The cost-effectiveness of family planning service provision

D. Hughes and A. McGuire

Abstract

Background Family planning services are amongst the most highly utilized services in the National Health Service. There have, however, been few empirical studies of the cost-effectiveness of these services.
Methods Two measures of output were used to calculate the cost-effectiveness of family planning services. The first measure is based on the number of pregnancies averted. The second measure uses the couple year of protection as the measure of output. Accordingly, two cost-effectiveness ratios are calculated: cost per pregnancy averted and cost per couple year of protection.
Results The direct cost per pregnancy averted is between £48 and £167 for reversible and £18 and £21 for non-reversible methods. The cost per couple year of protection is between £49 and £184 for reversible and £17 and £21 for non-reversible methods. For both approaches, if averted NHS costs associated with family planning services are included these translate into resource savings to the NHS resulting from the provision of these services.
Conclusion From the perspective adopted in this study, family planning services are highly cost-effective. According to calculations made in this paper, these services provide a high rate of return to the NHS and, when the resource consequences of unplanned pregnancies in the health sector as a whole are considered, result in resource savings.

Keywords: family planning services, contraception, couple year of protection, cost-effectiveness

Introduction

Family planning services are amongst the most highly utilized services provided by the National Health Service (NHS). It is estimated that approximately 70 per cent of females in the age range 18–44 use contraception of some form.[1] Of the estimated 5 million users of publicly provided family planning services in 1991 it was estimated that almost 3·5 million received contraceptive advice and provision from general practitioners (GPs), 1·26 million from Family Planning Clinics, and 150 000 from hospitals.[2] Over 50 per cent of all British females in the age range 35–44, or their partners, have been sterilized.[1] Yet, although family planning services are used extensively, it is estimated that one out of every three births is unplanned and approximately 20 per cent of all conceptions end in legal abortion.[3,4] This may well be an underestimate. Ashton et al.[5] calculated the likelihood of each woman having a legal abortion as being 0·46.

The most realistic means of achieving a reduction in the number of unplanned pregnancies is through the use of contraception. A high uptake of contraceptive services requires proper advice concerning the use of contraception and adequate provision of these services. Contraceptive advice and supplies have been provided free to patients by the NHS since 1974 (1972 in the case of vasectomy), Family Health Services Authorities providing funding of GP provision and District Health Authorities funding Family Planning Clinics and hospital provision. Contraceptive methods are now an established part of the treatment benefits provided by the NHS. It has been estimated that public expenditure on family planning services represented just under 3 per cent of total expenditure by Family Health Services Authorities in 1991.[2] Despite this, the number of unplanned pregnancies remains high.

Given the consequences of unplanned conception and pregnancy, there is a presumption that NHS family planning services are an efficient use of NHS resources. There have, however, been few empirical studies of the economic benefits of the provision of these services. In their recent assessment of information and research priorities in this area, Ashton et al.[5] highlighted the lack of empirical economic evidence on contraceptive service provision generally.

Two main studies exist. Laing[6,7] considered the financial benefits and costs associated with different forms of contraceptive provision, and concluded,

City University, London EC1V 0HB.
D. HUGHES, Research Fellow
A. McGUIRE, Reader
Address correspondence to D. Hughes.

generally, that this technology was an economic use of public funds. Since the early 1980s there have continued to be improvements in contraceptive method. McGuire and Hughes,[2] using a fuller range of contraceptive methods, confirmed the generality of the result found by Laing that contraceptive technology is economically beneficial. Each of these studies presented an analysis of the financial benefit–cost ratios, which estimate the total return to the public sector associated with the provision of contraceptive services. This return is spread over the health care and social service budgets.

The budgetary impact of family planning services was estimated to be £160 million across all providers. However, it is important to note the high return to existing users of the service. Following the method outlined by Trussell *et al.*,[8] an indication of this return is given in Fig. 1, which maps the five-year cost savings associated with a number of reversible contraceptive methods over and above the use of no method against the number of pregnancies avoided over this period. All the contraceptive methods considered avert at least three unplanned pregnancies and give rise to substantial cost-savings, estimated as NHS costs of provision of family planning services less cost savings associated with unplanned pregnancies averted, over a five-year period. Spermicide and diaphragm are associated with the lowest cost-savings and least number of unplanned pregnancies avoided, reflecting their relatively low efficacy. Implant, injection, IUD and oral contraception give rise to the largest cost-savings and are associated with the highest number of unplanned pregnancies avoided. (Cost information is available on request from the authors. Some details on unit costs are presented in the paper.)

The return to these services can, however, be better assessed through an explicit cost-effectiveness analysis, and this is the issue on which the rest of the paper concentrates. Given that there appears to be substantial unmet demand and scope for expansion in service provision, economic evaluation of these services is necessary.

Amongst the most prevalent forms of economic evaluation techniques are cost-benefit analysis (CBA) and cost-effectiveness analysis (CEA). The major distinction between these forms of analysis is that CBA considers the costs and outcomes resulting from any service provision in terms of monetary measurement, whereas CEA considers the outcomes in terms of physical units (e.g. unwanted pregnancy avoided). With CBA, because the resources and the outcomes are measured in commensurate monetary values, the resulting analysis will indicate whether the resourcing of a programming is worth while; the monetary value of the benefits simply has to be greater than the monetary value of the costs. CEA, on the other hand, can never state whether an investment in a programme is worth while or not; it can only ever indicate which particular means of achieving a given measure of outcome is preferable in terms of being an efficient use of resources.

It is difficult to attach a money value to the outcome arising from the use of contraception. A comprehensive value would consider intangible aspects, for example all the anxieties which may arise from contraceptive use, as well as the more intractable issues of the value of life and the resource implications arising from contraceptive use as a method of population control. (See Ref. 9 or 10, for an excellent discussion on this point.) Notwithstanding such concerns, a major outcome is the
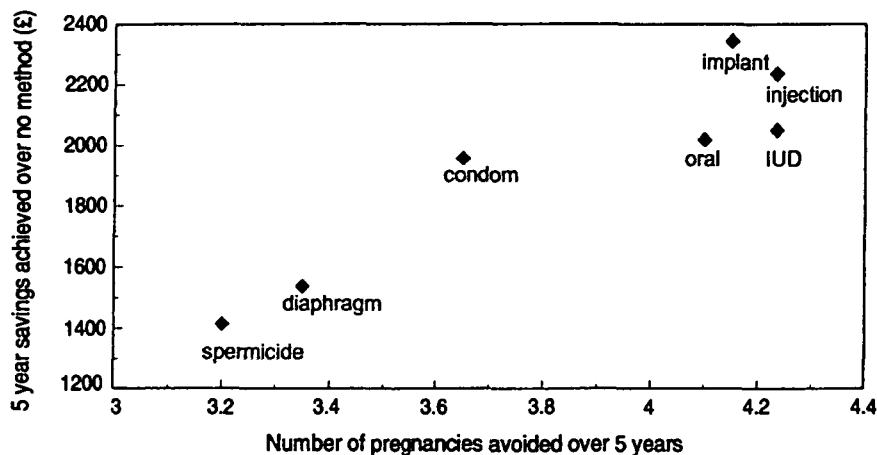

FIGURE 1 Cost savings and pregnancies avoided over 5 years.

avoidance of unplanned and unwanted conceptions. Although it may be possible to ask for the willingness to pay to avoid a conception, this presents considerable methodological problems, and it is more straightforward to assess the actual number of conceptions avoided through the provision of family planning services.

This physical measure of outcome leads to consideration of a cost-effectiveness analysis. It is a limited perspective, however, avoiding issues, for example, concerned with the valuing of a life forgone.

The definition of the physical measure of output that is relevant to this analysis remains an important issue. Family planning services provide at least two distinct services: the provision of information and advice as well as the provision of contraception itself. It is not possible to capture both dimensions in a single measure of the effectiveness of the service. We focus on the provision of contraception.

Even so, a number of different measures of effectiveness are available, based on measures of contraceptive failure. At least two dimensions of contraceptive failure are discernible: the failure rates themselves and the length of time of exposure to the risk of failure. This latter element is important because different forms of contraceptive device give coverage for different periods of time. Accordingly, two basic forms of cost-effectiveness ratios were calculated with regard to the provision of contraceptive services: cost per unplanned and unwanted conception or pregnancy averted, and cost per couple year of protection. This second ratio takes account of the time span over which the contraception is active and converts each form of contraception into a common basic unit – the couple year of protection.

One criticism of the couple year of protection has been that it does not, in its gross form, take account of the differing failure rates of the various types of contraception. To overcome this problem the gross couple year of protection, calculated as the number of days of protection afforded per year per unit of contraceptive service delivered, is weighted by the effectiveness of the contraception under consideration. A further criticism has been that whereas couple years of protection have evolved to take explicit account of the different time spans of protection offered by different contraception methods, they are normally not discounted. (Discounting to present value ensures that the impact of differing time profile on costs and effects is taken account of when comparing alternative investments. As individuals generally prefer to postpone costs and bring forward the outcome benefits the value of various investments will be affected by differing time profiles of costs and outcomes across options. Discounting all options to present value

recognizes this preference structure and amends the calculations of costs and outcomes accordingly.) This study presents discounted calculations of cost per couple year of protection.

Method

Each cost-effectiveness measure is compared against the baseline alternative of using no method of contraception. One argument against the use of this approach is that individuals who use no method incorporate a self-selecting group who use this method because of their natural low fecundity. Although this bias is accepted, use of no method forms the clearest alternative against which the full effectiveness of each single form of contraception can be assessed. The data on effectiveness are drawn from a recent paper by Trussell et al.[8] and are summarized in Table 1.

Results

Cost per unplanned and unwanted pregnancy averted

The first measure of outcome we consider focuses on unplanned and unwanted pregnancy averted. To judge the cost-effectiveness on this basis a number of calculations were undertaken. The basic ratio measures the total direct costs of service provision and divides these by the total effect, as measured by the total pregnancies averted. A number of variants are possible. Total direct costs of service provision can net out the cost savings achieved by contraception

TABLE 1 Effectiveness of individual contraceptive methods (number of expected pregnancies per year per 100 users)

Method	Effectiveness
Oral	3·00
IUD	2·00
Diaphragm	18·00
Condom	12·00
Vasectomy*	0·04
Sterilization*	0·17
Injection	0·30
Implant*	0·32
Spermicide	21·00
No method	85·00

*Failure rate represents an average of years 1–5. Implant: 0·09%, 0·31%, 0·40%, 0·40%, 0·40%. Vasectomy: 0·15%, 0·01%, 0·01%, 0·01%, 0·01%. Sterilization: 0·40%, 0·1333%, 0·1333%, 0·1333%, 0·0667%.
Source: Ref. 8.

averting unwanted births, and induced and spontaneous abortions. These total net costs are then divided by the total effects, i.e. the total pregnancies averted. We adopt a public policy perspective and focus on NHS resource utilization arising from the provision of family planning services.

Such calculations can be undertaken for the individual forms of contraception or for the different forms of service provider, for example GPs and Family Planning Clinics. To outline the basic approach, the cost-effectiveness of different forms of service provision for a typical family unit – assumed to be a couple with one or two children – is presented. A range of results for other users are also presented where appropriate.

Table 2 outlines the approach by reporting the cost-effectiveness of GP provision of family planning services. As oral contraception accounts for approximately 90 per cent of this form of service the cost-effectiveness ratio relates only to this form of contraception. The results show the direct cost of provision related to the number of pregnancies averted. The total cost of GP provision is based on: the net ingredient cost of oral contraception, taken to be £5.20 (*Monthly Index of Medical Specialties*, 1993, adjusted to 1991 prices[11]); a single GP consultation being £8.10;[12] dispensing fee (paid either to pharmacists or GPs) being £1.59;[13] and on the assumption of four annual consultations, the total cost of GP provision being £39.19.

The effectiveness, expressed as a failure rate, was based on the calculated value taken from Table 1 for oral contraception, which assumes the effectiveness of the combined pill. The number of pregnancies avoided is a net figure based on the difference between the effectiveness of oral contraception and no method. The cost per pregnancy avoided is simply the total cost of the oral contraception divided by the effectiveness; in this case £47.79.

To test the sensitivity of the calculated cost-effectiveness ratios a range of efficacy values were considered. For the cost per pregnancy avoided ratio arising from GP provision of services, for example, a range of efficacy defined by failure rates of between 0·001 and 0·05 per user per year were used. The associated calculations, in this particular case £46.16 and £48.99,

respectively, showed that the cost-effectiveness ratios based on the average efficacy values were in fact robust. The subsequent ratios reported therefore all refer to the average efficacy.

A cost-effectiveness ratio can also be calculated which nets out NHS costs avoided from averting unwanted births, and induced and spontaneous abortions. This is based on the number of births and abortions reported in official statistics for women with one to two children.[1,4] The Scottish figure is a pro rata estimate based on the English and Welsh data; spontaneous abortions are assumed to represent 10 per cent of total conceptions.[14]

Assuming all abortions result from unwanted and unplanned pregnancies, we assume that 23 per cent of unplanned pregnancies result in abortions and, given that 10 per cent have already spontaneously aborted, the rest are assumed to be live births (67 per cent).

The NHS costs of spontaneous abortion, abortion and live birth were estimated to be £242.24, £303 and £1056.87, respectively.[2] These figures gave the expected cost of a spontaneous abortion, abortion and live birth as £24.22, £69.67 and £708.18, respectively. The total expected cost saving is therefore £802.07 per pregnancy avoided. Subtracting this figure from the direct cost of service provision per pregnancy avoided gives the calculated cost-effectiveness ratio of –£754.28. Thus, when the averted NHS costs are taken into account there is a net saving in resources attained through the public provision of oral contraception by GPs. (A similar calculation was undertaken for three different types of users of the service: single women, teenage women and women with three children. This gave rise to cost-effectiveness ratios ranging from –£461.56 for teenage mothers to –£598.02 for single mothers. It will be noted that the ratios based on direct cost of provision only are the same for all groups, there being no assumed difference in provision across clients. When netting out NHS costs averted, however, the different groups face different abortion and live birth rates, and it is these differences which affect the calculated ratios. The abortion and live birth rates for these groups were estimated based on published data.[1,4] Again, taking into account the NHS costs averted

TABLE 2 Cost-effectiveness of GP provision*

Method	Cost	Efficacy	No. of pregnancies avoided per year	Cost per pregnancy avoided	Cost per pregnancy avoided (including NHS savings)
Oral	£39.19	0·03	0·82	£47.79	–£754.28

*All costs are in 1991 prices.

TABLE 3 Family Planning Clinic provision cost-effectiveness ratios*

Method	Cost per pregnancy avoided	Cost per pregnancy avoided (including NHS savings)
Oral	£135.89	−£666.18
Diaphragm	£167.46	−£634.61
IUD	£55.34	−£746.73
Spermicide	£163.94	−£638.13
Injection	£146.05	−£656.02
Implant	£97.09	−£704.97
Condom	£88.07	−£714.00

*All costs are in 1991 prices.

results in a net saving of resources arising from the provision of family planning services.)

The same technique was adopted to consider the cost-effectiveness of Family Planning Clinics. A fuller range of contraceptive method is considered for Family Planning Clinics as, unlike the GP provision, no single method dominates. The first stage was to estimate the direct costs of the various contraceptives. The Appendix gives fuller details of these calculations.

Table 3 uses this information to calculate the cost-effectiveness ratios for the various forms of contraception provided by Family Planning Clinics. The failure rate of the various forms of contraception, once again, formed the estimate of effectiveness, as based on Table 1. Again, pregnancies avoided are a net figure based on the difference between the effectiveness of each form of contraception and no method. The cost per pregnancy avoided is the direct cost of the form of contraception divided by the effectiveness.

The second reported cost-effectiveness ratio is the net cost of service provision, i.e. after account is taken of the NHS costs averted through avoiding unwanted pregnancies. This is calculated on the same basis as it was with regard to oral contraception provision through GPs. A slight complication was that, in the case of IUDs and implants, the costs averted had to be discounted over a five-year period in line with the estimated life of the devices. All other costs are calculated on an annual basis.

Once again, when the NHS costs averted are taken into account, the Family Planning Clinics are seen to provide a highly cost-effective service. [It should be noted that these ratios ought not to be compared with each other, but are calculated relative to 'no method' being used, as calculated IUD and implants are relatively cost-effective given their high levels of

effectiveness relative to no method. This is partly a reflection of the time period over which these devices operate. It is due to the differences in length of protection that direct like for like comparison across the different devices ought not to be undertaken when outcome is measured in terms of pregnancies averted. Condoms are relatively cost-effective in comparison with no method being used as they are highly effective at a low cost. It is unwise to compare across the different forms of service provision as Family Planning Clinic costs will reflect elements of service provision which are not contained in the GP cost. For example, the provision of cervical smears and well woman clinics will form part of the FPC cost as it is not possible to unbundle expenditure on specific services.

The direct cost-effectiveness ratios reported in Table 3 are assumed to hold for the differing family categories on the basis, once again, of no difference in provision across different client groups. However, the net ratios which take account of the NHS savings through averting unwanted pregnancies will differ for the various groups, reflecting the different prevalence of births and abortions in these groups. Using the same assumptions as before, net ratios which take account of NHS savings for the three family groups (single, teenage, women with three children) can be calculated, giving ranges of −£478.36 to −£590.47, −£341.89 to −£454.01, and −£356.95 to −£469.07 for the different methods of contraception.]

In an analogous manner, the cost per unit of output from the provision of family planning services through the hospital sector can be calculated. The two major forms of hospital contraception provision are female sterilization and vasectomy. The cost of these procedures is £212 and £178, respectively.[15] Again, using the failure rates from Table 1 as the basis for the estimate of effectiveness, we can estimate that the cost per pregnancy avoided is £21.77 and £18.25 for these procedures, respectively.

The net cost-effectiveness ratios taking account of the saved NHS costs through averting unwanted

TABLE 4 Hospital provision cost-effectiveness ratios*

Method	Cost per pregnancy avoided	Cost per pregnancy avoided (including NHS cost savings)
Sterilization	£21.77	−£780.30
Vasectomy	£18.25	−£783.82

*All costs are in 1991 prices.

pregnancies can be calculated using the assumptions from above. The ratios are reported in Table 4. Given the low cost-effectiveness ratios for these procedures, when the NHS averted costs are factored in, the ratios again indicate net resource savings. (Again, these calculations are assumed to hold for all family groups, although we only consider families with one to two children or more than three children for sterilization and vasectomy, as it seems unlikely that other family groups will use non-reversible methods of contraception. The cost-effectiveness ratios for a family group with more than three children was −£502.64 for sterilization and −£506.16 for vasectomy.)

Cost per couple year of protection

A second set of cost-effectiveness ratios present the cost per couple year of protection (CYP). The couple year of protection is measured by dividing the time period provided by one unit of contraceptive cover by 365 days. This is a useful outcome measure as it allows direct comparison across different forms of contraceptive method through converting each method to a unit of protection for a set period of time. In this way, every unit of a contraceptive method provided is associated with protection from pregnancy for a given, comparable period of time.

It is rather crude, however, as it takes no account of the effectiveness offered by the particular form of contraception over the period of protection. This can be taken account of by adjusting the gross CYP by the failure rates for the individual devices. This adjusted CYP is the basic output measure used in the calculations presented below. The CYP is also always the marginal CYP related to the baseline alternative of the use of no method.

The cost per CYP is calculated for different programmes of delivery, as in the previous section. The analysis proceeds in a similar fashion by considering GP provision first. Again, given that provision is dominated by oral contraception, the focus is on this form of provision.

The cost of the contraception has to be converted to a unit cost to ensure that the correct resource use is attached to each unit. The direct unit cost associated with oral contraception was estimated to be £9.40, the time unit of protection was estimated to be three months and it was assumed that there was one consultation per unit.

Table 5 reports the basic information required to calculate the cost per CYP. The first column reports the gross CYP associated with oral contraception. This is then adjusted by the effectiveness of the contraception, based on the information reported in Table 1, to calculate an adjusted CYP. The unit cost associated with contraception is then divided by this net CYP, to give a direct unit cost per adjusted CYP. The net cost-effectiveness ratios are based on the method described above. Again, oral contraception appears to be highly cost-effective. (As before, these ratios were calculated for the different family groups, giving a range of −£86.66 to −£112.40.)

Table 6 reports similar figures for Family Planning Clinics and hospital provision of contraception. A wider range of methods are reported for Family Planning Clinic services, for the reasons stated above. IUD and implants have had both costs and benefits discounted. The IUD is estimated to be relatively cost-effective compared with other forms of contraception. Once more, it is unwise to compare across the different forms of service provision, as the costs reflect different elements of service provision.

Table 6 also reports the cost per unit of protection after having netted out NHS costs averted. The unit of protection is taken as the form of output here because this forms the basis of the CYP, but the cost savings are associated with each unit of protection rather than each CYP. Once again, the service is shown to be highly cost-effective, with resource savings being achieved for all methods.

Similarly, when the hospital provision of family planning services is considered (see Table 6), it is highly cost-effective. Hospital provision is in fact the most cost-effective, achieving the highest resource savings, when considering cost per CYP. This reflects the high levels of effectiveness achieved by sterilization and vasectomy given their cost (£178 and £212, respectively). (The net cost-effectiveness ratios for family groups with three existing children were

TABLE 5 Cost per adjusted CYP* (GP provision)

Method	Gross CYP	Net efficacy	Net CYP	Cost per CYP	Net cost per CYP
Oral	0·23	0·82	0·1886	£49.84	−£141.87
No method	0·15				

*All costs are in 1991 prices.

TABLE 6 Cost per adjusted CYP*

Method	Gross CYP	Efficacy	Net CYP	Cost per CYP	Disc. cost per CYP	Net cost per unit
Family Planning Clinic provison						
Oral	0·23	0·82	0·1886	£145.97		−£123.74
Diaphragm	1	0·67	0·67	£165.51		−£426.50
IUD	5	0·83	4·15†		£54.99	−£2768.72
Spermicide	0·25	0·64	0·16	£183.81		−£98.92
Injection	0·25	0·847	0·212	£144.51		−£139.24
Implant	5	0·847	4·234‡		£96.75	−£2666.87
Condom	0·115	0·73	0·084	£91.43		−£59.76
Hospital provision						
Sterilization	18	0·8483	15·27§	£21.77		−£7597.20
Vasectomy	18	0·8496	15·29¶	£18.25		−£7643.17

*All costs are in 1991 prices. †Discounted net CYP is 3·71. ‡Discounted net CYP is 3·78. §Discounted net CYP is 9·74. ¶Discounted net CYP is 9·75.

calculated to be −£4893.87 to −£4935.69 for sterilization and vasectomy, respectively.)

Discussion

The major difficulty in assessing the efficiency of family planning services is the problematic nature of measuring the output. Two dimensions of output have been considered in this paper. Unwanted and unplanned pregnancies averted are a clear benefit gain from contraception. However, they are difficult to estimate with precision. For example, it could be argued that the use of contraception does not avert pregnancy, but merely delays it. This would affect the resource savings arising from the use of contraception. Although conceptually important, empirically this argument is less so. Assuming 70 per cent of pregnancies are unplanned but not unwanted – that is, are mistimed and would have occurred two years later – we can estimate the impact. Using the results from Table 4 we find that the cost-effectiveness ratios range from −£151 to −£263.

Another dimension of output focuses on the protection from unplanned and unwanted pregnancy. Again, this is not without difficulties, as assumptions covering the rate of consumption of contraception must be made. The couple year of protection is an explicit means of dealing with such issues. However, it is again a unidimensional measure of outcome which merely takes account of the period of benefit to allow direct comparison across contraceptive devices.

It is clear that such measures are constrained definitions of the true output provided by these services. It is difficult to capture the elements of information provision, for example. This study is limited in the sense that it is a cost-effectiveness study. It does not consider the intrinsic value of a life, but rather attempts to measure the resource consequences, from the perspective of the NHS, arising from given outputs of family planning services. As a consequence of this limited perspective, it does not consider the full resource implications which may have evolved if contraception had not been used. For example, the benefits to the community in terms of forgone production, and the costs in terms of the demands an unborn individual would have made on the economy's resources. Any decisions concerning family planning provision would ideally consider all such relevant aspects. This study, in constraining its perspective, provides some information through which decisions may be made, but by no means all.

Within its limitations, the study has shown that when the costs associated with induced abortion, spontaneous abortion, or live birth that have been averted were considered, resource savings to the NHS arose from the public provision of family planning services. This remains a most persuasive argument for keeping the provision of contraceptive services in the public sector.

References

[1] Office of Population Censuses and Surveys. *OPCS monitor*. London: HMSO, 1992.

[2] McGuire A, Hughes D. *The economics of family planning services*. London: Family Planning Association, 1995.

[3] Fleissing, Unintended pregnancies and the use of contraception: changes from 1984 to 1989. *Br Med J* 1991; **302:** 147.

[4] Office of Population Censuses and Surveys. *Birth statistics*. London: HMSO, 1993.

[5] Ashton A, Marchbank A, Mawle P, *et al*. Contraception, abortion and fertility services. In: Raftery J, ed. *Epidemiologically based needs assessment,* Vol. 2. London: NHSME, 1994.

[6] Laing WA. *The costs and benefits of family planning.* London: PEP, 1972.

[7] Laing WA. *Family planning: the benefits and costs.* London: Policy Studies Institute, 1982.

[8] Trussell J, Leveque JA, Koenig JD, *et al*. The economic value of contraception: a comparison of 15 methods. *Am J Publ Hlth* 1995; **85(4):** 494–503.

[9] Broome J. The economic value of life. *Economica* 1985; **52:** 281–294.

[10] Arthur WB. The economics of risk to life. *Am Econ Rev* 1981; **71:** 54–64.

[11] *Monthly Index of Medical Specialties.* London: Haymarket Medical, 1993 and 1994.

[12] Hughes D. Costing consultations in general practice: towards a standardised method. *Family Pract* 1991; **8(4):** 388–395.

[13] Department of Health. *General practitioners statement of fees and allowances, 1991.* London: HMSO, 1991.

[14] MacFarlane A, Mugford M. *Birth counts statistics of pregnancy and childbirth: tables.* London: HMSO, 1984.

[15] CIPFA. *DMU and NHS hospital trust fees and charges.* London: CIPFA, 1993.

Appendix: Direct costs of contraception for the estimation of Family Planning Clinic provision

Year 1 costs

Family Planning Clinics: average unit cost per user £26.23 (average estimated cost based on a number of District Health Authority provider units)

	Form of contraception						
	Oral	Diaphragm	IUD	Spermicide	Injection	Implant	Condom
Cost element							
NIC	5·20	5·97	7·98	12·72	17·48	170	36·75
Consultation	104·92	104·92	104·92	104·92	104·92	104·92	26·23
Prescription fee	1·31	1·31	1·31	1·31	1·31	1·31	1·31
Total cost	111·43	112·20	114·21	118·95	123·71	276·23	64·29

Five-year costs were discounted by 6 per cent, and for implant and IUD the net ingredient cost (NIC) was taken out and the number of consultations per year reduced to reflect the lower maintenance costs in terms of Family Planning Clinic visits.