

The University of Sheffield



**NICE Public Health Collaborating Centre**

## **Interventions for the prevention of pre-diabetes in high risk groups: examples of current practice in relation to the UK evidence base**

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## **1. EXECUTIVE SUMMARY**

### **1.1 Introduction**

Type 2 diabetes can be a serious health problem, and people from lower socio-economic status (SES) groups and black and minority ethnic (BME) groups can be at greater risk. Between 33% and 66% of people with pre-diabetes will go on to develop type 2 diabetes over a period of 3-6 years (Diabetes prevention Programme Research Group 2002). Pre-diabetes is characterised by higher than normal blood glucose levels, which can cause damage to health over time.

A mapping review and three evidence reviews have been conducted by the School of Health and Related Research (ScHARR) at the University of Sheffield. These have focused on evidence concerning the prevention of pre-diabetes among lower socioeconomic (SES) and black and minority ethnic (BME) groups. A recent report by Innove on the DiabetesE programme, suggested that diabetes prevention is already undertaken by a large proportion of primary care trusts (PCTs) in the UK. This practice review was undertaken to explore the ways in which PCTs are already delivering diabetes prevention initiatives to high-risk groups and the extent to which current programmes are consistent with the evidence statements in the ScHARR evidence reviews. The aim was to present an overview of representative case studies based on PCT initiatives for the prevention of pre-diabetes, specifically aimed at BME and low SES groups, and to assess the extent to which current interventions are consistent with the evidence identified by the ScHARR reviews. .

### **1.2 Methods**

Practitioner views and reports were identified primarily through searching the grey literature using Internet searches, starting with Google. An iterative approach was taken, with each successive wave of searching identifying additional useful sources and keywords, which were then included in the search strategy. This was augmented by a targeted search of specific PCT websites within spearhead local authority areas, and initiatives identified were searched in order to identify further evidence. Projects were included if they were aimed at adults from low SES groups or BME groups in the UK, with interventions similar to those outlined in the evidence reviews and any outcome applicable to the evidence statements within the reviews concerning low SES and BME groups. From these search methods, seven projects were identified as being of potential interest and were described in sufficient detail.. Leaders from these projects were contacted by e-mail and then telephone (in the case of non-response to e-mail) requesting further information concerning the projects and relevant outcomes.

### **1.3 Results**

Seven case studies were identified, three relating to adults from lower SES groups and four relating to adults from BME groups. Three of the identified projects provided details on setting up and implementation; two projects had been evaluated in terms of outcomes. While the projects were mainly targeted at lower SES groups or BME groups, there were some reported overlaps in terms of outcomes.

For adults from lower SES groups, projects were identified in Blackpool, Manchester and Gateshead. All three projects involved the provision of Health Trainers who were knowledgeable about the local community. The aim of Health Trainers was to support local people who may be hard to reach in making lifestyle choices that improve health and to assist them in setting goals and agreeing action plans.

A key issue for Blackpool PCT is the low rate of physical activity among the adult population. Each client received between four and six sessions with a Health Trainer. The sessions covered healthy lifestyle issues including physical activity. This project was not evaluated however, and therefore no data on outcomes was available.

The population covered by Manchester PCT is generally regarded as having a poor state of health compared to the national average. There is also a reported prevalence of obesity of 22%. The aim of Health Trainers in this area was to support and empower those at high risk in attaining a healthier lifestyle, particularly through a healthy diet and physical activity levels. A survey of clients was carried out but there was a low response rate. Of those that responded, the majority had followed the suggestions provided by their Health Trainer and reported that these changes had made a difference to their life.

A third of Gateshead residents live in some of the most deprived areas of England. Nearly 25% of people in NHS Tyne and Wear are reported to be obese; fruit and vegetable consumption is particularly low in young males and those living in more disadvantaged areas. Health Trainers are engaged in supporting people across the area, with weight management being a focus in one estate. Health Trainers here provide support and advice as well as recipe swaps and a gym circuit. There is currently no available outcome data for this area.

For adults in BME groups, projects were identified in Bradford, Lambeth, Leicester and Sheffield. Bradford is reported to have inequalities by gender, deprivation as well as ethnicity. The district has a high proportion of people from different ethnic backgrounds. Bradford PCT held a programme of events in support of Diabetes Awareness Week in 2009 to encourage people to learn more about the condition, as well as adopting preventive behaviours and attending for risk assessment. Links were made with local religious leaders and awareness of events was raised using posters and a radio broadcast. Outcomes included the organisation of a weight management group and recognition for the Community Development Workers involved in the programme. Attendance at a local Health Centre session was more than double that expected and users reported the session as being a positive experience. A health check for taxi-drivers with raised BMI was organised by a local taxi company. This also led to the development of a weight management group.

Lambeth is reported to have a population engaging in a high level of unhealthy lifestyle behaviours. Health Trainers from many different cultural backgrounds undergo NHS accredited training to give support in adopting healthier lifestyles in this area. As far as possible, Health Trainers are provided who are able to speak the language of their clients. There is no formal evaluation data currently, though one woman has given positive anecdotal evidence of her experience with a Health Trainer following her arrival in the UK from Ghana.

A proportion of the population of Leicester is reported to have a genetic disposition for type 2 diabetes with a high incidence among family members. Prevalence of type 2 diabetes is four times greater for the south Asian population compared to the white population of the city. A number of Community Health Development Coordinators have been appointed to support health promotion. One group which was assisted by a Coordinator, is a Patient Participation Group held in a GP practice. The Group focused on health promotion and organised an awareness raising campaign. The only reported outcome from this Group was a move toward lower use of salt and fat in three local temple kitchens.

The reported prevalence of obesity and overweight in Sheffield is 22% and 34% respectively. The PCT ran a two-day course for Asian taxi drivers which involved recruiting taxi drivers as health champions. The course was part of an ongoing initiative which included screening and engaging BME communities in healthy lifestyle activities. Anecdotal evidence is available that positive changes have been made for one taxi driver and his family. Another had assisted a work colleague in reducing his weight by giving advice and encouragement. Activities were organised by a group of taxi drivers. Knowledge of the drivers was reported to have increased as a result of their training.

#### **1.4 Discussion**

This report has examined a few examples of current practice for the prevention of pre-diabetes among high-risk groups in the UK. A large number of the identified projects were interventions involving Health Trainers. This differs from the three evidence reviews, where no Health Trainer initiatives were identified, although the review on awareness raising reported the use of lay workers as a means of identifying high-risk groups. Initiatives to improve the health of taxi drivers were also pertinent in identified projects. Other examples of practice not reviewed such as Knowlsey PCT's and Sefton PCT's 'Colin the Cabbie' initiative were similar. There was little information reported on how the included projects contacted and engaged with low SES and BME groups. However some strategies were reported, such as awareness raising events where links were developed with local mosques and Imams, and translating information leaflets into relevant languages.

From this limited evidence of practice from seven PCTs across the UK, it appears that some of the potential barriers to intervention, implementation and behaviour change as outlined in the evidence reviews, are being addressed in the design of initiatives or following their evaluation. These include in particular community engagement initiatives tailored to local circumstances and greater community engagement using 'word of mouth' rather than leaflets and posters. However, some of the barriers and facilitators highlighted within the three reviews were not reported as being addressed by the initiatives.

In conclusion, this review confirms the DiabetesE finding that many PCTs are delivering interventions that target communities at increased risk of developing pre-diabetes and type 2 diabetes. Common approaches utilised a health trainer model or targeted specific occupational groups. More attention could be paid to ensuring barriers to participation are directly addressed and to robust evaluation of the impact of projects. This which is particularly important with assessing the effectiveness and cost-effectiveness of initiatives in order to develop public health guidance.

## **2. INTRODUCTION**

### **2.1 Background**

The National Institute for Health and Clinical Excellence (NICE) has been asked by the Department of Health (DH) to develop public health guidance on the prevention of type 2 diabetes mellitus among high-risk groups. Groups at greater risk of developing type 2 diabetes include people of South Asian, African-Caribbean or black African descent, as well as people from lower socio-economic groups.

A mapping review and three evidence reviews have been carried out. The first two evidence reviews each focused on a particular high risk population within the UK. The first evidence review focused on prevention of pre-diabetes in adults from low socio-economic status (SES) groups, while the second review focused on prevention of pre-diabetes in adults from black and minority ethnic (BME) groups, including first, second and subsequent generations of people of South Asian (e.g. Indian, Pakistani, Bangladeshi), African and Caribbean origin. The third evidence review assessed identification/awareness-raising of high risk groups by health professionals.

A recent report from Innove on the DiabetesE programme (Findings from DiabetesE: Fifth National Report Innove, Feb 2010) highlighted the extent to which diabetes prevention is already undertaken by Primary Care Trusts (PCTs). Of 124 participating PCTs, 88% reported programmes for reducing overweight and obesity in groups at increased risk of diabetes, 88% reported programmes for increasing physical activity targeted at groups at increased risk of diabetes and 81% reported programmes for improving diet and nutrition in groups at increased risk of diabetes. 73% of PCTs had a programme for raising awareness of the risk factors for diabetes among its population. Given these high levels of current activity, it is important to explore the ways in which PCTs are already delivering evidence-based diabetes prevention to high risk groups and the extent to which current programmes are already consistent with the evidence statements derived from the evidence reviews.

### **2.2 Purpose of the review**

The aim of this review was to present an overview and representative case studies based on PCT initiatives for the prevention of pre-diabetes, specifically aimed at the two high-risk groups included in the first two evidence reviews. It is also the purpose of this report to assess the extent to which current interventions are in line with the ScHARR reviews and address the barriers and facilitators identified by the evidence reviews in relation to more socioeconomically deprived and BME groups.

## **3. METHODS**

### **3.1 Search strategy**

For this report on current practice it was necessary to identify practitioner views and reports. This colloquial evidence (NICE, 2009) was identified primarily through searching for grey literature.

Types of intervention and examples of intervention programmes were initially identified from a database of references generated through the searches for the mapping review and three evidence reviews on interventions to prevent diabetes in high-risk groups.

Internet searches were then undertaken to identify grey literature. An iterative approach was taken, with each successive wave of searching identifying additional useful sources and keywords, which were then included in the search strategy. In this way a map of evidence was gradually built up.

An initial Google search using the terms “pct” “diet” “exercise” and their related synonyms was undertaken in order to develop further keywords and identify potentially useful sources to search within. This was augmented by a targeted search of specific PCT websites which are within spearhead local authority areas.

The following PCT websites were searched for relevant information on existing practice:

- Barnsley
- Blackpool
- Leicester
- Middlesbrough
- Redcar and Cleveland
- Tower Hamlets
- Wolverhampton City

Initiatives identified within these websites were searched in order to identify further evidence, for example the Department of Health “Change 4 Life” Healthy Towns initiative. The Health and Social Care Awards lists were also scanned in detail for potentially relevant interventions. Any projects identified here were in turn searched for using Google.

Searches were undertaken in May 2010.

No quality assessment has been carried out on included reports as our intention was to identify representative case studies of current initiatives in diabetes prevention for high-risk groups within PCTs. We did not identify every example of such initiatives. From the search methods described, seven projects were identified as being potentially of interest. These seven projects were selected as they appeared to be described in sufficient detail and contact details were provided. During the first two weeks of May 2010, leaders from identified projects were contacted via email requesting further information on the projects and details of outcomes relevant to the evidence statements from the two effectiveness reviews on reducing the risk of pre-diabetes in adults from lower SES and BME groups.

Two projects responded to the initial email. A second email was sent to five projects that did not respond, requesting information on the project and outcome data. One project responded by sending information and outcome data and one responded by email stating that the request had been passed onto a manager. Telephone contact was made with the three projects that had not responded to any emails. Over the telephone

each of the three project leaders agreed to send some further information and any outcome data that had been collected although to date only one project has done so.

### **3.2 Inclusion and exclusion criteria**

The following inclusion criteria were applied to retrieved citations in order to identify relevant interventions for inclusion:

#### *Population*

The intervention has to include adults from lower SES groups or adults from BME groups in the UK.

#### *Intervention*

As defined by evidence reviews 1 and 2, for example ways of helping high-risk groups improve their diet/increase their physical activity or raising awareness of risk factors for developing pre-diabetes.

#### *Comparison*

No comparator required.

#### *Outcomes*

Any outcome applicable to the evidence statements in the two evidence reviews on interventions in adults from lower SES groups and BME groups, for example weight management groups or use of community leaders to disseminate health promotion messages.

## **4. RESULTS**

### **4.1 Summary of studies**

A total of seven representative projects were identified from the searches. Projects were selected on whether the project appeared to be described in sufficient detail and contact details were provided. Three projects responded with sufficient information on the setting up and running of the project and information on outcomes which helps illustrate the evidence statements from the three evidence reviews. These were the Sheffield Taxi Drivers Initiative, Bradford Diabetes Awareness Raising Events and Manchester Health Trainers. One project was able to give information on the setting up and running of the project but little information on outcomes (Leicester City Patient Participation Group). Three projects were unable to provide information on either the setting up or running of the projects or on outcomes within the timescale of this report. Overall, three projects related to adults from lower SES groups and four related to adults from BME groups.

Of the seven projects, only two appeared to have undertaken an evaluation and produced an evaluation report. The Bradford project sent the report via email (Iqbal & Peltier 2009), and the Manchester project evaluation report was available on the internet (Meah & Guest 2010), both of which were received in time for inclusion in this review. The aims of the evaluation report for the Bradford project was to examine



whether the aims and objectives of the Diabetes Awareness week had been met and if having such a week was effective. The aim of the evaluation report for the Manchester project was to examine the processes used by individual Health Trainers.

The findings varied from project to project and it was not always possible to relate the findings from the projects to the evidence statements in the three evidence reviews. Projects have only collected outcome data relevant to their own project evaluations or have collected qualitative evidence rather than quantitative evidence. Where findings illustrate an evidence statement this has been noted in the text and Appendix 1 gives a table of how issues raised in the evidence have been addressed in practice.

Although the seven projects had been split according to whether they mainly served lower SES groups or BME groups, there does appear to be crossover between the groups when looking at the outcomes and comparing them to the evidence statements from the evidence reviews. For example, a project aimed at BME groups may illustrate an evidence statement for lower SES groups and vice versa. Appendix 1 displays a table which draws together the evidence statements from the three reviews that are illustrated by findings from the various projects. Where hyperlinks have been used in the document, the website addresses are displayed in Appendix 2.

### *Health Trainers*

The 2004 White Paper Choosing Health (Department of Health 2004) made a commitment that, from 2006, Health Trainers would be “*giving support to people who want it in the areas with highest need and from 2007 progressively across the country.*” Health Trainers are either drawn from their local communities, or are knowledgeable about those communities and will provide local people with motivation and practical support to improve the local people’s health. Appropriate “clients” drawn from hard to reach disadvantaged groups are referred to Health Trainers, plus clients can self-refer. Health Trainers work with these clients on a one-to-one basis to assess their lifestyles and well being, to set goals, agree action plans and provide individual support focussing on behaviour change. Health Trainers use techniques that are based on psychological evidence and theories to help people change behaviours that are known to cause ill-health (Department of Health 2008). As each Health Trainer would need to be able to meet locally-identified needs, a single job description that applied to all the Health Trainer services in England would be inappropriate. Exemplar job descriptions have been developed which are then tailored to reflect local circumstances. Four out of the seven projects used Health Trainers and each project tailored the Health Trainer’s job description to meet local circumstances.

## **4.2 Interventions aimed at lower SES groups**

Three interventions from PCTs aimed at lower SES groups were identified, all three provided Health Trainers to support lifestyle interventions. The three PCTs were Blackpool, Manchester and Gateshead.

### *Blackpool PCT*

**Demographics.** Information from the Association of Public Health Observatories, Health Profile webpage [[Hyperlink to HEALTH PROFILES](#)], states that the health of people in Blackpool is generally worse than

the England average. According to the Public Health Annual Report for Blackpool, there are considerable levels of disadvantage, with Blackpool being ranked as the 12th most deprived of 354 local authorities in England, in 2007 [[Hyperlink to Public Health Annual Report for Blackpool](#)]. Forty-one out of 94 small areas within Blackpool are amongst the 20% most deprived areas of the country and there are no areas amongst the 20% most affluent.

Physical activity levels amongst the adult population in Blackpool are significantly worse than the England average, at 7.4% compared with a national average of 10.8%. The report did not make clear if this was the percentage of those attaining 30 minutes of at least moderate intensity activity on at least five days a week [[Hyperlink to Public Health Annual Report for Blackpool](#)].

**Intervention: Health Trainers.** The Health Trainers are recruited locally and have a stake in improving the health of their community, which links in with the evidence statement on nutritional knowledge in low-income groups (ES18) in the first review for lower SES groups. The webpage for Blackpool Health Trainers says that people can have between four and six sessions with a Health Trainer. The meeting place, length and timing of the programme are flexible to suit individual needs [[Hyperlink to Blackpool Health Trainers homepage](#)].

Health Trainers provide one to one meetings, support and may accompany the client to new places/groups, provide referral to other agencies such as smoking cessation and information on healthy eating, exercise, local fitness/leisure centres, free local activities and social events. These types of activities illustrate the evidence statements relating to perceived skills and capabilities (ES26), current lifestyles (ES27), suggestions by participants that might increase acceptability (ES21b) and acceptability of interventions (ES21c) from the evidence review on lower SES groups. The activities undertaken by Health Trainers in Blackpool also illustrate the evidence statements acceptability of lifestyle change interventions (ES2) and access and affordability (ES7) in the evidence review on BME groups. The information available illustrates the evidence statements suggesting that health professionals require a deep understanding of the cultural and religious beliefs and economic influences of communities (ES3) and that lay workers can identify those at risk and disseminate health promotion messages (ES6) from the evidence review on awareness raising (see appendix 1).

**Outcomes.** No evidence of outcomes was received from this PCT in time for inclusion in the report.

### *Manchester PCT*

**Demographics.** The Association of Public Health Observatories Health Profiles webpage [[Hyperlink to HEALTH PROFILES](#)], states that the health of people in Manchester is generally worse than the England average and a few indicators are similar to the England average, such as percentage of physically active adults. The report also stated that current estimates show that Manchester has 90,000 adults and 14,000 children that are obese in a total population of 464,000 (i.e. a 22% obesity prevalence rate) [[Hyperlink to Public health Annual Report for Manchester](#)].

**Intervention: Health Trainers.** One aim of the initiative is to attract people into employment who may not previously have considered, or been considered for employment in the field of health and social care. To be a Health Trainer, no formal qualifications or experience of employment in the health service are necessary; more important is the ability and desire to work with others and to bring about a real improvement in people's health [[Hyperlink to Manchester Health Trainers homepage](#)]. These Health Trainers appear similar to the lay workers mentioned in the evidence review on awareness raising.

The initial focus of the work of Health Trainers is to encourage increased levels of physical activity and improve access to information and one-to-one support around food, diet and nutrition. This focus illustrates the evidence statement regarding nutritional knowledge in low-income groups (ES18) in the evidence review on lower SES groups and the evidence statement acceptability of lifestyle change interventions (ES2) in the evidence review on BME groups (see Appendix 1).

The Health Trainer's role is not to give advice, but to structure a series of discussions to empower the client to develop and use skills to regulate their own behaviour. The approach is person-centred with the aim being for the client to make their own decisions. These Health Trainers use a range of techniques for supporting people to set and maintain their own personalised SMART (specific, measurable, achievable, realistic, and timely) goals. The first assessment session includes a health assessment to review the client's opinion of their current general health, well-being and health goals. The Health Trainers then work with individuals by supporting them to identify barriers and opportunities within their own lives that either hinder adopting good habits or could support healthy change. The role of the Health Trainer and the aims of the first session illustrate the evidence statements that suggest that local activities need to be appropriate (ES23a) and those relating to existing attitudes towards health and health-related messages (ES25) and current lifestyles (ES27) from the evidence review on lower SES groups. The role of the Health Trainers and aims also illustrates the evidence statements suggesting that knowledge levels do not always translate to practice (ES6a) in the evidence review on BME groups and that regarding dissemination of health promotion messages (ES6) from the evidence review on awareness raising (see Appendix 1).

Health Trainers have a very good knowledge of facilities and services in different communities and are able to provide practical support through escorting people to new group activities or to the shops to buy healthy food, which illustrates the evidence statements concerning environmental factors (ES29) in the evidence review on lower SES groups and access and affordability (ES6) from the evidence review on BME groups. Where necessary, Health Trainers support people to find the right professional programme (such as 'Stop Smoking Services') and support people in adopting the professional recommendations. The Health Trainers are based with different services across the city, and a person can be referred by an agency or make a self referral to a Health Trainer, which illustrates the evidence statement regarding identification of high-risk groups (ES2) from the evidence review on awareness raising (see Appendix 1).

The executive summary of a 2007 report on the recruitment process stated that although good relations between Health Trainers and other health care workers had developed in certain areas, wider negative attitudes of some health professionals were perceived to be a major problem for the programme [[Hyperlink to executive summary 2007](#)]. The executive summary did not elaborate further on the reported negative

attitudes and it was not possible to obtain a full copy of the report to seek further detail. This reported negative attitude appears to be in contrast to the findings in the evidence review on awareness raising, where health professionals were positive about the role of lay workers.

A consultation document on the evaluation of Manchester Health Trainers (Meah & Guest 2010) reported that 65% (n=64) of Health Trainers are originally from the community in which they worked, which illustrates the evidence statement that suggests that health professionals require an understanding of the cultural, religious and economic influences within the community (ES3) from the evidence review on awareness raising (see Appendix 1). This document further reported that the majority of Health Trainers saw their clients for five or more sessions (59%; n=58). On average, clients were offered information on between four and six healthy lifestyle choices (smoking, eating, physical activity, alcohol, sexual health and mental health).

**Outcomes.** A consultation document on the evaluation of Manchester Health Trainers reported that, on average, Health Trainers directed people to between seven and 12 other sources of information, such as health walks/walking groups, stop smoking services, exercise classes, weight management or exercise referral (Meah & Guest 2010). A survey of Manchester's Health Trainers' clients was undertaken, with Health Trainers giving questionnaires to clients at the end of the appointment along with return envelope. The response rate was 9% (39/400). Of those clients returning the questionnaire, 97% (n=38) said they followed the suggestions given by their Health Trainer, 87% (n=34) said the suggestions of the Health Trainer had made a difference to their life and 92% (n=36) said that working with a Health Trainer had made a difference to their lifestyle (Meah & Guest 2010).

Comments from clients included "*I now think about what I eat and make more effort to include fruit and veg into my eating programme*" which relates to the evidence statement concerning the role of existing attitudes towards health and health-related messages (ES25) and information-related barriers (ES24a) from the review on lower SES groups (see Appendix 1).

### *Gateshead PCT*

**Demographics.** Information from the Association of Public Health Observatories Health Profiles webpage [[Hyperlink to HEALTH PROFILES](#)] states that just under 35% of the residents of Gateshead live in the most deprived areas of England, with just under 5% living in the least deprived areas. While the percentage of physically active adults is similar to the England average, it was reported that nearly 25% of people in NHS South of Tyne and Wear are obese. On healthy eating, it was reported, according to local surveys, that apparently only a third of adult females consume five portions of fruit and vegetables each day, but that this was comparable to the average figure for England as a whole. Consumption of fruit and vegetables was particularly low amongst young men in South Tyneside, with only 22% of men achieving five portions a day, lagging behind the average for England of 29%. There was also a strong relationship between fruit and vegetable intake and SES group, with a lower proportion eating five a day amongst those living in more disadvantaged areas. It was stated that across NHS South of Tyne and Wear, levels of physical activity were

increasing, with 43% of adults undertaking thirty minutes of moderate intensity physical activity five times per week [[Hyperlink to Public Health Annual Report for Gateshead](#)].

**Intervention: Health Trainers.** Health Trainers in Gateshead are described as being “*local people, with knowledge and experience of the area they work in*” on the Gateshead Health Trainers homepage [[Hyper link to Gateshead Health Trainers homepage](#)], which links to the evidence statement suggesting that health professionals require a deep understanding of cultural and economic influences (ES3) in the evidence review on awareness raising. They are able to offer personal support and put clients in touch with other services, Community Groups and projects, which illustrates the evidence statement relating to lay workers identifying and disseminate health promotional messages (ES6) in the evidence review on awareness raising. Health Trainers are employed in several areas of Gateshead. One in particular in the Springwell Estate area holds a Weigh-In group open to men and women aged 16 and over. It is a self help group that offers support and advice on weight management, recipe swaps and gym circuit. The group also has a Wii and Wii fit for the group members, which links to the evidence statements relating to acceptability of interventions (ES21b, and ES21c), local activities (ES23a) and environmental factors (ES29) in the evidence review on lower SES groups as well as the evidence statement on access and affordability (ES7) in the evidence review on BME groups (see Appendix 1).

**Outcomes.** No evidence of outcomes was received from this PCT in time for inclusion in the report.

### 4.3 Interventions aimed at BME groups

Four interventions aimed at BME groups were identified from PCTs. Bradford PCT held a programme of events in support of Diabetes Awareness Week in 2009, Lambeth PCT provided a personal Health Trainer, Leicester City PCT formed a Patient Participation Group and Sheffield PCT ran an Asian Taxi Driver Initiative.

#### *Lambeth PCT*

**Demographics.** The annual public health report for Lambeth PCT stated that a third of patients registered with a GP in Lambeth are White British and one quarter is from BME groups. The report also said that Lambeth has a high level of those engaging in unhealthy lifestyle behaviours [[Hyperlink to Annual Public Health Report for Lambeth](#)].

**Intervention: Health Trainers.** The Health Trainers are people who have undergone NHS accredited training to support individuals to adopt healthier lifestyles, learning about all aspects of having a healthy lifestyle. This includes nutrition, exercise, stopping smoking and improving mental wellbeing, which links to the evidence statement concerning nutritional knowledge in low-income groups (ES18) in the evidence review on lower SES groups. The training helps the Health Trainers to share their knowledge with the people in the local community, allowing them to improve their own lifestyle [[Hyper link to Lambeth Health Trainers homepage](#)], which illustrates the evidence statement that suggests that lay workers can identify and disseminate health promotion messages (ES6) from the evidence review on awareness raising (see Appendix 1).

The Health Trainers are based in various settings such as the NHS, local authority and community/voluntary organisations. They offer backing to the most disadvantaged groups/people and those who have difficulty accessing services, which illustrates the evidence statement concerning identification of high-risk groups (ES2) from the evidence review on awareness raising (see Appendix 1).

Health Trainers offer one-to-one support to help people make positive changes to their health and based on a coaching model (it was not made clear which particular coaching model was used). They encourage and motivate people who are ready to make lifestyle changes, which illustrate the evidence statement regarding the acceptability of lifestyle change interventions (ES2) in the evidence review on BME groups. People recruited to be Health Trainers come from many cultural backgrounds, which help the Health Trainer to understand a person's culture, lifestyle and community needs. Where possible a client is provided with a Health Trainer who can speak their language, which relates to the evidence statement suggesting that a limited command of the English language could be a barrier (ES6c) in the evidence review on BME groups (see Appendix 1) [[Hyperlink to Health Trainers support webpage](#)].

**Outcomes.** No information on outcomes was received in time for inclusion in the report; the only available outcome was obtained from the Lambeth PCT Health Trainer webpage. In one case study, a woman who moved to Lambeth from Ghana a few years ago suffered a breakdown and started to see a Health Trainer. She reported being able to confide in the Health Trainer who was from the local community. The Health Trainer gave her advice on healthy eating, in particular fruit and vegetables and suggested regular exercise [[Hyperlink to Health Trainers support webpage](#)]. This qualitative outcome could be applicable to the evidence statement concerning nutritional knowledge in low-income groups (ES18) in the evidence review on lower SES groups, as well as the evidence statement on the acceptability of lifestyle change interventions (ES2) in the evidence review on BME groups (see Appendix 1).

### *Bradford PCT*

**Demographics.** Information from the Association of Public Health Observatories Health Profile webpage [[Hyper link to HEALTH PROFILES](#)] states that there are inequalities within Bradford by gender, deprivation and ethnicity. Information from the Annual Report of the joint director of public health Bradford and Airedale 2008/09 reported that Bradford district has the highest proportion of people from different ethnic backgrounds of any district in the Yorkshire and Humber region. Bradford district contains a mix of ethnic groups and cultures. Ethnic communities comprise a quarter of the total population, with over two-thirds of these communities living in inner city Bradford. At the time of the last census, three quarters of the population of the district described themselves as White, with 15% of Pakistani origin and 3% as Indian and the remaining 5% from Asian, Caribbean, Chinese, mixed or other backgrounds [[Hyperlink to Annual Public Health Report for Bradford](#)].

**Intervention: Diabetes awareness events.** The events featured a half marathon, supermarket tour, school health fair and men's cricket team health checks. The activities had been set up to encourage more people to learn about diabetes, how it can be prevented and to assess people for diabetes risks, which links to the evidence statement regarding the provision of increased information on risk factors (ES6b) in the evidence



review on BME groups (see appendix 1). Health professionals were on hand to find out what help and support people feel they needed to better self-manage their condition. The events were believed to be a way to encourage people to reduce the risks of developing diabetes, through taking more exercise or learning more about the nutritional value of food, and helped people recognise and get tested for the condition [[Hyperlink to Diabetes awareness in Bradford homepage](#)].

The events were held over one week and were timed to co-ordinate alongside the annual diabetes week organised by Diabetes UK, was held by NHS Bradford and Airedale. Two key aims of the event were to raise awareness of the risk factors associated with diabetes and to connect with individuals and communities who do not engage with health professionals in a proactive manner (Iqbal & Peltier 2009), which illustrates the evidence statement concerning nutritional knowledge in low-income groups (ES18) in the evidence review on lower SES groups and the evidence statement regarding identification of high-risk groups (ES2) from the evidence review on awareness raising (see Appendix 1).

To help promote the events, links were developed with the local mosques and Imams and a diabetes display with leaflets and information was also put up at the mosques. Posters were given to existing groups in the area (lunch clubs, women's groups, church groups and local nurseries), and to local shops, businesses, schools and community centres. A Community Health Development worker went on the local Bradford Community Broadcasting radio station to promote the event within the local area.

**Outcomes.** After the diabetes awareness events, the management and workers of a local taxi company suggested starting a weight management group with their drivers as well as healthy options cook and eat sessions. The events also helped develop recognition in the area for the Community Health Development workers and some health professionals (not specified). The first of a series of sessions held at a local Health Centre delivered messages around lifestyle risk factors and which group of people may be adversely affected, and then 'signposted' the user to the relevant services. It was expected that around 50 people would turn up for the first session, however 114 people were seen, and it was reported that users commented that they had enjoyed the session, found the location convenient and were impressed by the professional delivery of the service. The Imam of a local mosque gave a speech at Friday prayers and informed the congregation that a member of the Health Service would be outside the mosque to answer questions and provide information, as well as 'signposting' the people to the relevant services. One hundred and fifty-seven men were seen by the health professional and approximately 50 women were seen as they were in a segregated area. It was noted that women from the mosque were reluctant to speak to the male health professional due to religious sensitivities (Iqbal & Peltier 2009). This links in with the evidence statement on the acceptability of lifestyle change interventions (ES2) in the evidence review on BME groups (see appendix 1).

There was a health check day at a local taxi company, focused on taxi drivers at risk of developing diabetes, the majority of whom had a high BMI (25-35). The majority of the taxi drivers were overweight due to spending a large amount of time seated in their vehicles and their diet consisted of convenience takeaways with a low fruit intake. It was noted that the majority had not been to their GP in the last 4-5 years, and one taxi driver commented "*we only go to our doctor when we are due a medical test regarding our taxi badge*". If the taxi drivers did not attend, their licence to operate a public licensed vehicle would be revoked. After

the health check day, the management and workers requested starting a weight management group as well as healthy options cook and eat sessions (Iqbal and Peltier 2009), which illustrates the evidence statement concerning suggestions by participants that might increase acceptability (ES21b) in the evidence review on lower SES groups (see Appendix 1).

### *Leicester City PCT*

**Demographics.** The annual public health report for Leicester city PCT stated that there is a genetic predisposition for type 2 diabetes with higher incidence among close family members. Lifestyle factors such as obesity or overweight, poor diet and lack of physical activity are important. A waist circumference of 31.5 inches or over for women, 35 inches or over for Asian men, and 37 inches or over for white and black men is a good indicator of increased risk. Prevalence is four times greater in the South Asian population when compared with the white population of the city [[Hyperlink to Public Health Annual Report for Leicester](#)]. As a result, in those general practices with a high proportion of South Asian patients, as much as 10-12% of the practice population may have type 2 diabetes. Research evidence and local analysis shows that being of a minority ethnic background substantially increases patient risk of developing diabetes in the first place and of suffering its acute complications at a relatively younger age.

**Intervention: Patient Participation Group.** Leicester City PCT has appointed several Community Health Development Coordinators, some of whom work specifically in areas where there is a high proportion of BME communities. One of the groups a coordinator has worked with is a Patient Participation Group held in the Cross Street GP surgery. The group undertook health promotion as well as launching their own five a day awareness raising campaign (similar to the interventions in the evidence reviews on SES groups and BME groups) [[Hyperlink to Humberstone Patient Participation Group](#)].

The GP surgery had been informed by Leicester city PCT that it may be useful and beneficial to the practice if the surgery had a Patient Participation Group. During September/October 2006 the PCT sent a person to sit each day in the waiting room talking to patients and asking for expressions of interest in attending meetings for two to three weeks. This links to the evidence statement concerning identification of high-risk groups (ES2) from the evidence review on awareness raising (see Appendix 1). From those expressing an interest, 10 patients were invited for a first meeting. Only a small number were invited until the purpose and structure of the group had been decided. Although efforts were made to try and ensure the group would consist of a wide range of ages and ethnic groups, it tended to be elderly patients that showed an interest. The GP practice has found the Patient Participation Group a useful forum for the practice staff to pass on information to patients. The Patient Participation group now has a chairman, an elected secretary and a treasurer and is affiliated with the National Association of Patient Participation Groups (personal communication from Dani Hadley, Acting Practice Manager).

**Outcomes.** The only reported outcome for the Patient Participation Group at the Cross Street GP surgery relevant to this review was that the group had persuaded three local temples (religion not specified) and the Gurdwara (a Sikh meeting place for worship) to reduce salt and fat in the temple kitchens [[Hyperlink to Leicester City PCT peer review document](#)]. This implies that cooking can still be carried out in a traditional



way but without so much fat or salt and links into the evidence statements concerning the acceptability of lifestyle change interventions (ES2) and social norms and traditions relating to health behaviour change (ES8a) in the evidence review on BME groups (see Appendix 1).

### *Sheffield PCT*

**Demographics.** The annual public health report for Sheffield PCT expressed concern that approximately 22% of the Sheffield adult population is estimated to be obese, with a further 34% estimated as being overweight. Those who are overweight or obese are at an increased risk of type 2 diabetes. The report also stated that between 70,000 and 90,000 are estimated to have a Body Mass Index (BMI) greater than 40, with 1% of these estimated to have a BMI greater than 50. This data would suggest that there are about 8,000 people in Sheffield (2% of the adult population) with a BMI over 40, and of these, 80 people have a BMI over 50 [[Hyperlink to Annual Public Health Report for Sheffield](#)].

**Intervention: Asian Taxi Drivers initiative.** Sheffield PCT ran an Asian Taxi Drivers initiative which included screening and recruiting taxi drivers as health champions. NHS Sheffield ran a two-day health training course specifically for Asian taxi drivers, as part of an ongoing programme to engage BME communities in activities to make them healthier and increase their life expectancy. Those who signed up to the course had to agree to be part of the ongoing drive to improve health in their community by passing on their skills. Using information from the course and workshops the men recruited other drivers to attend similar events, increase physical activity in their community, take more fruit to work with them and encourage other drivers to do the same, work with NHS Sheffield to get regular health messages into their community and show their families and friends DVDs on important health issues. All the drivers were paid a fee of £100 a day during the course to cover lost earnings, on the understanding that they would work with the PCT to take the project forward. The course and associated peer health promotion illustrates the evidence statements concerning nutritional knowledge in low-income groups (ES18), dissemination by word of mouth (ES20), interventions delivered by community members (ES21b), acceptability of interventions (ES21c), interventions made appropriate to the target audience (Es21d) and current lifestyle in the evidence review on lower SES groups. The course and associated peer health promotion also illustrates the evidence statements concerning the acceptability of lifestyle change interventions (ES2), increased information on risk factors (ES6b) in the evidence review on BME groups and the evidence statements concerning identification of high-risk groups (ES2) and using lay workers to identify and disseminate health promotional messages (ES6) from the evidence review on awareness raising (see Appendix 1). At the end of the training the drivers received an attendance certificate [[Hyperlink to Sheffield Taxi Drivers project homepage](#)].

**Outcomes.** In one case study one Asian taxi driver said that the initiative had transformed his life in that he no longer ate fried takeaways at the end of his shift, and that it had also changed his family's eating habits by switching from ghee (a clarified butter without any solid milk particles or water) to olive oil and eating more fresh vegetables and fruit, which links to the evidence statement concerning social norms and traditions relating to health behaviour change (ES8a) from the effectiveness review on BME groups. Another Asian taxi driver said he had become a health champion and had helped a fellow taxi driver reduce his weight from

20 stones to 14 stones by giving advice and encouragement. It was also reported that one group of taxi drivers had organised football games, badminton and walks, which relates to the evidence statement concerning social norms and traditions relating to physical activity (ES8b) from the effectiveness review on BME groups (see Appendix 1). It was further reported that some taxi drivers had persuaded some takeaway outlets to start grilling rather than deep fat frying food [[Hyperlink to Sheffield Cab project overview](#)].

The taxi drivers recruited had a simple knowledge test administered at the beginning and at the end of the training course and demonstrated a shift in knowledge as a result of the training, with the average score rising from 15 to 23 (out of 25). This relates to evidence statement 5a (knowledge) from the effectiveness review on BME groups. Furthermore it was reported that, *“The men had already made changes after one day, in terms of health choices, for example, changing to semi-skimmed milk, joining the gym, talking to their partners and children”* (Thomas 2009). This quote implies evidence to link up with the evidence statement suggesting that behaviour change can be influenced by family members (ES30) in the evidence review on lower SES groups; in this case a positive influence rather than a negative influence (see Appendix 1).

## **5. DISCUSSION**

Type 2 diabetes is a serious chronic condition and if left untreated can cause long-term health problems. Often the symptoms may be absent or so mild they go unnoticed. Pre-diabetes is a precursor to the development of type 2 diabetes, and is characterised by the presence of higher than normal blood glucose levels that are yet to reach diabetic levels. Large amounts of glucose in the blood can damage blood vessels, nerves and organs, and even a mildly raised glucose level may cause damaging effects over time. It is crucial that interventions are in place to help reduce the risk factors for pre-diabetes in adults from low SES and BME groups. This report has examined a few examples of current practice in the UK.

### **5.1 Types of interventions currently undertaken by PCTs**

Some common features of current models for targeting groups at high risk of diabetes were identified across the seven case studies explored. In particular they often use a “Health Trainer” model and have sometimes targeted occupational groups.

### **5.2 Health trainers**

A large number of projects that were identified for this report fell under the heading of Health Trainers. This is different from the three evidence reviews of the evidence, where no Health Trainer initiatives were identified, although the evidence review on awareness raising reports the use of lay workers as a means of identifying high-risk groups. As Health Trainers are a relatively new initiative, it is unlikely that it would be sufficiently reported in current literature.

The 2004 White Paper Choosing Health (Department of Health 2004), provided the impetus and resources to create the NHS Health Trainer as a new addition to the public health workforce. Health Trainers were created to support the shift in public health approach from “advice from on high to support from next door” (Department of Health 2008, p.106). This approach could help to combat the barrier of resistance to being told what to do. For example, in the evidence review on lower SES groups, evidence from qualitative studies

suggested that there was a negative view towards eating food defined as healthy, with the participants having negative associations with the term ‘healthy eating’. The term ‘healthy eating’ was associated with government policy and eating healthy foods was seen as boring and not filling.

**Table 1: Projects included in reviews**

	Lower SES groups			BME groups			
	Health Trainers Blackpool PCT	Health Trainers Manchester PCT	Health Trainers Gateshead PCT	Diabetes awareness raising Bradford PCT	Health Trainers Lambeth PCT	Patient Participation Group Leicester City PCT	Asian Taxi drivers initiative Sheffield PCT
<b>Personnel involved</b>							
Trainers recruited from local community	✓	✓	✓		✓		✓
Health professionals				✓			
GP practice patients						✓	
<b>Activities</b>							
Health trainers offering information and support	✓		✓		✓		
Health trainers do assessment sessions		✓					
Events held to raise awareness of diabetes				✓		✓	
Health promotion							✓
Evaluation of Project carried out		✓			✓		

While there is a national Health Trainer programme with PCTs following core activities, there are opportunities for PCTs to undertake their own activities and development/changes to service delivery to recruit the workforce with the right skills needed to tackle health inequalities and make contact with the hard-to-reach groups. For the lower SES groups, all three identified projects were Health Trainer projects. The executive summary of a 2007 report on the recruitment process of Manchester Community Health Trainers stated that the project was very successful at recruiting people from local communities, particularly from BME groups [[Hyperlink to executive summary 2007](#)]. This illustrates how projects that are identified as being focused on the prevention of pre-diabetes among adults from low SES groups may also include adults from the other high-risk group of interest, BME groups. Indeed, it was easier to determine if a project was aimed at BME groups than if the project was aimed at lower SES groups.

### **5.3 Other initiatives**

Initiatives that strive to improve the health of taxi drivers have been undertaken, such as those carried out by Sefton and Knowsley PCTs. The Sheffield PCT taxi drivers initiative differed from these by targeting a specific group of taxi drivers (Asian taxi drivers) rather than taxi drivers in general. As part of a week of diabetes awareness raising events held in Bradford, taxi drivers from a local taxi company were given a health check at their workplace. The available evidence from the Sheffield taxi drivers initiative suggests it does appear to have a beneficial effect on the lifestyles of Asian taxi drivers and their families. Projects using taxi drivers to pass on health promotion messages have been undertaken elsewhere. The two other taxi drivers projects (Knowsley PCT and Sefton PCT) used a similar initiative (called ‘Colin the Cabbie’) to pass on information to improve men’s health and raise awareness of reducing the risk of coronary heart disease, cancer and diabetes. Both PCTs offered health checks to the taxi drivers.

### **5.4 Engaging high-risk groups**

Information on how the included projects contacted and engaged with low SES and BME groups was not fully described or not available. The evaluation of the Health Trainers service in Manchester (Meah & Guest 2010) suggests that evidence from their users survey shows that Health Trainers are reaching priority groups, are being accessed in a range of community settings and have built effective relationships within local communities. The evaluation report of the awareness raising events held in Bradford (Iqbal & Peltier 2009), suggests the events had helped develop recognition in the area for Community Health Development workers and some health professions (not specified).

The awareness raising events in Bradford that developed links with the local mosques and Imams illustrates the evidence statement ‘health activities need to be acceptable in terms of religion’ (ES4) in the evidence review on BME groups. Some of the lessons learnt from the evaluation of the awareness raising events held in Bradford were to have some of the information leaflets translated into relevant community languages (i.e. Eastern European & some Asian languages) and to have female as well as male health professionals on hand to give advice, in order to accommodate religious sensitivities (Iqbal & Peltier 2009). Which illustrates the evidence statement covering suggestions by participants that might increase acceptability (ES21b) in the

evidence review on lower SES groups and limited command of the English language (ES6c) from the evidence review on BME groups (see Appendix 1).

The Patient Participation Group altered the times of the meetings to encourage more attendance and the group has been widely advertised within the surgery, on the practice leaflets and on the practice website. This illustrates the evidence statement covering suggestions by participants that might increase acceptability (ES21b) in the evidence review on lower SES groups (see Appendix 1).

If we can take Health Trainers as a proxy for lay-workers in general, then there are some issues that have been addressed in terms of relating to the target audience, such as language, religious/cultural sensitivities, family influence, social norms and habits.

## **5.5 How issues raised in the evidence have been addressed in practice**

From limited evidence of practice from seven PCTs across the UK, it appears that some of the potential barriers to intervention implementation and behaviour change are being addressed in the design or following some evaluation of initiatives. However, as with all interventions that seek to bring about a lifestyle change, sustainability is important and long-term follow-up needs to be undertaken to gauge how sustainable various lifestyle changes are.

There was evidence from the evidence review on low SES groups that nutritional knowledge in low-income groups was mixed (ES18); this is reported to be addressed using Health Trainers, who improve access or provide information to local communities. Practical demonstrations, for example in shopping and cooking, were being carried out in the community, which encourages small steps in behaviour change (ES21b; see Appendix 1). Three initiatives were addressing the desire for free, flexible classes; one was recruiting women health professionals to increase acceptability of a diabetes awareness event.

Only one initiative encouraged lay community members to carry out interventions; this was identified as being a facilitating factor in the evidence review on low SES groups (ES21b). The link between interventions and social interaction was a common theme in the reviews; in three initiatives health trainers/taxi drivers were engaged in providing information on, or actively engaging the target audience in social interaction (ES21c). Empowerment of the client to bring about their own health improvement was an aim of two initiatives, linking these to ES23a. In addition, changes in current lifestyle were encouraged in three initiatives – this had been a barrier in the evidence review on low SES groups (ES27). Health Trainers in three initiatives had knowledge of local facilities that could be passed on to clients (ES29) (see Appendix 1).

In the evidence review on BME groups, cultural sensitivity was a major issue for intervention implementation. This was addressed in four practice initiatives to some extent by addressing the particular needs of clients (ES2). Increased information was cited as a suggested facilitator for BME groups (ES6b), and this appears to have been addressed in two initiatives in which health trainers and taxi drivers encouraged learning about diabetes-related risk factors. Two initiatives addressed language barriers (ES6c) by providing leaflets in relevant community languages, or a trainer fluent in the client language. Again, three initiatives addressed access to relevant facilities by providing information (ES7) (see Appendix 1).

The evidence review on awareness raising highlighted the difficulty of identifying high risk groups (ES2). Five of the practice initiatives utilised lay members of the community, for example health trainers and taxi drivers, to access and identify individuals within at-risk communities. The issue of health professionals being aware of cultural and religious norms (ES3) was addressed by utilising members of the community to access clients. Most of the initiatives were based on training lay members of the target community to engage with at risk groups. This facilitator was highlighted in ES6 of the evidence review on awareness raising (see Appendix 1).

Some of the barriers and facilitators highlighted within the three reviews were not reported as being addressed by the initiatives. However, as reporting was brief, it may be that these issues are being addressed but have not been identified in available literature. Such issues were the communication skills of lay workers (S20) and confused health-related messages (ES24a) from the evidence review on low SES groups, although it is possible that messages would be clarified during information-giving by health trainers and taxi drivers. Affordability was a debateable point in the reviews in relation to food access (ES28) in the same evidence review, although it was fairly clear that the cost of carrying out organised physical activity was reported as being prohibitive for some groups. This concern was not addressed in available literature and information on practice initiatives.

Other issues that appear not to have been discussed in the literature are the effects of social norms and family on behaviour change ideals (ES30 in the evidence review on low SES groups; ES8 in the evidence review on BME groups), although taxi drivers in Sheffield were talking to their families about healthy eating. Issues of identity (ES5), health professionals' potential lack of Islamic teaching (ES3) and body image issues (ES9) in the evidence review on BME groups, particularly the differences in perceptions of a 'normal' body size between different groups, were not mentioned in this literature. The apparent duality of discourses that were expressed by health professionals in one study in terms of health promotion for at risk groups (ES4) in the evidence review on awareness raising was perhaps not likely to be addressed since the case study initiatives mainly involved lay workers.

## **5.6 Conclusions**

This review of largely grey literature and PCT programme reports confirmed the DiabetesE finding that many PCTs are already delivering interventions that target communities at increased risk of diabetes. Common approaches, as illustrated by the seven case studies, utilised a health trainer model or targeted specific occupational groups. There is some evidence that interventions involved community engagement and were tailored to local circumstances, and that 'word of mouth' seemed to be more effective than posters and leaflets in engaging the local community. However, more attention could be paid to ensuring barriers to participation are directly addressed, and that there is robust evaluation of the impact and outcomes of projects. Evaluation of projects is particularly important when assessing the effectiveness and cost-effectiveness of initiatives in order to develop public health guidance.

## 6. REFERENCES

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## 7. APPENDICES

### Appendix 1: How issues raised in the evidence reviews have been addressed in practice

Issue	SES – Blackpool PCT	SES – Manchester PCT	SES – Gateshead PCT	BME – Bradford PCT	BME – Lambeth PCT	BME – Leicester City PCT	BME – Sheffield PCT
Review 1, ES18: <b>nutritional knowledge in low-income groups</b> is mixed in terms of content, and by demography	Health Trainers provide information on healthy eating and associated local events	Health Trainers improve access to information and one-to-one support around food, diet and nutrition		Diabetes awareness events were held to encourage people to reduce the risks of developing diabetes, including learning more about the nutritional value of food	Health trainers provide nutrition advice		Taxi drivers recruited as health champions bring more fruit to work and encourage their colleagues to do the same
Review 1, ES20: a good method of raising awareness of interventions appears to be <b>word of mouth</b>							Taxi drivers recruited as health champions
Review 1, ES21a: interventions were <b>more acceptable where key workers possess the appropriate attributes</b> , such as empathy, trustworthiness and communication skills							
Review 1, ES21b: <b>acceptability of interventions</b> can be increased by using <b>practical demonstrations and behaviour change taken in progressive small steps</b>		Health Trainers can provide support by escorting people to the shops to buy healthy food	In one area Health Trainers run a self-help group offering support and advice on weight	The management and workers of a local taxi company suggested a weight management			



Issue	SES – Blackpool PCT	SES – Manchester PCT	SES – Gateshead PCT	BME – Bradford PCT	BME – Lambeth PCT	BME – Leicester City PCT	BME – Sheffield PCT
			management, recipe swaps, gym circuit and Wii fit	group with their drivers that included cook and eat sessions			
Review 1, ES21b: <b>suggestions by participants that might increase acceptability</b> included women-only (and/or single-gender) classes, more activities at weekends to fit in with other commitments, free sessions, free child-care, free food, individual and group tailored recipes and useful enjoyable activities	Health Trainers provide information on free local activities; meetings are flexible			The evaluation of the diabetes awareness events suggested the need to have female health professionals on hand to give advice		The patient participation group met on the day and at the time that best suited most people	
Review 1, ES21b: <b>interventions delivered by community members rather than health professionals</b> tended to encourage community participation and meet local needs with an open and holistic agenda							Taxi drivers were recruited as health champions and agreed to pass on their skills to other taxi drivers
Review 1, ES21c: <b>acceptability of interventions</b> that aim to change behaviour can be enhanced by the added value of <b>social inclusion and social interaction</b>	Health Trainers provide information on social events		Health Trainers run a support group				Taxi drivers passed health promotion messages on to colleagues, family and friends through social interaction
Review 1, ES21d: interventions aimed at raising awareness of healthy behaviours are more acceptable when they are <b>made appropriate to the target audience and have a positive image</b>							Health promotion strategies targeted specifically at Asian taxi drivers
Review 1, ES23a: to increase access, health		Health	Health				

Issue	SES – Blackpool PCT	SES – Manchester PCT	SES – Gateshead PCT	BME – Bradford PCT	BME – Lambeth PCT	BME – Leicester City PCT	BME – Sheffield PCT
professionals reported that <b>local activities need to be affordable, appropriate, avoiding stigmatisation, with a wide variety of activities</b> (in physical activity interventions), some of these being <b>free or low cost, with the aim of ‘empowerment’ rather than ‘health improvement’</b>		Trainers’ role is to structure a series of discussions to empower the client to develop and use skills to regulate their own behaviour	Trainers enable clients to identify an area of change that will bring about a healthier lifestyle and improve their general well-being				
Review 1, ES24a: <b>information-related barriers</b> to adopting a healthy lifestyle included a sense of information bombardment, confused messages, distrust of information sources and lack of clarity in information presented (e.g. due to scientific language, complex messages)		Trainers’ role is to structure a series of discussions to empower the client to develop and use skills to regulate their own behaviour					
Review 1, ES25: <b>existing attitudes towards health and health-related messages</b> can be a factor in lifestyle change, including the perceived role of genetic factors and perception of the 5-a-day campaign as impractical or a joke		The first assessment session with a Health Trainer includes a review of the person’s opinion of their current general health, well-being and health goals					
Review 1, ES26: <b>perceived skills and capabilities</b> (e.g. for physical activity or cooking) can be linked to motivation; enhancing skills and peer or family support can be used to increase motivation							

Issue	SES – Blackpool PCT	SES – Manchester PCT	SES – Gateshead PCT	BME – Bradford PCT	BME – Lambeth PCT	BME – Leicester City PCT	BME – Sheffield PCT
Review 1, ES27: <b>current lifestyle</b> can be a barrier to adopting healthy lifestyle behaviours, in particular commitments and responsibilities, a belief that exercising around the home is sufficient, lack of time around work or childcare, stress, comfort eating, being stuck in a rut, embarrassment about doing physical activity and depression.	Meeting with the Health Trainer & timing of the programme are flexible to suit individuals' needs						Taxi drivers recruited as community champions encourage colleagues to take more fruit to work and lead by example
Review 1, ES28: <b>affordability</b> (including cost of food, transport and facilities) can also be a barrier to lifestyle behaviour change, but can potentially be addressed using budgeting as a topic in nutrition education programmes and exercise referral schemes							
Review 1, ES29: <b>environmental factors</b> can be a barrier to behaviour change, including a perceived lack of local amenities for food shopping and fear of crime, dark evenings and weather (relating to physical activity outdoors)	Health trainers provide information on local facilities	Health Trainers have a very good knowledge of facilities and services in different communities	Health Trainers have knowledge and experience of the area they work in				
Review 1, ES30: <b>behaviour change is influenced by preferences, social norms, habitual behaviours and the needs and preferences of family members</b> , such as viewing 'bad' food as a treat and 'good' food as boring, traditional food tastes and preferences, preferences of men for being overweight rather than 'thin', influence of parents in cooking and habits in shopping and living alone, which reduced motivation for cooking healthily		Health Trainer reported that all were enjoying their new lifestyles, were self motivated and could not imagine returning to their old, unhealthy habits					Taxi drivers had passed on positive health changes to their family members
Review 2, ES2: <b>acceptability of lifestyle change interventions</b> can be increased by	Meeting with the Health	The approach is person-centred		Future information	Based on a coaching	The group had persuaded	Health promotion

Issue	SES – Blackpool PCT	SES – Manchester PCT	SES – Gateshead PCT	BME – Bradford PCT	BME – Lambeth PCT	BME – Leicester City PCT	BME – Sheffield PCT
raising the cultural sensitivity of delivery (e.g. avoiding Ramadan in the timing of delivery, separate sessions for men and women), flexible timing of interventions, bilingual staff, learning to cook traditional foods in a more healthy way, including free food, timing classes to suit childcare, better transport and local access, less loud music or inappropriate TV programmes in gyms and providing the opportunity for social interaction	Trainer & timing of the programme are flexible to suit individuals' needs	with the aim being for the client to make their own decisions		sessions held in the local mosque will include a female health professional for women to talk to	model, Health Trainers encourage and motivate people who are ready to make lifestyle changes	local temples to cook using less salt and fat	strategies designed specifically for Asian taxi drivers
Review 2, ES3: <b>lack of understanding between professional and lay groups in terms of Islamic teaching</b> and its relation to healthy lifestyle practices can be a barrier to health promotion, including communication difficulties arising from health literacy deficiencies in lay Bangladeshi people and cultural sensitivity deficiencies in professionals							
Review 2, ES4: change is more likely when people believe they have some <b>degree of religious free will</b> , with a responsibility to attempt to maintain good health and wellbeing							
Review 2, ES4: healthy activities can be acceptable provided they <b>do not include aspects that conflict with religious teachings</b>				Links were developed with the local mosques and Imams, and a diabetes display with leaflets and information was put up at the mosques			
Review 2, ES5: <b>cultural influences and issues of identity can be barriers to</b>							

Issue	SES – Blackpool PCT	SES – Manchester PCT	SES – Gateshead PCT	BME – Bradford PCT	BME – Lambeth PCT	BME – Leicester City PCT	BME – Sheffield PCT
<b>lifestyle change</b> , for example placing less value on fruit and vegetables, or health enhancing behaviours being regarded as ‘separate’ to routine							
Review 2, ES5: <b>cultural influences and issues of identity can be facilitators of lifestyle change</b> , for example eating fruit and vegetables seen as relatively cheap, easily incorporating vegetables into daily cooking, the belief that certain vegetables can prevent ill health, the belief that expending sweat is important for well-being and health enhancing behaviours being regarded as ‘integral’ to routine							
Review 2, ES6a: high <b>knowledge levels do not always translate to practice</b> in terms of healthy lifestyle		Health Trainers encourage goal-setting and support people in adopting recommended behaviours					
Review 2, ES6b: South Asian people in the UK would appreciate <b>increased information on risk factors, advice and encouragement</b> in order to motivate and sustain behaviour change				Diabetes awareness events were set up to encourage more people to learn about diabetes, how it can be prevented (through taking more exercise or learning more about the nutritional value of food)			Advice and encouragement offered through using taxi drivers as health champions

Issue	SES – Blackpool PCT	SES – Manchester PCT	SES – Gateshead PCT	BME – Bradford PCT	BME – Lambeth PCT	BME – Leicester City PCT	BME – Sheffield PCT
				and to assess people for diabetes risks			
Review 2, ES6c: a <b>limited command of the English language</b> is a barrier to accessing information, as well as activities and shopping facilities outside the neighbourhood				One lessons learnt was to have some of the information leaflets translated into relevant community languages i.e. Eastern European & some Asian languages	Where possible a client is provided with a Health Trainer who can speak their language		
Review 2, ES7: <b>access and affordability</b> could be a barrier to healthy behaviours, for example lack of availability and high price of traditional fresh foods, lack of transport, not being able or willing to walk, having conflicting family commitments, ill health, cold weather and fear of walking alone	Health trainers provide information on local facilities	Health Trainers have a very good knowledge of facilities and services in different communities	Health Trainers have knowledge and experience of the area they work in				
Review 2, ES8a (Diet): <b>social norms and traditions</b> could be a barrier to health behaviour change, for example traditional South Asian cooking is associated with a high usage of fat, particularly during special occasions, Somali cooking is associated with high meat and low fruit and vegetable content, women from Zimbabwe were not used to cooking for themselves and it was seen as time consuming						The group had persuaded local temples to cook using less salt and fat	Taxi drivers had passed on positive health changes to their family members
Review 2, ES8b (Physical activity): <b>social norms and traditions</b> In South Asian groups, physical activity was perceived as a part of normal life and that there was little							Some taxi drivers had increased their physical

Issue	SES – Blackpool PCT	SES – Manchester PCT	SES – Gateshead PCT	BME – Bradford PCT	BME – Lambeth PCT	BME – Leicester City PCT	BME – Sheffield PCT
time for formal or ‘separate’ sessions, due to work or childcare commitments especially for women vigorous activity such as aerobics was not acceptable to some South Asian participants (particularly females, due to concerns over modesty) and the notion of perceived shame associated with choosing healthier options (e.g. low fat in cooking, particular physical activities that involve certain dress codes) was seen as more important than the benefits of a healthy lifestyle							activities
Review 2, ES9: <b>body size</b> can be positively or negatively associated with health and attractiveness, and attempting to reach an ideal body size can be a strong motivator for behaviour change							
Review 3, ES2: <b>Identification of high-risk groups can be problematic</b> ; this may be done at community events or by word of mouth, but the process of identifying and referring high-risk patients to an exercise referral scheme in primary care varied between practices and appeared largely serendipitous		The Health Trainers are based with different services across the city and a person can be referred by an agency or make a self referral to a Health Trainer		One of the aims was to connect with individuals and with individuals and communities who do not engage with health professionals in a proactive manner	Health Trainers offer backing to the most disadvantaged and those who have difficulty accessing services, and anyone over 18 can see a health trainer for free by calling or emailing the service to make an appointment	The PCT identified people to attend the patient participation group by sending someone to talk to patients in the waiting room of the GP practice each day	Identification of high-risk groups through using Asian taxi drivers as health champions
Review 3, ES3: in order to be able to empower high risk groups to make choices about adopting healthy lifestyles, <b>health professionals require a deep understanding of the cultural and religious beliefs and economic influences</b>	Health trainers are recruited locally	65% of Health Trainers are originally from the community in which they worked and	Health Trainers are “local people, with knowledge and experience of				

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within the communities with which they are working, including a need for practitioners to take into account the realities of the people they are aimed at		have a very good knowledge of facilities and services in different communities	the area they work in” (according to the website)				
Review 3, ES4: the <b>tension between the two discourses</b> of the philosophy of holism taught in training and personal values may need addressing when practicing health promotion in a culturally sensitive way							
Review 3, ES6: the training of <b>lay workers to identify and disseminate health promotion messages</b> to members of their community is a way of reaching hard to reach and high risk groups (for example by creating lists of contacts within the community and introducing themselves to those on the list), and lay workers can deliver health messages in a culturally sensitive way in an appropriate language, making complex messages more credible	Health Trainers are recruited locally and have a stake in improving the health of their community, working with those hard to reach	The Health Trainers are local people who want to support others to improve their health and provide personalised support to others within the communities, enabling those most at risk of ill health to access a healthier way of life	Health Trainers are local people with knowledge and experience of the area they work in, who are able to offer personal support and put clients in touch with other services, community groups and projects		Health Trainers to share their knowledge with the people in the local community		Asian taxi drivers were trained as health champions (2-day training course) to reach peers, colleagues and family
Review 3, ES7: <b>key facilitators to reaching high-risk groups using lay workers</b> included peer education within a range or organised community events, fostering a team spirit and sharing experiences, although lack of time for lay workers could be a barrier							



## Appendix 2: Website addresses of Hyperlinks

### **Blackpool Health Trainers webpage**

<http://www.blackpool4me.com/Blackpool4Me/Health/Education/BlackpoolHealthTrainers/>

### **Bradford diabetes awareness webpage**

<http://www.bradfordairedale-pct.nhs.uk/NR/exeres/5AEC1662-EBAC-4B0F-B51F-E0507D8D182B.frameless.htm?NRMODE=Published>

### **Executive summary of Manchester Community Health Trainers report**

<http://www.manchesterpublichealthdevelopment.org/mphds/download-files/pdf/health-trainers/2007/MCHT Recruitment Process Executive Summary.pdf>

### **Gateshead Health Trainers webpage**

<http://www.gateshead.gov.uk/Care and Health/CommunityHealth/healthtrainers/home.aspx>

### **Health Profiles**

<http://www.apho.org.uk/default.aspx?RID=49802>

### **Humberstone Patient Participation Group webpage**

<http://www.the-hmc.co.uk/other/patients-participation-group/>

### **Lambeth Health Trainers webpage**

<http://www.lambethpct.nhs.uk/documents/2612.pdf>

### **Lambeth Health Trainers support webpage**

<http://www.nhs.uk/lambeth/healthtrainers/Pages/Getafreehealthtrainer.aspx>

### **Leicester City PCT peer review document**

[http://www.raceforhealth.org/storage/files/Leicester\\_Outcome\\_Paper.pdf](http://www.raceforhealth.org/storage/files/Leicester_Outcome_Paper.pdf)

### **Manchester Health Trainers webpage**

<http://www.manchesterpublichealthdevelopment.org/mphds/health-trainers/health-trainers.html>

### **Public Health Annual Report for Blackpool**

<http://www.blackpool.nhs.uk/index.php/news-publications/latest-publications/>

### **Public Health Annual Report for Bradford**

<http://www.bradfordairedale-pct.nhs.uk/NR/rdonlyres/A0BA3BBC-A7AD-4B00-83D0-FA43C129B8E5/76101/PublicHealthReportWEBch2.pdf>

### **Public Health Annual Report for Gateshead**

<http://www.sotw.nhs.uk/aboutus/aboutus.aspx?id=460&terms=publications>

### **Public Health Annual Report for Lambeth**

<http://www.lambethpct.nhs.uk/documents/2612.pdf>

### **Public Health Annual Report for Leicester**

<http://www.phleicester.org.uk/Documents/AR2007/DPHAR07fullcopy.pdf>

### **Public Health Annual Report for Manchester**

[http://www.manchester.nhs.uk/document\\_uploads/Board%207%20April%202010/Manchester%20Public%20Health%20Annual%20Report%202009%20\(2\).pdf](http://www.manchester.nhs.uk/document_uploads/Board%207%20April%202010/Manchester%20Public%20Health%20Annual%20Report%202009%20(2).pdf)

### **Public Health Annual Report for Sheffield**

<http://www.publichealthsheffield2008.nhs.uk/>

**Sheffield Cab project overview webpage**  
<http://www.cieh.org/ehn/ehn3.aspx?id=30344>

**Sheffield Taxi Drivers project webpage**  
<http://www.sheffield.nhs.uk/news/cabbies291009.php>