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***Evaluation of Specialist Smoking Cessation Services  
in Wales***

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# ***Evaluation of Specialist Smoking Cessation Services in Wales***

## ***Abstract***

Specialist Smoking Cessation Services (SCS) were first established in the UK in Health Action Zones in England in 1999/2000. The evidence base for these services was set out in smoking cessation guidelines published in *Thorax* (Raw *et al* 1998), which recommended that 'intensive smoking cessation support should where possible be conducted in groups, include coping skills training and social support, and should offer around five sessions of about one hour over one month, and follow-up'. Evidence did not strongly favour groups in favour of individual support, but the former was 'much more cost-effective'. The intensive intervention envisaged by these guidelines was based on the well-evaluated, effective Maudsley Clinic programme (Hajek, 1989).

Since 1999, SCS have been established in each of the five Health Authority Areas in Wales, and the National Assembly has required each SCS to collect a minimum data set, to feed into evaluation of the services. However, there have been inconsistencies in how these data have been collected, and little use has been made of the data for local or national evaluation purposes. An independent evaluation was commissioned in April 2002, utilising and building upon the data collected by the SCS. The evaluation was completed in July 2003, and consisted of three components: a process evaluation, an outcome evaluation, and an economic evaluation. Each of the three components of the evaluation informed a series of 19 recommendations made by the evaluation team on the future configuration of Smoking Cessation Services in Wales. Overall, a more unified national smoking cessation service was recommended, with a stronger identity and national co-ordination.

Keywords: Smoking cessation services, evaluation, tobacco, service delivery and organization, Wales

## **Recommendations**

### **Core intervention provided by SCS**

1. The core service offered by the SCS to clients in the general population should adhere to the Maudsley model, which is known to be effective and is the evidence base upon which the SCS were developed. This core service should have the following components:
  - face-to-face motivational assessment
  - group-based wherever possible
  - to remain in the group, all group members to set a quit date at week two
  - maximum of six sessions
  - regular weekly sessions
  - encourage use of pharmacological therapy
2. For individuals for whom group sessions are not appropriate or very difficult to arrange (such as those in sparsely populated areas), one-to-one interventions should be offered, as long as they are structured and given by adequately trained and experienced personnel working to a protocol (West *et al.* 2000).

### **Target Groups**

3. The tension between maximising throughput of clients on the one hand, and the resource-intensive targeting of priority groups on the other, needs to be recognised explicitly in national guidance on service priorities.
4. Strategies to target priority groups, including pregnant women, ethnic minorities, young people and lower-income groups will need to be identified and co-ordinated at national level. For pregnant women, specific staff working with or seconded from maternity services, and offering flexible one-to-one intervention, appears to be most effective.

### **Accessibility of Services**

5. Services need to have a clear national identity, with a standard logo and promotional materials, one freephone contact number, with a national standard of service provision.
6. SCS courses and motivational screening appointments should be held at a variety of times, including evenings and weekends, and at venues that are accessible to potential clients. Services should ensure that provision of Welsh-language courses and courses in other languages meet the needs of their local population.

### **Relationship with Primary and Secondary Care**

7. SCS have a crucial role in promoting smoking cessation across the health service, particularly in primary care. SCS should dedicate much of their efforts towards training staff in primary and secondary care (doctors, nurses, midwives, health visitors, receptionists) to undertake at least brief interventions, and to promote the SCS courses.

8. A model that appears to be successful in many areas in England is to train members of the primary health care team to conduct six-week cessation courses themselves, within their primary-care premises. Such a model maximises the accessibility of smoking cessation courses, although the quality control of courses provided by primary care staff will be an issue. Clients seen by such distributed cessation services need to be included in the SCS performance measures. The new GP contract, with its many quality points for GPs who give smoking cessation advice, should increase GPs' interest in training staff for both brief intervention and referral to SCS and/or having staff be trained to deliver a full cessation course within the practice. GPs will also need to record these cessation activities.

9. At both national and local levels, SCS must be more integrated into other initiatives to promote smoking cessation, including those outside the health sector (for example by promoting brief intervention and referral to services among community workers, youth workers, and Sure Start.)

### **Pharmacological aids**

10. A national protocol for providing access to NRT or bupropion should be developed, and disseminated to GPs. The use of patient group directions to allow specialists to prescribe NRT (and possibly bupropion), in collaboration with pharmacists, should be investigated.

### **Evaluation and Monitoring**

11. The burden of data collection should be reduced. This will free up more time for the service staff to spend on cessation work. Data collection should be rationalised and standardised, to increase the value of the data. A uniform computerised database should be provided to all SCS, with a form for data entry, to record a minimum data set using consistent questions, response scales and codes, which should include the following information for each client attending a first motivational assessment appointment:

- whether quit date set
- age/sex/postcode/broad ethnic group/pregnant/used service before.

If a quit date is set, the following should be recorded:

- use of NRT/Bupropion
- smoking status and carbon monoxide reading at four weeks, for ALL clients setting a quit date (even if not attending subsequent sessions) using a standard definition, which we suggest would be

whether they have smoked at all in the last two weeks (continuous abstinence from two to four weeks after quit date)

Each client setting a quit date should be asked to provide signed consent for their name, address and telephone number to be used to contact them for 12-months follow-up.

- Name, address, telephone number
- Consent to provide follow-up data

The GP's name and surgery should be recorded, so that feedback data can be provided to the GP, and to monitor patterns of referrals from different practices.

All these variables can be collected within the course by the specialists, who will not need to undertake any further follow-up of clients (other than of those not attending the final appointment: these follow-ups should be done within a defined time period). On a regular (monthly) basis, database information should be downloaded and sent to a national coordinator, to check for quality, completeness and consistency of data recording.

12. At national level, a sub-sample of clients setting a quit date should be followed up at 12 months to provide validated self-reports of smoking behaviour.

### **Organisation and staffing**

13. Each service should have one coordinator (and no separate collaborator) who has a secure full-time contract and whose main role is to manage and coordinate the service, and to liaise with the national service coordinators.

14. Each service should be of a sufficient size to provide a flexible service, allowing staff cover for holiday or sickness absence or unfilled posts, and to provide accessible courses at a range of venues and times of day. In England, the HDA recommends that each service should cater for a population of 500,000, which seems appropriate in Wales to allow for the required flexibility. LHB areas are too small. A combination of full-time, part-time and sessional staff could provide the best way to provide a flexible service, although the service will vary according to the population density of different areas, and their success in training primary care staff to deliver cessation courses.

15. Staff turnover has been a problem for many services, but it will be reduced if staff are given longer contracts.

### **Training and Professional Development**

16. All staff should have appropriate, high-quality training in delivering all aspects of cessation to clients. The national standards for training developed by the HDA should guide the choice of courses offered to staff. Regular training events should be held in Wales, to ensure consistency of training for SCS staff in Wales, and also to provide an

opportunity to increase collaboration, and a feeling of national identity, among the staff.

17. SCS coordinators, and national coordinators of the SCS service, should ensure that they are up to date with the evidence base, developments and innovations in smoking cessation practice, and developments in other services in Wales that may be relevant to the SCS. This can be achieved by regular meetings of the coordinators, and membership of update services such as the Globalink Tobacco Action Network.

### **National co-ordination**

18. Implicit in the majority of the other recommendations is the need to have strong national coordination of SCS in Wales. The initial funding period of the services encouraged variation in service specification to meet local needs. However, this has led to fragmentation of services and many of them are too small in scale; the services and their staff have been isolated, the services have no clear identity, and access to services is not clear, either for the public or for health professionals. The lack of capacity among services to collect and manage the monitoring data, and their desire to introduce local variation in data collection, has diminished the value of these data. Among staff of developments in smoking cessation in Wales and the UK, staff training and development has also been negatively affected by the lack of coordination, while attempts to target priority groups have been hit by the lack of capacity of isolated local services to tackle these groups effectively. For all these reasons, a nationally coordinated service is strongly recommended; the new National Public Health Service seems ideally suited to this role.

### **Research**

19. The evidence base for the development of SCS in the UK is provided by the Maudsley model (Hajek, 1989). However, in Wales as well as the rest of the UK, the way SCS have been implemented has moved away from the precise service model operated at the Maudsley hospital. Innovations in smoking cessation practice, including the training of primary care staff to conduct cessation courses, the use of one-to-one counselling in rural areas for priority groups, and the use of dedicated smoking cessation midwives, have not been thoroughly evaluated for effectiveness or cost-effectiveness. Nor is it clear how sustained the changes in smoking behaviour achieved by SCS are, or how relapse prevention can successfully be tackled. Policy-makers in Wales and the UK should invest in high-quality research to investigate these issues, so that the SCS can become a true evidence-based service.

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Please note that appendices are not included in the published report. The appendices are available from the author. Please contact MooreL1@cf.ac.uk.

## 1. Introduction

Specialist Smoking Cessation Services (SCS) were first established in the UK in Health Action Zones in 1999/2000. The evidence base for these services was set out in smoking cessation guidelines published in *Thorax* (Raw *et al.* 1998), which recommended that ‘intensive smoking cessation support should where possible be conducted in groups, include coping skills training and social support, and should offer around five sessions of about one hour over one month, and follow-up’.

Evidence did not strongly favour groups in favour of individual support, but the former was ‘much more cost-effective’. The intensive intervention envisaged by these guidelines was based on the well-evaluated, effective Maudsley Clinic programme (Hajek, 1989).

SCS have had to establish themselves during a period of rapid change in the organisation of the health services, and also during a period when Government support for pharmacological treatment for smoking (NRT and Bupropion) has changed. Implementation of SCS has therefore been highly variable both across national and health authority boundaries, and across time.

Within Wales, SCS were established following the distribution of a Circular to the five Health Authorities in Wales, issued by the National Assembly in 1999. This Circular outlined the financial framework for service development, and gave initial advice on setting up the services, based on the 1998 White Paper ‘Smoking Kills’ and the 1998 *Thorax* guidelines. It stated that services should be targeted, particularly at disadvantaged groups and pregnant women, and take both self-referred clients and those referred from GPs. The Circular also stated that services should be responsive to local needs. Health Authorities were encouraged to test and develop a range of services and innovative approaches to delivering smoking cessation advice and help.

Since 1999, SCS have been established in each of the five Health Authority Areas in Wales, and the National Assembly has required each SCS to collect a minimum data set, to feed into evaluation of the services. However, there have been inconsistencies in how these data have been collected, and little use has been made of the data for local or national evaluation purposes. In 2002, the National Assembly commissioned this research team to conduct an evaluation of the SCS in Wales, utilising and building upon the data collected by the SCS. The evaluation consisted of three components: an outcome evaluation, a process evaluation, and an economic evaluation. The methods and results of each of these components are reported in sections two to four. The contractors and the client are both particularly keen that this evaluation informs the future development of the SCS in Wales, particularly since the recent reorganisation of health service structures in Wales, including the creation of the National Public Health Service, means that the funding and structures of the SCS will need to be reviewed. Therefore, a major component of this report consists of a discussion which draws mainly upon the process

evaluation, but is also informed by the results from the outcome and economic components, and a series of recommendations for the future organisation of the service, including exemplar service models from across the UK.

It was originally intended in the invitation to tender and in the tender document that this evaluation would commence in April 2002, reporting in May 2003. However, since the contract was not awarded until late April, and meetings with the client and with SCS coordinators did not take place until June, it was necessary to reschedule and revise some of the intended components of the evaluation. It was agreed with the client that this final report should be completed by mid-July 2003, to allow time for data from the six-month follow-up of clients (returned to the contractors by 25 June 2003) to be included. In order to ensure that the later-than-planned date for the final report did not allow the evaluation findings to feed into the planning of the revised arrangements for SCS in Wales, two briefing meetings have taken place, in September 2002 and February 2003, in which the contractors have fed back initial findings (primarily from the process evaluation) to representatives of the client.

## **2. Outcome Evaluation**

### **2.1 Methods**

Since the Smoking Cessation Services (SCS) had been in operation for two or more years before the commissioning of this evaluation, there was no possibility of using a controlled design (experimental or quasi-experimental) to estimate the impact of the service. The Welsh Assembly Government has issued a minimum dataset of information that services must collect about their clients and the outcome of their intervention for national monitoring purposes. However, there is considerable variation between services about how and when these data are collected from clients. In the initial tender it was suggested that the client questionnaires should be standardised across Wales so that identical data could be collected across all the services for the purposes of the evaluation. There were a number of reasons why this was not able to take place, mainly relating to the lack of time and resources for either the contractor, or more particularly, the SCS themselves, to change their data-collection instruments and their databases. It would also have been very difficult to engage the co-operation of SCS staff in such a major revision of their evaluation protocols, given the history of the perceived burden and ever-changing nature of the monitoring data requirements. Additionally, there were concerns from the service staff about the potential extra burden that additional data collection would place on the services. For these reasons it was decided to keep additional data collection to a minimum. It was therefore agreed with the client that the contractors would use existing data-collection instruments to obtain the data from SCS required in the minimum dataset, with a limited number of answers to additional questions to be collected during the period of this evaluation, primarily to provide more complete data on source of referral, and for some economic data. A product of this evaluation is a detailed description of the information currently being collected by services and recommendations about how this could be standardised in the future.

For clients of the service who set a quit date, personal information including age, occupation, and ethnic group is recorded. Their smoking status and previous quit attempts are also noted. After completing the six week course, the client's smoking status is recorded (quit/relapsed) and they are followed up at three, six and twelve months. Their self-reported smoking status is verified by CO monitoring. Information required for national monitoring is entered by each service on to their own database, and quarterly returns of these data are sent to the National Assembly.

In addition to the above data already being collected by the services, we asked for five additional pieces of information to be collected for the purposes of the external evaluation. These are:

1. Details of all contacts to the service. When telephone inquiries were received, the services noted the date and how the client had heard about the service, and these data were passed on to the research team. This information included no personal details about the client, who was not personally identifiable in any way. SCS recorded all

contacts to the service by potential clients whether they were by telephone or other referral routes and whether the referrals were to a central number or directly to specialists.

At the first appointment with a specialist the SCS staff were to record:

- i. whether the client will have group or individual sessions
- ii. how the client heard about the service
- iii. willingness to pay (part of economic evaluation)
- iv. travel questions (part of the economic evaluation and this data was already being collected by most services).

As part of the outcome evaluation we asked for the data routinely collected as part of the Assembly's minimum data set and the additional external evaluation questions to be passed on to the research team in an anonymous form. That is, name, address and other personal identifying information was to be removed from the database or form and then passed on to the university research team. Copies of all data-collection instruments developed for this evaluation are included in Appendix 2.

During the data-collection period all but one service were entering the routinely collected data on to a database. This information was passed to the research team in this electronic form. Adjustments to the data were made before it was passed on, in that personal details were removed by the SCS and replaced by a unique identifier. We asked that the client's postcode be added to the unique identifier so that this could be matched with census data for the ward in which that postcode was located, to provide a measure of socio-economic status. The records for all clients who did not give consent for their data to be used were removed from the databases by the SCS. The additional 'first appointment' questions were added to the database in one service, but the other services passed on the information specific to the external evaluation in paper form with a unique identifier. The data collection period was from the 15th July (the earliest possible date from which data collection could begin after the briefing of SCS coordinators about the evaluation methods) to the 30th November 2002 (the latest possible date to allow six-month follow-up data before the completion of the final report in mid-July).

#### 2.1.1. *Ethical Approval*

Although much of the data required for this evaluation was already being collected by the SCS, it is not possible, without formal ethical approval and the approval of Caldicott guardians, for these data to be passed on to University researchers. It was therefore necessary to gain ethical approval for the study, and to introduce new procedures to obtain written informed consent from the SCS clients for their personal data to be passed on to a third party. The information sheet, consent form and other details of the ethical approval application are included in Appendix 2.

The Multi-Centre Research Ethics Committee for Wales (MREC) gave approval for the study. The MREC observed that the study did not require Local Research Ethics Committee review. The information about contacts to service was completely anonymous so no consent process was required for this information to be passed to the research team.

Smoking Cessation Service staff approached all new clients of the service during the period 15th July to 30th November, when they attended their first appointment with the SCS, for their consent to take part in the evaluation. The need for informed consent precluded the inclusion of minors, adults with learning difficulties or mental health problems, so clients that were identifiable as being from these groups were not approached. The researchers could not have direct contact with clients of the service at any time in the consent or data-collection process for this part of the study. We are very grateful for the co-operation and collaboration of the SCS staff in ensuring that informed consent was given before any client data was passed to us. SCS staff kept a record of the ID numbers relating to clients of the service who had consented to take part and passed on the data collected on these clients to the research team. Names and addresses of clients were substituted with an ID number. The only personal identifying information passed to the research team was the client's postcode. The data in Table 2.3 shows the number of client ID numbers we received from each service.

### 2.1.2 Analysis and products

A major task in the outcome evaluation was to obtain copies of each service's data-collection instruments, and the databases on which the information was stored, to identify the feasibility of combining the data into one national database, and for each variable, to identify any differences in how they were collected, coded and stored. The intention was to be able to identify for each client in each service, in a consistent and comparable manner, each of the following key outcome variables:

- referral source
- attendance at a first appointment
- whether or not a quit date was set
- presence/absence of four-week data and follow-up data
- self-reported cessation at each follow up date
- use of pharmacological therapy;

and each of the following variables for analysis:

- SCS area
- gender
- ethnic group
- baseline smoking behaviour
- previous quit attempts
- deprivation score of ward of residence.

Once the data had been combined into a national database, the relationship between each of the key outcomes and the key analytical variables was undertaken in SPSS, largely using cross tabulations.

## 2.2 Results

### 2.2.1 Review of Data Collection and Recording by Services

A full description of the data sources used in the outcome evaluation is contained in Appendix 3. The majority of variables were found not to be uniformly collected and/or recorded across all SCS areas. An example of the variation in how individual variables have been collected is given in Appendix 4, which uses the example of the recording of the use of pharmacological therapy. Different services asked this question at different times; some recorded intention to use and some recorded actual use. The specific questions asked varied across services, and the response scales and how they were coded also varied. In some areas, data were collected but not recorded on databases, for example baseline smoking behaviour and previous quit attempts are collected from clients in Bro Taf, but since reporting of this data is not required by the National Assembly, they do not enter it on to their database.

### 2.2.2 Combined database

The variables that were found to be comparable across services sufficient to combine into a single national database were:

Age – in brackets of 18-29, 30-39, 40-49, 50-59, 60-69, 70+

Postcode

Sex

Ethnic group – only the main ethnic group categories

Pregnant at first appointment

Entitled to free prescriptions

Used service before

Number of sessions attended

Using pharmacological therapy

What pharmacological therapy – NRT/Bupropion/Other

Type of intervention planned at first appointment – 1:1/ pair/ Group/ Mix/ don't know

Source of referral at first appointment – 13 categories shown in Table 1

Four week follow up outcomes – Quit / Smoking / Lost to follow-up

Three month follow up outcomes – Quit / Smoking / Lost to follow-up

Indexed by ID number.

In many cases, 'comparable' variables were derived based on recoding responses into comparable categories, and/or responses to differently worded questions on the same topic were combined.

### 2.2.3 Missing data

It should be noted that one of our main findings has been the variation in recording practices between services and also the high rate of loss to follow-up of clients as they proceed through the care pathway. The loss to follow-up and drop-out through the course results in missing data for these clients at the four week follow-up stage and beyond. Also some clients might have attended session one of the course and given consent to take part in the evaluation, but then attended no more sessions. Some services such as Dyfed

Powys and Gwent record only certain types of information on clients who set a quit date, therefore there is missing demographic data in our results for some clients.

For the anonymous contacts to service data, 15 forms were returned partially completed with either only a date or no information at all on them. Six first-appointment forms were received with no ID number on, so were discarded.

#### 2.2.4 Anonymous contacts to service data

In the data-collection period 15th July to 30th November 2002, a total of 1844 contacts were made to the Smoking Cessation services in Wales. Table 2.1 shows the number of contacts to each service categorised by how the client heard about the service. The percentages in the cells are the percentage of referrals from each source received by the service.

**Table 2.1: Source of contacts to service**

Referral source	Gwent	North Wales	Iechyd Morgannwg Health	Dyfed Powys	Bro Taf	All Wales
GP/ Practice Nurse	388 (77.8%)	127 (53.4%)	147 (46.8%)	150 (65.5%)	439 (77.8%)	1251 (67.8%)
Pharmacist	2 (0.4%)	0	4 (1.3%)	0	1 (0.2%)	7 (0.4%)
Midwife	0	0	2 (0.6%)	0	1 (0.2%)	3 (0.1%)
Health Visitor	1 (0.2%)	1 (0.4%)	0	0	1 (0.2%)	3 (0.1%)
Dentist	1 (0.2%)	0	6 (1.9%)	0	1 (0.2%)	8 (0.4%)
Hospital services (such as doctor, nurse)	12 (2.4%)	8 (3.4%)	2 (0.6%)	8 (3.5%)	20 (3.5%)	50 (2.7%)
Other health professional	5 (1.0%)	5 (2.1%)	19 (6.1%)	4 (1.7%)	16 (2.8%)	49 (2.7%)
Leaflet flyer	25 (5.0%)	20 (8.4%)	24 (7.6%)	10 (4.4%)	1 (0.1%)	80 (4.3%)
Advert in newspaper, cinema, radio.	0	18 (7.6%)	7 (2.2%)	5 (2.2%)	3 (0.5%)	33 (1.8%)
Recommendation of friend / family	50 (10.0%)	19 (8.0%)	18 (5.7%)	23 (10.0%)	64 (11.3%)	174 (9.4%)
Telephone helpline (such as NHS Direct or Quitline.)	3 (0.6%)	6 (2.5%)	5 (1.6%)	0	5 (0.9%)	19 (1.0%)
Previous client of service, now smoking again	9 (1.8%)	0	41 (13.1%)	19 (8.3%)	0	69 (3.7%)
Other	3 (0.6%)	34 (14.3%)	39 (12.4%)	10 (4.4%)	12 (2.1%)	98 (5.3%)
Totals	499 (100%)	238 (100%)	314 (100%)	229 (100%)	564 (100%)	1844 (100%)

In North Wales in the ‘other’ category there were 18 contacts to service (7.6 per cent of total contacts to the North Wales service) from people who had heard about the service through workplace occupational health. In IMH in the ‘other’ category there were 9 people (2.9 per cent) who reported having seen the Bridge Banner advertisement and this had prompted them to call.

Since the populations of the Health Authorities are not identical, we give a rough estimate of the proportion of smokers in each health authority who contacted each service during this period. This is derived from the adult smoking prevalence and the population aged 18 or over in each Health Authority, derived from Health Statistics Wales (Welsh Assembly Government 2003).

**Table 2.2: Proportion of the estimated number of adult smokers in each health authority contacting the services in the data collection period**

Service	Estimated proportion of smokers
Gwent	499/ (0.320 x 422,800)= 0.37%
Dyfed Powys	229/ (0.291 x 383,600)= 0.21%
IMH	314/ (0.305 x 380,200)= 0.27%
North Wales	238/(0.316 x 519,100)= 0.15%
Bro Taf	564/ (0.315 x 543, 000)= 0.33%

While the absolute value of these proportions should not be over-interpreted, they do suggest that less than one per cent of smokers in each Health Authority are contacting the SCS, and that North Wales has fewer contacts per smoker than the other Authorities, with Gwent having the highest.

### 2.2.5 Consent rates

Table 2.3 shows the best estimate of the proportion of clients from each service attending a first appointment that consented to take part in the external evaluation.

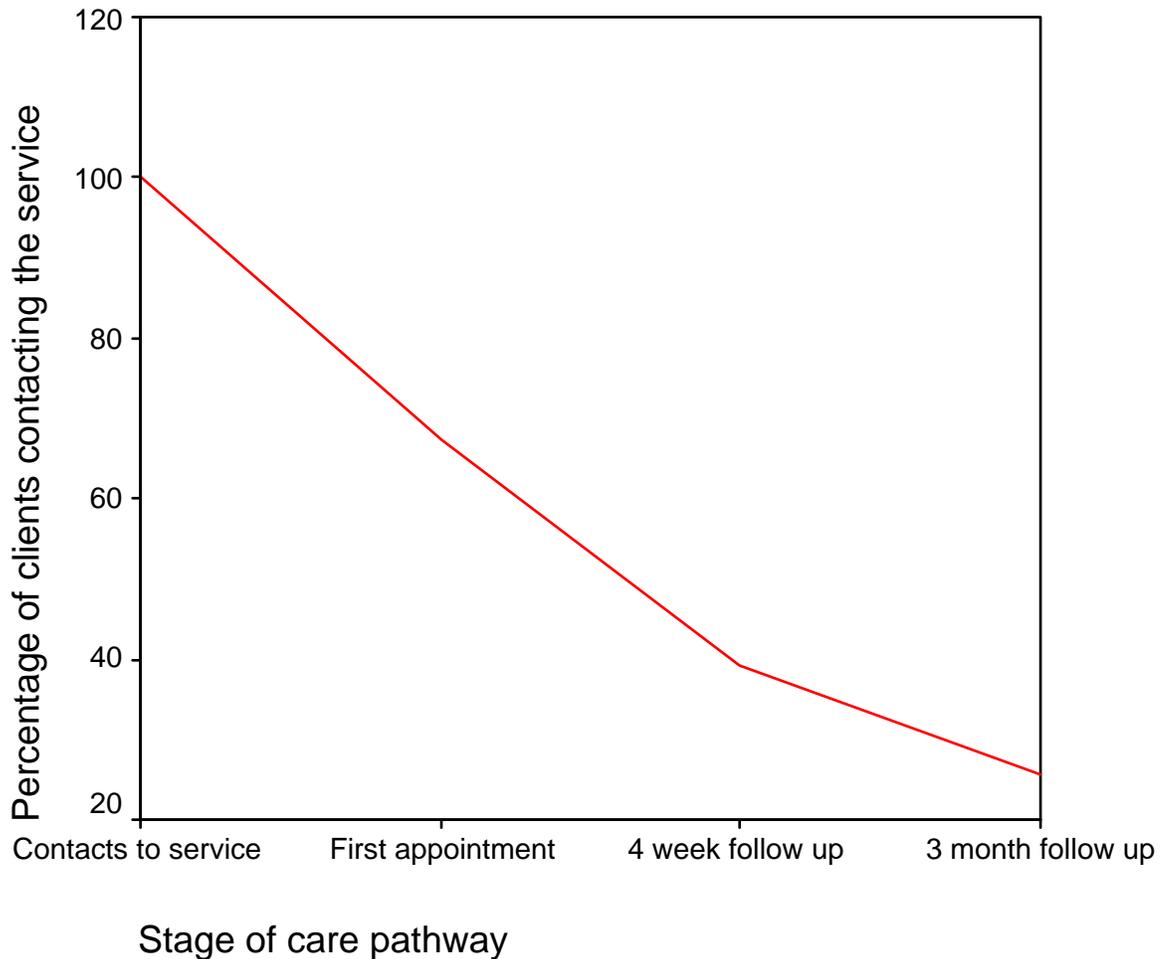
**Table 2.3: Proportion of clients attending a first appointment who consented to take part in the external evaluation**

Services	Consent rates	Source
Gwent	77.8%	Attendance registers for courses run in the period and number of consent forms
North Wales	68%	Estimate from service coordinator
Iechyd Morgannwg Health	87.3%	Exact numbers attending sessions and whether consented shown on database
Dyfed Powys	62.7%	Service sent through blank forms for those not consenting
Bro Taf (except RCT)	81.7%	Exact figures for Cardiff, Merthyr and VoG services. No data for RCT.
All Wales	75.5%	

### 2.2.6 Progress through the care pathway

Figure 2.1 shows the proportion of clients who lose contact with the services as they move through the care pathway and into the evaluation.

**Figure 2.1: All Wales. Proportion of clients still engaged with the service (that is, attending appointments or supplying data to the service) from contact to service, through first appointment, four-week follow-up and then three-month follow up. This is expressed at each stage as a percentage of all those contacting the service**



Note: the calculation that this graph is based upon contains a correction for the clients who did not consent to take part in the evaluation. That is, the total number of clients attending a first appointment was calculated from the number consenting and then consent rate. This was converted to a percentage of those contacting the service. The number of clients contacted at four weeks was then calculated as a percentage of the total consenting to take part and this proportion applied to the percentage of clients contacting the service and attending a first appointment. This assumes that those who did not consent to take part in the study would behave in the same way as those who did.

### 2.2.7 Key outcomes

There were 973 people attending a first appointment between 15 July and 30 November 2002 who consented to take part in the study. This was estimated as about 75.5 per cent of all those attending a first appointment. Of those attending a first appointment, people with mental health problems, learning difficulties or minors were not able to give informed consent so were not approached. Of those consenting, 669 (68.8 per cent of the total sample) went on to set a quit date. Of those setting a quit date, 305 (45.6 per cent) reported that they were non-smokers at four-week follow up. There were missing data for 125 clients, 18.7 per cent of those setting a quit date.

**Table 2.4: Comparison of the gender breakdown of those attending a first appointment in Wales, those setting a quit date in Wales and those setting a quit date in England**

	Male	Female
First appointment Wales	42%	58%
Set quit date Wales	41.4%	58.6%
Set quit date England	42.7%	57.3%

**Table 2.5: Comparison of those setting a quit date in Wales and those setting a quit date in England broken down by age group**

	<18	18-34	35-59	60+	Total
Set quit date Wales	3 0.4%	138 20.9%	363 54.9%	157 23.8%	661 100%
Set quit date England	1507 1.4%	28724 26.9%	57055 53.4%	19626 18.4%	106912 100%

The source of the English data is Department of Health press release (ref 2003/0073) Statistics on smoking cessation services in England, April to September 2002.

Tables 2.4 and 2.5 indicate that the age and gender characteristics of SCS clients in Wales are broadly similar to those in England, although with fewer in the 18-34 age group, and more aged 60 years or more.

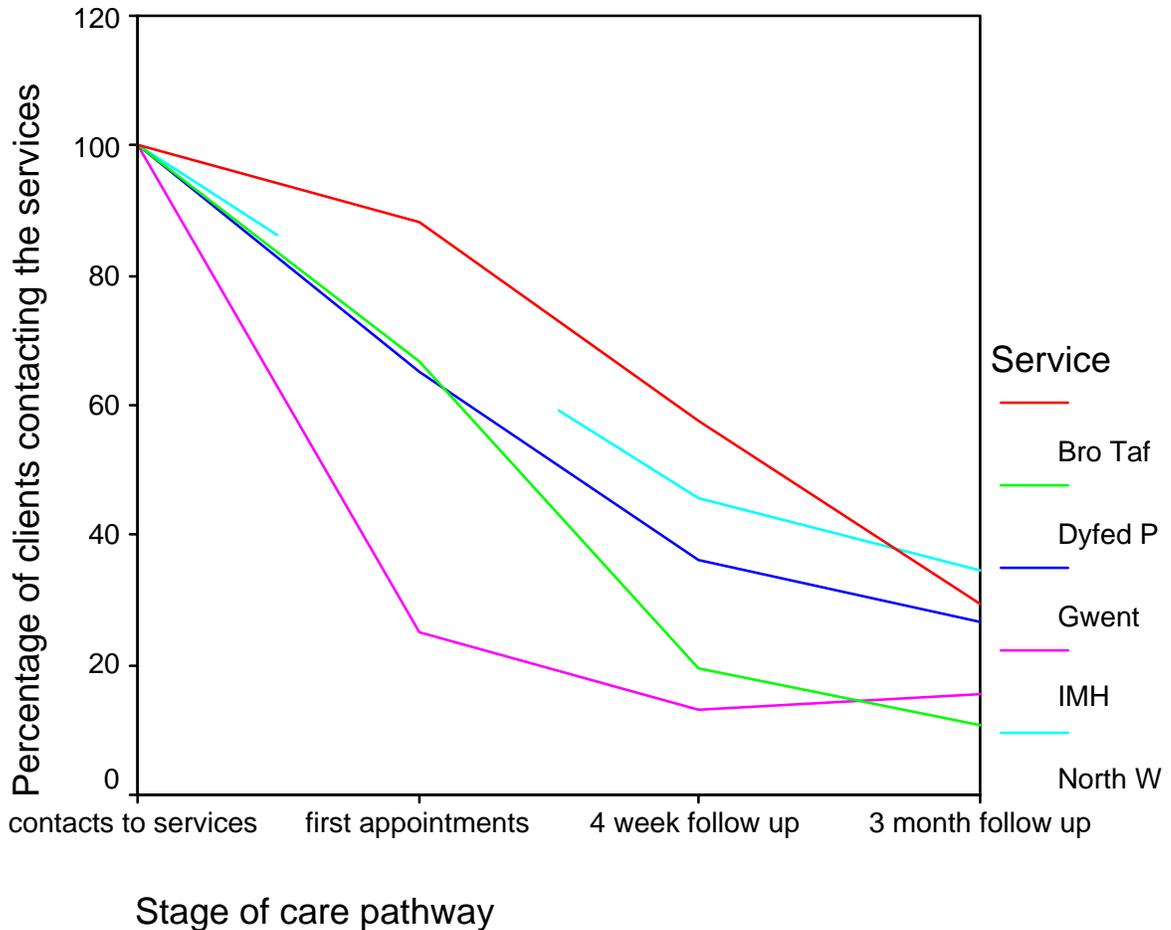
**Table 2.6: Total numbers attending a first appointment and consenting to take part in the external evaluation**

Services	Clients on database
Bro Taf	99
	Merthyr
	RCT
	Vale
Dyfed Powys	96
Gwent	253
Iechyd Morgannwg Health	Bridgend
	Neath Port Talbot
	Swansea
North Wales	149
All Wales	973

Table 2.6 indicates the number of clients for whom we had data. The number ranges from 15 in Bridgend, to 253 in Gwent, which demonstrates the variable size of the different

services, but also indicates that in Bridgend, and in three other SCS areas, fewer than 33 clients gave consent to participate. Even if the consent rate was as low as 66 per cent, this means that there are five services that had fewer than 50 clients attending a first appointment over the 5½ month period of the evaluation.

**Figure 2.2: Proportion of clients who are still engaged with the service (that is attending appointments or supplying data to the service) from contact to service, through first appointment, four week follow up and then three-month follow up, broken down by health authority service. This is expressed at each stage as a percentage of all those contacting each service**



Note: The graph is based on projected total numbers attending a first appointment (consenters and non-consenters) and follow-up rates are corrected for those not setting a quit date.

The graph indicates that between 13 per cent and 58 per cent of clients contacting the service make it through to four-week follow-up, although not all of those for whom four-week data are obtained actually attended the final appointment of the course. IMH have the greatest drop out between contact to the service and attending a first appointment. However, once clients have reached this stage, the level of data collection at follow-up is relatively high. Bro Taf have the highest proportion of clients contacting the service attending a first appointment, but then the follow up rates are proportionally lower at four weeks and three months.

**Table 2.7: Clients attending first appointment, broken down by service and by age group**  
N= 843, 86 per cent of sample.

		Age in Brackets							Totals
		<18	18-29	30-39	40-49	50-59	60-69	70+	
Bro Taf	Cardiff	1 1.2%	11 13.6%	20 24.7%	19 23.5%	16 19.8%	12 14.8%	2 2.5%	81 100%
	Merthyr	2 4.1%	8 16.3%	11 22.4%	4 8.2%	12 24.5%	10 20.4%	2 4.1%	49 100%
	RCT		19 11.5%	36 21.8%	31 18.8%	42 25.5%	28 17.0%	9 5.5%	165 100%
	Vale		6 30%	5 25%	2 10%	3 15%	3 13%	1 5%	20 100%
Dyfed Powys			15 16.7%	12 13.3%	21 23.3%	23 25.6%	17 18.9%	2 2.2%	90 100%
Gwent		1 0.4%	28 12.1%	56 24.1%	51 22.0%	38 16.4%	41 17.7%	17 7.3%	232 100%
IMH	Bridgend			4 26.6%	5 33.3%	6 40%			15 100%
	Neath Port Talbot		1 3.8%	8 30.8%	6 23.1%	6 23.1%	4 15.4%	1 3.8%	26 100%
	Swansea		2 7.7%	3 11.5%	2 7.7%	8 30.8%	10 38.5%	1 3.8%	26 100%
North Wales			7 12.1%	31 22.3%	29 20.9%	46 33.1%	20 14.4%	6 4.3%	139 100%
All Wales		4 0.4%	97 11.5%	186 22.1%	170 20.2%	200 23.7%	145 17.2%	41 4.9%	843 100%

Table 2.7 indicates the age breakdown of clients in each service. There is some variation, for example 72 per cent of clients in Swansea were aged over 50, but this should not be over-interpreted, because of small numbers. Only four clients aged under 18 were recorded, although there could have been others aged under 16 who would not have been approached for consent to participate.

Table 2.8 gives the gender breakdown for each service. Apart from North Wales, all had more female clients than male.

### ***Ethnic group of clients attending a first appointment***

We had ethnic group status data for 831 clients, 85.4 per cent of sample. 819 of the clients, 98.6 per cent of those whom we have this information for, identified themselves as white. There were four people who identified themselves as Asian, one person who gave their ethnic group as Chinese, and seven who gave their ethnic group as mixed.

### ***Pregnant women***

From our sample of clients attending a first appointment there were seven who said that they were pregnant. Two were in Bro Taf and five Gwent. Data was missing for 118 clients.

**Table 2.8: Clients attending first appointment by gender**  
N=869.

		Gender		
		Male	Female	Totals
Bro Taf	Cardiff	37 45.6%	44 54.3%	81 100%
	Merthyr	22 44.9%	27 55.1%	49 100%
	RCT	61 36.5%	106 63.5%	167 100%
	Vale	6 30.0%	14 70.0%	20 100%
Dyfed Powys		40 43.5%	52 56.5%	92 100%
Gwent		92 37.1%	156 62.9%	248 100%
IMH	Bridgend	6 40.0%	9 60.0%	15 100%
	Neath Port Talbot	11 42.3%	15 57.7%	26 100%
	Swansea	11 39.3%	17 60.7%	28 100%
North Wales		79 55.2%	64 44.8%	143 100%
All Wales		365 42.0%	504 58.0%	869 100%

### ***Socio-economic group of clients attending first appointments***

Using postcode data from clients attending a first appointment, the index of multiple deprivation (2002) at ward level was obtained for each client. The ranking of each ward in Wales for Index of Multiple deprivation was also obtained and then the rankings were divided into three sections. Two postcodes were found to be in England so were excluded. Table 2.9 shows the number of clients in each tertile seen by the services. It suggests that the four services in Bro Taf have been successful in targeting smokers in the most deprived areas. However, this table does not adjust for the socio-economic composition of their catchment population.

Table 2.10 shows the mean Index of Multiple Deprivation for each Health Authority for the wards from which the clients in our sample come, and compares it with the average Index of Multiple Deprivation score for all the wards in the Unitary Authorities contained in the Health Authority areas. This crude analysis suggests that relative to their catchment areas, Bro Taf, Dyfed Powys and Gwent have had some success in targeting lower-income groups within their areas, but that this has not been the case in IMH or North Wales.

**Table 2.9: The proportion of clients attending a first appointment who live in the most deprived, the medium and the least deprived sections of the rankings of the wards in Wales by Index of Multiple Deprivation**

N=817, 84.0 per cent of sample.

		MI Deprivation ranking of ward in Wales			
		Most deprived	Middle ranking	Least deprived	Total
Bro Taf	Cardiff	55 67.9%	16 19.8%	10 12.3%	81 100%
	Merthyr	50 100%	0 0%	0 0%	50 100%
	RCT	116 72.0%	20 12.4%	25 15.5%	161 100%
	Vale	13 65.0%	2 10.0%	5 25.0%	20 100%
Dyfed Powys		39 46.4%	30 35.7%	15 17.9%	84 100%
Gwent		116 50.4%	61 26.5%	53 23.0%	230 100%
IMH	Bridgend	4 28.6%	3 21.4%	7 50%	14 100%
	Neath Port Talbot	13 56.5%	6 26.1%	4 17.4%	23 100%
	Swansea	7 26.9%	5 19.2%	14 53.8%	26 100%
North Wales		19 14.8%	47 36.7%	62 48.4%	128 100%
All Wales		432 52.9%	190 23.2%	195 23.9%	817 100%

**Table 2.10: Comparison of the average Index of Multiple Deprivation for the clients in our sample, by health authority service, with the average IMD for the wards within that health authority**

Service	Mean IMD	Mean for UAs in HA area
Bro Taf	34.6	25.7
Dyfed Powys	23.9	19.0
Gwent	27.3	23.8
IMH	22.8	25.4
North Wales	15.9	19.8

Using individual-level data on entitlement to free prescriptions (rather than deprivation index data based on the electoral ward of residence), the same pattern appears, with Bro Taf, Dyfed Powys, Gwent and IMH all having a majority of their clients under 60 entitled to free prescriptions.

**Table 2.11: Proportion of clients under 60 attending a first appointment who are entitled to free prescriptions**  
N=637

	Entitled to free prescriptions		
	Yes	No	Totals
Bro Taf	155 66%	81 34%	236 100%
Dyfed Powys	43 62%	26 38%	69 100%
Gwent	91 52%	84 48%	175 100%
IMH	26 51%	25 49 %	51 100%
North Wales	33 31%	73 69%	106 100%
All Wales	348 54%	289 45%	637 100%

Table 2.12 indicates the wide variation among services in the extent to which clients are seen one-to-one, rather than in groups. This variation reflects the service models detailed in the case studies, and is further discussed in section 5.

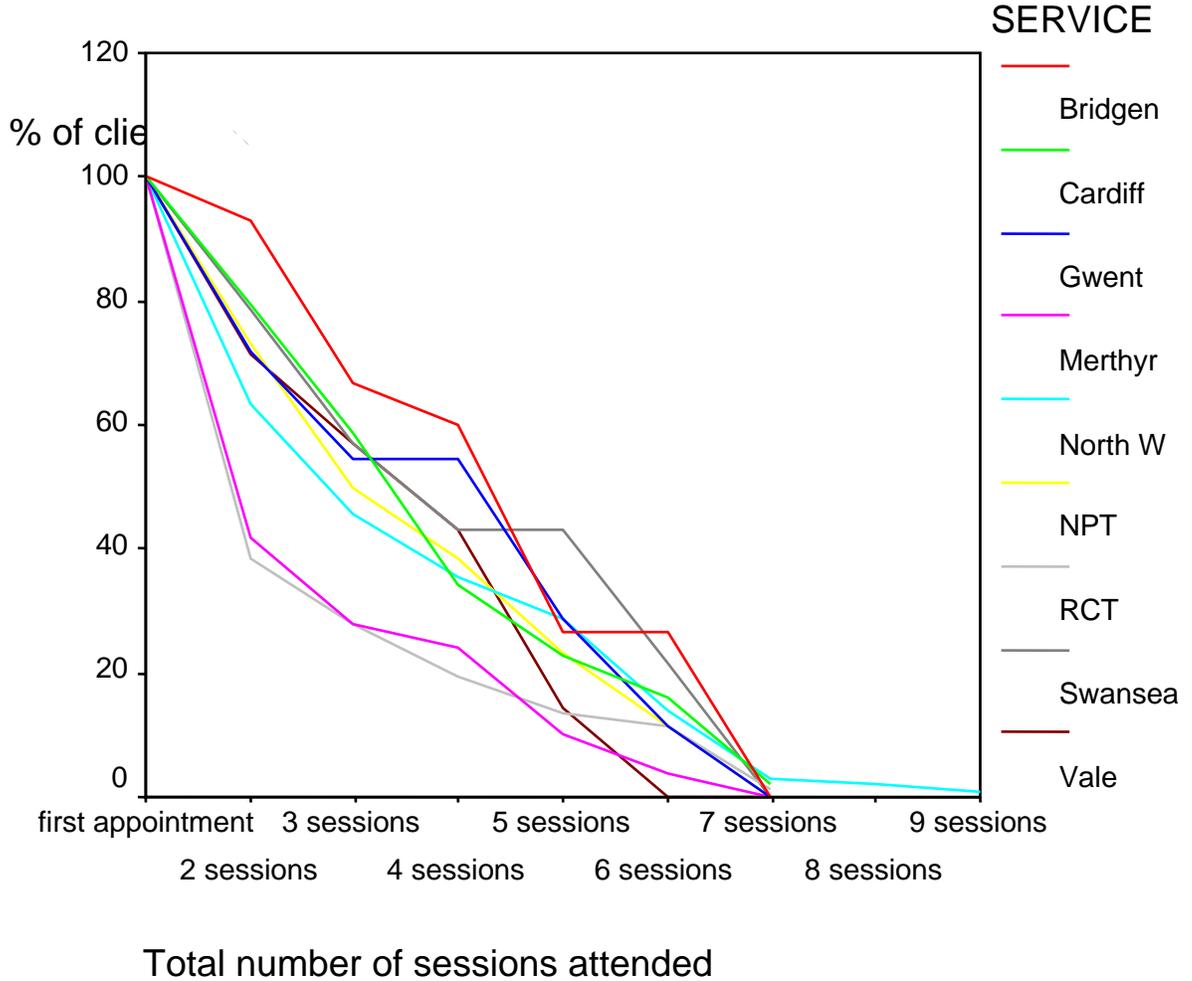
**Table 2.12: Type of intervention planned for clients attending a first appointment broken down by service**  
N=664, 68.2 per cent of sample

	Type of intervention					Totals
	1:1	Pair	Group	Mix	Don't know	
Bro Taf	158 43.8%	8 2.2%	182 50.4%	9 2.5%	4 1.1%	361 100%
Dyfed Powys	22 43.1%	1 2.0%	28 54.9%			51 100%
Gwent	11 7.9%	1 0.7%	125 90.0%		2 1.4%	139 100%
IMH			69 100%			69 100%
North Wales	32 72.7%	2 4.5%	10 22.7%			44 100%
All Wales	223 34.6%	12 1.8%	414 62.3%	9 1.4%	6 0.9%	664 100%

**Table 2.14: The number of sessions attended by clients in each service**  
N=658, 67.6 per cent of sample

Service	1	2	3	4	5	6	7	8	9	Total
Bro Taf	Cardiff	9	10	10	5	3	7	1		44
	Merthyr	4	7	2	7	3	2			25
	RCT	86	15	12	8	3	14	2		140
	Vale	2	1	1	2	1				7
Dyfed Powys	Missing data									
Gwent	21	36	19	36	37	24				173
IMH	Bridgend	1	4	1	5		4			15
	NPT	7	6	3	4	3	3			26
	Swansea	6	6	4		6	6			28
North Wales	50	24	14	9	20	15	1	2	1	136

**Figure 2.2: The proportion of clients attending a first appointment who attend between one and nine session at least with the service**



Note: There were no data available from Dyfed Powys on the number of sessions attended by clients, so Dyfed Powys SCS are not included in this graph.

Table 2.14 and Figure 2.2 indicate the number of sessions attended by clients who had had a first appointment with each SCS. The graph presents the same data as in the table, but in cumulative form, and indicates that the proportion attending at least three further sessions after the first appointment varied from 20 per cent (RCT) to 60 per cent (Bridgend)

**2.2.8 Clients who set a quit date**

Setting a quit date is not defined consistently across the services. Where it was clearly stated in the database whether a quit date had been set (Bro Taf and Gwent) then these data were used. In Dyfed Powys only clients setting a quit date are put onto the database at the Initial Questionnaire (IQ) stage. We have data on 14 clients who consented to take part in the study at the first appointment (so we have first appointment data) for whom there are no IQ data on the database, so these clients are assumed not to have set a quit

date. For IMH the database includes an agreed quit date and an actual quit date. To standardise this any clients attending week two of the course were presumed to have set a quit date in line with Assembly guidelines for national monitoring. For North Wales where there was no database (so data were entered by researchers straight from the questionnaires), we used the same method, that more than one session attended meant a quit date had been set. In Bro Taf there were examples of people who had attended fewer than two sessions but were recorded as having set a quit date. There are therefore some reservations about the comparability of these data. The number of sessions attended could not be used across all services as these data were absent in Dyfed Powys and there were high levels of missing data in other areas.

**Table 2.15: Clients who set a quit date as a proportion of all those in our sample attending a first appointment**

*N*=973

Service		Set quit date	Did not	Total
Bro Taf	Cardiff	66 66.6%	33 33.3%	99 100%
	Merthyr	45 83.3%	9 16.7%	54 100%
	RCT	165 74.7%	56 25.3%	221 100%
	Vale	20 62.5%	12 37.5%	32 100%
Dyfed Powys		82 85.4%	14 14.6%	96 100%
Gwent		150 59.2%	103 40.7%	253 100%
IMH	Bridgend	14 93.3%	1 6.7%	15 100%
	Neath Port Talbot	19 73.1%	7 26.9%	26 100%
	Swansea	22 78.6%	6 21.4%	28 100%
North Wales		86 57.7%	63 21.4%	149 100%
Total		669 68.8%	304 31.2%	973 100%

The proportion setting a quit date varies substantially across services, from 58 per cent in North Wales to 93 per cent in Bridgend. However, this largely reflects differences in the ways in which services screen their clients before the clients attend the first appointment.

### 2.2.9 Pharmacological Therapy

As described above, and detailed in Appendix 4, the recording of use of NRT / Bupropion was variable across services. Where nothing is recorded, it is not necessarily safe to assume that the client was not using any pharmacological therapy. There is quite substantial variation across services in the use (or recording) of pharmacological therapies to support smoking cessation.

**Table 2.16: Pharmacological therapy used by those setting a quit date***N=669*

Service		Set a quit date	NRT	Bupropion	No data on pharmacological therapy
Bro Taf	Cardiff	66	57 86.4%	1 1.5%	8 12.1%
	Merthyr	45	19 42.2%	4 8.9%	22 48.9%
	RCT	165	128 77.6%	5 3.0%	8 4.8%
	Vale	20	16 80%	1 5.0%	3 15.0%
Dyfed Powys		82	41 50.0%	3 3.7%	38 46.3%
Gwent		150	99 66.0%	27 18.0%	24 16.0%
IMH	Bridgend	14	5 35.7%	6 42.9%	3 21.4%
	Neath Port Talbot	19	12 63.2%	1 5.3%	6 31.6%
	Swansea	22	12 54.5%	0	8 36.4%
North Wales		86	54 62.8%	14 16.3%	18 20.9%
Total		669	443 66.2%	62 9.3%	138 20.6%

Note: it is not possible, from the recorded data, to know whether those for whom no pharmacological therapy is recorded were not using such therapy, or just that it was not recorded.

#### 2.2.10 Clients quit at four week follow up by self report

Table 2.17 indicates for each service the proportion of those who set a quit date who reported at the final four-week appointment that they were not smoking. Four-week quit data were not obtained for 18.7 per cent of our sample. In Bro Taf, follow-up data for Cardiff and the Vale were provided in the format showing that those who were confirmed as quitting were shown as 'true' and all others as 'false', which artificially reduces the level of missing data. For the rest of Wales without Bro Taf the level of missing data is 25.5 per cent. From the statistical bulletin released by the Department of Health the level of loss to follow-up at four weeks is  $25521/106912=23.9$  per cent in the English services. The quit rates in the table assume that those for whom four-week data were not obtained had not quit.

**Table 2.17: Quit rates for clients in our sample who set a quit date and levels of missing data**  
*N=669*

Service		Set a quit date	Missing follow up data	Number quit	% quit of all setting quit date
Bro Taf	Cardiff	66	22 (33.3%)	24	<b>36.4</b>
	Merthyr	45	2 (4.4%)	32	<b>71.1</b>
	RCT	165	2 (1.2%)	73	<b>44.2</b>
	Vale	20	4 (20.0%)	13	<b>65.0</b>
Dyfed Powys		82	54 (65.9%)	20	<b>24.4</b>
Gwent		150	10 (6.7%)	77	<b>51.3</b>
IMH	Bridgend	14	6 (42.9%)	5	<b>35.7</b>
	Neath Port Talbot	19	3 (15.8%)	4	<b>21.1</b>
	Swansea	22	10 (45.5%)	11	<b>50.0</b>
North Wales		86	12 (14.0%)	46	<b>53.5</b>
Total		669	125 (18.7%)	305	<b>45.6</b>

Note: the quit rate assumes that those not providing data had not quit.

Tables 2.18 and 2.19 indicate that there was no difference in the quit rate by gender, but that those aged 30-59 were less likely to quit than their younger or older counterparts.

**Table 2.18: Quit rates broken down by age group for all clients in our sample setting a quit date**  
*N=661*

	<18	18-29	30-39	40-49	50-59	60-69	70+	Total
Quit	2 66.7%	31 42.5%	39 30.2%	46 33.6%	52 32.1%	52 41.6%	14 43.8%	236 35.7%
Smoked since quit date	0 0%	26 35.6%	65 50.4%	58 42.3%	81 50.0%	56 44.8%	15 46.9%	301 45.5%
Missing data	1 33.3%	16 21.9%	25 19.4%	33 24.1%	29 17.9%	17 13.6%	3 9.4%	124 18.8%
Total	3 100%	73 100%	129 100%	137 100%	162 100%	125 100%	32 100%	661 100%

**Table 2.19: Quit rate broken down by gender for all clients in our sample setting a quit date**  
*N=664*

	Male	Female	Total
Quit	98 35.6%	140 36.0%	238 35.8%
Smoked since quit date	118 42.9%	184 47.3%	302 45.5%
Missing data	59 21.5%	65 16.7%	124 18.7%
Total	275 100%	389 100%	664 100%

Table 2.20 indicates that quit rates were highest among clients from middle-income wards.

**Table 2.20: Quit rates by category of Index of Multiple Deprivation ranking for those setting a quit date**

*N=621*

	MI Deprivation ranking among wards in Wales			
	Most deprived	Middle ranking	Least deprived	Total
Quit	110 49.5%	173 61.1%	53 45.7%	336 54.1%
Not quit	50 22.5%	50 17.7%	35 30.2%	135 21.7%
Missing data	62 27.9%	60 21.2%	28 24.1%	150 24.2%
	222 100%	283 100%	116 100%	621 100%

***Pregnant women at four-week follow up***

Of the seven clients who were pregnant at first appointment three were lost to follow up and four were still smoking at four-week follow up.

***2.2.11 Three month Follow-Up***

At three month follow up, 28.3 per cent of those setting a quit date reported that they were not smoking, whereas 27.5 per cent reported themselves as smokers. The remaining 44.2 per cent were lost to follow-up, and assumed to be continuing smokers. The high rate of loss to follow-up means that these data are of little value in the comparison of sustained quit rates among services. The tables below show the differences among clients that are lost to follow-up at three months and those that are not. Follow-up is more successful among those aged over 60 and among those in less deprived areas.

**Table 2.21: The number and proportion of clients who set a quit date in each age group that are lost to follow up against those that are not**

*N=843 86.6 per cent*

	<18	18-29	30-39	40-49	50-59	60-69	70+	Total
Data collected	2 50%	35 36.1%	83 44.6%	72 42.4%	89 44.5%	89 61.4%	25 61.0%	395 46.9%
Lost to follow up	2 50%	62 63.9%	103 55.4%	98 57.6%	111 55.5%	56 38.6%	16 39.0%	448 53.1%
Total	4 100%	97 100%	186 100%	170 100%	200 100%	145 100%	41 100%	843 100%

**Table 2.22: Proportion of clients of each gender that are lost to follow up at three months**

*N=817*

	M	F
Data collected from client	173 47.4%	226 44.8%
Lost to follow up	192 52.6%	278 55.2%
Total	365 100%	504 100%

**Table 2.23: Proportion of clients setting a quit date who come from each band of the ranking of Index of Multiple Deprivation form wards in Wales**

*N=817*

	MI Deprivation ranking of ward in Wales		
	Most deprived	Middle ranking	Least deprived
Data collected from client	185 42.8%	87 45.8%	104 53.3%
Lost to follow up	247 57.2%	103 54.2%	91 46.7%
Total	432 100%	190 100%	195 100%

### **3. Process Evaluation**

#### **3.1. Methods**

In the proposal sent to the Welsh Assembly Government it stated that to complete a process evaluation of the Smoking Cessation Services in Wales, a series of case studies would be undertaken of the five SCS in Wales. Each case study was conducted using a phased approach, informed by grounded theory methodology, in which the research questions were continually fine-tuned in response to the accumulating evidence. There were four distinct phases of data collection in the case studies of the Welsh SCS.

1. First, a series of interviews was undertaken to identify the structure and key features of each service, and to initially identify key issues to be explored in subsequent data collection. In this phase, informal face-to face interviews were conducted with:

- the collaborator and researcher from Bro Taf
- the acting collaborator and coordinator from Gwent
- the collaborator and coordinator from Dyfed Powys
- the collaborator/coordinator/specialist and three specialists in North Wales
- the collaborator from Neath Port Talbot in IMH.

In addition, the collaborator and coordinator from Swansea and the collaborator from Bridgend were interviewed over the telephone. All interviews took place between April 30 and May 14.

2. In order to collect more detailed information on the operation of each of the services, a questionnaire was sent to the nine service coordinators in Wales, one in each of the following areas:

**Gwent**

**Dyfed Powys**

**North Wales**

**IMH** – Bridgend, Neath Port Talbot, Swansea

**Bro Taf** – Rhondda Cynon Taf, Merthyr Tydfil, Cardiff and the Vale of Glamorgan.

The questionnaires are included in Appendix 2. Many of the questions included were based on those in a questionnaire sent out by Tim Coleman, University of Nottingham, for the ‘National Survey of the New Smoking Services: Implementing the Smoking Kills White Paper’, which he conducted on behalf of the Department of Health. Questionnaires were sent to the services on 26th June, and all were returned by 15th July.

3. A much shorter questionnaire was then written to send to all staff whose role is to deliver the cessation intervention; that is advisors, counsellors, specialists and tutors. A copy of this is included in Appendix 2. The questionnaire was used to collect basic information about all SCS staff, including their working hours, their training and background. This was used to inform the economic analysis, as well as to inform the sampling of staff for interview and the content of the interviews. This questionnaire was sent out on 2 July for return by 22 July. After a number of reminders, all staff in post at the time in Dyfed Powys (12), Gwent (5), Bro Taf (8) and North Wales (4) returned their

questionnaires as did most of the staff from Bridgend (7), Swansea (12) and Neath Port Talbot (7). The overall response rate was 90.4 per cent. This calculation is based on the total number of sessional tutors in IMH (37).

4. Between mid-July and mid-January all collaborators and coordinators were interviewed, as were the officials from the National Assembly for Wales with a role in the Cessation Service. A sample of staff from other levels within the services was also interviewed:

- one counsellor from each of the Bro Taf services
- two specialists in Gwent
- two specialists and an administrator in North Wales
- four project support officers and two sessional tutors in IMH.
- one HPOTC and two advisors from Dyfed Powys.

The interviews were based on the topics from initial visits and questionnaires, but gave people more of an opportunity to express their views on the chosen topic areas and to introduce other issues of importance. The topic guides for interviews were amended and added to as interviews progressed. The initial and final topic guides are contained in Appendix 2. Scheduling of interviews ensured that new issues raised in one area could then be addressed in interviews in other areas.

In addition to the Welsh case studies, it was proposed in the study tender to conduct a further three case studies in England. However, it became apparent that there was a wide diversity of practices across different services. A more efficient way of identifying alternative service models to inform the all-Wales evaluation would be to seek to identify examples of innovative practice from across England and Wales, and to use these examples to inform recommendations for the future organisation of SCS in Wales.

Key individuals, including those involved in the evaluation of SCS in England, the Department of Health and ASH Scotland, were asked to identify examples of successful, innovative practice. A request was sent out on Globalink (Tobacco Action Network), an electronic discussion forum subscribed to by the majority of smoking cessation coordinators in England, asking those with examples of successful practice to contact us. Further details of many of the projects identified was obtained, face-to-face or by telephone interviews, or by an exchange of written information.

A final element of the process evaluation was to conduct interviews with SCS clients. The MREC approved information sheets and consent forms to be sent out to clients (see Appendix 2), who were randomly selected from all services. The research team could have no contact with clients prior to their giving consent, so we provided the SCS coordinators with letters to send to clients, and the ID numbers of clients who had been sampled. Thirty-two letters were sent out in this way.

## 3.2 Results

The interviews were transcribed and with the results from the questionnaires, provided the content for the factually based Case Studies on each of the five Health Authority Area Services. These are contained in Appendix 1. They were sent to the services on 24th April 2003 for them to check for factual accuracy and return by 6th June. Amendments were made where necessary.

The information from these Case Studies, and the views expressed in the interviews, are used as the basis for the Discussion and Recommendations element of this document. The findings from England and Scotland have been included as separate boxes of information within the overall text. Results from the outcome and economic evaluation have been added where appropriate.

Of the thirty-two letters sent to SCS to be mailed out to clients, responses were received from three clients who had completed the consent form, indicating that they were willing to be interviewed. Two of these were successfully interviewed, but the third interview and further attempts to contact sampled clients, or to select a further sample, were abandoned due to the limited time and budget available to the research team.

### 3.2.1 Collaborator/ coordinator questionnaires

Ten questionnaires were returned. Dyfed Powys, Gwent and North Wales returned one per service completed by either the collaborator or the coordinator. IMH has three coordinators and three collaborator posts at LHG level so one questionnaire was filled in per LHG and Bro Taf have four LHGs with one questionnaire completed for each LHG by the service coordinator.

These questionnaires asked how much time the staff of each SCS spent on various activities. The first activity they were asked about was the training of others in smoking cessation methods, and the average estimate of the time staff spent doing this was 10.4 per cent (range 3-30 per cent). Evaluation and administration were asked separately, but we have combined these categories in analysis because it was clear from responses that these two functions were not distinguished in a consistent manner by respondents. The average estimate of the per cent of specialist time spent on evaluation and administration was 34.1 per cent (range 2-50 per cent).

### 3.2.2 Specialist questionnaires

Fifty-five completed questionnaires were received. Specialists were asked to estimate the amount of time they spent on various activities. Forty-nine specialists completed this section, and gave responses that differed from those provided by the collaborators and coordinators. Estimates from the staff themselves suggested that they spent on average 29 per cent of their time on evaluation and administration (range of 2-50 per cent). The average estimate of time that they spent training others in smoking cessation methods was 5.4 per cent (range of 2-70 per cent).

## **4. Economic Evaluation**

### **4.1. Introduction**

The purpose of an economic evaluation is to assess the costs and effects of interventions in order to identify which provide good value for money and so assist in the allocation of scarce health care resources (Drummond *et al.* 1997). Smoking cessation interventions have been subject to every available economic evaluation technique (for a review see Buck, 1997). The English specialist smoking cessation services have recently been subject to a crude economic evaluation which concluded that ‘... they are highly cost effective - a cost of less than £800 per life year saved’ (Stapleton, 2001).

Estimation of cost per life year saved, however, requires a modelling exercise based on excess quit rates (normally defined as biochemically confirmed abstinence a minimum of one year after intervention, Cohen and Fowler, 1993) of an intervention group over a control group within a randomised trial. In the present circumstances, it was not possible to have a control group and given the time frame, the main outcome measure used here is self-reported quitting four weeks after setting a quit date at a smoking cessation service. The present evaluation should therefore not be regarded as a full cost effectiveness analysis - as was explained in the original evaluation proposal - and the reported costs per quitter should not be directly compared with those of published studies.

Instead we here estimate the cost of the five Welsh smoking cessation services and relate them to a range of outcomes in the form of a costs and consequences analysis. A costs-and-consequences analysis, however, cannot conclude whether an intervention represents an economically efficient use of scarce resource (Jefferson *et al.* 2001). We have also attempted to determine the value which users place on the smoking cessation services through a 'contingent valuation' exercise explained below.

### **4.2. Costing methods:**

Each of the (then) five Health Authorities in Wales received a grant from the National Assembly for Wales to run a smoking cessation service for 2002/2003:

Bro Taf	£195,936
Dyfed Powys	£193,000
Iechyd Morgannwg	£200,500
Gwent	£70,000
North Wales	£110,600.

Most supplemented this either with unspent smoking cessation income from the previous year (which they were allowed to carry forward), with money from underspends on other services, or with income from one or more other funding sources (see 5.2.16 and 5.2.17).

In addition, each also had access to a variety of human and physical resources which were provided without charge, for example input by staff paid from other sources.

An *economic* costing was undertaken in which all resources used by the services were measured in physical units (for example hours of staff time) and then valued using market prices (such as salaries). This is distinct from a *financial* costing which represents an accounting of how money was spent.

Data for this exercise were a combination of data items which had been specified by the Welsh Assembly Government before commissioning the evaluation and additional data items requested by the evaluation team. With respect to the initial data, a lack of detailed instructions from the Welsh Assembly Government, for example on how to design the data bases, led to considerable variation among services in terms of how these data were collected and recorded. In order to minimise the burden which the collection of evaluation-specific data would impose, the services were not asked to change the way that they had been collecting these initial data items. This led to certain difficulties in making inter-service comparisons. Problems associated with data collection are discussed in Section 5.7.

Staff costs were based on information obtained through a questionnaire completed by the coordinator or collaborator at each service in July 2002. This provided details of the numbers of staff in post and their salaries, the estimated percentage of time each member of staff devoted to the service, and input by staff not employed by the service. Gross employment costs were derived by inflating salaries by 20 per cent to account for employers' on-costs (such as National Insurance, superannuation) and apportioned according to the estimated percentage of whole-time equivalent time devoted to the smoking cessation service.

The costs of material used to promote the services were also obtained by the above questionnaire but the costs of other promotions, for example advertisements in newspapers, were not collected.

The reported costs of training comprise only the fees paid for those who attended the Maudsley course in London (see 5.4.2). Each person attending will also have incurred travel and accommodation costs but data on these were not available. Reported costs should therefore be regarded as minimal. Training, however, represents an investment in human capital which produces a flow of benefits beyond the year in which the individual was trained. We have therefore used the standard economic evaluation method of expressing these costs in terms of their 'equivalent annual costs' (Drummond *et al.* 1997) using an assumed 'life' of the training of 5 years and a four per cent rate of discount. In-house training was not costed separately as it was provided by local health promotion specialists whose time has already been accounted for in the overall costing of the service.

Staff travel costs were provided directly by each service for the four-month period ending November 2002. Travel costs borne by those attending the services were recorded at first

appointment. This specified miles travelled if by car, or the amount paid if by public transport. The amounts paid for other user costs (such as babysitters) were also recorded.

Reported car mileage was costed at 41 pence per mile (AA Motoring Costs, 2002). Costs of nicotine replacement therapies and bupropion are based on reported use at six-week follow-up valued using prices in the British National Formulary (2003). The numbers using these aids through free prescriptions were also recorded.

Venue costs could not be estimated. Smoking cessation services were provided in both health service and non-health service locations with no charge for the former and a charge normally between £4 and £12 per hour for the latter - although there are outliers (such as Newport Leisure Centre) which can charge up to £20 per hour. All five services used General Practitioner premises, voluntary/local authority venues and commercial venues to varying degrees. All but North Wales also used hospital premises. The use of these facilities tended to be sporadic. For example, it was often the case that a suitable local venue would be sought only after a number of people from a defined area expressed a desire to attend the service.

### 4.3. Results

#### 4.3.1 Total NHS Costs

Table 4.1 below summarises the costs of the five smoking cessation services with the component services in Bro Taf and Iechyd Morgannwg Health shown separately.

**Table 4.1: Summary of costs of the 5 smoking cessation services**

Smoking Cessation Service	Total Staff Costs £	Materials £ (*)	Training (**)	Staff Travel Costs £	Total £
<b>Bro Taf</b>	<b>232974</b>	<b>4000</b>	<b>1267</b>	<b>6076</b>	<b>244317</b>
Cardiff	57698	2000	317	1528	61543
Merthyr Tydfil	48282	500	211	1029	50022
RCT	106634	1000	633	2000	110267
Vale of Glamorgan	20360	500	105	1519 (***)	22484
<b>Dyfed Powys</b>	<b>165291</b>	<b>2500</b>	<b>211</b>	<b>19472</b>	<b>187474</b>
<b>Gwent</b>	<b>139644</b>	<b>2500</b>	<b>633</b>	<b>9669</b>	<b>152446</b>
<b>IMH</b>	<b>189,519</b>	<b>15318</b>	<b>633</b>	<b>5700</b>	<b>211,170</b>
Bridgend	55,169	1000	211	2880	59,260
Neath/Port Talbot	55,727	5000	211	920	61,858
Swansea	78,623	9318	211	1900 (***)	90,052
<b>North Wales</b>	<b>154571</b>	<b>8000</b>	<b>317</b>	<b>19472 (***)</b>	<b>182360</b>
<b>All Wales</b>	<b>881,999</b>	<b>32,318</b>	<b>3,061</b>	<b>60,389</b>	<b>977,767</b>

.(\*) Does not include advertising costs.

(\*\*) Equivalent annual costs =  $E \{ [1 - (1 + r)^{-n}] / r \}$  (Drummond et al, 1997). Where r (discount rate) = 0.04 and n (training life span) = 5

(\*\*\*) Figures for staff travel costs for Vale of Glamorgan, Swansea and North Wales were not available. The above figure for Vale of Glamorgan is the mean of the other three Bro Taf services. For Swansea it is the mean of the other two IMH services. For North Wales we have imputed the figure for Dyfed Powys. Without imputation the total costs for these services would be artificially low, in comparison with those services which provided travel data.

#### 4.3.2 Staff Costs:

The bulk of the cost of each of the smoking cessation services is made up of staff time.

#### 4.3.3 User-Borne Costs.

Travel cost data were only collected on first appointment on the assumption that they were likely to be constant across sessions for each person attending. Table 4.2 shows the average user-borne cost associated with the first attendance at one of the smoking cessation services. The figures comprise only costs of travel as the amounts reported for 'other' costs were negligible.

**Table 4.2: User Travel Costs**

Smoking Cessation Service	No. by car	Total car cost	No. by public transport	Total fares paid	No. walking	Total Cost	Avg. cost per person per session
<b>Bro Taf n=284</b>	<b>182</b>	<b>£467</b>	<b>35</b>	<b>£98</b>	<b>67</b>	<b>£565</b>	<b>£1.99</b>
Cardiff n=44	25	£33	4	£10	15	£43	£0.98
Merthyr Tydfil n=38	19	£39	8	£22	11	£61	£1.61
RCT n=190	127	£373	23	£65	40	£438	£2.31
Vale of Glam n=12	11	£22	0	£0	1	£22	£1.83
<b>Dyfed Powys n=57</b>	<b>49</b>	<b>£219</b>	<b>4</b>	<b>£16</b>	<b>4</b>	<b>£235</b>	<b>£4.12</b>
<b>Gwent n=135</b>	<b>93</b>	<b>£265</b>	<b>19</b>	<b>£62</b>	<b>23</b>	<b>£327</b>	<b>£2.42</b>
<b>IMH n=59</b>	<b>41</b>	<b>£88</b>	<b>1</b>	<b>£4</b>	<b>17</b>	<b>£92</b>	<b>£1.56</b>
Bridgend n=12	8	£18	0	0	4	£18	£1.50
Neath/PT n=23	16	£18	0	0	7	£18	£0.78
Swansea n=24	17	£52	1	34	6	£86	£3.58
<b>North Wales n=105</b>	<b>76</b>	<b>£46</b>	<b>6</b>	<b>£22</b>	<b>23</b>	<b>£68</b>	<b>£0.65</b>
<b>Total n=604</b>	<b>441</b>	<b>£672</b>	<b>65</b>	<b>£303</b>	<b>134</b>	<b>£975</b>	<b>£1.52</b>

The average user-borne costs for each course are the product of the final column of the table above and the number of sessions attended. As can be seen in Table 4.3 below, however, data on the number of sessions attended is patchy and is wholly missing for the

service with the highest travel costs per session (Dyfed Powys). Because of this paucity of data we have not attempted to derive total user-borne costs. For those attending all six sessions the figure would be six times the costs reported above.

**Table 4.3: Mean number of sessions attended by service**

<b>Smoking Cessation Service</b>	<b>Average no. of sessions attended</b>	<b>Missing Data</b>	<b>Missing Data as %</b>
<b>Bro Taf</b>	<b>2.4</b>	<b>162</b>	<b>40</b>
Cardiff	3.2	55	55
Merthyr Tydfil	1.5	0	0
RCT	2.1	82	36
Vale of Glam	2.9	25	78
<b>Dyfed Powys</b>	<b>na</b>	<b>62</b>	<b>100</b>
<b>Gwent</b>	<b>3</b>	<b>42</b>	<b>17</b>
<b>IMH</b>	<b>3</b>	<b>0</b>	<b>0</b>
Bridgend	4	0	0
Neath/PT	3	0	0
Swansea	3	0	0
<b>North Wales</b>	<b>3</b>	<b>13</b>	<b>8.7</b>

#### 4.3.4 Smoking Cessation Aids.

The cost of smoking cessation aids should only be attributed to a smoking cessation service when an individual is persuaded to use it as a result of attending the service. No cost should be attributed to the services for those already using a smoking cessation aid at the first point of contact. While good data were available on the use of smoking cessation aids at first contact, data on use at the end of the course (that is at six weeks) were only available from Dyfed Powys, Gwent, and one of the Bro Taf services (Merthyr Tydfil).

Table 4.4 shows the numbers using any form of nicotine replacement therapy or bupropion at six weeks, together with the number of users who are entitled to free prescriptions. A course of 60 Bupropion tablets costs £42.85 and a box of 21 nicotine patches costs £24.51 (BNF, 2003). Given the absence of data on smoking cessation aids from the other services we have not included these in the overall costs of the services as reported in Table 4.5.

**Table 4.4: Use of smoking cessation aids at 6 weeks follow-up**

Smoking Cessation Service	Smoking Cessation Aid			Number using an aid and entitled to free prescription
	NRT	Bupropion	Not known	
<b>Bro Taf</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>
Cardiff	n/a	n/a	n/a	n/a
Merthyr Tydfil (n =51)	22	3	26	19
RCT	n/a	n/a	n/a	n/a
Vale of Glam	n/a	n/a	n/a	n/a
<b>Dyfed Powys (n = 20)</b>	<b>14</b>	<b>0</b>	<b>6</b>	<b>11</b>
<b>Gwent (n = 204)</b>	<b>134</b>	<b>38</b>	<b>32</b>	<b>103</b>
<b>IMH</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>
Bridgend	n/a	n/a	n/a	n/a
Neath/PT	n/a	n/a	n/a	n/a
Swansea	n/a	n/a	n/a	n/a
<b>North Wales</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>

n/a – not available

#### 4.4. Costs and Consequences Results

Analyses of effectiveness are presented in Section 2. Here we relate them to the costs as determined above. The figures in the total cost column represent costs for a full year but the numbers attending, setting a quit date and quitting, relate only to the survey period which covered 4.5 months (0.375 of a year). The figures in the table for cost per attendee, per person setting a quit rate, and per quitter figures have been calculated to account for this, for example cost per quitter = (total cost / number of quitters) x 0.375.

**Table 4.5: Costs and consequences summary table**

Smoking Cessation Service	Total Cost (£)	No. setting quit date (% consenting clients)	No. quitting (% consenting clients) (*)	Cost per person attending 1 <sup>st</sup> session £ (***)	Cost per person setting a quit date (£)	Cost per quitter (£) (**)
<b>Bro Taf</b>	<b>244,317</b>	<b>296 (73%)</b>	<b>142 (35%)</b>	<b>195</b>	<b>310</b>	<b>645</b>
Cardiff	61,543	66 (67%)	24 (24%)	206	350	962
Merthyr Tydfil	50,022	45 (83%)	32 (59%)	232	417	586
RCT	110,267	165 (75%)	73 (33%)	143	251	566
Vale of Glamorgan	22,484	20 (63%)	13 (41%)	196	422	649
<b>Dyfed Powys</b>	<b>187,474</b>	<b>82 (85%)</b>	<b>20 (21%)</b>	<b>494</b>	<b>857</b>	<b>3,515</b>
<b>Gwent</b>	<b>152,446</b>	<b>150 (59%)</b>	<b>77 (30%)</b>	<b>176</b>	<b>381</b>	<b>742</b>
<b>IMH</b>	<b>211,170</b>	<b>55 ( 80%)</b>	<b>20 (29%)</b>	<b>1,002</b>	<b>1,440</b>	<b>3,959</b>
Bridgend	59,260	14 (93%)	5 (33%)	1,389	1,587	4,445
Neath/Port Talbot	61,858	19 (73%)	4 (15%)	800	1,220	5,799
Swansea	90,052	22 (79%)	11 (39%)	993	1,535	3,070
<b>North Wales</b>	<b>182,360</b>	<b>86 (58%)</b>	<b>46 (31%)</b>	<b>219</b>	<b>795</b>	<b>1,487</b>
<b>All Wales</b>	<b>977,767</b>	<b>669 (69%)</b>	<b>305 (31%)</b>	<b>376</b>	<b>548</b>	<b>1,202</b>

(\*) All those who attended less than half the sessions and all others who were lost to follow-up are assumed not to have quit smoking.

(\*\*) The study collected data over the 4.5 month period from 15th July to 30th November, 2002. Costs per quitter figures reported here are therefore column 1 (total service cost) divided by column 3 (number of quitters) multiplied by 0.375 (4.5/12) to reflect the service costs of the costing period only.

(\*\*\*) Numbers attending a first session were determined on the basis of the numbers consenting to be in the study and the consent rates. For RCT the consent rate was imputed as the mean for the other three services in Bro Taf.

The costs per person attending a first session (that is, the cost per person making use of the smoking cessation sessions) varied from a low of £143 in Rhondda Cynon Taff to a high of £1,389 in Bridgend. This variation is mainly due to large differences in numbers attending a first session (RCT = 289, Bridgend = 16). The overall cost figure for Wales is £376.

The numbers attending, however, measure activity not achieved. All services have an objective of getting smokers to set an agreed quit date. The proportion of consenting clients who agreed a quit date varied from 59 per cent (Gwent) to 93 per cent (Bridgend) and the cost per person setting a quit date from £251 (RCT) to £1,587 (Bridgend). For Wales as a whole, the cost per person setting a quit date was £548.

The final objective of the services, however, is to reduce the number of people who smoke. The above quitter figures are based solely on the numbers of consenting clients for whom data were available. It does not include 1) any non-consenting clients (approximately 25 per cent of the total number who attended a first session) who might have quit or 2) any consenting clients who were lost to follow-up and who might have quit are assumed not to have quit. On the other hand, it represents 1) self-reported quitting which is known to overestimate the true numbers, 2) quitters at four weeks, many of whom might relapse after a year (the standard time period for assessing quitting) and 3) gross quit rates as opposed to the excess of intervention over control groups. In other words, it assumes that none of the recorded quitters would have quit without the intervention which, given that those who attended the sessions were motivated to quit, seems unlikely.

On this basis there was considerable variation in the cost per quitter from a low of £566 (Rhondda Cynon Taff) to a high of £5,799 (Neath / Port Talbot). The overall cost per quitter for all Wales is £1,202. For the reasons given above it is inappropriate to make direct comparisons with other cost-effectiveness studies of other smoking cessation interventions.

#### Sensitivity Analysis:

In the analysis above, the cost per person setting a quit date, and the cost per quitter are based on the assumption that those not consenting and those lost to follow-up, did not set a quit date nor did they quit smoking. Table 4.6 below shows the effect of an opposite set of assumptions which place the services in the best possible light. Here it is assumed that the rates determined above for those setting a quit date also apply to non-consenters, and the quit rates determined above also apply to all those for whom there are no data, that is non-consenters and those lost to follow up.

**Table 4.6: Sensitivity analysis: Assumes that % setting quit date and % quitting are the same as those for whom data is available**

Smoking Cessation Service	Total Cost (£)	Cost per person setting a quit date (£)	Cost per quitter (£)
<b>Bro Taf</b>	<b>244,317</b>	<b>253</b>	<b>390</b>
Cardiff	61,543	323	549
Merthyr Tydfil	50,022	276	329
RCT	110,267	191	369
Vale of Glamorgan	22,484	312	272
<b>Dyfed Powys</b>	<b>187,474</b>	<b>537</b>	<b>1,302</b>
<b>Gwent</b>	<b>152,446</b>	<b>296</b>	<b>400</b>
<b>IMH</b>	<b>211,170</b>	<b>1,257</b>	<b>2,329</b>
Bridgend	59,260	1,481	3,175
Neath/Port Talbot	61,858	1,160	3,314
Swansea	90,052	1,251	1,608
<b>North Wales</b>	<b>182,360</b>	<b>543</b>	<b>518</b>
<b>All Wales</b>	<b>977,767</b>	<b>414</b>	<b>619</b>

Costs rates are considerably lower under these assumptions. As an illustration, 37.3 per cent of those attending a first appointment in Dyfed Powys did not consent to be in the study, and data were missing on 71 per cent of those who did consent. Applying the Dyfed Powys assessed quit rate of 21 per cent to all these, lowers the cost per quitter from £3,515 to £1,302.

#### **4.5. Willingness-to-Pay for Smoking Cessation Services**

According to basic market economic theory, the value which a consumer places on a service is revealed by whether they are willing to pay its market price. If there are insufficient consumers willing to pay the market price, then either the price will fall or the service will be withdrawn. In this way markets ensure that only those services valued by consumers are supplied.

Where services are provided at zero price - as is the case with the Welsh smoking cessation services - alternative ways of estimating consumer values need to be found to ensure that scarce resources are not directed at services which are of little value to consumers. Contingent valuation (CV) methods are increasingly being used within economic evaluations to estimate the value which consumers place on the services which they use (Diener, O'Brien *et al.* 1998). 'Willingness to pay' (WTP) is a form of CV which is increasingly being used in health economic research. This approach is firmly rooted in the principles of welfare economics and is widely accepted as the theoretically correct benefit measure for cost benefit analyses (Johannesson and Jonsson, 1991).

A variety of elicitation methods can be used within WTP (Donaldson *et al.* 1997). Here, 'payment scales' were used wherein respondents are asked to choose, from a list of values, the maximum amount they would be willing to pay for a smoking cessation service.

The smoking cessation service you are about to receive is free and will in future continue to be offered free to smokers who would like assistance in quitting. However, as a means of assessing how highly smokers value a smoking cessation service we would be grateful if you could answer the following question:

Assuming you had to pay, what is the maximum amount that you would be willing to pay for the smoking cessation service you are about to receive?

- £0
- between £1 and £49
- Between £50 and £99
- Between £100 and £199
- Between £200 and £299
- Between £300 and £399
- Between £400 and £499
- More that £500, please specify \_\_\_\_\_

#### 4.5.1 Results:

The overall response rate for the WTP question was 76 per cent consented varying from 55 per cent in Gwent to 99 per cent in North Wales. Table 4.7 shows the number of responses in each value range. Table 4.8 shows the overall mean willingness to pay was £86 (range = £46 - £144, s.d. = £35). Values of nine outliers (valuations > £599) were removed as their unrealistically high valuation (up to £2000) would have had a disproportionate effect on mean values.

**Table 4.7**

Category	No of Responses
£0	73
£1 - £49	236
£50 - £99	131
£100 - £199	87
£200 - £299	28
£300 - £399	26
£400 - £499	48
£500 - £599	17
>£599	9
<b>Total</b>	<b>655</b>

**Table 4.8: Willingness to Pay**

<b>Smoking Cessation Service</b>	<b>Mean Willingness to Pay (Excluding values &gt; £599)</b>
<b>Bro Taf</b>	<b>£80</b>
Cardiff	£59
Merthyr Tydfil	£74
Rhondda Cynon Taff	£137
Vale of Glamorgan	£51
<b>Dyfed Powys</b>	<b>£72</b>
<b>Gwent</b>	<b>£46</b>
<b>North Wales</b>	<b>£135</b>
<b>IMH</b>	<b>£83</b>
Bridgend	£144
Neath/Port Talbot	£99
Swansea	£50
<b>All Wales</b>	<b>£86</b>
<b>Range</b>	<b>£46 - £144</b>
<b>Standard Deviation</b>	<b>£35</b>

It should be stressed that because WTP is used where market prices do not exist, the question has to be asked before clients use the service. An analogy is asking someone if they would be willing to pay £X to see the new *Star Wars* film (WTP stated preference) as opposed to observing whether they actually did pay to see the film when the price of entry was £X (revealed preference). In both cases the assessment is of anticipated value; it is made before seeing the film and does not reflect consumer satisfaction after the fact. Variations in mean WTP among the different smoking cessation services do not therefore reflect difference in users' assessments of the quality of the different services.

The total cost of the five smoking cessation services is £986,767. The cost per person attending a first session (Table 4.5) was £380 which is considerably higher than the mean willingness to pay. For reasons discussed above, these figures should be treated with caution but they suggest that if smoking cessation services were run on a commercial basis, they would have to be subsidised by the state in order to remain economically active.

## **5. Discussion**

### **5.1 Structure of the National Service in Wales**

There are five services in Wales, each based on the now obsolete Health Authority areas. These services vary in terms of staff contracts, levels of staffing and coordination as well as the nature of the support received by clients. This is seen clearly in the Organisational Charts and Care Pathways for each service contained within the Case Studies (Appendix 1). This variation is to some extent due to the fact that there was some pre-existing provision of smoking cessation in some areas, such as in Primary Care settings in Cardiff, and in Secondary Care settings such as Llandough Hospital in the Vale of Glamorgan, around which the new SCS were organised. But the variation was largely because of the original brief from the National Assembly Circular, which was interpreted by SCS as asking them to set up ‘demonstration’ projects to show what could work in different areas of Wales. Each service was developed to take into account the geography and size of the area, whether rural or urban in nature, and to reflect the philosophy of the leaders of each service.

### **5.2 National Co-ordination of the Services in Wales**

The 1999 Welsh Health Circular outlined the financial framework for service development. It also gave initial advice on setting up the services, based on the 1998 White Paper ‘Smoking Kills’ and the 1998 ‘Smoking Cessation Guidelines for Health Professionals’ published in *Thorax*. It stated that services should be targeted (particularly at disadvantaged groups and pregnant women), should take both self-referred clients and those referred from GPs, and should also be responsive to local needs.

Since this original documentation, communication from Assembly officials to the services has been by letter to the Directors of Public Health, who are the designated representatives of the Health Authorities on the Smoking Cessation contracts, and by meetings with collaborators, initially on a quarterly basis. Assembly research staff then met with coordinators to discuss evaluation issues. It has been the responsibility of the staff within the local services to disseminate any information to the rest of their service. Collaborators are also managers of health promotion services in their areas, and they have many other responsibilities with little time to spend on the management of the smoking cessation service. The lines of communication within the cessation services are not always straightforward (see Organisational Charts within individual Case Studies) and can be worsened by staff vacancies. In the interviews, it became clear that information that Assembly officials believed had been passed on to services had not reached all levels of staff. One example of this was the Smoking Cessation in Primary Care initiatives funded by the Welsh Assembly Government.

An important issue relating to communication is that there appears to be a mismatch between the expectation from the services that the Assembly would perform a national coordinator function and take a leadership role in the direction of the services, and the Assembly personnel's explanation of their role which makes it clear that:

*There are no requirements of us at a National level to have any other role than monitoring. We tried to offer a sort of gap service if something came up – ethnic minorities, and mental health ... by providing training.*

One coordinator said that:

*'I feel that there should have been more central support. As that is where the funding is coming from, that's where we expected to find it.'*

There have been tensions between the services and the Assembly and this seems to be one reason for it. The timing of actions within the short history of the Smoking Cessation Service (SCS) in Wales appears to be another reason for these tensions. The details of data collection were decided upon when the services were up and running. As one collaborator remarked:

*'We have been working to a constantly changing agenda – originally demonstration projects, with increasing pressure to become one model; it has turned into a research project in its own right and it wasn't designed that way.'*

It seems that these circumstances result in the view of one Assembly official that:

*'We can't seem to get across that we are trying to help.'*

In England there is also a variety of approaches taken by the services. Coordinators whom we spoke to said that they work towards the targets set by the Department of Health in 'The Priorities and Planning Framework 2003-2006.' This framework is then supported by a range of documents produced by the Health Development Agency on recommended methods of implementation. Regional networks exist to support individual service coordinators.

Scottish services were set up at the same time as their Welsh counterparts as a response to the White Paper; again there is wide variation. By 2002 it was realised that there were continuing issues relating to the national coordination of the services. The Partnership Action on Tobacco and Health (PATH) was funded by the Scottish Executive. It is a team of five people based within ASH Scotland, supported by an Advisory Group of smoking, health promotion and research experts. Its role is to develop and support services throughout Scotland to use proven best practice in smoking cessation and prevention, particularly in the key areas of training and evaluation. The aim is to keep people in the field up-to-date with developments through regular newsletters and e-mails. There is also

a national support group for smoking cessation coordinators run by the Scottish Tobacco Control Alliance (also based at ASH Scotland).

### 5.3 Links between Services in Wales

As well as the poor communication between the services and the National Assembly, there also seems not to have been strong lines of communication between the different services in Wales. One collaborator expresses this view:

*'We haven't had much opportunity to find out how other Authorities in Wales are actually setting things up.'*

It does not seem that collaborator meetings have focused on being a forum for the exchange of ideas and examples of good practice. Neither have coordinator meetings, which have concentrated on data-collection issues. Some collaborators and coordinators have provided support for each other in an informal manner. There seems to be very little contact between the specialists of each service or even between those from smaller services within the same Health Authority areas. One coordinator said:

*'The [specialists] generally work in quite an isolated way so that professional development and bringing them together, even on a national level, would be really beneficial.'*

### 5.4 How the Service fits in with Other National Initiatives in Smoking Cessation

#### 5.4.1 Smokers' Helpline

The National Assembly for Wales funds the Smokers' Helpline for Wales. This forms part of the NHS Helpline on 0800 169 0 169. Calls originating in Wales are automatically routed to Ash in Wales. In their report (Ash in Wales, Unpublished Data) on this service for the period April 2002 to March 2003, they state that 7,589 people contacting the Helpline required basic information only, with 1859 wanting additional advice or counselling. The report also shows that 121 callers were referred to local cessation services. In the outcome evaluation 18 people (one per cent) cited the Helpline as a source of referral.

The Helpline is a 24-hour service. During the day, staff at Ash in Wales will give information over the phone, send out packs of information and refer callers to local cessation services. At night the caller is re-routed to a call centre in Bristol. The workers there will take basic details of name and address and confirm if the caller is less than 18 years old or pregnant. They are not able to offer advice or give details of local cessation services. They will fax Ash in Wales, and the following day staff in Wales will act on this by getting in touch or sending out materials. Starting this year, all packs sent out now include a typed sheet with the contact details for each SCS in Wales.



#### 5.4.2 Smoking Cessation in Primary Care initiatives

The Welsh Assembly Government commissioned the University of Wales College of Medicine to

- develop a pack of materials for Primary Care titled 'Helping Patients Quit'. The pack includes smoking cessation guidelines for GPs and Practice Nurses and supportive materials (such as a poster, a mouse mat and computer stickers based on the *Thorax* guidelines).
- recruit Smoking Cessation Liaison Nurses, one Liaison Nurse for each LHG area in Wales. Their tasks were to include an audit of training needs and smoking cessation policies, dissemination of 'Helping Patients Quit', and distribution of information on 'Quit and Win' and No Smoking Day 2001. The liaison nurses were responsible for feeding back the results of the audit within their Health Authority area.
- organise a series of workshop and training events across Wales based on the needs identified in the audit. It was intended that priority would be given to those areas where training for Primary Care was not already being provided as part of the health authority smoking cessation service. Practices without a smoking cessation policy were invited to a workshop on policy development.

At interview, many of the smoking cessation staff were unaware of these initiatives and had not received any feedback from the audit of smoking cessation in primary care. Representatives from the SCS attended the three general workshops that were held. Four coordinators attended, but of these only one is currently still in the post, so it may be that staff turnover is responsible for the lack of knowledge about this initiative. Materials have also been developed for general dental practitioners, community dentists and hospital dentists. There are plans for eight dental health educators to be commissioned to provide training to each dental practice.

#### 5.4.3 Other National Initiatives in Tobacco Control

Some information on national tobacco control issues that relate to cessation has been discussed at collaborator meetings held with staff of the Assembly. Otherwise it is passed on through another forum:

*'Another way that information is passed down is through the ad hoc Tobacco Advisory Group, which meets twice a year. One Collaborator and one Coordinator were invited to represent all their counterparts.'*

Communicating information from these meetings to the rest of the staff in all the services would have fallen to the collaborator and coordinator who were present.

In Dyfed Powys there is a built-in structure to make sure that cessation sits within the wider tobacco-control agenda. It is the funding of the Health Promotion Officers – Tobacco Control, from cessation monies. As one of them said in an interview:

*'Some of the work I do may not be easily recognisable as directly related to giving up, but it underpins that work.'*

Other services interviewed did make the point that by using local contacts, the cessation service did link with other initiatives in general tobacco control.

*'Linking in with general tobacco control is important. I certainly would want [the service] to connect with anything that is happening in the area.'* (Collaborator)

In England it is deemed vital to have a comprehensive national tobacco-control strategy with smoking cessation as an integral part (Department of Health 1999). There is also documentation to assert that this model should be mirrored at a local level (West *et al.* 2002).

### **5.5 The Funding of the Welsh Smoking Cessation Service**

All collaborators and coordinators who were interviewed felt that it has been vital to have ring-fenced money to allow the Smoking Cessation Service to develop. They are keen that this should continue. For some there is the feeling that they have been adequately funded, although all expressed the view that more money would enable them to target more widely. There is praise for the Assembly because it has allowed money to be carried forward, and because:

*'All money allocated to the service has been spent on the service.'* (Collaborator)

However a few of the smaller services within the Health Authority area services, have said how difficult the funding issue has been for them. One coordinator mentioned that:

*'This year we were given just £20,000. This isn't enough to employ one person, let alone run a service.'*

They supplemented this with money that was under-spent from other services and by securing additional funding for projects with a smoking cessation component. More than half of the services have supplemented their funding in a similar way, but this has associated difficulties:

*'Having money from two pots means that it has been more work getting the bids together and you have to report back to two sets of people.'*

Bro Taf services have received extra money from the following sources: Inequalities in Health, Primary Care Development Fund, and General Medical Services. Gwent has also tapped into Inequalities in Health funding, as has Dyfed Powys alongside Cardiac Rehabilitation money, Surestart and heart health programmes. As explained in Section 4 (Economic evaluation), in addition to resources paid for directly from these income

sources, the smoking cessation services were also able to use resources for which they did not have to pay. This included staffing input from non-SCS staff and health-service facilities. One collaborator feels strongly that:

*'The Assembly needs to recognise how much additional money has gone into it. We have not achieved this level of service by just this pot of money, although the initial money did give them [each service] a lever to get this additional funding.'*

Another coordinator strongly believes that:

*'Really it needs to be one service funded appropriately without the need to go to other pots to make it work.'*

However, something of concern to all services has been the short-term nature of some of the funding. One collaborator reported that:

*'The amount of money is all right but continued lack of confirmation of funding has been a huge problem; people need to know that they have job security. It is hard to keep staff.'*

The other funding-related issue is its distribution. In the case of two services, the Assembly grant goes through the health authority area to the Local Health Groups (LHGs). It is then paid to the Trusts because they actually run the service, but this has not been easy.

In England money is not ring-fenced for cessation. However, cessation is made a priority for Primary Care Trusts through the **Priorities and Planning Framework 2003-6 (Department of Health 2003)** and the overall budgets given to them from the Department of Health are meant to reflect this. There is one objective in the framework relating to reducing the rate of smoking in manual labourers' groups, which comes within a focus on improving services and outcomes in cancer. There is another objective relating to the reduction in the proportion of women who smoke throughout pregnancy, which is a move in addressing inequalities in health. In Scotland, cessation money was ring-fenced until March 2003; it has since been withdrawn. Local services expressed some concern about this and it appears that there is a variety in the levels of priority given to cessation within Local Health Boards.

## 5.6 Staffing

The variety in the staffing models used by each service can be seen in the Organisational Charts contained in the Case Studies, Appendix 1.

### 5.6.1 Collaborator

In the earliest phase of service development, the Directors of Public Health nominated a collaborator for each service. The collaborators form the links between the Assembly and the cessation services and took a lead in service development. The collaborators are not paid for this role out of monies designated for the development of cessation services, but take it on as part of their wider remit.

In most Health Authorities the collaborator is the local Manager of Health Promotion Services. In the case of the North Wales Health Authority, however, the cessation service coordinator takes on a joint collaborator/coordinator/ specialist role. Not all Health Authorities chose to have a single collaborator; Iechyd Morgannwg Health (IMH) Cessation Service has three collaborators, one for each of the LHGs within the Health Authority area.

The collaborators reported that they had a large part to play in the development phase of the services, especially in meeting with Assembly staff. Now the services are established, the service coordinators have taken responsibility for the day-to-day management of the services, and the collaborator's role is in the main restricted to budgetary issues and liaison with the Assembly. The exceptions to this are in services where they have been unable to recruit a coordinator and so the collaborators have had to take on some of the coordination as well as their other responsibilities.

Overall, the collaborators say that they now spend only a few hours a week on general management issues for the cessation services. As one collaborator mentioned in interview,

*'They (collaborators) probably need to meet again to consider the Evaluation's recommendations, but overall this role is becoming extinct.'*

### 5.6.2 Coordinator

All coordinators reported that their role is to decide on the direction the service takes and to promote the service within their areas. Gwent and Dyfed Powys each have a full-time coordinator, North Wales has a joint coordinator / collaborator / specialist role that is almost full-time, IMH has one half-time and two full-time coordinators and Bro Taf has four part-time coordinators whose hours vary from four hours a week to nearly three days a week, one of whom is a joint coordinator/specialist. One part-time post remained unfilled during the period of this study; three full-time coordinators were on sick leave or maternity leave for some of this time. Those coordinators who work part-time on cessation also have other responsibilities, some in the field of tobacco control, others in wider health promotion. A collaborator in Wales commented:

*'We thought at the beginning half-time coordination would be fine but with data collection and everything it was not.'*

The other advantage of having full-time coordination for a service is noted by another collaborator:

*'It has been useful for some areas to get someone on secondment as their coordinator's post is full-time. It would not be possible to do that with a 0.5 wte appointment.'*

The coordinators are drawn from a variety of backgrounds; health promotion, nursing, and research, and some are recent graduates. Most coordinators have a staff-management role. An exception is the Bro Taf cessation service, in which Cardiff and the Vale of Glamorgan LHGs reimburse Cardiff and Vale NHS Trust who employ the counsellors and deliver the service. The counsellors are line-managed by the Trust's health promotion manager, not the cessation service coordinator. This creates an extra tier in the management structure and difficulties in administration and finance. However one of the coordinators told us,

*'I don't think it has been a problem for the counsellors having one line-manager, and one coordinator. ... A lot of services are provided that way, it is nothing really unusual.'*

### 5.6.3 Researcher

Only one service, the Bro Taf health authority, had a researcher in the post during the data-collection period. IMH also has a part-time researcher post but it was vacant during the data-collection period. The Bro Taf researcher, from a teaching/research background, oversees the evaluation process and also facilitates communication between the collaborator and the coordinators, and between the Bro Taf service and the Assembly.

### 5.6.4 Specialists

Staff delivering the smoking cessation intervention have been given a variety of titles across Wales including 'specialist', 'advisor', 'counsellor' and 'tutor'. All have a generic role, unlike their counterparts in the other areas of the UK, where there are staff who are employed solely to work with a specific target groups such as pregnant women or young people. In interviews it came across that everyone had strong views about the most appropriate titles for those who run cessation.

*'They are called specialists as they look at smoking and concentrate just on that aspect as opposed to counsellors who may deal with broader issues.'* Collaborator.

*'I believe that the best title would be advisor; our only role is to help clients stop smoking.'* Specialist

*'I changed my title to 'nurse'; I felt that it was a foot in the door for Primary Care.'* Counsellor.

These members of staff are from a variety of backgrounds; clinical, community, sports and leisure, and counselling. One coordinator in particular believes that employing the latter group is vital:

*'Having counsellors just makes the service have a different approach to people who haven't had a counselling background.'*

A counsellor told us:

*'Being a qualified counsellor is good for the service as without one you would not get to the underlying cause, you are only treating the symptoms otherwise, of why people smoke. I think this is vital to relapse prevention. You are understanding their motivation not only why they want to quit but what made them start in the first place. What other things have caused them to slip up. Personally I think it is vital. Cognitive therapies I use a lot of. We are looking at how people think that affects how they behave. There is a cycle, explaining that really simply and pitching it at the right level with each client so they are learning. That is a life skill for them to take away forever.'*

Another coordinator comments on the fact that differences in personalities and backgrounds do not seem to have resulted in differences in impact:

*'Although the specialists have different approaches, some lively and bubbly, others quiet and listening, they get the same results. No specialist gets more clients to stop smoking.'*

Within the five Health Authorities in Wales, three distinct models for the employment of specialist staff can be distinguished:

- a small group of full or almost full-time staff;
- a larger number of part-time staff each working in the region of 7-20 hours a week and spread over a larger geographical area;
- a very large number of sessional staff who have other full-time employment but are paid by the cessation service for 2-3 hours a week. Sessional staff can be called upon to run groups when there is sufficient demand and are paid only when groups are run.

There are perceived advantages and disadvantages to each model.

A number of **advantages of having full-time staff** were identified by the services.

- ❖ Specialists become known to clients and health professionals.

*'If you want the service to have a public face, to say this is who we are and this is what we do then you need people who are employed for a considerable length of time. It makes it easier having a united service with everybody singing from the same hymn sheet.'* Collaborator

- ❖ It is easier to manage a small number of full-time staff.

- ❖ All aspects of work related to cessation can be taken on by specialists.

*'As it is the only thing they have to do even if there are only two people waiting in the area, they still get on and run a group. There is a lot of related work, such as training GPs, practice nurses, going out and working in the Trust on their smoking policy, big businesses in the area. Just doing smoking cessation keeps them focused.'*

- ❖ More choice of times during the working day can be offered to clients.

A number of **advantages of having sessional or part-time staff** were identified by the services.

- ❖ There has been a very low turn-over of staff in services that adopt this staffing model.

*'There is not the same level of burn-out in sessional staff as there can be for full-time workers on cessation. It is quite draining work.'* Project Support Officer.

The issue of short-term contracts, which has been a feature of the service in Wales during the last couple of years, seems to have less effect on those for whom cessation is not their main job.

- ❖ It is a low-cost way of running a service on a tight budget. Many of the sessional members of staff were said to give their own time to receive support and training.
- ❖ Those who are employed in this capacity often have a professional interest in cessation in their other employment. Services can benefit from the backgrounds these staff have. As one coordinator remarked,

*'I don't have to worry about accountability and confidentiality because that is already ingrained into their own professions.'*

- ❖ With the employment of many staff for short periods of time, areas covered by each specialist are smaller, which cuts down the time and financial implications of travel. In an area that employs full-time staff, a specialist noted that,

*'There is a lot of traveling involved in the specialist's work as we have large areas to cover. We are constantly in the car.'*

- ❖ There is no need to find office space for specialists, something that has been an issue for those employing full-time staff.

It is interesting to note that within the few years that the services have been running in Wales, there have been early moves to take on the advantages of each of these staffing models. Places that employ sessional staff now have full or part-time Project Support Officers in post. They are able to support the coordinator in running the service, and to offer cessation during the daytime. Another area which has full or part-time staff has started to employ two nurses on a sessional basis to cover a region that would involve specialists in considerable travel time and expense. In another service this cover is provided by practice nurses their practices. It is appropriate for services to look further at utilising this mix of staffing models.

An issue which is more about numbers of specialists in an area, rather than the hours they work, is that of cover for illness and holidays. Services with a number of staff can arrange cover,

*'Tutors are very flexible and will also cover each other when ill or on holiday.'*  
Project Support Officer

*'We try to keep to some kind of structure for the sessions because it is useful if someone is off. We have a diary so everyone knows where all the groups are and what week they are on.'* Specialist

In one large geographical area they have experimented with having a peripatetic specialist, part of whose job is to cover absence, although the specialist has had to travel extensively. Some services are unable to cover time off by specialists, which can leave clients disadvantaged. A specialist in one service told us that as they are a rural service they have no-one who can cover sickness or absence. If someone is off sick, their sessions have to be cancelled, which can disadvantage clients and reflect badly on a service.

#### *5.6.5 Project Support Officer*

This role exists only in services which employ sessional staff who come from administration or health-promotion backgrounds. Their roles vary slightly from one service to another but generally they support coordinators and specialists to allow the service to run smoothly and to provide some scope for introducing daytime sessions for clients. The sessional model usually can offer only evening sessions unless the workers' full-time employment is flexible.

#### *5.6.6 Tobacco Control Health Promotion Officer*

This role is only found in one of the services where there are two posts covering different geographical areas. The role is one of management at a local level, training specialists and encouraging cessation as part of wider remit. As one said,

*'Some of the work I do may not be easily recognisable as directly related to giving up but it underpins that work. My training in primary care leads to practice nurses raising the issue with smokers who then might come into the service. My campaign work on No Smoking Day will highlight that now might be a good time to give up and we can help you.'*

#### 5.6.7 Administrator

The level of administration varies between areas. Some specialists are expected to do much of their own, and in some it is provided by people who share buildings with the service but are funded from different monies.

### 5.7 Training and Support of Staff

#### 5.7.1 Training Staff

All members of staff providing cessation in the services have been on at least one training course. The variety of courses attended can be seen in each individual Case Study in Appendix 1. Although staff development is different in each service, all staff have had the opportunity to attend the one-off sessions provided by the Assembly on such issues as mental health and ethnic minorities.

*'We tried to offer a sort of gap service if something came up; ethnic minorities, and mental health ... by providing training.'* Assembly staff

The training common to all services is the Maudsley Smoking Cessation Training and Research Programme Course, or an in-house course based on that model, delivered by those who have had the original training. The fee for the Maudsley course is £105 per participant but costs for overnight accommodation and travel are also incurred. In-house training is provided mainly by service staff and so does not increase the total cost of the service.

A specialist who attended the training in London commented,

*'It is very rigid [Maudsley] but it was good training in that it covered every aspect of the quit process. It covered nicotine replacement and CO testing.'*

Another remarked that it was useful for new staff to at least have shadowed experienced staff because the training required participants to role-play situations with clients. The Maudsley training is based on cessation run within a clinical setting and it might be that support is required by coordinators to make sure that everyone promotes the main messages that apply to community-run cessation

The in-house training in the Welsh services is usually provided by health-promotion specialists with many years experience in smoking and in running training. However, as has been found in England, there is no quality control for the training run within cessation

services. There is a risk that important messages can get watered down or changed.

Assembly officials have made it clear that it has not been their role to provide a co-ordinated national approach to training. Relevant training is run by many different organisations, mainly in England. A number of people at different levels who were interviewed mentioned that they would like to see coordinated, accredited training provided on an all-Wales basis. As one coordinator says,

- *'I would ... like to have some sort of national accreditation, some sort of recognition for the work that cessation workers do; a health professional qualification.'*

West and McEwen (2001) conducted a survey of Smoking Cessation training courses in the United Kingdom. They found a total of thirteen distinct trainers who offered twenty-four courses to a range of Health Authorities. Only one course, the Diploma in Smoking Cessation offered by the National Respiratory Training Centre, is accredited. (The NRTC course is a four-month distance-learning course and is accredited by the Open University.) In June 2003, this was followed up by the H.D.A. document, 'Standard for Training in Smoking Cessation Treatments.' This covers the requirements of training in providing the appropriate knowledge and skills needed to deliver three different cessation interventions: brief interventions, intensive one-to-one support and group interventions. The document is arranged by core content areas and key learning outcomes for each of these areas. Methods of assessment are referred to and there are pointers to the future in relation to accreditation and endorsement of courses by national professional bodies. It has been a key responsibility of PATH in Scotland to consider training issues. A mapping of tobacco-related training has been completed, followed by consultations with cessation staff. The results of these will inform the National Training Standards for Scotland, which will be published in the summer of 2003.

### 5.7.2 Support of Staff

Most services are aware that there is a need to provide some form of support and debriefing for staff either within the management structure or outside it. Regular meetings can be a helpful forum for specialists, as noted by one coordinator.

*'They have got so many different skills that they can share with each other. They learn a lot from each other's work practices. There is a great team atmosphere.'*

There is a perception too that it is a responsibility of the services to provide additional specific support for counsellors. Staff in Bro Taf who work in the Merthyr Tydfil or Rhondda Cynon Taf services are all qualified counsellors. They all receive group and individual supervision from an external supervisor who is a qualified counsellor. One of the counsellors reported that they received 1.5 hours per month of external supervision. This supervision is paid for by the cessation services.

The counsellors in Cardiff and the Vale of Glamorgan are both qualified nurses and one

is on secondment from her post as a practice nurse. For this reason the line manager believes that they should be managed by a senior nurse to ensure that their training and development needs as nurses are met. In other services this is not the case.

*'There is no-one from a nursing background with knowledge of the role I have and who can provide professional support; perhaps it needs to be provided by a national body, perhaps the Royal College of Nursing.'* Coordinator

## 5.8 The Intervention

### 5.8.1 Information Session / Motivational Assessment

A key feature of the Maudsley model is that only patients who are motivated to quit are accepted on to the group-based courses. There is a variety of approaches taken by the services to the assessment of motivation. In Gwent they run an information session only and in some areas of Bro Taf, clients will be offered information sessions and motivational assessments. In IMH a brief motivational assessment for self-referring clients is undertaken over the telephone during the initial contact with the service. In Dyfed Powys, motivational assessments are done in different ways:

*'The advisor conducts a motivational assessment; depending on the area and the way of working of the advisor it will be face-to-face or on the phone. If someone, when they've had the motivational assessment, comes up as not being motivated, they will talk to them, give a brief intervention and explain why they don't think they are ready to give up smoking and maybe send them some materials.'* Coordinator

Those who do not run any motivational assessment believe that:

*'When people phone up that is taken as adequate evidence of motivation with no further screening.'* Specialist

When information sessions are run, they are either offered on a group basis, to cope with numbers accessing the service, or on an individual basis, to allow specialists to get to know their clients better. Issues such as preparing people for the course, discussing NRT and giving clients letters to take back to their GPs, are covered in this session.

*'It is there that they (specialists) decide what sort of group would suit them (clients) or if they can't really cope with a group. They find too it's easier to run a group when they have met them all individually.'* Coordinator

*'You use a bit of motivational interviewing. It is good to acknowledge the positive reasons why they smoke then look at why they want to give up.'* Specialist

In one service the coordinator felt that most people who came to the information session would go on to access a course, whereas a collaborator in another service notes,

*'We get about a 50 per cent drop-out rate between the information session and week one of the groups; I would be interested to look at why this drop out rate is so high.'*

### 5.8.2 The Course

The 1999 Welsh Health Circular guides the services according to the 1998 Thorax recommendations (Raw, McNeill and West 1998) in terms of the intervention that is most appropriate. There it states:

*'The withdrawal orientated treatment model offers a practicable and proven system for most specialist services.'*

This model is also referred to by the name of the hospital where it was developed, the Maudsley. The article 'Withdrawal-orientated Therapy for Smokers' outlines the main features of this model (Hajek 1989):

- the model is 'Withdrawal orientated therapy', that is, the primary goal of the treatment is to help clients get over the withdrawal symptoms associated with quitting
- it has been developed within an urban health setting
- clients mainly self-refer
- clients are accepted only if they are motivated to quit
- the staff members in the Maudsley are a clinical psychologist, a psychiatrist, a nurse and a secretary.

The treatment offered for cessation is outlined below.

- Questionnaires are sent to smokers who contact the clinic. After the completed forms are returned, clients are given an appointment for an assessment interview. These procedures serve the purpose of data collection, preparation for treatment and screening out smokers not sufficiently motivated to return the forms or attend the interview. Clients are invited to attend an assessment interview. Those unsuitable for group treatment (for reasons such as florid psychosis or deafness) are treated individually.
- NRT gum is supplied to group members and its use explained. A box of 2 mg gum is given out each week to participants. (Form of NRT available 1989)
- Group-orientated therapy is offered, that is group rather than therapist- orientated treatment (Hajek, Belcher, and Stapleton 1985) with best results from a group size of 12 – 15 clients (Hajek 1986). 'The time available is used primarily to encourage group interaction and formation of alliances between members. The aim is to summon group resources to keep clients from smoking during the initial withdrawal.' (Hajek 1989)

- Information is given on use of nicotine gum, withdrawal symptoms and the importance of complete abstinence
- There is very little educational material and no tailoring to individual needs.
- Five sessions are held over four weeks, quitting by week two.

‘From the second session group meetings are focused primarily on input by group members who discuss their experiences of not smoking over the past week and try to influence those who did not manage.’

- CO is monitored each week.
- Dropouts cannot re-enter for one year.
- The evaluative component is an integral part of the treatment programme.

All services report that they follow this model in their courses. However the Care Pathways in the Case Studies, Appendix 1, show there is a lot of variety among services and within services, with none following the model to the letter. It is not surprising that services do not follow this evidence-based intervention exactly because it is set in a health clinic with staff from specific backgrounds, working with a strongly selected group. In applying it in a community setting with staff from different backgrounds working with diverse groups, there must be some adaptation. As one specialist noted,

*‘It is very different working in a rural area to working in somewhere like the Maudsley, a central clinic.’*

A coordinator also made this comment:

*‘Not everyone can be Peter Hajek and I feel he underestimates how difficult it is just to let people talk. For this reason we have produced supporting materials to help counsellors, especially those who hadn’t been running groups for years and years.’*

In the services, adaptation of the model varies.

- ❖ All services aim for clients to receive the most appropriate pharmaceutical aid, NRT or Bupropion. (See section on prescribing.)
- ❖ It seems that all services use a CO monitor at all sessions:

*‘We do CO readings every week. It is like the scale at Weight Watchers and they call it my lie machine.’* Specialist

However,

- ❖ not all services run an initial assessment session or any sort of motivational assessment, before the main treatment course (as discussed above).
- ❖ IMH, Gwent and Bro Taf run six sessions, North Wales and Dyfed Powys runs up to eight sessions. Individual specialists allow clients to continue for longer. They find that some clients keep coming to groups because

*‘They are just very lonely and come for someone to talk to. You can spot them a mile off but we would never exclude anyone.’*

- ❖ most courses have sessions every week but there are individual specialists in North Wales and Dyfed Powys who meet their clients every two weeks.

Most clients should have set a quit date in the second week of the course, but this is not always adhered to.

*‘They do not always quit week 2, it depends on how prepared the person is. Some people need a transitional period when they put their new coping mechanisms alongside their smoking for a time. The preparation is as important as the stopping’.* Specialist

- ❖ Re-entry of clients to courses varies, but most services suggest waiting for six months, in line with the recommendations of the NICE Guidance on re-use of NRT and Bupropion.
- ❖ IMH only run groups. In Gwent the emphasis is on groups but in the other services, a mixture of individual and group sessions is offered.
- ❖ All services reported that lengths of sessions would be about an hour for groups but usually less for individual consultations.
- ❖ Services provide their specialists with additional materials. IMH and Bro Taf mentioned using the Ash in Wales publication ‘The Really Helpful Guide to Running Stop-smoking Groups.’ However even then specialists often use their own judgment about which activities to include.

*‘I do not do the relaxation sessions. You have to adapt the sessions for your clients, we get a lot of farmers up here and they would think that I had gone loopy.’* Specialist

Although all staff receive Maudsley training or internal training based on the Maudsley model, it is evident that clients of the Welsh SCS are not receiving the same intervention as those who attend the Maudsley model in London. The important questions are; would it be possible to achieve that? And should services actually be trying to do so?

From the outcome evaluation we have found that only 12.3 per cent of clients who attended a first appointment with the service go on to attend all six sessions. This could back up what one Assembly official said

*'It is a real quality issue if lots of people are dropping out – maybe the course is not helpful.'*

Roy Castle Fag Ends Community Stop Smoking Group has been providing smoking cessation support within the community in Liverpool since 1994. In 1999 it became the Specialist Smoking Cessation Service for the city. The support they offer is based on motivational interviewing. The service makes every attempt to ensure that there are no barriers to referral; clients can turn up without appointments and slot into one of the forty support groups that run weekly at set venues across the city. Clients can continue attending for as long as they need and can re-access whenever they want. There are usually two specialists running the groups. First appointees are seen separately and then join the group. The specialists value the fact that clients are at different stages of their quit attempt. One specialist offers one-to-one support at the Roy Castle Foundation.

NRT is given out on a voucher scheme. If clients are not eligible for free prescriptions they pay at the pharmacy when collecting the NRT. Their self-reported quit rates in 2001 – 2002 are 72 per cent at four weeks.

### 5.8.3. Relapse Prevention

Staff in many of the services commented that they found the follow-ups, required for the evaluation, useful in terms of relapse prevention. They have other concerns about the method of collecting these data which are discussed in section 9. Some services have, because of these reservations, considered other ways of relapse prevention.

- ❖ Dyfed Powys has a flexible approach to this and some groups meet the specialist for up to nine months after the quit date.
- ❖ In IMH they do not offer formal relapse prevention but it is offered opportunistically at follow-ups.
- ❖ In Gwent a formal session is offered to most clients at two months, many people drop into the venue when the course is finished because venues have courses running throughout the year.
- ❖ In RCT clients can attend Follow-up Support groups at three months and have access to telephone support:

*'If someone looks a bit vulnerable then they are offered telephone support to the [specialist] in the morning between certain times but few take this up.'*

Many of the services reported that when groups had gelled well together they arranged to meet up informally, but without service support.

In England it was found that there was no clear evidence that relapse-prevention sessions were effective (West and Raw 2002). Their recommendation was to encourage clients to rejoin the service for cessation after an appropriate time. This was echoed by a coordinator in Wales:

*'We do not take them (clients) back until six months has elapsed, as in the NICE guidelines. This fits in with motivational interviewing too because you do not want someone to go into a pattern of failure. They do everything again, including the information session.'*

This is certainly an aspect of the intervention in which there is a great deal of variation among the services, and which should be considered on a national level.

## **5.9 Access to Services**

### **5.9.1. Venues**

All services are keen to find venues for running cessation sessions that are easily accessible to clients. A key issue on which places are chosen is ease of access for socio-economically disadvantaged clients. This can mean basing sessions in deprived communities so that no transport is necessary, or in central venues close to public transport links. All services will monitor the success of each venue and re-use those that are popular with clients. Of one venue a specialist said,

*'I am booked in there two or three times a week, its right in the middle of town, right by the bus stop, there's a car park right by it.'*

Another specialist remarked that the advantage of re-using venues is that *'People know where we are.'*

Where services differ is in the use of community or health venues, as shown in the individual Case Studies in Appendix 1. A wide range of views was represented in interviews across the services:

*'We don't like to use health venues because of associations that they bring with them. The service is largely de-medicalised, so it is appropriate that it is not run*

*in an NHS centre.*' Coordinator.

*'There is no payment for health clinics, but for community centres there would be some sort of payment and smoking cessation has been so tightly funded it has been hard to do that.'* Collaborator

*'We use NHS (GP practices or Health Centre) premises for the initial assessment. It makes the connection that this is an NHS service.'* Coordinator

*'When we ask clients what they like, they often say that they think we're more of a valid service if we're in a health setting. But some like to get away. The important thing is that it is local. 40+ per cent of people in [the area] don't have access to a car.'* Coordinator

*'In the surgery and health promotion unit people attend regularly or ring to say they are not coming. In other venues this is less so; there is no respect for the service.'* Specialist

In interviews, some staff expressed an interest in looking at the feasibility of having Drop-in Centres (urban areas) or a Smoking Cessation Bus (rural areas) to increase accessibility to clients.

**The four services in the West Yorkshire Smoking and Health area** bought a double-decker bus with a grant from the Tobacco Control Alliance. Fund raising and the support of the local PCTs cover its running costs. It is used for at least one day a week by each service in West Yorkshire to raise awareness of their work. It is driven to shopping centres, community festivals and other popular places where people gather. It is staffed by freelance workers who can give brief interventions. It is not used as a setting for providing cessation courses.

**Burnley Stop Smoking Service** hired a small bus to go around the workplaces in Industrial Estates. A health visitor runs six-week cessation interventions and provides NRT by a Patient Group Direction, which encourages workers to attend all six sessions.

**In Liverpool, the Roy Castle Foundation** allows anyone to drop in at any time. All specialists are based at the foundation, with one running individual support from there. This means that a specialist would usually be available to give the client their initial meeting and then tell them how they can access support groups or further individual support.

### 5.9.2 Timing of Sessions

The time period during which clients can access cessation support seems to be based on whether the service is run by sessional or full/part-time staff. The former offer mainly evenings (between 6 – 8 pm) when specialists have finished their other work. The latter mainly offer daytime or traditional office hours as their specialists are employed to cover that time. There are exceptions to this, with one part-time specialist

offering sessions up to 9 p.m. in a town-centre venue and another one offering late-evening sessions to fit in with local farmers' work. Some services have looked into this issue and the employment of Project Support Officers in areas with sessional specialists is aimed at re-dressing the balance and offering daytime cessation sessions.

### 5.9.3 *Language of Delivery*

Cessation is offered through the medium of Welsh only in areas where the need is considered overwhelming and there is a specialist who speaks Welsh. It could be possible that in other areas some clients would prefer to have support in Welsh. Work with clients from ethnic minority groups is either delivered in English or with translation. It seems appropriate for services to be able to offer support in the preferred language of the client, perhaps by using sessional or non-core staff.

In Bradford all cessation aimed at ethnic-minority groups is delivered in their native tongue. In attempting to encourage clients from different races to access the courses the service is very flexible with the times at which support is offered, for example Bengali restaurant workers can attend cessation at the end of their working day, after 12 midnight.

### 5.9.4 *Offering Group or Individual Intervention*

In Wales, from data collected at first appointment, 34.6 per cent of clients would have individual treatment, 63.3 per cent group treatment, 1.8 per cent be seen in a pair, 1.4 per cent in a mixture of these, 0.9 per cent not known. Gwent (90 per cent) and IMH (100 per cent) almost exclusively offer cessation in a group setting, while elsewhere it varies among services, or among specialists within services, whether clients receive the intervention in a group or as individuals.

There are positive factors to running groups, such as:

- ❖ the evidence base from the Maudsley promotes group work
- ❖ it is possible to have a higher throughput of clients
- ❖ it is more cost effective, particularly in the services that employ sessional staff
- ❖ it is not a problem when clients do not attend
- ❖ groups can be supportive during the intervention and beyond.

*'It's much more powerful if you get people in a group saying something, rather than a trainer just telling individuals that some people find this and some people find that.'* Collaborator

*'What people will often feed back is that if it wasn't that they were coming to the group they would have had a cigarette. Sometimes it is not letting the groups down and sometimes it is having a bit of competition.'* Specialist

However even if services are keen to run groups there are instances when it is not possible:

*'I see the added value of groups but in a rural area you have to do some one-to-ones , as people want to give up smoking now not wait until the service gets together a group.'* Collaborator

*'One-to-one is only run for those who wouldn't cope with a group or the group won't cope with them. Mental health problems, they talk too much, or they smell!'* Coordinator

There are also positive aspects to running individual sessions, such as:

- ❖ it allows the needs of individuals to be met more easily:

*'Doing individual work gives an opportunity to more closely tune your work to the individual's needs';*

- ❖ clients are more used to this, as in individual GP consultations;
- ❖ it is a way of cutting down the waiting time for clients; they do not have to wait until there are sufficient numbers to form a group;
- ❖ individual interventions need the minimum of space and so can be run in many venues that would not be appropriate for group work; and
- ❖ it can be less threatening for a specialist than a difficult group.

In terms of the preference of clients, this reportedly varies among services, although this could be related to the service usually provided and the way in which alternatives are offered:

*'I don't think this is a problem, we've never been asked for individual sessions.'* Specialist (from an area where groups are the norm)

*'I would run a group if there was a demand but there is not'.* Specialist (from area mainly offering one-to-one courses).

#### 5.9.5 Promoting the Service

The timing of the introduction of Bupropion, just as services were starting up, meant that many of the services had no lead-in time to plan their promotion strategy. They had to react to overwhelming interest from health workers and the public.

Most services have tried some large-scale local advertising in the local media but have found it expensive and have not observed any real increase in the numbers of clients. From the outcome evaluation we have found that 1.8 per cent of contacts to the

services in Wales heard about the service through an ‘advertisement in a newspaper, cinema or radio’. One collaborator did note however that:

*‘It takes a long time for a new service to get to the public consciousness. Advertisements in the Echo could start that off but not remembered when they get to the point of wanting the service.’*

Many commented that services did not have a sufficient budget to advertise successfully and that it could be a national role.

At the moment all promotional materials are different, see Appendix 5 for copies of the promotional cards from the services. Names relating to services differ; there is no standardisation of logos, no recognition of the Assembly role in the funding of the services. All have different telephone numbers:

- ❖ in Dyfed Powys the advisor’s mobile phone numbers are on cards and local advertising;
- ❖ in Bro Taf there is a freephone number based in RCT for all services.
- ❖ in Merthyr clients can contact the health promotion department direct because it was felt that it was important to have a local phone number;
- ❖ in Gwent there is a free phone number for all to contact;
- ❖ in IMH the number given on promotional materials is the health promotion department of each LHG; and
- ❖ in North Wales there is a central number, but it is not a freephone.

Details about how people can contact local services are given out by Ash in Wales to all people who ask for support materials on the NHS helpline. A member of staff there remarked that:

*‘There are so many numbers it looks really confusing.’*

This lack of identity is confusing both for potential clients and for professionals who might potentially refer clients to the SCS.

There have been some increases in referrals from lower-cost options such as bridge banners, information in council workers’ pay packets and advertising on the Local Authority website, leafleting at local cinemas and putting information about what courses are running, in the free ‘What’s On’ section of the local papers.

Staff from all services told us in interviews that they had considerable success from concentrating on target communities, and from putting up posters and leaving cards in public places such as shops, hairdressers and libraries as well as the more obvious health settings. Word of mouth is important to all services; satisfied clients spread the word. In the outcome evaluation we found that 9.4 per cent of contacts to services were from people who had heard about the service through ‘recommendation of friends or family’. In one rural area a specialist said,

*'I had someone in a group who ran the angling shop and I had quite a few people who had been in that shop. He had a little pile of cards by the Angling Times. The darts group also told their members about it.'*

## **5.10 Relationship to Primary Care**

### *5.10.1 Referral*

From the outcome evaluation, GP and practice nurses were the main source (67.8 per cent) of contacts to SCS. All services are keen to get referrals from GPs and other primary care workers. Most concentration goes into encouraging GPs and practice nurses although some include pharmacists, dentists, health visitors and opticians.

There has been a general move away from getting health professionals to fill in paper referrals. These would have been sent to the services for specialists to then contact the patient, and this led to people being contacted who were not motivated to quit. Now, health professionals are encouraged to give out cards with the details of the service and let patients make the contact.

Most comments expressed in interviews were about the response of GPs; some were complimentary:

*'GPs have been very positive all along. "It has done the Health Promotion service" a lot of good. They have always thought of us as a bit woolly to run a service, that they really value it, is good'.* Collaborator

In Merthyr, a satisfaction survey which had a positive response was sent to GPs. Dyfed Powys staff also had favourable comments on the service in questionnaires sent to GPs.

Some other services have found GPs a difficult group to approach and there are some GPs who appear reluctant to refer. Low rates of GP referral can be dependent on how many practices are already offering cessation for patients. In Cardiff, which has fifty-five GP practices, thirty-nine said they were offering specific cessation services to people who want to quit. (An audit of all practices across Wales by the University of Wales, College of Medicine – unpublished). In other cases it seems to be related to the personal views of GPs. Specialists have found that there are those who believe that patients should have the willpower to give up on their own.

In all areas there has been a need for hard work by cessation staff over time to show that the service is worth referrals. Services have found that some approaches are time-consuming but seem to work well:

*'We have found that visiting GPs is more effective than writing to them.'*  
Specialist

*'We have a record from the client forms of which GPs are referring; we can then go and speak to GPs who are not referring. We are there to save the GPs' time. GPs have very little time and this is something we can do for them; we are offering a treatment.'* Specialist

There are a number of specific initiatives which coordinators believe have helped raise awareness of the service within Primary Care.

- ❖ In IMH, services have put a lot of energy into getting promotional material to any health group that can refer:

*Posters and cards are always being sent out as resources to community and health settings. Every optician, pharmacist, dentist and every GP in - , has a letter drop with a poster and within three months they have a personal visit to supply them with cards in a plastic holder which they can leave on display for their clients to pick up.'* Coordinator

- ❖ Dyfed Powys has a Smoking Cessation Steering Group which has representatives of different health worker groups. The same service sends client feedback and success rates back to GPs on a quarterly basis.
- ❖ In RCT the service links closely with all GPs and has offered all surgeries a CO monitor to assess patients, particularly at assessment clinics. The service provides training on how best it can be used.
- ❖ In Neath Port Talbot a trial is being run in which some GP practices are putting stickers on the notes of patients who have received a brief intervention on smoking and are given the details of the Cessation Service; they act as an *aide-memoire* to follow this up with patients. It can also ease prescribing for these patients. In the same service, the project officer will spend some time based in associated pharmacies; if people come in with scripts for NRT or on an issue relating to smoking, they are encouraged to talk to her. It is also an opportunity to provide brief intervention work. Neath Port Talbot also has Practice Level Agreements with the Primary Care Teams with targets on smoking. Since the introduction of the National Service Framework on Coronary Heart Disease, they have spoken to the CHD lead nurses in all the practices. An obvious spin-off is that more people are aware of the service and the need to refer their patients.

A number of specialists and coordinators said that they found previous work in Primary Care helped with relationships in this area.

*'I was district nurse for seven years, so I do know a lot of people. I know a lot of the GPs and have always worked in this area.'*

Services that have been set up as community-based services, using no health premises for courses, still depend heavily on referrals from health workers. It is a feature of the services in Wales that with very few exceptions, community workers are not actively encouraged to refer.

#### 5.10.2 Prescribing

The problem that all services find with prescribing pharmacological therapy (NRT/Bupropion) is the variation between GPs. This is summed up by one coordinator's comment:

*'Some people can walk into their GP and get a prescription from the receptionist very easily for the whole duration of the course. Others have to make appointments and they sometimes are not getting their NRT until towards the end of the course. Others can't get it at all.'*

There is also a difference in the time GPs are prepared to prescribe for. As one specialist points out,

*'It is variable with the GPs; some prescribe for two weeks, some for one and some for three months. If that variation could go that would be for the best.'*

There was a general belief that this situation has improved over time and with the introduction of the NICE Guidance. Within all areas, information went out to all GPs about the Guidance, either sent directly from services or through the pharmacy advisors. North Wales has also started a system in which all clients have a card which verifies attendance at a course; the aim is that this can be used for clients to get their NRT from GP receptions rather than having to make an appointment to see the GP each time. In Dyfed Powys, all advisors organise the first prescription of NRT for clients. The advisor phones through and the clients pick it up from the surgery. For Bupropion they have to see their GP.

One way in which the difficulties of over-prescribing can be overcome is with a Patient Group Direction (PGD). None of the services has introduced one although a number expressed an interest in trying it in the future. Gwent investigated nurse prescribing and in Rhondda Cynon Taf the possibility of having a PGD for a community pharmacist is being explored by the pharmacy advisor. North Wales has actively looked into the possibility of introducing PGDs for some time, but has not been successful in introducing them.

The NICE Guidance encourages the use of **Patient Group Directions** for cessation services. *'Patient Group Directions for Bupropion and NRT could be considered where responsibility for smoking cessation lies with appropriately trained non-physician health care professionals (such as nurses or pharmacists), and access to a medical practitioner for prescription is limited. This would enable convenient and timely provision of smoking cessation pharmacotherapies to patients in accordance with a strict protocol. For NRT nurse-prescribing is also an option.'* (Para 7.5).

Many services in England and Scotland are using PGDs for all or some of their clients. The perceived advantages for the services are

- they provide a one-stop-shop for clients. They remove the difficulties that arise with differences in prescribing patterns among GPs;
- it encourage clients to attend courses on a weekly basis; and
- it can raise the profile of the service for clients and health professionals.

The charity PharmacyHealthLink has published a template for Patient Group Directions: *'Improving Local Access to Smoking Cessation Therapies by Using Patient Group Directions'* (Armstrong, McNeill and Robbie 2003) There is clear guidance for setting up a PGD for smoking cessation therapies.

- Preliminary meetings
- A rationale for developing a PGD
- Funding
- Writing a local PGD
- Supplying the smoking cessation therapies
- Audit and administration
- Authorisation – by a signature on behalf of the NHS Authorising body, lead clinician, and lead pharmacist.
- PGD training
- Review of PGD

When cessation staff are nurses, health visitors or midwives they *have authority to supply under a PGD*. They could therefore provide a one-stop shop for clients. If that is the case there are strict storage and audit requirements, which could have implications for administrative staffing levels.

Where services have some staff that do not have this clinical background, the PGD can be held by those members of staff who have, or (through Community Pharmacists and the staff) give Letters of Recommendation to supply, which the clients take to the pharmacy to receive their NRT. This is similar to the voucher schemes.

- PGDs can be used for NRT and Bupropion.
- They are being used in services to increase the use of NRT for young people, pregnant women and those with Coronary Vascular Disease. This is because PGDs can be used to supply outside the licence.
- Funding PGDs should not be a matter for cessation services but should come from the prescribing budgets of PCTs in England/LHGs in Wales.

### 5.11 Relationship to Secondary Care

From the outcome evaluation we found that 2.7 per cent of contacts to the service had heard about them through hospital services. There is a big variety across Wales in terms of the relationships that the SCS have with secondary care. Bro Taf has three hospitals with their own separately funded cessation services. There are close links between them and the specialist SCS. All other services provide some link with the hospitals in their areas. This can be through training staff, encouraging referrals and providing help for patients and staff to quit.

### 5.12 Training of Health Professionals by Cessation Staff

Training was not specified at set-up as an integral part of the role of cessation staff. However staff members in all services are providing some training for health professionals. There is, however, a lot of variation in what is being offered:

- full training to run cessation courses
- brief intervention training
- raising awareness of the service and encouraging referrals.

There are also variations in who is running the training. In some services it is provided by members of staff who have a wider smoking/health promotion remit, such as the coordinator in Cardiff and the HPOTCs in Dyfed Powys. In others, it is a central part of the role of cessation staff as in the case of Swansea's coordinator.

Some see value in training to raise the profile of the service and to increase referrals. Others expressed a concern that there is no national recognition for any training. Those who run full cessation training believe that if any health professionals who attend the course then go on to run cessation, then their figures should be included in the data collection. It was not a unanimous view that services should train health professionals to run cessation in their own workplaces. Some staff believed that this would compete with the specialist service.

Plymouth SCS provide a day's training and regular updates to any professional who has an interest in running cessation as part of their work. There are two hundred people who have received training, are offered annual update courses and are registered as providing cessation. Their figures count in data sent to the Department of Health, but they are not paid by the service. They include a wide variety of health workers and also youth and community workers, staff in health-and-fitness centres, people from the armed forces and school staff, including teachers.

It seems that the introduction of the National Service Frameworks has had an impact on the services in the field of training. One collaborator noted that:

*'There is a real interest (in brief intervention training) now that the NSF has kicked in.'*

- ❖ HPOTCs in Dyfed Powys are working with the LHG to develop protocols on how GP practices can raise the issue of smoking and what can be done with patients who are at risk of CHD.
- ❖ Specialists in North Wales work closely with local CHD liaison nurse to assist cessation.
- ❖ In IMH the Cardiac National Service Framework Key Personnel have all been trained. They are instigating

*'...if not structured cessation services, then positive brief intervention, positive prompts and positive reinforcements.'* Coordinator

It can be expected that the new GP contract will promote further interest in brief intervention training, and other training to promote referral to SCS by primary care staff or provision of SCS in practices.

## 5.12 Priority Groups

From the interviews undertaken for this research, it was clear that there was a tension between, on the one hand, the priority to get as many clients as possible through the service, and on the other hand, the targeting of priority groups who could be hard to reach and/or less motivated to quit. The pressure of getting numbers through seems to dilute targeting

### 5.12.1 Socio-economically Disadvantaged

The White Paper supported by the Welsh Health Circular expresses the need 'To help adults - especially the most disadvantaged - to give up smoking.'

Services approach this in a number of ways:

- ❖ Dyfed Powys was set up to target eleven towns that contain deprived wards;
- ❖ in Gwent there is no specialist based in the wealthiest area of Monmouthshire and additional Inequalities in Health money has been used to aim the service at the five most deprived wards of Blaenau Gwent;
- ❖ the funding for the Bro Taf service was divided between the four LHGs using a formula based on smoking prevalence and the standard deprivation weighting used by Primary Care. As the Collaborator explains:

*'If the aim is to reduce inequality, you have to do it [organise the service] on the basis of inequality.'*

- ❖ The work that is done as part of the Barry Heart Health Project is aimed at the five most deprived wards in Barry. In Rhondda Cynon Taf there is a link with the Heart Attack teams which work in 'Communities First' areas;
- ❖ In IMH the community venues are chosen for ease of access by lower socio-economic groups;

*'Fourteen of the wards in the service area have Objective One funding. The service has the capacity to deliver eight venues across those wards. We move out of a target area only if there is not the capacity to get a group within it.'* Collaborator

- ❖ In North Wales there is a focus on providing accessible venues and encouraging health professionals in disadvantaged areas to refer their clients to the service.

In all areas targeting is not exclusive and there was a view prevalent among some specialists that

*'It's unfair if you start to discriminate against people.'*

#### 5.12.2 Pregnant Women

Again it is a recommendation of the Welsh Health Circular that services should 'offer particular help to pregnant women who smoke.'

Generally the services did not feel that they were very successful at attracting pregnant women to the service.

- ❖ In Dyfed Powys the service has been training health visitors and midwives. Some specialists have linked with Homestart, Surestart.
- ❖ In Gwent they work only with pregnant women who are motivated to quit. Individual sessions are provided for them. A pilot project has been run in Caerphilly Miners' Hospital training midwives to refer to their clients.
- ❖ In RCT Bro Taf the few pregnant women who access the service are fast-tracked and given individual support. In Merthyr midwives are trained. In Cardiff and the Vale of Glamorgan midwives were trained to run cessation, but found that they were too busy to carry it out. The coordinator is providing brief intervention training to community and hospital midwives and Surestart staff. She is also involved in a trial to use NRT for pregnant women at Llandough Hospital.
- ❖ In IMH, training and resources are given to midwifery services. Groups are offered in an antenatal setting. In Neath Port Talbot trained midwives provide these sessions. The service pays a sessional rate to the Trust to run them. It has been difficult to get women to the end of six weeks.
- ❖ In North Wales specialists have tried running cessation in Surestart sessions without great success, and training workers in a family centre in brief intervention. Materials available from The Royal College of Midwives have also been sent to midwives. Brief intervention training is offered in some areas.

The Department of Health gave extra funding to services in England to enhance cessation rates in pregnant women. Overall this met with limited success. However a number of services in England have seen increases in referral and quit rates in this target group. An analysis of the approaches taken by North Staffordshire, Doncaster and Plymouth, shows that the following seem to have an impact:

- \* having a dedicated ‘Smoking and Pregnancy’ specialist, rather than generic specialists trying to help pregnant women as well as their other clients;
- \* having a specialist from a midwifery background;
- \* the specialist working closely with maternity services;
- \* pregnant women being seen on a one-to-one basis, or with partners and other family members if appropriate; and
- \* cessation provided within the client’s home.

None of the following groups have been specified as target groups in any documentation. However the services believed that to encourage cessation within them is a way of tackling inequalities in health.

#### 5.12.3 *Ethnic Minorities*

From the outcome evaluation, 819 clients identified themselves as white, seven mixed (Dyfed Powys 2, Gwent 3, Cardiff 1 and North Wales 1), one as Chinese (Dyfed Powys) and four as Asian (Gwent 2 and Cardiff 2). 98.6 per cent were white compared with 97.9 per cent of the Welsh population according to the 2001 census data.

There are only two services that have considered it necessary to provide any targeted service to this group.

- ❖ In Cardiff the counsellor works with clients of many different nationalities, with the nurse, at the Asylum Seekers’ Project. In the first year of the service a young Bangladeshi man undertook a needs assessment of Bangladeshi men. This has been followed up by work by a Community Researcher for the Bangladeshi and Bengali community. She is employed through the Barefoot Workers’ Project. She facilitated focus groups advertised through community settings and the mosques but has had a low response within the community so far. In all initiatives, cessation has been provided with translation.
- ❖ In Swansea, they have tried to attract members of ethnic communities to the service. They have made links with Swansea Bay Equal Opportunities Council, made announcements in the mosque, offered training in the community, opened a venue in a community centre within the heart of the largest ethnic-minority grouping residential area and made sure they have up-to-date literature and posters. However, they have received no self-referrals from these initiatives.

**Tower Hamlets PCT funds a project serving the Bangladeshi community.** The project partners are Queen Mary University of London and Social Action for Health, a community organisation. They have an advisory group, made up of smoking cessation advisors and community members, which meets quarterly to discuss and advise on new developments.

The project tries to meet the needs of the local community by using bilingual, gender-specific male and female advisors. All materials, including advice pamphlets, contact details and questionnaires, are printed in both English and Bengali. They are proactive in the community, recruiting at a variety of venues such as local food co-operatives and English-language classes. Once clients have entered the programme, they receive one-to-one counselling on a weekly basis, with NRT. This can be in community settings or at home. They have a 62 per cent quit rate at four weeks.

**Bradford District Stop Smoking Service** has South Asian Development Workers. They are fully trained specialist advisors who can support clients in Urdu, Punjabi and Hindko. The service ran a high-profile campaign during Ramadan last year. It included a tour within appropriate communities by the West Yorkshire Smoking and Health 'Quit Smoking Bus', to raise awareness of the campaign. Five local mosques agreed that the service could hand out gifts of dates and information about available services. Two Imams agreed to include a message about smoking in their Friday address to their congregations. The whole campaign attracted a lot of press coverage and increased numbers from these communities accessing the services from 100 in 2000-2001 to 320 in 2001-2002. This increase has continued.

#### 5.12.4 *Young People*

A number of services have been running pilot projects funded separately by the Assembly, which have been evaluated by the University of Strathclyde. It is not the remit of this report to consider these. All services noted that the specialist service was aimed at the 18+ age range but could give examples of times when teenagers younger than that had accessed the service with parents or grandparents or through school nurses. Some expressed an interest in working with younger people. However the two collaborators recommend caution:

*'A completely different approach is required. You cannot assume that people who work well with adults are automatically going to be able to work with young people. It is a given that children's services in health should be different, you can't integrate.'*

*'I believe that adolescents need their own service, not to access them into mainstream. The Children's Act has an impact there.'*

There was a related issue bought up by one collaborator.

*'I would like to know how to get younger people into the service (18+), our cohort is 40+.'*

In the outcome evaluation it was found that people in the 50-59 and 60-69 age range had the highest quit rates. This is in agreement with English findings that people over 60 have the highest quit rates according to the Department of Health statistical bulletin. The older-age groups were also found in our outcome evaluation to be less likely to be lost to follow-up at both four weeks and three months. (See outcome evaluation results for tables).

#### 5.12.5 *People with Mental Health Problems*

All areas seem to get people with some special mental health needs. There are training implications for staff on this issue which were picked up by the Assembly. Some specialists expressed an interest in having further help in this area.

Two services have actually made moves to attract those with mental health problems to use the service.

- ❖ Dyfed Powys ran a pilot project in the Mind Centre in Carmarthen. They developed a protocol for running cessation for people with mental health problems. They did a presentation at the Assembly for the cessation services, based on this. A bid has been made to develop this work further.
- ❖ In Gwent one specialist has also done some work with Mind.

#### 5.12.6 *Prisoners*

The Swansea service has run a pilot project in the prison. The coordinator was asked by the pharmacist to the prison to address some issues raised by smoking cessation, and from this ran a six-week smoking-cessation support group. Ten prisoners attended but as Swansea is not a long-term prison, prisoners were sent to other places in the middle of the course. Even so, two prisoners did quit. The coordinator wrote an evaluation, sent it to the Assembly and to the Governor, emphasising that if the service was to continue in any format, somebody would have to attend the training to take it over. That was agreed. It was also negotiated that the prisoners would pay £3.50 for their NRT which was the equivalent of their tobacco allowance each week, and in return have some kind of benefit such as extra gym time. This was approved. A member of staff came in to do the training; she was then supported by the coordinator to collate the resources that could be used and to redraft the guidelines and the weekly session planner specifically for the prison. The Governor had said that prisoners would stay until their sessions were finished, but that did not happen. The extra gym time and the payment for NRT were kept.

*'The last data I had from the prison were that it was running out of funds, it was becoming so popular.'* Coordinator

The Department of Health and HM Prison Service have recently published: *'Acquitted. Best Practice Guidance for Developing Smoking Cessation Services in Prisons.'* This builds on the experiences and learning from the Department of Health Pilot project run between May 2001 and September 2002. It concludes that there is a considerable demand for cessation in prisons and that worthwhile outcomes can be achieved. A needs assessment undertaken at the beginning of the project in two separate prisons indicated smoking levels of 78 per cent and 88 per cent. It also showed a high demand for cessation. The guide provides practical suggestions for specialist cessation staff and prison officers. It urges services to consider developing cessation for prisoners as an inequality-in-health issue.

### 5.13 Evaluation

Evaluation has been an issue of great concern and has caused tension in the relationship between service staff and Assembly officials. In the initial round of interviews with collaborators and coordinators, the time spent on evaluation activities, and the perceived changing evaluation agenda, was raised as a high-priority issue. Data from the coordinator and staff questionnaires suggested that about 30 per cent of staff time was spent on evaluation and administration activities. The general view of the services is expressed in the following comments:

*'It is too data loaded. The coordinators have been so busy with the data that they haven't actually been able to go and raise the profile of the service.'* Collaborator

*'In one month I had 121 contacts to make, multiply that by the three times we have to try each client and that could mean up to 363 calls.'* Coordinator

The Welsh Health Circular laid out the responsibilities of the services in relation to monitoring and evaluation:

**The continued provision of these additional smoking cessation monies for 2000-2001 and 2001-2002 is subject to the successful implementation of the proposals and evidence of the effectiveness of the services. Health Authorities will need to provide the National Assembly for Wales with the following data:**

- **The number of smokers within the Health Authority who have used the service (broken down by gender and age);**
- **The number of smokers within the Health Authority who have successfully completed a course of treatment, including how many have received free NRT (broken down by gender and age);**

- **Initial one-month quit rates, and in due course three month quit rates, broken down by the same categories. One month quit rates have been shown to be a good predictor of eventual quit rates at 12 months;**
- **The number of wte staff employed through the service. Is there a dedicated specialist smoking cessation coordinator?**
- **The overall cost of the service, including the cost of free NRT; and**
- **Users' impressions of the quality of the service provided.**

This made it clear that it was the responsibility of the services to provide the Assembly with this data. However the problems seem to have arisen when the detail of the data to be collected was decided upon after the services were already set up.

*'I was asked to be involved towards the end of the first year, after all the planning had been done ... My role was to advise on evaluation; the services should have done their own evaluation and analysis. I was happy to chair meetings and then discuss as a group what data we believed was sensible to collect.'* Researcher, Assembly.

As in other features of the cessation service, there does appear to be some expectation by the services that the Assembly would give stronger national guidance at the start of the cessation services, particularly in relation to providing a database:

*'People all over Wales are doing things very differently and it would have been good if somebody had had the foresight to provide everybody with the databases they need. Now it's probably too late to do anything centrally because everyone has devised their own systems and they would feel quite territorial about those.'*  
Collaborator

In fact, during the duration of this evaluation, North Wales did not have a functioning database. But it is certainly true that services have been collecting data differently, which makes a difference in figures. Appendix 3 provides one example of how questions on the same topic were asked differently, at different times, and with different response scales and codes. Other examples include the variation in how follow-up contacts were made, and how many attempts were made to make contact, and also whether clients re-entering the service are counted as new clients.

From the examination of the databases and questionnaires we found that services are collecting data in addition to that required for the national minimum dataset. This is for historic reasons in that the services were initially set up to be self-evaluating and so set up their own data collection for this purpose. However much of this persists when no analysis of the data is planned and also there is redundancy in many of the procedures, for example in Dyfed Powys, where clients are asked their ethnic group at client enquiry and initial questionnaire stages and both are entered on to the database.

The definition of items in the minimum data set must be standardised. For example, for setting a quit date, anyone attending week two of the course should be treated as if

they had set a quit date. Another example is quit status at follow up. At four week follow-up clients should be asked if they have smoked in the last two weeks, that is, two weeks after week two of the course, and it should be very clear that continuous abstinence is required from that time. At present some services are collecting data on continuous abstinence, and others on point abstinence.

Despite the great amount time and effort put into collecting follow-up data, the proportion of clients for whom no follow-up data are collected, even at four weeks, is very high.

Each service has set up its own database, and this has been a substantial project for each of them, particularly when they have not had ready access to the relevant IT skills. There has been much duplication of effort, with the result that no two services collect and record data in the same way. A standardised database is essential, and the fields that we believe are required on that database are listed in the Recommendations.

Some of the services perceive that data collection has set the parameters in which the services would operate. Even though all services signed up to the minimum data set there have been some concerns.

One coordinator told us that it would be good if the data were *'a service issue, not a research issue.'*

*'There is so much information it is very difficult to interrogate the databases and actually get the stuff you feel would be useful.'* Collaborator

*'A problem at the moment is that even though they record the name of the GP and the practice on the forms it does not go down on the database so they cannot extract figures easily to feed back to GPs about success rates for their practice.'*  
Coordinator

Another concern expressed by the services was about the lack of feedback from the Assembly, about the figures that were sent in. This seems to be a mismatch in terms of the services' expectations and the role of Assembly officials:

*'There was no commitment made, as far as the Contract went, that we would do anything with the data in terms of feedback to the services on the basis of the data we received. It was a monitoring role more than anything.'* Assembly Official

#### 5.13.1 Carbon Monoxide Verification

In the summer of 2000, a freelance consultant from GASP was bought in by the Assembly to undertake carbon monoxide verification of self-reported quitters at six months. However it seems that some clients who have received their 12-month follow-up are also followed up. The services send letters to clients and only those who consent can be contacted. The verification takes place in the client's home. Coverage

of Wales is patchy and there are some services that have never referred any clients to GASP.

## **6 Recommendations**

### **Core intervention provided by SCS**

1. The core service offered by the SCS to clients in the general population should adhere to the Maudsley model, which is known to be effective and is the evidence base upon which the SCS were developed. This core service should have the following components:

- face-to-face motivational assessment
- be group-based wherever possible
- to remain in the group, all group members to set a quit date at week two
- a maximum of 6 sessions
- have regular weekly sessions, and
- encourage use of pharmacological therapy.

2. For individuals for whom group sessions are not appropriate or very difficult to arrange (such as in sparsely populated areas), one-to-one interventions should be offered, as long as they are structured and given by adequately trained and experienced personnel working to a protocol (West *et al.* 2000).

### **Target Groups**

3. The tension between maximising the throughput of clients on the one hand, and the resource-intensive targeting of priority groups on the other, needs to be recognised explicitly in national guidance on service priorities.

4. Strategies to target priority groups, including those of pregnant women, ethnic minorities, young people and lower-income groups will need to be identified and coordinated at national level. For pregnant women, specific staff working with or seconded from maternity services, and offering flexible one-to-one intervention, appears to be most effective.

### **Accessibility of Services**

5. Services should have a clear national identity, with a standard logo and promotional materials, one freephone contact number, and a national standard of service provision.

6. SCS courses and motivational screening appointments should be held at a variety of times, including evenings and weekends, and at venues accessible to potential clients. Services should ensure that the provision of Welsh-language courses and courses in other minority languages meets the needs of the local population.

## **Relationship with Primary and Secondary Care**

7. SCS have a crucial role in promoting smoking cessation across the health service, particularly in primary care. SCS should dedicate much of their efforts towards training staff in primary and secondary care (doctors, nurses, midwives, health visitors, receptionists) to undertake at least brief intervention, and to promote the SCS courses.

8. A model that appears to be successful in many areas of England is to train members of the primary health-care team to conduct six-week cessation courses themselves, within their primary care premises. Such a model maximizes the accessibility of smoking cessation courses, although the quality control of courses provided by primary-care staff will be an issue. Clients seen by such distributed cessation services need to be included in the SCS performance measures. The new GP contract, with its many quality points for GPs who give smoking cessation advice, should increase GPs' interest in training staff for brief interventions and either referral to SCS and/or having staff trained to deliver a full cessation course within the practice. GPs will also need to record these cessation activities.

9. At both national and local levels, SCS must be more integrated into other initiatives to promote smoking cessation, including outside the health sector (for example by promoting brief intervention and referral to services among community workers, youth workers, and Sure Start.

## **Pharmacological aids**

10. A national protocol for providing access to NRT or bupropion should be developed and disseminated to GPs. The use of patient group directions to allow specialists to prescribe NRT (and possibly bupropion) in collaboration with pharmacists should be investigated.

## **Evaluation and Monitoring**

11. The burden of data collection should be reduced. This will allow more time for the service staff to spend on cessation work. Data collection should be rationalised and standardised, to increase the value of the data. A uniform computerised database should be provided to all SCS, with a form for data entry, to record a minimum data set using consistent questions, response scales and codes, which should include this information for each client attending a first motivational assessment appointment:

- Whether quit date has been set
- Age / sex / postcode / broad ethnic group/ pregnant / whether they have used service before.

If a quit date is set, the following information should be recorded:

- The use of NRT / Bupropion
- Smoking status and carbon monoxide reading at four weeks, for all clients setting a quit date (even if they are not attending subsequent

sessions) using a standard definition, which we suggest would be whether they have smoked at all in the last two weeks (meaning continuous abstinence from two to four weeks after quit date).

Each client setting a quit date should be asked to provide signed consent for their name, address and telephone number to be used to contact them for 12-month follow-up.

- Name, address, telephone number
- Consent to provide follow-up data.

GP's name and surgery should be recorded, so that feedback data can be provided to the GP, and to monitor patterns of referrals from different practices.

All of these variables can be collected within the course by the specialists, who will not need to undertake any further follow up of clients (other than that of those not attending the final appointment: these follow-ups should be done within a defined period). On a regular (monthly) basis, database information should be downloaded and sent to a national coordinator, to check for quality, completeness and consistency of data recording.

12. At national level, a sub-sample of clients setting a quit date should be followed up at 12 months to provide validated self-reports of smoking behaviour.

### **Organisation and staffing**

13. Each service should have one coordinator (and no separate collaborator) who has a secure full-time contract and whose main role is to manage and coordinate the service, and to liaise with the national service coordinators.

14. Each service should be of a sufficient size to provide a flexible service, allowing staff cover for holiday or sickness absence or unfilled posts, and to provide accessible courses at a range of venues and at various times of day. In England, the HDA recommend that each service should cater for a population of 500,000, which seems appropriate in Wales to allow for the required flexibility, LHB areas are too small. A combination of full-time, part-time and sessional staff could provide the best way to offer a flexible service, although this will vary according to the population density of different areas, and their success in training primary-care staff to deliver cessation courses.

15. Staff turnover has been a problem for many services, and will be reduced if staff are given longer contracts.

### **Training and Professional Development**

16. All staff should have appropriate, high-quality training in delivering all aspects of cessation to clients. The national standards for training developed by the HDA should guide the choice of courses offered to staff. Regular training events should be held in

Wales, to ensure consistency of training for SCS staff in Wales, and also to provide an opportunity to increase collaboration, and a feeling of national identity, among the staff.

17. SCS coordinators, and national coordinators of the SCS service, should ensure that they are up to date with the evidence base, developments and innovations in smoking cessation practice, and developments in other services in Wales that may be relevant to the SCS. Regular meetings of the coordinators, and membership of update services such as the Globalink Tobacco Action Network, would facilitate this.

### **National coordination**

18. Implicit in most of the other recommendations is the need to have strong national coordination of SCS in Wales. The initial funding period of the services encouraged variation in service specification to meet local needs. However, this has led to the fragmentation of services many of them are too small-scale, the services and their staff have been isolated, the services have no clear identity and access to services is not clear either for the public or for health professionals. The lack of capacity among services to collect and manage the monitoring data, and their desire to introduce local variations in data collection, has diminished the value of these data. Staff training and knowledge among staff of developments in smoking cessation in Wales and the UK has also been negatively affected by the lack of coordination, while attempts to target priority groups have been hit by the lack of capacity of isolated local services to tackle these groups effectively. For all these reasons, a nationally coordinated service is strongly recommended; the new National Public Health Service seems ideally suited to this role.

### **Research**

19. The evidence base for the development of SCS in the UK is provided by the Maudsley model (Hajek, 1989). However, in Wales as well as in the rest of the UK, the way SCS have been implemented has moved away from the precise service model operated at the Maudsley hospital. Innovations in smoking cessation practice, including the training of primary care staff to conduct cessation courses, the use of one-to-one counselling in rural areas and for priority groups, and the use of dedicated smoking cessation midwives, have not been thoroughly evaluated for either effectiveness or cost-effectiveness. Nor is it clear how the changes in smoking behaviour achieved by SCS are sustained, or how relapse prevention can successfully be tackled. Policy makers in Wales and the UK need to invest in high quality research to investigate these issues, so that the SCS can become a truly evidence-based service.

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