



Cornwall Health Research Unit

Addressing Obesity: A Quantitative Evaluation of the Weight Management on Referral Pilot Project Undertaken in West Cornwall

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Note: The original title of this pilot project was 'Slimming on Referral'. It was subsequently established that this term has been copyrighted by Slimming World, so all references to the phrase in the context of this project have been excluded from this report.

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Overall Findings

- The Weight Management on Referral pilot sought to address obesity growth in deprived areas in West Cornwall. Individuals classified as obese (BMI>30) were identified at 14 nominated GP practices and issued with free vouchers for a 12 week Weight Watchers programme.
- By April 2008, 830 individuals had been issued with vouchers, of whom 688 (83%) later enrolled at a local Weight Watchers class.
- The majority of those receiving vouchers were female (84%) with a similar proportion enrolling with Weight Watchers (89%). There was good representation across all age bands.
- From the GP practices, the proportion of patients enrolling per 1000 registered patients was between 13 and two.
- Enrolled patients self-reported healthier lifestyles at baseline than the general population.
- Of those for whom data are available (n=374), 299 (80%) completed the 12 week programme. Younger participants were more likely to exit the programme before completion.
- Based on the available weight data (n=227) 135 individuals (59%) achieved at least 5% weight loss over the course of the Weight Watchers programme. Of those continuing with the programme for a further 12 weeks (n=40), 31 (77%) recorded at least 5% weight loss compared to baseline. Overall results compared favourably with a similar scheme reported in the Greater Derby Primary Care Trust (Lavin *et al.*, 2006).

- A considerable number of those completing the 12 week programme improved their lifestyle in terms of alcohol consumption, diet and exercise (self-report).
- A number of participants also took advantage of other related services, including LEAPActive, a physical activity programme, and Eatsome, a course encouraging cooking for a healthy diet. Generally these participants had higher starting BMI measurements than the overall study population. Two hundred and seventy-five participants (33%) spoke to a support worker employed to provide counselling and encouragement to those on the programme.

1. Introduction

Obesity is presently one of the main challenges to public health in the UK. An estimated 67% of men and 56% of women are thought to be overweight or obese, i.e. with a Body Mass Index (BMI) of greater than 25 kg/m² (National Statistics, 2008, p4). If the threshold is set at a BMI of 30, the level classified as obese, the proportion is 24% for both men and women (National Statistics, 2008, p1). A third category, morbid obesity, is defined as a BMI of 40 or above and is characteristic of a small percentage of adults. For women, there is an established relationship between prevalence of obesity and those on low incomes and in routine and manual households, although the equivalent link for men is weaker (National Statistics, 2008, p6). Increased health risks with a direct link to obesity include a range of conditions, including a greater likelihood of heart disease and some cancers as well as clinical depression and reduced mobility (Avenell *et al.*, 2004).

Studies examining the most appropriate treatments for obesity report that a combination of exercise, diet and behavioural therapy has proved most effective (Avenell *et al.*, 2004, Dick 2004). Despite this evidence, the availability of obesity support services within Primary Care in the UK has historically been inconsistent (Dr Foster Intelligence, 2005). The Public Health White Paper *Choosing Health* (DoH, 2004) recommended the upgrading of Primary Care services to address diet and physical activity in particular, including subsidising the cost of attendance at commercial weight management groups. The National Institute for Health and Clinical Excellence (NICE) issued guidelines in December 2006 (NICE, 2006) addressed not only to the NHS but to a range of statutory agencies, emphasising the need for space for physical activity, lifestyle improvement as a priority to drug treatment and appropriate interventions by health professionals.

Studies analyzing the impact of commercial weight management interventions are infrequent, apart from those carried out by the organisations themselves to promote their service, which by definition carry the risk of researcher bias. Evidence from the USA has concluded that attendance can lead to significant weight loss both in the short term (Lowe *et al.*, 1999) and over

a longer period (Heshka *et al.*, 2000, 2003). In the UK, a study of a Slimming on Referral programme within the Greater Derby Primary Care Trust in conjunction with Slimming World showed a consistent pattern of weight loss over the 12 week programme, albeit with a small sample (n=62) (Lavin *et al.*, 2006).

In Cornwall, one of the Local Area Agreement (LAA) outcomes in the priority area of Healthier Communities and Older People is to 'halt the rise in obesity' (Cornwall Strategic Partnership, 2006). This Weight Management on Referral scheme forms part of Weight Management West, an initiative designed to address obesity trends which included Why Weight, a weight management service specifically targeting families with children under five years of age. The funding for Weight Management West was provided by the Neighbourhood Renewal Fund, which targets areas identified as highly deprived by the English Indices of Multiple Deprivation. The project began in March 2007 and aimed to recruit 1000 obese patients from GP practices in West Cornwall by way of providing free vouchers for enrolment in a 12-week Weight Watchers programme in their local area. By April 2008 830 cases were recorded in the dataset.

Cornwall Health Research Unit (CHRU) was commissioned to analyse the questionnaire data that had been collected, both at baseline and follow-up.

2. Aim of Study

The aim of this study was to examine whether the issuing of free vouchers for a commercial slimming class was successful in producing weight loss in individuals in the short-term, as well as providing a greater awareness of the benefits of a healthier lifestyle.

3. Methods

3.1 Sample

Fourteen general practitioner (GP) practices located in the Penwith and Kerrier Neighbourhood Renewal Areas (areas with low deprivation scores as recorded in the English Indices of Multiple Deprivation) took part in the study.

Patients identified with a BMI in excess of 30 kg/m² and registered as patients at one of 14 GP practices were offered, as part of their normal interaction with GPs and primary care staff, free vouchers for a 12 week session at their local Weight Watchers group. Whilst all those fulfilling the weight criteria were eligible, not all were actually resident in known areas of deprivation (two highly deprived areas, Pengegon in Camborne and Treneere in Penzance, were identified through post code analysis as a sub-group and at the request of Cornwall Health Promotion residents of these areas are subject to separate analysis in Section 4.5). Despite the minimum BMI threshold of 30, a small proportion of those enrolling on the scheme had a start BMI lower than the threshold of 30 kg/m².

3.2 Data Collection

The questionnaires used in this study were developed by the Cornwall & Isles of Scilly Health Promotion team and are included as an appendix to this report.

All those issued with vouchers completed a registration questionnaire which included name, address, gender and age, questions regarding lifestyle (smoking, drinking, diet and exercise) and questions regarding attitude to weight loss. This baseline data allowed comparisons to be made as clients progressed through the scheme. Those who reported to the Weight Watchers class had their weight recorded at the start of the programme.

Thereafter, further questionnaires were completed as clients progressed through the scheme, either to the end of the 12 weeks (when weight was again recorded) or when dropping out earlier. These were completed mostly by telephone, conducted by Health Promotion staff. These follow-up questionnaires related to the usefulness of the sessions, reasons for non-completion and take-up of related activities, particularly LEAPActive, a physical activity course, and Eatsome, a series of sessions promoting home cooking for a healthy diet.

Additional questionnaires were issued for those who continued with Weight Watchers for a further 12 week period. The protocol also includes a questionnaire for one-year follow-up, but no data were available at the time of this report.

3.3 Data Analysis

Questionnaire data was entered into a Microsoft Access database. For the purposes of analysis the files were converted into SPSS format. Chi-square analysis has been used to identify factors consistent with the degree of success achieved by clients.

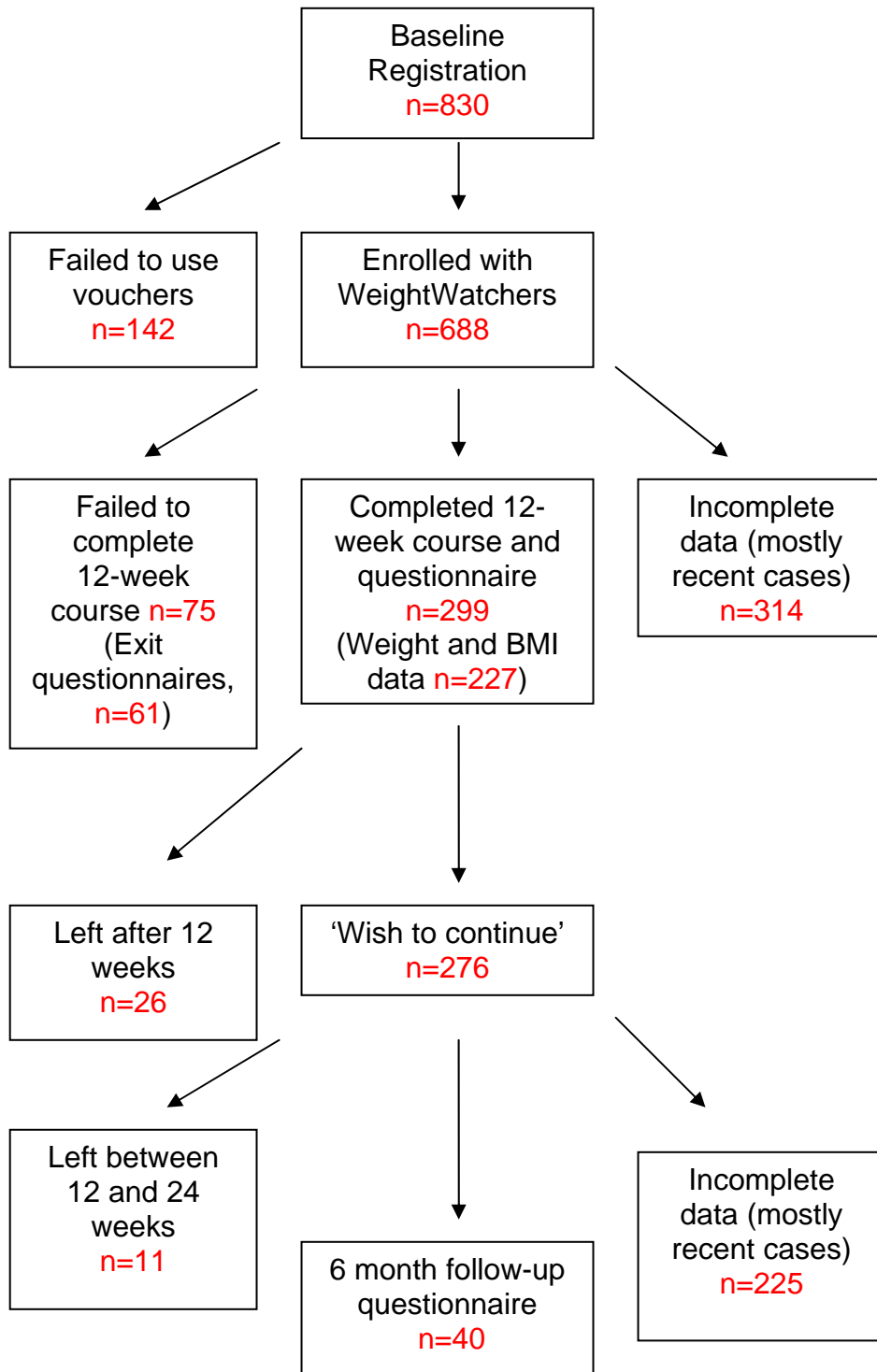
The analysis focused on three areas, as set out in the evaluation tender submitted to Cornwall Health Promotion in March 2008:

- (i) descriptive statistics to examine the success of the scheme for the total sample and the activities which were used in addition to the Weight Management Referral scheme;
- (ii) sub-group analysis to compare the success of the scheme by age group, gender, health behaviour (e.g. smoking), and deprivation status; and
- (iii) comparison between baseline and follow-up measurements of weight, BMI and weight circumference; and comparison between these physical measures of impact and the self-report data collected by the questionnaire.

4. Results

4.1 Participation Response Rate throughout the Project

Figure 1 – Participant Response Rate



4.2 Characteristics of Participants and Participating GP Practices

As can be seen from the information in Table 1, there were proportionately more females in the sample; but good representation across age bands.

Table 1 – Participant's Characteristics by Gender and Age Band (n=830)

Gender	n (%)	Age Band	n (%)
Female	721 (87)	Under 40	192 (23)
Male	109 (13)	40 to 50	171 (21)
		50 to 60	230 (28)
		Over 60	236 (28)

Of the individuals who received free vouchers, 688 (83%) later attended a Weight Watchers session. Table 2 shows the number of referrals from each of the participating practices, and also illustrates the approximate total number of patients registered at each practice, based on data provided by Health Promotion. It is recognised that referrals as a proportion of the total number of obese patients registered at each practice would have been more useful, but these data were not available.

Table 2 – Referrals by GP Practice (n=829, 1 missing case)

Practice	Registered patients	Referrals	Referrals per 1000 patients	Enrolled	Enrolled per 1000 patients
Morrab	5028	85	16.9	66	13.1
Phoenix	5500	77	14.0	64	11.6
Veor	9100	113	12.4	95	10.4
Alverton	6500	75	11.5	64	9.8
Clinton Rd	4500	50	11.1	43	9.6
Pool	10500	109	10.4	83	7.9
Sunnyside	6000	49	8.2	43	7.2
Trevithick	4600	39	8.5	32	7.0
Harris Memorial	5400	42	7.8	33	6.1
Penalverne	5250	35	6.7	32	6.1
Rosmellyn	7200	37	5.1	33	4.6
Homecroft	7000	37	5.3	31	4.4
Manor	12500	58	4.6	52	4.1
Marazion	7000	23	3.3	17	2.4
Total	96078	829	8.6	688	7.2

The range of referrals was between 113 (Veor) and 23 (Marazion). The range in the proportion of referred patients going on to attend the sessions was between 91.4% (Penalverne, n=35) and 73.9% (Marazion, n=23).

4.3 Self-reported Lifestyle of Participants

At baseline 100 of the participants (12%) reported that they smoked; 45 (5%) reported drinking more than the recommended units of alcohol weekly (59% were recorded as having no alcohol intake whatsoever); 407 (49%) ate fewer than five portions of fruit or vegetables daily; and 580 (70%) participated in fewer than five physical activity sessions weekly. These findings are lower than those reported for the total UK population in other surveys.

Table 3 illustrates the characteristics of the participants grouped into those who enrolled with Weight Watchers and those who did not. Where appropriate, the Chi-squared test was used to explore statistically significant differences between the groups. It should be noted that a number of the possible answers to questions pertaining to attitude to weight loss have been combined to avoid small samples.

Table 3: Difference between Participants who Enrolled on Weight Watchers and Those Who Did Not Enrol

		Enrolled (n=688, 83%)	Not enrolled (n=142, 17%)	Total	P value
Age Band	Under 40	157 (82%)	35 (18%)	192	0.479
	40 to 50	138 (81%)	33 (19%)	171	
	50 to 60	198 (86%)	32 (14%)	230	
	Over 60	194 (82%)	42 (18%)	236	
Gender	Female	606 (84%)	115 (16%)	721	0.023
	Male	82 (75%)	27 (25%)	109	
Practice	Alverton	64 (85%)	11 (15%)	75	0.199
	Clinton Rd.	43 (86%)	7 (14%)	50	
	Harris Memorial	33 (79%)	9 (21%)	42	
	Homecroft	31 (84%)	6 (16%)	37	
	Manor	52 (90%)	6 (10%)	58	
	Marazion	17 (74%)	6 (26%)	23	
	Morrab	66 (78%)	19 (22%)	85	
	Penalverne	32 (91%)	3 (9%)	35	
	Phoenix	64 (83%)	13 (17%)	77	
	Pool	83 (76%)	26 (24%)	109	
	Rosmellyn	33 (89%)	4 (11%)	37	
	Sunnyside	43 (88%)	6 (12%)	49	
	Trevithick	32 (82%)	7 (18%)	39	
	Veor	95 (84%)	18 (16%)	113	
Smoking status	Smoker	77 (77%)	23 (23%)	100	0.249
	Non-smoker	606 (84%)	118 (16%)	724	
Alcohol Intake	Above recommended level	35 (78%)	10 (22%)	45	0.351
	Below or at recommended level	652 (83%)	132 (17%)	784	
Diet	Five a day or more	348 (82%)	75 (18%)	423	0.628
	Less than five a day	340 (84%)	67 (16%)	407	
Exercise	Five weekly activities or more	206 (82%)	44 (18%)	230	0.805
	Less than five weekly activities	482 (83%)	98 (17%)	580	
Importance of weight loss	Positive	682 (83%)	139 (17%)	821	0.007
	Neutral/negative	6 (100%)	0 (0%)	6	
Main reasons	Body Image	512 (84%)	101 (16%)	613	
	Health Image	600 (83%)	122 (17%)	722	
	Peer Pressure	34 (79%)	9 (21%)	43	
	Other	68 (83%)	14 (17%)	82	
Confidence of weight loss	Positive	585 (84%)	112 (16%)	697	0.286
	Neutral/negative	102 (78%)	29 (22%)	141	

Note: For some of the variables the total cases do not sum 830 as answers to some individual questions were not recorded.

A significant proportion of men (25%) as opposed to women (16%) were given vouchers but failed to enrol at the Weightwatchers sessions. Although the results were not statistically significant, more smokers (23%) than non-smokers (16%) failed to enrol at the sessions. Ninety-nine per cent of clients felt that weight loss was either 'very important' or 'important'.

4.4 Weight Watchers Programme

4.4.1 Completion of the Programme

Table 4 illustrates the characteristics of those who completed the programme (n=299, 80%) and those who did not (n=75, 20%). For information a final column shows the characteristics of those who completed a further Weight Watchers course and completed a follow-up questionnaire at six months, but the sample size (n=40) is too small to test for significant differences between the groups.

Of the 75 individuals who exited the programme before 12 weeks, 61 completed an exit questionnaire. The main reasons given for non-completion were health problems (22 individuals, 36%), not benefitting any more from the group (14, 23%) and time of meetings not convenient (13, 21%).

Thirty-nine of the 61 (64%) replied that they wished to exit completely from the programme. Ten (16%) were happy to be contacted in the future. Although they wished to opt out of Weight Watchers, 12 wanted to continue to be engaged with the support worker (20%), seven with LEAPActive (12%) and seven with Eatsome (12%).

Only eight of 57 (14%) who gave their travel time to meetings had a journey time of greater than 20 minutes.

Table 4 - Characteristics of Participants who Completed the Programme and Those Who Did Not Complete

		12 week complete (n=299, 80%)	Exit before 12 weeks (n=75, 20%)	P value	6 month complete (n=40)
Age Band	Under 40	39 (65%)	21 (35%)	0.001	3
	40 to 50	59 (75%)	20 (25%)		10
	50 to 60	94 (83%)	20 (17%)		10
	Over 60	103 (89%)	13 (11%)		17
Gender	Female	262 (79%)	69 (21%)	0.288	27
	Male	37 (86%)	6 (14%)		13
GP Practice	Alverton	22 (69%)	10 (31%)	0.032	6
	Clinton Rd.	24 (86%)	4 (14%)		6
	Harris Memorial	15 (94%)	1 (6%)		0
	Homecroft	11 (79%)	3 (21%)		0
	Manor	26 (84%)	5 (16%)		3
	Marazion	8 (89%)	1 (11%)		0
	Morrab	33 (66%)	17 (34%)		11
	Penalverne	12 (67%)	6 (33%)		2
	Phoenix	25 (93%)	2 (7%)		1
	Pool	35 (76%)	11 (24%)		7
	Rosmellyn	14 (78%)	4 (22%)		3
	Sunnyside	17 (74%)	6 (26%)		1
	Trevithick	9 (82%)	2 (18%)		0
	Veor	48 (94%)	3 (6%)		0
Start BMI	25 - 30	27 (84%)	5 (16%)	0.829	3
	30 - 40	182 (80%)	46 (20%)		20
	> 40	84 (80%)	21 (20%)		17
Smoking status	Smoker	20 (62%)	12 (38%)	0.064	7
	Non-smoker	277 (82%)	62 (18%)		32
Alcohol Intake	Above recommended level	10 (63%)	6 (37%)	0.075	4
	Below or at recommended level	289 (80%)	69 (20%)		36
Diet	Five a day or more	162 (84%)	31 (16%)	0.044	23
	Less than five a day	136 (76%)	44 (24%)		17
Exercise	Five weekly activities or more	85 (72%)	33 (28%)	0.009	13
	Less than five	214 (84%)	42 (16%)		27

	weekly activities				
Importance of weight loss	Positive	294 (80%)	75 (20%)	0.692	39
	Neutral/negative	5 (100%)	0 (0%)		1
Main reasons	Body Image	218 (82%)	49 (18%)		27
	Health Image	258 (79%)	67 (21%)		37
	Peer Pressure	11 (85%)	2 (15%)		3
	Other	34 (77%)	9 (23%)		2
Confidence of weight loss	Positive	255 (82%)	55 (18%)	0.036	35
	Neutral/negative	44 (69%)	20 (31%)		5
Participant in LeapActive	Yes	43 (96%)	2 (4%)	0.005	10
	No	256 (78%)	73 (22%)		31
Participant in Eatsome	Yes	43 (83%)	9 (17%)	0.594	4
	No	256 (80%)	66 (20%)		37

Of those who began the Weight Watchers programme, 35% of those in the youngest age band (those under 40), exited before 12 weeks compared with only 11% of those in the over-60 age band.

There was a marginally statistically significant difference between those who reported eating a healthy diet of five or more portions of fruit and vegetables a day, compared with those who did not. Eighty-four per cent of the former group completed the 12 week programme, compared with 76% of the latter group ($p < 0.05$). It is noteworthy that 72% of those engaged in exercise five times per week or more completed the 12 week programme, compared with 84% who reported undertaking activities less than five times per week ($p < 0.009$). Finally, those who were confident at baseline in their ability to lose weight were significantly more likely to complete the programme (82% compared with 69%).

Of the 45 participants who took part in the LEAPActive programme, 96% completed the 12 week course. It is also interesting to note that over three-quarters of those who did not participate in LEAPActive completed the 12 week course.

At the end of the 12 weeks, those who completed the Weight Watchers programme were again asked about their lifestyle in terms of smoking, alcohol, diet and exercise. Table 5 highlights the changes in lifestyle observed over the 12 week period.

Table 5 - Lifestyle Characteristics of Participants at Beginning and End of Weight Watchers Programme (n=299)

		Baseline n (%)	12 weeks n (%)
Smoking status	Smoker	20 (7)	20 (7)
	Non-smoker	277 (93)	277 (93)
Alcohol intake	Above recommended level	10 (3)	2 (1)
	Below or at recommended level	289 (97)	297 (99)
Diet	At or over recommended level	162 (54)	246 (82)
	Below recommended level	136 (46)	53 (18)
Exercise	At or over recommended level	85 (28)	118 (39)
	Below recommended level	214 (72)	181 (61)

With the exception of smoking, there was a considerable improvement in lifestyle over the 12 weeks as measured by these indicators. In particular, 84 net individuals (28% of the sample and 62% of unhealthy eaters) changed from an unhealthy to a healthy diet, measured by fruit and vegetable portions, during the Weight Watchers programme.

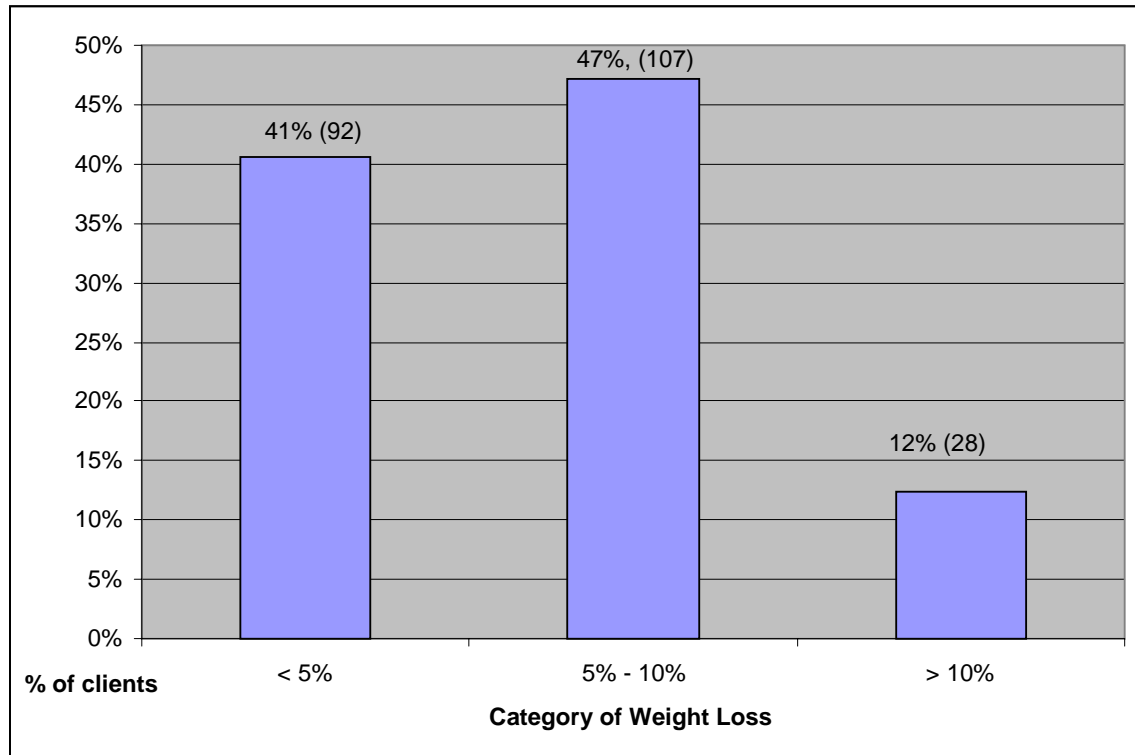
4.4.2 Weight Loss

Of the 365 cases for whom weight data were available, 9% recorded a starting BMI between 25 and 30 kg/m² (overweight, but below the minimum threshold for this scheme) 63% were obese (BMI 30-40) and 29% morbidly obese (BMI 40+).

Of those recorded as having completed the 12 week programme (299), weight data is available for 227 cases. Figure 2 illustrates participant weight loss as a percentage of baseline body weight. Weight loss was divided into three categories: those losing less than 5% of baseline body weight (including the eight

individuals (4%) who gained weight), those who lost between 5 and 10%, and those who lost more than 10%.

Figure 2 – Weight loss as Percentage of Baseline Body Weight after 12 Weeks



The information illustrated in Figure 2 shows that 59% of clients achieved at least a 5% loss in body weight over the course of the programme. Comparisons with the results of a similar study in the Greater Derby Primary Care Trust are made in the discussion section.

Weight loss data were also available for 40 of the 227 who continued with another 12 week course of Weight Watchers. Nine of these individuals (23%) lost less than 5% of their baseline body weight at this six month follow up; 25 (62%) lost between 5 and 10% of their baseline body weight, and a further six (15%) lost more than 10% of their baseline body weight at six months. Information relating to possible contributing factors to weight loss is illustrated in Table 6.

Table 6 – Factors Contributing to Weight Loss after Completion of 12 Week Programme (n=227)

Factor	< 5% (n=92, 40.5%)	5-10% (n=107, 47.1%)	>10% (n=28, 12.3%)	Total	p value
Gender					
Male	8 (25%)	18 (56%)	6 (19%)	32	0.128
Female	84 (43%)	89 (46%)	22 (11%)	195	
Age Band					
Under 40	10 (35%)	13 (45%)	6 (21%)	29	0.018
40-50	18 (42%)	20 (47%)	5 (12%)	43	
51-60	42 (55%)	26 (34%)	8 (11%)	76	
Over 60	22 (28%)	48 (61%)	9 (11%)	79	
Baseline BMI					
25 - 30	12 (63%)	4 (21%)	3 (16%)	19	0.081
30 – 40	49 (35%)	74 (53%)	18 (13%)	141	
Over 40	31 (46%)	29 (43%)	7 (10%)	67	
LEAPActive					
Participated	19 (48%)	19 (48%)	2 (5%)	40	0.259
Did Not Participate	73 (39%)	88 (47%)	26 (14%)	187	
Eatsome					
Participated	18 (51%)	13 (37%)	4 (11%)	35	0.347
Did Not Participate	74 (39%)	94 (49%)	24 (13%)	192	
Importance of losing Weight					
Yes	90 (40%)	105 (47%)	28 (13%)	223	0.616
No	2 (50%)	2 (50%)	0 (0%)	4	
Main Reason for Losing Weight					
Body Image	60 (37%)	81 (50%)	21 (13%)	162	
Health	77 (39%)	98 (50%)	21 (11%)	196	
Peer Pressure	3 (33%)	6 (67%)	0 (0%)	9	
Other	11 (46%)	12 (50%)	3 (13%)	24	
Confidence in Losing Weight					
Yes	78 (40%)	94 (48%)	24 (12%)	196	0.931
No	14 (45%)	13 (42%)	4 (13%)	31	
Smoker					
Yes	5 (29%)	11 (65%)	1 (6%)	17	0.136
No	86 (41%)	95 (46%)	27 (13%)	208	
Alcohol					
Above recommended	1 (13%)	5 (63%)	2 (25%)	8	0.212
At or below recommended	91 (40%)	102 (45%)	26 (11%)	227	
Diet					
At or above	53 (42%)	59 (47%)	14 (11%)	126	0.773

recommended					
Below recommended	39 (39%)	48 (48%)	14 (14%)	101	
Exercise					
At or above recommended	22 (33%)	36 (55%)	8 (12%)	66	0.320
Below recommended	70 (44%)	71 (44%)	20 (12%)	161	
Travel to Group Meeting					
< 10 mins	46 (38%)	56 (47%)	18 (15%)	120	0.245
11-30 mins	45 (46%)	43 (44%)	10 (10%)	98	
> 30 mins	1 (13%)	7 (87%)	0 (0%)	8	

The only statistically significant difference between groups according category of weight loss was for age. There was no obvious age trend shown in the results as most weight loss was achieved in the over 60 age band, but the least amount of weight loss was associated with those in the 51-60 age band.

Whilst males were generally more successful at losing weight, these differences between male and female were not statistically significant.

Of the 40 participants who completed six months with Weight Watchers, 38 (95%) reported that they were still trying to lose weight; and 25 (63%) stated they intended to continue to attend the Weight Watchers meetings.

4.4.3 – Satisfaction with Weight Watchers and associated activities

The results presented in Table 7 illustrate the participants' attitude towards the running of the Weight Watchers course.

Table 7 - Comparison in Attitudes Between Completers of 12 week Course and Non Completers

	Completed 12 weeks n (%)	Did Not Complete 12 Weeks n (%)
Enjoyed Weight Management group Meetings Yes (OK or better) No	294 (87) 8 (32)	43 (13) 17 (68)
Supportive Group Leader Yes (OK or better) No	289 (86) 14 (50)	46 (14) 14 (50)
Was the Information Supplied Useful Yes (OK or better) No	291 (87) 11 (46)	45 (13) 13 (54)
Travel to Group Meeting < 10 mins 11-30 mins > 30 mins	161 (80) 129 (90) 12 (92)	41 (20) 15 (10) 1 (8)
Leap Active Yes No	38 (88) 265 (83)	5 (12) 56 (17)
Eatsome Yes No	38 (88) 265 (83)	5 (12) 56 (17)

Note: because of conflicting data records, total completers and non-completers vary slightly between Table 5 and Table 7. Similarly, numbers enrolling in LEAPActive and Eatsome shown in Table 5 may vary from the self-reported data in Table 7.

4.5 Residents of Pengegon (Camborne) and Treneere (Penzance)

In order to assess the impact of the scheme on these two targeted areas of high deprivation, baseline results were isolated for the 62 cases identified by post code as resident in either Pengegon (26 cases) or Treneere (36).

Based on Census data from 2001 it is possible to estimate the potential numbers of obese adults resident in the relevant SOAs (Super Output Areas):

Table 8 - Referrals from Pengegon and Treneere

SOA	Adult population (2001 Census)	Estimated no. of obese adults (60% of adults)	No. of referrals	12 weeks complete
Kerrier 008B (Pengegon)	865	519	26	20
Penwith 006E (Treneere)	1023	614	36	27

Source: www.neighbourhood.statistics.gov.uk, accessed 16 June 2008

Although the sub-group was selected from specific small geographical locations, as many as 12 of the 14 participating practices referred at least one resident of either Pengegon or Treneere. Most referrals were from the practices at Morrab (13), Phoenix (10) and Alverton (9). The age ranges of this group were generally younger than the overall study population – 84% of the Pengegon/Treneere group were under 60, compared to 72% of the overall study population.

In Table 9, the results from the Pengegon/Treneere group (n=62) are compared with the overall study population (n=830) in respect of some selected key indicators.

Table 9 - Comparisons between Pengegon/Treneere residents and All Participants

	Pengegon/Treneere n (%)	Overall n (%)
Female	54 (87)	721 (87)
Enrolled with Weight Watchers	55 (89)	688 (83)
12 week complete (% of those enrolling)	47 (85)	299 (80)
LEAP Active (% of those enrolling on WW)	5 (9)	45 (12)
Eatsome (% of those enrolling on WW)	6 (11)	52 (14)
Contact with Support Worker	15 (24)	275 (33)

4.6 Other Weight Loss Interventions

Two other activities and additional one-to-one support were made available to clients to augment the lifestyle changes being promoted by Weight Watchers.

These activities were promoted by Health Promotion staff and support workers, as well as being publicised through local media and online.

The two additional activities were:

- LEAPActive, a physical activity class available at a number of community locations, and;
- Eatsome, a programme encouraged to encourage cooking for a healthy diet.

Both activities were run by Cornwall Health Promotion and sessions were designed to be accessible in the locations covered by the pilot. Both had previously been established as stand-alone activities before Weight Management West began.

Additionally, a support worker was assigned to the project, initially with the brief to contact all participants to discuss concerns and offer related services such as those mentioned above. However, when it became clear that this would be too large a caseload for one person, it was decided that priority would be given to clients encountering particular difficulties either in maintaining regular attendance or losing weight. It was also made clear to clients that the worker could be contacted in case of need of this kind of support.

4.6.1 LEAPActive

Of those enrolling in Weightwatchers for whom data is available, 45 of 374 (12%) also enrolled with LEAPActive. Table 10 provides a summary of the findings from which it can be seen that the average starting BMI for this group was 4% higher than the average for all participants, but otherwise this sub-group was generally comparable in terms of lifestyle.

Table 10 - Comparison between Participants enrolling in LEAPActive and All Participants

	LEAPActive group n (%)	Overall n (%)
Female	38 (84)	721 (87)
12 week completers	43 (96)	299 (80)
Average start BMI	38.7	37.3
Average BMI after 12 weeks	36.5	35.2
Smokers	2 (4)	100 (12)
Excess alcohol	2 (4)	45 (5)
Poor diet	24 (53)	407 (49)
Low level of physical activity	30 (67)	580 (70)

4.6.2 Eatsome

Of the 374 cases considered in Section 4.4, 52 enrolled with Eatsome. (The co-ordinator of the Eatsome programme reported that 90 people participated over the full duration of the referral programme (Aston, 22 May 2008, personal communication)). The baseline characteristics of this group are as follows:

Table 11 - Comparison between Participants enrolling in Eatsome and All Participants

	Eatsome group n (%)	Overall n (%)
Female	45 (87)	721 (87)
12 week completers	43 (83)	299 (80)
Average start BMI	38.4	37.3
Average BMI after 12 weeks	36.2	35.2
Smokers	3 (6)	100 (12)
Excess alcohol	1 (2)	45 (5)
Poor diet	24 (46)	407 (49)
Low level of physical activity	15 (29)	580 (70)

It should be noted that 19 individuals took advantage of both LEAP and Eatsome, so some of the data overlaps.

Of the 52 cases, 22 (42%) reported a healthy diet (five or more portions of fruit/vegetables daily) at baseline. Of 37 Eatsome participants who completed a questionnaire at 12 weeks, 31 (84%) reported a healthy diet.

4.6.3 One to One Support

Of the 830 registered clients, 275 either initiated or received telephone contact with the support worker. Between 85 and 90 of these individuals were also seen face-to-face (Williamson, 27 May 2008, personal communication).

Table 12 - Comparison between Participants given One to One Support and All Participants

	One to One Support n (%)	Overall n (%)
Female	237 (86)	721 (87)
12 week completers	146 (48)	299 (80)
Average start BMI	36.9	37.3
Average BMI after 12 weeks	34.9	35.2
Smokers	28 (10)	100 (12)
Excess alcohol	15 (5)	45 (5)
Poor diet	131 (48)	407 (49)
Low level of physical activity	187 (68)	580 (70)

4.7 Comparison with Results Obtained Elsewhere

4.7.1 National Comparison

The results from the study sample in terms of smoking, alcohol, diet and exercise differed widely from data available nationally. Table 13 compares the lifestyle indicators reported by the study population with nationally published data.

Table 13 - Comparison Between Cornwall Sample and National Data on Lifestyle Indicators

	Study n (%)	National data ⁽¹⁾⁽²⁾⁽³⁾
Smoking prevalence	Female 91 (14%) Male 9 (9%)	Female 21% Male 23%
Alcohol: Excess Abstinent	45 (5%) 490 (59%)	21% 12%
Poor Diet	Female 349 (48%) Male 53 (53%)	Female 68% Male 72%

Sources: (1) ASH (2008), (2) Institute of Alcohol Studies (2008), (3) National Statistics (2008)

Comparison data in respect of physical activity is omitted, as the criteria for the questionnaire (activities of at least 20 minutes) and national surveys (activities of at least 30 minutes) differ.

4.7.2 Comparison with Derby Study

The study conducted by Lavin *et al.*, (2006) in the Greater Derby Primary Care Trust was similar to the Cornwall pilot in many respects. The commercial partner was Slimming World rather than Weight Watchers but the inclusion criteria were similar including a BMI of >30. The intervention was not aimed specifically at deprived groups, although socio-economic status was established with a series of questions concerning income, employment status etc. Sixty-two clients completed the 12 week course from 107 original recruits (58%).

The information in Table 14 compares the outcomes from attending the slimming programmes from participants both in the Derby study and the Cornwall study. In both studies weight loss was assessed at the end of the 12 week slimming programme.

Table 14 - Weight Loss Comparisons of Referral programmes in Derby and West Cornwall

	Derby n (%)	Cornwall n (%)
Clients failing to enrol	16 (15)	142 (17)
Enrolled clients failing to complete 12 weeks	29 (32)	75 (20)
No. of clients weighed	62	227
Avg. weight loss (kg)	-5.4	-5.8
Avg. weight loss (% of body weight)	-6.4	-5.8
% achieving > 5% weight loss	35 (57)	135 (59)
% achieving > 10% weight loss	4 (6)	28 (12)

Given the small sample in the Derby study, the results are very similar for the two cohorts.

5. Summary of Questionnaire Analysis

The aim of this study was to undertake statistical analysis of questionnaire data, focusing on patients fulfilling BMI criteria of >30 , some of whom undertook a twelve week Weight Watchers course. The focus of the analysis was to evaluate whether the issuing of free vouchers for a commercial slimming class was successful in achieving both weight loss and an awareness of the benefits of a healthier lifestyle.

The Weight Management on Referral project sought to address obesity growth in deprived areas in West Cornwall. Individuals classified as obese (BMI >30) were identified at 14 nominated GP practices and issued with free vouchers for a 12 week Weight Watchers programme. By April 2008, 830 individuals had been issued with vouchers, of whom 688 (83%) later enrolled at a local Weight Watchers class. The majority of those receiving vouchers were female (84%) with a similar proportion enrolling with Weight Watchers (89%). There was good representation across all age bands.

Despite the fact that more men than women are classified as obese, the majority of those identified as being eligible for the scheme were women.

Possible reasons for the disparity are:

- Men are less inclined to visit their GP surgery than women (Moynihan, 1998); and
- Men may have been put off attending Weightwatchers because of the prospect of a female-dominated class, and a popular perception, fuelled by advertising, that Weightwatchers is an activity aimed principally at women (Stinson, 2001).

Moreover, given that this intervention is targeted at areas of deprivation, it is relevant to note that there is currently no UK evidence to support the hypothesis that excess weight in men is associated with low socio-economic status:

There was no apparent relationship between IMD (Index of Multiple Deprivation) and prevalence of obesity among men. However, men in the least deprived IMD quintile had the highest prevalence of overweight including obese, while men in the most deprived quintile had the lowest prevalence. (National Statistics, 2008. p6)

The balance of men to women is relevant in terms of overall obesity strategy, as the referral scheme was predominantly of benefit to female participants. However, if it is accepted that obesity in men is not consistent with socio-economic status, targeting efforts at women in deprived areas may prove to be appropriate in terms of future funding of this kind.

From the GP practices, the proportion of patients enrolling per 1000 registered patients was between 13 and two. In order to measure the contribution of individual practices it would be necessary to measure the number of referrals against the number of registered patients classified as obese. The referral rates will also depend on the overall footfall at each practice, which may vary according to geographical location.

Analysis of the weight data shows that 9% of those for whom weight data is available were not obese at the beginning of the Weight Watchers course. In most cases this could be due to weight fluctuations between the GP visit and the beginning of the Weight Watchers sessions, but there may also have been some errors by staff at GP surgeries in identifying eligible individuals. Practice staff should be aware of the NICE guidelines on assessing patients, particularly the booklet '*Treatment for people who are overweight or obese*', available online at www.nice.org.uk/CG043

Enrolled patients self-reported healthier lifestyles at baseline than the general population. The methods of data collection may have contributed to these results. It is suggested that the disparities can be explained by a combination of the following factors:

- Overweight individuals with poor lifestyles might have been less motivated to embark on a formal weight management course, therefore

the study population would not be representative of the adult population as a whole;

- Anecdotal evidence suggests that many participants deliberately understated their consumption levels, believing (incorrectly) that if they told the truth concerning their lifestyle they would be disqualified from receiving free vouchers;
- Individuals might have been embarrassed to reveal the true extent of their lifestyle to a stranger on the telephone, which was the method by which the majority of interviews were conducted;
- There was no option on the questionnaire recognising 'declined to answer' status. For example, anyone declining to reveal their smoking status would have been recorded as a non-smoker.

Of those eligible for the Weight Watchers course and for whom data was available, 374 started but 75 failed to complete the course. The remaining 299 (80%) completed the 12 week programme. However not all those who exited the programme intended to do so permanently – 22 of the 61 (36%) who responded were leaving their options open to return to a weight loss programme at some point.

Younger participants were more likely to exit the programme before completion. The findings replicate those of Lavin *et al.*, (2006), where more than 50% (n=19, p<0.008) of the under-40 age band in Derby failed to complete the 12 week course. This may be simply a consequence of busier lives and family and work commitments, or perhaps that the culture of weight loss amongst younger people is to regard it somewhat less seriously – something that can be tried, then put off until later. It was notable that those that did stay with the programme from this age band achieved greater weight loss over 12 weeks than the population in general.

Based on the available weight data (n=227) 135 individuals (59%) achieved at least 5% weight loss over the course of the Weight Watchers programme. Of those continuing with the programme for a further 12 weeks (n=40), 31 (77%) recorded at least 5% weight loss compared to baseline.

Overall results compared favourably with a similar scheme reported in the Greater Derby Primary Care Trust (Lavin *et al.*, 2006).

The background documentation prepared for the Weight Management on Referral scheme made the following estimates concerning the probable effect of the programme:

It is estimated that one in three patients recruited to the programme will lose 5% of body weight by the end of twelve weeks and one in five will lose 10% of body weight. (Weight Management West project proposal, 2007)

In the event the first estimate was easily achieved whilst the second was not – the proportion of those achieving 10% body loss was closer to one in nine (12.3%). However, the results were higher than those achieved in Derby, and it has been reported that weight loss of 5% or above produces measurable health benefits such as reduced blood pressure, although the evidence is more robust for sustained weight loss over at least one year, and weight loss of 10% is deemed to be ‘clinically significant’ (National Obesity Forum, 2004).

A considerable number of those completing the 12 week programme improved their lifestyle in terms of alcohol consumption, diet and exercise (self-report). This is an important finding and should be considered alongside weight loss data in assessing the benefits emerging from the initiative. A change in lifestyle, if sustained, will produce longer-term benefits which cannot be quantified from the short-term data provided here.

A number of participants also took advantage of other related services, including LEAPActive, a physical activity programme, and Eatsome, a course encouraging cooking for a healthy diet. Generally these participants had higher starting BMI measurements than the overall study population. Two hundred and seventy-five participants (33%) spoke to a support worker employed to provide counselling and encouragement to those on the programme.

Assessing the importance of related activity was difficult to quantify, as those looking for additional support over and above that provided through Weight Watchers were generally those who recorded higher BMI measurements at

baseline and by definition, i.e. seeking out further support activity, were finding it more difficult to lose weight. Additionally, the sample size was small. As a result, direct comparisons with the overall study population would not fairly assess the impact of these additional activities. Qualitative data has been collected as part of the wider evaluation of the project and it is considered that this may serve to highlight the impact in a more useful way.

It is clear from the data that the Weight Management on Referral initiative has benefited a major proportion of those targeted through the GP practices, and there is no reason to expect that the results would not be similar if repeated elsewhere, provided that access to commercial weight management groups was comparable. What cannot be assessed from these data is the impact on weight management in the longer term, and it is recommended that longitudinal studies are conducted on this population to assess progress against baseline data, at yearly intervals if circumstances permit. The evidence base (e.g. Dick (2004)) suggests that a combination of activities such as diet plus exercise can achieve more lasting change than diet alone, and thus by implication the regime of commercial programmes such as Weight Watchers and Slimming World, which address a range of lifestyle behaviours, present a potentially beneficial option to obese individuals who are motivated to lose weight.

6. References

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Appendix – Questionnaires

Note: the questionnaires originally devised for the pilot scheme contain the phrase ‘Slimming on Referral’. Subsequently it was established that this term had been copyrighted to Slimming World, and therefore it has been removed from the text of this report.

‘Slimming on referral’ registration questionnaire (Q1)

You will be asked these questions when you phone to register for the ‘Slimming on referral’ programme. Please complete the form in your own time before making the call so that you are prepared to provide the answers when asked.

Your details

1. Name:.....

2. Address:.....

.....3. Post code:

4. Sex: male female (Please tick one box)

5. Age:years

6. GP name: Practice:.....

Joining a weight management support group

7. How important is it for you to start losing weight?

Please tick one box

Very important	<input type="checkbox"/>
Important	<input type="checkbox"/>
Not bothered either way	<input type="checkbox"/>
Not important	<input type="checkbox"/>
I really do not want to at the moment	<input type="checkbox"/>

8. What are your main reasons for wanting to lose weight?

Please tick all that apply

Don't want to lose weight	<input type="checkbox"/>
To feel better	<input type="checkbox"/>
To look better	<input type="checkbox"/>
For yourself	<input type="checkbox"/>
For specific event/occasion	<input type="checkbox"/>
To gain confidence	<input type="checkbox"/>

To help treatment/operation

Anxious about the effect of your weight on your health

GP advised it

Pressure from others

Other (please give details).....

9. How confident are you that you could lose weight over the next three months?

Please tick one box

Very confident

Confident

Don't really know

Unsure

Very unsure

Your health and lifestyle

10. Smoking

Do you smoke? yes no (Please tick one box)

If yes, about how many cigarettes do you have a day?

11. Alcohol

Generally, about how many alcoholic drinks do you have each week?

Enter number

Beer, lager or cider (how many pints?)

Wine (how many small glasses?)

Spirits (how many single measures?)

12. Diet

**How many portions of fruit and vegetables do you eat each day , on average?
(a portion is equivalent to about a handful, eg one apple or 7 cherry tomatoes, or three heaped tablespoons of peas)**

Enter number

fruit

Vegetables (not counting potatoes)

13. Physical activity

Generally, how many times in a week do you do any of the following activities for at least 20 minutes? (please write the number of times in the boxes)

	Enter number
Keep fit, dancing and exercises	<input type="text"/>
Other sport	<input type="text"/>
Jogging/running	<input type="text"/>
Cycling	<input type="text"/>
Swimming	<input type="text"/>
Brisk, long walks	<input type="text"/>
Hard physical labour in job/house/garden	<input type="text"/>
Other activity (please give details).....	<input type="text"/>
.....	

What to do next:

**Call 01209 313419 to register with the slimming on referral programme.
You will receive further details about the programme and be offered a choice of classes to attend.**

'Slimming on referral' 12 week completion questionnaire

For completion by the coordinator over the telephone.

"I have some questions to ask you, to help us to understand whether this programme is meeting people's needs, or whether we can improve it in some way."

ID number (completed by interviewer by reference to previous records):

Name

Date of Birth

The first questions are about the weight management group meetings

(please tick one box for each of the following questions)

Have you attended weight watcher meetings before Yes No

1. Did you find the weight management group meetings:

Very enjoyable enjoyable OK uncomfortable Very uncomfortable

2. Did you find the group leader:

Very supportive supportive OK Not supportive Very unsupportive

3. Did you find the information given at the group meetings:

Very useful useful OK Not very useful Useless

4. How did you normally get to the group meetings?

walk bus Drive yourself Driven by someone else Other (details)

5. How long did it usually take you to get to the meeting?

5 mins or less 5- 10 mins 10-15 mins 20-30 mins More than 30 mins

6. Did you take advantage of additional support available from:

(tick 'YES' column if you did, and then tick in a following column to show how useful it was)

	YES	Very useful	useful	Not very useful	useless
Weight Management Support Worker					
A buddy from the West Cornwall Healthy Living Centre					
A Leap Active 6 week course					
An Eatsome 'get cooking' session					
A 'walking for health' group					

7. Did you find the following elements of the slimming club meetings useful?

	Very useful	useful	Not very useful	useless
Information and advice about different foods				
Recipes and tips on how to prepare food				
Advice on how to lose weight				
Moral support				

8. Now that you have completed your 12 week programme, how do you feel?
(please tick all boxes that apply)

A sense of achievement	<input type="checkbox"/>	Less anxious/depressed	<input type="checkbox"/>
Glad it is all over	<input type="checkbox"/>	More anxious/depressed	<input type="checkbox"/>
Healthier	<input type="checkbox"/>	Other (please give details)	<input type="checkbox"/>
Less healthy	<input type="checkbox"/>	

Some questions about your health and lifestyle.....

9. Smoking

Do you smoke? yes no (Please tick one box)

If yes, about how many cigarettes do you have a day?

10. Alcohol

Generally, about how many alcoholic drinks do you have each week?

	Enter number
Beer, lager or cider (how many pints?)	<input type="text"/>
Wine (how many small glasses?)	<input type="text"/>
Spirits (how many single measures?)	<input type="text"/>

11. Diet

How many portions of fruit and vegetables do you eat each day , on average?
(a portion is equivalent to about a handful, eg one apple or 7 cherry tomatoes, or three heaped tablespoons of peas)

	Enter number
fruit	<input type="text"/>
Vegetables (not counting potatoes)	<input type="text"/>

12. Physical activity

Generally, how many times in a week do you do any of the following activities for at least 20 minutes? (please write the number of times in the boxes)

	Enter number
Keep fit, dancing and exercises	<input type="text"/>
Other sport	<input type="text"/>

Jogging/running

Cycling

Swimming

Brisk, long walks

Hard physical labour in job/house/garden

Other activity (please give details).....

.....

The future

13. Are you at the moment still trying to lose weight?

yes no

14. Are you confident you can maintain the weight loss you have achieved?

yes no Haven't lost weight

15. Do you think you will continue to attend the slimming club meetings?

yes no

16. If Yes

Go back to consult with you GP Practice referrer and get re-referred

17. If no, please can you tell us why not (tick all boxes that apply)

Feel I have achieved enough weight loss Generally too busy

Can now lose weight on my own Other (please give details)

The weekly fees are too expensive

Not benefiting any more from the group

18. If No at this point in time do you want to

Exit the programme totally :

Or would you like to engage with:

	YES	NO
A weight management support worker		
A buddy from the West Cornwall Healthy Living Centre		
A Leap Active 6 week course		
An Eatsome 'get cooking' session		
A 'walking for health' group		

Thank you for your time.

'Slimming on referral' exit questionnaire (patient quit within 12 weeks)

For completion by the coordinator over the telephone.

"I have some questions to ask you, to help us to understand whether this programme is meeting people's needs, or whether we can improve it in some way."

ID number (completed by interviewer by reference to previous records):

Name.....

Date of birth.....

The first questions are about the weight management group meetings

(please tick one box for each of the following questions)

Have you attended weight watcher meetings before Yes No

1. Did you find the weight management group meetings:

Very enjoyable enjoyable OK uncomfortable Very uncomfortable

2. Did you find the group leader:

Very supportive supportive OK Not supportive Very unsupportive

3. Did you find the information given at the group meetings:

Very useful useful OK Not very useful Useless

4. Would you like to make any comment about the group, the leader or the other people attending?

5. Listed below are some of the reasons why people may stop attending groups.

Please say whether they apply to you (tick all that apply)

- | | |
|---|--|
| I feel I can manage on my own <input type="checkbox"/> | Difficulties with child care <input type="checkbox"/> |
| I don't like being part of a group <input type="checkbox"/> | Other caring responsibilities <input type="checkbox"/> |
| Decided not to lose weight <input type="checkbox"/> | Shift work <input type="checkbox"/> |
| Lost enough weight already <input type="checkbox"/> | Too busy at home/work <input type="checkbox"/> |
| How much <input type="checkbox"/> | |
| Could not fit in with family's food <input type="checkbox"/> | Family difficulties <input type="checkbox"/> |
| Lack of support from family <input type="checkbox"/> | Found the system hard to understand <input type="checkbox"/> |
| Not losing any more weight <input type="checkbox"/> | Found it difficult to get certain foods <input type="checkbox"/> |
| Feeling too anxious/stressed/depressed <input type="checkbox"/> | Was not benefiting any more from group <input type="checkbox"/> |
| Health problems <input type="checkbox"/> | Could not afford certain foods <input type="checkbox"/> |
| Time of meetings not convenient <input type="checkbox"/> | Other (please give details) <input type="checkbox"/> |

Meeting place not convenient

6. What was your main reason for deciding not to continue?

7. Any other comments about your reasons for stopping the sessions?

8. How did you normally get to the group meetings?

walk bus Drive yourself Driven by someone else Other (details)

9. How long did it usually take you to get to the meeting?

5 mins or less 5- 10 mins 10-15 mins 20-30 mins More than 30 mins

10. Did you take advantage of additional support available from:

(tick 'YES' column if you did, and then tick in a following column to show how useful it was)

	YES	Very useful	useful	Not very useful	useless
A weight management support worker					
A buddy from the West Cornwall Healthy Living Centre					
A Leap Active 6 week course					
An Eatsome 'get cooking' session					
A 'walking for health' group					
Other (please specify)					

11. Did you find the following elements of the slimming club meetings useful?

	Very useful	useful	Not very useful	useless
Information and advice about different foods				
Recipes and tips on how to prepare food				
Advice on how to lose weight				
Moral support				

12. Are you at the moment still trying to lose weight?

yes no

13. Would you like to make any further comments about this programme?

.....
.....
.....

14. At this point in time do you want to
Exit the programme totally : See Question 15

Or would you like to engage with:

	YES	NO
A weight management support worker		
A buddy from the West Cornwall Healthy Living Centre		
A Leap Active 6 week course		
An Eatsome 'get cooking' session		
A 'walking for health' group		

15. Thank you for completing this with me
Can I send you my contact details in case you want support in the future

'Slimming on referral' 6 months completion questionnaire

For completion by the coordinator over the telephone.

"I have some questions to ask you, to help us to understand whether this programme is meeting people's needs, or whether we can improve it in some way."

ID number (completed by interviewer by reference to previous records):

Name

Date Of Birth

1. How do you feel after completing 6 months on the programme?

.....

2. Can you tell us what you enjoyed most about the programme?

.....

3 Now that you have completed your 6 month programme, how do you feel?

(please tick all boxes that apply)

A sense of achievement

Glad it is all over

Healthier

Less healthy

Less anxious/depressed

More anxious/depressed

Other (please give details)

.....

4 In the last 3 months, did you take advantage of additional support available from:

(tick 'YES' column if you did, and then tick in a following column to show how useful it was)

	YES	Very useful	useful	Not very useful	useless
Weight Management Support Worker					
A buddy from the West Cornwall Healthy Living Centre					
A Leap Active 6 week course					
An Eatsome 'get cooking' session					
A 'walking for health' group					
Other (please specify)					

Some questions about your health and lifestyle.....

5 Smoking

Do you smoke? yes no (Please tick one box)

If yes, about how many cigarettes do you have a day?

6 Alcohol

Generally, about how many alcoholic drinks do you have **each week?**

Enter number
Beer, lager or cider (how many pints?)
Wine (how many small glasses?)
Spirits (how many single measures?)

7 Diet

How many portions of fruit and vegetables do you eat **each day** , on average?
(a portion is equivalent to about a handful, eg one apple or 7 cherry tomatoes, or three heaped tablespoons of peas)

Enter number
fruit
Vegetables (not counting potatoes)

8 Physical activity

Generally, how many times in a week do you do any of the following activities for at least 20 minutes? (please write the number of times in the boxes)

Enter number
Keep fit, dancing and exercises
Other sport
Jogging/running
Cycling
Swimming
Brisk, long walks
Hard physical labour in job/house/garden
Other activity (please give details).....

.....

The future

9. Are you at the moment still trying to lose weight?

yes no

10. Are you confident you can maintain the weight loss you have achieved?

yes no Haven't lost weight

11. Do you think you will continue to attend the slimming club meetings?

yes no

12. If no, please can you tell us why not (tick all boxes that apply)

Feel I have achieved enough weight loss	<input type="checkbox"/>	Generally too busy	<input type="checkbox"/>
Can now lose weight on my own	<input type="checkbox"/>	Other (please give details)	<input type="checkbox"/>
The weekly fees are too expensive	<input type="checkbox"/>	
Not benefiting any more from the group	<input type="checkbox"/>	

13 Is there any other form of support that you feel would enable you to sustain your weight loss ?

.....
.....
.....
.....

We hope that you can continue to make the lifestyle changes necessary to attain a healthy weight.
Your GP will be monitoring your situation and to be able to monitor the success of the scheme we will be following participants up after a year

Thank you for your time

‘Slimming on referral’ exit questionnaire (patient quit within 12-24 weeks)

For completion by the coordinator over the telephone.

“I have some questions to ask you, to help us to understand whether this programme is meeting people’s needs, or whether we can improve it in some way.”

ID number (completed by interviewer by reference to previous records):

Name

Address

1. Listed below are some of the reasons why people may stop attending groups. Please say whether they apply to you (tick all that apply)

- | | | | |
|-----------------------------------|--------------------------|--|--------------------------|
| Difficulty maintaining motivation | <input type="checkbox"/> | Reached your target weight | <input type="checkbox"/> |
| Time of meeting not convenient | <input type="checkbox"/> | Felt you could do better on your own | <input type="checkbox"/> |
| lack of transport | <input type="checkbox"/> | Felt stressed or depressed | <input type="checkbox"/> |
| No one to look after the children | <input type="checkbox"/> | Found another way of losing weight | <input type="checkbox"/> |
| Other caring responsibilities | <input type="checkbox"/> | Difficulty fitting diet in with social life | <input type="checkbox"/> |
| Too busy at home or work | <input type="checkbox"/> | *The weekly fees were too expensive | <input type="checkbox"/> |
| Problems at home or work | <input type="checkbox"/> | Was not benefiting any more from the group | <input type="checkbox"/> |
| Health problems | <input type="checkbox"/> | Decided to stop losing weight for the moment | <input type="checkbox"/> |
| Not losing any more weight | <input type="checkbox"/> | Other (please give details) | <input type="checkbox"/> |

How much weight have you lost?

.....

*** (if not subsidised by the programme)**

2. What was your main reason for deciding not to continue?

3. Any other comments about your reasons for stopping the sessions?

4. After the first 12 weeks did you take advantage of additional support available from:

(tick ‘YES’ column if you did, and then tick in a following column to show how useful it was)

	YES	Very useful	useful	Not very useful	useless
--	-----	-------------	--------	-----------------	---------

Weight Management Support worker	
A buddy from the West Cornwall Healthy Living Centre	
A Leap Active 6 week course	
An Eatsome 'get cooking' session	
A 'walking for health' group	

5. Are you at the moment still trying to lose weight?

yes

no

6. Would you like to make any further comments about this programme? Please tell us what was good and what could be done better.

.....

.....

.....

.....

.....

7 At this point in time do you want to
Exit the programme totally : See Question

Or would you like to engage with:

	YES	NO
A weight management support worker		
A buddy from the West Cornwall Healthy Living Centre		
A Leap Active 6 week course		
An Eatsome 'get cooking' session		
A 'walking for health' group		

8.Thank you for completing this with me

Can I send you my contact details in case you want support in the future

Thank you for your time.