

Final Report 2009

Live Active – Central Administration System

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Proposal No: 2615

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Executive Summary

Introduction

This report explores the impact of one of the enhancements to the Live Active Referral Scheme, the central administration system.

The central administration system is a secure web based diary which is linked to Glasgow City based exercise counsellors. The system enables appointments to be booked by participants through a central telephone number. This alleviates leisure centre reception staff from the administrative burden of managing bookings. Exercise counsellors may still edit and book appointments, however, it is anticipated that most of the booking management would be conducted through the central administration system.

Objectives of this report

The purpose of this phase of the evaluation was to identify the impact of the Central Administration System amongst service users, leisure centre administrative staff, Live Active exercise counsellors and health professionals.

Method

The Live Active Referral Scheme database was used to identify any differences in adherence and attrition before and after the introduction of the central administration system.

Focus groups with participants, leisure centre staff and exercise counsellors were undertaken. And finally semi structured interviews completed with health professionals who refer to the Live Active Referral Scheme.

Results and discussion

Referral, adherence and attrition

Following the introduction of the central administration system there was a 38% rise in referrals (from 2,157 referrals between June 2005 – November 2005 to 2,975 referrals between June 2007 – November 2007). The scheme may only have been able to accommodate this level of referrals due to the introduction of the Central Administration System.

Unfortunately, the central administration system did not yield improved adherence with the scheme at baseline. Proportionally fewer attended the baseline stage (73% before the administration system compared to 68% after). However, when positive and medical drop outs were excluded from the analysis, there was no difference between attendance at baseline before and after the introduction of the central administration system. This may suggest that since the introduction of the central administration system greater screening of participant's eligibility takes place prior to the baseline appointment than was previously the case.

However, there was improved adherence at 6 months with proportionally fewer drop outs following the introduction of the central administration system.

The central administration system made no difference to adherence at 12 months with similar levels of drops outs before and after the introduction of the central administration system.

Perception of participants

The majority of participants were unaware of any changes to the booking system. Most participants used their exercise counsellors to make appointments. Participants did not have a strong recollection about their first appointment and gave the impressions that it had been administered capably. Perhaps the fact that they did not consciously recognise that there was a Central Administration System in place is to the credit of the programme.

Leisure centre administrative staff

The leisure centre staff welcomed the introduction of the central administration system. They reported that prior to the introduction of the system difficulties were encountered in accommodating lengthy telephone calls from new participants when centres were already busy. The central administration system was also used as a central point from which to obtain information about the scheme if participants were looking for answers to specific queries.

Exercise counsellors

Exercise counsellors valued the introduction of the central administration system as it enabled them to directly make their own appointments (previously they had to book appointments via the leisure centre administrative staff). This led to increased ability to track participants who did not attend and to communicate with participants if their exercise counsellor was unable to attend an appointment due to sickness or other reasons.

Exercise counsellors verified the central administrator was helpful in providing more information about the nature of the scheme to participants before they attended baseline appointment. The administrator communicated additional information about participants prior to baseline such as particular medical conditions, nervousness about exercise etc. The administrator helped with practical issues such as giving directions and sending out maps to centres.

Health professionals

Only one "regular referrer" was available to comment on the Central Administration system. They noted an improvement following its introduction in that it provided a clear route for participants to contact for information about the scheme, booking and travel directions.

Other referers included some who offered to book appointments for participants and others (the majority) who left participants to book their own appointment due to time constraints in the practice. As the majority did not use the central administration system directly they were unable to comment on the utility of the system.

Challenges and improvements

Some leisure centre staff felt that communication between the scheme and themselves could improve. They sometimes felt "out of the loop" regarding new offers or changes to the programme.

In a similar vein, health professional would value improved communication about their patients particularly around their attendance at the scheme.

Differences in the working practice of individual exercise counsellors was noted. With some counsellors making positive links with the leisure centre staff and others failing to communicate effectively.

Leisure centre staff highlighted challenges to the system. For example, if the central administrator was not available to answer the phone it was left to ring out with no message facility, this was a particular challenge outside office hours (Monday to Friday 9 until 4). On

occasions participants had cancelled an evening appointment but this was not relayed to the exercise counsellor until after the appointment time.

Some commented that the central administration system could be developed by tracking the number of referrals from health professionals. This would allow targeted marketing to be in place.

Conclusions and recommendations

Following the introduction of the central administration system the Live Active Referral Scheme was able to:

- accommodate a 38% rise in participants coming onto the Scheme;
- screen out inappropriate referrals, medical and positive drops outs prior to the baseline appointment more effectively ; and
- improve adherence levels at the 6 month stage (although this was not observed at 12 months).

Live Active Referral Scheme participants did not notice a change in the administration system and were generally satisfied with the way they made appointments with their exercise counsellor.

On the other hand, leisure centre staff welcomed the introduction of the system. They reported the system enabled them to seek answers to specific queries and avoided lengthy conversations with participants during busy periods.

Similarly, exercise counsellors valued the central administrator's help in providing support and information to participants by sending directions to venues etc prior to their first appointment. In addition exercise counsellors valued the fact that the central administrator communicated additional participant information to them prior to the appointment. The Central Administration System its self was valued for the flexibility offered in managing bookings.

Some improvements to the scheme were suggested. These included improving communication with leisure centre staff regarding promotions and changes to the scheme and improving the communication with the health professionals about the participants they referred to the scheme.

A range of working practices were identified between leisure centre staff and exercise counsellors. It is recommended this is tackled through on going training of the counsellors and guides for good practice are developed for new staff.

Some leisure centre staff were critical of the lack of message facility in the scheme. This could be resolved by introducing voice mail and remote access to messages to enable exercise counsellors to receive cancellation outside office hours.

Finally, some suggested the central administration system could be used to track high and low refers. This could be used to develop targeted marketing strategies.

Terminology

This is an explanation of some of the terminology used in the Live Active Referral Scheme, and in this report.

Baseline

Baseline in this context refers to the chronological stage of the Live Active Referral Scheme when participants have their first consultation with the counsellor, after they have been referred onto the scheme. The other chronological stages of the Live Active Referral Scheme are at 6 and 12 months.

Participant exercise details and health related measurements are taken by the counsellor at baseline, 6 and 12 month points and are held in participants' files. These data allow a participant's progress on the Live Active Referral Scheme to be assessed.

Blood Pressure

Blood Pressure is the pressure of blood in your arteries, measured in millimetres of mercury (mmHg). Your blood pressure is recorded as two figures, the first number is the systolic pressure (the pressure in the arteries when the heart contracts) and the second is the diastolic pressure (the pressure in the arteries when the heart rests between each heartbeat).

High blood pressure (Hypertension) – 140 over 90 or higher

Normal range - between 120 over 80 and 140 over 90

Low Blood Pressure (Hypotension) – 90 over 60 or lower¹

BMI, Body Mass Index

A measure of someone's weight in relation to height. The body mass index (BMI) is a person's weight in kilograms (kg) divided by their height in meters (m) squared.

Central administration system

The Live Active Referral Scheme central administration system is a secure web based diary which is linked to Glasgow City based exercise counsellors only. The day to day operation of this administration system is predominantly the responsibility of the designated central administrator. However the ability to view and edit appointments is available to all Glasgow City based exercise counsellors, under a secure log in protocol. A flexible administration system such as this, promotes a far more user friendly experience, as participants can book or change appointments both through the central administrator or their exercise counsellor.

CHCP, Community Health and Care Partnership

Community Health (and Care) Partnership is the name of the organisations that have been set up across Scotland to provide a wide range of community based health services delivered in homes, health centres, clinics and schools. In Glasgow City and East Renfrewshire the Partnerships are also responsible for many local social care services provided by social work staff².

CHD

Coronary heart disease is when the small blood vessels that supply blood and oxygen to the heart become partially or wholly blocked.³

¹ The Blood Pressure Association, <http://www.bpassoc.org.uk/Home>

² <http://www.chps.org.uk/content/default.asp?page=s363>.

³ <http://www.nhs.uk/Pathways/coronaryheartdisease/Pages/Landing.aspx>

Exercise Counsellor

A Live Active Referral Scheme staff member who is specifically trained to deliver health behaviour change intervention in relation to physical activity and delivers the Live Active Referral Scheme in a local area.

Exercise Instructor

A self employed coach (freelance) who instructs designated exercise classes for the Local Authority. One such class may be the Live Active First Steps physical activity class/session.

Exercise Tolerance Test (ETT)

This is a pre-screening test for participants with established heart disease prior to starting physical activity. This is a treadmill test at a local hospital cardiology unit to assess the participant's heart response to exercise and to therefore assess their suitability to undertake physical activity in the community.

First Steps

First Steps is an eight week rolling programme that offers participants more contact with the exercise counsellor and a chance to taste a variety of activity options. It also aims to increase social support with fellow scheme participants. First Steps takes the form of:

- a physical activity taster session (for example various forms of exercise classes (circuits; tai chi etc), use of the gym and walking;
- a social support component with the exercise counsellor present; and
- an occasional education component.

Due to the rolling nature of First Steps, participants are able to join at any time.

FMR

FMR Research Ltd, the social research firm commissioned to conduct this evaluation.

GP

General Practitioner

HADS

The hospital anxiety and depression scale (HADS) is a widely used and popular self-report measure designed to detect the presence and severity of mild degrees of mood disorder, anxiety and depression. The participant is asked to answer fourteen questions (7 for anxiety and 7 for depression) relating to their mental attitude. The maximum score possible for Anxiety or Depression on the HADS scale is 21 (totally anxious or depressed), and the lowest score is 0 (totally lacking in anxiety or depression).

- 0-7 Normal
- 8-10 Mild
- 11-15 Moderate
- 16-21 Severe.

HADS is completed at the discretion of the participant; it is not used as a psychological screening tool.

Keep Well

Keep Well is a pilot Scottish Executive primary care based approach to enhancing anticipatory care. In Glasgow the Keep Well pilot has funded an additional Live Active counsellor. This additional post is based in the same sites as the Live Active exercise counsellor. The aim of the post is to "fast track" participants referred from a Keep Well screening to the Live Active Referral Scheme and to enhance the Live Active Referral Scheme to also include weight management and nutrition as health behaviours being addressed.

Live Active 2005

The Live Active Referral Scheme prior to the introduction of further Scottish Executive enhancements.

Low Risk (LR)

Low Risk is the category which encompasses the majority of participants referred onto the Live Active Referral Scheme. These are inactive participants who do not have established heart disease and who require support to become more active.

Mean

The arithmetic average.

mmHg

Millimetres of mercury, a measure of pressure. Used in this context in respect of blood pressure.

Motivator enhancement

The Live Active Motivator enhancement is based on the peer support/buddying concept. The role of the Motivator is intended to provide support and encouragement to individuals or small groups engaging in physical activity through the scheme. It is voluntary and undertaken by those who have completed the full 12 months of the Live Active Referral Scheme and have demonstrated a positive attitude towards maintaining an active lifestyle.

NHS GGC

NHS Greater Glasgow and Clyde.

Post Cardiac Referral (PCR)

These are direct referrals from the hospitals cardiac rehabilitation programme. Participants are referred by cardiac physiotherapists to support their post cardiac rehabilitation.

Participant

This is the term used by the Live Active Referral Scheme to denote those referred to the Live Active Referral Scheme and participating in it.

SIMD, Scottish Index of Multiple Deprivation

The official measure for identifying small area concentrations of multiple deprivation across all of Scotland.⁴

SPSS

Originally Statistical Package for the Social Sciences. SPSS is a computer software package designed to accommodate and facilitate the analysis of arrays of numerical data. FMR used SPSS software to analyse the database.

Stage of change

This is an assessment tool which looks at people and categorises their current behaviour and attitude towards health behaviour change. There are five stages of change:

Pre contemplation:	I am not regularly physically active and do not intend to be
Contemplation:	I am not regularly physically active but I am thinking about starting in the next 6 months
Preparation:	I do some physical activity but not enough to meet the description of regular physical activity
Action:	I am regularly physically active but only became so in the last 6 months
Maintenance:	I am regularly physically active and have been so for longer than 6 months

⁴ <http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=14765&Pos=&ColRank=1&Rank=208>.

People's stage of change is a transitory cyclical measure and can go forwards and backwards on the scale. But the observed result is that people are increasingly likely to move closer towards maintenance with every cycle around the stages.

1 Introduction

This report covers FMR Research's investigation of the Central Administration System, one of the enhancements to the Live Active Referral Scheme.

1.1 Background

NHS Greater Glasgow established the Live Active Referral Scheme in 1997 in partnership with Glasgow City Council. After an initial positive evaluation in 1999 the scheme gradually expanded to include the following local authority areas within the NHS Greater Glasgow area – East Dunbartonshire, South Lanarkshire, West Dunbartonshire and East Renfrewshire. One of Glasgow city's Universities also delivered the scheme (Glasgow Caledonian).

In 2008 the Live Active Referral Scheme continued to expand, was rolled out across the full NHS Greater Glasgow and Clyde area in partnership with local authorities and is now also delivered in Inverclyde and Renfrewshire. The scheme employs 24 full-time exercise/health counsellors working within partner local authority areas.

The Live Active Referral Scheme aims to increase levels of physical activity amongst sedentary individuals who are specifically referred by their health professional (e.g. GP, practice nurse, cardiac healthcare staff, etc). Exercise counsellors provide these participants with the skills, knowledge and confidence necessary to lead an independent, regularly active lifestyle. Benefits and barriers to change are addressed, and participants are offered access to a variety of appropriate physical activity opportunities. There is also an opportunity for referral onto support services for other health behaviours, e.g. nutrition and smoking cessation.

A series of enhancements was introduced to the scheme in 2005, in line with the 2002 evaluation findings. This report looks specifically at one enhancement: the Central Administration System, referred to colloquially as 'central admin.'

1.1.1 Live Active Referral Scheme with enhancements

The Live Active Referral Scheme involves the following stages. Referred participants are enrolled onto the scheme for a period of 12 months and receive an evidence based one-to-one physical activity counselling service. This is in the form of a structured consultation at the baseline stage, and two further recall consultations at six and twelve months. Additional support given to participants throughout the twelve month scheme includes telephone calls, letters and the option of supported exercise sessions.

The participant attends the initial baseline consultation for advice on appropriate levels of physical activity. During the consultation, baseline data are recorded on measures such as height, weight, BMI, blood pressure, smoking, alcohol consumption levels, levels of physical activity and self perceptions of physical and mental wellbeing. These recordings are repeated at 6 months and 12 months.

Within the health behaviour change consultation the exercise counsellor and participant, discuss and agree a personalised goal setting plan. The goal setting plan is completed in triplicate, and provides the participant with a detailed account of their agreed physical activity aims and objectives over a six month period. On completion the plan is signed by both the exercise counsellor and participant, one copy is retained by the exercise counsellor, one by the participant and the third copy is forwarded to the referrer. In addition the referrer would receive a covering letter detailing the participant's date of consultation.

Participants receive reduced price access to local authority leisure centres where they can take part in a variety of activities; counsellor led supervised sessions or independent exercise. Support and advice is also provided for home-based exercise.

Following the positive results of the Live Active Referral Scheme evaluation in 2002, Scottish Executive funding enabled a series of enhancements to be developed. Three enhancements have been introduced to the Live Active Referral Scheme. These are:

- First Steps – a social support initiative;
- the introduction of a Central Administration System for the scheme;
- and the introduction of Motivators (peer mentors).

Each of the enhancements is designed to improve adherence to the scheme. A previous report has already investigated the scheme prior to these enhancements. The enhancement that this report will investigate is the addition of the Central Administration System for the scheme.

1.1.2 The Central Administration System

The Live Active Referral Scheme Central Administration System is a secure web based diary which is linked to Glasgow City based exercise counsellors only. The day to day operation of this administration system is predominantly the responsibility of the designated central administrator. However the ability to view and edit appointments is available to all Glasgow City based exercise counsellors, under a secure log in protocol. A flexible administration system such as this, promotes a far more user friendly experience, as participants can book or change appointments through the central administrator or their exercise counsellor.

The aim of the Central Administration System is to reduce the time exercise counsellors spend on basic administration, therefore increasing time spent with participants, and allowing more effective promotion and awareness raising with the local community and local partners.

Prior to January 2007, booking for the scheme used to be taken by reception staff at the local leisure centres. In Glasgow City only, this has now moved to a central administration point and one dedicated telephone number for bookings across the city. For all other local authority areas bookings for the scheme are taken by the exercise counsellors. Therefore this report only looks at Glasgow City data for the scheme.

1.2 Objectives

The aim of this section of the Live Active Referral Scheme evaluation was to identify the impact (including attrition levels) of the Central Administration System amongst service users, leisure centre administrative staff, Live Active exercise counsellors and health professionals.

2 Method

2.1 Overview

FMR's research method comprised three elements. These were:

- database analysis comparing the uptake and attrition rates between referral and baseline for a 6 month period before the introduction of the Central Administration System (and any other enhancements) and for an equivalent 6 month period after the introduction of the Central Administration System (excluding participants who had experienced other enhancements, i.e. First Steps and/or Motivator participants);
- three focus groups (with participants, leisure centre administration staff and Live Active exercise counsellors); and
- 15 semi structured interviews with health professionals who refer patients onto the Live Active Referral Scheme.

2.2 Database analysis

FMR used the Live Active Referral Scheme dataset provided by NHSGGC to select the records of those who had been referred to the Live Active Referral Scheme (selecting those referred to Glasgow City leisure centres only⁵) between June 2005 and November 2005⁶ (2,157 participants) and those who had been referred to the Live Active Referral Scheme (again selecting those referred to Glasgow City leisure centres only) between June 2007 and November 2007 (2,973 participants).

The Central Administration System was introduced in January 2007. The timeframe from June 2007 to November 2007, used to examine the period following the introduction of the Central Administration System, was selected to allow for a six month 'settling in' period following the introduction of the enhancement and provide six months of data. In order to allow comparisons the same time period, June to November, was selected two years previously to represent the period prior to the introduction of the Central Administration System. The data for 2005 were used to prevent results being influenced by the period of transition in 2006 following the introduction of the First Steps and Motivator enhancements and to ensure that all participants would have had the opportunity to complete the scheme prior to the introduction of the Central Administration System.

For the database interrogation, data were analysed comparing Live Active participants referred prior to the introduction of the Central Administration System and those Live Active participants referred following the introduction of the Central Administration System, allowing differences between the two groups to be identified. In cases where the differences are significant this is stated (as it will be for cases that are not significant). Significant results are reported at the 95 percentile point. A detailed break down of results can be found in appendix 5.

The Live Active Referral Scheme database comprised pre-coded and non-coded data. In order to facilitate the analysis, FMR carried out a large amount of manual coding and recoding of data. This included identifying those participants who made a baseline appointment (whether or not they attended this appointment) to determine the influence of the central admin system.

⁵ Participants attending Glasgow City leisure centres only were selected as the central administration system is only operational in the Glasgow City area.

⁶ This timeframe was selected as it was prior to the introduction of any enhancements (central administration system, Motivator or First Steps) and enable 'like for like' comparison before and after the introduction of the central administration system, as far as possible.

It should also be noted that percentages in the data tables may not always add up to 100%, due to the effects of rounding.

2.3 Focus groups

The focus groups comprised one with participants, one with leisure centre administrative staff and one with Live Active exercise counsellors.

Topic guides were developed for the focus groups, and were submitted to the reference group, who made suggestions and the topic guides were amended accordingly prior to the groups being conducted (Appendix 1, 2 and 3).

The participants' focus group was held at a hotel in Glasgow city centre, a venue well served by the transport infrastructure to make it easier for people to take part. Using the Live Active database, those who had experience of both types of administrative system were identified and were sent a letter giving the invitation to return a consent form to take part. Twenty-eight people responded, of which eleven were able to take part. The gender profile of participants was 4 males and 7 females, with 3 participants aged 46-64 and the remainder 65+. Participants had used a range of leisure centres in Glasgow City.

The administrative staff focus group was held at FMR's premises, with six members of staff taking part. Staff participants were recruited by the Live Active team and worked in leisure centres across Glasgow City.

The focus group with exercise counsellors was held at Trongate, with exercise counsellors who had experience of the previous system as well as the new Central Administration System. Exercise counsellors worked across a range of Glasgow City leisure centres.

2.4 Health professional interviews

Fifteen semi-structured telephone interviews were carried out with health professionals who had referred patients onto the Live Active Referral Scheme.

A topic guide (Appendix 4) was developed for the interviews, and was submitted to the reference group, who made suggestions and amendments prior to the interviews being undertaken.

The interviews were conducted with eight health professionals who referred to the Live Active Referral Scheme on a regular basis ('regular referrers') and seven health professionals who referred less often ('rare referrers'). Details of health professionals were collated by the exercise counsellors at each of the leisure centres. All health professionals were sent a letter and then followed up by telephone in order to determine their willingness to participate in the research and to arrange a suitable time and date to conduct the telephone interview. Any who were proving more difficult to contact were then sent a follow up letter and again followed up by telephone. Additional contacts, for 'rare referrers', were sourced from the Live Active database by identifying those who had referred five patients or fewer in the past year. These referrers were also lettered and followed up by telephone.

3 Results and discussion

This section looks at the results of the database interrogation, the three focus groups undertaken, the 15 semi structured interviews and includes discussion around the findings.

3.1 Referral uptake and attrition rates

This section of the report looks at the stage of programme reached, the proportion of participants attending consultations and attrition rates between referral and baseline. Positive and medical drop outs were taken into account. Participants referred prior to the introduction of the Central Administration System (those referred between June 2005 and November 2005) were compared with those participants referred following the introduction of the Central Administration System (those referred between June 2007 and November 2007).

3.1.1 Stage of programme reached

Of those referred onto the programme **prior to** the introduction of the Central Administration System (referred between June 2005 and November 2005) (2,157 participants):

- 27% (578 participants) did not progress beyond the referral stage;
- 53% (1,150 participants) attended a baseline consultation and then dropped out;
- 11% (247 participants) attended both baseline and 6 month consultations and then dropped out; and
- 8% (182 participants) completed the full programme including the 12 month final consultation (Table 1).

In comparison, of those referred onto the programme **following** the introduction of the Central Administration System (referred between June 2007 and November 2007) (2,973 participants):

- 32% (960 participants) did not progress beyond the referral stage;
- 47% (1,404 participants) attended a baseline consultation and then dropped out;
- 13% (372 participants) attended both baseline and 6 month consultations and then dropped out; and
- 8% (237 participants) completed the full programme including the 12 month final consultation (Table 1).

Following the introduction of the Central Administration System (referred between June 2007 and November 2007) a higher proportion of those referred failed to attend a baseline consultation, and a higher proportion attended the six month consultation. These differences are statistically significant⁷ ($p < 0.001$) (Table 1 & Table 2).

A significantly higher proportion of participants referred prior to the introduction of the Central Administration System attended consultations (73%, 1,579 participants) than those referred after the introduction of the Central Administration System (68%, 2,013 participants) ($p < 0.001$) (Table 1 & Table 2).

In spite of these figures reported above, the differences reported are small and following the introduction of the central administration the volume of participants referred onto the Live Active Referral Scheme has increased (from 2,157 before the introduction of the Central Administration System to 2,975 afterwards; a 38% rise in throughput). This increase in volume may only have been possible following the introduction of the Central Administration System, as the previous method of booking may have been unable to cope with this scale of demand. Further, the central administrator has freed up the time of the exercise counsellors

⁷ The statistical significance of these results was tested using the Chi-Square test.

to brief and meet practices which may have increased awareness of the Live Active Referral Scheme and improved referral rates.

It should be noted that these figures represent a snapshot of the referrals onto the Live Active Referral Scheme prior to and following the Central Administration System.

3.1.2 Examination of dropouts between referral and baseline⁸

It is useful to look in greater detail at the transition between referral and baseline, and in so doing we will examine the difference between those who did or did not **make** (as opposed to attend) a baseline appointment.

Of those referred **prior to** the introduction of the Central Administration System (referred between June 2005 and November 2005), who dropped out between referral and baseline (578 participants):

- 71% (411 participants) made no baseline appointment;
- 11% (65 participants) made a baseline appointment; and
- the remaining 18% (102 participants) were recorded as inappropriate referrals or positive and medical dropouts (Table 3).

In comparison, of those referred **following** the introduction of the Central Administration System (referred between June 2007 and November 2007) who dropped out between referral and baseline (960 participants):

- a significantly smaller proportion of participants made no baseline appointment (64%, 615 participants);
- the same proportion made a baseline appointment (11%, 110 participants);
- whilst a significantly higher proportion of participants were recorded as inappropriate referrals or positive and medical dropouts⁹ (24%, 235 participants) ($p < 0.01$) (Table 3 & Table 4).

When inappropriate referrals, positive or medical drop outs and those whose form was out of date (i.e. 6 months following the referral date) were discounted, 14% (65 participants) of 'appropriate' referrals, referred prior to the introduction of the Central Administration System (referred between June 2005 and November 2005) made a baseline appointment – the remainder failed to make a baseline appointment. This compares with 15% (110 participants) of 'appropriate' referrals, referred following the introduction of the Central Administration System (Table 5). This difference is not significant.

The data show that following the introduction of the Central Administration System a significantly smaller proportion of participants made a baseline appointment and a significantly higher proportion of participants were identified as inappropriate referrals or positive and medical dropouts.

However, when inappropriate referrals and positive and medical dropouts are excluded there is no significant difference between the proportion of participants who made a baseline appointment who were referred prior to the introduction of the Central Administration System and those referred following the introduction of the Central Administration System.

Since the introduction of the Central Administration System it would appear that a higher proportion of participants are categorised as inappropriate referrals and positive or medical

⁸ Between referral and baseline a number of those dropping out of the programme were as a result of inappropriate referrals (for example: those who were referred through a low risk route but had a heart condition; those looking for a discount only; or those with other medical conditions that are excluded from the scheme) or were considered to be positive or medical dropouts (this would include those who were already physically active and not requiring support, those who gave medical reasons for not attending, and those who had been transferred to another centre or moved away). It is necessary to account for these when examining the participants reaching the baseline stage of the programme, in order to provide an accurate reflection of the actual drop out rate.

⁹ The statistical significance of these results was tested using the Chi-Square test.

dropouts, and this may suggest that, since the introduction of the Central Administration System, greater screening of participants' eligibility takes place prior to the baseline appointment than was previously the case with bookings undertaken by the leisure centre administration staff.

3.1.3 Summary

Analysis of the data available on attrition rates, for those who were referred prior to the introduction of the Central Administration System and those referred following its introduction, shows that Live Active participants referred **after** the introduction of the Central Administration System were significantly more likely to:

- be identified and recorded as inappropriate referrals or positive or medical dropouts;
- reach the referral stage only (i.e. were referred but did not attend the Live Active Referral Scheme); and
- attend the 6 month consultation.

There was no significant difference in relation to the proportion of participants who made a baseline appointment when inappropriate referrals, positive and medical drop outs were excluded from the analysis. Similarly, there was no significant difference in relation to the likelihood of reaching the 12 month stage of the programme.

3.2 Impact of the Central Administration System

This part of the report outlines the key findings, regarding the impact of the move to a Central Administration System, from the three focus groups with exercise counsellors and exercise instructors and 15 interviews with health professionals who had referred patients onto the Live Active Referral Scheme both regularly (regular referrers) and less often (rare referrers).

Given that the focus of this report is the introduction of the Central Administration System, only issues relating directly or indirectly to central administration will be explored here with all other information gained from these focus groups and interviews being reported in the Overall Report.

3.2.1 Live Active Referral Scheme participants

Participants were largely unaware of any change in the booking system. This is not to say there were shortcomings in the process; the participants seemed happy with their booking arrangements. This is because in a lot of cases, participants seemed to arrive at their own arrangements and solutions for booking their appointments.

"XXX, who's in charge, always comes down at the start or end of the class. Nobody phones the booking office, they just go to XXX for your time for your six month or year referral." (Participant)

The majority used their exercise counsellors to make their appointments as they were in the leisure centre when their exercise counsellor was present, so the direct route seemed expedient. Some commented that they had received letters reminding them to make appointments, but the majority still made appointments face to face. It should be noted that those attending the focus group all went to specialist classes relating to their medical condition so tended to see their exercise counsellor frequently at these classes meaning an appointment could be made directly, with no need for the telephone booking system.

Participants did not have a strong recollection about their first appointment and gave the impression that it had been administered capably. Perhaps the fact that they did not consciously recognise that there was a Central Administration System in place is to the credit of the programme.

*“It also went like clockwork for me, got a call from the physio at the gym...”
(Participant)*

“Through the GP, very quick, interview, induction, blood pressure and everything.” (Participant)

“I’m not aware of having to book anything. [I was] referred to the gym and talked to the exercise counsellor...” (Participant)

3.2.2 Leisure centre administration staff

The leisure centre administration staff felt they had seen a general improvement since the introduction of the centralised booking scheme. There were general comments about the previous system, where the understaffed nature of the leisure centres made taking lengthy phone calls from new participants very awkward.

*“Some people used to get their GP referral sheet from their doctor and there was a bit of confusion about who was supposed to make the appointment. Sometimes the receptionist phoned us when we were supposed to take them, other times they left it up to the customers and sometimes the customers were waiting for weeks and the appointment hadn’t been made,”
(Leisure centre admin staff)*

“Customers were phoning up for their first appointment and they were asking lots of questions that we can’t answer...and they’re wanting to talk to you and, you’re not wanting to be nasty but there’s a queue out of the door and I can’t really help you anyway.” (Leisure centre admin staff)

They also felt it had made a huge difference to new referrals as they were now able to ask questions about the Live Active Referral Scheme to the central administrator who was more knowledgeable about the scheme as a whole. Due to this, leisure centre administration staff had also noticed that new participants now came in with far more knowledge of the processes and system.

“They’ve had that dialogue with the call centre and they’re coming in with a better sense...they seem to know what they’re coming in for now” (Leisure centre admin staff)

3.2.3 Exercise counsellors

The exercise counsellors themselves were generally positive about the introduction of the Central Administration System, with advantages cited divided into benefits to the exercise counsellors themselves and benefits gained by participants following its introduction.

The biggest benefit to the exercise counsellors was the ability to make and have access to their own appointments. Previously, this had to be done via the leisure centre reception. Given that the majority of participants stated that they made their appointments face to face with the exercise counsellor this is an obvious benefit.

“Biggest change is we can make appointments from our office if a client phones up. Before they had to go through reception and now we have instant access to the appointments...” (Exercise counsellor)

The exercise counsellors also highlighted that, as a result of having access to the appointments, they were able to track appointments in the case of those participants who were persistent “no shows”.

It was also suggested that it was beneficial with regards to the rescheduling of appointments in the case of exercise counsellors’ absence.

“It is also easier in the case of staff phoning in sick...it is so much easier for those appointments to be rescheduled whereas before we would have to phone the centre and then rely on them phoning the clients or whoever the manager is would have to get the client details and phone round.” (Exercise counsellor)

It was also acknowledged that it was a more reliable system for the participants, as now, if the exercise counsellor was busy, they could contact the central administration line and if necessary leave a message which the exercise counsellors were satisfied would be returned.

“When we are busy with appointments and clients can’t get through to us they can get the central administration number which is probably more readily available – before they were phoning direct to the leisure centres and some of them are very busy and the clients can’t get through – quite often too busy to answer the phone....” (Exercise counsellor)

They also felt, like the leisure centre administration staff, that the additional information provided by the Central Administration System was of benefit to participants. For many participants there were significant gaps in their knowledge in relation to the Live Active Referral Scheme when they were initially referred. Since the introduction of central administration they can now get far more information prior to the initial baseline appointment which may, in some cases, highlight any participants for whom the Live Active Referral Scheme may not be suitable (i.e. inappropriate referrals):

“...many when phoning up didn’t know much about the programme – now they get told exactly what is going to happen...” (Exercise counsellor)

The exercise counsellors also felt that they had more information regarding the participants prior to the baseline appointment than was previously available. This is as a result of notes on the system regarding anything that the central administration staff felt was important (i.e. if the participant was particularly nervous or had any specific health problems).

The benefit of additional information provided to the exercise counsellors was one they discussed as being a result of the central administration staff undertaking far more duties than were initially expected of the role. This includes greater administrative duties

“XXX [central administration] has also been known to do reminder calls and send out appointment cards” (Exercise counsellor)

.... as well as more unusual duties in support of participants:

“...giving them directions and sending out maps...more than just giving out appointments.” (Exercise counsellor)

3.2.4 Health professionals

Only one health professional, who was considered a ‘regular referrer’, was able to comment on the appointment system and the move to the Central Administration System:

“It is better, before people were struggling – they were phoning up the leisure centre and not knowing who to ask for.”

In the majority of cases the health professionals reported that it was the patient or in some cases the receptionist who makes the appointment, whilst in other cases the health professionals were unaware of what happened after they had sent away the referral form.

It was recommended in the Live Active 2005 report that the appointment was booked by health professionals at the time of referral in order to reduce the dropout rate between referral and baseline. One referrer was fairly positive about this:

“I do [book appointment] for other referral schemes (e.g. smoking cessation) so would do it if I knew the number ...”

However, this would not be welcomed by all health professionals:

“The patients themselves make the appointment as neither I nor the receptionists have time!”

As a result of the booking being undertaken by someone other than the referrer, the majority of the health professionals interviewed were unable to comment on the appointment system and the move to the Central Administration System as they had little or no knowledge of it. This was attributed, throughout the interviews, to a lack of feedback by those making appointments. However, the lack of feedback was also suggested as being positive:

“Difficult to say as it is left with the patient to do it [book appointment] but no one has come back with any complaints though...”

Despite most health professionals not being able to comment directly on the Central Administration System, they were able to comment on the referral process itself, and results from this will be reported in the final overall report.

3.2.5 Summary

Participants spoken to in the focus group generally made their second and third appointments through their exercise counsellor, so were unable to comment on any change to the booking system. That said, all were happy with the booking of their baseline appointment. Other focus group discussions showed that the move to the Central Administration System was perceived to:

- place less pressure on leisure centre administration staff;
- provide exercise counsellors with the ability to book, view and track their own appointments;
- have set in place a better procedure in the event of an exercise counsellor's absence;
- provide better information for participants prior to booking the baseline appointment; and
- provide greater information for exercise counsellors prior to undertaking a participant's baseline appointment.

Only one health professional was able to make any comment regarding the introduction of the Central Administration System and this was generally positive.

3.3 Challenges and suggested improvements to the Central Administration System

3.3.1 Communication with leisure centre administration staff

There was a general feeling amongst leisure centre administration staff that they were not kept up to date with the changes to the Live Active Referral Scheme or the introduction of new offers or programmes. As front of house staff they felt that it is particularly important that they are up to date with the programmes and where they take place as customers tend to ask them.

“We're not getting brought into the loop as much as we should be because at the end of the day customers ask us what it is, they don't generally phone and speak to the people who run it” (Leisure centre administration staff)

One member of the exercise counsellors' group did highlight that they ensured that the leisure centre administration staff were aware each day what appointments were booked in and at what time.

"I make sure that I say to them that I am waiting for 3 appointments at"
(Exercise counsellor)

There was also the view from leisure centre staff that there will always be vulnerabilities around communication with the Live Active Referral Scheme, given the programme's client group.

"... a lot of the GP referrals are elderly or have mental health problems and aren't very good at remembering things. They produce a letter and they are out by a couple of days." (Leisure centre admin staff)

3.3.2 Communication with referrers

Whilst all of the health professionals interviewed, regardless of whether they were 'rare' or 'regular' referrers, were generally positive about the Live Active Referral Scheme overall, they did highlight some potential areas for improvement, particularly around communication.

The majority of health professionals were unaware of whether their patients had attended the Live Active Referral Scheme, the time it took for them to begin exercise, or to display any physical and/or mental improvements. Those reported as 'rare referrers' felt that they were unable to comment on whether or not the Live Active Referral Scheme worked for the majority of their patients.

As outlined in Section 1.1.1, referrers are sent a copy of the goal setting plan and a note of the date of consultation following each consultation. However, they do not receive any communication if a participant fails to attend a consultation or detailed feedback on progress.

Whilst the provision of more detailed feedback on participants is likely to be an additional requirement of the exercise counsellor, the provision of feedback regarding attendance at appointments could be provided by the central administration staff.

3.3.3 Working relationships

The leisure centre administration staff's perception was that there were stark differences in the working relationships between exercise counsellors and administrative staff across the programme. It ranged from excellent working relationships that keep everyone in the loop and knowledgeable about when the exercise counsellor is available, to the leisure centre administrative staff not knowing that their exercise counsellor had gone on holiday for two weeks. It was felt that it would assist the smooth running of the leisure centres if this was improved. It was also recognised that the main determinant of the effectiveness of local working relationships was the style and approach of the exercise counsellor.

There also appeared to be a high turnover of staff in the exercise counsellor role, making it difficult to form working relationships and put into place systems that encourage better communication. It was stated that if an exercise counsellor is there for over a year it was unusual.

3.3.4 Access to information

The leisure centre administration staff felt that the downside of the new system for the administrative workers was that they have no access to the appointments page so cannot help if someone has a problem with their booking. The only option they were aware of was to phone the Central Administration themselves and they have found this to be troublesome.

There was some confusion in the staff cohort as to the opening hours of the Central Administration System and some participants had found that the number just rang out. In

these situations they felt there was nothing else they could do to assist the customer and felt that this was far from satisfactory. Leisure centre administration staff were asked to estimate the frequency of a customer having a problem with their booking, and this ranged from 1 in 10 to 5 out of 6.

*“...the negative side is that we just don’t know now, we just don’t know.”
(Leisure centre admin staff)*

All of the exercise counsellors appeared in agreement with the leisure centre administration staff regarding the difficulties posed as a result of the administration staff no longer having access to the appointments, recognising that often participants will phone up the leisure centre at which their appointment is due with any queries and the reception staff are now unable to respond.

“The only thing is people phone up the centre to say that they have lost their appointment but they no longer have this information and they have to pass on to us and central admin.” (Exercise counsellor)

The suggested solution, from leisure centre administration staff, to this problem would be for them to have the ability to view (but not change) the web based appointments diary, therefore enabling them to be able to assist those customers who are confused with their appointments. They were clear that they do not want or need to have the ability to alter these appointments.

In spite of these problems it was felt that, in general, the introduction of the Central Administration System was welcomed by the leisure centre administration staff as it reduced their workload.

“...the reception staff now aren’t hassled by clients so it is less work for them ...” (Exercise counsellor)

One counsellor did state that he was aware of one member of leisure centre administration staff who preferred the previous system as they felt that they were no longer aware who was on the programme when they came into the centre.

“One receptionist said she liked it before as she knew their name and could say hi to them when they were coming into the centre after their first appointment...” (Exercise counsellor)

3.3.5 Confusion with Keep Well¹⁰

The exercise counsellors highlighted that one of the main challenges with the Central Administration System was that the same number was used for both the Keep Well Scheme and the Live Active Referral Scheme. This often led to confusion when booking the appointments, resulting in a number of Keep Well patients being booked in with Live Active exercise counsellors. Whilst the simplest solution appeared to be the introduction of a separate phone line, it was noted that as Keep Well was a temporary programme, the only feasible solution was an improvement in the communication between the practice nurse and the participant at their appointment.

“The main problem is back to the practice nurses...they are not saying we are referring you to a Keep Well scheme they say we are referring you to the Live Active scheme...” (Exercise counsellor)

¹⁰ ‘Keep Well’ is a pilot Scottish Executive primary care based approach to enhancing anticipatory care. In Glasgow the Keep Well pilot has funded an additional Live Active Health Counsellor. This additional post is based in the same sites as the Live Active Exercise Counsellor. The aim of the post is to “fast track” participants referred from a Keep Well screening to the Live Active Referral Scheme and to enhance the Live Active Referral Scheme to also include weight management and nutrition as health behaviours being addressed.

3.3.6 Opening hours of the central booking line

The only other challenge cited by the exercise counsellors was in relation to the opening hours of the central administration telephone line, this being 9am to 4pm Monday to Friday. It was suggested that many people thought it was an actual call centre and therefore expected it to be open in the evenings as well.

“People assume that it is a call centre number so some have messages left at 10 o’clock at night – they can leave a message and we will call them back” (Exercise counsellor)

The main issue this presents is in relation to cancellations, in particular for evening appointments. It was suggested that, whilst notification of cancelled appointments had improved since the introduction of the Central Administration System, the exercise counsellors are still not always made aware of cancelled appointments and cannot as a result record this as a “no show” on the database.

“The only thing I was thinking of as a negative is that we do a late night each week and the central admin number is only open until 4pm so we don’t know until the next day...” (Exercise counsellor)

Therefore there may be scope to improve the relaying of messages to the exercise counsellors. However, if the central administration line is busy or it is outwith opening hours and a message has been left, it may be the case that this is not picked up until after the time the appointment was due to occur.

3.3.7 Other future developments of the Central Administration System

The exercise counsellors discussed a number of other potential recommendations for the future development of the Central Administration System which would lead to more general improvements to the Live Active Referral Scheme as a whole.

The first of these would be designed to free up more time for the exercise counsellors.

“To do the three, six and twelve month letters rather than doing it at the sites which frees up more exercise counsellor time...” (Exercise counsellor)

The second of these is to aid the marketing and promotion of the Live Active Referral Scheme by identifying which practices refer regularly and which do not.

“Tracking the GPs – who is referring and who is not...” (Exercise counsellor)

This would highlight any practices who may benefit from awareness raising which would go some way to addressing the issue of lack of promotion and low referrals within some practices of the Live Active Referral Scheme.

3.3.8 Summary

The main challenges facing the Live Active Referral Scheme around the Central Administration System were:

- a reduction in communication between the Live Active Referral Scheme and the leisure centre administration staff;
- a reduction in the information which leisure centre administration staff now have access to;
- confusion resulting from Keep Well and the Live Active Referral Scheme sharing the central booking line number; and

-
- the opening hours of the central administration booking line not matching those of the Live Active exercise counsellors, which poses a problem regarding cancellations.

A number of improvements to the Central Administration System, in order to overcome some of the challenges detailed above, were proposed. These include:

- extended opening hours to ensure notification of cancelled appointments are relayed to the exercise counsellors;
- providing leisure centre administration staff with a read only version of appointments; and
- improving communications between practice nurses and Keep Well participants, ensuring that the participant is clear that it is the Keep Well programme onto which they have been referred.

Three recommendations for the future development of the Central Administration System and role were discussed:

- undertaking more of the general administration of the Live Active Referral Scheme to free up the exercise counsellors (e.g. 6/12 month consultation prompt letters);
- providing referrers with feedback on uptake of referral; and
- aiding the marketing and promotion by tracking health professionals' propensity to refer.

4 Conclusions and next steps

4.1 Conclusions

This part of the study explored the differences following the introduction of the Central Administration System.

Conclusions from database analysis

Following the introduction of the Central Administration System (referred between June 2007 and November 2007) those referred were:

- more likely to drop out of the Live Active Referral Scheme between referral and baseline and less likely to attend the baseline consultation; and
- significantly more likely to be identified and recorded as inappropriate referrals/positive and medical dropouts.

When inappropriate referrals/positive and medical dropouts were excluded from the analysis, the proportion making a baseline appointment was not significantly different from the proportion of those referred prior to the introduction of the Central Administration System.

These conclusions drawn from the data have to take account of the facts that:

- despite the proportions going down, the volume of referrals has increased following the introduction of the Central Administration System. This may not have been viable prior to the introduction of the Central Administration System, in terms of the capacity of the leisure centre administrative staff to deal with any further increase in Live Active booking enquiries;
- the differences reported whilst they are statistically significant, are small; and
- the increase in the proportion of participants who are recorded as inappropriate referrals/positive and medical dropouts suggests that there is now greater screening of participants by the central administrator, prior to their baseline appointment.

Conclusions from the focus group discussions

The focus group discussions with participants, leisure centre administration staff and exercise counsellors also highlighted a number of benefits to the Central Administration System. These were:

- the resultant reduction in the workload of leisure centre administration staff following the introduction of central administration, recognising that often leisure centres are busy, understaffed and many Live Active booking calls can be lengthy;
- exercise counsellors are now able to book, view and track their own appointments and this has obvious benefits in terms of personal time management, absence management and also ease of booking for participants given that a number of those in the participants' focus group reported that their preferred method of appointment booking was through their exercise counsellor; and
- greater provision of information prior to the baseline appointment both for participants and exercise counsellors, enabling greater screening of participants, highlighting any inappropriate referrals/positive and medical dropouts and making exercise counsellors aware of any relevant information.

The focus group discussions also highlighted a number of challenges facing the Live Active Referral Scheme following the introduction of the Central Administration System, including:

- a reduction in communication and information sharing between the Live Active Referral Scheme and the leisure centre administration staff – as these staff now

-
- have no knowledge of appointments following the move to the Central Administration System, despite often being a participant's first point of contact;
 - confusion between Keep Well participants and Live Active participants, as both appointments are booked with counsellors based at the leisure centre via the same number; and
 - the opening hours of the central administration booking line preventing exercise counsellors being made aware of cancellations for appointments after 4pm.

Recommendations for the future development and improvement of the Central Administration System discussed by the groups were:

- the introduction of extended opening hours;
- improving communication between practice nurses and Keep Well participants;
- introducing more day to day Live Active Referral Scheme administration to the central administration role (such as participant prompt letters); and
- extending the central administration role to include monitoring levels of referrals from referral sources.

Conclusions from the health professionals interviews

The health professionals interviewed had little knowledge of the Central Administration System.

- In the majority of cases appointments were booked by the patient or the practice receptionist.
- The one health professional interviewed who had any knowledge of the Central Administration System was positive as it removed any confusion concerning who they should be asking to speak to, as was previously the case when phoning the leisure centre.
- Despite their lack of awareness, the majority of the health professionals interviewed stated that they were happy with the time taken from referral to the participant beginning physical activity suggesting that the Central Administration System was successfully processing referrals through the system within an adequate time frame.

The other main point arising from the interviews and general discussions about the Live Active Referral Scheme were that there was a strong theme regarding the lack of feedback received, from either the Live Active Referral Scheme or the participant, both regarding attendance and more detailed progress updates. To some extent the communication between the Live Active Referral Scheme and the health professional who is referring could be improved by extending the central administration role to include provision of patient attendance data allowing follow up of non attenders.

4.2 Next steps

This is the third in a series of reports assessing the Live Active Referral Scheme. There will be further analysis and reporting, covering the addition of the Motivator enhancement. An amalgamation of the impacts of the changes made to the Live Active Referral Scheme and a fuller exploration of non adherers will be presented in an overall final report.

Appendices

Appendix 1	Topic guide for central administration with local authority staff
Appendix 2	Topic guide for central administration with participants
Appendix 3	Topic guide for central administration with exercise counsellors
Appendix 4	Topic guide for health professionals Interviews
Appendix 5	Database analysis tables

Appendix 1 Topic guide for central administration with local authority staff

Introductions and background to research.

1. What do you know about the Live Active Referral Scheme?
2. What are your thoughts around the Live Active Referral Scheme?

Prior to January 2007, bookings for the Live Active Referral Scheme used to be taken by reception staff at the local leisure centres. This has moved to a central administration point and one dedicated telephone number for bookings across the city.

3. What are your thoughts around the move to the central administration point for booking appointments for the Live Active Referral Scheme?
4. What impact has this change had on you and your role?
5. What do you see as your role within the Live Active Referral Scheme?
6. Do you feel the exercise counsellor links well with you and other admin/reception staff?
7. If so, in what way?
8. If not what could be done to make this better?
9. What would you suggest are the main positives of the new system when comparing it to the old system?
10. What are the main negatives of the new system?
11. What recommendations would you make for the further development of the Live Active administration system?
12. What recommendations would you make to the Live Active Referral Scheme generally?
13. Do you have any further comments or suggestions on the changes to the central administration or on the Live Active Referral Scheme?

Thanks and close

Appendix 2 Topic guide for central administration with participants

Introductions and background to research.

- 1a. What are your thoughts around the Live Active Referral Scheme?
- 1b. In general, what has your experience been of booking appointments for the Live Active Referral Scheme?

Prior to January 2007, bookings for the Live Active Referral Scheme used to be taken by reception staff at the local leisure centres. This has moved to a central administration point and one dedicated telephone number for bookings across the city.

- 2a. Have you had experience of both booking systems? When did you make the appointments?
- 2b. What are your thoughts around the move to the central administration point for booking appointments for the Live Active Referral Scheme?
- 2c. What impact has this change had on your experience of booking an appointment?
- 3. What would you suggest are the main positives of the new system when comparing it to the old system? What are the main negatives of the new system?
- 4. What recommendations would you make for the further development of the Live Active administration system?
- 5a. Thinking of the referral process, is there any way in which this should be changed/improved?
- 5b. Are there any barriers to accessing the Live Active Referral Scheme?
- 5c. What do you think could be done to improve clients' attendance and encourage them to 'stay with' the Live Active Referral Scheme?
- 6. What recommendations would you make to the Live Active Referral Scheme generally?
- 7. Do you have any further comments or suggestions on the changes to the central administration or on the Live Active Referral Scheme?

Thanks and close

Appendix 3 Topic guide for central administration with exercise counsellors

Introductions and background to research.

1. What do you think about the Live Active Referral Scheme in general?
2. What do you think about your roles and responsibilities within the Live Active Referral Scheme in general?

Prior to January 2007, bookings for the Live Active Referral Scheme used to be taken by reception staff at the local leisure centres. This has moved to a central administration point and one dedicated telephone number for bookings.

3. What are your thoughts around the move to the central administration point for booking appointments for the Live Active Referral Scheme?
4. What impact has this change had on you and your role?
5. Do you feel the exercise counsellor's link well with admin/reception staff? If so, in what way? If not, what could be done to make this better?
6. What differences are you aware of with the change to one central administration point and a dedicated telephone number for bookings?
7. In comparison to the old system and way of working what are the main positives/benefits of the change?
8. In comparison to the old system what are the challenges or negative points to the new system and new way working?
9. What recommendations would you make for the further development of the Live Active administration system?
10. What recommendations would you make to the Live Active Referral Scheme generally?
11. Do you have any further comments or suggestions on the changes to the central administration or on the Live Active Referral Scheme?

Thank and close

Appendix 4 Topic guide for health professionals interviews

Introductions and background to the research.

The Live Active Referral Scheme in general

1. What are your thoughts on the Live Active Referral Scheme in general?
2. How frequently do you refer to the Live Active Referral Scheme in an average month?
3. What prompts you to refer a patient? Do you have certain criteria that they have to meet? What are the main reasons you refer patients?
4. Is there anything that prevents you from referring patients?
5. Apart from the Live Active Referral Scheme, are you aware of other physical activity services/opportunities which you can recommend to your patients such as classes, gyms or walking groups etc?
6. Do you refer to other services (not exercise related), i.e. smoking cessation courses, food or weight management services? If so which services?
7. What recommendations would you make for the further development of the Live Active Referral Scheme?
8. Any other comments or suggestions with regard to the Live Active Referral Scheme?

The referral process

9. How do you find the referral process for Live Active Referral Scheme? Length of the forms etc.? Probe for improvements/good points
10. Do you feel there are any barriers to accessing the scheme in relation to the referral process? If so what are these and how could these be overcome?
11. How long does it take from your referral to the patient getting involved in physical activity? Is this length of time acceptable?
12. On average, how long would you say it takes (from referral) to see a change (physical/mental etc.) in your patient's on the Live Active Referral Scheme?
13. What rating would you give the process as a whole out of 10?
14. In your opinion, would you say the Live Active Referral Scheme works for the majority of the patients that you refer?

Central admin system

Prior to January 2007, bookings for the Live Active Referral Scheme used to be taken by reception staff at the local leisure centres. This has moved to a central administration point and one dedicated telephone number for bookings.

15. What differences are you aware of with the change to one central administration point and a dedicated telephone number for bookings? (probe for positive and negative effects).
16. What effect has this change had?
17. Do you make the bookings for Live Active patients yourself? If not, who does?

-
18. How do you feel about the appointment booking system for the Live Active Referral Scheme? (is it easy, convenient etc?)
 19. Have you ever been faced with any problems or difficulties in booking an appointment for Live Active Referral Scheme or getting information about the Live Active Referral Scheme?
 20. Are you aware of any issues that patients may have had with the new system of booking appointments?
 21. Could you rate the booking system before the change and after the change, out of 10?
 22. Are there any comments or recommendations you could make for booking appointments for patients onto the Live Active Referral Scheme easier?

Thank and close

Appendix 5 Database analysis tables

Table 1 Stage of programme reached

		Central Admin analysis			
		Before		After	
		No.	%	No.	%
Stage of programme reached from data	Referral only	578	27%	960	32%
	Baseline	1150	53%	1404	47%
	Month 6	247	11%	372	13%
	Month 12	182	8%	237	8%
	Total	2157	100%	2973	100%
Attended consultations	No	578	27%	960	32%
	Yes	1579	73%	2013	68%
	Total	2157	100%	2973	100%

Table 2 Stage of programme reached – Pearson Chi Square Tests

		Central Admin analysis
Stage of programme reached from data	Chi-square	23.397
	df	3
	Sig.	.000*
Attended consultations	Chi-square	17.975
	df	1
	Sig.	.000*

Results are based on nonempty rows and columns in each innermost subtable.

*. The Chi-square statistic is significant at the 0.05 level.

Table 3 Examination of dropouts between referral and baseline

		Central Admin analysis			
		Before		After	
		No.	%	No.	%
Referral only dropouts	No baseline appointment made	411	71%	615	64%
	Baseline appt made	65	11%	110	11%
	Positive drop out/inappropriate referrals	102	18%	235	24%
	Total	578	100%	960	100%

Table 4 Examination of dropouts between referral and baseline - Pearson Chi-Square Tests

		Central Admin analysis
Referral only dropouts	Chi-square	10.384
	df	2
	Sig.	.006*

Results are based on nonempty rows and columns in each innermost subtable.

*. The Chi-square statistic is significant at the 0.05 level.

Table 5 Examination of dropouts between referral and baseline (Inappropriate referrals and positive or medical dropouts excluded)

		Central Admin analysis			
		Before		After	
		No.	%	No.	%
Referral only dropouts	No baseline appointment made	411	86%	615	85%
	Baseline appt made	65	14%	110	15%
	Total	476	100%	725	100%