Hertfordshire Weight Management Pilot
Evaluation Report

EXECUTIVE SUMMARY

A 12 week pilot weight management service in Hertfordshire ran from January 2009 to March 2011.

This service was established in 22 GP Practices and two leisure providers and with a geographic spread across Hertfordshire.

It was delivered by Practice Nurses, Health Care Assistants and Fitness Instructors supported by weight management training and a computer programme designed to provide evidence-based diet and physical activity guidance.

The objective set was to achieve a loss in body weight of 5 per cent or more from people with a BMI of 30 or above or with a BMI of 28 or above with co-morbidities.

Results at the end of 12 weeks were:

- 37.6% of people achieved a body weight loss of 5 per cent or more.
- 4.2% of people achieved weight loss of 10% or more.
- 27.1% of people dropped to a lower BMI category.
- The serviced proved to be particularly good at attracting men.
- The average cost of each client supported was approximately £64.
- Benchmarking shows this service is cost-effective compared to other evaluated weight management services.

1) BACKGROUND

1.1 In 2008 West Hertfordshire PCT (now part of NHS Hertfordshire) secured £190,000 to deliver a weight management project in primary care across Hertfordshire.

1.2 £180,000 was secured from the Big Lottery Fund and £10,000 from Hertfordshire Local Area Agreement funding.

1.3 The project started delivery in January 2009 and finished in February 2011. It was managed by a Health Improvement Specialist from NHS Hertfordshire Public Health Directorate.

1.4 The rationale for the project is Health Profile data [(1)] indicating that about 1 in 4 adults in Hertfordshire are obese, that is with a Body Mass Index (BMI) ≥ 30 kg/m^2.

1.5 According to the Foresight national report, if adult obesity levels continue to rise at the current rate, 50% of women and 60% of men will be obese by 2050[(2)].

1.6 Obesity increases the risk of mortality and of many health conditions including coronary heart disease, diabetes, osteoarthritis, mental health problems, and some cancers [(3)].

1.7 In addition it is estimated that the cost of obesity in Hertfordshire is £316 million per year of which £84 million are direct cost to the NHS[(4)].

1.8 The projected rise in obesity levels in the Foresight report have financial implications for the NHS whereby the cost burden of obesity is set to rise from 6% up to 13.9% of the NHS budget.

1.9 This project uses an evidence based weight management service model in line with NICE guidance [(5)] which incorporates the key elements of healthy eating, physical activity and behaviour change and focuses on healthy sustainable weight loss whereby people are expected to lose no more than 0.5–1 kg (1–2 lb) a week.

1.10 The outcome measure used is percentage weight loss based on initial weight when entering the service. A **target of 5% weight loss** was set to be achieved at the completion of the 12 week intervention.

1.11 This level of weight loss has been shown to have a significant clinical impact on patient outcomes including reductions in blood pressure and total cholesterol [(6,7)].

1.12 It is recognised that weight loss of more than 5 per cent is also beneficial, for example a 7% decrease in initial weight would reduces the risks of developing type 2 diabetes by 58% in individuals with impaired glucose tolerance [(4)].

2) PROJECT DESCRIPTION

The Model

2.1 The project had a number of key aims:

- To be a targeted intervention: BMI ≥ 30 or ≥ 28 for patients with co-morbidities
- To help patients achieve weight loss (with an initial 5% goal)
- To establish primary care weight management services in the county
- To train the primary care workforce in weight management intervention
- To help patients make sustainable lifestyle changes in terms of healthy eating and physical activity
- To ensure an appropriate exit strategy was in place

2.2 The service model involved primary care professionals (25 Practice Nurses, 26 Health Care Assistants, and one Registered Dietician) who undertook a one day training course to deliver a one to one weight management service from their GP surgery.

2.3 A number of exercise professionals (15 in total) were also trained, some to support GP surgeries that had insufficient staff capacity and also to deliver a service in a leisure centre setting to establish if comparable outcomes could be achieved in this setting.

2.4 In a majority of cases most service providers had two members of staff trained to help ensure continuity of service even if there was staff absence or turnover. A total of 67 practitioners were trained.

2.5 The training provider (*KasTech Ltd*) was selected from the Department of Health's Directory of Obesity Training Providers [8] to deliver the training module.

Recruiting GP Practices in the Pilot

2.6 At the start of the project expressions of interest to participate in the intervention were invited from all GP Practices in Hertfordshire

2.7 Service providers were then selected to take part in the project based on obtaining a good geographical spread across the 10 districts in the county as well as ensuring where possible services were located in areas of higher need, based on obesity prevalence data and relative health inequalities

2.8 In total 31 service providers were recruited throughout the project. This was on a rolling basis therefore some service providers started delivery towards the start of the project whereas others started towards the latter end. (See Appendix 1: List of Service Providers).

2.9 When the project came to an end there were 24 service providers who had patient outcome data to collect, these are shown on the map (Appendix 2).

Setting up the service

2.10 Funding was provided to GP Practices to cover:

- Additional Practice Nurse (PN) or Healthcare Assistant (HCA) time to operate a 1:1 weight management clinic within the practice. (Four hours per week at the rate of £16 per hour)
- Provision of the specialised weight management software. (*ProHealthClinical*)
- Training to enable practitioners to deliver the intervention.(average of 2 members of staff per practice)
- Advice on patient selection
- High capacity scales to weigh heavier patients

2.11 Service providers were required to:

- Dedicate staff time to deliver the service for approximately 4 hours per week – either within their existing hours or additional hours.
- Have a computer and printer in a private consultation area so the trained practitioner could use the software when seeing patients.
- A system to select and book patients into the service

2.12 After initial training, service providers were issued with a weight management software package called *ProHealthClinical* which had been used in a previous weight management RCT intervention and has demonstrated its effectiveness [(9)].

2.13 The software licences are perpetual so once purchased did not require annual renewal fee.

2.14 The software contains a range of practical tools including;

- Bespoke energy expenditure assessment for the patient
- Healthy meal and snack plans
- Personalised physical activity energy expenditure calculations
- Food and activity diaries
- Monitoring of weight and BMI
- Goal setting and progress monitoring
- Achievement certificates
- Reporting function for individual patients and group outcomes
- Comprehensive lifestyle database easily tailored for individuals

2.15 In most cases the software was loaded onto the server within the GP practice to enable practitioners' access to the program from a number of computers in different consulting rooms

2.16 During the intervention the trained practitioners would use the weight management software as a means to agree and track changes in patient's behaviour and weight. In addition it served as a 'toolbox' of resources which the practitioner could use to match to the specific needs of the patient in their attempt to lose weight.

Recruiting into the service

2.17 The intervention was a 12 week programme. Patient inclusion criteria stipulated an initial BMI of at least 30 or a BMI of 28 or over with co-morbidities. Within these BMI criteria it was up to the individual service provider to choose which patients they recruited into their service and how they did this.

2.18 Some services targeted patients who fulfilled the BMI inclusion criteria alone; others concentrated on patients who also had recorded co-morbidities. Patient recruitment techniques also varied with some service providers conducting searches on their clinical system to target potential service users, others invited suitable patients to a patient open evening to aid recruitment.

2.19 The small number of leisure providers who were involved in the pilot placed recruitment posters at their venues and some placed adverts in the local press.

2.20 Whatever the recruitment method service providers employed they were advised during the initial training to select patients who had a clinical need and were sufficiently motivated to take part in the 12 week programme.

Service Delivery

2.21 Practitioners followed a set service delivery protocol. This involved an initial consultation of 30-40 minutes where baseline information was taken (weight, height, physical activity levels).

2.22 Past weight loss attempts were reviewed and in consultation with the patient, healthy eating and physical activity goals were agreed.

2.23 Follow up appointments (15-20 minutes) took place at 2, 4, 6, 8 and 12 weeks when the patient's weight was recorded and behavioural goals reviewed and reset as appropriate.

2.24 Tailored feedback was given to patients based on the successes and difficulties experienced since their previous appointment.

2.25 A suggested topic guide was provided to practitioners and included in the protocol (Appendix 3: Structured Lifestyle Intervention Protocol).

3) RESULTS

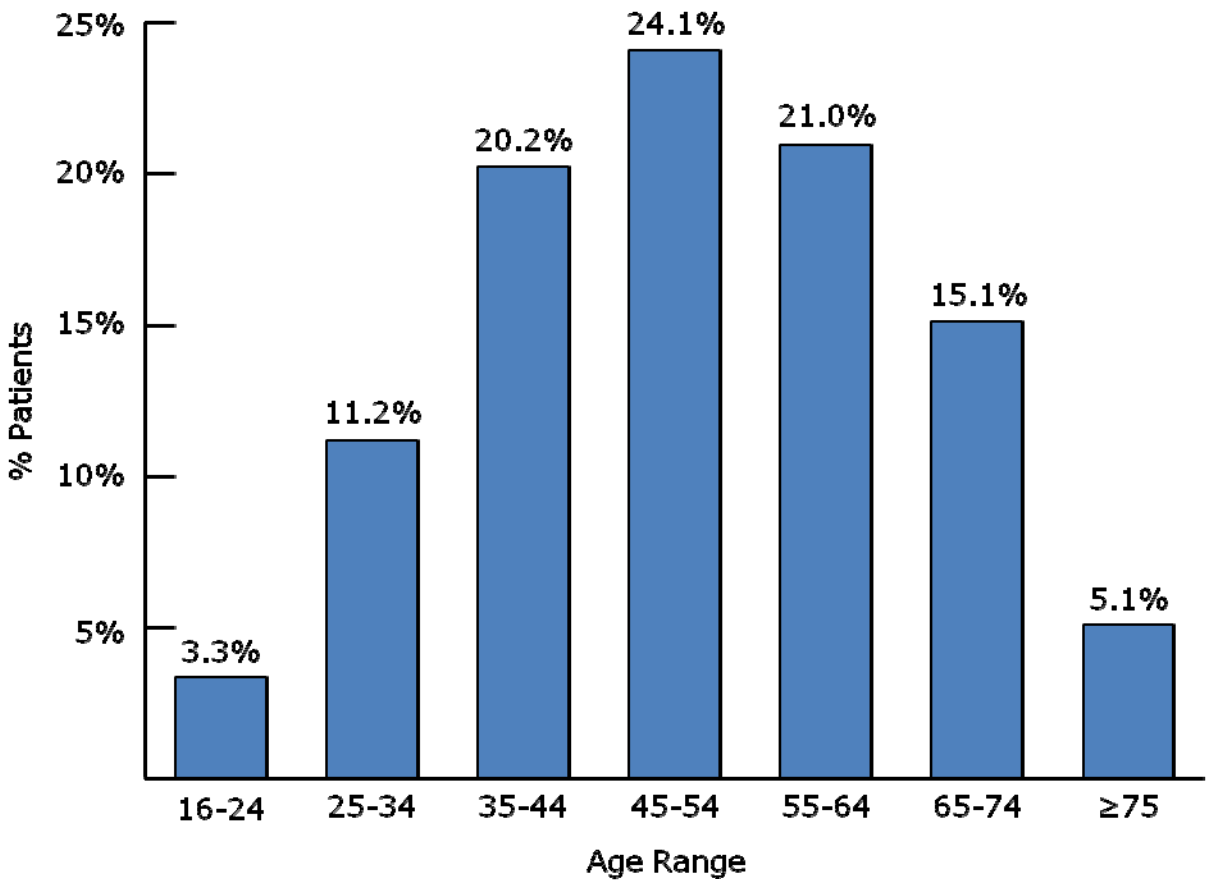
3.1 Providers reported seeing 2,147 patients in total.

3.2 Detailed data was obtained from 24 service providers that allowed analysis on 1812 patients.

Age Distribution

3.3 Graph 1 shows the age distribution of the patients that took part in the intervention with the largest number between 45 and 54 years old.

Graph 1: Age Distribution of Patients



Evaluation

3.4 To assess these results data was electronically extracted from the *ProHealthClinical* weight management software at each site and pooled to give an overview of the project across Hertfordshire.

3.5 From the 24 service providers there were a total of 1812 service users; with the initial consultation and the subsequent follow ups ideally each service user should receive 6 appointments. However with all health improvement interventions not all patients completed the entire intervention, below is a breakdown of attendance rates:

- 1144 patients attended ≥ 4 appointments (of these 923 patients attended ≥ 5 appointments)
- 511 patients attended ≤ 3 appointments*
- 157 patients attended initial appointment only*

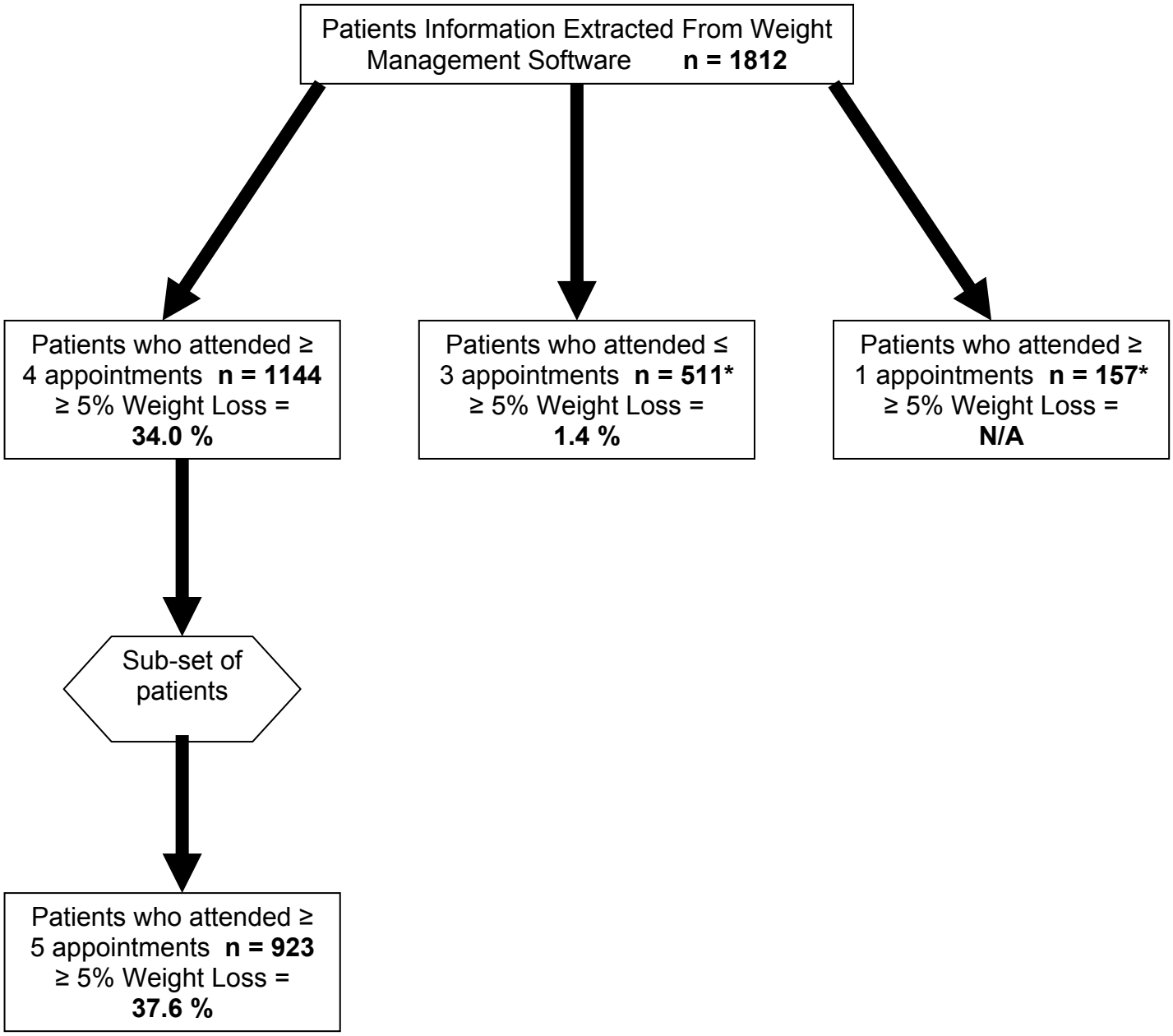
Total = 1812 patients

* The protocol encouraged practitioners to discharge patients not sufficiently motivated to make lifestyle changes and not achieving weight loss of at least 2lbs or 1% of their body weight within the first month.

3.6 Therefore over 63% of the participants attended at least two-thirds of the intervention (≥ 4 appointments).

3.7 The flow of patients is summarised in figure 1 below

Figure 1: Patient Attendance and Outcomes Flowchart



3.8 To make a comparison with published results of other interventions data for patients who attended ≥ 5 appointments will be used as this is the measure most commonly used in the literature. In this case that is the 923 patients who attended ≥ 5 appointments.

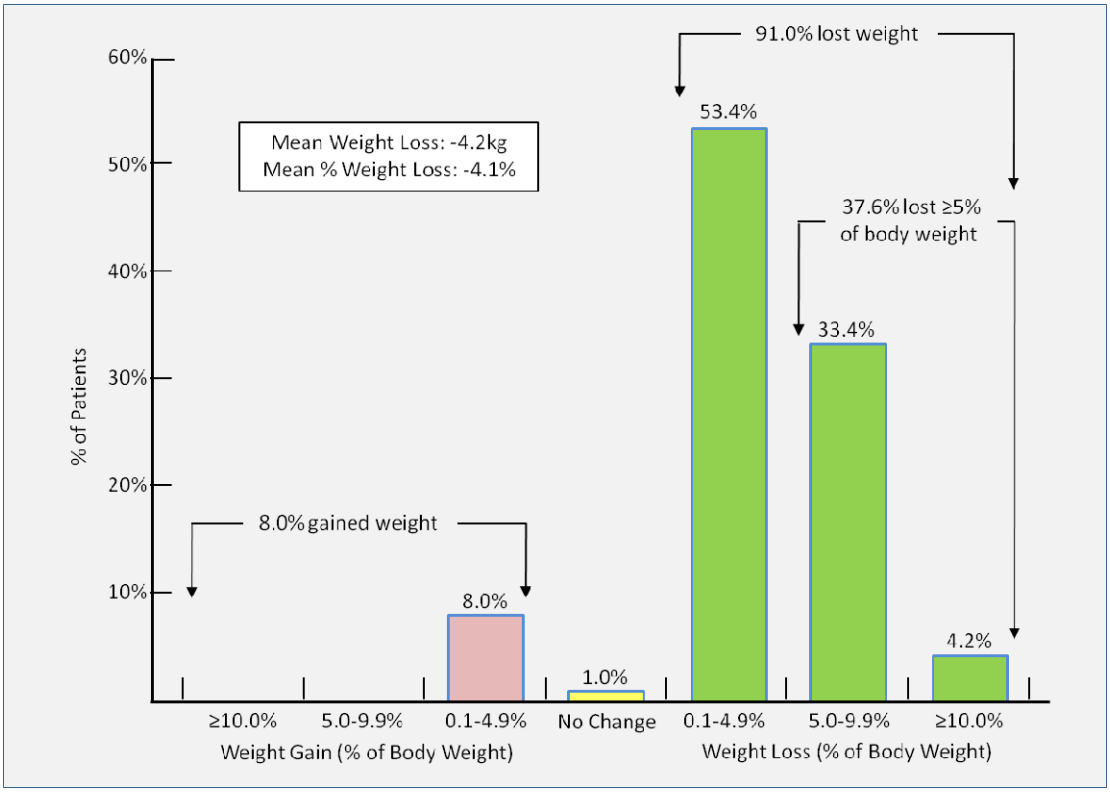
Table1: All Patients Attending ≥ 5 Appointments (n=923)

	Patients Attending 5 or more Appts within 14 Weeks	Female	Male
Count (%)	923 (100%)	677 (73.3%)	246 (26.7%)
Mean Age (Range)	53 (19 to 87)	52 (19 to 87)	55 (27 to 81)
Mean Initial BMI kg/m² (Range)	37.1 (25.5 to 71.1)	36.9 (25.5 to 60.4)	37.6 (26.6 to 71.1)
Mean Initial Weight kg (Range)	103.1 (60.2 to 203.0)	97.9 (60.2 to 164.0)	117.4 (77.0 to 203.0)
Mean Weight Change kg (Range)	-4.2 (5.5 to -23.2)	-3.9 (5.5 to -23.2)	-5.1 (4.1 to -17.3)
Mean Weight Change % (Range)	-4.1% (4.4 to -19.9%)	-4.0% (4.4 to -19.9%)	-4.4% (2.6 to -12.5%)
Patients BMI ≥ 40	27.4%	27.2%	28.0%
Lost Weight	91.0	90.4%	92.7%
Weight Loss ≥ 5%	37.6	36.2%	41.5%

Last Observation Carried Forward (LOCF)

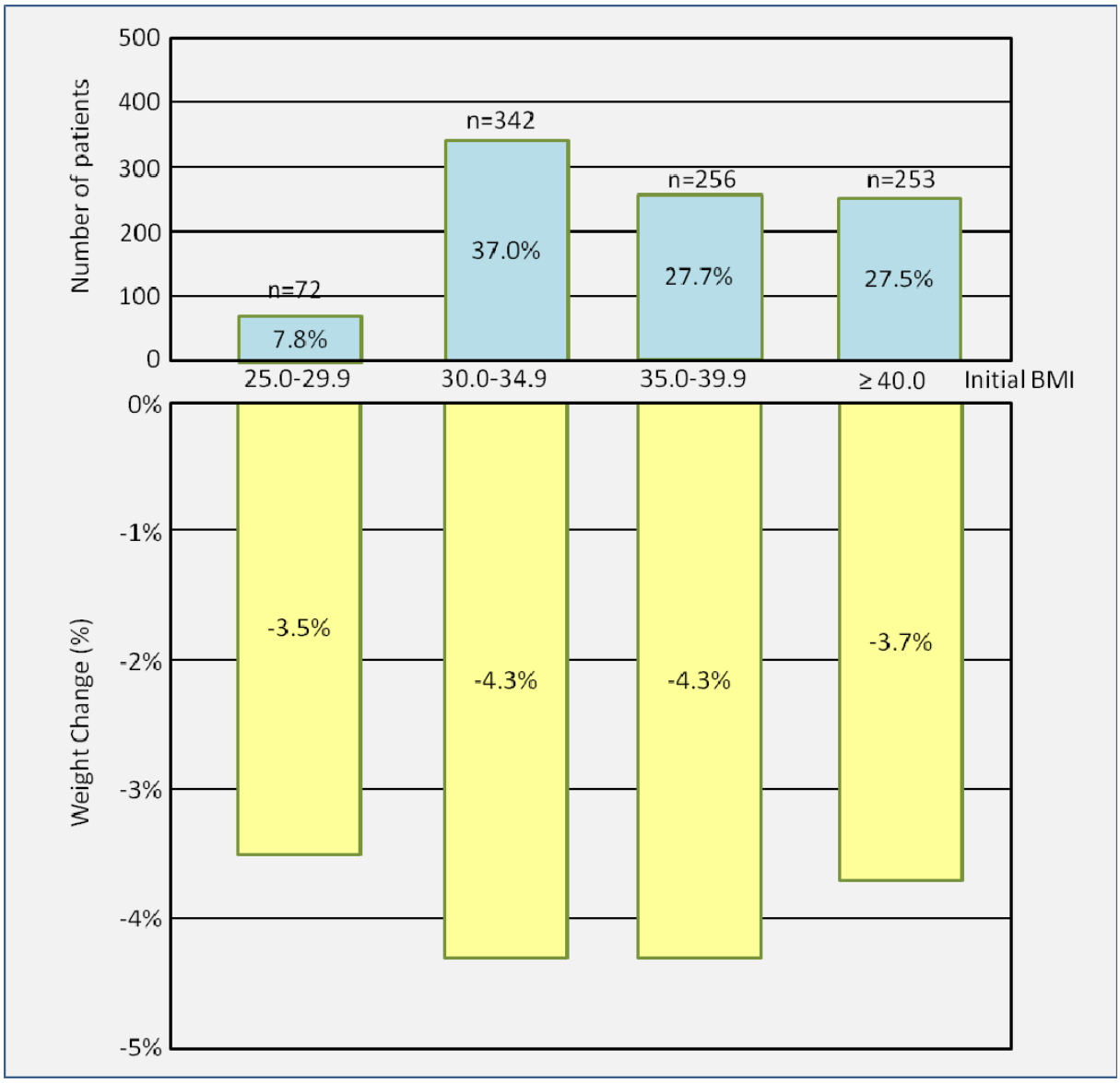
3.9 The average initial starting weight was 103.1kg with an average initial BMI of 37.1; also 27.4% of patients had a starting BMI ≥ 40.

Graph 2: Weight Change for Patients Attending ≥5 Appointments within 14 Weeks (n=923)



3.10 This shows that 91% of patients attending ≥ 5 Appointments lost weight with **37.6% losing 5% or more** which is clinically significant, 4.2% achieved more than10% weight loss in the 12 week period. Also 250 of the 923 patients (27.1%) dropped to a lower BMI category during the intervention.

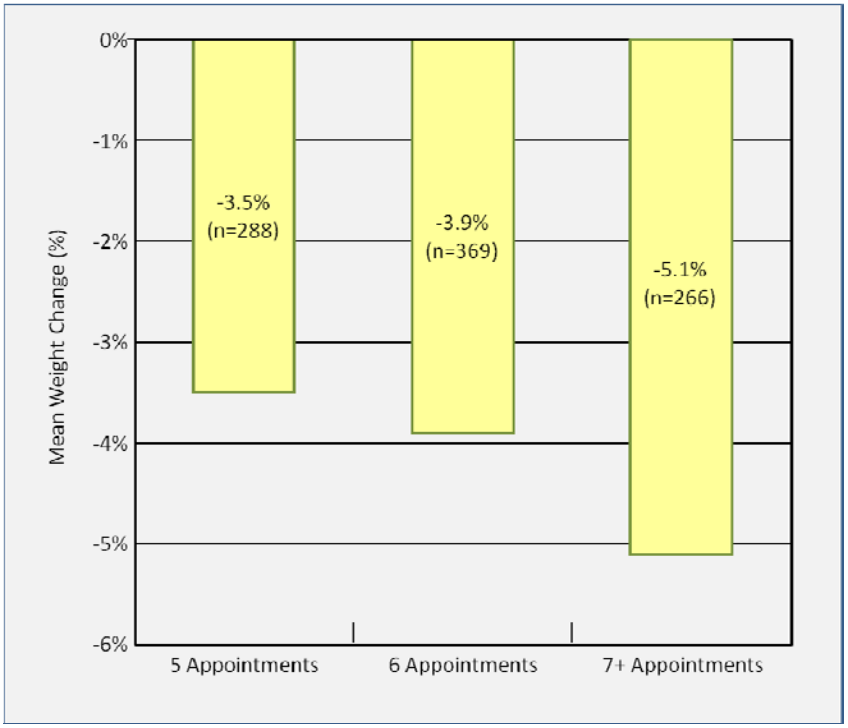
Graph 3: Percent Weight Change Grouped by Initial BMI for Patients Attending ≥ 5 Appointments



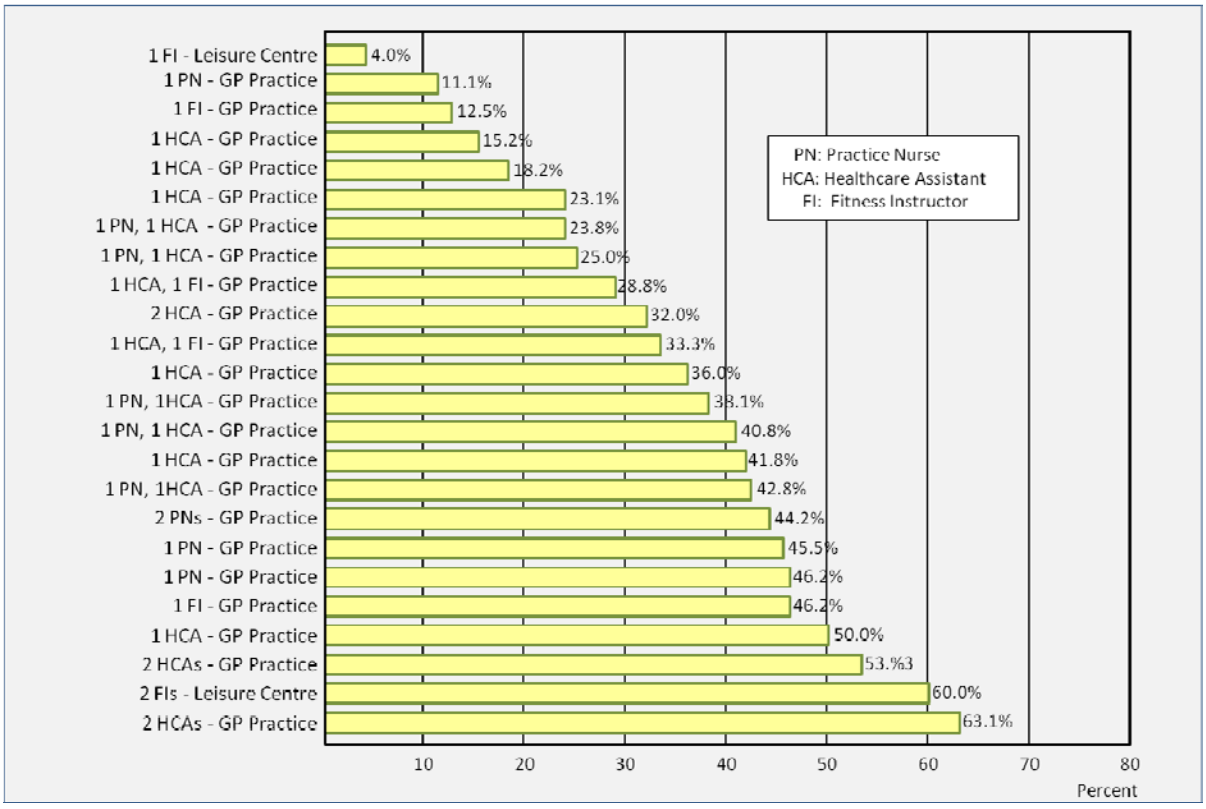
3.11 Graph 3 above shows across the BMI categories the weight loss achievements of patients, no matter what the initial BMI patients were able to achieve an average weight loss of 3.5% - 4.3%.

3.12 Graph 4 below demonstrates better weight loss with the more appointments patients are motivated to attend.

Graph 4: Number of Visits – Impact on Mean Wt. Change (%) for Patients Attending ≥ 5 Appointments (n=923)



Graph 5: Percent of Patients Losing ≥ 5.0% of Body Weight within 14 Weeks by Setting and Practitioner Profession



3.13 Graph 5 above shows that there was a large range across service providers (4% - 63.1%) for patients who achieved weight loss of 5% or more. **The mean that achieved ≥ 5% weight loss was 37.6%**.

4) COSTS

4.1 At the conclusion of the project £138,000 of the original £190,000 budget had been spent. Negotiations between NHS Hertfordshire and the lottery funders agreed a lower project spend along with fewer beneficiaries.

4.2 Project costs consisted of set up costs; training, marketing, weight management software and equipment. Also the budget was used to pay service providers for delivering weight management service time.

4.3 In total 2,147 patients experienced at least part of the 12 week intervention, with an average cost per patient of approximately £64.

4.4 After initial set up spend, if service running costs are considered in isolation cost per patient can be calculated as follows;

Contact time in 12 week intervention	**X**	Practitioner £ per hour	**=**	£ per patient
2 hours 20 mins	**X**	£16	**=**	£37.33 per patient

4.5 The cost of the Project Manager was in kind contribution from the Public Health Directorate at NHS Hertfordshire. Although this not directly quantifiable considerable time was spent on the following; conducting needs assessment, recruiting service providers, arranging training, training provider/venue, drawing down lottery grant funding, processing provider payments, collecting activity data and reports from service providers, reporting on spend, performance and outcomes to lottery funder, evaluation and dissemination of results.

5) DISCUSSION

5.1 The project achieved most of the aims set out in section 3.

5.2 Nearly all the participating patients attending the weight loss services fulfilled the clinical criteria and **37.6% lost 5% or more of their initial weight** which is clinically significant.

5.3 The percentage achieving ≥ 5% over the12 week intervention exceeds benchmarks set by a number of other weight loss interventions (see table 2 below).

Table 2: Benchmarking Results along with other Weight Loss Interventions

	Slimming World NHS Bristol [10]	WW NHS Referral Scheme Database-MRC [11]	ProHealth*Clinical* BHF Funded RCT GP Pilot [9]	ProHealth*Clinical* NHS Hertfordshire [12]	Counterweight [13]
	12 weeks	12 weeks	12 weeks	12 weeks	12 weeks
Intervention Type	Group	Group	One to One	One to One	One to One
Intervention Visits	Weekly	Weekly	Fortnightly	Fortnightly	Fortnightly
N=	n=2696	n=29,326	n=122	n=923	n=775
Mean Age	N/A	49	47.2	53	49.4
Mean Initial Wt (kg)	N/A	94.3 (median wt)	98.5	103.1	101.2
Mean BMI kg/m2	N/A	35.1 (median BMI)	35.9	37.1	37.1
% BMI ≥ 40	N/A	N/A	N/A	27.4%	25.4%
Wt Chg kg	-3.6	-2.8 (median wt)	-4.0	-4.2	-3.3
Wt Chg %	-3.4	-3.1%	-4.1%	-4.1%	-3.3%
≥5% Wt Loss	36%	33%	34%	37.6%	26.1%
% men	10%	10%	19.7%	26.7%	23%

5.4 Weight management services were set up across the county, with services established in all 10 local authority areas within Hertfordshire. In total 67 practitioners (Practice Nurses, Healthcare Assistants, Fitness Instructors) were trained across 30 service providers.

5.5 A small number of practitioners and service providers were unable to deliver the service due to staff shortages and competing healthcare priorities which placed demands on their time. Also some services providers did not deliver the 4 hours clinic time per week as intended due to these reasons. As a consequence a number of service providers were invited to extend their clinic hours and took up the opportunity.

5.6 As service providers had agreed to take part on a voluntary basis it was difficult to manage if they did not deliver the agreed number of clinic hours, in retrospect a service level agreement may have addressed this issue? This was the primary reason the original number of beneficiaries had to be reduced and not all the funding spent due to lower than anticipated patient throughput with a number of services.

5.7 Although the hourly remuneration rate at £16 per hour was agreed with service providers at the start of the project where Senior Practice Nurses were delivering the intervention some Practice Mangers reported that this barely covered their costs if they were working additional hours. Therefore if the intervention was to be run again this is an area which may need reconsideration.

5.8 The average initial starting weight was 103.1 kg (range 60.2 to 203.0) and mean initial BMI was 37.1 (range 25.5 to 71.1); also 27.4% of patients had a BMI $\geq$ 40 (Morbidly Obese). When the patient outcome data was collected practitioners delivering the intervention were asked in addition to BMI what other characteristics patients had. Many reported patients who had attended the service also had Co-Morbidities which included:

- Diabetes
- Impaired glucose intolerance
- Cardiovascular Disease
- Hypertension
- Osteoarthritis
- Depression

5.9 Although not specified in the standard protocol used some practitioners also took other clinical measures with some patients to monitor their progress in addition to weight/BMI. For some patients reductions were recorded in terms of waist circumference, blood pressure and cholesterol measurements.

5.10 Of the patients who attended the intervention 26.7% were men, though this may seem low it compares well with other weight loss interventions who can have male uptake as low as 10% (see table 2).

5.11 Graph 3 (Patient BMI vs Patient Outcomes) shows that patient outcomes are comparable across the initial BMI ranges, this would suggest that the intervention is just as successful for those in the lower BMI range as those in the higher ones.

Therefore patients can be recruited from across the obesity classification range and still be able to achieve similar weight loss outcomes.

5.12 Graph 4 reviews the number of patient appointments attended and the weight loss outcomes they achieve. There is a clear positive relationship with the number of appointments attended and the outcomes achieved. This would suggest, selecting patients who are motivated to attend and retaining them for the duration of the intervention helps obtain the best results.

5.13 A number of practitioners delivering the intervention reported some patients who attended their first appointment were not fully aware of what the programme entailed, and when this was fully explained they then decided not to proceed. Therefore it is important that potential participants should have the intervention fully explained to them prior to being booked into the first appointment to minimise drop outs. Use of a patient screening questionnaire could also help reduce attrition at this stage.

5.14 Graph 5 shows the variation in outcomes across the service providers, a majority of them met or exceeded the outcomes achieved with bench marked intervention. It also demonstrates that Practice Nurses, Healthcare Assistants and Fitness Instructors can all help patients achieve good outcomes when delivering this service model. Therefore there is no evidence to suggest that professional background of the practitioner makes a difference to the weight loss patients are able to achieve.

5.15 When reviewing the characteristics of services who achieved good weight loss outcomes for their patients a number of factors emerged;

(i) ***Consistent Practitioners:*** Services tended to work better when the same practitioner saw the patient on each visit as it enabled them to gain greater insight into eating and activity behaviours, barriers to change and triggers.

(ii) ***Regular Dedicated Clinic Time*****:** Set aside time allowed practitioners to see more patients; it also helped practitioners avoid being given other duties which would affect their ability to dedicate sufficient time to deliver the weight management clinic.

(iii) ***Structured Referrals:*** Ensuring the service effectively recruits patients and streams them into the clinic. Some services used their clinical system to target invites to patients who had a high BMI, also some targeted patients with specific co morbidities or who required weight loss prior to hip or knee surgery.

(iv) ***Feedback*****:** Providing positive feedback to patients and referring practitioners on weight loss and other clinical indicators such as blood pressure helped motivate participants.

(v) ***Self Monitoring*****:** Patients who received and used self monitoring forms such as food/activity diaries and lifestyle goals tended to do well.

5.16 Once the project was complete some services have ceased as they are no longer receiving funding for practitioner delivery time. However a number of service providers have continued to offer the weight management clinics and have simply

mainstreamed the service. In one locality the local clinicians wanted to commission a weight management intervention so have approved a Locally Enhanced Service (LES) for Weight Management. This LES will follow the same structure as this pilot but will in addition incorporate longer term support and follow up for patients to aid further weight loss and maintenance.

5.17 A costing template is attached in Appendix 4 which gives approximate costs for setting up and running a weight management service based on this project's model of service with additional follow up appointments. Costs in year 1 include set up overheads such as equipment and training; year 2 just factors in ongoing running costs. These are based on 10 service providers seeing 50 patients (500 patients total) each a year who attend the full intervention.

6) RECOMMENDATIONS

6.1 The pilot project has demonstrated that the service model can be effective at delivering patient outcomes as of those who completed the intervention **37.6% lost 5% or more of their initial body weight,** which is clinically significant and compares favourably with other interventions.

6.2 As a result of the project the following recommendations are made:

1) This model of service should be considered when planning weight management services. It is effective across the BMI ranges, can engage with both male and females, also it can be delivered by a variety of practitioners across health and non-healthcare settings.

2) Services should be available to patients who need structured support to lose weight and mainstreamed / commissioned accordingly. These services should be monitored and evaluated to ensure that they are delivering good patient outcomes.

3) Service providers need to have sufficient capacity and support from local clinicians to ensure patients can be effectively identified and streamed into the weight management service. In addition patients should be screened to ensure they are sufficiently motivated to enter the service and are aware of what it involves to help minimise attrition rates.

4) Providers should follow an evidence based protocol and sign up to a service level agreement if they are commissioned to ensure quality is maintained and sufficient number of patients are seen.

5) Improved identification of patients with an unhealthy BMI is required in GP practices, current recording of obesity levels falls below what is expected from modelled estimates. Primary care professionals should routinely offer advice and help to patients who have an unhealthy weight.

6) Longer term follow-up of at least 12 months should be included to ensure that patients who achieve initial weight loss are supported to continue to lose weight or maintain a healthy weight. Appendix 4 indicates supporting someone for 12 months in an established service will be approximately £124 per patient.

6.3 For further information please contact:

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7) REFERENCES

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11. Weight Watchers on prescription: An observational study of weight change among adults referred to Weight Watchers by the NHS (accessed 5/7/11 - http://www.biomedcentral.com/content/pdf/1471-2458-11-434.pdf) (in press)

12. Evaluation of NHS Hertfordshire Lottery Funded Weight Management Pilot, 2011 (unpublished)

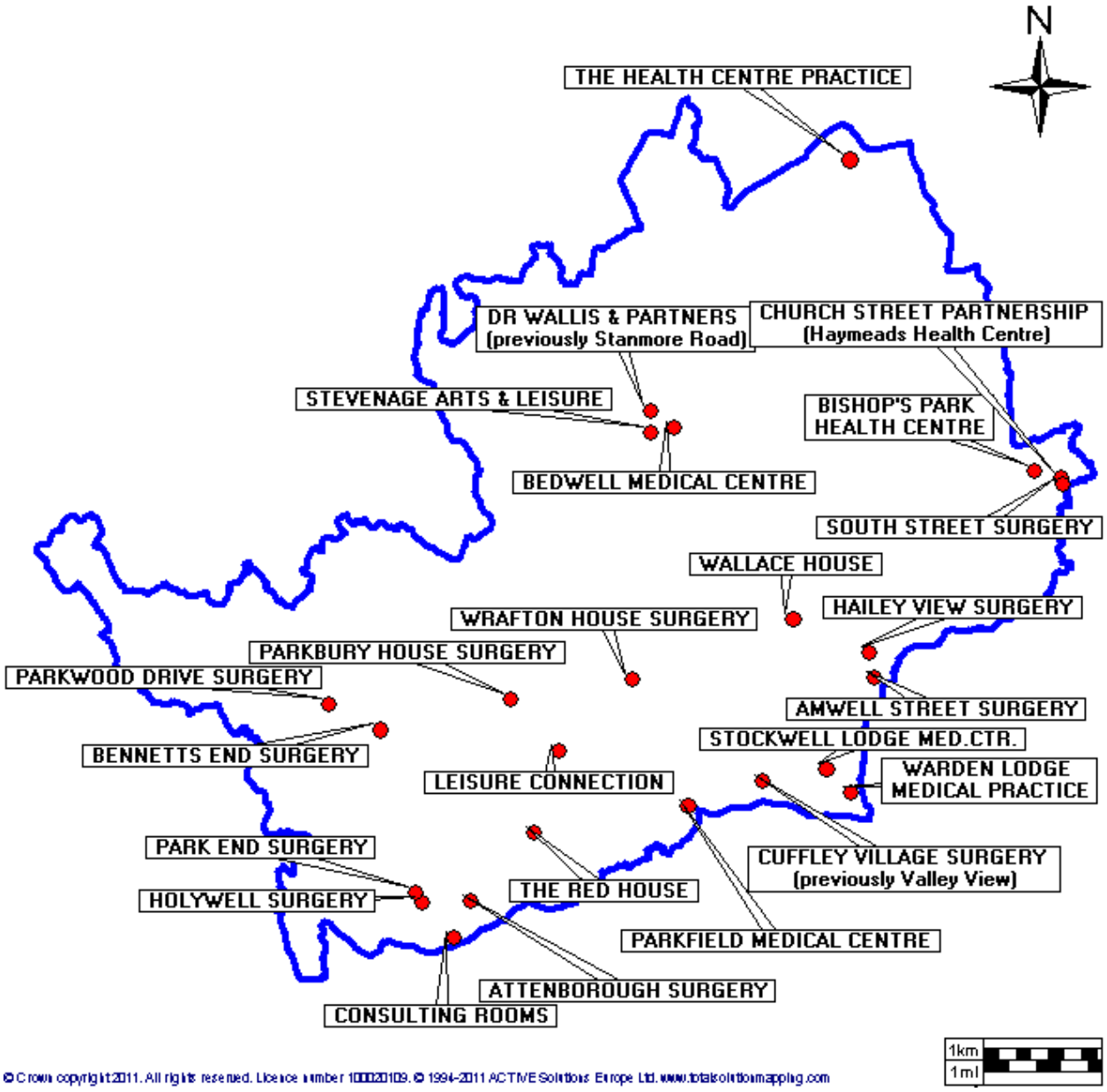
13. The Counterweight Project Team: Evaluation of the Counterweight Programme for obesity management in primary care. B J Gen Pract 2008, 58:548-554

Appendix 1: List of Service Providers

Service Providers Where Outcome Data was Available and Collected	Service Location
Amwell Street Surgery	Hoddesdon
Attenborough Surgery	Bushey
Bedwell Medical Centre	Stevenage
Bennetts End Surgery	Hemel Hempstead
Bishops Park Health Centre	Bishops Stortford
Consulting Rooms	South Oxhey, Watford
Cuffley Village Surgery (Valley View)	Waltham Cross
Hailey View Surgery	Hoddesdon
Haymeads Health Centre	Bishops Stortford
Hollywell Surgery	Watford
Leisure Connection	London Colney
Park End Surgery	Watford
Parkbury House Surgery	St Albans
Parkfield Medical Centre	Potters Bar
Parkwood Drive Surgery	Hemel Hempstead
Royston Health Centre	Royston
South Street Surgery	Bishops Stortford
Stanmore Road Surgery	Stevenage
Stevenage Arts and Leisure Centre	Stevenage
Stockwell Lodge Medical Centre	Cheshunt
The Red House Surgery	Radlett
Wallace House Surgery	Hertford
Warden Lodge Medical Practice	Cheshunt
Wrafton House Surgery	Hatfield

Service Providers Where Outcome Data was not Available*	Service Location
Garden City Practice (Welwyn)	Welwyn Garden City
Knebworth and Marymead Medical Practice	Knebworth
North Herts Leisure Centre	Letchworth
Peartree Lane Surgery	Welwyn Garden City
Theobold Medical Centre	Borehamwood
Tudor Surgery	Watford
William Penn Leisure Centre	Rickmansworth
*** Reasons included:**	
Service did not get up and running	
Staff shortages, staff leaving	
Staff had other priorities	
IT issues	

Appendix 2: Map of Service Providers Where Outcome Data was Collected.



Appendix 3: Structured Lifestyle Intervention Protocol

ProHealth*Clinical* Primary Care Weight Management – Structured Lifestyle Programme (12 weeks)

Weekly Appts	Topic/Activities	Printouts/Handouts
0 (20-40 min)	**Introduction Session - Initial Assessment – (Patient, Health and Weight Sections)** Complete and input measurements – (i.e. height, weight, waist circumference, blood pressure) **Discuss motivations for losing weight** and evaluate appropriateness at this time. Review BMI and **set 5% weight loss goal** (Weight Section) Briefly **identify helpful lifestyle changes** with previous weight loss efforts (Patient Section-Notes) Review handouts, identify specific actions and programme timetable. Summarise patient motivation and comments (Patient Section-Notes)	Review ProHealth Patient Information Sheet -Key Ways to…. (opt) Give a 7 day sample meal plan (e.g. 1400 if TEE less than 2400 or 1800 calorie if TEE 2400 or greater) Give a blank food diary- (e.g. for **planning meals, snacks**) Print out fortnightly lifestyle goals to monitor (see printout) Agree next appointment date and time
2 (15-20 min)	**Food Choices and Eating Habits Session** **Weigh and graph**. (Weight Section) Review and **score lifestyle goals** (Lifestyle Section) (opt) Review progress, eating plan & **discuss specific eating changes** (food portions, habits, routines) Discuss family and friends support. **Emphasise importance of planning meals and snacks.** **Discuss avoiding or having alternatives to problem foods. Identify lower calorie substitutes.** Agree personalised lifestyle goals to monitor (Lifestyle Section) (opt) Summarise changes, comments and record in ProHealth (Patient Section-Notes)	Print out weight graph (optional) Give ProHealth Patient Information Sheet –12 Tips to Cut…(opt) Give a blank food diary- (e.g. for planning meals, snacks) (opt) Give an appropriate meal plan/snack suggestion (optional) Print out personalised fortnightly lifestyle goals(opt) **OR** activity diary (e.g. ask them to Track days they follow their healthy eating plan) Agree next appointment date and time
4 (15-20 min)	**Activity Goal Setting and Health Benefits Session** **Weigh and graph** on ProHealth (Weight Section). Review progress and **score lifestyle changes**. (Lifestyle Section) (opt) Devise **personalised activity programme and energy expenditure goal** (e.g. 800 to 1000 calorie per week in Exercise Section) Discuss health benefits with increasing activity using Healthy Reasons to Exercise…. Summarise changes, comments and difficulties in ProHealth (Patient Section-Notes)	Print out weight graph Give ProHealth Patient Information Sheet – Healthy Reasons… Print out activity or lifestyle form to monitor activity/steps. Give an appropriate meal or snack suggestion (e.gJacket Potatoes) Give out local WHI, aerobic or swimming class schedules Agree next appointment date and time
6 (15-20 min)	**Identifying and Tracking Difficulties or Obstacles Session** Weigh and graph on ProHealth (Weight Section). **Review compliance and average weight loss.** Review progress and fortnightly activity achieved (Exercise section) **Review eating triggers from patient questionnaire.** Discuss **benefits of tracking or monitoring eating and activity patterns** (e.g. increases awareness, encourages small, realistic changes). Review the benefits of rewards for behaviour goals achieved) Identify and **discuss difficulties and helpful solutions** associated with changing habits/routines. Identify and record new lifestyle goals. (Lifestyle section). Summarise changes, comments and problems in ProHealth (Patient Section-Notes)	Print out weight graph (**if less than 0.5lbs per week ? discharge**) Give ProHealth Patient Information Sheet – Ways to Reward… Print out personalised fortnightly or monthly lifestyle goals. Give blank food diary to track problem or unplanned eating Give an appropriate meal plan/snack suggestion (Snack Ideas) Agree next appointment date and time
8 (15-20 min)	**Promoting Long-Term Lifestyle Changes – Handing Difficulties/Relapses Session** Weigh and graph on ProHealth (Weight Section). Review activity achieved. Review progress and score lifestyle changes. (Lifestyle Section) (opt) Emphasise **short-term SMART goals to handle difficult situations** – Good Project Mgmt Identify and discuss difficulties and explore some initial ideas or solutions. Identify helpful rewards, family, friends, work and community support available. Summarise changes/problems and record in ProHealth (Patient Section - Notes)	Print out weight graph Give ProHealth Patient Information Sheet – SMART Steps to… Give an appropriate meal plan/snack suggestion (optional) Print out personalised fortnightly or monthly lifestyle goals (i.e. Track days they follow their eating or activity plan or record disruptions to eating or activity plans) Agree next appointment date and time
12 (20 min)	**Programme Review and Reassessment Session** Weigh, complete 12 week measurements and input into ProHealth (Health and Weight Sections). Review progress, reinforce achievements and lifestyle changes achieved. (Lifestyle Section) Discuss lifestyle goals and habits helpful to continue to monitor. Briefly discuss time management, value of scheduling time for lifestyle changes and relaxation. Highlight any ongoing community and practice resources and support available. Summarise changes/problems and record in ProHealth (Patient Section-Notes)	Print out weight graph Print out ProHealth Certificate of Achievement Print out personalised monthly lifestyle goals (optional) Give an appropriate meal plan/snack suggestion (optional) Agree any further appointment date and time (e.g. 3 months appt)

Appendix 4: Costing Template for Future Service Implementation

Cost of Setting up and Running a Weight Management Service				
Based on 10 Service Providers seeing 50 patients a year: total = 500 patients				
Set Up Costs				
	Cost		No.	Total
Weight Management Computer Software	£1,525	each	10	£15,252
1 day training module x 5	£600	each	5	£3,000
Training Venue Cost Per Day	£300	each	5	£1,500
			Set Up Costs Total	**£19,752**
Running Costs Per Year				
Initial Consultation (30-40mins)	£20			
2 week Follow up Consultation (15-20mins)	£10			
4 week Follow up Consultation (15-20mins)	£10			
6 week Follow up Consultation (15-20mins)	£10			
8 week Follow up Consultation (15-20mins)	£10			
12 week Follow up Consultation (20mins)	£10			
Sub Total @ 12 weeks = £70 per patient				
Follow up at 6 months (20mins)	£10			
Follow up at 9 months (20mins)	£10			
Follow up at 12 months (20mins)	£10			
Additional Outcome Payment for 5% weight loss at 6 months*	£20			
Total Cost Per Patient Treatment Episode (inc 6/9/12month follow up)	£120	10 x 50 patients	500	£60,000
Training : Practitioner Update CPD x1	£900			£900
Additional Training Day to Cover Staff Turnover	£900			£900
			Running Costs Total Per Year	**£61,800**
* Calculations made on assumption 100% will achieve this for budgeting purposes only				
			GRAND TOTAL	**£81,552**

Set up and running costs for 1st year	**£81,552**
Running costs per year thereafter	**£61,800**
Cost of supporting a patient for a year	**123.60**