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Kirklees Young Pals Evaluation

Interim Report

November 2007

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Executive Summary

Background

- (i) A steep rise in the prevalence of childhood obesity in England, and locally in Kirklees, in recent years, provides the background for the development of the Young Pals Project.
- (ii) Diet and exercise are widely believed to be relevant to tackling childhood obesity, although there is uncertainty about optimal activity levels for children. Sleep duration and television watching may also be linked to obesity levels in children. Support from parents is another significant factor.
- (iii) Kirklees has joined the National MEND Programme (Spring 2007) tackling childhood obesity through involving the whole family in target setting and activities.

Kirklees Young Pals

- (iv) The Kirklees Young Pals Programme, run by Kirklees Active Leisure, became operational early in 2006. Following initial contact with the University of Huddersfield, the Nationwide Children's Research Centre (NCRC) was contracted to evaluate the Programme in October 2006.
- (v) The agreed methodology includes attendance data; BMI, weight (kilograms) and body fat percentage measurements; Self-esteem questionnaires; and questionnaires recording Type and Frequency of Activity and data about Attitudes to Physical Activity.
- (vi) A Steering Group has reviewed the potential use of accelerometers (or actigraphs) to provide objective measures of physical activity levels in young people.

Quantitative Database

- (vii) The revised Young Pals database includes 41 children and young people who have been enrolled on the programme since September 2006. Twenty-two of them were female, and nineteen male, evenly split across North and South Kirklees. Twenty-five were aged between five and ten, and fifteen between eleven and fifteen. Three-fifths of the children and young people were white British, and two-fifths were from ethnic minority groups. Thirteen per cent (13%) of participants were noted to have a disability.
- (viii) Most of the children for whom referral data was completed had been recommended to the scheme by Health professionals.
- (ix) Attendance data recorded that children and young people had attended, on average, 5.33 of the weekly (Fusion) sessions and one of the (Meltdown) sessions during the first year of the evaluation period.
- (x) Evidence from Self-esteem, Attitude and Type and Frequency questionnaires so far indicates mainly positive trends.
- (xi) Analysis of physical measurements so far again indicates mainly positive trends.
- (xii) There have been some significant gaps in data collected, including attendance data and physical measurements. Numbers completing other questionnaires have been quite small.

Children's Data

- (xiii) Children have demonstrated a clear understanding of the objectives of the Programme and described improvements in self-confidence and other benefits from attending the Programme, including experiencing less bullying.
- (xiv) Children have also seemed knowledgeable about healthy eating.

- (xv) Young people have acknowledged previous weight-related embarrassment and discomfort at school, ameliorated by attendance at the Programme.
- (xvi) Young people have welcomed the variety of activities available at Young Pals, though some would like this to be extended.

Parents / Carers

- (xvii) Parents have welcomed the Young Pals Programme and confirmed the benefits experienced by their children through attending. Parents appreciated advice from dieticians, although some wanted this to be more readily available.
- (xviii) Some parents consulted have requested more regular feedback about children's progress, including weight loss / gain.
- (xix) Some parents acknowledged that being overweight themselves made it more difficult for them to help their children.
- (xx) Most parents have found Meltdown sessions easy to get to and some have asked that these should be more frequent. Some parents have found more difficulty accessing weekly Fusion sessions which take place straight after school.

Dieticians and School Nurses

- (xxi) Dieticians and School Nurses have welcomed the availability of the Young Pals Programme; Dieticians have acknowledged the limited time they have available to support children with weight problems.
- (xxii) School Nurses have requested additional feedback about the number of parents who have taken up their (School Nurses') recommendations to attend the Programme.
- (xxiii) Confidentiality concerns have sometimes constrained sharing of information between professionals.
- (xxiv) School Nurses have proposed that they should take a more proactive approach to referrals, obtaining consent from parents to refer them directly to the Programme.

Evaluators' Observations

- (xxv) Evaluators' observations have confirmed the level of enjoyment of children and young people taking part in the Programme.
- (xxvi) Children and young people have responded positively to opportunities for physical measurements to be taken recording their progress.
- (xxvii) Staff involved in running the Programme have sought to ensure that children and young people, including those with disabilities, obtain maximum benefits from participation.
- (xxviii) Kirklees Active Leisure staff have been at pains to reduce stigma attached to weight problems.

Recommendations

- (xxix) Enhanced data completion, including attendance data, weight measurements and BMI data will be an important target for the second year of the Programme.
- (xxx) The current range of evaluation questionnaires should be reviewed to assess whether current requirements for data collection and questionnaire completion can be simplified without compromising the evaluation.
- (xxxii) Referral procedures for the Programme should be reviewed with a view to ensuring an appropriate level of referrals from general practitioners; and also to ensure that school nurses can positively influence parents whose children they consider would benefit from the Programme.
- (xxxiii) The Steering Group is asked to consider how information from the Interim Evaluation should be reported back to participants (children and young people, parents / carers and professionals); and also to consider how the information so far obtained can best be shared with Kirklees Active Leisure staff.

1. Introduction

Background and Literature

Obesity is now recognised as the most common paediatric chronic condition in Western Countries (LeMura and Maziekas 2002) and in England is one of the most pressing health problems facing the Government. In response to this in 2004 the Government produced a PSA (Public Service Agreement) to “halt the year on year rise in obesity among children aged under 11 by 2010” (Department of Health 2004). Locally, childhood and young people have been identified as a priority within the LAA’s (Local Area Agreements). A copy of Kirklees Obesity Strategy (June 2007) is included as **Appendix (i)** to this report.

The background to this action was the alarming rise in the prevalence of obesity in England from 10% (1995) to 14% (2003) in children aged 2-10; and in particular in 8-10 year olds from 11% (1995) to 17% (2003) (Department of Health 2006). Kirklees Obesity Strategy states that: *Obesity amongst children has doubled in 2 - 4 year olds in the last ten years, and has trebled in 6 – 15 year olds in the last eleven years. Obese children are more likely to be obese as an adult. In Kirklees, 16.4% of Year 6 children are obese.*

While obesity is universally measured through BMI, difficulties arise when measuring BMI in children. Guidelines have now been produced nationally as to how to measure childhood obesity on a population level (Department of Health 2006). According to these guidelines and the PSA target, children are defined as overweight if their BMI is above the 85th centile and obese if above the 95th centile (Department of Health 2006). This cut off is derived from the UK National BMI classification (Department of Health 2006). When dealing with individual children the 91st and 98th centile tend to be used and are the cut off points used within the Young Pals Scheme.

Although the links between BMI and morbidity and mortality (for example obesity and early onset diabetes, stroke and cardio-vascular disease and some cancers) (Department of Health 2005) are well established in adults, again the links are not as clear in childhood. It has however been demonstrated that childhood obesity

substantially increases the risk of orthopaedic, respiratory and psychosocial disorders (Blaak et al 2002); and, importantly, obese children are more likely to become obese adults.

There has been much speculation as to why children's weight levels and obesity are increasing; and there is now a commonly held belief that children are eating too much and not exercising enough. However, when these two areas are studied more closely, the causes (and therefore the prevention/treatment) are found to be much more complex. One of the problems has been difficulties in measuring both physical activity and diet. Most research to date relies on self-report of behaviours which are both difficult to define and to measure. Calorie consumption includes both food and liquid consumption. When the total calorie consumption of children today (self/parent reported) is compared to that of the 1960's there does not appear to be much difference (Eisenmann 2006). However the content and the pattern of eating has changed considerably with more consumption of energy dense foods/ fast foods/ soft drinks and less consumption of milk and an increase in snacking (Eisenmann 2006). The contention therefore that we merely need to reduce caloric consumption in order to manage weight is clouded by the importance of the macro and micro-nutrient content of the food consumed, and also possibly by children's eating behaviours and patterns. In order to assess the effectiveness of any weight loss intervention these need to be taken into account.

Assessing the other side of the equation – the energy output – is also complex. Difficulties arise in not only measuring physical activity but also defining what we mean by physical activity. Definitions used by Sport England (Sport England 2006) encompass all forms of energy expenditure such as walking to school and gardening, yet when questioning children on their activities research typically focuses on sport / exercise which is structured. As to how much activity children should be doing many questions still remain. The advice is that all children should be active for at least 60 minutes a day of moderate activity (Department of Health 2004) and at least twice a week this should include activities to improve bone health, muscle strength and flexibility. But this is compounded by what type of activity? What does moderate mean? Activity levels in children at present are much higher than in adults (70% boys and 61% of girls are already meeting recommendations), (Sport England 2006) suggesting that these recommendations may be conservative when looking at the prevention and treatment of obesity. It may also be that methods of measuring

activity may not be accurate. The most common methods of measuring energy expenditure on a large scale (self-report) are also the most unreliable. Whereas energy expenditure can be estimated to some extent when attending designated sessions, the overall increase in activity (e.g. walking more instead of using the car etc.) is again more difficult to measure. Attempts have been made instead to measure sedentary activities (e.g. television viewing) which are easier to measure, but again there are inconsistencies. It is quite feasible to watch a number of hours of TV a night and to be active for an hour a day – the two are not mutually exclusive. When TV viewing is reduced – it is often replaced with other sedentary activities (Biddle and Gorley 2005) (but see references to Reilly's recent Overview of Childhood Obesity, 2007, below).

As far as obesity is concerned..., given how easy it is to be inactive, more than 60 minutes of physical activity may be needed to avoid weight gain. Indeed, the 'obesogenic environment' found in Western societies is perhaps contributing to accelerated weight gain (Swinburn & Egger 2004) because of the ease with which we can engage in less physical activity (Biddle and Gorley 2005 p277).

Other factors also make problems of measurement more complex. There is now some evidence that sleep duration is linked to obesity in children (Eisenmann 2006) and that this has been reduced over previous decades. The increase in availability of electronic equipment in children's bedrooms leading to later bed-times may be a contributory factor. The origins of the obesity problem may in fact be *in utero* as the rise in obesity in children has been mirrored by an increase in mean birth weights (Surkan et al 2004). There are strong links between high birth weight and increases in obesity in adolescence and adults (Garn 1976) and some evidence of links with very low birth weights. Children born to obese mothers are twice as likely to be obese by the age of two (Catalon 2006) regardless of their birth weight suggesting there is both a genetic and environmental impact. The lack of recognition of the "maternal-foetal origins of obesity may help to explain why (traditional) approaches of diet and exercise are ineffective" (Eisenmann 2006 pp 332). Finally there is increasing concern about children's and young peoples' level of stress and the potential links to obesity "It is conceivable that environmental noise, crime, terrorism, household stress etc. may be contributing to the overall stress load of contemporary children and adolescents" (Eisenmann 2006 pp. 331). The impact of the social and

physical environment provided for children is manifested in the physiological response in children to problems of being overweight and of obesity. This requires more than providing information on diet and exercise and hoping that the result is a change in behaviour.

If the causes of obesity are complex then so too will be its treatment. There is to date very little evidence of how to effectively prevent or treat obesity in children. Exercise, however is:

“an empirically validated method of treating paediatric obesity.... the impact has been found through synthesis of available research to have a modest to strong impact on selected body composition variables” (LeMura and Maziekas 2002 p. 494).

The UK Government has also set targets to increase physical activity in the population. This includes a PSA of increasing the proportion of school children who spend a minimum of two hours a week (within or outside of school time) on high quality PE and sport from 25% in 2002 to 85% by 2008; and by 2010 for all pupils to do up to two hours sport in school hours and two to three hours outside of school hours (Department of Health 2004).

Research has been conducted to establish what barriers to physical activity exist amongst children, and the results suggest three distinct areas:

- (i) preferences and priorities (preferring to do other things);
- (ii) family life and parental support (parents not supportive);
- (iii) restricted access to opportunities (Brunton 2003).

The majority of interventions to date that have tried to increase activity levels have been school-based and most have focused on providing information / education. They have mostly been undertaken in the US and few intervention studies have been conducted in the UK (Brunton 2003). There is, therefore, little evidence of what is effective to guide physical activity promotion. The recommendations that do exist suggest engaging parents in supporting and encouraging their children's physical activity, and providing opportunities for family participation, and combining this with education and provision at school. Successful approaches that take into account

children's views "provide children with (a) diverse range of activities to choose from; emphasise the aspects of participating in physical activity that children value (e.g. opportunities to spend time with friends); (and) provide free or low-cost transportation and reduce costs" (Brunton 2003) p6).

Evidence to date on successful weight management suggests that behavioural modification can enhance an exercise programme: for example, including parents, providing nutritional advice, and encouraging more spontaneous activity as well as attending structured exercise sessions (LeMura and Maziekas 2002). There is in particular a lack of research on successful interventions that address ethnic and gender differences, despite the knowledge that children from ethnic minority backgrounds tend to be less physically active and that gender difference in both activity participation and fat deposition and removal exist (LeMura and Maziekas 2002).

The importance of psycho-social issues is also deemed essential to effective weight management in children. Changes in psychosocial health are regarded as an essential component of any weight loss intervention (Hill 2005). Both depression and low self-esteem are predictors of drop-out from paediatric weight management services (Hill 2005). However, the relationship between the two is not clear. In particular, this is true in younger children where obesity does not appear to impact on concepts of self worth – it is only during adolescence (and more commonly in girls) that links (but not necessarily causative relationships) are found to self-esteem.

A recent research overview on Childhood Obesity (Reilly, 2007) has confirmed high prevalence rates and a continuing rise in childhood obesity. Children and young people from families of lower socio-economic status, and some children from ethnic minorities are at higher risk. Reilly notes that obese individuals need more (not fewer) calories to maintain activity levels. He highlights evidence that metabolic causes of childhood obesity are extremely rare (mainly found in young or short children).

Reilly proposes that prevention programmes should focus directly on obesity rather than healthy living; should modify target behaviours; do no harm; and produce measurable impacts. This research overview commends prevention programmes which promote breast-feeding; reduce television viewing and screen time; promote

physical activity; and reduce the intake of fruit juices and sugar-sweetened fizzy drinks. Children's well-being has been found to increase when they are involved in responsible programmes aimed at the prevention or treatment of obesity. Overall, children's behaviours have been found to be more resistant to change than previously thought. Reilly refers to the Planet Health programme conducted in schools in the USA (Gortmaker and others 1999), a randomised control trial carried out over two school years which successfully prevented new cases of obesity in girls; the positive effects of the programme are attributed by the authors to a reduction in television viewing.

The suggestion from most of the research to date is that further evaluations of what does and does not work for overweight and obese children are needed. More is required on the most effective ways of engaging young people in physical activity, both structured and spontaneous; and more is needed on preventing future weight gain on those already overweight and on the psychological impacts of obesity in childhood.

"Given the shortage of evidence on what works for obesity, it will be of critical importance to ensure that high quality evaluations are put in to place as programmes and initiatives are rolled out" (NAO 2006).

Kirklees Young Pals

Kirklees Culture and Leisure Services (Active Leisure) started to run the Young Pals Service early in 2006 for children referred by general practitioners and health professionals who needed activity programmes to achieve weight loss and to tackle obesity. Programmes were run for children aged 6 – 11 and 11 – 16 in North and South Kirklees. Monthly Meltdown sessions held on Sundays providing a structured programme of games and physical activity for children were provided, including regular measurement of height and weight. Meltdown sessions were held in Sports Centres in Huddersfield and Batley. These were supplemented by Fusion sessions held on a weekly basis, after school, in a variety of locations.

Evaluation of the programme was discussed initially with the University of Huddersfield (Kiara Lewis, Sports Lecturer) early in 2007. Aims of the evaluation were described as:

- (i) To evaluate the effectiveness of a care pathway for overweight and obese young people.
- (ii) To find out what works locally for children and young people who are overweight and obese to inform local practitioners and contribute to the debates about effective approaches to tackling childhood obesity.
- (iii) A case study approach to evaluation was recommended as its aims are to be inclusive, and the evaluation would consider processes as well as outcomes.
- (iv) A triangulation of data collection techniques would be used to enhance the validity of the data combining quantitative (questionnaires, psychological tests) and qualitative (semi-structured) interviews. An evaluation framework was developed between Kirklees Culture and Leisure and the University of Huddersfield.

The Nationwide Children's Research Centre (NCRC) was approached in June 2006 to undertake the evaluation in consultation with Kirklees Culture and Leisure and the University of Huddersfield, and a contract for the evaluation was agreed in October 2006.

Kirklees Leisure stressed the importance of including parents and referring agencies in the evaluation.

Methodology

Following negotiation it was agreed that the evaluation would comprise:

- (i) Attendance data for young people at Meltdown or Fusion sessions (and for parents attending Meltdown sessions where available).
- (ii) BMI, weight (kilograms) and body fat percentage to be recorded for participants at regular intervals (Weeks 1, 10, 25 and 45).

- (iii) Self-esteem (of young people) to be measured using the Rosenberg Self-Esteem questionnaire at regular intervals.
- (iv) Additional questionnaire to be completed recording Type and Frequency of Activity. Data about Attitudes to Physical Activity to be obtained from young people (Weeks 1, 10, 25 and 45).

The evaluation framework included focus groups with parents, referring agencies (school nurses and dieticians); and meetings with Kirklees Active Leisure staff (6-monthly).

The evaluation framework also included exploration of the use of accelerometers (or actigraphs) to provide objective measures of physical activity levels in young people.

Additional data regarding young people would be obtained from referral forms, review meetings, exit interviews and follow-up telephone calls.

An evaluation Steering Group was established, chaired by the Kirklees Leisure Physical Development Manager, including Kirklees Active Leisure staff involved in running the project, the University of Huddersfield, and the NCRC. Meetings of the Steering Group were held in October and December 2006 and in February and May 2007. The Steering Group meetings reviewed emerging evidence about the amount of activity required by children and young people to effect their energy balance. Steering Group meetings reviewed piloting of accelerometers, including involvement by children and young people involved in the Young Pals programme. It was found that accelerometers could be used for periods of up to one week. Some issues were identified regarding the accuracy of data obtained about activity levels and further trials of accelerometers were proposed by up to six young people in May 2006.

This Interim Report reviews quantitative and qualitative data so far obtained. The evaluators had opportunities to observe Meltdown sessions in both North and South Kirklees. They decided to include focus groups and interviews with young people, as well as with parents.

By May 2007, Kirklees Active Leisure had obtained two year's funding to participate in the MEND programme which has been positively recommended by the National

Obesity Forum. Parents as well as children are fully involved in MEND programmes which aim to work with the whole family tackling obesity issues. MEND programmes run for nine weeks. Eight of the first families to agree to take part in the MEND programme, all from North Kirklees, were already involved with Kirklees Young Pals. The Kirklees Physical Activity Development Manager anticipated that MEND would be successful in integrating physical activity and dietary approaches. The MEND programme comes with an established evaluation methodology.

2. Quantitative Data

Introduction

Following a meeting with the Physical Activity Development Officer for the Young Pals programme the existing SPSS database has been revised to reduce the number of 'cases' (children and young people) from 179 to 41 for the purpose of this interim quantitative analysis report.

81 Children and young people who had been enrolled in the programme prior to the start of the evaluation (September 2006) were removed as baseline data was not available for this group. Removal of these 81 cases reduced the database to information on 98 children and young people, all of whom had started the Young Pals scheme during or since September 2006. This has allowed the evaluation team to be confident that all those who are now retained on the database have received the same intervention since September 2006.

At the time of preparing analysis for this interim report (September 2007) it was noted that 57 of these 98 children and young people have failed to attend follow up review (ALE) appointments (schedule to take place at 12, 24 and 48 weeks) following their initial appointment. This means that there was only baseline data available for these cases and therefore they could not be included in this analysis. The loss of 57 participants from the initial group of 98 equates to a drop out rate of 58%.

When a young person fails to attend review (ALE) appointments a follow up non-attendance questionnaire (NAQ) is sent to ascertain the reasons for non-attendance but to date the response rate has been quite low. A small number of questionnaires have identified the following reasons for non-attendance thus far:

- Cost of sessions
- Difficulties in attending sessions due to lack of transport
- Now attending alternative activities closer to home

The Young Pals team are keen to gather more information on reasons for non-adherence to the scheme and will allocate resources to carry out follow up telephone calls to all non-attenders who have failed to return their NAQ. This will allow further data on reasons for non-adherence to be included in the final evaluation report scheduled for September 2008.

Research exploring non-adherence to exercise schemes has focused on an adult population to date. Clearly there may be some differences in children and young people's reasons for non-adherence, not least because they may be reliant on support from an adult in order to travel to the scheme. However, it is interesting to note that research with adults has found the drop out rate to be in the region of 50% across different schemes and that these individuals usually drop out in the first 3 – 6 months (Robinson & Rogers, 1994).

It is important to implement a more robust strategy to follow up those who do not adhere to the scheme since non-attendance may not necessarily indicate non-participation in physical activity since some children and young people may simply have found a different physical activity session closer to home. Such a reason for non-attending would still be considered positively since the aim of the scheme is to foster participation in physical activity, regardless of where it takes place.

Quantitative Analysis

Forty-one (41) children and young people are now detailed on the SPSS database (179 were previously detailed). Twenty-two (54%) are female; and nineteen (46%) are male.

Participants are evenly split across the Kirklees area with twenty-one residing in the North and twenty in the South of Kirklees. One of the forty-one children is also participating in the National MEND Initiative.

Consent forms (consent to participate in the evaluation) are currently held for thirty-eight (95%) of the participants. Information on age is recorded for 98% (40) of the sample. Of these, twenty-five (62.5%) are aged between 5 and 10 years and fifteen (37.5%) are aged 11 – 15 years. Information on age was missing for one participant.

Details on type of school attended was recorded for 40 (98%) of the sample. Of these, 22.5% are attending Infant/Primary School; 40% are attending Junior School and 37.5% are attending Secondary School.

Data on ethnic group was recorded for 39 (95%) of the sample. Of these, 59% are white British; 7.7% are white and black Caribbean; 5.1% any other mixed background; 5.1% black Caribbean; 5.1% Indian; 15.4% Pakistani; and 2.6% any other ethnic group.

Information on disability was recorded for 38 (93%) of the sample. Of these 38, 13% (5) were noted to have a disability and 87% did not. Further information was sought about the nature of the disability, and in some cases more than one type of disability was recorded for a particular child. The following figures record eight disabilities for the five children: three children (7.9% of the sample of 38) had a learning disability; two (5.2%) had a physical disability; two (5.2%) were visually impaired; and one (2.6%) had Asperger's / Autism.

Recommending Agents

Information on recommending agent was recorded for 38 (93%) of the sample. Of these, 42% had been recommended to the scheme by a School Nurse; 31.6% had been recommended by their GP Surgery (either by the GP or the Practice Nurse); 5.2% had been recommended by the Community Paediatric Dietician or another Hospital specialist; 13.1% had been told about the scheme by Kirklees Active Leisure staff directly; and 2.6% had received the recommendation from a parent or relative. The remaining 5.3% had either contacted the scheme directly or had previously attended the Young Pals Programme.

Attendance Data

Attendance data at weekly Fusion sessions for the first year of the evaluation was available for 40 (98%) of the sample. Of these, 40 children and young people, 18 (45%) had not attended any Fusion sessions (as they were only attending monthly Meltdown sessions). The remainder of the sample's attendance pattern is as follows:

Fusion Sessions

- 15 children and young people had attended between 1 and 10 Fusion sessions
- 4 children and young people had attended between 11 and 20 sessions
- 1 child had attended between 21 and 30 sessions
- 2 children had attended 31 or more Fusion sessions with the highest attendance rate recorded as 32 weekly Fusion sessions over the year

Mean attendance at Fusion sessions over Year 1 of the evaluation was 5.33 sessions.

Meltdown Sessions

Meltdown attendance was recorded for 40 (98%) of the sample. Of these, 30 (75%) did not attend any Meltdown sessions as they were only attending weekly Fusion sessions.

- 6 children and young people had attended 1 – 4 Meltdown sessions.
- 3 children and young people had attended 5 – 9 Meltdown sessions.
- 1 child attended 10 Meltdown sessions over the first year of the evaluation

Mean attendance at Meltdown sessions during the first year of the evaluation was one session.

Recently the Young Pals scheme has made changes to programme delivery such that Meltdown sessions will no longer run. However, more Fusion sessions will run in place of these, including at weekends, and sessions will be offered at five sites - Huddersfield, Colne Valley, Spenborough, Batley and Dewsbury. It is hoped that the increased frequency of sessions at venues across the District will increase attendance.

Changes to the Scheme since September 2006

In September 2007, in response to consultation with service users and a review of evidence contained within NICE guidance, the Young PALS team made changes to programme delivery.

Meltdown sessions in their pre-existing format (monthly) no longer run. These have been replaced by increased Fusion sessions, including sessions at weekends. The sessions now also incorporate educational information about healthy eating and lifestyles as well as physical activities. Sessions are now offered at six sites across the Kirklees District: Huddersfield; Colne Valley; Spenborough; Batley; Whitcliffe Mount (Cleckheaton) and Dewsbury.

The appointment structure of the Active Lifestyle Evaluations (ALE) or 'one to one' sessions with parents and children have also been reviewed to allow each child's physical measurements to be recorded such that height and weight measurements will now be

recorded at baseline (week one) and then again on a twelve week basis at review appointments (12, 24, 36, 48 weeks). Previously physical measurements were only recorded for young people attending monthly Meltdown sessions and therefore this change should result in a greater amount of evaluation data being collected.

Additionally, the Young PALS team have received funding to deliver the MEND (Mind, Exercise, Nutrition and Do it!) programme. This is a national programme aimed at obesity prevention and treatment, thus increasing the range of activities and support available for young people in the Kirklees area.

Evaluation Data

Due to the small sample sizes, data from inferential statistics should be viewed with caution.

Where time two data is missing this is largely due to the length of time a young person has been enrolled in the scheme, i.e., those joining within the last three months will only have baseline data recorded.

Self-Esteem

Rosenberg Self-Esteem measures were completed on at least two occasions for 19 of the total sample. Scores on this measure range from 10 to 40 with higher scores indicating higher self-esteem. The mean score at Time 1 (T1) was 30.24 and the mean score at Time 2 (T2) had increased (indicating improvements in self-esteem) to 33.76. A paired sample T-test was carried out to examine whether the increase was statistically significant and it was found to be so. ($t = -3.580$, $df = 18$, $p = 0.002$). Further analyses, using the Mixed Design ANOVA procedure, revealed no significant group differences in self-esteem based on the variables of gender, age, ethnicity or disability.

Concerns have been raised by Young Pals staff about possible social facilitation effects when children are completing self-esteem (and other) measures and as such, the validity and reliability of such data. For example, it was felt that children may not have completed questionnaires honestly as they did not want to reveal low self-esteem to parents or sessional staff. The measure is a valid and reliable measure that is well respected within the research community but clearly it is important to ensure that children are encouraged to complete all measures honestly and without assistance from parents or staff. If it is necessary to provide the child with privacy to complete the task then this should be offered.

Attitudes to Physical Activity

Eighteen participants completed the Schutz et al (1985) Children's Attitudes to Physical Activity Scale (CATPA) on at least two occasions. The scale assesses attitudinal dispositions towards the physical activity sub-domains of social growth, social relations, health and fitness and, additionally, in the case of older participants, release of tension. The scale employs a semantic differential scale for the response format, presenting five bipolar adjective pairs, e.g., happy-sad; good-bad which the respondent 'scores' on a five-point scale. In the younger children's version only one bipolar adjective pair is presented and 'smiley faces' are employed to facilitate the engagement of younger respondents.

Younger Participants

Ten younger participants completed a reduced version of the Attitudes to Physical Activity Scale which assessed *social growth* (taking part in physical activity = a chance to meet new people); *social relations* (taking part in physical activity = a chance to be with friends); and *health and fitness* (taking part in physical activity = making health better and improving body condition). The maximum score for each of the three domains is 5 which indicates a positive attitude towards physical activity.

At Time 1, the mean score for the ten participants on the measure of *social growth* was 4.10. At Time 2 this had increased to 4.50, although this increase was not statistically significant.

The mean score for the domain of *social relations* was 4.60 at Time1 and at Time 2 this had increased to 4.70, although this increase was not statistically significant.

For the domain of *health and fitness*, an increase was also observed with a mean score at Time 1 of 4.30 increasing to 4.70 at Time 2. (Not statistically significant).

All scores observed indicate positive attitudes at time one (baseline) and therefore large increases in scores would not be expected.

Older Participants

Eight young people completed the Attitude to Physical Activity for older participants on at least two occasions. The maximum score for each of the three domains of *social growth*, *social relations* and *release of tension* is 25 (indicating a positive attitude towards physical activity). The maximum score for the *health and fitness* (value) domain is 10, and for the *health and fitness* (enjoyment) domain, 15.

In the *social growth* domain, the mean score at Time 1 was 21.44, and this had increased to a mean score of 24 at Time 2. (Not statistically significant).

In the *social relations* domain, the mean score at Time 1 was 22.55, and this increased to a mean score of 24 at Time 2. (Not statistically significant).

In the domain *health and fitness* (value) the mean score at Time 1 was 9.50; this slightly *decreased* (indicating a reduction in positive attitude) to 8.13 at Time 2. (Not statistically significant).

In the domain *health and fitness* (enjoyment) the mean score at Time 1 was 14.12 and this slightly *decreased* (indicating a reduction in positive attitude) to 12.88 at Time 2. (Not statistically significant).

In the domain *release of tension*, the mean score at Time 1 was 21.88 and this had increased to 23.38 at Time 2. (Not statistically significant).

Baseline scores for the older participants also indicate relatively positive attitudes towards physical activity at time one.

Further analyses of attitudes towards physical activity based on the 'between-subjects' effects of gender, age, ethnicity and disability could not be computed due to the small sample size. In addition, it has not been possible to compare scores from this sample against normative data supplied by Schutz et al (1985) due to the small sample size as normative data is based on a sample of 500 children and young people.

Frequency and Type Data

A measure was specifically designed for the purpose of this evaluation to record children and young people's participation in activities outside of the Fusion and Meltdown sessions. The measure records type of activity, e.g., walking; PE, and frequency of participation, on a scale of 1 to 5 as follows:

1 = Never 2 = Less than once per week 3 = Once per week

4 = Two or three times per week

5 = Five times per week

Thirty-nine participants completed the *frequency and type* measure at time one and 18 had completed a second time two measure at the time of data analysis. Mean scores for each of the twelve types of activity (from the sample of 18 completing the measure twice) are displayed below:

- Walking (mean increase from 3.56 to 3.61)
- Swimming (mean increase from 2.33 to 2.44)
- Playing out (mean increase from 3.22 to 4.11)
(Statistically significant – $t=-2.530$, $df = 17$, $p = 0.02$)
- Household chores (mean increase from 2.28 to 3.50)
- P.E. (mean increase from 3.44 to 3.61)
- Team sports (mean increase from 1.67 to 1.89)
- Cycling (mean increase from 1.72 to 2.06)
- Skateboarding / rollerblading (mean increase from 1.22 to 1.33)
- Jogging (mean increase from 1.83 to 2.56)
- Club activities (no change from mean score at time one of 1.44)

Participation in household chores, playing out and jogging recorded the biggest increases in frequency. However, despite the slight increases in frequency recorded, the majority of activities, with the exception of playing out, are still performed less than once per week.

The other activities assessed (exercises and dance) recorded decreases in frequency of participation.

Further analysis was carried out by summing the frequency scores for each type of activity for each of the participants who had completed the measure on two occasions. This produced a mean activity score at time one of 27.72 (from a total possible score of 60) and this had increased at time two to 29.83 (not statistically significant).

Physical Measurements

Data was also collected on physical measurements (height in cm; weight in kg; body fat %; and BMI - body mass index) for part of the sample - 18 participants at time one, 11 participants at time two and time three, 8 participants at time four and 6 participants at time five. The mean measurements and changes over time for all participants are detailed in the table below (changes over time should be reviewed with caution due to the differing sample sizes):

All Participants

Measure (Mean)	Time One (N = 18)	Time Two (N = 11)	Time Three (N = 11)	Time Four (N = 8)	Time Five (N = 6)
Height in cm	141.03	141.41	142.21	142.79	136.42
Weight in kg	52.88	53.73	54.64	53.94	48.92
Body fat %	36.32	35.95	34.92	32.07	33.42
BMI	25.53	25.94	26.17	25.37	25.40

To further explore these results, the analysis was re-run to assess the impact of gender on the findings and data for each gender is displayed below:

Male Participants

Measure (Mean)	Time One (N = 8)	Time Two (N = 3)	Time Three (N = 3)	Time Four (N = 2)	Time Five (N = 1)
Height in cm	143.37	153.00	153.66	163.50	147.00
Weight in kg	52.01	59.16	60.40	69.10	45.20
Body fat %	34.1	28.9	28.2	24.35	22.50
BMI	24.7	24.09	24.57	27.75	20.92

Analysis of the data based on gender reveals significant improvements for male participants in all of the areas assessed although sample sizes are very small for the later measurements and therefore results are to be viewed with caution.

Female Participants

Measure (Mean)	Time One (N = 10)	Time Two (N = 8)	Time Three (N = 8)	Time Four (N = 6)	Time Five (N = 5)
Height in cm	139.15	137.06	137.92	135.88	134.30
Weight in kg	53.58	51.70	52.49	48.88	49.66
Body fat %	38.09	38.60	37.44	34.65	35.60
BMI	26.27	26.63	26.77	25.57	26.30

The group sizes for the measurements over time are more consistent for the female participants and initial analysis reveals less progress for the female sample.

However, due to the differing group sizes at time one, two three etc. advice was sought from a University colleague and it was suggested that further analysis should be run on the eleven participants for whom we have data at three points in time. The table below details findings for these eleven participants. However, caution in interpreting these findings is again emphasised due to the small group size:

All Participants

Measure (Mean)	Time One (N = 11)	Time Two (N = 11)	Time Three (N = 11)
Height in cm	140.73	141.41	142.21
Weight in kg	53.51	53.74	54.64
Body fat %	36.01	35.95	34.92
BMI	26.11	25.94	26.17

A series of one factor repeated measures ANOVA were performed on the data for these eleven participants to examine whether changes in physical measurements overtime were significant. Changes in BMI and weight were not significant but height ($F = 23.929$, $df = 2$, $p = 0.000$) and body fat ($F = 4.861$, $df = 2$, $p = 0.019$) were found to be so.

To further explore these results, the analysis was re-run to assess the impact of gender on the findings for these eleven participants and data for each gender is displayed below. However, due to the differing group sizes (3 male; 8 female participants), caution is once again emphasised:

Male and Female Participants

Measure (Mean)	Time One		Time Two		Time Three	
	Male (N=3)	Female (N=8)	Male (N=3)	Female (N=8)	Male (N=3)	Female (N=8)
Height in cm	152.33	136.37	153.00	137.06	153.67	137.91
Weight in kg	59.93	51.10	59.17	51.70	60.40	52.49
Body fat %	29.17	38.57	28.90	38.60	28.20	37.44
BMI	24.58	26.68	24.09	26.63	24.57	26.77

A Mixed Design ANOVA found no significant differences based on gender for height; weight; body fat % or BMI. Data was not available on the time period between measurements for individual participants.

It has not been possible to explore changes in height and weight and comparisons with national growth chart data in time for this amended interim report. However, it is hoped that this data can be assessed at a later stage and included in the final evaluation report when guidance has been sought from a specialist in this area.

In addition, it will be important in assessing data over the two year period for the final evaluation report to explore any seasonal changes in frequency and type of activity, e.g., reduced walking (e.g., to school) during summer holidays and reduced playing out in the winter months.

3. Qualitative Data

This section describes the views of children and young people, parents / carers and referring agencies obtained by the evaluators attending Meltdown sessions in North and South Kirklees between November 2006 and May 2007. Some of these children and young people started the programme before September 2006, and are not included in the quantitative analysis.

Views of Children and Young People

Views of children in the younger groups aged 5 – 11 who met the evaluators are summarised below:

Evaluator 2 observed a Meltdown session attended by fifteen younger children in November 2006. A high proportion of the children were from Asian or Dual-Heritage families. Following a warm-up session, playing games, the first hour was for circuit training with children completing a sequence of about eight activities. After a wind-down game, two trainers from Huddersfield Giants (Rugby League) took the final session, teaching ball games. A few of the children were seriously overweight and some struggled with the exercises. Each of the children was taken for a short individual session by two of the instructors where the children's height and weight were checked, and they completed a Physical Activity Questionnaire. The senior instructor asked for feedback about the session from the children before the rugby trainers arrived. All the children said that they had enjoyed the session, including the small number who had struggled most to complete the circuit training. The senior instructor's advice to the group was that they should exercise every day for half an hour to an hour with a medium level of exertion. Instructors' engagement with the children was positive and encouraging and every attempt was made to ensure that children felt included at all stages.

In the Meltdown sessions attended by Evaluator 1 (North Kirklees, March 2007), and Evaluator 2 (South Kirklees, May 2007) children gave clear reasons for attending Meltdown and understood what Young Pals was aiming to achieve. Some felt nervous before they attended, but most found the sessions friendly and supportive

once they arrived. A number of children were able to describe clear benefits from attending the programme. Children also described other physical activities in which they were taking part and their views about diet. Some described being bullied because of being overweight. Their suggestions for improving Young Pals were noted.

Reasons for Attending

A ten-year old boy (South Kirklees) gave a clear account:

My Mum thought me and my sister were getting a bit overweight. She wanted to find a club that would help us lose a bit 'cos she didn't want us ending up a bit fat...We came to Fusion first and that was good, so we kept on going 'cos we lost quite a big of weight then. We heard about Meltdown as well. I've lost quite a bit of weight and I'm getting a bit taller as well...also the games, you don't realise that you're losing weight 'cos they're so much fun.

Another child said:

I needed some exercise and my Mum found this place, the Meltdown...We went to the doctor's and then they get you put through to Pals...and then we started coming here, and it's really fun.

Another child said she had started attending:

...because I was fat once and my Dad told me to lose some weight so they sent me here.

Some of the North Kirklees children had been worried before they started to come:

...because there's loads of new people and I don't know who people are and stuff.

Another child said:

You know when I first came, I felt a bit shy 'cos I didn't know anybody.

Some children had been encouraged to attend by their school, for example, by a School Nurse. Most of the children from North Kirklees said that it was their idea to come, although some said that it was a joint decision with their parents. One of the children said:

Well, mine and (my) brother's Mum and Dad said, "Well, we'll leave it to you. If you want to go you can, but we'll leave it to you".

The North Kirklees group had clear ideas about why they attended:

I think a good reason to come here is because we get two-and-a-half hours of physical exercise, and we don't get that amount of time at home 'cos you're usually busy doing stuff with your friends and that, and your family.

I like to come for physical exercise 'cos I don't get so much at home. I'd like to do trampolining.

To make new friends, lose weight and have lots of exercise.

These views were echoed by other children. Losing weight, making new friends, getting exercise, getting fit, having fun and learning new games were reasons mentioned by several children.

You get to do games and they give you lots of exercise like rounders and stuff like that.

Get more energy.

Other exercise, diet and suggested improvements

Children in South Kirklees volunteered examples of exercise and physical activity including skipping, football, playing out, gymnastics, karate, and walking. (The latter was sometimes a family activity). Swimming was particularly popular.

Comparisons were made between Young Pals and school.

I like it better here 'cos we do more team games.

You never get to choose your own partners at school and you do here.

Sometimes they let you pick your own players at games and stuff.

At school you have to do work and here you don't(!)

Other children were not so sure:

I don't like it because when you're really, really hot and you need a break they say, "Come and join in a minute".

I don't like Meltdown because we don't get enough water breaks.

Some of the children had ideas about improving Meltdown sessions including introducing golf and trampolining and being able to access the Squash Courts, and having more sports sessions (including cricket and football).

However, children understood the importance of coming to Young Pals and losing weight. It was...*good, 'cos we'll live longer.* Another child said...*If we don't lose any weight we could have a heart attack.*

Children in the South Kirklees group were positive about changes since they had been attending Young Pals. They understood the importance of increasing levels of physical activity, and the importance of a healthy diet. Several examples were given:

'Cos we put on lots of weight and most people told us to eat (well) and we'd take off the weight.

I have changed quite a bit. I used to eat loads of bad stuff but now I've cut down a lot.

Several children gave examples of eating fruit and vegetables, including some not always popular with children:

Yeah, I've started eating cauliflower, broccoli, carrots and fruit.

“Five a Day” was another concept which the children had absorbed.

You've got to eat five fruits per day, and the next day you eat another five.

Main responses about Young Pals from the children interviewed were very positive, although one or two children were more diffident. In South Kirklees all the children were able to describe two other activities in which they took part apart from Meltdown. In North Kirklees, several children said that they were getting bullied less since they had been attending Young Pals, and several also thought that they had become more confident.

Views of Young People (11 – 16)

Evaluator 2 interviewed a large group of young people attending Meltdown in North Kirklees (March 2007). Evaluator 1 met two boys attending the session for older young people at South Kirklees (May 2007). These young people had coherent views about reasons for attending Young Pals and the benefits they had experienced from the programme.

Getting Started

Young people (North Kirklees) described being referred to the programme by Health Professionals:

I went to the dietician and I saw (name of dietician) there, and she were just talking to me about it, so I ended up coming.

One time I went to the Baby Clinic and I saw...I think it were the dietician and (name of senior instructor at Young Pals)...she explained it as well and she posted us leaflets and stuff as well.

I heard (about it) from school because the dietician was (there) and I think it was (name of senior instructor at Young Pals) who was there.

I were getting bullied at school so went to see my doctor and he said he'd heard about this Young Pals thing.

I went to the dietician and she just told me about it.

Several of the young people admitted that they were nervous or scared before they attended the first session. Some of the young people had heard positive accounts of activities at Young Pals sessions. One young person described her first attendance:

I was all-right because E (female worker)...I knew who E were, and I think A (female Physical Activity Instructor) came for t' first time and they looked after me so I weren't nervous.

Some young people had been involved in a "buddying" system at Young Pals. Buddies were known as "Extras":

When new kids come you've just got to, like, help 'em out...and if someone's sat out you've got to try to get them to join in and stuff.

Most people made friends anyway. As soon as you walked in they were friendly and stuff.

Like the younger group of children, young people were clear about Young Pals' objectives:

There's three reasons: to keep healthy and stuff; to make new friends; and to help other people and have fun.

Another young person had received positive feedback:

Well, when I went to the dietician...she said that I'd lost quite a few pounds, so it's like getting me fit and healthy...and I've grown a load.

Bullying was an important issue for a number of young people:

I were fed up of getting bullied at school, so I wanted to do something about it.

Several young people said that they were now getting bullied less and getting their confidence back. One young person said:

I still get bullied a bit and, like, I've started making friends now 'cos when I were in Junior School and (in the) beginning of Year 7 I didn't really have any friends.

Confidence could be the key to handling bullying:

Well, it's like when you've been bullied at school and the positive thing about it, they make you feel good in yourself, and they make you feel like your confidence has grown back...they're very friendly. They help you, and they teach you new games and the games are quite fun.

Another young person said...

It's better than (being) sat upstairs doing 'nowt and playing at stuff.

One young person had enjoyed moving up to the older group:

I didn't used to like the younger (group) 'cos all we did was play games, but I like the older one now. This is my second time because we go to the proper gym, and we go swimming and stuff like that.

Some young people had experienced embarrassment and discomfort at school:

I've started doing sport at school and stuff now, and getting involved in PE. When I used to run my legs used to hurt and stuff, so I didn't join in. But now they don't hurt as much, so I run about and join in.

'Cos I'm quite chubby and my legs are quite chubby, and I don't like wearing shorts, and they just take the mickey out of me. I do want to do PE but Miss

said, "If you don't wear shorts for indoor PE you can't do it", so sometimes I were missing.

'Cos you get picked last for doing stuff, 'cos they think you're slow.

When I started (at my new school), 'cos I'm a big lad... they think I'm an easy target.

When we do football and rugby...you have to change your top first, people laugh at you then.

'Cos in PE I used to go out...'cos you're allowed to take your own towels and stuff...I used to tie the towel round my legs...'cos I didn't like wearing shorts.

Changes since attending Young Pals

Young people gave positive descriptions of improvements since they had been attending Meltdown or Fusion sessions:

If they call you bad names like "Fatty" and stuff like that you just say, "Well, look in t' mirror at yourself".

Like here, when we go swimming, if someone says summat to one of us we'll all stick up for this person.

There could be psychological benefits from the programme as well:

I used to have a short temper. I used to have to have "anger management", but since I've started losing weight...that's stopped.

One young person previously was unable to keep up with his cousins when he went to visit his aunt:

'Cos they're older and they're more athletic...now, I'll go up to my auntie's...and just play footy with my cousins and stuff, and run about with them.

Another young person said:

Yeah, I've got confidence at going out. You know, I didn't used to play out, but I play out now with my friends.

Young people also described changes in their diet:

I didn't used to like fruit, but since I've been coming here, I've been trying different (ones). The other day me and my Mum made a fruit kebab, so we got sticks and put loads of fruit on it.

Young people described changing their diet to include salads and fruit, to which they had been introduced by Young Pals:

I didn't used to like eating fruit, I'd only eat bananas, but now I'm eating kiwi, apples and stuff like that...

Young people commented that they appreciated having much longer sessions at Meltdown, and some wanted Fusion sessions to be longer, so that more activities could be fitted in.

Young people attending the Meltdown sessions appreciated the wider range of sporting activities available. This view was shared by a twelve-year old boy attending the young person's Meltdown session in South Kirklees. He had found opportunities to try out aerobics, squash and badminton exciting. This young man had been referred to Young Pals from a hospital clinic. He described the main objectives of the programme as making new friends, being healthy and trying out new activities. He gave the programme 10 / 10 for all three. Before coming to Meltdown he could not run half the length of a football pitch; now he could run the whole length. He had also learnt to reduce his diet, eating salads, and being satisfied with half a plate of pasta instead of a full one.

A fifteen-year old young man and his father at South Kirklees Meltdown also described positive benefits from attending sessions. This young man said that Meltdown had been very good for him in terms of keeping healthy and fit. He had made an effort to eat more fruit and less fatty foods. His father said that his son had

lost more than a stone while attending Meltdown. His son was happier and more outgoing when his weight was under control. The young man's objective was to be able to run without keeling over; his father said that he had a good turn of speed for a boy carrying a lot of weight. He had had problems with his knees causing him to miss some Meltdown sessions and making it difficult for him to get back to playing rugby, so he was now trying out other sports. His father described how difficult it was for young people to control their diet and keep their weight under control.

During this session, the senior instructor said that the key elements in a healthy lifestyle were nutrition, plenty of fluids, plenty of sleep, with a lot of fun mixed in.

Evidence from Parents / Carers

Evidence in this section is drawn from focus groups held with parents attending Meltdown sessions with Evaluator 1 in North Kirklees (Batley Sports Centre, March 2007), and at Huddersfield Sports Centre (Evaluator 2, May 2007). Data from interviews with two individual parents, one in North and one in South Kirklees is also included.

Referrals and getting started

Most parents at the two focus groups had heard about Young Pals from Health Professionals, including School Nurses, Dieticians, General Practitioners and Health Visitors. Parents expressed relief that people in authority were taking their problems seriously:

I was relieved that there was such a thing where they could come and they'd be treated equally, regardless of their size or their issues; to know that there was someone there that could help. (Parent, North Kirklees).

I'm glad somebody else had knowledge and something to offer because where I live it wasn't easy to get him to go out and play. We don't live near his friends from school so he was restricted as to how much exercise he could get...so somebody offering me something he could go to was a godsend, really. (Parent, North Kirklees).

Parents welcomed access to professional advice from dieticians:

I didn't realise, but you can phone the dietician up if you're getting stuck for ideas...I've got her phone number at home and she's lovely...She was the one that helped me, not just cutting portions down in one go, to gradually lower it down. Now they (children) both know, if I put too much on their plate, they tell me. (Parent, North Kirklees).

Another parent (South Kirklees) had taken the initiative in raising her son's being bullied at his school.

Other parents commented that they would have welcomed more follow-up support from dieticians after the initial assessment:

If somebody had said, "Do you want to come back for another visit and let us know how things are going", I'd have rung up and said, "Yes, I do". But they just seem to have lost me in the system so I haven't seen anybody with regard to diet. (Parent, North Kirklees).

Where dieticians were able to provide advice on appropriate meals or portion size, parents seemed to strongly welcome this and to take the advice on board. Sometimes parents had found reassurance from doctors unconvincing:

I went when she (daughter) was three, and they said, "No, she's all-right". I said, "She's three and she shouldn't be out of breath". He (doctor) said, "Oh, she's fine, she'll grow up", and then it got to, "No, that ain't happening, she's just getting bigger". But, whatever I do with her, she doesn't seem to be losing weight...so I'm thinking it's her thyroid gland...but they haven't tested her for that.

Another of the North Kirklees parents had been to see the Hospital Paediatrician who had said:

"Rest assured, he will grow into his body weight", and I just thought, "You don't know what you're talking about". There were no explanations or diagrams or anything. It was just, "He will grow into his size. Don't worry

about it". That's no answer for a concerned parent when your three-year old child's in six-year old's clothes and stuff like that.

Parents commented on their children sometimes feeling picked on, and on the positive impact of Young Pals on children's confidence:

My eldest (daughter) is terrified...well, not terrified, but doesn't like doing PE at school because of her size...although she's still overweight...This (Young Pals) has given her confidence. She's not bothered (about) her appearance now at all, is she?" (Parent, South Kirklees).

Buying clothes could be very difficult:

I find myself even now cutting labels out of (my son's) clothes because I think if anybody gets hold of it when he's getting changed for PE they're just going to laugh at him...I've caught him before now wearing his PE kit underneath his uniform because he doesn't want to get undressed in front of other kids. (Parent, North Kirklees).

(My daughter)'s eight, and she's into age 15 – 16 clothes, and it gets very upsetting. I bought her some beautiful clothes yesterday and she's absolutely suited because I'd got her a dress and it really looks lovely on her. So that's given her a little bit more confidence. Buying clothes for them, it's bad news. (Parent, North Kirklees).

It's the first time in (my son's) life I've actually bought him a pair of trousers that aren't trackie bottoms...I cried when he put them on and he fastened them, and he zipped them up. I said, "Ooh, you look lovely". I was so proud of him because he had lost that little bit of weight to get them on.

Many of the parents at the focus groups gave examples of their children enjoying attending Young Pals and gaining in self-confidence:

They (son and daughter) both enjoy attending. It's not exactly a drag to get them to come in. They're all eager, ready and waiting. I've enjoyed seeing them attending something like that. (Parent, South Kirklees).

My daughter really likes it and she enjoys coming. I think she is gaining the benefit from that. (Parent, South Kirklees).

(My daughter) loves coming. She's actually started walking to Fusion. She'd never have done that before. She's made lots of friends. She's more outgoing...she's doing more exercise and stuff. It's good. (Parent, South Kirklees).

My two have always been confident anyway in spite of their size. (Parent, South Kirklees).

Parents commented that the staff at Young Pals were approachable. They varied the activities at Young Pals sessions. Children could see that they were making progress:

I think it's because they had their weight monitored that they could physically see that someone else in authority, in their eyes, was making a mark on their progression. So I think it was like they didn't want to let themselves down, and they didn't want to let anybody else down. (Parent, South Kirklees).

Parents from North Kirklees described how their children were apprehensive when first attending Young Pals sessions, worried that they might be talked about or picked on. One mother said that when her children...*saw other kids round about their size, that's when they thought, "Oh yeah, this is cool. I'm gonna go".*

Parents talked about making attending Meltdown session a special occasion for their child.

Some had heard about "buddying" schemes being developed by Young Pals. Parents said that giving children extra responsibility could help their self-confidence:

I think it would be good for the ones that have been going a long time to give them a bit of responsibility,...a reward for what they have done. (Parent, North Kirklees).

Parents were pleased that their children's attitude to exercise had changed:

(My son) sees exercise as fun now, not something that he has to do to lose weight...We have real trouble controlling him...to calm him down, he's skipping, and he loves doing everything, and he doesn't see a certain sport as a girl's sport or a boy's sport. (Parent, North Kirklees).

The boost in children's morale was plain to see:

They've got higher self-esteem, they stand up for themselves now...they say, "Well, you watch me", that sort of thing. "I'm going to join in". (Parent, North Kirklees).

They've got the confidence and the ability to do it at school as well. Even school's noticed...They were two little kids who sat in a corner and didn't do anything, whereas now...if there's no-one playing they'll get up and they'll organise a game. (Parent, South Kirklees).

One father who attended the focus group in North Kirklees said that his daughter was *shy not having been...very good at sports before, but since she's been coming here she's got more confidence. She's better at games, and she's just really enjoying coming.*

Weight Loss

One parent (North Kirklees) described wanting her children to have a better quality of life and to be aware of health issues. Her son was starting to take careful note of fat content and carbohydrate content in foods commenting...*You can't have carbohydrates after teatime because it all piles on.* His mother was proud that her son had become more knowledgeable.

Parents also appreciated that not gaining weight could be a more realistic target than losing weight. One mother (North Kirklees) said...*It isn't a case that my son's lost weight, he's actually slimmed down and he's grown taller...So it's maintaining the weight more than actually losing it.*

One of the fathers in the group said that his daughter had...*toned up a bit. She hadn't gained any, but she might have lost some (weight).*

Parents knew that they could obtain information from Young Pals about weight and height measurements. Some of the children talked about their results. Some parents (North Kirklees) said that they would welcome regular monthly information about their children's progress.

Parents (South Kirklees) acknowledged that schools were putting more emphasis on healthy eating and exercise. Some parents put a premium on adopting a healthy lifestyle at home, although this was not necessarily followed by their children. Some of them acknowledged that they had given their children too much fast food, which could be very tempting when parents were working full-time. However, no doubt influenced by their contact with Young Pals, parents interviewed were knowledgeable about appropriate diet and portion size.

Some parents acknowledged that being overweight themselves made it more difficult for them to help their children. One mother of twins attending Young Pals at South Kirklees was very conscious that one of her daughters could be stuck at home while her sister was out playing with her friends...*I mean, I'm not a very active person, but it's made me think that really I should be doing something...doing more exercise...My conscience is playing on me thinking I should be doing something. I like swimming, but I've got to get some weight off first before I'll go.*

Another parent in North Kirklees said that her twelve-year old son enjoyed swimming, whereas she hated it, being very conscious of carrying too much weight herself.

Other parents (North Kirklees) were becoming involved in taking more exercise with their children. One of the mothers described exercising with her daughter including skipping, playing ball and going for walks...*I've to do the exercise just like she is doing; so I'm slimming down...I do a lot more with her, but I'm knocking on now, I can't do it.* This kind of commitment was demanding for some parents.

Comments on Meltdown and Fusion Sessions

Parents welcomed the monthly Meltdown sessions and had found them easy to get to. There were several comments (North Kirklees) requesting that their frequency be increased to once a week or once per fortnight.

Parents in both North and South Kirklees said that they had experienced more difficulty in accessing Fusion sessions, partly because they started straight after school and organising transport could be difficult. There were also competing attractions with other after school activities and youth club sessions to be fitted in. Nonetheless, a number of parents were managing to ensure that their children attended Fusion sessions as well as Meltdown.

Motivation

One parent from South Kirklees described his fifteen-year old son's approach to controlling his weight in more detail:

The healthier and happier he feels, the better a person he is...But when he puts the weight on he gets grumpy, and he can be out of hand...He's not as motivated. He gets within himself. (Name of son)'s like most people, really, you can eat the right stuff, but then you get fed up of it after so long, and then when no-one's looking, you know, he will have the stuff he shouldn't be having, and most people are like that.

Some young people needed to be reminded all the time and helped to comply with exercise and diet guidelines. Young Pals could make an important contribution:

...I think it's a great thing for kids, you know, it's good that it's there for kids who are putting on weight...to get other kids together to become friends and do things together as teamwork...I think if there's more days put on, and activities change from what they're doing, they'll enjoy it a bit more, and they'll come a bit more.

Views of Dieticians and School Nurses

This section is based on evidence from a focus group between six School Nurses and the two evaluators, and on individual interviews with two Kirklees Dieticians, one covering North and one South Kirklees, all in July 2007.

Overview

School nurses and dieticians were agreed about the crucial importance of tackling childhood obesity. Problems of obesity ranked high in school nurses' priorities – they said that between 80 and 90% of their recall appointments were for overweight children. The two dieticians emphasised that only a small proportion of their time was available for clinics or other sessions for children with weight problems. Their experience had been that referral levels from general practitioners had dropped and clinic time for these children had therefore been reduced. This did not reflect the seriousness and prevalence of childhood obesity problems, for which the resources they were able to offer were limited.

The experience of both school nurses and dieticians was that tackling obesity required a whole-family approach. The North Kirklees dietician commended the MEND programme which involved the whole family. Sometimes, all the members of the family were overweight. Problems could be equally intractable for one overweight child whose siblings did not share the problem.

Both dieticians and school nurses stressed how hard it was to achieve change in tackling problems of obesity. This could stem from resistance from parents who were anxious about contact with health professionals. Achieving change could also be made more difficult by lack of opportunities, (for example, for school nurses) for follow-up and contact. Notwithstanding Healthy Schools programmes, knowledge about food technology was scant. School nurses found it difficult to change eating habits ingrained at home, with ready access to fast food outlets. Take-up of (healthy) school dinners tended to be low. The South Kirklees dietician commented that parents might not want to eat "fast or unhealthy food" themselves, but because they felt that they were catering for their children they sometimes took the easy option.

She also commented that some children did not want their friends to know that they were trying to lose weight or that they were seeing a dietician.

The same dietician said that it would be possible to come up with the ideal diet for every child, but persuading them to follow it was not easy:

When they're little (they're) totally dependent on the parents, and the parents have busy lives, and other things that they need to be thinking about, and very often, other children. You can see whole families that are all overweight, but very often it's just one child in the family of a number of children, and all the siblings have absolutely no problem with their weight at all, and can eat sweets and crisps and chocolate till it's coming out of their ears, and it's all around the house...it is very difficult. "Well, I can't stop so and so having it because he really needs it, so I've got to have it in the house". "Well, Dad has a pack-up for lunch, and he always has crisps and he's not gonna do without, so it's always in the house". "So it's always a temptation for the child, and we're not gonna change that. I think there are loads of issues as to why they don't take the advice on board".

Views of Young Pals Programme

Girls could be motivated to try to control their diet because of concerns about their appearance or about clothes size...*Being skinny is the in thing* – (South Kirklees dietician). Motivation could be more difficult for boys, although sport could be a positive factor. The prospect of serious diseases linked to obesity, such as heart problems and diabetes, lay too far in the future to make much impact on children and young people.

Dieticians had worked closely with Young Pals, for example running combined sessions with senior colleagues from Kirklees Active Leisure. The dietician would prepare an assessment about dietary issues and Kirklees Active Leisure would advise on physical activity. School nurses were also in frequent contact with the Young Pals programme, although they had not taken part in, or observed, Young Pals sessions. Both dieticians and school nurses commented positively on the benefits of the Young Pals programme for those young people who were referred.

The dietician for North Kirklees, who had previously attended Meltdown sessions where she had been well received by children and young people, commented that the programme helped children to realise their potential. Meltdown emphasised positive progress made by young people, and also included advice on healthy eating, so that the importance of exercise and diet in the programme were well balanced. Her reservation was that Young Pals sessions were not always well attended, and more perhaps needed to be done to measure children's perceptions about eating and exercise. It was important to set achievable objectives for children, helping them to hold their own.

The school nurses' view was that healthy leisure activities were available in Kirklees, but were not taken up sufficiently by overweight or obese children and young people. School nurses gave examples of positive feedback they had received about Young Pals:

The kids that I know that go to the Fusion and Young Pals really like it.

I've heard some good feedback. The ones I've spoken to that do attend do enjoy it once they get into it and make some friends.

There are a few that I know who are attending Young Pals – I can see the difference already, so they're taken off the list.

School nurses said that they would welcome feedback from Young Pals about the number of children they referred who had taken advantage of the service. Their concerns, and those of the two dieticians, were more about children and young people not in contact with the programme at all. Dieticians focused exclusively on children who were medically referred. School nurses thought that there could be scope for actively involving class teachers in identifying children who could benefit from the service. Both dieticians and school nurses expressed a degree of frustration that attendance at the programme was completely voluntary, and that a more robust approach to encouraging attendance was needed with some families. In this context, the dietician for North Kirklees said that she would welcome working in a multi-agency team including a Clinical Psychologist and a Parenting Adviser to help deal with intractable problems. School nurses and the dietician for North Kirklees both referred to the need to consider using Child Protection procedures in extreme

cases. School nurses also commented on the need for earlier intervention; health visitors were well placed to identify overweight infants, and more investment was needed in training play groups and nursery staff so that they could provide sessions focusing on exercise. Schools had to have a primary focus on academic achievement, and there were problems in engaging overweight children and young people in pre-school and after school activities.

Contact and Referrals

It appeared that opportunities for direct contact between dieticians and school nurses were very limited. One of the dieticians would have welcomed an opportunity to locate a dietician in a school (or schools), but funding for such a post would have to be found. The dietician for South Kirklees considered that children and young people attending the Young Pals programme should always be seen by both a dietician and by a Kirklees Physical Activity Instructor. One problem was that dieticians were not able to pass on confidential information. The dieticians had considered whether more of their work with children should be based in community settings, away from hospitals. Some parents found it easier to go to a hospital clinic with their child, where attendance was not negotiable. Dieticians were open to the possibility of providing more community-based sessions, although logistical problems could arise in having to arrange after school or holiday appointments.

School nurses considered that there was scope for improving the effectiveness of referrals into the Young Pals programme. Part of the school nurses' problem was that they did not have authority to refer children directly to Young Pals without parental consent. Chances of successful referrals were much improved where school nurses contacted parents first and obtained their agreement to directly refer them to Young Pals, rather than leave parents to make the contact themselves. School nurses were aware of some changes involving parents giving generalised consent for schools to refer children to appropriate programmes (due to be considered in September 2007) which could make referral processes easier. School nurses undertook BMI measurements for children when they entered Primary and Secondary Schools, but parents were not sent this information unless they specifically requested it.

There was also a suggestion from school nurses that Fusion sessions could be located in schools, where they would have easier access.

Asian Children

School nurses observed that Asian children frequently had to attend the Madressah after school, which meant that they would not be available to attend Fusion sessions. They also commented that some Asian families gave overweight boys a privileged status, and could therefore be less likely to recognise problems of obesity.

Evaluators' Observations

The evaluators' observations based on their attendance at Meltdown sessions, contacts with children and young people, parents and carers and other professionals included:

- (i) Children and young people clearly enjoyed taking part in Meltdown sessions, had taken on board advice about physical activity and healthy eating, and believed that they were benefiting from attending.
- (ii) Children and young people who experienced difficulties with any parts of the Meltdown programme received appropriate individual help.
- (iii) Children and young people responded positively to opportunities for physical measurements to be taken recording their progress.
- (iv) Kirklees Active Leisure staff ensured that children with special needs, including children with learning or physical disabilities, were successfully integrated into Meltdown sessions.
- (v) Kirklees Active Leisure staff were motivated to ensuring that children and young people obtained maximum benefits from participation.
- (vi) Parents and carers were welcomed to Meltdown sessions and staff ensured that they received appropriate information, and that their concerns were addressed.

- (vii) Kirklees Active Leisure staff have been at pains to reduce stigma attaching to weight problems in all aspects of the Young Pals programme.

- (viii) Kirklees Active Leisure staff have sought to involve health professionals (school nurses and dieticians) in running the Young Pals Service and have used these colleagues' expertise appropriately.

4. Discussion, Conclusions and Recommendations

Quantitative Data

Quantitative data obtained so far shows that rather more than half the children and young people involved in Young Pals are girls. About two-thirds of children and young people involved are white UK, and about a third are from ethnic minority groups; these proportions seem appropriate given Kirklees' demographic characteristics. Most children taking part in the programme were referred by health professionals (where this information was available), which suggests that these were children whose weight and obesity problems definitely required the support of a physical activity programme like Young Pals.

So far, gaps have been noted in the data available for children and young people, including attendance data and evidence of consent. Weight and BMI data is available for a significant proportion (about a third) of children involved in the programme, but not available for others. Much smaller numbers of children have completed self-esteem data, questionnaires about attitudes to physical activity, and about the frequency and type of activities in which they have taken part. Ensuring improved levels of data inputting, weight and BMI measurements and questionnaire completion requires active support from all Kirklees Active Leisure staff involved in running the programme. Optimal results will depend on achieving improvements in this area. Consideration could also be given to simplifying or possibly reducing the number of measurements being used.

One of the main findings so far is that BMI's and body fat percentages have remained fairly constant for children and young people taking part in the programme. Interpreting this finding must take account of children's growth rates. It may well be that preventing significant weight gain is an appropriate target for many children participating in Young Pals.

Increases in self-esteem for young people for whom evidence is available is an encouraging trend. Improved attitudes to physical activity and slight improvements in

frequency and type of activity have also been noted. For all these measures, more robust evidence is needed involving larger numbers of children and young people.

The literature reviewed in the introduction to this report highlighted problems in isolating programme elements associated with successful outcomes in treating childhood obesity. An interesting finding from a recently completed research programme was that reduced television (or screen) time appears to be strongly related to prevention of obesity (in girls, at any rate). Discussion of the relevance of this finding to the Young Pals programme is merited.

Children's Evidence

The recent research review quoted above concluded that indicators of well-being generally increased when children were involved in responsible programmes aimed at the prevention or treatment of obesity. Evidence so far strongly indicates that Young Pals meets this criterion. Children appear to enjoy the Programme and benefit from taking part, show signs of increased confidence and describe being bullied less than before. Children have clear concepts about programme objectives. Buddying schemes are likely to prove popular with both children and parents.

Parents / Carers

Parents and carers also seem very clear, from the evidence obtained, about the reasons for children and young people attending. Parents recognised the importance of taking part in physical activities with their children, although some have found this taxing. Parents have confirmed their observations of improvements in their children's confidence. They had welcomed advice from health professionals, particularly dieticians, and some would appreciate improved access to such advice. On a practical level, some parents have found difficulties in enabling their children to attend Fusion sessions; and some have requested more frequent Meltdown sessions.

Some parents have requested more frequent feedback about weight and BMI measurements from the programme.

The MEND programme introduced after the Young Pals programme was established has adopted a family-focused approach welcomed by all the professionals involved with Young Pals.

Health Professionals

Health professionals have endorsed the positive contribution of Young Pals to tackling weight and obesity problems in children. They have a vivid appreciation of the extent of the problem and of the limited resources which they are able to contribute. Dieticians would welcome increased numbers of referrals from general practitioners. They also recognised that parents, not physical activity programmes, have to take responsibility for children. There would appear to be scope for closer contact between dieticians and school nurses. The latter said that they would welcome opportunities to observe Young Pals sessions for themselves. School nurses said that they would also welcome opportunities for more direct involvement in referrals to Young Pals, and thought that this could be partly achieved through obtaining parents' consent to refer them directly to the programme (rather than leaving parents to contact Young Pals themselves).

Recommendations

These are proposed as a basis for discussion with Kirklees Active Leisure.

- (i) A key recommendation is for Kirklees Active Leisure to consider how data completion, including attendance data, weight measurements and BMI data can be enhanced for children and young people involved.
- (ii) As the database expands, analysis of the relevance of gender and ethnicity factors in relation to programme outcomes should be explored.
- (iii) Further qualitative data will be obtained from children and young people, parents / carers, representatives of colleague agencies and project staff will be obtained in Year 2 of the programme.

- (iv) Current arrangements for providing feedback about children's progress to parents / carers should be reviewed, to make sure that parents receive as much information as they need.
- (v) Consideration should be given to facilitating observational visits by school nurses to Young Pals sessions.
- (vi) Observations by dieticians about the need for higher numbers of referrals from general practitioners should be noted by Kirklees Active Leisure, with consideration of appropriate follow-up action.
- (vii) Observations about review of referral procedures from school nurses, including suggestions that they should obtain consent from parents to refer them directly to the programme, should be considered by Kirklees Active Leisure, and follow-up action determined.
- (viii) It is proposed that findings from the Interim Report should be shared with Young Pals project staff (meeting to be arranged).
- (ix) The Steering Group should decide what information from the Interim Report should be shared with participants (both children and young people, and parents / carers) and with other professionals at this stage.

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Kirklees

Obesity Strategy

28 June 2007

2007 - 2010

1. Introduction

Obesity is a disorder (not disease) in which excess body fat has accumulated to an extent that health may be adversely affected.

The consequences of overweight and obesity are wide ranging and serious. (1) Obese people are more at risk of premature death, circulatory diseases, gallstones, certain forms of cancer, osteoarthritis, liver malfunction, decreased libido and impotence in men, infertility in women, sleep disorders, type 2 diabetes, raised blood pressure and high cholesterol. (2)

Obesity is becoming more widespread and is likely to have significant financial implications for the NHS and other partners if current trends in obesity continue. (3)

Obesity amongst children has doubled in 2-4 year olds in the last 10 years and has trebled in 6-15 year olds in the last 11 years. Obese children are more likely to be obese as an adult. (4) In Kirklees, 16.4 % of Year 6 children are obese.

Obesity now affects 1 in 5 adults in England. The proportion of the population who are obese is increasing. (5) In Kirklees at least 18% of adults are obese with a further 36% being overweight.

Locally in Kirklees, there is relatively little difference in the distribution of obesity by ethnicity, income or geography although these factors are important in ensuring services are accessible to local people.

Like many other areas, Kirklees has pockets of excellent practice in relation to obesity prevention and treatment. The challenge is to take these examples, together with the broad evidence base of what works, and systematically implement them. This is particularly important with services that have the opportunity to support key target groups in choosing to and making behaviour changes to achieve and maintain a healthy weight. Systematic implementation is therefore a key issue.

A second dimension is the breadth of work underway which directly contributes to the prevention and treatment of obesity. As such it is increasingly apparent that many people are involved in obesity related

work in Kirklees. Sometimes the breadth of obesity work can lead to those involved having only a partial picture of existing activity. A strategic approach to obesity will provide opportunity for systematic implementation of effective practice and will ensure that maximum value is achieved from obesity related work through generating a better understanding of what is already happening together with improved linkages between existing and planned interventions.

The strategy provides an overarching framework for the delivery of the obesity programme in Kirklees. It sets out the overall aim and key principles which underpin the obesity programme, the accountability framework through which progress is measured and in which partners play a key role, and contains a brief overview of the current Obesity Programme Plan for 07-08. Making a real difference to the prevalence of obesity requires long term planning, as this is a complex issue. The strategy therefore enables consistency in the direction of travel, whilst the programme plan will be reviewed periodically to reflect progress and changing priorities.

2. Aim

To reduce the number of people in Kirklees who are obese by providing them with the support they need to reduce or maintain their weight.

3. Key principles

The Obesity Programme:

- Focuses on people who are obese or overweight and particularly at risk of becoming obese. This means we focus on those people who will benefit most in terms of health gain, not just those that help us to achieve targets. This demands a robust segmentation of the market and systematic implementation to ensure we can target our interventions appropriately.

- Is based on a systematic approach to identifying needs, using evidence based interventions and contributing to developing the evidence base.
- Builds on existing effective local practice, and encourages a diversity of effective approaches
- Ensures weight loss / management services include physical activity, food and emotional wellbeing (as defined in NICE guidance) components.
- Seeks to address the stigma experienced by people who are overweight or obese.
- Does not incorporate all elements of the physical activity, food and emotional wellbeing programmes (particularly as these programmes are seeking to achieve various other health outcomes in addition to reducing obesity). The primary prevention aspects of obesity are addressed through the physical activity, food and emotional wellbeing programmes and we will build strong links with these programmes.

4. Strategic implementation

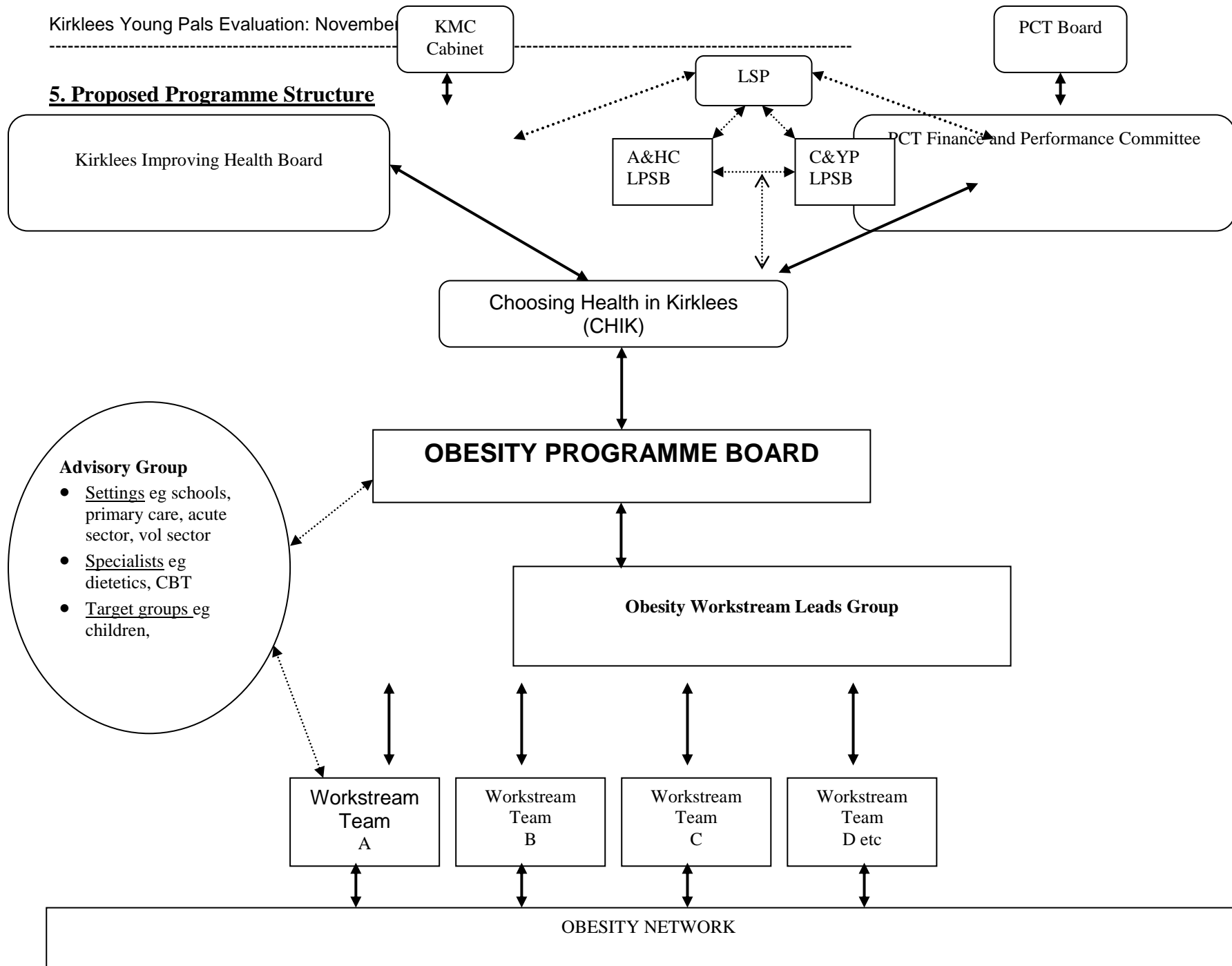
The development, implementation and review of the Obesity Strategy and Programme Plan is the responsibility of the Obesity Programme Board. This is a strategic group of partners who can bring and commit resource to establish the strategic direction of the programme, ensure a strategy and action plan and developed; commission and performance manage the delivery of the action plan and manage risk. The Programme Board is governed by the Choosing Health in Kirklees (CHIK) Group; which reports to Kirklees PCT Finance and Performance Committee and Kirklees Improving Health Board.

The Programme Plan is delivered via a series of focused workstreams which each have clear aims, outcomes and evaluation measures. Delivery of each workstream involves time limited multiagency teams working together in their current roles to achieve a specific purpose. Workstream leads work together to minimise duplication, resolve problems where possible and ensures the effective delivery of the programme plan, with access to an advisory group of ‘specialists’ representing the views of specific disciplines or evidence based / qualified expert roles. The Advisory Group also contribute to the development of the programme priorities when the Programme Plan is reviewed.

There are also individuals who have an interest or skills in an obesity related field who contribute to the implementation of a workstream. These individuals are supported through an electronic network.

The diagram below outlines the programme structure.

5. Proposed Programme Structure



6. Obesity Programme Plan - Headlines

Workstream	Actions involved	Completion date	Outcomes
Identify those most in need and segment the market	Health needs assessment £100k social marketing programme	June 07	Identified priority groups and used to inform service planning and delivery
Redevelop the Programme structure and implement a programme planning approach	Development of groups: Programme Board, Advisory Group, Workstream Leads Group, Network Establish accountability mechanisms Development of a programme planning framework Secure additional resources Engaging stakeholder events	July 07 Sept 07 for Network	Key stakeholders are engaged in programme, actions are implemented in planned way, added value through systematic approach, programme is accountable for resources, maximises impact on obesity prevalence.
Improve data quality and streamline reporting processes	GP recording of obese patients National child measurement programme Reporting to LAA, LDP, A&HC LPSB, C&YP LPSB, CHIK	Mar 08	GP recording of obese patients to triple by Mar 08
Implementing NICE Guidance	Mapped local provision against NICE guidance, identified gaps Prioritisation informed programme plan Dissemination events for primary care and key stakeholders	First phase Sept 07	Evidence of effective practice is integrated into practice. Client group receive consistent and quality services which aid them to lose weight.
Develop and implement a social marketing programme in conjunction with Communities for	Establish project plan; research to scope target group and issues; evidence review to identify effective approaches	Mar 08	Developed local understanding of how social marketing can be used effectively in Kirklees and built skills and capacity to do it. Used social marketing approaches to

Workstream	Actions involved	Completion date	Outcomes
Health	Scope intervention Consultation with target group Implement intervention and evaluate		reach a hard-to reach-group and achieve weight loss.
Supporting, commissioning and developing services to meet the needs of priority groups in losing and controlling their weight as part of a care pathway	MEND	Mar 09	Systematic brief interventions delivered in primary care by trained, enthusiastic staff, who are able to motivate and provide long term support. Increase in effective support available, tailored to needs of communities; increased referral to services; clients achieve and sustain weight loss
	Counterweight	June 07	Individual and family weight loss.
	Health trainers' role in supporting people with long term conditions	Oct 07	Support individuals with LTC particularly diabetes to achieve and maintain weight loss.
	Appropriate use of pharmacotherapy including referral to support services	Mar 08	Effective use of pharmacological interventions leading to sustained weight loss.
	Development of additional services to meet the needs of identified priority groups	Ongoing	Increase in support available and individual weight loss.
Commissioning bariatric surgery, compliant with NICE guidance and reflecting local health needs	Providing PH advice to regional commissioning framework and commissioning services	Sept 07	Services commissioned from compliant providers; increases likely success of operation and sustained weight loss.
Key obesity prevention interventions within the food and physical activity programmes			
Giving children (0-5 years) the best start in life	Supporting mothers to breastfeed, through baby cafes; Breastfeeding Friendly Initiative; peer support staff	Mar 08	Breastfeeding initiation targets achieved and breastfeeding maintained.

Workstream	Actions involved	Completion date	Outcomes
	Supporting effective weaning practice Structured physical activity in nurseries Healthy food provision and mealtimes in early years settings Engagement of parents in active play and healthy eating through use of family based behaviour change techniques; videos, demonstrations etc as part of broader programmes		Appropriate weaning practice takes place, nutrition maximised. Children aged 0-5 and their families adopt recommended healthy eating and physical activity behaviours
Implementing a whole school multicomponent approach including key staff	Change in provision by School Meals Service Healthy Choice Award in schools to increase access to healthy options Healthy School Award Further actions focusing on addressing the barriers to behaviour change, to be developed	Mar 08 Ongoing Ongoing	Reduce consumption of fizzy drinks, Increase consumption of water, fruit and vegetables Improved school lunches and environment
Workplaces particularly KMC and NHS	Action to provide opportunities for healthy eating and physical activity through provision, policies, culture, environment, incentives, interventions, to be developed	March 08 and ongoing	Staff adopt healthy eating and physical activity behaviours in the workplace
Community	Further action to provide tailored support in communities to address barriers to healthy eating and physical activity and create sustained behaviour change eg through skills, confidence, planning, tailored travel plans, point of purchase schemes in shops, support from volunteers, to be developed.	To be determined	Barriers addressed, individuals adopt healthy eating and physical activity behaviours
Public	Development of a communication programme to convey the key messages eg aim to maintain a healthy weight; monitor own weight regularly; and take action if overweight, to be developed.	March 08	Individuals act on key messages
Changing environments to encourage healthy choices	Encourage retailers to promote healthy food options eg via Healthy Choice Award scheme		Increased availability of healthy choices measured by an increase in the number of premises successfully gaining the Healthy Choice Award, and an increase in the

Workstream	Actions involved	Completion date	Outcomes
	<p>Further action to provide :</p> <ul style="list-style-type: none"> - safe facilities and spaces for walking and cycling, and play - cleaner safer streets - tailored travel plans - sustainable community activities reflecting local needs <p>and increase understanding of the impact of these in relation to obesity.</p> <p>Maximise opportunities to promote physical activity in the planning of new buildings, action to be developed.</p>		<p>number of gold awards.</p> <p>Increased uptake of physical activity at desire levels and frequency;</p>

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7. Appendices

1. Classification of overweight and obesity

ADULTS

Healthy weight	18.5–24.9
Overweight	25–29.9
Obese	30–39.9
Morbidly Obese	40 or more

The NICE Guidelines (CG43) indicate that these are a general guide as there are circumstances in which BMI may be a less accurate measure including for some target groups with additional risk factors, and advice is provided on these accordingly. However, BMI should be used as a measure in adults. Waist circumference may be used in addition to BMI in people with a BMI of less than 35. Bioimpedance is not recommended as a substitute for BMI.

CHILDREN

BMI measurement in children should be related to the UK 1990 BMI charts to give age and gender specific information. Again further advice is given in the NICE guidelines as to appropriate interventions and assessment processes.

2. Indicators and Targets

LDP : PSA10a Childhood obesity

LDP: PSA10b4 – 10b8: Adult obesity prevalence

The proportion of people aged 16 and over on GP list, with a BMI recorded in the last 15 months, recorded as having a BMI of 30 or greater.

	Mar 07:
PSA10b4	16872
PSA10b5	29547
PSA10b6	327726
PSA10b7	57.1%
PSA10b8	9.02%

LAA

6.8 Percentage adult population with a BMI of 30 or over (data source: Tracker Survey)

March 06	06/07	07/08	08/09
18%	19%	20%	21%

Actual performance for 06/07 = 18%

NB Confidence interval +/-1.5%

