NHS Quality Improvement Scotland

Sexual health standards

A report on the budget impact for Scotland and by NHS board

May 2008

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Executive summary

In April 2008, NHS Quality Improvement Scotland (NHS QIS) published nine service-level standards for sexual health services http://www.nhshealthquality.org/nhsqis/files/SEXHEALTHSERV_STANF_MAR08.pdf. These have been developed by clinical experts and aim to support improvements to clinical services and contribute to the wider effort to promote good sexual health.

NHS QIS is developing further tools to assist NHS boards to implement the standards. The main focus is on a self-assessment form and related guidance. These tools accompany all NHS QIS standards. However, there is evidence that the lack of robust information on the resources required and associated costs is one of the biggest difficulties in developing plans to implement clinical guidelines[1]. This report is an attempt to reduce this barrier by providing an estimate of the costs to implement some key criteria within each standard. It should be read in conjunction with the relevant standards.

A sub-group of clinicians who had contributed to the standard development process volunteered to assist with this project. The members prioritised the essential criteria for each standard according to their likely effect on the resources required in NHS boards. The criteria so identified were costed using published information where possible.

Many criteria have not been costed. That is not to say there will be no costs to meeting them, rather in many cases there will be costs. It simply reflects the outcome of the prioritisation exercise. Thus the costs provided are not the costs to implement the standards but rather information to help boards implement some key standards.

The report summarises the principles and processes adopted and sets out the important assumptions for each key criterion. The results show that the total cost for the key criteria in each standard is about £4.5 million in 2007/08 prices. Of this sum, £0.15 million has been included for the three island boards. Table 1 analyses the cost by standard of the remaining £4.3 million.

Two standards account for 80% of the identified resources. The major resource requirement is around the provision of intrauterine and implantable contraceptives as described under Standard 8. This accounts for over £2.3 million or 55% of the estimated costs. The second standard with significant cost implications is Standard 1, with an estimated cost of £1.1 million equivalent to 25% of the total cost estimate. The criteria include one on the provision of integrated sexual health services within a reasonable travel time from population centres.

Sensitivity analyses are provided for all criteria with forecast costs of over £100,000. The key sensitivity analyses are on Standard 8. If contraceptive injections are regarded as contributing to the Standard then the cost for this Standard falls from £2.4 million to £0.6 million and the overall costs fall to £2.7 million.

Table 1 Cost analysis by standard

Standard	Description	Estimated cost £'000	% of total
1	Comprehensive provision of specialist sexual health services	1,076	25
2	Sexual health information provision	69	2
3	Services for young people	297	7
4	Partner notification	149	3
5	Sexual healthcare for people living with HIV	24	0
6	Termination of pregnancy	22	0
7	Hepatitis B vaccination for men who have sex with men	65	2
8	Intrauterine and implantable methods of contraception	2,347	55
9	Appropriately trained staff providing sexual health services	252	6
	Total for Scotland	4,300	100

Two NHS boards, Lanarkshire and Lothian face costs of some £0.8 million each to implement the standards. Table 2 shows the estimated cost by NHS board.

Table 2 Cost of key criteria by NHS board

NHS board	Cost of key criteria £'000	%
Ayrshire & Arran	275	6
Borders	182	4
Dumfries & Galloway	208	5
Fife	387	9
Forth Valley	291	7
Grampian	475	11
Greater Glasgow & Clyde	502	11
Highland	196	4
Lanarkshire	814	18
Lothian	771	17
Orkney	50	1
Shetland	50	1
Tayside	201	5
Western Isles	50	1
Scotland	4,451	100

Key risks around the cost estimates include:

- interpretation of contraception methods contributing to Standard 8
- updated information from the General Register Office for Scotland on settlements over 10,000 for Standard 1
- definition of 'integrated' services for Standard 1.

Clarity on these aspects will be provided by the self-assessment framework and related guidance which will be published NHS Quality improvement Scotland in due course.

The work was greatly assisted by the efforts of staff at Information Services Division (ISD), together with colleagues in Health Protection Scotland and clinicians in the NHS boards who have published robust clinical indicators for many aspects of sexual health. This good base line clinical information has made it possible to identify the additional services that are required to meet individual criteria. Thanks are also extended to the clinical leads in sexual health in each health board who have provided information and comments on earlier drafts of the report.

An Excel costing tool is available on www.nhshealthquality.org to aid the estimation of local costs associated with implementing the standard on partner notification.

This is a pilot project and not a component of the NHS QIS Standards development methodology. The effectiveness of this project will be evaluated.
Comments on the value of this project would be most welcome by email to shsresponses.qis. These will assist NHS QIS in deciding whether to revise the current standards methodology.

1. Introduction

1.1 Implementing standards on sexual health services

The purpose of NHS Quality Improvement Scotland (NHS QIS) is to drive improvement in the quality and safety of healthcare for the people of Scotland through the provision and use of knowledge.

In support of this aim, in March 2008, NHS QIS published service-level standards for sexual health services (www.nhshealthquality.org). The purpose of these standards is to support improvements to clinical services and contribute to the wider effort to promote good sexual health. A central focus of the nine standards is to reduce the variation in access and quality that exists among different NHS board areas. The standards are also seen as important to the drive to reduce health inequalities in Scotland.

Each standard has several essential criteria. These should be met wherever a service is provided. Other criteria are 'desirable', being met by some boards and which demonstrate quality levels that all boards should strive to achieve.

NHS QIS is committed to increasing the implementation support it provides to NHSScotland and is developing a range of tools to achieve this. As part of that process, it is recognised that the National Institute for Health and Clinical Excellence in England (NICE) has provided costing tools for NICE guidance published since January 2005. This initiative was consistent with the findings of an Audit Commission review in the same year of the work of NICE[1]. The review concluded that providing information on the resources required and associated costs of guidance was critical to implementation.

Given such evidence, NHS QIS has undertaken this demonstration project to quantify the resources and related costs required to implement the key sexual health standards. This report (the Report) describes the project and its results. The effectiveness of the work will be subject to evaluation.

Comments on the value of this project would be most welcome by email to shsresponses.qis. These will assist NHS QIS in deciding whether to revise the current standards methodology.

Other initiatives to support implementation include developing a self-assessment framework and guidance notes to accompany the standards. These documents will be available in due course on the NHS QIS website (http://www.nhshealthquality.org/nhsqis/43.144.140.html).

1.2 Objectives

The objective of this project is to provide information for each NHS board on some of the resources and costs required to implement the key sexual health services standards, quoting sources and assumptions so that users can adapt the information for their own purposes. The objective is not to tell NHS boards how to arrange services locally as each board will develop solutions according to their local circumstances.

The criterion within each standard has been assessed as to the likelihood of having a material impact on the resources of NHSScotland. Central estimates, together with sensitivity analyses are provided for the criteria with the potentially greatest impact. Other criteria with easily accessible information have also been costed but the majority have not been. That is not to say there will be no cost to meeting them, rather in most cases there will be costs. However, some may be met by using existing resources more effectively rather than requiring more resources to do more.

An excel template for one of the key standards, partner notification, accompanies the Report (www.nhshealthquality.org/files/SexualHealth_costingtool_May08.xls). Costing this standard requires boards to make assumptions on several complex stages. The template is designed to allow each NHS board to modify the assumptions to quickly assess the impact this standard will have on local budgets.

The purpose of providing this data is as an aid to implementation within NHS boards. The relevant resource use and costs will vary depending on the context and purpose of the decision maker, and users should adapt the estimated values to suit their needs. The report, of necessity, has omitted the finer detail underpinning the estimates. If users require further information or advice on using the data, they should contact Ms Joyce Craig, Senior Health Economist, NHS QIS by email at joyce.craig@nhs.net

1.3 Exclusions and limitations

The analyses do not extend to quantifying the clinical benefit and associated financial savings from implementing the standards. For example evidence suggests that undertaking more intensive partner notification and chlamydia testing now should lead to a reduction in the number of future infections, re-infections and complications. Any such reduction will avoid certain activity costs which would have arisen due to the need to test and treat the infection. Similarly increasing the use of long acting contraception should reduce the number of unwanted conceptions and terminations. Such clinical benefits could be very material.

However, modelling forecast infection rates through time before and after the introduction of these standards would be resource and time extensive and therefore the exercise has not been undertaken.

The exercise is subject to several limitations. These include:

- uncertainty as to what comprises current clinical practice. Various methods were used to minimise this; for example using questionnaires, discussion with clinical leads across NHSScotland and using published peer reviewed sources of data.
- being unable to cost many of the criteria as they were not judged individually to require a material change in resource use. However, a lot of small changes may aggregate up to represent a material step change in resource allocation.
- the total target population is unknown as the risk groups are likely to overlap with some members potentially exhibiting multiple risk factors (e.g. chlamydia and gonorrhoea). We have therefore, estimated indicative populations for each risk group.
- sexual health services are delivered in a wide range of settings and by a range of professionals. Epidemiological, resource use and cost data are most easily available for the specialist setting and thus the Report is biased to using data for this setting.
- the costs do not capture the downstream resource and consequences of the standards and are therefore likely to understate the implications for the NHS boards.

1.4 Document overview

Chapter 2 describes the methodology adopted. Chapters 3 to 11 report the estimated budget impact for each of the nine standards. At the start of each chapter, the essential criteria are listed, together with a brief statement explaining whether a criterion is costed or not. For those that are costed more detailed information is provided later in the chapter, together with relevant sensitivity analyses.

Appendix 12- 1 thanks colleagues who have contributed to the development of this Report, particularly those who provided peer review. Appendix 12- 2 provides estimates of annualised cost per clinic and Appendix 12-3 contains references.

2. Methodology

2.1 Principles, process and participants

The methodology adopted the:

- principles set out in two recent publications on principles and methodology [2,3]; and
- the process set out in 'Process for costing clinical guidelines', NICE February 2008[4].

A sub-group of five members (see appendix 1) was formed from members of the Standards Project Group and Remote and Rural participants. Members provided advice to identify the key standards and also participated within peer review.

2.2 Stages of the costing process for mainland boards

Members of the project sub-group were asked to identify:

- which standards are likely to require significant resources to implement?
- if any standards are likely to result in significant savings through ending ineffective practice or improving current ways of working?
- which standards will cause a material change to the numbers of patients being managed?

The consensus was implementing each standard could require significant resources. Within each standard, only the essential criteria judged to have a potentially material cost impact were costed; the desirable criteria and the remaining essential criteria were not.

The key cost drivers for each criterion in a standard were identified by:

- using demographic/epidemiological data published by Information Services Division (ISD), NHS National Services Scotland, on the number of people affected by each standard
- using a questionnaire to establish a baseline of what is currently happening in each NHS board, supported by expert opinion and published information mainly from relevant websites
- assessing the resources needed to enable boards to meet the standards based on current practices in boards which already meet the standards
- applying unit cost information obtained in the main from published sources.

Simple spreadsheet models were used to calculate the national and NHS board cost impact for each criterion, with sensitivity analysis provided where appropriate. Sensitivity analyses were conducted where a criterion is estimated to cost more than £100,000.

Peer review of the outputs was provided by the sub-group members. Each reviewer was asked to identify for each criterion:

- if the assumptions were logical and consistent?
- can the assumptions and calculations withstand challenge?
- are the calculations based on robust data sources or, where data does not exist, is the expert opinion reasonable?

The lead sexual health clinician in each NHS board was also provided with information on the data values and underlying assumptions, together with the estimated cost of meeting each criterion, and their comments were invited. The modelling assumptions and parameter values were revised in light of the comments received. Data values and associated spreadsheets were quality assured by an independent health economist.

2.3 Process for island boards

The island NHS boards had some difficulty in completing the baseline assessment questionnaire issued to every NHS board. Following discussions with Dr Anne Nicolson, Lead Clinician in Sexual Health, NHS Orkney and a member of the Sexual Health Services Project Group, it was decided to assume a cost for Orkney to implement the standards of £50,000. This was based on her experience in setting up the Sexual Health and Wellbeing Service and assumed that latter was available for patients to access. Further, it was assumed that the same level of £50,000 would be required in the Western Isles and Shetland.

3. Standard 1 Comprehensive provision of specialist sexual health services

3.1 Essential criteria

Table 3- 1 Essential criteria for Standard 1 lists the essential criteria under Standard 1 and summarises the approach used to cost each criterion.

Table 3- 1 Essential criteria for Standard 1

Standard Statement 1 A comprehensive range of specialist sexual health services is provided locally and individuals with the greatest need are treated as a priority.	
1.1	The NHS board has integrated local specialist sexual health services, which as a minimum, deliver a full range of contraception options, facilities for the diagnosis and treatment of all sexually transmitted infections in both men and women, and HIV testing and counselling. *Responses from all mainland Boards indicate they meet this criterion. No further action.*
1.2	There is a minimum of 2 full days per week of integrated local specialist sexual health service provision available within 30 minutes travel time from each settlement of over 10,000 people. *See section 3.2*
1.3	80% of individuals with priority sexual health conditions are offered the opportunity to be seen within 2 working days of initial contact with a specialist sexual health service. *See section 3.3*
1.4	There are targeted services for communities or individuals with specific needs. *This criterion was not costed.*
1.5	There is a mechanism in place to monitor missed telephone calls (9am–5pm) to specialist sexual health services. *See section 3.4*
1.6	The standard of specialist sexual health service accommodation conforms to recommendations made by Department of Health, Health Services Building Notes and the Monks report. *This cannot be costed without site survey reports. No further action.*
1.7	The emphasis of services is not just on sexual ill health but also on promoting good health including the provision of services for the delivery of condoms and safe sex advice, assessment of psychosexual health, gender dysphoria, and sexual dysfunction.

	This criterion was not costed.
1.8	There is a system in place to ensure that national guidelines on clinical governance, clinical effectiveness and child protection are disseminated to specialist and generic sexual health service providers. *This criterion was not costed.*
1.9	Evidence is available to demonstrate local care protocols are adapted to include recommendations made in national guidelines produced by the British Association for Sexual Health and HIV (BASHH), the Faculty of Reproductive and Sexual Health (FRSH) and the Royal College of Obstetricians and Gynaecologists (RCOG) in relation to sexual health. *This criterion was not costed.*

3.2 Criterion 1.2 There is a minimum of 2 full days per week of integrated local specialist sexual health service provision available within 30 minutes travel time from each settlement of over 10,000 people.

The NHS QIS clinical adviser described an integrated specialty service to include the identification and management of HIV. The focus has therefore been on genitourinary medicine (GUM) clinics.

The methodology used was to list all settlements over 10,000 using General Register Office for Scotland data[5] for 2004, the most recent available. All GUM clinics within 30 minutes travel time, assumed to be equivalent to 15 miles (measuring distance from the central post office in the settlement as the starting point) were identified. If no clinic was available within 15 miles of the settlement then a new clinic open for 6 hours a day for 2 days was assumed to be required. Where one or more GUM clinics were available within 15 miles, the opening hours on the two days with greatest capacity for the best served clinic were summed and the total compared to the criterion that the clinic should be open for six hours a day for two days a week.

For family planning clinics (FPC) the number of services available within a 15 miles radius to each settlement with over 10,000 people was obtained using the fpa clinic search at http://www.fpa.org.uk/finder/ . The total opening hours for all such clinics were summed and compared to a service level of 12 hours a week. Where services did not provide access at this level then the shortfall was quantified. This approach assumes all services are integrated and that it is appropriate to spread the opening hours over several days rather than concentrate them on only two days per week. Where a shortfall in capacity existed in more than one settlement within an NHS board, and those settlements were within a 15 mile radius of each other, it was assumed that meeting the shortfall in one settlement would contribute to meeting the shortfall in the others.

Greater clarity on the interpretation of this and other criteria will be provided within the self-assessment framework and guidance notes to accompany the

standards. The fuller detail provided therein may change this interpretation and the associated costs.

Appendix 2 sets out the assumptions used to estimate the annual cost of £4,000 per hour to operate a consultant led GUM or FPC service. This cost has been applied to each additional hour of GUM and FPC capacity required in the relevant NHS boards.

The additional hours required for each NHS board for GUM and FPC services and associated costs are provided in Table 3-2.

Table 3- 2 Additional annual hours and costs for GUM and FPC capacity: central case

NHS board	Extra GUM capacity (hrs)	Additional cost to operate[a]	Additional FPC capacity (hrs)	Additional cost to operate[a]
Ayrshire & Arran	16.5	£66,000	0.0	£0
Borders	16.0	£64,000	6.0	£24,000
Dumfries & Galloway	20.0	£80,000	5.8	£23,000
Fife	17.8	£71,360	0.0	£0
Forth Valley	12.0	£48,000	0.0	£0
Grampian	32.6	£130,250	26.0	£104,000
Glasgow & Clyde	0.0	£0	0.0	£0
Highland	15.5	£62,000	0.0	£0
Lanarkshire	45.5	£182,000	0.0	£0
Lothian	8.0	£32,000	0.0	£0
Tayside	0	£0	0.0	£0
Scotland (excluding islands)	183.9	£735,610	37.8	£151,000

a) Figures in all tables are subject to rounding

Sensitivity analyses

Table 3-3 provides the additional hours and costs for three further sensitivity analyses. The first option assumes that the additional GUM hours are calculated by summing the total hours a clinic operates in a week and deducting the total from twelve hours a week. This exercise showed that four NHS boards would reduce costs if they meet the criterion by withdrawing the service on some of the days, other than the two days needed to meet the criterion.

The second approach uses the same assumptions as the central case other than it assumes a distance of 20 miles is consistent with a 30 minutes travel time. Borders avoids providing an extra clinic at Hawick saving some £48,000.

The third approach assumes that the annual cost to operate a consultant led GUM or FPC service is £5,000 per hour. This assumes a consultant is there for all 12 hours, the central case assumes the consultant is only there for 8 of the 12 hours. This increases all costs by a third.

Table 3- 3 Additional annual hours and costs for GUM and FPC capacity: sensitivity analyses

NHS board	Option 1		Option 2		Option 3
	GUM capacity required	Additional annual cost[a]	GUM capacity required	Additional annual cost[a]	Additional annual cost[a] GUM & FPC at £5,000 per hour
Ayrshire & Arran	14.5	£58,000	16.5	£66,000	£82,500
Borders	16.0	£64,000	4.0	£16,000	£110,000
Dumfries & Galloway	20.0	£80,000	20.0	£80,000	£128,750
Fife	15.5	£62,000	17.8	£71,360	£89,200
Forth Valley	1.0	£4,000	12.0	£48,000	£60,000
Grampian	32.6	£130,250	32.6	£130,250	£292,810
Glasgow & Clyde	0	£0	0	£0	£0
Highland	12.0	£48,000	15.5	£62,000	£77,500
Lanarkshire	45.5	£182,000	45.5	£182,000	£227,500
Lothian	8.0	£32,000	8.0	£32,000	£40,000
Tayside	0	£0	0.0	£0	£0
Scotland (excluding islands)	165.1	£660,250	171.9	£687,610	£1,108,260

a) Figures in all tables are subject to rounding

3.3 Criterion 1.3 80% of individuals with priority sexual health conditions are offered the opportunity to be seen within 2 working days of initial contact with a specialist sexual health service.

Currently there is no data collection system to assess the access to NHS boards on specialist service. Therefore ISD undertook a Mystery Shopper[6] exercise of genitourinary medicine (GUM) clinics and family planning clinics (FPC) to identify how many settings were able to see callers within 48 hours. The results were used to identify the boards that may not meet this criterion.

Five NHS boards had GUM clinics that failed one of the four service levels tested by the Mystery Shopper. Each (Ayrshire & Arran, Borders, Dumfries & Galloway, Highland and Lanarkshire) is assumed to require additional clinic capacity in order to meet the access requirements in criterion 1.2. No further capacity is assumed necessary to meet this criterion.

Assuming the criterion is set at NHS board level (so FPCs can send clients with possible sexual health problems to GUM clinics and meet the criterion) then the FPC clinics that were not able to see females within two working days due to capacity issues were Ayrshire & Arran, Borders, Dumfries & Galloway and Highland. Forth Valley and Tayside FPC clinics did not meet the service level because the ‘shopper’ was unable to contact the service. This should be remedied by the introduction of a missed calls system (criterion 1.5). Three of these four NHS boards are assumed to require additional FPC capacity to meet the access criterion 1.2. Only Highland is assumed to require an additional service of 3 hours clinic per week per year at an annual cost of £12,000.

Sensitivity analyses

No sensitivity analyses are presented for this criterion.

3.4 Criterion 1.5 There is a mechanism in place to monitor missed telephone calls (9am–5pm) to specialist sexual health services.

A questionnaire was used to identify the number of sites in each NHS board that did not meet this criterion. These were: Ayrshire & Arran 11, Borders 5, Dumfries & Galloway 5, Fife 6, Forth Valley 8, Grampian 2, Highland 5, Lanarkshire 10, Lothian 14 and Tayside 5; 71 in total. Costing such a service is not straightforward. These sexual health services often occupy shared clinic space in one centre that serves many such clinics and usually has a central call facility. Adopting a missed call system for one service could require adopting a dedicated line for that service. The costs will also vary with the existing telephone configuration and service provider. A central estimate of £2,500 per service has been used.

Sensitivity analyses

The sensitivity analysis assumes a quarter of sites (18) have a much higher cost of £10,000 per site to install equipment to enable staff to monitor missed calls. These sites are likely to be ones where the telephone services for the FPC and GUM clinics are provided as part of a central service covering many more functions. The cost to implement would rise to £312,500.

4. Standard 2 Sexual health information provision

4.1 Essential criteria

Table 4-1 lists the essential criteria under Standard 2 and summarises the approach used to cost each criterion.

Table 4- 1 Essential criteria for Standard 2

Standard Statement 2: The public has access to factually accurate and consistent information about sexual health relevant to their needs.	
2.1	The NHS board has a system in place to identify the diverse sexual health information needs of its population and to respond to those needs appropriately using relevant information formats. *This criterion was not costed.*
2.2	There are clear and effective arrangements to ensure accurate information describing sexual health conditions and local service provision arrangements. The information details links with partner organisations outside the NHS, such as local authorities. *See section 4.2*
2.3	Updated accurate information on local sexual health service provision is made available to other NHS boards, including NHS 24, and to partner organisations outside the NHS. *This criterion is assumed to be met by publishing annually an extra 100 copies of 20 leaflets at a mean cost of 30p to print and distribute, total cost £600 per NHS board.*
2.4	Information about time-dependent sexual health emergencies (eg emergency contraception, postexposure prophylaxis) is widely available locally. *See section 4.2*

4.2 Criterion 2.2 and 2.4 There are clear and effective arrangements to ensure accurate information describing sexual health conditions and local service provision arrangements. The information details links with partner organisations outside the NHS, such as local authorities.

Information about time-dependent sexual health emergencies (e.g. emergency contraception, postexposure prophylaxis) is widely available locally.

The resource requirements to meet these criteria have been informed by discussions with Dr G Flett Consultant in Family Planning and Reproductive Health Medicine and Mr D Cooper Sexual Health Network Manager, both NHS Grampian. An analysis of the mapping of sexual health/HIV information available

in other languages suggests that each year about seven such leaflets are produced in this board. The topics for such leaflets vary widely from general leaflets on contraception to ones focussing on specific HIV drugs.

It is assumed that to meet the criteria an additional leaflet is made available each year, for an audience of 20% of the population from 15 to 50 age range in each NHS board. GRO Scotland data[5] were used to estimate the populations in the relevant age groups. Printing costs assume 90% of the leaflets are printed in English at a cost of 8 pence each. The other 10% are assumed to be translated into two other languages, with translation costs of 15p a word (average 2,000 words) plus £20 per language for typesetting. The resultant mean cost is 11.2p per leaflet. A further 20% distribution costs has been added. In addition more frequent updating of relevant websites could take an extra five hours once a quarter (Dr Flett and Mr D Cooper, April 2008, personal communication) at an estimated cost of £240 per year. The resulting costs are shown in Table 4-2.

Table 4- 2 Provision of accurate information

NHS board	All aged 15-49	Additional leaflets for 20% of age group	Printing costs	Plus distribution 20% on cost, network update and links to external boards[a]
Ayrshire & Arran	166,454	33,291	£3,729	£5,310
Borders	46,787	9,357	£1,048	£2,090
Dumfries & Galloway	61,929	12,386	£1,387	£2,500
Fife	166,715	33,343	£3,734	£5,315
Forth Valley	133,399	26,680	£2,988	£4,420
Grampian	254,171	50,834	£5,693	£7,665
Greater Glasgow	447,019	89,404	£10,013	£12,850
Highland	93,159	18,632	£2,087	£3,340
Lanarkshire	271,154	54,231	£6,074	£8,120
Lothian	406,182	81,236	£9,098	£11,750
Tayside	175,600	35,120	£3,933	£5,555
Scotland (excluding islands)	2,222,569	444,514	£49,784	£68,915

a) Figures in all tables are subject to rounding

Sensitivity analysis

No sensitivity analysis is provided for this standard.

5. Standard 3 Services for young people

5.1 Essential criteria

Table 5-1 lists the essential criteria under Standard 3 and summarises the approach used to cost each criterion.

Table 5- 1 Essential criteria for Standard 3

Standard Statement 3: Health Boards ensure the development and delivery of integrated approaches to sexual health improvement, particularly in relation to young people.	
3.1	60% of chlamydia tests per year are taken from males and from females aged under 25 years. *See section 5.2*
3.2	The annual rate of chlamydia tests performed in the NHS board area is greater than 100 per 1,000 males aged 15–24 years. *See section 5.2*
3.3	The annual rate of chlamydia tests performed in the NHS board area is greater than 300 per 1,000 females aged 15–24 years. *See section 5.2*
3.4	There is evidence of active engagement of local key partners including health, education, social work, youth services and the voluntary sector, to support improved sexual health for young people and reduced teenage pregnancy. *This criterion was not costed*
3.5	Emergency contraception is well-publicised and available for young people. *This criterion was not costed.*
3.6	Targeted interventions are demonstrated for young people at greatest risk of teenage pregnancy and poor sexual ill-health, including looked-after children. *This criterion was not costed.*
3.7	The NHS board supports delivery of sex and relationship education training for professionals in partner organisations such as youth workers and social workers who work with the most vulnerable young people. *This criterion was not costed.*

5.2 Criteria 3.1, 3.2, and 3.3 Chlamydia tests

The current number of tests for each NHS board was obtained from ISD[7]. The required numbers of tests were obtained using data from the General Registry Office for Scotland[8]. These data suggest that some NHS boards (Dumfries & Galloway, Grampian, Greater Glasgow & Clyde, Lothian and Tayside) are already conducting more tests than strictly required by the criterion. This assumes the number of tests on over 25 years old can be reduced without adversely impacting on the sexual health of the population within the board. The cost of retaining the current number of tests for over 25 years old and meeting the reminder of the criterion is provided as a sensitivity analysis.

The cost per test was assumed to be £8.41 for a male urine test and £8.00 for a female vulvovaginal swab at 2007/08 prices[9]. The weighted average cost is £8.11 per test. This is for laboratory costs only. In addition 20 minutes of clinical time to oversee and manage the result was assumed to give a cost per test of £24.20. The cost excludes the subsequent management of persons identified as having chlamydia. Table 5-2 compares the required number of tests, the existing tests and the total cost of tests for each mainland NHS board.

Table 5- 2 Current and required chlamydia tests and cost of additional tests

Number of tests required for ages 15-24			Sub-total to be 60%	Total tests required	Total current tests	Additional tests	Total cost of tests[a]
NHS board	**Men**	**Women**					**£24.20**
Ayrshire & Arran	2,271	6,513	8,784	14,639	12,557	2,082	£50,390
Borders	564	1,631	2,195	3,658	3,091	567	£13,730
Dumfries & Galloway	798	2,194	2,992	4,987	6,619	-1,633	£0
Fife	2,427	7,030	9,457	15,761	14,251	1,510	£36,545
Forth Valley	1,853	5,392	7,244	12,074	10,665	1,409	£34,100
Grampian	3,424	9,871	13,295	22,158	25,885	-3,728	£0
Glasgow & Clyde	8,600	25,183	33,783	56,305	57,379	-1,074	£0
Highland	1,791	4,397	6,188	10,314	10,048	266	£6,425
Lanarkshire	3,697	10,436	14,133	23,555	17,129	6,426	£155,515
Lothian	5,595	17,328	22,923	38,205	43,604	-5,399	£0
Tayside	2,588	7,411	9,999	16,665	17,298	-633	£0
Scotland (excluding islands)	33,990	98,362	132,352	220,586	218,526	2,060	£296,705

a) Figures in all tables are subject to rounding

Sensitivity analyses

If NHS boards continue to test the same number of over 25 year olds and these form 40% of the total number of tests as required by the criteria then the additional costs increase by £1.5 million to £1.8 million. Table 5-3 provides the additional number of tests and costs thereof by NHS board.

Table 5- 3 Additional chlamydia tests and costs if NHS boards retain current number of tests in over 25 years old

NHS board	Additional tests[a)]	Additional costs (£24.20 per test) [a)]
Ayrshire & Arran	4,201	£101,650
Borders	849	£20,545
Dumfries & Galloway	1,664	£40,255
Fife	5,137	£124,305
Forth Valley	2,018	£48,825
Grampian	8,188	£198,140
Greater Glasgow & Clyde	18,911	£457,645
Highland	3,995	£96,665
Lanarkshire	10,371	£250,980
Lothian	16,081	£389,160
Tayside	4,285	£103,685
Scotland (excluding islands)	75,700	£1,831,855

a) Figures in all tables are subject to rounding

A second sensitivity analysis includes overheads in the cost of the chlamydia diagnostic test. The published HTA[9] value of £8.11 included the costs of consumables, equipment and staff time, but no overheads. Edinburgh laboratory has provided a cost of the diagnostic test including overheads, of £11.64. (Carol Thomson, Lothian, Personal communication, March 2008). The effect of using this higher cost on the base case number of additional tests is shown in Table 5-4.

Table 5- 4 Additional laboratory cost per test £11.64 by NHS board (total cost £27.70)

NHS board	Additional costs at £27.70 per test [a]
Ayrshire & Arran	£57,780
Borders	£15,745
Dumfries & Galloway	£0
Fife	£41,910
Forth Valley	£39,100
Grampian	£0
Greater Glasgow & Clyde	£0
Highland	£7,370
Lanarkshire	£178,330
Lothian	£0
Tayside	£0
Scotland (excluding islands)	£340,235

a) Figures in all tables are subject to rounding

6. Standard 4 Partner notification

6.1 Essential criteria

Table 6-1 lists the essential criteria under Standard 4 and summarises the approach used to cost each criterion.

Table 6- 1 Essential criteria for Standard 4

Standard Statement 4: Individuals who are diagnosed with a sexually transmitted infection see an appropriately trained member of staff to organise partner notification (contact tracing).	
4.1	A sexual health adviser or a professional trained and supported by a sexual health adviser (e.g. a practice nurse), is available to all individuals diagnosed with chlamydia or gonorrhoea. *This criterion was not costed. Criterion 4.2 requires all individuals with a diagnosis to be offered partner notification by such an adviser.*
4.2	Individuals are offered partner notification in all settings delivering sexual healthcare, including in primary care, youth services and community pharmacies. *See section 6.2*
4.3	For every 100 individuals diagnosed with chlamydia in specialist sexual health settings, 64 contacts are verified as having attended within 90 days of the first partner notification interview. *See section 6.2*

6.2 Criteria 4.2 and 4.3 Partner notification

Process

A three stage partner notification process, adapted from a NICE costing template report[10] on partner notification in England, was used. The stages are partner referral by index case, partner attending for testing and partner treatment.

The main approaches used to refer partners are patient referral whereby the index patient accepts full responsibility for informing partners of the possibility of exposure to a sexually transmitted infection (STI) and for referring them to the appropriate services, with records of partner attendance documented. This is the only method assumed to be used in the GP setting. The second approach is provider referral where the provider takes responsibility for confidentially notifying partners of the possibilities of their exposure to an STI. Contract referral is not assumed to be used in Scotland.

Data values and sources

The number of individuals in each NHS board diagnosed with chlamydia or gonorrhoea was obtained from HPS data for 2007[11]. The values applied for the main parameters for each of the stages are shown in Table 6-2. Initially the values adopted in the NICE report[10] were listed and subsequently revised using data from Scottish settings and following discussion with members of the Standards Project Group. A key assumption is that GPs will undertake partner notification for 50% of the relevant population at a cost of £2.06. There may not be the incentives in the system to realise this.

Table 6- 2 Partner notification: parameters, values and source

Parameter	Values used for costing		Source
	GP setting	Specialist	
% of clients identified initially by setting	50%	50%	NICE values, confirmed as accurate for Scotland
% of formal partner notification undertaken (that is to include tracing and follow-up):			NICE values revised for Scotland
Current	0%	95%	
Future	100%	100%	
Form of notification used:			NICE values revised for Scotland
patient referral	100%	80%	
provider	0%	20%	
Cost of patient referral	£2.06	£10.13	NICE value used for GP setting: 30 mins AfC 6 nurse in specialist setting
Cost of provider referral	Not used	£15.19	45 mins AfC 6 nurse in specialist setting
Number of cases per index patient	1.2	1.4	NICE value used for specialist but NICE value of 1.7 reduced to 1.2 for GP setting
% of partners attending (current and future)	45%	60%	NICE value, confirmed as accurate for Scotland
New STIs found	70%		NICE value, confirmed as accurate for Scotland
Unit cost to test partners	£14.30		NICE value
Cost to treat new cases	£11.81		NICE value

Central estimate of additional STIs and associated costs

Estimates of the initial and incremental number of STIs (chlamydia and gonorrhoea) by NHS board are given in Table 6-3, with Table 6-4 providing an analysis of the incremental cost of each of the three stages. Fuller information is available in a costing template at www.nhshealthquality.org or by contacting Joyce Craig by telephone on 0141 225 6985, or by email to joyce.craig@nhs.net

Table 6- 3 STIs in 2007 and additional numbers with partner notification

NHS board	Number of STIs 2007	Additional STIs assuming 100% partner notification
Ayrshire & Arran	1,173	567
Borders	262	127
Dumfries & Galloway	569	275
Fife	1,259	608
Forth Valley	915	442
Grampian	1,849	893
Glasgow & Clyde	5,172	2,498
Highland	754	364
Lanarkshire	1,839	888
Lothian	3,285	1,587
Tayside	1,785	862
Scotland (excluding islands)	18,862	9,111

Table 6- 4 Additional cost of partner notification

NHS board	Cost: partner notification discussion	Cost: partner testing	Cost: partner treatment	Total cost
Ayrshire & Arran	£1,535	£4,880	£2,820	£9,235
Borders	£340	£1,090	£630	£2,060
Dumfries & Galloway	£745	£2,370	£1,370	£4,485
Fife	£1,650	£5,240	£3,030	£9,920
Forth Valley	£1,200	£3,810	£2,200	£7,210
Grampian	£2,420	£7,695	£4,450	£14,565
Glasgow & Clyde	£6,770	£21,520	£12,440	£40,730
Highland	£990	£3,140	£1,815	£5,945
Lanarkshire	£2,405	£7,650	£4,425	£14,480
Lothian	£4,300	£13,670	£7,905	£25,875
Tayside	£2,335	£7,430	£4,295	£14,060
Scotland (excluding islands)	£24,690	£78,495	£45,380	£148,565

Sensitivity analyses

Two sensitivity analyses have been undertaken. The first applies the values used by NICE in its costing template report[10] on partner notification. The significant changes from the values shown in Table 6-2 are:

- NICE assumed the cost of patient referral in GUM setting to be £2.06 (central case assumed £10.13) and provider referral to be £2.12 (central case assumed £15.19). Using the NICE assumption reduces the cost of partner notification discussion by 26%.
- NICE assumed the number of partners per index case to be 1.7 in General Practice (central case assumed 1.2). This increases the incremental cost impact of partner testing by 24%.
- NICE assumed that in future practice, in GUM clinics 45% of partners will be attending for testing (central case assumes 60%) thereby reducing the incremental cost to treat partners by 2%.

The second analysis assumes GPs are currently undertaking 30% partner notification (central case assumed zero). GPs are undoubtedly initiating partner notification at the first appointment but it is understood that very few follow-up on that initial step. This will reduce effectiveness but possibly not to zero. The resultant changes in the costs are shown in Table 6-5.

Table 6- 5 Sensitivity analyses using NICE assumptions and 30% GP notification rates

NHS board	Additional costs: NICE assumptions	Additional costs: GP 30% partner notification
Ayrshire & Arran	£10,040	£8,090
Borders	£2,240	£1,810
Dumfries & Galloway	£4,870	£3,920
Fife	£10,780	£8,680
Forth Valley	£7,830	£6,310
Grampian	£15,830	£12,750
Greater Glasgow & Clyde	£44,270	£35,670
Highland	£6,450	£5,200
Lanarkshire	£15,740	£12,680
Lothian	£28,120	£22,660
Tayside	£15,280	£12,310
Scotland (excluding islands)	£161,450	£130,080

7. Standard 5 Sexual healthcare for people living with HIV

7.1 Essential criteria

Table 7-1 lists the essential criteria under Standard 5 and summarises the approach used to cost each criterion.

Table 7- 1 Essential criteria for Standard 5

Standard Statement 5: Individuals attending for ongoing HIV care are offered high quality sexual and reproductive healthcare to improve personal wellbeing and to minimise the risk of transmitting infections to others.

5.1	90% of adults receiving ongoing HIV care have the result of syphilis serology taken within the preceding 6 months recorded in their HIV records or documentation why this is not required updated at 6 monthly intervals. *See section 7.2*
5.2	80% of HIV+ adults presenting for the first time in Scotland have their sexual and reproductive history documented within 4 weeks of their initial HIV diagnosis and are given advice to prevent onward HIV transmission, backed by the availability of condoms. *See section 7.3*
5.3	80% of adults receiving ongoing HIV care have an offer of a sexual health screen within the previous 12 months. If a sexual health screen is not required or the offer is declined, this information is documented at 12 monthly intervals. *See section 7.4*
5.4	There is a documented local care pathway for sexual and reproductive healthcare, including provision of contraceptive counselling and condoms for individuals with HIV and this is communicated directly to HIV+ individuals and to organisations who provide support for individuals with HIV. *British Association for Sexual Health and HIV (BASHH) responses show only two clinics have written policies, others have unwritten policies. Assume such boards can write policy re-deploying existing resources. No further action.*

7.2 Criterion 5.1 90% of adults receiving ongoing HIV care have the result of syphilis serology taken within the preceding 6 months recorded in their HIV records or documentation why this is not required updated at 6 monthly intervals.

Data from ISD and HPS for number of adults with HIV for 2006[12] were updated by the number of new cases in 2007. The new cases were allocated to NHS boards in proportion to the 2006 caseload. ISD also provided audit data BASHH on the numbers of adults with HIV and receiving syphilis serology. The BASHH records did not include all NHS boards. For NHS boards with no records a baseline of 60% of adults was assumed to be receiving syphilis serology results at six monthly intervals. The cost per test to include laboratory time was estimated at £9 and a further £2 added for nurse time to manage the testing process and record the result. Table 7-2 provides an estimate of the incremental number of tests and associated costs.

Table 7- 2 HIV adults, number and cost of serology tests

NHS board	Total HIV 2006	Plus new HIV cases (est.)	Total 2007	Baseline from BASHH case notes	Incremental: assume 60% baseline if no BASHH data	
					Additional tests	Additional costs
Ayrshire & Arran	35	16	51		15	£170
Borders	8	5	13	100%	0	£0
Dumfries & Galloway	34	6	40		12	£130
Fife	61	16	77	100%	0	£0
Forth Valley	39	12	52	54%	19	£200
Grampian	160	24	183	70%	37	£410
Greater Glasgow & Clyde	778	111	889	100%	0	£0
Highland	35	13	48	100%	0	£0
Lanarkshire	92	24	116		35	£380
Lothian	986	98	1084	80%	108	£1,190
Tayside	188	17	205		62	£680
Scotland (excluding islands)	2,416	342	2,758		288	£3,160

Sensitivity analyses

No sensitivity analyses are presented for this criterion.

7.3 Criterion 5.2 80% of HIV+ adults presenting for the first time in Scotland have their sexual and reproductive history documented within 4 weeks of their initial HIV diagnosis and are given advice to prevent onward HIV transmission, backed by the availability of condoms

The same geographic spread of HIV cases was assumed but a higher caseload of 400 for 2008 was used, consistent with the number of cases in 2005. Data on the proportion of adults with HIV having a full history taken was from a BASHH audit and provided by ISD. Where no data were recorded a baseline of 40% was used. The incremental cost per history documented was assumed to be £30, comprising 20 minutes of a mix of specialist registrar and consultant time (50%/50%) plus administration support. Table 7-3 provides estimates of the number of additional histories required in each board and cost thereof. This may overstate costs since many NHS boards will be maintaining records but perhaps not in the detail and to the time limit specified in the criterion

Table 7- 3 Forecast numbers and cost for additional history

NHS board	New cases	If 400 new cases a year	Baseline from BASHH; non responders assume at 40%	Additional histories	Incremental cost
Ayrshire & Arran	16	19	40%	7	£230
Borders	5	6	33%	3	£80
Dumfries & Galloway	6	7	40%	3	£80
Fife	16	19	100%	0	£0
Forth Valley	12	14	46%	5	£140
Grampian	24	28	50%	8	£250
Greater Glasgow & Clyde	111	130	85%[1]	0	£0
Highland	13	15	43%	6	£170
Lanarkshire	24	28	40%	11	£340
Lothian	98	114	67%	15	£450
Tayside	17	20	40%	8	£240
Scotland (excluding islands)	342	400		66	£1,980

1BASHH figure of 61% increased to 85% after discussion with M Murchie Sandyford

Sensitivity analyses

No sensitivity analyses are presented for this criterion.

7.4 Criterion 5.3 80% of adults receiving ongoing HIV care have an offer of a sexual health screen within the previous 12 months. If a sexual health screen is not required or the offer is declined, this information is documented at 12 monthly intervals.

The forecast in Table 7-4 of number of adults with HIV in 2007 was used. Data on the proportion of adults having a sexual health screen within the previous 12 months was taken from a BASHH audit, provided by ISD. For NHS boards with no baseline data a baseline of 20% was assumed. A member of the Project Group advised Greater Glasgow was already achieving over 80%.

A screen was assumed to cost £20 being £5.00 nurse time for 15 minutes plus an allowance for two additional tests or investigations at £7:50 each.

Table 7- 4 Forecast numbers and cost for additional screening

NHS board	Total adults with HIV	Baseline from BASHH; non responders assume at 20% except Highland =0	Additional screens to reach 80%	Annual cost
Ayrshire & Arran	51	20%	31	£610
Borders	13	17%	8	£165
Dumfries & Galloway	40	20%	24	£480
Fife	77	100%	0	£0
Forth Valley	51	21%	30	£600
Grampian	184	30%	92	£1,840
Glasgow & Clyde	889	80%[1]	0	£0
Highland	48	0%	38	£770
Lanarkshire	116	20%	70	£1,390
Lothian	1,084	30%	542	£10,840
Tayside	205	20%	123	£2,460
Scotland (excluding islands)	2,758		958	£19,155

1BASHH figure of 18% increased to 80% after discussion with M Murchie Sandyford

Sensitivity analyses

No sensitivity analyses are presented for this criterion.

8. Standard 6 Termination of pregnancy

8.1 Essential criteria

Table 8-1 lists the essential criteria under Standard 6 and summarises the approach used to cost each criterion.

Table 8- 1 Essential criteria for Standard 6

Standard Statement 6: Women receive safe termination of pregnancy with minimal delay, followed by a contraceptive review and counselling.	
6.1	70% of women seeking termination of pregnancy undergo the procedure at 9 weeks or less gestation. *See section 8.2*
6.2	There is a mechanism to ensure that all women are offered, at the time of termination pregnancy, a range of contraceptives in addition to condoms, including implants or intrauterine methods, where appropriate. *This criterion was not costed.*
6.3	60% of women leave the facility with one of the more effective methods of contraception (hormonal oral contraceptives, intrauterine devices or contraceptive implants). *This criterion was not costed.*
6.4	Post termination of pregnancy counselling to provide psychological support is available within 4 weeks for women (and their partners) who request it. *This criterion was not costed.*
6.5	The NHS board has an agreed referral mechanism in place (where services are not available locally) for women who require a termination of pregnancy up to the legal time limit for such procedures. *This criterion was not costed.*

8.2 Criterion 6.1 70% of women seeking termination of pregnancy undergo the procedure at 9 weeks or less gestation.

The key data source is number of terminations performed by NHS boards for year end 2006 as notified to Chief Medical Officer and provided by ISD[13]. These data show the number and percentage of terminations performed in women who are at less than 10 weeks gestation and are presented in Table 8-2. The total number of terminations and the number required to meet the criterion are also shown. Three NHS boards were exceeding the 70% threshold in 2006. Note

these data are now two years old and the numbers of women seeking a termination have been rising steadily in Scotland from under 12,000 in 2000 to almost 13,000 in 2006 (http://www.isdscotland.org/isd/servlet/FileBuffer?namedFile=mat_aas_table7.xls&pContentDispositionType=inline).The historical data may thus not represent current performance against this criterion.

It has been assumed that NHS boards which were within 6% of the 70% target in 2006 have met/can achieve this criterion by improving triage and/or referral mechanisms at minimal cost. The remaining NHS board is Lanarkshire where 52% of terminations were achieved at 9 weeks or less. Subsequently, capacity for medical procedures has increased, which together with other planned improvements should improve the performance. This change could be cost saving as a medical termination is slightly cheaper than a surgical termination (£647 compared to £749)[14]. However for costing purposes a cost of £100 per termination to enhance referral pathways has been included for Lanarkshire, a total cost of £22,200.

Table 8- 2 70% of women seeking termination of pregnancy undergo the procedure at 9 weeks or less gestation

NHS board	Abortions performed <10 weeks 2006	Abortions performed <10 weeks 2006 %	Abortions performed >10 weeks 2006	Total abortions	To meet standard Total*.7	Additional needed earlier	% of total	Funding
Ayrshire & Arran	524	65	286	810	567	43	5%	No
Borders	191	80	47	238	167	-24	10%	No
Dumfries & Galloway	193	65	102	295	207	14	5%	No
Fife	603	70	255	858	600	-3	0%	No
Forth Valley	420	67	203	623	436	16	3%	No
Grampian	876	66	459	1,335	935	59	4%	No
Greater Glasgow & Clyde	2,343	72	934	3,277	2,294	-49	-2%	No
Highland	342	64	189	531	372	30	6%	No
Lanarkshire	617	52	581	1,198	839	222	19%	Yes
Lothian	1,710	67	827	2,537	1,776	66	3%	No
Tayside	855	72	336	1,191	834	-21	-2%	No
Scotland	8,674		4,219	12,893	9,027			

8.3 Sensitivity analyses

No sensitivity analyses are provided for this standard.

9. Standard 7 Hepatitis B vaccination for men who have sex with men

9.1 Essential criteria

Table 9-1 lists the essential criteria under Standard 7 and summarises the approach used to cost each criterion.

Table 9- 1 Essential criteria for Standard 7

Standard Statement 7: Men who have sex with men who are at risk of sexually transmitted hepatitis B are offered vaccination.	
7.1	There is a protocol to promote hepatitis B vaccination of all individuals in community settings such as primary care who are at increased risk of hepatitis B. *This criterion has not been costed*
7.2	MSM have a choice of where hepatitis B vaccination is available, with a protocol to promote hepatitis B vaccination of all individuals at risk outside specialist sexual health services. Information on other health promoting activities such as risk reduction and sexually transmitted infection testing is also available in that setting. *This criterion has not been costed*
7.3	70% of all MSM attending specialist sexual health services and not known to be immune to hepatitis receive at least one dose of hepatitis B vaccine. *See section 9.2*

9.2 Criterion 7.3 70% of all MSM attending specialist sexual health services and not known to be immune to hepatitis receive at least one dose of hepatitis B vaccine.

Table 9-2 uses data from ISD for the period January to June 2007 on the proportion of MSM eligible for Hep B vaccine attending a GUM clinic who receive a first dose in that setting. These data are used to estimate the additional numbers of MSM who should receive a vaccine to meet the criterion. The cost of two vaccinations is assumed to be £30, comprising two vaccines at £12.99 each, two 5 minute appointments with an Agenda for Change (AfC) band 6 nurse and admin time.

Table 9- 2 MSM: 70% receive vaccinations for hepatitis B

NHS board	Numbers receiving first dose	%	Total MSM	Total *0.7	Additional vaccines required	Additional costs 2 vaccines
Ayrshire & Arran	23	7%	329	230	207	£6,210
Borders	25	18%	139	97	72	£2,170
Dumfries & Galloway	14	71%	20	14	0	£0
Fife	69	43%	160	112	43	£1,300
Forth Valley	61	41%	149	104	43	£1,290
Grampian	158	25%	632	442	284	£8,530
Glasgow & Clyde	1,141	42%	2,717	1,902	761	£22,820
Highland	22	50%	44	31	9	£260
Lanarkshire	27	31%	87	61	34	£1,020
Lothian	1,399	49%	2,855	1,999	600	£17,990
Tayside	223	45%	496	347	124	£3,720
Scotland (excluding islands)	3,162		7,628	5,339	2,177	£65,310

Sensitivity analyses

No sensitivity analyses are presented for this criterion.

10. Standard 8: Intrauterine and implantable methods of contraception

10.1 Essential criteria

Table 10- 1 Essential criteria for Standard 8 lists the essential criteria under Standard 5 and summarises the approach used to cost each criterion.

Table 10- 1 Essential criteria for Standard 8

Standard Statement 8: All individuals have access to intrauterine and implantable methods of contraception.	
8.1	Women requiring contraception are given information (including written information) about, and offered a choice of, all methods of contraception including intrauterine and implantable contraceptives. *This criterion has not been costed.*
8.2	60 or more females per 1,000 females of reproductive age are prescribed intrauterine and implantable contraceptives. *See section 10.2.*
8.3	Contraceptive service providers who do not provide intrauterine and implantable contraceptives within their own practice or service should have an agreed mechanism in place for referring women for intrauterine and implantable contraceptives. *This criterion has not been costed.*
8.4	A consultation appointment with a service providing intrauterine and implantable contraceptives is available within 5 working days. This criterion has not been costed although it could be a significant cost. No data on waiting times is available, nor on numbers of clinicians who are trained to fit devices.

10.2 Criterion 8.2 60 or more females per 1,000 females of reproductive age are prescribed intrauterine and implantable contraceptives.

Recent data on the number of women using long acting reversible methods of contraception (LARC)[15] were adapted to estimate the proportion of women of reproductive age currently using LARC methods that meet the criteria. These were defined by the Project Group to be progestogen implants, intrauterine devices (IUD) and intrauterine systems (IUS).

Currently, over 34,000 women (28% of women of reproductive age) use contraceptive injections as the preferred means of LARC. This compares to about 42,200 (34% of women of reproductive age) using implants, IUDs or IUSs. Therefore, in total about 62% of women of reproductive age do use a LARC. Four NHS boards Fife, Forth Valley, Lanarkshire and Lothian do not achieve a 60%

threshold assuming all forms of LARC satisfy the criteria. No NHS boards meet a 60% threshold assuming only implants, IUDs and IUSs contribute to meeting the criteria.

Compliance with the criteria will result in women switching from injections to other LARC devices. The costings assume:

- for the four boards not meeting a 60% threshold that all women currently receiving injections switch to another form of LARC thus saving the cost of injections. The additional women required to reach 60% are assumed to use the current mix of the three other LARC methods.
- for the remaining boards, sufficient women switch from injections to another form of LARC to enable the board to meet the 60% threshold. Thus the savings from injections are assumed to accrue to the additional women who must use one of the other LARC methods.

This approach minimises the costs to the NHS boards.

The unit costs for each method are taken from a recent NICE cost impact report on LARC[16] which itself uses costs from an economic model in a guideline on LARC[17]. The cost components include device cost, initial consultation, fitting and training cost. These costs were updated for the charges payable under the Local Enhanced Services (LES) arrangements facilitated by the GMS contract. Dr E Stewart GP, a member of the Standards Project Group, provided information on the payments for local enhanced services in his Board. Substituting these costs into the NICE costings increased the costs for IUS, IUD and Implanon by £20 in year 1 and the annual average cost by £14 (assuming GPs and FPCs insert these devices on a 50/50 basis). Other NHS boards have different payment structures for such local enhanced services.

Table 10- 2 Detailed cost data for IUS and other costs for remaining methods from NICE1 reproduces the cost components for the IUS service as estimated by NICE as an example and gives the weighted average first year and annualised cost over the expected duration of the devices for implants, IUDs and IUSs. The equivalent costs revised for the LES contract are also provided: the latter figures have been used in the costings.

Table 10-3 has the first year and average costs for the four LARC methods to include injections.

Table 10- 2 Detailed cost data for IUS and other costs for remaining methods from NICE[16]

Component	Cost
Device cost IUS 'Mirena'	£83.16
Initial GP consultation, 20 mins	£44.80
Consultation for insertion, 18 mins	£40.32
Sterile pack for insertion	£18.20
Follow-up consultation 3-6 weeks later, 9 mins	£20.16
Consultation for removal, 10 min	£22.40
Sterile pack for removal	£3.17
IUS: first year cost	£207.00
Annual average cost over duration of 3.32 years	£70.00
Implanon: first year cost	£175.00
Annual average cost over duration of 2.24 years	£103.00
IUD: first year cost	£133.00
Annual average cost over duration of 3.36 years	£48.00
Weighted average first year cost (NICE)	£182
Weighted annual average cost (NICE)	£78
Revised for Local Enhanced Services Payments	
Weighted average first year cost	£202
Weighted annual average cost	£91

Table 10- 3 First year and annual average costs by LARC method

	IMPLANON	IUD	IUS	Injections
Cost: first year	£195	£153	£227	£144
Annual mean cost	£117	£62	£84	£117

Table 10-4 provides the number and rates of use of implants, IUDs and IUSs, the additional number of women required to use such methods to reach 60% and the total cost assuming a weighted average cost of £202 for the methods. The total costs are £6.5 million. However this is before the cost offset from using injections is included (see table 10-5).

Table 10- 4 Proportion of women currently using each device, compared to the criterion of 60% and associated cost to meet criterion using the weighted average first year cost

NHS board	IMPLANON		IUD		IUS		Total (exclude injections)		Numbers to reach 60%	Mean costs at £202 per method
	Numbers	Rates	Numbers	Rates	Numbers	Rates	Numbers	Rates		
Ayrshire & Arran	1,415	17	716	8	1,714	20	3,845	45	5,127	£258,715
Borders	289	12	132	6	507	21	928	39	1,428	£100,870
Dumfries & Galloway	357	11	272	9	777	25	1,406	45	1,875	£94,605
Fife	805	9	475	6	1,046	12	2,326	27	5,169	£573,860
Forth Valley	694	10	354	5	930	13	1,978	28	4,239	£456,315
Grampian	1,863	15	675	5	1,809	14	4,347	34	7,671	£671,010
Greater Glasgow & Clyde	3,942	13	2,833	9	4,585	15	11,360	37	18,422	£1,425,445
Highland	1,090	17	330	5	1,446	22	2,866	44	3,908	£210,375
Lanarkshire	1,309	10	501	4	2,004	15	3,814	29	7,891	£822,980
Lothian	1,829	9	1,068	5	2,477	12	5,374	26	12,402	£1,418,565
Tayside	1,016	11	433	5	1,826	20	3,275	36	5,458	£440,720
Scotland (excluding islands)	14,610	12	7,790	6	19,120	16	41,519	34	73,588	£6,473,460

In addition, NHS boards will require to train more clinical staff to fit devices. The additional training requirement assumes each trained clinician is an AfC band 6 and fits 10 devices a week for 44 weeks a year, with numbers rounded up by one in each NHS Board to provide some cover. This assumes women are signposted to trained clinicians and may face considerable travel time and costs to make the appointment. Training is assumed to be conducted by an AfC band 6 clinician and conducted on a one-to one basis over 3.5 hours. Table 10-5 presents the savings from avoiding the need to provide injections to women along with the additional training numbers and costs for each NHS board. The total cost of meeting this standard is £2.35 million. This is likely to underestimate the true cost because it is unlikely that the required number of women will switch from injections to another form of LARC. Therefore, the assumed savings will not be realised. More trained clinicians are also likely to be necessary to avoid giving women a very poor service level.

Table 10- 5 Cost of additional IUDs, IUSs and implants plus associated training minus savings on injections

NHS board	Mean costs at £202 per method	Additional trained staff	Additional training cost	Cost offset for current number of injections	Net cost for LARC (IUD, IUS and implants)
Ayrshire and Arran	£258,715	4	£569	£184,560	£74,723
Borders	£100,870	2	£310	£71,956	£29,221
Dumfries and Galloway	£94,605	2	£300	£67,488	£27,416
Fife	£573,860	7	£1,084	£336,456	£238,488
Forth Valley	£456,315	6	£892	£290,916	£166,290
Grampian	£671,010	9	£1,243	£478,681	£193,573
Greater Glasgow and Clyde	£1,425,445	17	£2,477	£1,016,874	£411,048
Highland	£210,375	3	£489	£150,074	£60,788
Lanarkshire	£822,980	10	£1,492	£429,264	£395,209
Lothian	£1,418,565	17	£2,466	£799,380	£621,650
Tayside	£440,720	6	£866	£314,400	£127,189
Scotland (excluding islands)	£6,473,460	83	£12,188	£4,170,673	£2,345,596

10.3 Sensitivity analysis

The first sensitivity analysis assumes injections can contribute to the standard and assumes four contraceptive injections a year protect one woman; however these may not be the same individuals. The mean cost falls to £176 per method because injections have the lowest first year cost. Under this basis the cost of meeting the standard falls to £0.6 million (see Table 10-6). Only four NHS boards would face higher costs to meet such a re-defined standard.

Table 10- 6 Injections contribute to LARC threshold: revised cost

	Injections [1]		**Total number current LARC users**		**Numbers to reach 60%**	**Total cost with first year cost of £176 per method**
NHS boards	**Numbers**	**Rates**	**Numbers**	**Rates**		
Ayrshire and Arran	2,051	25	5,896	70		£0
Borders	651	27	1,579	66		£0
Dumfries and Galloway	958	30	2,364	75		£0
Fife	2,337	26	4,663	53	604	£106,213
Forth Valley	2,020	29	3,998	57	202	£35,597
Grampian	4,307	35	8,654	69		£0
Greater Glasgow and Clyde	7,695	25	19,055	62		£0
Highland	2,008	31	4,874	75		£0
Lanarkshire	2,981	23	6,795	52	1,080	£189,984
Lothian	5,551	27	10,925	53	1,370	£240,987
Tayside	3,309	36	6,584	72		£0
Scotland (excluding islands)	33,868	28	75,387	62	3,256	£572,781

1This adopts a population approach, assuming 4 injections a year protects one woman, however these may not be the same individuals.

The second sensitivity analysis is to adopt the lower weighted annual average cost for each LARC method. This arises because the devices usually provide protection over several years but the costs are mainly in the initially assessment and fitting period. This uses the central case and assumes injections cannot contribute to meeting the standard.

The costs for NHS boards are shown in Table 10- 7.

Table 10- 7 Cost using weighted average cost approach compared to central case

NHS board	Central case cost £202 per method	Additional cost using annual average cost of £91 per method
Ayrshire and Arran	£74,723	£43,311
Borders	£29,221	£16,937
Dumfries and Galloway	£27,416	£15,891
Fife	£238,488	£138,231
Forth Valley	£166,290	£96,384
Grampian	£193,573	£112,198
Greater Glasgow and Clyde	£411,048	£238,250
Highland	£60,788	£35,234
Lanarkshire	£395,209	£229,069
Lothian	£621,650	£360,318
Tayside	£127,189	£73,721
Scotland (excluding islands)	£2,345,596	£1,359,544

11. Standard 9: Appropriately trained staff providing sexual health services

Essential criteria

Table 11- 1 Essential criteria for Standard 9 lists the essential criteria under Standard 9 and summarises the approach used to cost each criterion.

Table 11- 1 Essential criteria for Standard 9

Standard Statement 9: All staff who deliver sexual health services are adequately and appropriately trained.	
9.1	The NHS board has a contracted arrangement for clinical services to be led locally by a consultant holding a certificate of completion of training in genitourinary medicine. *See section 11.2*
9.2	The NHS board has a contracted arrangement for clinical services to be led locally by a consultant holding a certificate of completion of training in obstetrics and gynaecology and with sub-specialty (or equivalent) training in sexual and reproductive health. *See section 11.3*
9.3	All health professionals providing sexual health interventions in both generic and specialist services demonstrate knowledge gained from post registration courses in sexual health and provide evidence of relevant continuing professional development. *See section 11.4*
9.4	There is a local induction programme for all staff in generic and specialist sexual health services which includes training in confidentiality, information handling, the use of chaperoning for intimate examinations and child protection in relation to sexual health. *See section 11.5*

11.2 Criterion 9.1 The NHS board has a contracted arrangement for clinical services to be led locally by a consultant holding a certificate of completion of training in genitourinary medicine.

Enquires suggest Ayrshire and Arran and Dumfries & Galloway may require additional consultant level support in genitourinary medicine to meet this criterion. The additional cost is estimated as the difference in salaries between an associate specialist and a consultant. The mid point associate specialist salary is £68,810 2007/8 and midpoint salary for a consultant in 2007/8 is £90,000. This difference of £21,190 rises to £25,850 with 22% overheads for superannuation and national insurance. This assumes there are no redundancy costs and no additional secretarial and nursing staff are required to support the consultant. This is thus a risk that the cost could be higher.

11.3 Criterion 9.2 The NHS board has a contracted arrangement for clinical services to be led locally by a consultant holding a certificate of completion of training in obstetrics and gynaecology and with sub-specialty (or equivalent) training in sexual and reproductive health.

Enquires suggest Dumfries & Galloway, Highland, Tayside and Borders require additional consultant level support in obstetrics and gynaecology to meet this criterion. Employing a consultant could cost an extra £25,850 per board.

11.4 Criterion 9.3 All health professionals providing sexual health interventions in both generic and specialist services demonstrate knowledge gained from post registration courses in sexual health and provide evidence of relevant continuing professional development.

Responses to the questionnaire reported that all NHS boards have provided the majority of staff with training in post registration courses. Numbers requiring training have been notified as 0-5 for each board. Assuming an average of five staff at Lothian and Greater Glasgow and Clyde, two in Borders, Dumfries & Galloway and Highland and three in the remaining mainland boards to train gives a total of 34 to be trained across Scotland, excluding the Islands.

The cost of BASHH course has been used to represent a typical such course. Course fees are £1,350, with attendees also requiring ten nights in London and two return flights. With an average cost of flights and travel of £500 and accommodation of £1,000, the cost per attendee is £2,850, equivalent to £14,250, for Lothian and Greater Glasgow, £5,700 for the Borders,, Dumfries & Galloway and the Highlands, £8,550 in the other boards. The national costs are £96,900. Savings may be achievable by providing courses in Scotland.

11.5 Criterion 9.4 There is a local induction programme for all staff in generic and specialist sexual health services which includes training in confidentiality, information handling, the use of chaperoning for intimate examinations and child protection in relation to sexual health.

Responses to the questionnaire reported that virtually all NHS boards have local staff induction programmes including these elements: the one exception (Lanarkshire) does not undertake child protection training. Assuming the necessary training could be developed by a AfC band 6 in 16 hours gives a total cost of £320 (midpoint salary plus 22% for NI and superannuation).

Sensitivity analyses

No sensitivity analysis presented for this standard.

12. Appendices

Appendix 12- 1 Subgroup members

We would like to thank colleagues who contributed to the development of this Report, provided consultation comments, assisted with peer review and external quality assurance. In particular we would like to thank:

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Appendix 12- 2 Estimated annual hourly cost of GUM or FPC clinic

The costs assume that a NHS board operates an existing service so the additional costs are primarily staff, consumables and accommodation for the additional opening hours. The fixed costs of setting up and marketing the clinic are already in place.

Assume for a two day a week GUM clinic or FPC, each of 6 hours per day, the weekly staffing requirements are:

- 1 consultant for 8 hours (mid point salary £90,000),
- 1 AfC grade 6 nurse for 12 hours (mid point salary £27,388), and
- 1 AfC grade 3 for 12 hours (mid point salary £15,870).

An overhead of 22% for superannuation and NI has been added to the mid point salaries.

Other costs are as shown in Table 12- 1.

Table 12- 1 Estimate of annual cost per hour for a GUM /FPC clinic

Consultant	£23,295
Nurse	£12,454
Admin	£7,217
BT Phone line	Assume line in and de minimus calls out
Advertising/Marketing of Service	Assume zero since established
Equipment	Assume zero since established
Stationery	£750
Staff development and T&S	£250
Others eg tests	£2,000
Accommodation costs (Based on 160 sq ft at £12 per sq ft)	£1,920
Total for 12 hours	£47,885
Per hour	£3,990
Round to	£4,000

Appendix 12- 3 References

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