The Economics of Sexual Health

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The Economics of Sexual Health: Findings

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Introduction

In recent years there has been increasing acknowledgement of the need for significant improvements in sexual health services in England, which have been described as being in “crisis”. In recognition of this need, in 2001 the Department of Health (DH) published the first National Strategy for Sexual Health and HIV\(^1\), with associated guidance to encourage PCTs to make improvements in sexual health services across England\(^2\).

However, very little economic evidence was used as the basis for the policy recommendations included in the Strategy, particularly those relating to contraception and abortion services (also known collectively as fertility control). This raises two key questions: firstly, does such economic evidence exist? Secondly, if there are gaps in the evidence, in terms of interventions covered or quality of studies, can research be conducted to fill these gaps and provide robust economic evidence for sexual health policy? These questions are particularly relevant now as the last key report in this area, on the economics of contraception, was published over ten years ago\(^3\). In addition, despite increased Government commitment to and investment in sexual health services since the launch of the Strategy, it is clear that there are not unlimited resources within the NHS for sexual health.

In this context, we must also raise the question of whether it is possible to meet the needs and preferences of users of sexual health services more effectively within the current budget, or even with some budget savings. To address this question, fpa commissioned a two-stage research study into the economics of sexual health in England, focusing on contraception and abortion services. The two main aims of the research were:

1. To assess the existing literature on the economics of contraception and abortion services, in terms of both its quality and its relevance to current policy questions.
2. Building on this assessment, to model the economic impact of changes in contraception and abortion services.

The research was carried out between April 2003 and July 2005 at the Centre for Health Services Research at Newcastle University, and was particularly timely given the renewed focus on sexual health in the Public Health White Paper Choosing Health, published in November 2004\(^4\). The DH has committed £300 million towards the implementation of the White Paper’s sexual health proposals, of which £40 million has been earmarked for contraception services\(^5\).

The research produced some strong findings, which are detailed in this report:

- **Part 1** details the first stage of the research, which reviewed existing evidence, and shows quite clearly that there is a significant lack of economic evaluation studies for contraception and abortion services which are meaningful for decision-makers, and therefore that there is scope for further research in this area to improve the evidence base for policy-making.

- **Part 2** outlines key findings from the second stage of the research, which modelled the costs and benefits of policy changes for contraception and abortion services. These changes would produce significant cost savings for the NHS, which in the medium term could amount to over £60 million per year.

Overall, the research shows that not only is it feasible to improve contraception and
abortion services in ways that better meet the preferences of service users, but also that there is a considerable net saving of up to £1 billion over 15 years to be made from doing so. This report therefore provides both up-to-date research on the cost savings to be made nationally from implementing improvements to contraception and abortion services; and also important evidence and input for PCTs as they determine how best to improve these services at a local level, in particular how they allocate any new funding for this purpose.

**Part 1**

A systematic review of economic appraisals of contraception and abortion services and methods

This section covers: the principles on which the review was based; definitions of the costs and benefits of sexual health services; key findings from the review; and directions for future research.

**1. BASIC PRINCIPLES**

Economics examines how best to use resources. The need to do this is based on the undeniable fact that resources in the NHS are not sufficient to meet all needs, therefore choices have to be made about what health services to provide. No matter what statements are made about rights of access to care and meeting needs, some rights and needs will be met while others will not – or at least, not immediately.

How then do we decide which needs to meet? The theoretical basis of the economic approach to this question is the principle of **opportunity cost**. Because of scarcity and the need to choose, certain opportunities will be taken up while others will be discarded. Meeting one right or need means that the opportunity to meet another is missed. Economists refer to the benefits associated with forgone opportunities as opportunity costs. If the aim of decision-makers is to maximise benefits to the community, and thus to minimise opportunity cost, there is a need to gather evidence on both the costs and benefits of health care.

By measuring costs and benefits, we can choose that combination of resources which maximises benefits – and, consequently, the amount of need met – from available resources. The type of evidence that includes both costs and benefits is known as an economic evaluation.

**2. DEFINING COSTS AND BENEFITS OF SEXUAL HEALTH SERVICES**

It is important to outline the types of cost and benefit that should be looked for when reviewing economic evaluations, especially for complex areas such as sexual health services.

**2.1 Costs**

These can either be direct or indirect, where direct costs are “the value of all resources consumed in the provision of a health care intervention”, and indirect costs are the costs of lost productivity, for example due to taking time off from work to use a service.
Direct costs can be further subdivided by the perspective of the analysis – essentially, whose budget is affected. Different perspectives can be those of: an institution (e.g. hospital/clinic); a consumer/user or her/his relatives/carer (including person accompanying the user to an appointment); a health service (where costs are incurred by more than one institution or centrally); and other public sector agencies, for example in providing income maintenance payments. Table 1 gives a simple description of cost categories relevant to each perspective.

The following section, on benefits, focuses on what decision-makers are trying to achieve, given such costs, from their fixed budgets. With this information, decision-makers can judge, for any given service or intervention, what are the net gains in benefit relative to any net costs incurred to achieve such gains.

<table>
<thead>
<tr>
<th>Costs to:</th>
<th>Type of cost incurred/averted</th>
</tr>
</thead>
<tbody>
<tr>
<td>User/carer</td>
<td>Travel</td>
</tr>
<tr>
<td></td>
<td>Lost work</td>
</tr>
<tr>
<td></td>
<td>Out-of-pocket expenses</td>
</tr>
<tr>
<td>Institution/health service costs of contraception</td>
<td>Contraceptive method (e.g. drugs or devices in different quantities)</td>
</tr>
<tr>
<td></td>
<td>Staff time in dispensing or fitting drugs/devices</td>
</tr>
<tr>
<td></td>
<td>Education and counselling/support</td>
</tr>
<tr>
<td></td>
<td>Training staff</td>
</tr>
<tr>
<td></td>
<td>Treatment of side-effects and complications</td>
</tr>
<tr>
<td></td>
<td>Contraceptive failure (resulting in costs of unintended births and abortions)</td>
</tr>
<tr>
<td>Institution/health service costs of abortion</td>
<td>Abortion method (e.g. drugs – including anaesthetic for surgical abortion – and surgical equipment)</td>
</tr>
<tr>
<td></td>
<td>Staff time in carrying out the procedure</td>
</tr>
<tr>
<td></td>
<td>Counselling</td>
</tr>
<tr>
<td></td>
<td>Pregnancy testing</td>
</tr>
<tr>
<td></td>
<td>Testing for infection and/or antibiotic treatment</td>
</tr>
<tr>
<td></td>
<td>Treatment of complications</td>
</tr>
<tr>
<td></td>
<td>Surgical abortion following incomplete medical abortion</td>
</tr>
<tr>
<td></td>
<td>Abortion ‘failure’ (resulting in costs of births)</td>
</tr>
<tr>
<td>Litigation costs</td>
<td>E.g. for problems leading to sterilisation failure, and IUD insertion problems</td>
</tr>
<tr>
<td>Other public sector costs</td>
<td>Payment to family for child (e.g. child benefit)</td>
</tr>
<tr>
<td></td>
<td>Payment due to low income (e.g. income support)</td>
</tr>
<tr>
<td></td>
<td>Payment for child (outside of family) (e.g. residential services, foster care or for adoption)</td>
</tr>
</tbody>
</table>
2.2 Benefits

In this section we first consider what is meant by benefit, based on a brief summary of qualitative research with decision-makers in the area of sexual health in England. We have used this to compile a set of measures of benefit, which is summarised in Table 2. We then go on to discuss what this means in the context of the review.

2.2.1 Qualitative research summary

Essentially, benefits are what decision-makers are trying to achieve with their limited resources and, as such, benefit is defined as the extent of fulfilment of decision-maker goals.

For the qualitative research, we interviewed seven decision-makers representing different perspectives, including the user perspective. Table 2 provides a summary of the categories and sub-categories of benefit identified through the research. The categories are defined in full below.

Health and quality of life are the most obvious outputs of a health care technology and therefore an obvious goal is to improve health or its constituent parts. The World Health Organization (WHO) defines health as “A state of complete physical, mental, and social well-being not merely the absence of disease”. It defines quality of life as “an individual’s perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns”. Here, because we are using benefit to capture fulfilment of goals, quality of life is not as broad. In fact, it might be closer to the WHO definition of health, which we might call ‘health-related quality of life’, with health referring more to the most obvious outputs of health care technologies and the absence of disease.

Equity is a more difficult concept. A recent discussion paper considering whether the NHS is

<table>
<thead>
<tr>
<th>Main category:</th>
<th>Sub-category:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>Sexual health, fertility control, prevention of: unwanted/unplanned pregnancies and births, ectopic pregnancies, infections, stroke, thrombosis, uterine wall perforation, etc</td>
</tr>
<tr>
<td>Quality of life</td>
<td>Happy/reasonable/good life, self-esteem, knowledge/understanding/education, ability to work or study, and avoidance of: feeling ill, stress/hassle, pain, worry</td>
</tr>
<tr>
<td>Equality of</td>
<td>Provision, access, benefit, standards, availability, fertility control, choice, health, resources, competencies/skills of commissioners, skills of clinicians</td>
</tr>
<tr>
<td>Equality by</td>
<td>Age, location, capacity to benefit, probability to access, initial health, ethnic group, service, culture, choice, deprivation, disability</td>
</tr>
<tr>
<td>Access to</td>
<td>Fertility control (contraception and abortion) methods and services, sex education in schools/sex and relationships education, knowledge, understanding</td>
</tr>
<tr>
<td>Other access issues</td>
<td>Waiting time, availability</td>
</tr>
<tr>
<td>Social</td>
<td>Benefit, cost, choice, health, preference, values</td>
</tr>
<tr>
<td>Individual benefit</td>
<td>Choice, fulfilment of aspirations, goal achievement, respect of individual perspective/values/importance, satisfaction, empowerment/control, happiness</td>
</tr>
</tbody>
</table>
equitable states: “an equitable service is defined as one that offers equality of access to health care to individuals in equal need [often referred to as horizontal equity]”[9]. However, at its most general, it is simply defined as ‘fairness’, which might be interpreted as ‘treating people equally’.

Access is distinguished from equity in that, although one goal might be to increase equality of access, another might be to increase access irrespective of its distribution. Yet again it is not straightforward to define, and includes utilisation and costs incurred in receiving health care.

Social is more a qualifier for other terms in that it refers to goals for any people other than the service user. These include family but also non-family, such as society as a whole. For example, ‘public health’ is translated to social health.

Individual benefit refers to measures which are related to the way in which the extent of fulfilment of a goal is derived from the benefit of other individuals or, in economic terms, by maximising the utility of others i.e. a decision-maker might have a goal of fulfilling the goals of individual service users or society as a whole. Therefore measures of preference or the values of individual members of defined groups would be relevant here.

2.2.2 Relevance to the review

The predominant measure of benefit for contraceptive technologies is rate of unintended/unwanted pregnancies prevented and, thus, births and abortions prevented, which is referred to generally as contraceptive effectiveness. These can also imply substantial cost-saving effects, where costs are expressed as the costs of contraceptive failure.

Another obvious measure of benefit is related to sexually transmitted infections (STIs), where, in theory, one method might be superior to another in preventing pregnancies but inferior in preventing STIs. Similarly, one method might be superior in terms of preventing STIs but inferior in terms of preventing pregnancies. This highlights the difficulty in measuring overall benefit for contraceptive technologies given multiple goals/dimensions. However, this research has focused specifically on fertility control – i.e. the prevention of pregnancy as a measure of benefit for contraception – therefore we have not taken into account the measures of benefit relating to STIs.

The quality adjusted life year (QALY)[10] is an attempt to weigh up multiple dimensions of benefit in terms of the dimensions of health-related quality of life. It is currently the most prevalent way of measuring individual health and well-being in economic evaluations in the UK and is the method adopted by the National Institute for Health and Clinical Excellence in assessment of technologies. The technology with the highest benefit in this sense would produce the most QALYs per individual. User satisfaction is related in the sense that one would expect someone to be more satisfied with the option that gives the highest number of QALYs.

Another measure of benefit is the range of methods of contraception or abortion available, where the goal would be to increase the range of methods available. Of course, although increasing the range of methods could be a goal, it might also be instrumental in increasing the benefit of users and both goals could be instrumental in increasing compliance in order to increase effectiveness. This is particularly so with contraception, there being some evidence that increasing the range leads to a reduction in unintended pregnancies through women being able to obtain the method they prefer.
and therefore use it more effectively, and also through increased availability of methods without user failure.

So far we have discussed benefit as it accrues to an individual, which can then be aggregated across individuals to estimate total incremental change in implementing a new technology. However, benefit can also be expressed in terms of some concept of equity such as equality of access or equality of health. It is a key aim of the National Strategy for Sexual Health and HIV that there is increased equality of access to contraception. Increasing the proportion of abortions funded by the NHS across all PCTs is another. However, very few health care intervention studies, either effectiveness only or economic evaluations, have been designed to measure the effect of technologies on inequalities.

3. KEY FINDINGS

There are a number of broad preliminary conclusions which can be drawn from the evidence that is available:

- It is absolutely clear that contraception services, in themselves, result in reduced cost and increased benefit overall.
- There is evidence that greater access to a full range of contraceptive methods, including longer-acting methods (such as the IUD, IUS and implants), is beneficial and can lead to a reduction in unwanted pregnancies.
- There is evidence that access to emergency contraception (EC), both the emergency contraceptive pill and the IUD, is beneficial.

However, overall the first stage of the review has shown quite clearly that there is a real lack of economic evaluation studies for contraception and abortion services which are meaningful for decision-makers. There is a mismatch between the demand for and supply of evidence, which manifests in two main ways in the existing literature: inappropriate or limited measures of benefit; and, given current beliefs as reflected in key policy documents, a lack of comparisons to reflect or assess those beliefs.

Decision-makers, as shown through policy documents representing various stakeholders, seem to believe that interventions should increase access to services as well as reduce inequalities in access, particularly in terms of funding, contraceptive and abortion method choice, access to EC, and reduced delay in obtaining contraception and abortion services.

4. DIRECTIONS FOR FURTHER RESEARCH

This review has indicated clearly that there is a need for further economic research to provide more direct and useful evidence for policymakers to use when commissioning contraception and abortion services. Our findings highlight a number of key criteria that future research should fulfil in order to be most useful. These criteria are that the research evidence should:

- measure both cost and benefit
- measure benefit in terms that are relevant, in particular:
  - taking account of the range of measures
  - attempting to value these
  - including measures of distribution, access and user preference
- have a design that is appropriate for the measures above
permit the measurement of opportunity cost, either:
- with a hypothesis of ‘dominance’, whereby one method or technology is both cheaper and more beneficial than another, or
- by including the comparison of sufficient sets of independent technologies from the same budget, some of which would be predicted to be more beneficial, but also more costly.

Our review also indicates that, specifically in order to address policy questions in the area of contraception and abortion, research evidence should:
- compare a proposed technology to that which is currently provided
- define technologies clearly
- in comparisons between individual contraceptive methods, clearly define the suitable population (i.e. those currently using method ‘a’ for whom method ‘b’ would also be appropriate)
- take account of the preferences of users, either:
  - in defining the population (i.e. by preference for method), or
  - in valuing the measures of benefit;
- in measuring preferences, use economic (choice) methods, which allow the trade-off between measures of benefit and characteristics of methods
- investigate the value of using QALYs in measuring benefit
- investigate ways of designing research to measure change in distributional measures (e.g. equality of ‘rate of unintended pregnancy’ or access)
- be clear in any assumptions, particularly regarding pregnancy timing and contraceptive effectiveness
- compare a direct (regression) approach to estimating service or contraceptive method effectiveness to one based on the synthesis of evidence via decision modelling
- find ways of modelling contraceptive method switching that are less biased by the influence of historical evidence on method choice
- estimate the efficiency of reduced waiting time to abortion and increased equality of access to NHS funding for abortion
- estimate the efficiency of increasing the equality of access to the range of methods of contraception and abortion.

Following the key findings of the systematic review, Part 2 of the research models the costs and benefits of two policy changes. In the light of the findings from Part 1, measures of benefit will include: equality of access to abortion; equality of access to contraceptive and abortion methods, as measured by contraceptive profile estimated according to demand (preference); rate of unintended pregnancy and abortion; and complication rate following abortion.
Part 2

Modelling the costs and benefits of policy changes to contraception and abortion services

Following the preliminary conclusions of Part 1 of the research, this second section of the research models the costs and benefits of the following policy changes:

- Changing the NHS supply of contraceptive methods in order to better reflect the preferences of women.
- Reducing the delay in obtaining an abortion, as reflected in reducing the gestational age at which the procedure is carried out.

1. MODELLING THE POLICY CHANGES

As the evidence is intended to inform decision-making for the NHS, there are three general parameters which were important to take into account:

1. The current NHS budget for contraception and abortion services.
2. Relevant costs and benefits of these services.
3. Estimates of how each of these would change in the light of policies to change the profile of available contraceptive methods and enhance access to abortion.

In modelling the policy changes for contraception and abortion services, there are five outcome measures of benefit which are relevant in assessing the effectiveness of these changes:

1. Increased access to contraceptive methods according to preference.
2. A reduced rate of unintended pregnancy and abortion.
3. Reduced delay in obtaining an abortion.
4. Reduced rates of complications of abortion.
5. Increased access to abortion methods according to preference.

1.1 Contraception services

In order to model changes in the supply of contraceptive methods, data was required on: the current (NHS) profile of contraceptive methods; the ideal (according to women’s preferences) profile; and the cost and effectiveness (in terms of reduction in unintended pregnancy-abortion) of each method.

To estimate the current profile, the most accurate data was gained from the prescription analysis and cost (PACT) data collected by the Prescription Pricing Authority from pharmacies, which reflects prescriptions from general practice, and DH data from family planning clinics. This raw data was then converted into prevalences (percentage of all methods prescribed in one year).

It is very challenging to estimate the ideal profile of contraceptive methods, particularly as there is limited information available on women’s preferences, therefore we chose to estimate the ideal profile using the Delphi consensus method among a panel of experts. The ideal profile was estimated in age bands, in order to estimate preferences more accurately.

The cost and effectiveness of each method were estimated using an adaptation of the model by Sonnenberg et al. Essentially, this model simulates a cohort of women aged 15 to 49 in seven age bands who are at risk of becoming, but who do not want to become, pregnant, and who, at the outset, use one of the methods of contraception. Over a specified period, the rate
of pregnancy depends on the joint probabilities of becoming pregnant in each year, which are determined by several factors.

Using these three sets of data (current profile, ideal profile, and cost and effectiveness of each method), we were able to estimate costs for the current and ideal profiles of contraceptive methods which are prescribed through primary care (therefore excluding male and female sterilisation, condoms, natural family planning, and the emergency contraceptive pill). The contraceptive patch was also excluded due to its very low current prevalence and consequent difficulty in estimating women’s preferences for it.

Based on the comparison between the current and ideal profiles, it is estimated that current supply does not meet the demand for longer-term reversible contraceptive methods. It is therefore estimated that in order to provide the ideal profile across the NHS as a whole, there would need to be a large decrease (-27%) in prescriptions of the combined pill, and a parallel increase in prescriptions of a number of other methods, particularly implants (+9%) and the IUS (+8%), in order to better meet women’s preferences.

The cost implication of these changes is a considerable net saving of over £500 million over 15 years, and more detail on this estimate is given in Table 3.

Table 3 (a)

<table>
<thead>
<tr>
<th></th>
<th>Combined</th>
<th>Progestogen only</th>
<th>Implant</th>
<th>Injection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost per user</td>
<td>£2,260.88</td>
<td>£2,260.88</td>
<td>£1,632.20</td>
<td>£1,965.22</td>
</tr>
<tr>
<td>Cost current</td>
<td>£5,412,965,320.35</td>
<td>£901,605,462.86</td>
<td>£67,750,948.29</td>
<td>£694,532,730.74</td>
</tr>
<tr>
<td>Cost ideal</td>
<td>£3,048,334,226.33</td>
<td>£1,322,958,893.86</td>
<td>£650,128,541.96</td>
<td>£691,082,152.35</td>
</tr>
<tr>
<td>Cost change</td>
<td>-£2,364,631,094.02</td>
<td>£421,353,431.00</td>
<td>£582,377,593.67</td>
<td>-£3,450,578.40</td>
</tr>
</tbody>
</table>

Table 3 (b)

<table>
<thead>
<tr>
<th></th>
<th>IUS</th>
<th>IUD</th>
<th>Diaphragm/cap</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost per user</td>
<td>£1,563.55</td>
<td>£1,469.75</td>
<td>N/a</td>
<td>N/a</td>
</tr>
<tr>
<td>Cost current</td>
<td>£516,155,584.23</td>
<td>£400,621,276.34</td>
<td>N/a</td>
<td>£7,993,631,322.81</td>
</tr>
<tr>
<td>Cost ideal</td>
<td>£1,033,155,381.96</td>
<td>£586,940,576.83</td>
<td>N/a</td>
<td>£7,332,599,773.28</td>
</tr>
<tr>
<td>Cost change</td>
<td>£516,999,797.73</td>
<td>£186,319,300.49</td>
<td>N/a</td>
<td>£661,031,549.52</td>
</tr>
</tbody>
</table>

NB This table uses cost data from the economic evaluation as part of the NICE guidance on long acting reversible contraceptive methods. Those for diaphragm/cap are not given due to this study not having included this method. Cost per user is the NICE estimate of total costs for a simulated cohort of 1000 women over 15 years of use (including discontinuations), divided by 1000 to give the cost per woman (user). This therefore includes the costs of unintended pregnancies and in particular, of those, live births (maternity services and care of newborn until discharge from hospital).
1.2 Abortion services

Reducing the delay in obtaining an abortion, as reflected in reducing the gestational age at which the procedure is carried out, was seen to be desirable for a number of reasons:

- Reduction in the waiting time would increase the proportion of abortions performed up to nine weeks.
- This would facilitate an increase in the number of early medical abortions (which can only take place up to nine weeks).
- It would also facilitate an increase in the number of surgical abortions under local anaesthetic (which generally take place up to 12 weeks).
- Both of these changes would therefore reduce the number of surgical abortions under general anaesthetic, and the consequent problems associated with general anaesthesia.
- There is also evidence that the rate of complications, independent of procedure, increases with gestational age, and therefore there is reason to believe that reduced delay would reduce the complication rate.

Again, in order to model a reduction in the delay in obtaining an abortion, data was required on: the current profile of abortion methods; a new profile of gestational age at time of abortion as a result of some hypothetical intervention to reduce delay; a new profile of abortion methods as a result of better reflection of women’s preferences for method; and complication rates given current and new profiles. Using this data, cost was calculated as the sum across all gestational ages and all methods of abortion and its associated complication costs.

The current profile of gestational age at time of abortion was estimated from DH data for 2002. Gestational age bands were those in the DH data. (Data for 2003 and 2004 was not used due to lack of detailed data on complication types.)

The new profile of gestational age at time of abortion was estimated by application of a hypothetical intervention, on which we based our assumption of an expected (average) reduction in delay of about ten days.

Only one study was available to estimate a new profile of women’s preferences for abortion method, therefore we have used sensitivity analysis to vary the estimate of results for a range of different profiles. Three different profiles have been estimated of the proportion of abortions performed by each of the main methods (medical abortion; surgical abortion under local anaesthetic; surgical abortion under general anaesthetic): current profile; short-term improved profile; and medium-term improved profile.

Complication rates were those produced from the data collection exercise from DH data from 2002. These complication rates were expressed as a percentage of each method for each gestational age such that a change in profile (according to gestational age or preference for method) produced a change in complication rate.

Based on comparison between the current and ideal profiles of gestational age at the time of abortion, an average reduction in delay of ten days would increase the proportion of all abortions carried out under ten weeks from 60% (2004 data) to 71%. This increase in pre-week abortions would be cost saving by definition, as more abortions would be eligible for early procedures, which cost less.
The exact amount of savings to be made would depend on the proportion of women choosing each of the methods – we have calculated savings based on each of the three profiles outlined above, as follows:

**Current method profile:**
- The current profile assumes no change in the proportion of women choosing each of the three main methods of abortion.
- This is therefore based on: medical abortion accounting for 19% of all abortions (2004 statistics); 14% of providers offering surgical abortion under local anaesthetic (where appropriate); and a third of surgical abortions being carried out by this method.
- In this scenario, there would be a small annual saving of £645,000.

**Short-term improved method profile:**
- The short-term improved profile assumes a moderate change in the proportion of women choosing each of the three main methods of abortion, which should be achievable over the short-term.
- This is therefore based on: the proportion of all abortions accounted for by medical abortion increasing to 41%; the proportion of providers offering surgical abortion under local anaesthetic (where appropriate) increasing to 100%; and a third of surgical abortions being carried out by this method.
- In this scenario, there would be an annual saving of up to £17.5 million.

**Medium-term improved method profile:**
- The medium-term improved profile assumes a significant change in the proportion of women choosing each of the three main methods of abortion, which should be achievable over the medium-term.
- This is therefore based on: the proportion of all abortions accounted for by medical abortion increasing to 66%; the proportion of providers offering surgical abortion under local anaesthetic (where appropriate) increasing to 100%; and 66% of surgical abortions being carried out by this method.
- In this scenario, there would be an annual saving of up to £30 million.

2. **RECOMMENDATIONS**

It is clear that both changing the profile of contraceptive methods prescribed and reducing the delay in obtaining an abortion will not only focus services more closely on women’s needs and preferences but would also produce quite considerable cost savings for the NHS.

We urge all PCTs to **review their own contraception and abortion data** in the light of this evidence, and take steps to improve these services as a matter of urgency.

PCT Chief Executives also need to consider their budgets as a whole, and must recognise that **investing in contraception and abortion services will result in savings in other areas**.

Specifically, there are a number of clear recommendations that we draw from this research:

- PCTs should provide more training, resources and support to service providers to ensure that a fuller range of contraceptive methods is provided to meet women’s needs, in particular training within general practice (where the majority of contraceptive care is given) on the insertion of implants, the IUD and the IUS.
PCTs should provide more and better information to women to enable them to make an informed choice about the contraceptive method that best meets their needs.

Following recent improvements in abortion waiting times in many areas, PCTs should continue to implement measures to reduce waiting times for abortion.

PCTs should ensure that all women are offered a choice of procedures appropriate to their gestation, and should encourage take-up of early medical abortion and surgical abortion under local anaesthetic.

In addition, the first stage of the research indicated clearly that there is a need for further economic research to provide more evidence for policymakers to use when commissioning contraception and abortion services. In particular, we suggest that further research be done to develop and improve the models used in this study, for example to provide additional information on those aspects associated with women’s preferences.

### 3. SUMMARY AND CONCLUSIONS

Despite a welcome increase in the prioritisation of sexual health at national policy level in recent years, and significant additional investment in services to support this, it is clear that there are not unlimited resources within the NHS for sexual health. Moreover, even with this additional prioritisation and investment, many women are not currently receiving high quality contraception and abortion services which truly meet their needs.

Is it, therefore, possible to improve service provision and make budget savings? This research shows that it is. Indeed, not only is it feasible to improve contraception and abortion services in ways that better meet the preferences of service users, but there is also a considerable net saving of up to £1 billion over 15 years to be made from doing so.

In the light of this unequivocal economic evidence, the onus must now be on the Government and PCTs to ensure that significant improvements are made to both contraception and abortion services. This is an urgent priority that will require not only direction and support at a national level but also an informed and comprehensive approach within each PCT that includes general practice, family planning clinics, sexual health clinics, and both NHS and agency providers of abortion services. With such a holistic approach in place, service providers will be able to improve the services they offer to users, and also contribute to budget savings across the NHS.


7. We recognise that other public sectors costs as listed here are included within the full potential costs and cost savings of contraception and abortion services; however, they were subsequently excluded from the modelling in Part 2 of the research, as this was designed to calculate savings to the NHS only.


10. Each set of values on each dimension is given a weight between 0 (representing death) and 1 (representing perfect health). They are then multiplied by the expected number of years in a health state corresponding to that set of values in order to calculate the expected number of QALYs. The weights are often referred to as *preference* weights on the basis that the technology producing the higher total ought to be the preferred alternative. The use of such a measure stems from the lack of opportunity to estimate *revealed* preference, inferred from actual choices of health care technologies, given that choice is constrained by supply in the absence of a free market [i.e. with public provision]. However, constructing experiments to estimate *stated* preference and thereby produce weights is also challenging, given the complexities [multi-attribute nature] of choices and the propensity for confounding by *framing effects* [how the choices are described].

11. The group of experts involved in the Delphi consensus model were taken from the expert advisory group for the research, and consisted of: 2 GPs, 1 family planning nurse, 1 consultant in sexual health and 1 representative of a user-facing NGO. For a full list of the advisory group see Appendix 1.


Appendix 1

Expert group membership

**CHAIR:**
Professor Cam Donaldson, University of Newcastle

**MEMBERS:**
Toni Belfield, fpa
Caroline Davey, fpa
Professor David Hunter, University of Durham/UKPHA
Paul Lincoln, National Heart Forum
Margaret McGovern, fpa
Dr John McLeod, University of Birmingham
Dr Nick Payne, Department of Health
Dr Angela Robinson, BASHH
Dr Stephen Searle, High Peak and Dales PCT
Anne Weyman, fpa

**RESEARCHER:**
Nigel Armstrong, University of Newcastle
fpa Membership

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<th>Individual £30 pa</th>
<th>Organisation £90 pa</th>
<th>School* £50</th>
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<td>Discount on open training courses</td>
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<tr>
<td>Discount on all fpa publications and leaflets</td>
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<td>20%</td>
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<tr>
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<td>3 copies</td>
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<td>Full set of fpa leaflets: contraceptive methods, STIs, young people’s series and abortion</td>
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<td>Full set of fpa policy statements</td>
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<td>Briefing with key fpa personnel once a year</td>
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*Includes universities, colleges, Connexions, Sure Start and youth organisations.

For an application form or further information, please contact Julia Scodie on 020 7923 5206 or email membership@fpa.org.uk