



**Cornwall Health Research Unit**

**Making a Difference:**

**The Stop Smoking Services in Cornwall & the Isles of Scilly**

**Assessment of the Service**

**& Effect on Behaviour & Smoking Habits**

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## Executive Summary

- This report represents phase three of a study which monitors users of the Cornwall Stop Smoking Services (SSS) in 2003 - 2004 to assess how successful the SSS has been and explores the reasons why unsuccessful clients have started smoking again.
- The methods used were a telephone survey with a specifically designed questionnaire at 52 week follow up. For phase three a number of new questions were included to determine :
  - the main reasons why people who initially were successful subsequently lapsed
  - how the client became aware of the SSS
  - the frequency of contact with the SSS during the quit attempt
- Of the 551 clients who used the service in 2003 - 2004, 23.4% were successful in quitting after 52 weeks.
- The number of successful quitters improved over the three phases of the study. Between phase one and phase three there has been a 5.1% increase in the number of successful quitters. However, the proportion of partially successful quitters has decreased by 2.2%.
- More males (31.8%) were successful at quitting than females (15.1%).
- There were no significant differences between age groups in being successful at quitting.
- There were no significant differences in the success rates of participants when grouped according to the three Cornwall Primary Care Trusts (PCTs). However, the success rate for participants residing in North & East PCT has declined over this last phase of the study.
- By far the majority of first contacts with the Stop Smoking Service took place at the GP surgery (84.9%).

- Nicotine Replacement Therapy (NRT) remained the most useful aid when attempting to stop smoking.
- The most frequent reasons given for having restarted to smoke after attempting to quit were stress at home, lack of willpower and enjoyment. This has not changed over the three phases of the study. Nearly 12% of unsuccessful quitters would have used a commercial aid if they were to try again.
- The Stop Smoking Service is still considered to be helpful or very helpful by the majority of clients who were successful in stopping smoking.

## **Introduction**

This report is the third in a series commissioned by the Cornwall Stop Smoking Service (SSS) which examines the efficacy of the services they provide to assist those in Cornwall who have attempted to quit smoking during the period 1999-2004.

The first report was an evaluation of how well the SSS was promoted during 1999, and assessed its impact upon public awareness. The results of this assessment were provided in a report published in February 2000 (*Stop Smoking Services in Cornwall: Effect of 1999 Campaign on Awareness and Behaviour. Cornwall Health Research Unit*) and the information was used by the SSS to assist policy formulation for service delivery in the following year.

The second stage of the project involved an assessment of the effectiveness of the services provided by the SSS by evaluating those who had used the service 52 weeks after their 'quit date'. This evaluation included clients who had used the service over the previous two-year period. The report of this evaluation was first published in October 2002 and updated in May 2003 (*Stop Smoking Services in Cornwall: An Assessment of the Service. Cornwall Health Research Unit*).

In March 2004 the Cornwall Stop Smoking Co-ordinator asked the Cornwall Health Research Unit (CHRU) to carry out further follow-up work on users of the SSS. The methods were similar to those used in the previous work, but further questions were added to establish how users first became aware of the service. The researchers also encouraged clients to re-establish contact with the service if appropriate, particularly where the individual was dissatisfied with the quality of support received initially

## **Aims**

The aims of the study, as set out in the proposal submitted to the Stop Smoking Co-ordinator in March 2004, are as follows:

1. To monitor those people in Cornwall and the Isles of Scilly who have used Stop Smoking Services and to assess how successful the services have been in helping them stop smoking.
2. To gather information on the reasons why people may have started smoking again after using the Stop Smoking Services.

## **Methodology**

The methodology is similar to that used in the previous evaluations. The only change has been the addition of a number of new questions in the questionnaire.

### *Design*

A telephone survey of users of the Cornwall SSS 52 weeks following registration. Registration took place between May 2003 and April 2004.

### *Sample*

Quota sampling was used to stratify by age (five age bands), gender and outcome (successful or unsuccessful). A sample size of > 50 individuals per subgroup was identified as being consistent with an expected quit rate of 13% detected in each group - this was the national quit rate for those using specialist services in 2001 (DoH, 2001).

### *Data Collection*

A questionnaire was designed to assess the effectiveness of SSS in Cornwall on clients who used the service, and to elicit reasons for either successful or unsuccessful attempts to give up smoking. The questionnaire was piloted with 20 users of the SSS. The final version of the questionnaire contained separate sections for successful and unsuccessful quitters. The questions were designed to elicit the client's reasons for success or failure, information about cessation aids such as NRT or Zyban (originally

an anti-depressant drug now seen to reduce the craving for tobacco), and the client's view of the service provided.

For this third phase of the project (clients with quit dates between April 2003 and March 2004) a number of small revisions were made to the questionnaire, reflecting earlier experience and the particular requirements of the current Stop Smoking Co-ordinator. These changes consisted of:

- The main reasons for wanting to give up;
- How the client became aware of the SSS; and
- Frequency of contact with the SSS during the quit attempt;

### *Procedure*

When contacting the SSS for the first time, each client was asked to sign a declaration stating that they agree to be contacted by representatives of the SSS, and for the data collected to be used for evaluation purposes. Telephone numbers for the survey were provided in the database for the SSS; if these were incorrect or not available, the local telephone directory was used. Three attempts were made to clients to ask if they would participate in the interview. All calls were made on a weekday in one of the following time periods: 10am – 12 noon; 2pm – 4pm; 6pm – 7pm. The interviews lasted between 5 and 25 minutes depending on the willingness of the clients to talk in detail about their experience in attempting to quit. The interviews followed a set format as dictated by the questionnaire but the interviewer was encouraged to explore issues as they arose.

### *Outcome*

During the pilot study it was clear that the Department of Health (DoH) definition of a successful quitter (not smoked at any time since two weeks after the original quit date, DoH, 1999) was insufficiently discriminating at the 52 week follow up to recognise the progress of many clients. For example, the DoH definition excluded those who believed they had broken their smoking habit, but did still smoke the occasional cigarette in a social situation; also those who had made repeated attempts to quit in the early stages, eventually stopping for good, not having smoked for, say, nine

months. To accommodate these types of clients, after consultation with the Cornwall SSS co-ordinator the following definitions were employed:

1. A successful quitter was someone who was not smoking at the time of the follow up **and** had not relapsed from the quit attempt for more than 30 days over the 12 month period.
2. Clients found to have given up smoking at the time of follow up, but who did not otherwise meet this definition were classified as 'partially successful'.

## **Results**

The format of this section follows where possible that of the previous evaluations. For the most part, the detailed results relate to the most recent survey, and where appropriate an indication is given in graphical form of how these results compare with previous years. Where such comparisons are made, reference is made to the three phases of the study, which were as follows:

Phase 1 – clients with quit dates between September 1999 and August 2000;

Phase 2 – clients with quit dates between September 2000 and March 2002;

Phase 3 – clients with quit dates between April 2003 and March 2004

In total, 3818 clients contacted the Cornwall SSS in phase three, and 551 questionnaires were completed. Quotas were calculated such that the sample was broadly representative of all SSS users in terms of age, gender and PCT area. The majority of quotas were filled for age groups 30 and above; however there was some difficulty in contacting sufficient clients aged between 18 and 29. For the quota to be fully representative of the client base, 46 more questionnaires (18 male and 28 female) from this age group would have been needed. The shortage was due to a variety of reasons, mainly unavailability at the time of the calls, unobtainable phone numbers (often a mobile) or where the client had moved house, which occurred more frequently in the younger age bands. A low response rate from this age band was also experienced by Ferguson *et al.*, (2005), who conducted similar follow-up. There were also some cases where information in the dataset was inaccurate.

Table 1 shows the demographic breakdown of participants who completed the questionnaire.

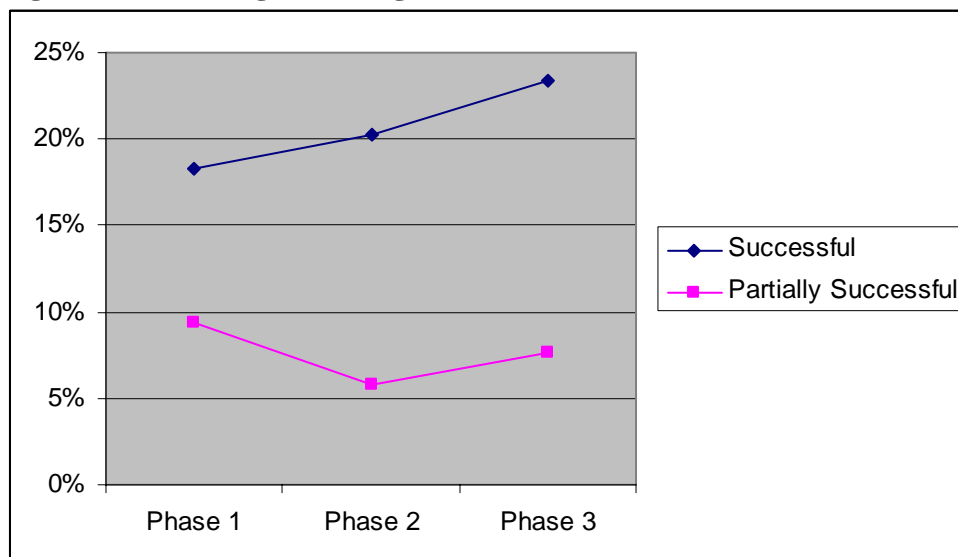
**Table 1: Questionnaires Completed by Age, Gender and Primary Care Trust 2003/04 (n=551)**

Age band	Male (%) n=261	Primary Care Trust				Other (%)	Female (%) n=290	Primary Care Trust				Other (%)
		West (%)	Central (%)	North (%)	Other (%)			West (%)	Central (%)	North (%)	Other (%)	
18-29	22 (8.4)	6 (6.0)	12 (13.2)	4 (6.0)	0	41 (14.1)	9 (8.7)	13 (14.0)	19 (20.9)	0		
30-39	59 (22.6)	25 (25.0)	21 (23.1)	13 (19.4)	0	84 (29.0)	32 (30.8)	27 (29.0)	24 (26.4)	1		
40-49	60 (23.0)	24 (24.0)	20 (22.0)	15 (22.4)	1	62 (21.4)	24 (23.1)	20 (21.5)	18 (19.8)	0		
50-59	61 (23.4)	23 (23.0)	20 (22.0)	17 (25.4)	1	60 (20.7)	23 (22.1)	19 (20.4)	17 (18.7)	1		
60+	59 (22.6)	22 (22.0)	18 (19.8)	18 (26.9)	1	43 (14.8)	16 (15.4)	14 (15.1)	13 (14.3)	0		
<b>Total</b>		<b>100</b>	<b>91</b>	<b>67</b>	<b>3</b>		<b>104</b>	<b>93</b>	<b>91</b>	<b>2</b>		

Note: the 'Other' category relates to clients referred to the Cornwall SSS from North Devon PCT

Based on the definitions set out in the previous section, of the 551 clients interviewed 129 (23.4%) were successful, 42 (7.6%) partially successful and 380 (69.0%) unsuccessful. Figure 1 shows the results over the three phases of the study:

**Figure 1: Percentage Quitting Over the Period 1999-2004 (n = 1930)**



The number of successful quitters has improved over the three phases of the study. Between the first and third phase there has been a 5.1% increase in the number of successful quitters. However, the number of partially successful quitters has

decreased by 2.2%. Statistical analysis using the chi-squared test showed the observed differences were statistically significant ( $p < 0.05$ ).

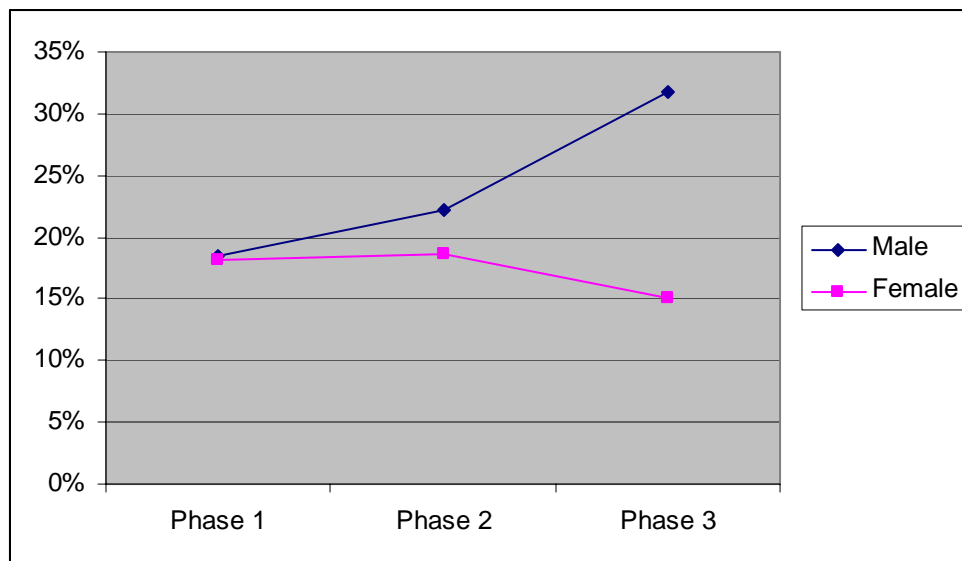
**Table 2: Analysis of Quitters by Gender, 2003/04 (n=551)**

	Successful	Partial	Unsuccessful	Total
Male	83 (31.8%)	22 (8.4%)	156 (59.8%)	261
Female	46 (15.1%)	20 (6.6%)	224 (78.3%)	290
<b>Total</b>	<b>129 (23.4%)</b>	<b>42 (7.6%)</b>	<b>380 (69.0%)</b>	<b>551</b>

From Table 2 it can be seen that the men in the sample returned higher success rates than the women. Statistical analysis using the chi-squared test showed that this was statistically significant ( $p < 0.0001$ )

Figure 2 compares the differences in success rates between males and females.

**Figure 2: Percentage of Successful Male and Female Quitters, 1999-2004 (n=1930)**



From Figure 2 it can be seen that over the three phases of the study, especially between phases two and three, the gap between successful males and successful females has been widening.

The age breakdown is given in Table 3a.

**Table 3a: Analysis of Quitters by Age, 2003/04 (n=551)**

	Successful	Partial	Unsuccessful	Total
18-29	8 (12.7%)	1 (1.6%)	54 (85.7%)	63
30-39	28 (19.6%)	12 (8.4%)	103 (72.0%)	143
40-49	35 (28.7%)	9 (7.4%)	78 (63.9%)	122
50-59	30 (24.8%)	10 (8.3%)	81 (66.9%)	121
60+	28 (27.5%)	10 (9.8%)	64 (62.7%)	102
<b>Total</b>	<b>129 (23.4%)</b>	<b>42 (7.6%)</b>	<b>380 (69.0%)</b>	<b>551</b>

These differences were not statistically significant.

Table 3b consolidates the age data for the three phases of the project, and reveals a similar pattern of success:

**Table 3b: Analysis of Quitters by Age, 1999-2004 (n=1940)**

	Successful	Partial	Unsuccessful	Total
18-29	31 (15.7%)	7 (3.5%)	160 (80.8%)	198
30-39	77 (17.1%)	31 (6.9%)	341 (75.9%)	449
40-49	97 (22.9%)	26 (6.1%)	300 (70.9%)	423
50-59	94 (21.0%)	39 (8.7%)	314 (70.2%)	447
60+	100 (23.6%)	40 (9.5%)	283 (66.9%)	423
<b>Total</b>	<b>399 (20.6%)</b>	<b>143 (7.4%)</b>	<b>1398 (72.1%)</b>	<b>1940</b>

Tables 4a and 4b illustrate differences in quitting by age and gender.

**Table 4a: Analysis of Male Quitters by Age, 2003-04 (n=261)**

	Successful	Partial	Unsuccessful	Total
18-29	4 (18.2%)	0 (0.0%)	18 (81.8%)	22
30-39	15 (25.4%)	1 (1.7%)	43 (72.9%)	59
40-49	25 (41.7%)	6 (10.0%)	29 (48.3%)	60
50-59	16 (26.2%)	9 (14.8%)	36 (59.0%)	61
60+	23 (39.0%)	6 (10.2%)	30 (50.8%)	59
<b>Total</b>	<b>83 (31.8%)</b>	<b>22 (8.4%)</b>	<b>156 (59.8%)</b>	<b>261</b>

**Table 4b: Analysis of Female Quitters by Age, 2003-04 (n=290)**

	Successful	Partial	Unsuccessful	Total
18-29	4 (9.8%)	1 (2.4%)	36 (87.8%)	41
30-39	13 (15.5%)	11 (13.1%)	60 (71.4%)	84
40-49	10 (16.1%)	3 (4.8%)	49 (79.0%)	62
50-59	14 (23.3%)	1 (1.7%)	45 (75.0%)	60
60+	5 (11.6%)	4 (9.3%)	34 (79.1%)	43
<b>Total</b>	<b>46 (15.1%)</b>	<b>20 (6.6%)</b>	<b>224 (78.3%)</b>	<b>290</b>

These tables show that the success rate for men was greater than that for women in every age band, the biggest differences being in the 40-49 group (41.7% vs. 16.1%) and the over 60s (39.0% vs. 11.6%).

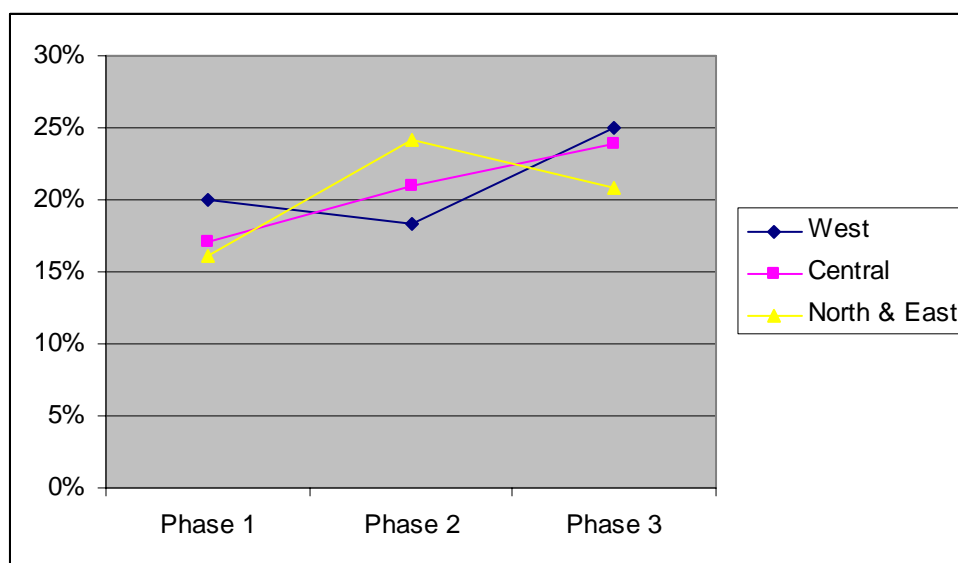
**Table 5: Analysis of Quitters by PCT, 2003-04 (n=546)**

	Successful	Partial	Unsuccessful	Total
West Cornwall PCT	51 (25.0%)	19 (9.3%)	134 (65.7%)	204
Central Cornwall PCT	44 (23.9%)	9 (4.9%)	131 (71.2%)	184
North & East Cornwall PCT	33 (20.9%)	14 (8.9%)	111 (70.3%)	158
<b>Total</b>	<b>128 (23.4%)</b>	<b>42 (7.7%)</b>	<b>376 (68.9%)</b>	<b>546</b>

The differences are not statistically significant.

Figure 3 shows the success rate for clients from each PCT across the three phases of the study:

**Figure 3: Success Rates by PCT Over the Period 1999-2004 (n=1930)**



*Note: pre-2002 data has been adjusted to reflect the PCT areas created in April 2002*

From Figure 3 it can be seen that while all three PCTs have increased their success rates over the three phases of the study, the proportion quitting in North & East PCT is declining.

The structure of the questionnaire was such that some questions were addressed only to successful quitters, some only to unsuccessful quitters, and others to both categories. Tables 6-15 refer to questions answered by all respondents. The questions relating to Tables 6-8 were included for the first time in this phase of the study, so no comparison is possible with earlier data:

**Table 6: Main Reasons for Wanting to Give up Smoking? (more than one answer permitted)**

	Successful	Partial	Unsuccessful	Total
Encouragement/pressure from family and friends	35 (27.1%)	5 (11.9%)	75 (19.7%)	<b>115</b> <b>(20.9%)</b>
Concerns about health (self or others)	109 (84.5%)	39 (92.9%)	340 (89.5%)	<b>488</b> <b>(88.6%)</b>
Finance	23 (17.8%)	7 (16.7%)	62 (16.3%)	<b>92</b> <b>(16.7%)</b>

Other reasons given included pregnancy, dislike of the habit and age.

**Table 7: Method of First Contact with the Stop Smoking Service**

	Successful	Partial	Unsuccessful	Total
Pharmacy	4 (3.1%)	1 (2.3%)	8 (2.1%)	13 (2.4%)
GP Surgery	107 (82.9%)	36 (85.7%)	325 (85.5%)	468 (84.9%)
Helpline	7 (5.4%)	1 (2.4%)	28 (7.4%)	36 (6.5%)
Other*	11 (8.5%)	4 (9.5%)	19 (5.0%)	34 (6.2%)
<b>Total</b>	<b>129</b>	<b>42</b>	<b>380</b>	<b>551</b>

*Other\* includes midwives, health visitors, the workplace and as a result of hospitalisation for other medical reasons.*

From Table 7 it can be seen that the GP surgery is where the majority of first contacts are made with the SSS.

**Table 8: Sources of Information about Stop Smoking Services Before Initial Contact.**

	Successful	Partial	Unsuccessful	Total
Personal contact~	88 (68.2%)	33 (78.6%)	262 (68.9%)	383 (69.5%)
Television	13 (10.0%)	2 (4.8%)	47 (12.4%)	62 (11.3%)
Poster#	12 (9.3%)	2 (4.8%)	36 (9.5%)	50 (9.1%)
Other media*	6 (4.7%)	1 (0.2%)	6 (1.6%)	13 (2.4%)
Not previously aware	7 (5.4%)	4 (9.5%)	16 (4.2%)	27 (4.9%)
Other	3 (2.3%)	0 (0.0%)	13 (3.4%)	16 (2.9%)
<b>Total</b>	<b>129</b>	<b>42</b>	<b>380</b>	<b>551</b>

*Personal contact~ = introductions from GPs or other health professionals as well as recommendations from friends and family.*

*Poster# = local advertising (in GP surgeries, etc.) as well as billboards.*

*Other media\* = Radio, Internet and Newspapers/Magazines.*

In phase three, 92.9% of clients used some form of Stop Smoking product in their attempt to quit, similar to the proportion observed in previous phases of the evaluation.

**Table 9: Products Used to Stop Smoking (more than one answer permitted)**

	Successful (n=121)	Partial (n=41)	Unsuccessful (n=350)	Total (n=512)
Nicotine Replacement Therapy	102 (84.3%)	35 (85.4%)	349 (99.7%)	486 (94.9%)
Zyban	8 (6.6%)	7 (17.1%)	22 (6.3%)	37 (7.2%)
Sweets	9 (7.4%)	2 (4.9%)	18 (5.1%)	29 (5.7%)
Chewing Gum	9 (7.4%)	3 (7.3%)	41 (11.7%)	53 (10.4%)
Other	0 (0.0%)	0 (0.0%)	2* (0.6%)	2 (0.4%)

\* Hypnosis (outside the NHS)

Figure 4 illustrates the proportion of clients using NRT and Zyban over the three phases of the evaluation:

**Figure 4: Use of Stop Smoking Medicinal Aids, 1999-2004 (All Clients n = 1930)**

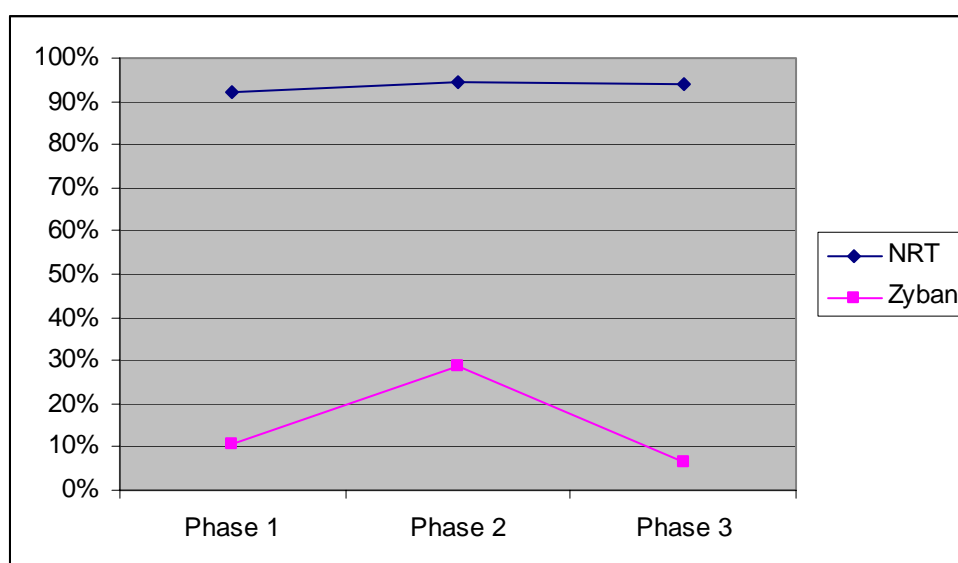


Figure 4 shows that while NRT use has remained constant over the three phases of the study, Zyban is now less popular than before it became available on the NHS.

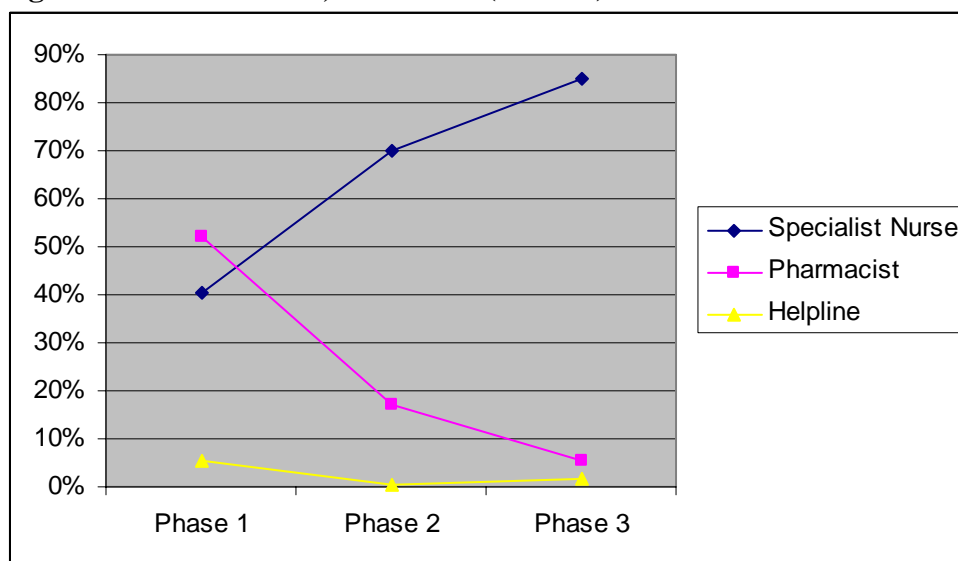
**Table 10: Main Contact at the Stop Smoking Service**

	Successful	Partial	Unsuccessful	Total
Pharmacist	6 (4.7%)	2 (4.8%)	21 (5.6%)	29 (5.3%)
Stop Smoking Nurse	112 (86.8%)	34 (81.0%)	319 (84.6%)	465 (84.9%)
Helpline Counsellor	1 (0.8%)	1 (2.4%)	8 (2.1%)	10 (1.8%)
Other#	10 (7.8%)	5 (11.9%)	29 (7.7%)	44 (8.0%)
<b>Total</b>	<b>129</b>	<b>42</b>	<b>377</b>	<b>548*</b>

\* 3 respondents had no meaningful contact with the SSS  
Other# = midwives, health visitors, hospital staff and GPs.

A time analysis of this question is presented in Figure 5 and illustrates the changes in the structure of the service since 1999. At that time much of the load was being carried by pharmacists, who were in many cases the first port of call for would-be quitters. Gradually Stop Smoking Nurses were positioned in virtually every GP surgery, and coupled with the raising of awareness of the public to the service, this is now the route taken by the vast majority of quitters.

**Figure 5: Main Contact, 1999-2004 (n=1930)**



**Table 11: Frequency of Contact with the Stop Smoking Service**

	Successful	Partial	Unsuccessful	Total
Initial contact only	21 (16.3%)	8 (19.0%)	73 (19.4%)	102 (18.6%)
Irregular one-to-one contact	28 (21.7%)	10 (23.8%)	75 (19.9%)	113 (20.6%)
Regular one-to-one contact	76 (58.9%)	22 (52.4%)	218 (57.8%)	316 (57.7%)
Regular group meetings	4 (3.1%)	2 (4.8%)	11 (2.9%)	17 (3.1%)
<b>Total</b>	<b>129</b>	<b>42</b>	<b>377</b>	<b>548</b>

From Table 11 it can be seen that one-to-one contacts form the majority of contacts with the SSS. Group meetings do not occur too often. Reasons previously identified for the paucity of groups include the difficulties of bringing together quitters in rural areas and the reluctance of GP surgeries to arrange sessions because of the amount of administration involved.

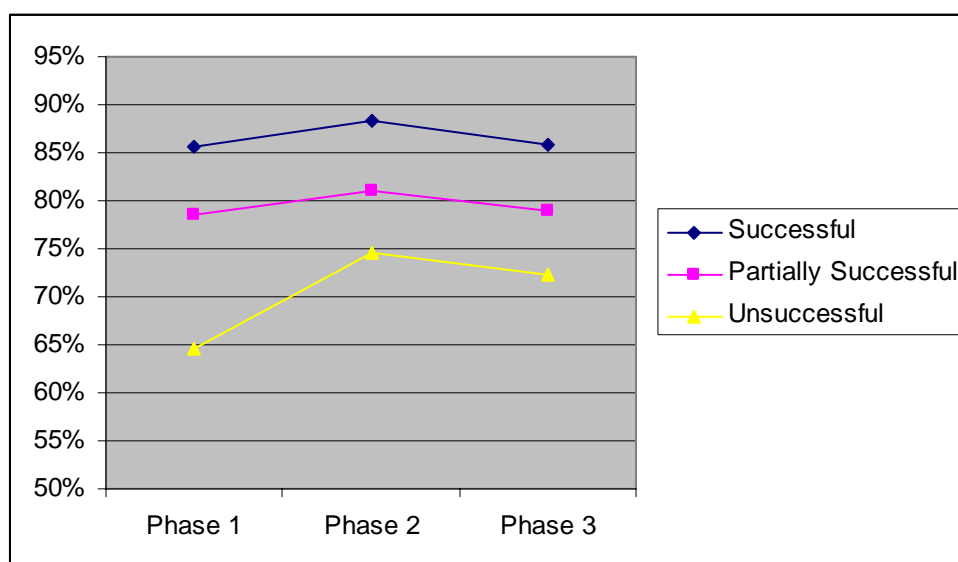
**Table 12: Perceived Helpfulness of the Stop Smoking Services**

	Successful	Partial	Unsuccessful	Total
Very helpful	71 (55.9%)	21 (50.0%)	125 (33.2%)	217 (39.8%)
Quite helpful	38 (29.9%)	12 (28.6%)	147 (39.1%)	197 (36.1%)
Neither helpful nor unhelpful	15 (11.8%)	4 (9.5%)	67 (17.8%)	86 (15.8%)
Quite unhelpful	3 (2.4%)	4 (9.5%)	30 (8.0%)	37 (6.8%)
Very unhelpful	0 (0.0%)	1 (2.4%)	7 (1.9%)	8 (1.5%)
<b>Total</b>	<b>127</b>	<b>42</b>	<b>376</b>	<b>545*</b>

\* 6 clients had had insufficient contact with the SSS to reply

As would be expected, the level of satisfaction with the service is consistent with degree of success or failure. The overall results are comparable to the previous evaluations. Figure 6 shows the percentage of clients replying either ‘Very helpful’ or ‘Quite helpful’ to this question.

**Figure 6: Percentage of clients finding the SSS either ‘Very Helpful’ or ‘Helpful’, 1999-2004**



**Table 15: Aspects of the Stop Smoking Services Considered Helpful**

	Successful	Partial	Unsuccessful	Total
Counselling	100/101 (99.0%)	28/32 (87.5%)	248/261 (95.0%)	376/394 (95.4%)
Group therapy	4/4 (100.0%)	2/2 (100.0%)	13/17 (76.5%)	19/23 (82.6%)
Advice	120/123 (97.6%)	39/42 (92.9%)	337/363 (92.8%)	496/528 (93.9%)
Support	103/106 (97.2%)	27/32 (84.4%)	265/299 (88.6%)	395/437 (90.4%)

*Note: Not all categories were relevant to every quitter. The percentages shown are those who replied 'helpful' as a proportion of those who answered the question*

These results were consistent with previous years, as would be expected by the satisfaction levels shown in Figure 6. Unsuccessful and partial quitters were asked the main reasons for starting again, with more than one answer permitted; the results are presented in Table 16.

**Table 16: Main Reasons Given for Restarting Smoking**

	Partial (n=42)	Unsuccessful (n=380)	Total (n=422)
Stress at home or work	10 (23.8%)	194 (51.1%)	204 (48.3%)
Lack of support	0 (0.0%)	3 (0.8%)	3 (0.7%)
Habit/craving/lack of willpower	26 (61.9%)	135 (35.5%)	161 (38.2%)
Enjoyment	4 (9.5%)	36 (9.5%)	40 (9.5%)
Partner or member of family smoking	2 (4.8%)	14 (3.7%)	16 (3.8%)
Peer pressure	5 (11.9%)	10 (2.6%)	15 (3.6%)
Weight gain	1 (2.4%)	15 (3.9%)	16 (3.8%)

Unsuccessful quitters were asked if there was anything they would have done differently in the light of their failure to quit. The majority of unsuccessful quitters (52.9%) stated that there was nothing that they would have done differently when looking back on their quit attempt. Twenty-two per cent (21.8%) would have changed their behaviour or lifestyle.

## Discussion

The overall increase in the number of successful quitters compared to previous years reflects a service which is continuing to develop facilities for those within Cornwall who have expressed an interest in giving up. Within the figures contain a number of trends which in this section are discussed further, often with reference to other literature.

The pattern of higher success rates amongst male smokers is replicated in studies by Lowey *et al.*, (2003) and Ferguson *et al.*, (2005). Reasons for this identified in the literature include “...lower levels of confidence in relation to quitting, differences in the use and effect of nicotine and in the ‘role’ of tobacco in the lives of men and women” (Judge *et al.*, 2005). In this study it was found that stress was more likely to be the reason for women to fail (52.7% of unsuccessful quitters, men 48.7%) as was habit/craving (36.2% women, 34.6% men), whereas enjoyment of smoking was a reason more often given by men (12.8% vs. 7.1%). These results reflect the findings of earlier phases, suggesting that nicotine dependence, as opposed to social factors, is a bigger barrier to quitting for women than men.

The pattern of higher success rates amongst older quitters replicates the trends seen in Ferguson *et al.*, (2005).

There are two points of interest to be drawn concerning the use of Stop Smoking Aids. First, of the 26 clients who did not use any form of NRT, 25 were either successful or partially successful in their quit attempt. This suggests an element of pre-planning, in this case a conscious decision not to use NRT, can be a positive indicator to a successful outcome. A good example of pre-planning was a male interviewee who decided 2½ years in advance that he was going to quit on his 60<sup>th</sup> birthday. Preparation involved cutting down on cigarette intake as well as using the facilities made available through the SSS. He was recorded as a successful quitter 12 months later.

Second, the decline of Zyban as a stop smoking aid is particularly apparent this year. Its popularity peaked in 2001/02, after it became available on prescription.

The earlier study showed that 28.9% found the drug helpful in a quit attempt during that period. It would appear from the interviews conducted for this study, supported by other evidence (e.g. Eckl-Dorna and Groman, 2004), that negative press coverage concerning possible side-effects is the main reason for the decline in the use of the drug as a cessation aid.

There are a number of other ways in which the success of the Cornwall SSS can be measured, including the official figures published by the DoH, recent research examining smoking prevalence in England and a comparable study of two other SSSs in England. The DoH produces annual 4-week quit rates for each PCT and Strategic Health Authority area. Although such reporting enables comparisons to be made across the various SSSs in England, it has been argued, both in the earlier CHRU paper and by others (e.g. Wanless, 2004) that this is an insufficient period in which to judge longer-term benefit. Fifty-two week follow-up of users of the SSS, whilst being recommended by DoH as a useful indicator of the efficacy of the Services, has not been carried out consistently across England:

*“...anecdotal evidence suggests that very few services have been able to implement effective long-term follow-up; those that have tried report low response rates. Lack of time, resources and administrative capacity means that local services have limited opportunity to invest in conducting any form of research to assess longer-term outcomes.” (Ferguson et al., 2005)*

The Cornwall SSS is one of a few areas which examine these long-term outcomes in greater detail. Recent studies have attempted to assess the longer-term impact of the SSS by estimating the number of quitters who continue to abstain to the first anniversary of their quit attempt and beyond. This information can then be linked with the smoking prevalence data now available for each PCT area to assess to what degree the services are contributing to the Government targets set out in the White Paper *Smoking Kills* (1998).

It is estimated that the number of successful quitters at four weeks who relapse before 52 weeks is between 55-70% (Milne, 2005; Ferguson et al., 2005). The latest sample of Cornwall SSS clients suggests a lapse rate of 66%. It is thought that a

further 35% of four week quitters (Stapleton *et al.*, 1999) will lapse at some point after 12 months have passed. Therefore, of the 2308 quitters recorded as four week successes in Cornwall in 2003/04 (DoH, 2004) it would be expected that approximately 500-550 ( $2308 \times 66\% \times 35\%$ ) would permanently abstain. Set against the total number of smokers in Cornwall, now estimated at 113,831 (Tocque *et al.*, 2005), the annual reduction in smoking prevalence is not great, and certainly not sufficient to achieve the Government target of a reduction in adult smoking prevalence from 26% to 21% by 2010. However, the establishing of the SSS was never intended to be the only solution to the threat to public health caused by smoking; rather it is part of a wider cultural trend intended to address the issue which includes measures, for example, on restricting smoking in public places, or increasing tax on tobacco. Given the relatively low resources allocated to the Services, the contribution by the Stop Smoking Co-ordinator and the network of specialist nurses and advisors has been shown to be effective.

The setting of targets, as in other areas of the NHS, has been an integral and sometimes controversial strategy employed by the DoH. PCTs are now required to meet targets devolved from the NHS Priorities and Planning Framework. For the years 2003/04 to 2005/06, those related to smoking are as follows:

- *“To achieve 800,000 smokers successfully quitting at the four week stage by 2006;*
- *to achieve a one percentage point reduction per year in the proportion of women continuing to smoke throughout pregnancy, focusing especially on smokers from disadvantaged groups; and*
- *in primary care, to update practice-based-registers so that patients receive appropriate advice and treatment on diet, physical activity and smoking, particularly those patients at high risk of CHD, with hypertension, diabetes and a BMI greater than 30.” (DoH, 2002)*

The earlier report spoke of the possible problems that can arise with a strategy in which the achievement of targets is seen as a priority – in this instance, to ensure that subsequent funding is secured. In the case of the SSS, local co-ordinators may be

tempted to chase targets by focusing on highly motivated quitters, which research (e.g. Woods *et al.*, 2003) has shown are often to be found in the more affluent areas, thereby undermining Government objectives to reduce health inequalities by directing resources at areas of deprivation. This point was picked up by Derek Wanless in his recent report on the state of Public Health in the UK:

*“... the use of targets has been criticised ... they may skew local priorities, such as four-week smoking cessation targets, and may not lead to equity between different groups in society, when variations in health by geographical region, age, sex, socio-economic, or ethnic groups are not considered. Most importantly targets may be set at unattainable levels, and they can lead to inefficient use of resources when other important objectives are not explicitly targeted.”* (Wanless, 2004)

On the available evidence, the Cornwall SSS has tackled this issue successfully, both meeting the targets set by the DoH (Tocque *et al.*, 2005) and, so far as can be ascertained, reaching smokers in deprived areas. It should be pointed out that the evidence for this is based simply on postcode data provided for users of the Service; no other questions are asked that reveal social class, income, housing status etc. However, when the geographical characteristics of the client base are set against known areas of deprivation, a good degree of consistency is found. It is hoped to explore this area further in later studies.

The main pockets of deprivation in Cornwall are to be found in the west of the region (ODPM, 2004). It was therefore interesting to note in the previous study (CHRU, 2002) that a disproportionately high number of clients were being attracted from the area covered by West of Cornwall PCT. The current study shows that this is still the case, although the spread of clients is more balanced than that previously observed. In the previous study 46.8% of clients were resident in West Cornwall - the figure observed in the latest dataset is 38.6%. Although there are a greater proportion of adult smokers (28%, Tocque *et al.*, 2005) in West Cornwall compared to the other two Cornish PCTs, this alone is not sufficient to explain the observed differences. One reason identified by the local Stop Smoking Co-ordinator for the disproportionate number of clients from West Cornwall is the success of the radio advertising

campaign on the commercial station Pirate FM. Figures provided to the SSS by the station show that it is listened to more in West Cornwall than elsewhere, and it can therefore be assumed that advertising awareness is consequently higher for the population as a whole. The questionnaire to the sample of service users attempted to confirm this hypothesis by asking where the client first heard about the service, but in most cases users could not provide a specific recollection, the results indicating that initial awareness usually resulted from a combination of word of mouth and advertising in general - Stop Smoking commercials have also been prominent on TV and poster campaigns. A large number of clients were introduced to the SSS by a GP or other health professional (see Table 7), reflecting the priorities set out above in the Priorities and Planning Framework. One other explanation for the relatively high number of clients from West Cornwall is that the policy of successive Stop Smoking Co-ordinators to attract clients from the more deprived areas has been particularly successful.

It is interesting that the number of respondents that claimed to have first heard of the Service from radio advertising is low, which appears to contradict the positive feedback that the SSS has received from the advertising campaign on local commercial radio. However, recall of specific advertising after 12 months may be hazy, and the campaign was being run simultaneously across a number of local and national media with the intention of creating a general awareness.

It is suggested that the question asking how clients first heard of the SSS be refined in any further studies to reflect interventions by health professionals as opposed to friends and family, and perhaps to refer more generally to 'Advertising' as opposed to specific media. If required by the SSS a specific question could be added referring to the Pirate FM advert.

A study of two English SSSs (Ferguson *et al.*, 2005) was recently released as part of a supplement to the journal *Addiction*. The study was one of the first in England to employ 52-week follow-up in its methods, and as such contains data that can be examined with a view to comparing the success rates achieved by the Services.

Because of publishing deadlines a detailed analysis of the findings of the Ferguson study must be postponed for a later paper. However, by adjusting the results in such a way that these are compared like-for-like, the success rate for the two English areas (Nottingham and North Cumbria), using our definition of successful **plus** partially successful quitters, is 28.5% (Carbon monoxide validated results). The equivalent figure in 2003/04 for Cornwall is 31% (self-report). Although the methods of the two studies differ, for the first time there is evidence that Cornwall is providing a service delivering longer-term success rates at least on a par with, and possibly ahead of other areas.

## **Conclusions and Recommendations**

The Cornwall SSS, first established as part of HAZ (Health Action Zones) in 1999, has survived a good deal of change both internally and as a result of new procedures introduced by the DoH. It continues to provide an appropriate and personal service to smokers in the region who seek help in quitting the smoking habit, and the results in this report demonstrate the generally positive rapport that the service has engendered both with the general public and the health community.

The Cornwall Stop Smoking Services continues to provide an effective service recording a 23% success rate of those clients using the service.

The results from this third phase of the study indicate a widening of success rates between males and females. Whilst the reasons for this may not be clear, although Lowey and Ferguson have offered possible explanations, these results suggest that there may be some benefit in the devising of separate strategies for male and female quitters, over and above the services already provided (generally by midwives) to pregnant women.

Although all of the PCTs in Cornwall have shown an increase in the number of successful quitters over the three phases of the study in the last study phase North and East PCT recorded a declining rate. This may be the result of the SSS focussing on the more deprived area of West Cornwall but it would be of concern if this trend continued.

Since the introduction of Specialist Stop Smoking nurses into GP surgeries the majority of first contacts with the SSS have switched from the pharmacist to the GP surgery. It is not clear whether a substitution effect has taken place whereby clients who would have initially seen the pharmacist now see the Stop Smoking nurse. This is worth investigation as it may be possible to increase the number of clients using the SSS by targeting the pharmacies.

The most useful aid for clients who were successful in quitting remains Nicotine Replacement Therapy. The use of Zyban has declined.

Of those clients who attempted to quit but then relapsed the main reasons given were stress at home, lack of willpower and enjoyment. The majority of unsuccessful quitters (52.9%) stated that there was nothing that they would have done differently when looking back on their quit attempt. Twenty-two per cent (21.8%) would have changed their behaviour or lifestyle. Only 3 clients recorded a lack of support as a reason for being unsuccessful.

By far the majority of clients (over 90%) found all aspects of the SSS (counselling, group therapy, advice and support) helpful. However, the service might wish to consider the role of group therapy as only a few clients used this service.

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