’ on cost effectiveness. It should be noted that the CCG is not the commissioner for some of the other contraceptive methods, but these calculations are based on the costs to the wider health system.

Costs per procedure (averages of 2016/17 activity to date):

<table>
<thead>
<tr>
<th>Method</th>
<th>Lasts (est)</th>
<th>Average Cost item calculated over latest 12mths data for pills &amp; ring, 2 years for other methods</th>
<th>Charged</th>
<th>Cost over 15 years (per patient) (est)</th>
<th>Estimated No. patients using method (Currently)</th>
<th>% patients currently using method</th>
</tr>
</thead>
<tbody>
<tr>
<td>COC</td>
<td>monthly</td>
<td>£20.18 per year</td>
<td>CCG</td>
<td>£303</td>
<td>17102</td>
<td>44.95%</td>
</tr>
<tr>
<td>POP</td>
<td>monthly</td>
<td>£14.03 per year</td>
<td>CCG</td>
<td>£210</td>
<td>9366</td>
<td>24.61%</td>
</tr>
<tr>
<td>Ring</td>
<td>monthly</td>
<td>£119 per year</td>
<td>CCG</td>
<td>£1,785</td>
<td>47</td>
<td>0.12%</td>
</tr>
<tr>
<td>IUD</td>
<td>5yr*</td>
<td>£10.41</td>
<td>PHLA</td>
<td>£31</td>
<td>2650</td>
<td>6.96%</td>
</tr>
<tr>
<td>Implant</td>
<td>3yr</td>
<td>£77.17</td>
<td>PHLA</td>
<td>£386</td>
<td>4389</td>
<td>11.53%</td>
</tr>
<tr>
<td>Drug Eluting IUD</td>
<td>5yr Mirena, which vast majority of scripts are for.</td>
<td>PHLA</td>
<td>£244</td>
<td>1752</td>
<td>4.60%</td>
<td></td>
</tr>
<tr>
<td>Vasectomy (AQP)</td>
<td>Permanent</td>
<td>£260.00</td>
<td>CCG</td>
<td>£260</td>
<td>446</td>
<td>1.17%</td>
</tr>
<tr>
<td>Female Sterilisation</td>
<td>Permanent</td>
<td>£1,161.00</td>
<td>CCG</td>
<td>£1,161</td>
<td>51</td>
<td>0.13%</td>
</tr>
<tr>
<td>Injectable Progestogen</td>
<td>3 Monthly</td>
<td>22.37 per year</td>
<td>CCG</td>
<td>£336</td>
<td>2247</td>
<td>5.91%</td>
</tr>
<tr>
<td>EHC</td>
<td>one-off</td>
<td>£6.27</td>
<td>Cannot tell - may be repeat users. 1521 packs in last 12 mths</td>
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* some are 10 yr, but majority are 5

Figure 3 Average cost of procedure 2016/17 activity to date. This differs from actual cost due to patients attending consultation and choosing not to have the procedure.

Figure 4 The cost and usage of contraception across East and North Herts determined using prescribing data for all methods except sterilisation for which activity data was used. Data for condom usage was not available. 15 years has been taken as a measure of cost for non-permanent forms of contraception as this is the difference between average age of vasectomy and average age of menopause.

Should the decision be made to restrict access to sterilisation services then there will be additional system costs associated with providing alternative contraception to those who would otherwise have undergone sterilisation. These will be discussed below under “Affordability”.

One in three councils across the UK have looked to restrict funding to contraceptives provided by GPs or already no longer provide this funding, according to the Advisory Group on Contraception10. Nine councils specifically noted that they
have restrictions in place on who can access LARC methods, such as IUD, IUS or the contraceptive implant. Durham County Council, for instance, indicated that IUD and contraceptive implants are not available to women 'who are not registered to a GP practice in County Durham'. Similarly, Rotherham Metropolitan Borough Council indicated that only ‘patients registered with contracted GP’ could access LARC.

**Affordability (inc. opportunity costs)**

*How much will the service or intervention cost per year? What is the cost per head of population that would potentially benefit? Is this cost affordable within the CCG’s overall budget? Is there an opportunity for releasing resources for alternative uses? (resources include staff time, estate and finance)? What are the opportunity costs for other services or interventions?*

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<th>Very low</th>
<th>Low</th>
<th>Moderate</th>
<th>High</th>
<th>Very High</th>
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<tbody>
<tr>
<td>X (Female Sterilisation)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>X (Vasectomy)</td>
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The affordability of female sterilisation has been rated as “Low-Moderate” due to the high costs associated with it on a cost per-case basis. Vasectomy has been rated as “Moderate-High” affordability due to its relative affordability compared to some other forms of contraception.

When considering the affordability of sterilisation services, a number of other factors should be considered including cost of alternative contraception as well as the possibility for unintended pregnancy. As previously shown (Figure 4), the costs of alternative contraception are split between the CCG and Public Health budgets depending on the form used.

NHS data shows that the national number of vasectomies performed has fallen by 64% in 10 years, and female sterilisation by 46% in 10 years. Over the last 3 years East and North Herts have not seen a significant reduction in vasectomies or female sterilisation.

Here we have looked at the following scenarios to allow realistic assessment of affordability:

- Continuing with the current policy (*Option 1*).
- Restricting access to all sterilisation procedures (male and female) with funding provided on an IFR basis for those with exceptional clinical circumstances (*Option 2*).
- Continuing offering vasectomy (with all activity moving to AQP) and restricting access to female sterilisation as above (*Option 3*).

The CCG does not have data on condom usage as it is not prescribed. It is therefore difficult to scope the likelihood anyone not offered sterilisation may use this as their only form of contraceptive. Therefore condoms have not been included in the costing models for Options 1, 2 & 3. A survey was conducted by HSCIC for contraceptive services and this suggests 20.6% of those aged 35 and over use condoms. However, condoms are also used for protection against STIs and so a proportion of this percentage may also have been using more effective forms of
birth control. Hertfordshire County Council pays 46p for 6 condoms. Based on average sexual activity for this age group (78 times per year) the annual cost for someone to use condoms would be £5.98.

Option 1 (Current Policy)

The current cost of sterilisation services to the CCG is £198,487 per year (average activity over last 2 years). This consists of non-scalpel vasectomy been carried out by AQP's, a small number been carried out by Acute Providers and all female sterilisation been carried out by Acute Providers.

Option 2 (Restricting access to all sterilisation procedures)

If both male and female sterilisation were to be offered on a prior approval basis we have assumed for the purpose of service cost projections that 5% of current activity would be funded. This may be more or less. Using this assumption costs have been estimated for the CCG and PHLAs for delivering contraceptive services to the 497 individuals that on average access sterilisation services each year. The estimate of costs below assumes those not offered sterilisation will follow the trend in contraceptive use of the rest of East and North Herts.

The Total Cost is the cost of all contraceptives provided by the CCG and PHLAs (Green Line). The PHLAs (Blue) fund contraceptive devices – IUDs and Implants. The CCG (Purple) fund prescribed contraceptives – COCs, POPs, Rings, injectable progestogen and sterilisation services.

Figure 5 Cost of delivering contraceptive services to 497 individuals, 5% of which are granted funding for sterilisation. This assumes these individuals will follow the same trend in contraceptive use as the rest of East and North Herts.
This is a realistic costing model assuming patients choose their method of contraception based on current trends. We assume the majority of couples would use COCs. However in a worst case scenario this group of people will all move to rings or injectable progestogen. In a best case scenario all would choose to use the copper IUDs.

Abortion costs

It is difficult to estimate the number of unintended pregnancies Option 2 may result in. Female sterilisation and Vasectomy are two of the most effective forms of contraception and there is a risk those not offered sterilisation may move to less effective contraceptives with higher failure rates. COCs are the most popular contraceptive option and have a failure rate of 8-9% with typical use. The average cost for an abortion under national tariff post MFF is £672.40 (Appendix A). Using the failure rate for COCs this could mean a cost to the CCG of £26,896. The failure rate is however likely to be lower in an older cohort of patients and some may choose to continue with an unintended pregnancy reducing this cost.

Cost to Primary Care

The costs shown in Figure 4 do not consider the cost to Primary Care or Sexual Health Services, only procedure cost or prescription cost. The benefit of sterilisation is that it does not require ongoing monitoring as other methods of contraception do. Implementation of option 2 could lead to 7080 extra people on monitored forms of contraception in 15 years’ time.

A standard 10 min appointment with a GP costs £36, with a Band 7 Nurse Practitioner £9, with a Band 6 Practice Nurse £7. It’s likely the majority of contraceptive appointments will be carried out by a Practice Nurse or Nurse Practitioner as the CCG employs 193 Nurses in GP Practices, 116 of which have family planning training. These costs are met through the core GMS contract, and some under enhanced commissioning of contraceptive services via NHS England.

The costs of each contraceptive method including appointment costs are shown in Appendix C. Injectable Progestogen puts the greatest pressure on services as it requires a 10 min appointment every 3 months. This moves the yearly cost from £22.37 to £50.40, if these injections are administered by a Practice Nurse. COCs the most popular contraceptive require at a minimum a 10 min yearly review.

When the cost to primary care and sexual health services is factored in Female Sterilisation is still the second most expensive contraceptive to the wider health system (CCG and county council public health budgets). Community vasectomy (not acute vasectomy) however becomes the second most cost effective contraceptive instead of the fourth over a 15 year period (average age of community vasectomy to average age of menopause).
Option 3 (Continue to offer vasectomy through AQPs/ community services and restrict access to female sterilisation)

If female sterilisation were to be offered on a prior approval basis we have assumed for the purpose of service cost projections that 5% of current activity would be funded. This may be more or less. If Option 3 was adopted 446 men on average would receive a vasectomy each year. The estimate of costs below assumes those not offered female sterilisation will follow the trend in contraceptive use of the rest of East and North Herts. As before this costing estimate could be significantly more or less if people choose cheaper or more expensive contraceptive options.

<table>
<thead>
<tr>
<th>Year</th>
<th>Cost for Contraceptives</th>
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<tbody>
<tr>
<td>1</td>
<td>£0</td>
</tr>
<tr>
<td>2</td>
<td>£50,000</td>
</tr>
<tr>
<td>3</td>
<td>£100,000</td>
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<tr>
<td>4</td>
<td>£150,000</td>
</tr>
<tr>
<td>5</td>
<td>£200,000</td>
</tr>
<tr>
<td>6</td>
<td>£250,000</td>
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</tbody>
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Figure 6 Cost of delivering contraceptive services to 497 individuals. It is assumed 5% of the demand for female sterilisation is granted funding. Vasectomy services are accessed by 446 men each year through AQP Providers. It is assumed those not granted funding for female sterilisation will follow the same trend in contraceptive use as the rest of East and North Herts.

Abortion costs

As with Option 2 there is a risk that those not offered sterilisation may move to less effective forms of contraception and result in an unintended pregnancy. The risk of additional abortion costs to the CCG is significantly less with Option 3. If all those not funded for female sterilisation move to COCs then using the failure rate with typical use abortions may cost the CCG £2,689.60. The failure rate may be lower in an older cohort of patients and some may choose to continue an unintended pregnancy.
Cost to Primary Care

Implementation of option 3 could lead to 720 extra people on monitored forms of contraception in 15 years’ time. Significantly less than Option 2. The costs of each contraceptive method including appointment costs are shown in Appendix C.

Procurement Costs

As Option 3 intends to carry on providing vasectomy in the community AQPs will have to be re-procured. There is a one off cost associated with this repeated at 3-5 year intervals. The existing contracts and service specifications should reduce the work and cost required to procure AQPs.

Comparison Option 1, 2 & 3

As the number of individuals on alternative methods of contraception will increase over time after implementation of Option 2 or 3 costs to the system will increase over the years. The current service model (Option 1) is more expensive but is not subject to such variation over time, except if the AQP procedure cost is altered under a new contract or if the national tariff for female sterilisation significantly increases.

<table>
<thead>
<tr>
<th></th>
<th>Year 5</th>
<th>Year 10</th>
<th>Year 15</th>
<th>Year 20</th>
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<tbody>
<tr>
<td>Option 1</td>
<td>£198,487.00</td>
<td>£198,487.00</td>
<td>£198,487.00</td>
<td>£198,487.00</td>
</tr>
<tr>
<td>Option 2</td>
<td>£52,104.25</td>
<td>£95,005.50</td>
<td>£137,906.75</td>
<td>£137,906.00</td>
</tr>
<tr>
<td>Option 3</td>
<td>£123,805.55</td>
<td>£128,168.10</td>
<td>£132,530.65</td>
<td>£132,530.65</td>
</tr>
</tbody>
</table>

Figure 7 Costs for delivering contraceptives to those that would ordinarily access sterilisation services as their first choke for Options 1, 2 & 3. This only considers cost for the prescription or procedure not appointment requirements and assumes these individuals will follow the same trend in contraceptive usage as the rest of East and North Herts.

Impact on Health Inequalities

*Could this service act towards reducing health inequalities in the local area? Is it accessed disproportionately by a marginalised or deprived group/area or targeted at such?*

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<th>Very low</th>
<th>Low</th>
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Contraception has been shown in general to reduce inequalities. Access to contraception has promoted women’s economic empowerment and reduced gender inequality in the UK.

Specific evidence for an impact of sterilisation on marginalized/deprived groups is lacking and varied, and we do not have detailed demographic data available for service users on a local level. Although UK studies have shown higher rates of unplanned pregnancy in groups of lower educational level, there was no direct links with socioeconomic status. As such it has been rated as “low-moderate”.

Socioeconomic Status

- In the US unplanned pregnancies have been shown to be more prominent in groups of lower socioeconomic status and on lower incomes.

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• Population studies in the US also suggest those that are less educated and on lower income are less likely to access sterilisation services\textsuperscript{16}, however, due to significant differences in delivery models between the NHS and US systems it is difficult to generalise based on this.

• A further study in the US has found that there were higher levels of vasectomies carried out in times of greater unemployment, suggesting that access may be disproportionately high in more deprived areas, although UK and local evidence was not found\textsuperscript{17}.

• Conversely a study from Manitoba, Canada showed that vasectomy rates decrease as income increases, but that the opposite is true of female sterilisation\textsuperscript{18}. A recent UK study has not replicated the US findings of increased rates of unplanned pregnancy in lower socioeconomic groups, but did find a significant correlation between lower educational level and higher unplanned pregnancy rates\textsuperscript{19}. Positive smoking status, drug use and earlier age of first sexual encounter were also strongly correlated.

• The lack of consensus in this area makes it difficult to assess the effect of deprivation on access to sterilisation services without local data.

Gender

Although contraception is normally considered to be a decision made by couples it should still be noted that vasectomy is one of the only alternatives to condoms available to men. Condoms do not offer the same level of protection from unplanned pregnancy as vasectomy. Not providing vasectomy services may push the burden of contraception back to the female partner. Women have a number of alternatives to sterilisation available to them of equal efficacy. We can assume most individuals accessing sterilisation services are in a relationship and have one sexual partner, however we do not have data to support this.

Age

As seen in figures 3 & 4 in appendix A, vasectomy is most commonly used by those in the 31-46 age range and female sterilisation by those aged 28-44. Whilst these are not generally considered to be marginalized groups, a change in policy will impact on specific age groups.

The impact of this policy on protected characteristics (age, gender etc.) will be further assessed in the Quality and Equality Integrated Impact Assessment.
Summary of Rankings:

- Strategic fit – Low (Both)
- Clinical Effectiveness – High (Both)
- Anticipated Health Benefits – Low (Both)
- Cost Effectiveness – Community provided vasectomy: High, Acute provided vasectomy: Low
  Female Sterilisation: Very Low
- Affordability – Vasectomy: Moderate-High, Female Sterilisation: Low-Moderate
- Impact on Health Inequalities – Low-Moderate

Recommendation

Given the evidence considered above, the recommendation to the Governing Body is to consider option 3 – to commission vasectomy in the community under AQP contracts and community tariff only; and to limit access to female sterilisation except in exceptional circumstances. This recommendation is based on the fact that there is equivalent clinical efficacy of community and acute provided vasectomies and female sterilisation has much higher costs compared to other highly effective methods of reducing unintended pregnancy in this cohort of patients.

References

1. Trussell J; Contraceptive failure in the United States, Contraception, 2011


