FORMATIVE EVALUATION OF THE
HEALTH TRAINER COMMUNITY HEALTH
CHECK SERVICE IN COUNTY DURHAM

November 2012

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Executive Summary

Background
Cardiovascular disease (CVD) is the leading cause of death in the UK; tackling CVD is therefore a key national and regional priority for improving health. The health of people in the north east is generally worse than for England as a whole, with the worst levels of deprivation and lowest life expectancy. County Durham in particular includes many areas experiencing multiple deprivation, and premature mortality rates for the ‘biggest killers’ (heart disease, cancer and stroke) are worse locally than for England as a whole. The national prevention strategy for CVD centres on the NHS Health Check Programme, which involves offering a primarily primary care based vascular risk assessment to those aged between 40 and 74 years without established CVD. Recent modelling studies suggest the programme is likely to be cost-effective if targeted at high risk groups.

County Durham and Darlington NHS Foundation Trust has been commissioned by Durham County Council to deliver a community health check (CHC) service. The remit of the service involves recruiting and training health trainers to identify those at moderate risk of CVD – using the full health check and mini health MOTs – and then deliver tailored lifestyle interventions to reduce that risk. Socioeconomic deprivation is associated with a higher risk of cardiovascular mortality, yet response rates for screening programmes tend to be low in deprived areas. The health trainer CHC service was designed to target people who would not usually access screening and offer them support to improve their heart health, thereby addressing health inequalities.

Evaluation Design
A mixed method design was used to evaluate the implementation and acceptability of this innovative service during its first six months of operation (January – June 2012). The three elements of this formative evaluation were as follows:

i) Secondary analysis of quantitative monitoring data from 774 clients who had received a mini health MOT. Descriptive and summary statistics were produced to highlight the baseline characteristics of the client population.

ii) Interviews and focus groups with a purposive sample of 20 stakeholders who commission, deliver or receive support from the service. A thematic content analytical approach was used to analyse all transcripts and fieldnotes.

iii) Secondary analysis of summary data from patient experience questionnaires completed by 181 clients. These data were collated using Survey Monkey.
Findings
Key findings are presented below, divided into sub-sections corresponding to the three elements of the evaluation design described on the previous page.

Baseline characteristics of the service user population
Of the 774 clients who received a mini health MOT between January and June 2012, a total of 239 were assessed as being eligible for a full health check and 101 went on to receive the health check during this period. The mini MOT was most likely to attract women (62% of clients), people living in areas of multiple deprivation (60%), and those under the age of 50 (58%). However, men (47%), those living in more affluent areas (56%) and people who are overweight or obese (67%) were most likely to take up the offer of a full health check. Of those identified as meeting the eligibility criteria, 59% of men went on to receive a health check, in comparison with 34% of women. The majority of women were identified as being at low risk of CVD (69% compared with 45% of men), whereas one in six men were found to be in the high risk category (17% compared with 9% of women). None of the health check recipients were from a minority ethnic group.

Feedback from staff and key stakeholder discussions
The health trainer CHC service was described as resulting from shared objectives between the NHS and local authority around improving heart health and reducing health inequalities. There was a perception amongst commissioners that the primary care based health check programme had not been effective in reaching certain sub-groups within the local population. The approach of offering mini health MOTs in the community and in workplaces was perceived to be more successful in engaging these target groups. However, similar checks are offered by a range of providers and there was some concern amongst the health trainers that this could result in a duplication of effort. They also reported concerns that the time lag between conducting a mini health MOT and arranging a full health check resulted in a loss of motivation for clients and contributed to difficulties in meeting their targets. For those who do receive a health check, the health trainers were felt to offer added value in terms of taking the time to explain and interpret the results. The service was felt to have raised awareness of health issues and provided peace of mind for clients, who may go on to make lifestyle changes.

Results of the patient experience questionnaire
These results must be treated with some caution because the patient experience questionnaires are completed following a mini health MOT conducted by one of several providers. Therefore, they do not relate specifically to the CHC service. However, the majority of respondents had received a mini MOT either from a CHC health trainer (41%) or some combination of CHC health trainers, core health trainers and members of the 'Get Active' physical activity team (32%). Most respondents had received the mini MOT at a community event or in their workplace, rather than at a roadshow or by being
an existing health trainer client. The top three reasons for deciding to have a mini MOT centred on being worried about their health (25%), taking the opportunity to have their health checked out (25%), and being told about the service by staff when they arrived at the venue (23%). All of the respondents agreed that the staff were friendly, made them feel comfortable and explained everything to them in an understandable way. Overall, more than 99% of those who received a mini health MOT were satisfied with the service they received and the same proportion said they would recommend it to other people.

Discussion
The findings of this evaluation suggest that the health trainer community health check service in County Durham has been implemented successfully and is perceived as being an acceptable way of increasing coverage of the NHS Health Check Programme. Previous research on similar interventions supports the idea that taking CVD screening to suitable venues within the community can be effective in increasing coverage amongst the target groups. Much of the ongoing debate around health checks centres on whether population-wide or targeted approaches to CVD screening are more effective and cost-effective. The CHC service combines both approaches in an effort to improve population health and address health inequalities as part of a bipartite prevention strategy. There are a number of limitations to this evaluation, one of which involves gaps and suspected recording errors in the quantitative monitoring data. Another is the relatively small, non-representative sample of staff and key stakeholders who took part in the qualitative element of the evaluation. In spite of these limitations, we assert that the chosen methodology allowed for the collection of data of sufficient depth to address the aim and objectives, and enabled us to highlight a series of implications for practice and future research on the subject of cardiovascular health checks.
Contents

Executive Summary 2
Contents 5
Background 6
Evaluation Design 11
Findings I: Baseline Characteristics of the Service User Population 17
Findings II: Feedback from Staff and Key Stakeholder Discussions 26
Findings III: Results of the Patient Experience Questionnaire 40
Discussion 45
Appendices: 54
Appendix A: Focus Group and Interview Topic Guides 54
Appendix B: H-diagram for Completion by Core Health Trainers 55
References 56

Acknowledgements

We acknowledge the support and assistance of County Durham and Darlington NHS Foundation Trust, which enabled us to undertake this study. We express our grateful thanks to those participants who gave up their time to take part – we hope we have represented their views with fairness. Funding for this evaluation was obtained from the Higher Education Innovation Fund (HEIF) provided by Northumbria University.
Background

This report details an evaluation of the first six months of operation of an innovative health trainer service implemented in County Durham, northern England. The remit of the service primarily involves conducting NHS health checks and mini health MOTs in the community, to identify those at moderate risk of cardiovascular disease. This chapter sets out the local and national policy and research context for the service.

Policy and Research Context

The UK is in the midst of major public sector reform, involving significant changes to the structure of public health in England and new powers allocated to local government to address health priorities (Department of Health, 2010a; 2012). This is in line with the ‘Big Society’ policy idea, which aims to create an environment that empowers local people and communities to take an active role in society (Conservative Party, 2010). At the same time, there is a growing emphasis on the influence of individual behaviours in the aetiology of lifestyle diseases and in their contribution to persistent social inequalities in health. Current policy rhetoric suggests that individuals should be encouraged to ‘choose health’, while paradoxically recognising that disadvantage restricts choice and limits opportunities for those in the poorest health (Department of Health, 2004; 2010b). Recent analyses of data from the Health Survey for England have demonstrated that the overall proportion of the population engaging in at least three of four key unhealthy behaviours (smoking, excessive alcohol use, poor diet and low levels of physical activity) declined from around one-third to one-quarter between 2003 and 2008 (Buck & Frosini, 2012). However, these reductions mainly occurred among those in higher socio-economic and educational groups. In contrast, people with no qualifications were more than five times as likely as those with higher education to engage in all four unhealthy behaviours in 2008, compared with only three times as likely in 2003. As a result, the health inequalities gap in the UK continues to widen.

One potential solution has been to recruit and train individuals from less affluent communities to offer personalised advice and support to their peers. This is supported by communication theory, which suggests that people are more likely to adopt innovations or practices if they are delivered by someone similar to the audience (but with greater prestige) and reinforced by peer pressure and support (Foulger, 2004). Peer- or lay-led intervention models are perceived to be a cost-effective strategy in healthcare environments that are challenged by limited financial and human resources. These interventions have the potential to address key issues such as the need to care cost-effectively for expanding populations with chronic illness, enhance the equity of service provision and ensure compliance with treatments (Lorig, 2002; Donaldson, 2003). In England one example of this type of peer or lay health adviser role is the NHS health trainer (Department of Health, 2005). The role was launched in 2005 and set out...
to empower people to change their health-related behaviours by widening access to appropriate health information and services, and by offering practical support from someone who understands the pressures and problems they face. Health trainers were initially launched in the most health-deprived areas in England in 2006, before being rolled out across the country in 2007, in order to have the greatest impact on health inequalities. By 2009, over 90% of primary care trusts (PCTs) had implemented a health trainer service and more than 3,100 individuals had commenced or completed the accredited training programme (Department of Health, 2009).

Lay health adviser roles similar to health trainers have been used widely both in developed and developing countries. Although there is some data to support their efficacy, reviews of the research literature have consistently found insufficient evidence to assess which lay-led strategies are likely to be most effective and whether such approaches can be cost-effective (Lewin et al., 2005; Viswanathan et al., 2009; Carr et al., 2011). Furthermore, there tends to be a lack of rigorous qualitative research exploring key stakeholder views and perceptions. We – the evaluation team – have sought to address some of the gaps in the existing literature by generating knowledge of the NHS health trainer role and its potential impact on individuals and communities. For example, all team members were involved in an evaluation of the implementation of health trainers in the north east (Visram et al., 2006), as well as a large-scale evidence synthesis to explore the effectiveness and cost-effectiveness of different types of health-related lifestyle advisor (Carr et al., 2011). A national evaluation of health trainers is pending but there remains a need for in-depth work conducted locally to inform service development, delivery and appropriate monitoring and evaluation frameworks. Various health trainer models have emerged in response to particular local circumstances; the components of these models need to be described and there needs to be an understanding of the underlying mechanisms by which they influence outcomes. This is consistent with the development phase of the Medical Research Council’s (MRC) framework for the evaluation of complex interventions (MRC, 2008).

**The NHS Health Check Programme**

The new health trainer service in Durham is part of the national NHS Health Check Programme, which aims to reduce the high prevalence and costs associated with cardiovascular disease (CVD), diabetes and kidney disease. CVD is the leading cause of death in the UK and socioeconomic deprivation is associated with a higher risk of cardiovascular mortality. Tackling CVD is therefore a key national and regional priority for improving health. In 1999, the Government white paper *Saving Lives, Our Healthier Nation* set a target of reducing CVD mortality by 40% by 2010, primarily by reducing risk factors at the population level (Department of Health, 1999). Subsequent legislation resulted in a national ban on smoking in public places. In 2000, the National Service Framework for Coronary Heart Disease (CHD) outlined 12 standards central to the effective management of CHD, including the offer of appropriate advice to people at
significant risk of CHD but who have not yet developed the disease (Department of Health, 2000). However, it was not until 2008 that the Department of Health established a national prevention strategy. Implementation of the strategy, which was named the NHS Health Check Programme, began in April 2009, with full implementation planned for 2012-13 (Department of Health, 2008b). The programme set out to offer a primary care based vascular risk assessment to those aged 40 to 74 years without established CVD, relying on the assumption that the excluded disease groups already receive optimal CVD risk management through other care pathways (Dalton & Soljak, 2012). The setting of the NHS Health Check is flexible, as long as minimum quality criteria are met (Department of Health, 2008c). Most health checks are carried out in general practice but PCTs frequently provide additional community-based services, for example, in pharmacies, to improve the programme’s outreach.

The NHS Health Check Programme has three core components: the assessment, communication and management of CVD risk (see fig. 1). Risk assessment comprises the recording of demographic characteristics and anthropometric and clinical data relating to CVD risk for all eligible patients. Blood glucose tests and serum creatinine tests must also be carried out for patients considered to be at high risk of diabetes and kidney disease. A CVD risk score is then calculated using either the Framingham score modified for European populations or QRISK2, a score based on a large UK primary care database (Dalton & Soljak, 2012). Following risk assessment, there are three flows of patients through the system. If they have preclinical symptoms of disease, they are referred to general practice for formal diagnosis and enter established care pathways. If they are identified as high risk (i.e. at 20% or more 10-year risk), they are also referred to general practice and become eligible for the prescription of statins. The remainder of the population (i.e. those with low to moderate risk, <20%) is managed within the programme, either with a brief lifestyle intervention or with signposting to other local services for more intensive intervention. Examples include weight management programmes, exercise interventions and stop smoking services.

It has been estimated by the Department of Health that if there is universal uptake across the country, the programme could prevent 9,500 cardiovascular events (myocardial infarctions and strokes) and 2,000 deaths each year (Department of Health, 2008b). The programme is also predicted to be cost-effective, with an estimated cost of £3,000 per quality-adjusted life-year (Department of Health, 2008a). However, strategies to identify and manage CVD risk have never been implemented on this scale, and estimates of effectiveness and cost-effectiveness rely on modelling studies (Department of Health, 2008a; Khunti, 2011). A number of trials testing strategies to reduce the risks of CVD in general practice populations have not shown any benefit in terms of ‘hard’ outcomes, for example, a reduction in smoking or excessive drinking (Multiple Risk Factor Intervention Trial research group, 1981; Haq, Yeo & Jackson, 1995; Toon, 1995). This links to wider debates regarding the emphasis on recognition of risk factors rather than measurable behaviour changes, the effectiveness of individual
versus population-level approaches, and involvement of clinicians in prevention activities that divert attention away from treatment (Rose, Khaw & Marmot, 2008; Khunti, 2011; Dalton & Soljak, 2012). Concerns have already been raised regarding the level of uptake of the health checks and associated lifestyle interventions. The Department of Health cost-effectiveness modelling assumes a 75% uptake but a pilot in one region reported response rates of 29%, with even fewer attending for follow-up (Department of Health, 2008a; Richardson et al., 2008). In general, response rates for screening programmes are low in areas of socioeconomic deprivation and therefore there is the potential to widen health inequalities. However, recent modelling studies suggest the NHS Health Check programme is likely to be cost-effective if targeted at high risk groups (Khunti, 2011). Community-based approaches may be successful in engaging with these groups, as well as relieving some of the pressure on primary care. Robust evaluation of these approaches is needed to assess the reach of the programme and determine whether it may help to reduce or exacerbate inequalities.
Local Context

The health of people in the north east is generally worse than for England as a whole, with the worst levels of deprivation and lowest life expectancy (NEPHO, 2011). County Durham in particular includes many areas experiencing multiple deprivation. Overall, almost half of the county’s population lives in relatively deprived areas, although there is a great deal of local variation. For example, 74% of lower super output areas (LSOAs) in East Durham are in the most deprived 30% nationally, compared to 27% in Durham & Chester-Le-Street (Durham County Council & NHS County Durham, 2012). Life expectancy for men living in the most deprived areas of County Durham is over 6 years lower than for men living in the least deprived areas. For women the gap is almost 5 years. Premature mortality rates for the ‘biggest killers’ (heart disease, cancer and stroke) are worse locally than for England as a whole. Between 2008 and 2010, CVD and cancer accounted for 65% of early or premature deaths in County Durham (Durham County Council & NHS County Durham, 2012). Smoking remains the biggest single contributor to the reduced life expectancy experienced locally. There have also been local increases in admissions to hospital for alcohol-related harm, levels of childhood obesity, and numbers of people diagnosed with diabetes (APHO, 2012).

Durham County Council commissioned a new service to be delivered by County Durham and Darlington NHS Foundation Trust. The remit of the health trainer community health check (CHC) service involves conducting NHS health checks and mini health MOTs\(^1\) in the community to identify those at moderate risk of CVD (between 10% and 20%) and delivering lifestyle interventions to lower that risk. The CHC service targets those aged 40 to 74 years who are generally considered ‘hard to reach’ by other services; therefore, there is the potential to address health inequalities as well as reducing CVD risk in the general population. This service is innovative in that it is designed to add value by offering an alternative to standard NHS health checks delivered through GP practices and pharmacies. Preliminary work undertaken by researchers at University College London suggests that health trainers are successful in engaging with people from socio-economically disadvantaged communities (Wilkinson et al., 2007). It is hoped that, by employing a community outreach approach, the health trainer CHC service will be effective in engaging with individuals who would not normally take up the invitation to undergo health screening. The service is also innovative in that it is at the forefront of the imminent move of public health to local authority settings, which provides a useful context for qualitative exploration of the acceptability of this new way of working.

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\(^1\) The mini health MOT involves taking the person’s weight and height, calculating their body mass index, and measuring their blood pressure. If they are found to be eligible, they are invited to undergo a full health check, which involves repeating the mini MOT and also having their cholesterol level measured.
Evaluation Design

The evaluation aim, objectives and methods are set out in this chapter, along with details of the sample and analytical procedures. Ethical issues are also considered.

Aim and Objectives

The aim of the evaluation described here was to investigate the implementation and acceptability of the health trainer community health check (CHC) service in County Durham. More specifically, the objectives were to:

1. Examine issues related to the development and establishment of the service, with particular reference to its integration (or otherwise) into the local public health system in County Durham
2. Explore the experiences of health trainers in joining the CHC service and delivering NHS health checks in local communities
3. Gather the views and perceptions of key stakeholders who have experience of commissioning, managing or working with the CHC service
4. Assess whether or not the service is perceived as having a positive impact in terms of health improvement and a potential reduction in health inequalities
5. Inform future development and evaluation of the health trainer CHC service in County Durham and the national NHS Health Check Programme

It was anticipated that this project would make a key contribution to future plans to conduct a definitive outcome evaluation of the CHC service and other health trainer-led activities. We set out to identify potential intervention outcomes, in preparation to test and then measure these outcomes, as part of a process consistent with the feasibility phase of the MRC framework for the evaluation of complex interventions (MRC, 2008).

Methods

The evaluation aim and objectives have been met using a mixed methods approach, enabling us to make use of existing quantitative monitoring data, as well as qualitatively exploring the experiences of those working with or for the CHC service. Multiple methods were used in order to effectively capture the views of all relevant stakeholders and also to enhance the reliability of the evaluation via the process of triangulation (Denzin, 1978). The two main components of the project are set out below.

i) Review of existing monitoring data

One member of the project team (SV) worked with County Durham and Darlington NHS Foundation Trust to review and analyse the (anonymised) quantitative monitoring data collected in relation to the health trainer CHC service. Three separate datasets were
deemed relevant to this evaluation (table 1). As far as possible, the information was collated into Excel spreadsheets and then converted into an SPSS database for analysis. Postcode data was used to derive a deprivation score for each client, based on the Indices of Deprivation 2007. It was not possible to access the raw data relating to the health checks as this is processed by an external agency (Health Diagnostics®). Instead, we were given a copy of their analysis report based on data collected from April to June 2012. This represents the first complete period of operation for the CHC health trainers, due to delays in accessing training and gaining the permissions necessary to be able to undertake full health checks. The health trainers were in post from January 2012 and able to undertake mini health MOTs from this point, therefore data from a larger population of clients is available from January to June 2012.

Table 1: Details of monitoring data collected in relation to the CHC health trainer service

<table>
<thead>
<tr>
<th>Dataset</th>
<th>Details</th>
<th>Period</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mini health MOTs</td>
<td>• Data collected by HTs during face-to-face meetings with all clients</td>
<td>Jan – Jun 2012</td>
<td>774</td>
</tr>
<tr>
<td></td>
<td>• Entered onto Excel spreadsheet by secretary within NHS Trust</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Demographic data: gender, age, ethnicity, postcode</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Health data: eligibility for health check, BMI (use to assess overweight/obesity), blood pressure (high/pre-high BP)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Signposting: to their GP (for high BP/BMI), health trainer, stop smoking, physical activity, healthy cooking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full health checks</td>
<td>• Data collected by HTs during face-to-face meetings with eligible clients</td>
<td>Apr – Jun 2012</td>
<td>101</td>
</tr>
<tr>
<td></td>
<td>• Uploaded and processed by external company (Health Diagnostics®)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Summary statistics on: gender, age, postcode, ethnicity, smoking status, alcohol, physical activity, BMI, waist circumference, BP, cholesterol, CVD risk score (by age and gender), referrals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient experience questionnaire</td>
<td>• Data collected via anonymous questionnaire following the MOT/health check (optional)</td>
<td>Jan – Jun 2012</td>
<td>181</td>
</tr>
<tr>
<td></td>
<td>• Entered onto Survey Monkey by secretary within NHS Trust</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Questions include: mode of access, reasons for attending, views on staff, level of satisfaction, gender, age</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Based on the original key performance indicators (KPIs) for the service, it was anticipated that baseline data from mini health MOTs could be available for up to 1,500 clients by the end of June. However, due to the aforementioned delays, the KPIs have since been revised. Furthermore, it was understood that the mini health MOT would be repeated with clients who had completed lifestyle interventions delivered by the CHC health trainers, to give before-and-after data on body mass index (BMI), blood pressure and behavioural risk factors. However, none of these clients had completed the intervention at the time of conducting the analysis. It has therefore not been possible to begin to formally assess any progress made by the health trainer CHC service towards health improvement or a reduction in health inequalities locally. Instead, analysing the available monitoring data has enabled us to describe the baseline characteristics of the client population and speculate on the likely impact of the service on lifestyle factors associated with CVD risk.

ii) Focus groups and interviews with key stakeholders
We engaged in a number of discussions with key stakeholders in the CHC service to gather their views and perceptions on what has worked well so far and what, if anything, could be improved. We were particularly interested in their views on the commissioning model (i.e. local authority-led) and how the service fits with other local health trainer services, as well as with GP-led health checks. Individual interviews were conducted with service leads and commissioners based in the NHS and local government to identify any development and implementation issues. We also interviewed a number of key stakeholders in workplaces, primary care and community settings to obtain their views on the acceptability of this new service. A semi-structured interviewing approach was used, whereby the researcher asks certain questions but is free to alter the sequencing and to probe for more information. This allows the participant to talk around a topic, thus exploring more dimensions of the phenomenon being studied than would otherwise be possible (Fielding, 1994). See Appendix A for details of the interview and focus group topic guides.

It was originally envisaged that separate focus group discussions would be conducted with the three health trainer teams in County Durham, to explore their views and experiences of the role and of working with local communities. Focus group interviewing is particularly suited to obtaining several perspectives on the same topic and enables participants to ask questions of each other, as well as to re-evaluate and reconsider their own understanding of their specific experiences (Morgan, 1997). This method was felt to be appropriate for use with staff who were already familiar with working together, and efforts were made to arrange the discussions around scheduled team meetings. However, we were informed that locality team meetings take place irregularly during the summer months and the larger monthly meeting (involving all three teams) generally has a full agenda. We were invited to present the evaluation at one of the whole team meetings, but there was insufficient time to conduct a focus group discussion. Instead, we offered attendees the option of re-arranging the focus
group or completing a type of simple survey called an H-diagram. This is a tool that is often used in participatory appraisal projects and helps individuals to record their views in a non-threatening, open but structured way (O’Hara, 2009). It involves a mixed method design that combines attributes of SWOT analysis with those of ranking exercises. See Appendix B for the diagram used in this evaluation. All members of the CHC health trainer team (n=5) chose to take part in a focus group, whereas others from the two core health trainer teams (n=4) completed the H-diagram in their own time and returned it to the evaluation team by post.

The preferred venue for the key stakeholder discussions was the participants’ workplaces, as conducting the research interaction with the ‘entity-in-context’ enables fullest understanding (Lincoln & Guba, 1985). However, the option of taking part in a telephone interview was also offered to those who agreed to take part in the evaluation. This method tends to have a high response rate, saves time and effort, and can be useful in geographically disperse populations such as those working in more remote areas of County Durham (Robson, 2002). Telephone interviews were conducted with 5 individuals, whereas the health trainer focus group and 6 individual interviews took place within the participants’ workplaces. All discussions were audio-recorded, with the participants’ informed consent, and transcribed verbatim to assist with analysis. Field notes were also written up after each interview and focus group and stored in a project file, along with copies of all communications and minutes of meetings.

**Sampling and Recruitment**

All health trainers and relevant service leads operating within County Durham were invited to take part in the evaluation. This constitutes a form of convenience sampling, which is an approach that is commonly used to assist in service development research (Robson, 2002). Other key stakeholders were identified using a combination of convenience and purposive sampling in order to develop variation and maximise the possibilities of obtaining leads for additional data (Lincoln & Guba, 1985). A list of relevant workplaces, community organisations, primary care and public health staff was developed based on suggestions from the service leads and their existing links with these teams/organisations. This approach may have increased the risks of bias associated with allowing the service leads to ‘cherry pick’ the other participants. However, these risks were felt to be counter-balanced by the need to access individuals who were aware of the health trainer CHC service and would be willing to participate in its evaluation. Involvement of the service leads may have also helped to enhance the acceptability of the evaluation by building on existing relationships and trust.

Information packs for potential participants were put together by the project team and distributed to the sample of staff and stakeholders, by email or in person as appropriate. The information packs contained an invitation letter addressed from County Durham and Darlington NHS Foundation Trust, along with an information sheet setting out the purpose of the evaluation and what their participation would involve. If they were
willing to take part, they were asked to contact the project team either to arrange a suitable date and time for an individual interview or to confirm that they would be attending a focus group at a specified time. Return of a completed H-diagram was taken as consent for this information to be used as part of the evaluation. Recruitment continued until all relevant stakeholder groups were represented in the sample (see table 2 below for an overview).

### Table 2: Characteristics of the key stakeholder sample

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender:</strong></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>12</td>
</tr>
<tr>
<td>Male</td>
<td>4</td>
</tr>
<tr>
<td>Unknown (gender was not included in the H-diagram)</td>
<td>4</td>
</tr>
<tr>
<td><strong>Role:</strong></td>
<td></td>
</tr>
<tr>
<td>Health trainer</td>
<td>9</td>
</tr>
<tr>
<td>Service recipient/workplace representative</td>
<td>5</td>
</tr>
<tr>
<td>Commissioner</td>
<td>3</td>
</tr>
<tr>
<td>Public health staff (including service leads)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Employer:</strong></td>
<td></td>
</tr>
<tr>
<td>NHS</td>
<td>15</td>
</tr>
<tr>
<td>Public sector (non-NHS)</td>
<td>4</td>
</tr>
<tr>
<td>Local government</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>20</td>
</tr>
</tbody>
</table>

### Ethical Considerations

Due to the nature of this work (i.e. the fact that it represents a service evaluation, rather than a research project), there was no need to seek approval from an NHS research ethics committee. However, one member of the evaluation team (SV) was required to obtain a research passport and letter of access to enable us to examine the monitoring data held by County Durham and Darlington NHS Foundation Trust. We received written confirmation from the Trust’s Research and Development Manager that this level of approval was sufficient to enable us to access their staff, premises and anonymised data collected during routine clinical care. The evaluation also received ethical approval from the School of Health, Community and Education Studies (HCES) Research Ethics Panel at Northumbria University.

All data relating to the evaluation have been treated as confidential by the evaluators and kept secure at all times in compliance with the Data Protection Act (1998). No person’s name or any information that could identify a particular individual will be used in published material from the evaluation. Participants were asked for their written consent to take part in the interviews and focus groups, have the discussions recorded and for the (anonymised) information to be used in any publications. Audio-recordings were transferred to a password protected computer and will be wiped after one year. Transcripts, field notes and other documentation relating to the participants will be
stored securely in a locked cabinet at Northumbria University and destroyed six years after the end of the evaluation, in line with University policy.

**Data Analysis**

The Statistical Package for the Social Sciences (SPSS) v. 19 was used to process quantitative data from the County Durham and Darlington NHS Foundation Trust monitoring database. Summary data obtained from the patient experience questionnaire (via Survey Monkey) and from the full health checks (via Health Diagnostics®) have been collated and examined using Microsoft Excel. Our intention was to perform appropriate statistical tests to identify any significant differences between those who are eligible and those who attend for a full health check. However, individual-level data were not available from Health Diagnostics®. Instead, various descriptive statistics have been produced to describe the baseline characteristics of the service user population and suggest areas of unmet need. The questionnaire data also indicate the level of user satisfaction with the health trainer CHC service.

The focus group and interview transcripts, H-diagram responses and field notes have been analysed using a thematic content approach, whereby each phrase is examined, coded according to the themes within it and considered in terms of its context in the discussion (Boyatzis, 1998). Trustworthiness of data interpretation has been addressed by having members of the evaluation team independently analyse the transcripts (Denzin 1978). The process took place manually, rather than using qualitative data analysis software, to ensure the evaluators’ continued immersion in the data.

Quantitative and qualitative evaluation findings are presented separately in the next three chapters, followed by a discussion chapter which synthesises the findings and considers them in light of the existing literature. A series of recommendations are then made with the aim of enhancing the quality and effectiveness of this new service.
Findings I: Baseline Characteristics of the Service User Population

This chapter presents analyses of mini health MOT data gathered from the health trainer CHC service monitoring database, alongside summary health check data from the Health Diagnostics® analysis report. Baseline data were available for a total of 774 clients who had undergone a mini health MOT between January and June 2012. Of these individuals, 239 were eligible for a full NHS health check (based on their CVD risk profile). A total of 101 health checks were conducted by CHC health trainers between April and June 2012, with the remaining 138 clients either waiting to be offered an appointment or exiting the service because they were uncontactable, had declined the invitation to undergo a health check, or had recently received one from their GP.

The data presented below enable comparisons to be made between those who were eligible for a full health check and those who actually completed the health check, to determine whether or not the service was reaching the areas of highest need. Due to the raw health check data not being available, it has not been possible to perform the appropriate statistical tests and instead these results are presented in graphical form to illustrate patterns in the data. Comparisons are made using socio-demographic characteristics, health indicators and referrals for further advice or signposting.

Socio-Demographic Characteristics

Gender
Of the 774 people who received a mini health MOT from the health trainer CHC service between January and June 2012, 477 (62%) were women and 297 (38%) were men. The gender imbalance increases further when we separate out those who were assessed as being eligible for a full health check; this group consists of 169 women (67%) and 70 men (33%). However, of the 101 individuals who attended for a health check between April and June 2012, 54 (53%) were women and 47 (47%) were men. See fig, 2 on the following page for an illustration.

This evening out of the sex ratio occurs because a higher proportion of men who are assessed as being eligible for a health check then go on to attend the appointment; more than half (59%) of eligible men attend, in comparison with around one-third (34%) of eligible women. Possible reasons for this are considered in the discussion chapter. These figures are surprising because there also exists a slight gender imbalance in the proportions of those who meet the criteria for a full health check. One-third of women (34%) who underwent a mini health MOT were assessed as being eligible for a full health check, whereas only around one-quarter of men (27%) met the eligibility criteria.
Age

The pie chart below (fig. 3) shows the age composition of those receiving a mini health MOT, which ranges from 16 years to over the age of 75. The largest proportions of users appear in the 16-29 age group (22%, 168 individuals) and the 40-49 age group (21%, 164 individuals). The smallest proportions of users are in the 70-74 age group (4.0%, 31 individuals) and the 75 and above age group (6.5%, 50 individuals).
One of the eligibility criteria for a full health check is being aged between 40 and 74 years, and therefore fig. 4 below presents data for this age range only. The graph illustrates that the 40-49 age group makes up the largest proportion of those attending for a full health check (56%), whereas the 70-74 age group makes up the smallest proportion (1.0%). Similar to the situation with gender, this imbalance results from differences in the likelihood that a person found to be eligible for a health check at the mini MOT stage will actually complete a health check. For example, of the 9 people aged 70-74 years who were eligible, only 1 attended for a health check. This equates to an 11% attendance rate. However, 56 of the 94 eligible people aged 40-49 years attended for a health check. This equates to a 60% attendance rate. The rates for those aged 50-59 years and 60-69 years were 37% and 39% respectively.

**Figure 4: Age (40-74 years) by intervention type**

![Figure 4: Age (40-74 years) by intervention type](image)

**Ethnicity**

The vast majority of service users identified themselves as White British (746 individuals, 96%), with the other users either identifying themselves as being from an ethnic group other than White British (19 individuals, 2.5%) or choosing not to disclose their ethnicity (9 individuals, 1.2%). The ethnic composition of the service user populations attending for a mini health MOT or health check is presented in table 3 on the following page. The numbers from the different ethnic groups are too small to conduct any meaningful analysis or draw any conclusions on this indicator. However, it can be speculated that those from non-White ethnic backgrounds may be less likely to attend for a full health check than those from White British or White Irish backgrounds.
Table 3: Ethnic group by intervention type

<table>
<thead>
<tr>
<th>Ethnic group (self-identified)</th>
<th>No. undergoing a mini health MOT</th>
<th>No. eligible for a health check</th>
<th>No. attending for a health check</th>
</tr>
</thead>
<tbody>
<tr>
<td>White British</td>
<td>746</td>
<td>232</td>
<td>99</td>
</tr>
<tr>
<td>Bangladeshi</td>
<td>11</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Not disclosed</td>
<td>9</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>White Irish</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Indian</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Black British</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Asian-British - Pakistani</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Maltese</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Serbian</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Totals</td>
<td>774</td>
<td>239</td>
<td>101</td>
</tr>
</tbody>
</table>

Socio-economic status

Information on socio-economic status was derived from the clients’ postcodes, using a combination of GeoConvert\(^2\) and software held by County Durham and Darlington NHS Foundation Trust. The Index of Multiple Deprivation (IMD) 2007 was used to rank the postcodes and the ranks were then assigned to quintiles. For consistency with the terminology used by Health Diagnostics®, 1\(^{st}\) has been used to indicate those living in the 20% least deprived areas and 5\(^{th}\) indicates those in the 20% most deprived areas. Postcodes were missing for 32 users and therefore this data relates to 742 individuals.

Figure 5: Socio-economic status of those receiving a mini health MOT

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\(^2\)GeoConvert ([http://geoconvert1.ds.man.ac.uk/](http://geoconvert1.ds.man.ac.uk/)) is an online geography matching and conversion tool for UK academics. It allows registered users to obtain and manipulate geographical and postcode data.
Fig. 5 on the previous page shows that those living in the most deprived areas are more likely to access (or be accessed by) the health trainer CHC service than those living in less deprived areas. Almost two-thirds of clients (60%, 449 individuals) came from the 4th and 5th deprivation quintiles, compared to one-quarter (25%, 183 individuals) from the 1st and 2nd quintiles. This suggests that the CHC health trainers have so far been successful in achieving their aim of targeting groups that may not access other services.

Fig. 6 below compares the socio-economic status of those receiving a mini health MOT with those eligible for a full health check and those receiving a full health check. Summary data from Health Diagnostics® were available only for the 4th and 5th quintiles, and therefore data for the 1st-3rd quintiles have been combined. From the graph it would appear that full health checks are more likely to be taken up by those from relatively affluent groups. Of the 52 users from the most deprived quintile assessed as being eligible, only 17 completed a health check. This represents an attendance rate of 33% in comparison with 44% for the more affluent groups.

**Figure 6: Socio-economic status by intervention type**

![Socio-economic status by intervention type](image)

**Health Indicators**

**Overweight and obesity**

Of the 774 individuals receiving a mini health MOT, 146 were recorded as being overweight (19%) and 96 were obese (12%). For the 101 individuals receiving a full health check, the figures were 40% and 27% respectively. Fig. 7 on the following page illustrates that there was little difference between the population who received a mini health MOT and the subpopulation who were eligible for a full health check. However, the data suggest that people who attend for a full health check are more likely to be overweight or obese, and therefore weight might be considered a motivating factor for
attendance. Of the 45 eligible individuals with a BMI between 25 and 29.9 kg/m\(^2\), 40 (89%) attended for a health check. Almost all of the eligible individuals with a BMI above 30 kg/m\(^2\) received a health check (25 of 27 individuals, 93%).

**Figure 7: BMI by intervention type**

![BMI by intervention type](image)

**Blood pressure and cholesterol**
Almost one-quarter of clients (23%, 177 individuals) were recorded as having either high blood pressure or pre-high blood pressure at the mini health MOT stage (see fig. 8).

**Figure 8: Blood pressure levels amongst those receiving a mini health MOT**

![Blood pressure levels](image)
It has not been possible to conduct comparisons between those receiving a mini health MOT and those receiving a full health check, due to the different recording systems used (i.e. overall blood pressure level vs. separate readings for diastolic and systolic). Nor has it been possible to conduct comparisons regarding blood lipid cholesterol because cholesterol is not tested at the mini health MOT stage. Fig. 8 below shows the ratio of total cholesterol (TC) to high-density lipoprotein cholesterol (HDL) for the 101 health check recipients. A TC/HDL ratio of 5 or less is generally considered desirable and a ratio higher than 5 relates to higher cardiovascular disease (CVD) risk. Around one-fifth of users (22 individuals) fall into the higher risk categories.

Figure 8: Cholesterol levels amongst those receiving a full health check

CVD risk score
The purpose of testing blood lipid cholesterol during the NHS health check is to calculate a CVD risk score for each client. Aggregate data from the Health Diagnostics® summary report is presented in fig. 9 on the following page, which demonstrates that more than half of those who received a health check (58 of 101 individuals) were assessed as having a low CVD risk score. Almost one-third (30 individuals) had a moderate CVD risk score and a further 13 individuals had a high CVD risk score.

When the scores are separated out by gender (see fig. 10), a different pattern emerges. A higher proportion of women are in the low risk category in comparison with men (69%, compared with 45% for men). At the other end of the scale, men are around twice as likely to be in the high risk category (17%, compared with 9.3% for women). This is unsurprising given that different risk calculations are used for men and women, with age acting as an important mediating factor.
Signposting

Referral to a GP

Individuals identified as being at high risk of CVD or other health conditions are advised to contact their GP following a mini MOT or health check. The graph on the following page (fig. 11) shows that those who receive a full health check are more likely to be referred to a GP for advice than those who receive a mini health MOT (35% of the client population in comparison with 22% of the health check subpopulation).
Lifestyle intervention

For those who do not need to see a GP but who would like some support around achieving a healthier lifestyle, a range of options are made available. These include signposting to stop smoking services, weight management programmes, physical activity sessions and holistic interventions delivered by health trainers. However, these referrals are recorded differently using the different data collection systems, so it is difficult to make direct comparisons. For example, the Health Diagnostics® report states that none of the clients were referred to commercial or local authority weight management programmes and makes no mention of NHS services, whereas the CHC service monitoring database records that 21 clients were signposted to ‘Cook 4 Life’/healthy cooking courses. This represents 2.7% of the total population.

In cases where the same or very similar labels have been used, the numbers are too small to draw meaningful comparisons. Of the 774 clients who received a mini health MOT, 21 (2.7%) were recorded as being referred for support around smoking cessation, in comparison with 1 individual (1.0%) who received a health check. The corresponding figures for exercise referral are 1.8% and 1.0% respectively. A larger number of clients (82, 11% of the total population) were signposted to a health trainer for lifestyle advice following the initial mini MOT, although it is not known how many actually went on to see a health trainer. Overall, the numbers of people who were signposted to either a lifestyle intervention or their GP are far smaller than anticipated, and it is likely that this reflects issues with the recording of this information rather than a real situation. These issues are considered further in the discussion chapter.
Findings II: Feedback from Staff and Key Stakeholder Discussions

The qualitative findings presented in this chapter have been constructed from the key stakeholder interviews and focus group with the CHC health trainer team, incorporating feedback gathered from members of the core health trainer teams using the H-diagram method. The key stakeholder group comprises 3 commissioners, 3 public health staff and 5 workplace representatives who hosted mini health MOTs delivered to their staff by the CHC service. The findings are organised into themes based on the original evaluation objectives (see page 11) and illustrated with the use of direct quotations and vignettes from the participants3.

Establishment of the Health Trainer CHC Service

The health trainer CHC service was described as arising from close working relationships between commissioners working in public health in the NHS and the local authority in County Durham. It was recognised that both organisations had a shared interest in improving heart health and reducing social inequalities in health within the local population. Increasing coverage of the existing NHS Health Check Programme was seen as one way to tackle these issues, as illustrated by the following quote:

“There was a lot of work being done at that time around cardiovascular disease and the health checks programme, and taking the health checks programme out into the community. Because until that point it was very much being delivered via GPs. And there were concerns that we weren’t really reaching our hard to reach groups and those groups that really were at high risk. So... The [CHC] health trainer programme kind of developed from there really. We’d already committed some money to the [core] health trainer programme to supporting that, and what we decided to do is actually let’s focus on the CVD and the health checks programme. So that’s how it came about. (Stakeholder 3)

Participants asserted that the ‘traditional’, GP-led approach to health checks was not reaching the most disadvantaged population groups. There was reported to be evidence of significant variation between GP practices in terms of health check delivery (as described in the quote below), both by geography and by age. One stakeholder stated that, although the programme is aimed at those aged between 40 and 74 years, it tends to attract patients in the 60 years and over age group. The CHC service was therefore designed to target those who may be less likely to visit their GP, by engaging with people in local communities, rather than offering a whole population approach.

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3 Health trainers and other stakeholders are identified separately using ID numbers to maintain anonymity.
That’s the whole point of emphasising the community programme, because with the GP programme – which is the bulk of health checks – there are wide differences in performance between practices. There are population groups not being reached. There are geographical areas where the coverage isn’t as high as it could be. [...] In contrast, with the community programme, I can direct where the programme goes. We can set the programme for the year. We can define the target group. We can... You know, all sorts of things make it more possible to make it a more targeted intervention. (Stakeholder 8)

There were reportedly a number of barriers to implementing this new service, largely arising from the ongoing NHS structural reorganisation, which caused significant delays. This resulted in frustration for commissioners and raised questions about which organisation was best suited to delivering the service. Participants were keen to emphasise that this was due to organisational issues rather than any of the individuals involved. There were also issues relating to risk and governance linked to the health checks, as well as the recruitment and training of the health trainers:

There’s a huge amount of work gone into it. So... There was a huge amount of work recruiting, kind of... Getting them through to the system where they could... Where Durham [County Council] could commission. Then there was a huge amount of time where it was difficult for them to recruit, because of the recruitment processes in the FT [NHS Foundation Trust]. Then there was a huge amount of time getting them trained to actually deliver health checks. (Stakeholder 2)

The newly recruited CHC staff reported a number of teething problems such as difficulties in using IT in the community, which was described as “a big nightmare” (Health trainer 2). Some staff had come from an administrative background where they were used to working with more efficient IT systems, whereas others had previously worked outside the NHS. One individual mentioned the NHS culture of being referred to by their band as “demoralising” (Health trainer 5) and something that was holding them back. They were hopeful that most teething problems would be ironed out following the first six months of operation, but felt that progress to date had been slow:

It’s all been, like, a bit of a learning curve and we’re starting to notice what things are and aren’t working. And we’re being able to bring them back to try and... Try and make some changes to how things are done. It’s just, I’m getting the feeling it’s going to be a small... A very slow progress in terms of making the changes to how everything has been arranged. But that’s, kind of, how it works. It’s a bit trial and error – that type of thing. (Health trainer 3)

In spite of these issues, there was a sense of optimism about the potential impact of the health trainer CHC service in conjunction with other community-based approaches to delivering health checks. Other providers include pharmacies, leisure services and occupational health staff within the local authority. It was felt that each provider would
help to increase the coverage of the programme by targeting different populations through different venues, although it was acknowledged that there could be a degree of overlap. The CHC service was described as part of a pilot project aiming to explore different ways of working and gather baseline information in order to build an evidence base relating to heart health. Stakeholders working in service delivery within the NHS were concerned that it might be intended as a ‘quick fix’, whereas others appeared more comfortable with a process of trial and error, as illustrated by the following quote:

*In relation to targets, we were quite relaxed about this, to be honest. Because it is a new service and we weren’t quite sure – and the same as all of the health checks... [...] You know, we didn’t put harsh targets... Or even any targets on for a lot of it, because we just wanted to get some baseline information as to how this has been, you know, picked up. So, I mean, we’ve set some targets for the health trainer programme. But on the whole we’ve left it quite loose for this first year. And what we said was we will review it at each quarterly meeting, and we’ll review it annually as well – in terms of the targets. But we just wanted to get an idea, first of all, as to how... How it’s going to be picked up, really. (Stakeholder 3)*

The wider health trainer programme was felt to have a reputation for successfully engaging with people from communities that are generally considered ‘hard to reach’ by statutory services. The funding available to deliver the CHC service therefore provided an opportunity to test out a new approach by bringing together the existing health trainer programme with the NHS Health Check Programme. The decision to align the two programmes was partly a pragmatic one, in order to provide some security for the health trainers. However, there was initial scepticism that this approach would move them towards a more medical (as opposed to social) model of health and away from the original aims of the health trainer programme. It was eventually decided that it would add value to existing approaches both for the clients and health trainers:

*It is about developing the skills, the capacity and the capability of the health trainer to provide more for their client. [...] That, I think, is the little nugget that actually is just so important. Because it means that the health trainers could provide more for the people that they engage with. And it struck me that they would be... It might be easier for people. You know, we talk a lot about the relationships that they health trainers have with their clients. So if it was someone who wouldn’t go and see a GP and have it [a health check] done, wouldn’t go to a pharmacist and have it done, even with the support of a health trainer... If it was the health trainer that said, “Well, I can do it for you”, then that would probably be more likely to happen. And it means that they would have access to... To something that might be quite important for them. (Stakeholder 2)*

One aspect of this added value involves the emphasis on prevention of cardiovascular disease (CVD), rather than the identification of those in the high risk group. As such, the CHC service was intended to offer an alternative way of reducing CVD risk besides the
prescription of statins. Health trainers are trained to deal with the whole person and either provide them with personalised advice and support or signpost them into relevant services (see the quote below). The ability to target people who are already motivated and ready to change was identified as a particular benefit of the service.

The health trainers have this, kind of, unique role because of their translation of kind of evidence and risk factors into a format that people would understand. So I think with the community programme, we will see more people going into lifestyle programmes — stop smoking, physical activity, weight management — as a result of having a health check. As opposed to those people having a health check done in general practice. (Stakeholder 8)

Experiences of Service Delivery
Feedback from the interview and focus group participants suggested that the system of using mini health MOTs and health checks to engage with local people was perceived to be effective. The checks were described as useful in engaging people in a conversation about their health, which acts a shortcut to introducing the interventions that health trainers usually deliver or signpost into. Clients reportedly appreciate receiving immediate feedback and having the opportunity to discuss their results with someone who is able to address any queries they might have (see the quote below). Stakeholders and core health trainers highlighted the level of knowledge possessed by the CHC health trainers in terms of being able to interpret and communicate complex information.

It [cholesterol] is really confusing. It takes a while to get your head round the different types and what’s being talked about and what’s the important bits. So there’s quite a few [clients] where you’ll come across who has had their cholesterol checked many years ago and were told that it was a certain number. And their impression of that number is that it’s fine, and it might actually not be. Or that their impression is that number is really, really high — and actually... In actual fact it might have been — but if the ratio was low, then there may not have been too much to be concerned about. [...] We try to make sure they completely understand what we’re telling them before they leave. And give them that bit of time to understand it, rather than just say, “Here’s your results.” (Health trainer 2)

The CHC health trainer team described their approach of delivering health checks in the community as an ideal way of accessing people who would not choose to see their GP or a pharmacist. One participant noted that some people are concerned about wasting their GP’s time, particularly if they do not feel ill, and so seeing a health trainer might be a more appropriate “first line of approach” (Stakeholder 10). Offering short, flexible appointments in non-clinical settings – either in the community or in workplaces – helps to enhance the accessibility of the service, particularly for those who work full-time. The relatively informal, opportunistic approach enables the health trainers to
target preventative interventions to those in the low risk categories and also to identify individuals who might be unaware that they are in the high risk category:

*I think that’s where the benefit of us being there. Because we can just, sort of, be in a community centre... We can be sat, having a chat with someone and telling them what we do, and then just say, ”Do you fancy having a...? Having a check done?” And they go, “Well, yeah.” Because you’ve been there talking to them for 10, 15 minutes by this point. So they’ve got to know you and they just want to continue the conversation. So you just take them through, do that, continue the conversation, and then you might actually identify something that you could have... It sounds dramatic – but you could have saved that person’s life just by doing that check that they would never have had done.* (Health trainer 3)

In addition to reaching different groups, the health trainer-led health checks were felt to offer more than GP-led health checks in terms of the level of information provided. This is evidenced by the following focus group extract, which draws on the personal experience of one health trainer and on feedback from clients who had previously received a health check from their GP:

**HT2: I don’t think you get as much of a... The information back off what it [your CVD risk] is and why it was like that and what you could do to change it. Because I’ve had [a health check] done at the GP – and so did my husband at the time – and his [CVD risk score] was highlighted that it was 20% and mine was only 1%. And it was only because I asked the GP what it was, and why mine was like that... And his diet is very similar to mine.**

**HT3: Yeah, that’s what I’ve had a few people say – ”Oh, you don’t get this kind of information at the GP.” Because we sit and go through everything and the results with them.**

The mini health MOTs were unanimously felt to be a useful engagement tool, but there were some concerns about the uptake of the full health checks and the implications for meeting the targets set for the CHC service. When asked where these targets had come from, the health trainers suggested that someone had “put some numbers in a hat and pulled them out” (Health trainer 4). The service leads acknowledged that they had identified more people at high risk of CVD than anticipated, which made it difficult to deliver on targets based on strict definitions of low and moderate risk. Concerns about not being able to meet their targets had resulted in feelings of panic amongst the team, as highlighted in the quote below:

*The mini-health checks haven’t really been a problem. You go to a community venue and you can do... Just by turning up, you can do five or six just for people that are there. It’s just managing to do the full health checks from that. We did find, as well, that there wasn’t as many people eligible as was originally thought – from our original targets of how many MOTs we had to do and then, from that, how many full health checks we had to do. They just didn’t relate. [...] I think we all, when we started delivering, sort of had a bit of a panic about quite
how many full health checks we were being expected to do in comparison to how many we were actually physically able to do. Whether it’s a time thing, or whether it’s just a numbers thing. (Health trainer 1)

Part of the reason for struggling to meet their targets arises from the delay between identifying those eligible for a full health check (using the mini MOT) and delivering a full health check, generally at a later date and a different venue. It was suggested that it might be more appropriate to conduct mini MOTs and health checks at the same event, although this requires greater input from the team:

We have tried it out – that we can deliver both at the same time – and although it can work, it requires quite a lot more staff to do that at a big community event. Because it’s busy. So...
That’s something we might do again. We might try that again. But yes, it’s about making sure that people aren’t left too long. And that we... Well, we strike while the iron is hot, as it were. To make sure we get as good a take up as possible. (Stakeholder 5)

Selecting the most appropriate location and venue for the checks was also identified as an important factor. The health trainer CHC service operates county-wide and it was reported that some parts of the county are more difficult to engage than others. The CHC health trainers expressed a preference for organising their own events in smaller venues as opposed to being part of larger roadshows, which they felt were a waste of resources. One health trainer stated that they could spend a whole day at a roadshow and only speak to five or six people, whereas targeting different community venues in the morning and afternoon can greatly increase their numbers. The following quote also highlights the challenges associated with ‘canvassing’ people on the street:

The Gala Theatre [in Durham city centre] – which is set out of the way a little bit – it’s not... It’s not for the community. It’s in the middle of the shopping centre, so it’s difficult to get people in. As soon as you go to speak to anyone – “Oh no, I’m busy”, you know. And you know yourself because I do that myself – “Sorry, I haven’t got time.” So we find that quite difficult, don’t we? Having to canvass people in. (Health trainer 5)

A related challenge involves the branding of the health trainer CHC service specifically and the wider health trainer programme in general. It was felt that people – members of the public and health professionals – who have not come into contact with a health trainer are still largely unaware of the role. This can make it difficult for the CHC health trainers to approach people during events, where they may be perceived as trying to sell something or collect money for charity. The team were keen to promote the service but the issue of uniforms was described as a “bone of contention” (Health trainer 1). Some staff had worn a uniform in previous roles and felt they looked too casual in their own clothes, whereas others were concerned that uniforms might make them appear
too official and be off-putting for certain clients. It was agreed that some form of uniform or t-shirt would help in raising awareness amongst members of the public:

I did an event with [a member of staff from] Durham County Council on Saturday, and there was... There was me and there was him. And we were both doing similar things and, obviously, like we were employed by the NHS. And he had a Check 4 Life t-shirt on, with the Check 4 Life logo and it looked really good. And then I was just there in my normal clothes. And we were both doing the same thing, so... I think something would be good – for events, especially.
(Health trainer 3)

However, the CHC health trainers reported that it was not possible to wear a uniform at some events and not others due to the perceived emphasis on consistency within the NHS Foundation Trust. This created a real concern for the team as it was felt to be in direction opposition to the emphasis on flexibility and responsiveness generally associated with the health trainer role. They reported feeling held back by a need to obtain approval within the Trust for any suggestions or changes they wanted to make, without due recognition for their prior experience and local knowledge. One health trainer described the way in which the drive for consistency might result in a service that is not fit for purpose, although it was recognised that it was still in the pilot phase:

I don’t whether... Personally, whether it... Their trying to be consistent throughout everything is something that’s pulling us back a little bit. Because people who we work with and the areas that we work with, if it’s completely different... I mean, we might be doing an event where... I mean, there was events just before Christmas that we did in the passport office, and you could be talking to people in there who were really high up in management. And then we might do a community centre event where everyone is just volunteering – doing things for free, and they’re not really on that much money and they’re a little bit more... In a little bit more of a deprived area. And the way that you do things may have to be a little bit different, but if we’re trying to be consistent with everyone in the service we give, you’ve got to kind of go in the middle. Which means it’s not really all that appropriate for both. So being allowed to be not the same every single time. And I think, again, that’s something that’s like... They’re really trying that at the moment. And they may find, in 6 months’ time, that actually what we were doing before worked better and go back to it. (Health trainer 4)

Integration into the Local Health System
Participants identified links between the health trainer CHC service and various internal and external collaborators, which are described in the following sub-sections.

Links to within public health
Public health staff spoke highly of the CHC health trainers, referring to them as a knowledgeable and highly skilled team. As a result of observing members of the team at
events, one participant said that “their rapport is very good and they never make anybody feel at risk” (Stakeholder 4), in terms of the way they communicate the results of the mini MOT or health check. The same individual referred to the team as “just another string to our bow. It just makes the whole [health improvement] service that much better, I think” (Stakeholder 4), and also highlighted the possibility of combining resources in order to make cost savings for the NHS. For example, if one public health team hires a venue to deliver an event, then other teams can ‘piggy back’ their work onto this event. The CHC health trainers reported having good working relationships with other teams, but felt that resources were sometimes a barrier to joint working:

*I think it’s coming down to time as well with a lot of the other services. We’re funded to do this – they’re not. So if we’re asking them would they like to come to this event, they’ve got to fit that into their schedule somewhere. Whereas our schedule revolves around doing these events, so we make the time. And sometimes I think your motivation to make the time to attend these things just isn’t there from some of the other teams, because that’s not why they’re funded and... And in all fairness, you can understand it, but it does make our life a little bit more difficult.* (Health trainer 1)

The four core health trainers who completed H-diagrams all gave the health trainer CHC service a score of 9 out of 10, as well as adding a number of positive comments. One wrote, “I feel the [CHC health trainer] team have integrated well with us and we work really well together” (Health trainer 7). The service leads described providing opportunities for the newly recruited CHC health trainers to work with and shadow the core health trainer team, as well as others within public health, as part of their training for the role. This shadowing, along with associated mapping work, was felt to have given the CHC staff a good understanding of services available in the local area. As such, they are able to effectively generate additional referrals for other teams:

*I think because the health trainer service, generally, is seen as a bit of a one-stop shop for people, and that we are one of the parts of the service that’s best at making links and signposting people. So I don’t think we’re seen as a threat at all. We’re seen as a tool – as a useful channel, really, for people. We will always signpost to the Cook for Life, which is part of the food and health team. We’ll signpost to the stop smoking service and for further information around cancer services. Because we recognise that we’re not specialist in those areas, and that there are people better able to provide the information.* (Stakeholder 5)

**Links with primary care**

The CHC health trainers described their role as seeking to relieve some of the pressure on primary care by offering a complementary health check service. However, they also made a number of references to feeling as if they were in direct competition with these alternative providers. One health trainer said, “Pharmacies do them [health checks] now, so we’ve got even more competition” (Health trainer 4) and another added, “That’s
why I had problems getting the pharmacies to take the leaflets. Because as soon as they saw the blood pressure check logo on the front, they wouldn’t take them because we’re taking away [their business]” (Health trainer 5). The problem is reportedly exacerbated by the time lag between the health trainers conducting a mini MOT and a full check, during which time people may choose to see their GP for advice instead:

*When we’re phoning people who we’ve done a mini health check [MOT] on, quite often what’s happening is if they’ve had something highlighted in the mini-health check – like their blood pressure was a little bit raised – and we’ve asked them to call in to see their GP... Because their GP gets paid to do a full health check – instead of just checking their blood pressure, they do the full health check and then they’re no longer eligible to have it done with us. Then we’re not meeting our targets, but just helping the GPs to make theirs.* (Health trainer 1)

One concern was that the health trainer CHC service would not be able to meet its targets, but another was that the competition between the various providers would result in a duplication of effort. There was a view that “Most people would have something done again, if they can” (Health trainer 2). While it may not be problematic for a person to have more than one mini MOT, the resource implications of repeating the full health check are greater. Managers and commissioners appeared confident that the system of self-report and use of the same diagnostic software would help to avoid this situation. However, the health trainers were concerned about confusion arising from the variety of terms used (e.g. health check, mini MOT, Check 4 Life), and the lack of data linkage between public health and primary care:

**HT1:** I’ve heard that the GPs get paid to do mini-health checks and full health checks, so you can understand why they’re encouraged to do it as well. But when we do our health checks, that information doesn’t get put into the GP’s surgery for that person. So it doesn’t link together.

**HT2:** But then they still could request them to go in and have one, so... And if they thought, “Oh well, my cholesterol was a bit high last time. I’ll see what it’s like this time.” So then they’re effectively getting things done twice and it’s just costing more and more money.

**Links to workplace health**

On the whole, the feedback from the various workplace representatives was highly positive. They reported being open to any offer of services or activities that might contribute to existing workplace initiatives, such as the ‘Better Health at Work’ award. The health trainer CHC service was described as “Something proactive that would add to what we were already doing” (Stakeholder 7). Participants were particularly grateful to have had access to a free service that was relevant to their needs:
We did feel like we were lacking on what we did for our staff in that regard [in terms of health and wellbeing]. So we welcomed the opportunity, really, to be able to do something for staff. And especially with it being a free service by the NHS and not by a company, you know, that was promoting itself or there were charges and things. And we just felt that... The two trainers came in, spoke to myself and the HR manager and the deputy HR manager. And we felt, following that discussion, that it was definitely something that we would be interested in doing. (Stakeholder 6)

Another participant highlighted the NHS ‘badge’ as a marker of quality, saying, “I think when people see the NHS logo, it reassures them. They know that they’re going to get a quality service” (Stakeholder 10). It was felt that, even though the health trainers make it clear that they are not medically trained, their role within the NHS helps to inspire trust and confidence. The service was described as accessible and well organised, as illustrated by the following quote:

In my experience, the health trainers that came in were very friendly, approachable, and they got fantastic feedback from the staff. I don’t think there were any logistical problems in terms of people accessing their allocated appointments or anything like that, so it seemed to go really smoothly from the feedback we got. (Stakeholder 10)

Workplace events were perceived as being very successful by the key stakeholders and the CHC health trainers, who reported finding them easier to organise than other types of events. They help to remove many of the barriers to taking part in health promoting activities, by locating these activities in settings that are familiar and convenient for people to access. This was felt to be a particularly successful way of engaging men:

I mean, and being a man myself, I know a lot of men typically will put off going to the doctors and things like that. And need to have health checks and... Just talking to staff and our union members, it really has been beneficial to have the onsite facilities. We’ve done the stop smoking clinics before through our ‘Better Health at Work’ initiative. I think the blood donors are on site today, as we speak. And I think the fact that we’re providing the onsite facility removes that excuse, if you like – for want of a better term – for a lot of people who say, well, “Oh, I’ll go next week. Or I’ll go at the weekend.” When it’s actually there, provided for them at work, be it in their lunch break or whether the employer gives the time, it does remove a barrier for a lot of people. (Stakeholder 10)

Perceived Outcomes
Many participants felt it was too early to determine whether or not the health trainer CHC service was successful, while others volunteered early indicators of what they perceived as positive impact. Some of the possible impacts of the service will only occur after a longer time period; for example, one manager identified capacity building as a potential outcome, in terms of supporting clients to gain skills and possible employment
with the health trainer programme. Stakeholders within the NHS and local authority felt that organisational learning from the pilot project and its perceived integration within the wider public health system should be acknowledged as important early outcomes:

*If we were to get another contract, we know what works and what doesn’t work. And we know that we’ve got things... The basics – like policies, standard operating procedures, governance issues, the equipment required – in place. And we’ve got a cohort of staff – both core health trainers, existing health trainers, and the [CHC] ones – who are trained up. So we’ve got a very highly skilled staff in place. But most of all, it’s the learning, really, which we didn’t have before.* (Stakeholder 9)

Health trainers and their families were identified as key potential beneficiaries of the CHC service. In addition to having access to the training and employment opportunities associated with the wider health trainer programme, the staff have gained specific skills around the delivery of NHS health checks. It was anticipated that these skills might enhance their interest and employability in more clinical roles such as nursing. The CHC health trainers reported finding the role enjoyable and feeling optimistic about the future of the service, in spite of the aforementioned ‘teething problems’:

*I do really enjoy my job. Like, I get up and I really... I’m looking forward to my day of coming to work. And I actually don’t like the days where I’m sat and I haven’t really got much to do. I like being out there and doing the community engagement and... That’s the part of the job that I really enjoy. It’s just all of the organisation around it that, maybe, gets a little bit frustrating from time-to-time, if there isn’t an ability to do it the way it should be.* (Health trainer 4)

The level of take-up of the service, particularly in areas that had been difficult to engage previously, was given as an indicator that it is perceived to be acceptable by the target population. The mini MOT was felt to be highly successful as an engagement tool. Workplace representatives reported being pleased with the level of take-up within their organisations, and all expressed an interest in becoming ‘repeat customers’ to accommodate new staff or those who had been unable to attend on previous occasions. The following quote highlights the degree of user satisfaction with the service:

*I think we got about 40... 40 or more [members of staff] that applied for the MOTs. And, of which about 20, 22... 21, 22 went through to the health check stage. I thought it was great. I really... I did. And the feedback I got from other staff afterwards, they were promoting it to colleagues. And more people were coming forward. So, you know, obviously because they’d had a good experience. They said they found... You know, and I certainly found the girls very down-to-earth and very easy to understand information. They didn’t bamboozle you with technology, you know, technical speak. They put things very much in layman’s terms and made it easy to understand. You could ask the... You know, you could ask them questions and, you know, they would explain further.* (Stakeholder 6)
A key perceived benefit of the health trainer-led CHC approach involved raising awareness of issues such as blood pressure amongst those who previously were unaware that they were at risk. One service lead said, “We have lots of examples of that happening, and people having to be signposted to their GP, who would never have dreamt of going because they thought they were fine” (Stakeholder 5). There was also feedback from one workplace where a number of people had reportedly been shocked by their blood pressure readings, and to a lesser extent their BMI and cholesterol levels, and that this had motivated them to make lifestyles changes. Participants felt that the health trainers had raised awareness of services and lifestyle interventions available in the local area. They are able to signpost and support people through different pathways, offering them different options to improve their cardiovascular health:

"We’re finding that we are also dealing with the... Some clients who are really going through a clinical care pathway, but somehow they’ve been missed in checking their blood pressure. Or the basics reveal – what we see as the basics. And this is encouraging people to consider more changes and say, “Wow, my blood pressure was that last month. Now it’s going – after three months or so – it’s going down. My cholesterol level was extremely high, and now I’m feeling better. I’m able to control, you know... After the last intervention, I’m able to control, you know, certain lifestyles better.” So it’s just adding value towards either existing care pathways or just the visibility of access, you know. (Stakeholder 9)

Although the aims of this evaluation did not include gathering feedback from service users, a number of the workplace representatives and core health trainers revealed that they had personally received a mini MOT and/or full health check. Box 1 on the following page details the views and experiences of these participants, along with an example from one member of CHC staff. Most feedback was positive and described benefits such as greater peace of mind and raised awareness of CVD risk factors. These participants also stated they would be unlikely to visit their GP for a full health check, either due to lack of time or lack of awareness that GPs offer a similar service.

There were only two examples of less-than-positive feedback volunteered by service users. In one case, the participant suggested from her personal experience that it would be beneficial if the CHC staff had greater awareness of certain health issues, such as thyroid problems. Although it was accepted that health trainers are not medically qualified, it was felt that “from the point of view of the users, maybe there is an expectation that they will be fairly clued up on particular conditions. Particularly those associated with BMI and so on” (Stakeholder 7). The second case relates to examples of service users experiencing shock and upset after being informed that their CVD risk was higher than expected. However, the participant was uncertain to whether this should be described as a negative aspect of the health trainer CHC service:

"I think the only – and I don’t know if it is a negative, actually – but I think a couple of people, or one, definitely, that I’m aware of, got a little upset afterwards because they didn’t realise they..."
had a problem. And I think... They were quite shocked and taken aback and upset. They didn’t think that the little bit of a problem that they had could potentially be a bigger problem. And so that, you know... But, like I say, I don’t think that was a negative. (Stakeholder 6)

Box 1: Positive feedback from users of the health trainer CHC service

The fact that, you know, they came into work – it’s just 15 minutes to go and it’s, like, one-to-one and all the information that you got. Especially through to the final check when, you know, you get your own personalised print out and... I’m like the other colleagues who have never had a cholesterol test. And it’s always at the back of your mind – you know, what if? I know with like a family history that there was a possibility – even though you feel you’re fit and healthy and doing all the right things – I know that cholesterol is one of the things that you can’t predict because of... All of the things that can affect it. So I... It was an opportunity for me to have that done. (Stakeholder 6)

I had a CVD check myself and I am now aware of the need to take action to reduce the long term risk of developing a long term health condition. By doing so, hopefully I can avoid long term medication and therefore reduce costs to the NHS. (Health trainer 6)

I went for the initial screening – and I can’t remember what the figures or the data was, but I suspect largely because of my age that I now had an entitlement to the... To the blood check and all of the other details. Interestingly enough, when I had the first check, then what it was indicating was that my BMI was higher than it needed to be. So it... Although I probably knew that I was overweight, it certainly made me think twice. And as a result I made some changes, and there was advice given at the session which was very helpful. And then, when I came to do the second check, obviously the things... The adjustment that I had been making had actually made a difference. So that was positive. And, I suppose, for me, I’ve managed to maintain that and sustain it. (Stakeholder 7)

I spoke to a lady recently who... She had no intention of going to a GP’s surgery. She only signed up to come and have a health check just because there was space. I was there, I was doing them, there was some time space and she just thought, “Oh, well, I might as well.” She went along and got it [her blood pressure] checked and it was quite high. And then I phoned her GP to speak to him to see if she could get an appointment. And he wasn’t even comfortable leaving it until – like, this was on a Friday afternoon – he wasn’t comfortable leaving her until the Monday morning. So he actually stayed in the surgery after the surgery closed for her to come in and see him about it. Yet she... She was very grateful that we were there and offering that, because she had no intention of going to her GP’s surgery just to call in. (Health trainer 2)
Potential Areas for Improvement

A key area for improvement identified by the CHC staff was the issue of the time lag between conducting mini MOTs and arranging for clients to receive a full health check. Some felt this could be overcome by offering mini MOTs and health checks at the same time, while others suggested operating an appointment system to avoid sending highly motivated people to the end of a waiting list (as described in the quote below). Other participants working in public health suggested having regular sessions at specific venues, either on a drop-in basis or by operating a “centralised booking system – all enquiries for CVD checks go to one freephone number (similar to the stop smoking service) and to be allocated an appointment at a regular clinic” (Health trainer 6).

*I think we would be best off already having your times – already having your time slots with you for every week. You do an event, someone is eligible, you tell them straight away: “You’re eligible. Would you like to book an appointment?” They book an appointment with you, then at a different point you can phone the admin and let them know that you’ve booked an appointment, and fill in the spaces that you’ve got with the people who are on the backlog list. Because, at the moment, trying to get through that list – every event we do, people are just going on to the back of the... Onto the end of the list.* (Health trainer 2)

One participant felt that the mini MOT/health check could incorporate a diabetes check, and another suggested that topics such as back pain, stress and depression could also be addressed as part of the process. The following quote highlights a potential willingness to accept support from health trainers on a range of issues within the workplace:

*There are issues around posture, repetitive strain and joint and back injuries. If there’s anything in terms of, like, awareness sessions that could be provided by the health trainer service, that would be great. And also, as [name of colleague] mentioned, if the full MOT facility – the full health check – becomes available in the workplace, that’s something I think we would certain look at again.* (Stakeholder 10)

Those involved in commissioning or delivering the health trainer CHC service appeared satisfied that the model is viable and that it could be considered a potential replacement for GP-led health checks. One participant suggested that the service should be made available across the north east, while a commissioner said, “Let’s industrialise this and get as many people through as possible” (Stakeholder 8). Some felt the CHC service had not been marketed effectively, and that this would be something to consider during the next phase of operation. A workplace representative said, “We obviously know of the PCT ones [health trainers] but not these [CHC] ones. [...] I would maybe say if anything could be improved then maybe communication” (Stakeholder 1).
Findings III: Results of the Patient Experience Questionnaire

The final findings chapter provides a summary of results from 181 patient experience questionnaires completed voluntarily and anonymously by clients following a mini health MOT. These data give some insight into the clients’ motivation for taking up the offer of a mini MOT, their views on the staff involved and their level of satisfaction with the service. However, the results must be treated with some caution because the questionnaires are completed during events involving a number of public health teams (see fig. 12). The questionnaire responses are collated onto Survey Monkey to provide feedback on the mini health MOT process in general and therefore it was not possible to separate out responses relating to solely to the CHC health trainers.

**Figure 12: Provider of the mini health MOT**

<table>
<thead>
<tr>
<th>Provider Type</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Get Active</td>
<td>59</td>
<td>32.6%</td>
</tr>
<tr>
<td>Core health trainer</td>
<td>24</td>
<td>13.3%</td>
</tr>
<tr>
<td>CHC health trainer</td>
<td>23</td>
<td>12.7%</td>
</tr>
<tr>
<td>Combination</td>
<td>75</td>
<td>41.4%</td>
</tr>
</tbody>
</table>

**Event Type**

Fig. 13 on the following page illustrates the types of events where mini health MOTs take place. The majority of those completing the patient experience questionnaire had received an MOT either in the community (88 individuals, 49% of the sample) or their workplace (70 individuals, 41%). A far smaller number were existing health trainer clients (16 individuals, 8.8%) and only 3 people (1.7%) had attended a roadshow event. It is not known whether these numbers accurately reflect the main routes by which people access the health trainer CHC service or if they are a reflection of the likelihood of people voluntarily completing questionnaires in different locations.
**Motivation**

The patient experience questionnaire asks clients 'How did you find out about the Mini Health MOT?' (see fig. 14). Of the 180 people who answered this question, 72 (40%) said that they had been provided with information by their workplace, 49 (27%) had found out at a community event, and 35 (19%) had been told by a health trainer. Smaller numbers had been told about the MOTs by a personal contact or the Get Active team, or had seen an information leaflet or advertisement in the local community. The ‘other’ option includes those who had organised the events or been informed by a health visitor. No respondent chose the option of 'It was available at the time'.

Clients are also asked 'What made you decide to have a Mini Health MOT?' (see fig. 15). One-quarter of respondents (45 individuals) selected the option ‘I was worried about my health’ and the same number chose ‘I take care of my health – this was an opportunity to have it checked out’. A similar proportion (41 individuals, 23%) said ‘The staff here told me about it when I came in’ and a further 31 respondents (17%) underwent an MOT because ‘It was available at the time’. Ten of the respondents said that they found it more convenient than making a doctor’s appointment or that they do not get to see their doctor in general. The ‘other’ option included one person who was signposted to the service and another who elaborated with ‘Wife made me’.
Figure 14: How clients find out about the mini health MOT

- Information from work: 72
- Community event: 35
- Told by health trainer: 8
- Told by partner, friend, relative, colleague: 6
- Information leaflet: 5
- Told by Get Active: 3
- Advertisement in local community: 2
- Other: 2

Figure 15: Motivation for undergoing a mini health MOT

- Worried about my health: 45
- Opportunity to get checked out: 41
- Informed by staff: 8
- It was available at the time: 8
- More convenient than making a doctor’s appointment: 7
- Encouraged by a family member or friend: 2
- I don’t get to see my doctor: 2
- Other: 2
Views on the Staff

The questionnaire contains four questions or probes to ascertain clients’ views on the staff involved in delivering the mini health MOT. The results are summarised in table 4 below. None of the clients disagreed strongly with any of the statements and only one person disagreed slightly that they had sufficient time to discuss any concerns. More than 90% of respondents agreed strongly that the staff were friendly, that they made them feel comfortable and explained everything in a way that was understandable. Fewer people agreed strongly that they were given enough time to discuss any concerns, although this was still a high proportion of the sample (86%).

Table 4: Views on staff conducting mini health MOTs

<table>
<thead>
<tr>
<th>How far do you agree or disagree that…</th>
<th>Agree strongly</th>
<th>Agree slightly</th>
<th>Neither agree nor disagree</th>
<th>Disagree slightly</th>
<th>Disagree strongly</th>
<th>No answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>The staff were friendly</td>
<td>170</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>The staff made me feel comfortable</td>
<td>166</td>
<td>13</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>The staff explained everything to me in an understandable way</td>
<td>169</td>
<td>11</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>I was given enough time to discuss any concerns</td>
<td>153</td>
<td>19</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>4</td>
</tr>
</tbody>
</table>

User Satisfaction

The questionnaire asks clients ‘How satisfied were you with today’s Mini Health MOT?’ (see fig. 16). The vast majority of respondents (164 individuals, 92% of the sample) stated that they were very satisfied, with a further 13 (7.3%) stating that they were quite satisfied. This means that more than 99% of those who underwent a mini health MOT were satisfied with the service they received. One individual reported that they were very dissatisfied and the reasons for this are not known. Clients were also asked whether they would recommend the mini health MOT to other people. Of the 178 people who responded to this question, 176 (99%) said yes and 2 (1.1%) said no.

Seven people chose to respond under the ‘any further comments’ section of the patient experience questionnaire. These responses – which are shown in box 2 on the following page – were entirely positive. Names of individual staff members have been removed from the quotes to preserve their anonymity. Again, these should be treated with some caution because they relate to the mini health MOT (‘Check 4 Life’) programme in general, rather than the health trainer CHC service specifically.
I feel very comfortable talking to [name of staff member] about my weight, which I don't find easy. (Respondent 1)

[Name of staff member] checked us out – very friendly guy – only took a few minutes. (Respondent 2)

Staff very good. (Respondent 3)

It was very helpful. It was nice to have someone to take time with me. (Respondent 4)

Very friendly and helpful. (Respondent 5)

Excellent opportunity – everyone should consider – very helpful staff. (Respondent 6)

Thank you. (Respondent 7)

The results of the patient experience questionnaire, along with the findings from the quantitative and qualitative data analyses, are discussed in the following chapter.
Discussion

The purpose of this final chapter is to synthesise and interpret the evaluation findings in light of the strengths and limitations of the methods. The chapter begins with an overview of key issues that have been set out in previous chapters, supported by the existing empirical and policy literature on health checks and lay health trainers. An appraisal of the evaluation design is then undertaken to demonstrate the credibility of the findings. Finally, the implications for service provision and future research are set out in relation to both the health trainer community health check service in County Durham and similar services aimed at cardiovascular risk screening.

Synthesis and Interpretation of the Findings

Increasing coverage of the NHS Health Check Programme

The findings of this formative evaluation suggest that, overall, the health trainer CHC service has been implemented and delivered successfully to date. Success in this instance is defined largely in terms of coverage of the CVD risk screening programme. It was suggested that GP-led health checks were not being taken up locally by particular population groups, including those under the age of 60 or living in socio-economically disadvantaged areas. It is not uncommon for public health interventions to advantage those with the lowest levels of need; parallels have been made with the inverse care law, which states that the availability of good medical care tends to vary inversely with the need for it in the population served (J Tudor Hart, 1971). The risk of intervention-generated inequalities is greatest with public health interventions that rely on voluntary behaviour change, employ a one-size-fits-all approach, have an educational component and are financially regressive (White, Adams & Heywood, 2009). Research has shown that women who choose not to attend the NHS Breast Screening Programme are more likely to come from affluent areas, and the same is true in the case of cervical cancer screening (Banks et al., 2002; Dalton & Soljak, 2012). The CHC service, on the other hand, was successful in recruiting 60% of its clients from the 40% most deprived areas in County Durham. Delivering mini health MOTs in community venues and workplaces was perceived to be an effective way of removing the barriers to accessing the NHS Health Check Programme and engaging people in a conversation about their health.

At the full health check stage, clients were more likely to come from more affluent areas than more deprived areas (56.5% compared with 43.5%). However, this need not be seen as problematic since cardiovascular disease affects people in every socio-economic grouping. Much of the ongoing debate around health checks centres on whether population-wide or targeted approaches to CVD screening are more effective and cost-effective. A modelling study conducted by Lawson et al. (2010) using Scottish survey data suggested that a targeted approach would be less costly than mass screening and could identify up to 84% of high-risk individuals. However, this approach would not be
suitable for identifying those at moderate or low risk. Maintaining a population-wide approach creates opportunities to engage with people at different levels of risk to influence their lifestyle choices and empower them to care for themselves (Kumar et al., 2011). There is growing evidence that population approaches can be cost-effective and are likely to be more beneficial for health inequalities (Capewell & Graham, 2010; Dalton & Soljak, 2012). However, there exists a ‘prevention paradox’ in that public health measures offering large benefits to populations will often have little or no benefit to individual population members (and may require them to incur significant costs) (Rose, Khaw & Marmot, 2008). Furthermore, a focus on identifying those ‘at risk’ can help to ensure that individuals are motivated to complete an intervention and that they have the support of their physician. The CHC service combines both population-wide and targeted approaches in an effort to achieve good coverage in disadvantaged groups, who could potentially see the greatest benefit. It has been suggested that “The realization of a genuinely bipartite prevention strategy is likely to be crucial in efforts to significantly reduce the burden of CVD” (Dalton & Soljak, 2012, p.211).

The approach employed by the CHC service fits with what Marmot (2010) has described as ‘proportionate universalism’, in terms of the measures needed to reduce the steepness of the social gradient in health. This involves action across the whole gradient in recognition that, rather than a simple gap between the ‘haves’ and ‘have-nots’, there exists a continuum characterised by unequal distribution of resources, capabilities and rights (Popay et al., 2008; Whitehead & Popay, 2010). However, the fact that only 33% of eligible people from the most deprived quintiles attend for a full health check, in comparison with 44% of those from the least deprived quintiles, indicates that the CHC service may be more attractive to those from more affluent groups and therefore there is a risk of intervention-generated inequalities. The relatively low adherence rate is a cause for concern across the board, although some groups have higher retention rates than others. For example, the service appears to be more attractive to the younger age groups, given that 56% of those who undergo a full health check are under the age of 50. It has been suggested that, although concentrating efforts on the 50-74 age group may improve sensitivity to detect CVD using health checks, this would reduce the chance of engaging with patients about health at an earlier stage (Kumar et al., 2011). The CHC service is less successful in engaging and retaining older people, particularly those over the age of 70. It may be that this age group is more likely than younger age groups to visit their GP for advice on health and lifestyle issues.

It is well recorded that men are less likely to make use of health care and health improvement services than women, for reasons including caring being seen as a female task, work-related issues, and a lack of services specifically targeting men's health (Bertakis et al., 2000; Smith, Braunack-Mayer & Wittert, 2006). Women were more likely to access the CHC service, possibly because it tends to be offered at times and venues that are more likely to appeal to women, for example, children’s centres, carer’s groups and family fun days. However, of those identified as being eligible for a full health check, men were significantly more likely than women to attend. Delivering
the CHC service within workplaces was perceived by stakeholders to be a particularly effective way of engaging with men. The time lag between conducting mini MOTs and arranging an appointment for a full health check might have resulted in women seeking advice from their GP for advice instead. Furthermore, the technical aspect of the intervention – whereby computer software is used to generate a numeric CVD risk score – might appeal to men more than women. Individual level data were not available to enable us to move beyond speculation on these and other issues. For example, it was not possible to determine whether the high proportion of eligible women assessed as being at low CVD risk was associated with the high levels of overweight and obesity amongst those undergoing a health check, and also with age. If there was an association, there could be important implications for the communication of risk to those who might have a low score due to their age and gender, but who might still benefit from lifestyle intervention due to their BMI. The extremely high adherence rate amongst those who are overweight or obese suggests that excess weight is an important motivating factor for those attending the health check. However, this could be an artefact of the data due to differences in recording of the mini MOT and health check data. The level of obesity recorded in the CHC service monitoring database (12%) is surprisingly low given that the local average for County Durham is 29% (APHO, 2012).

Implementation and delivery of the CHC service

A key concern for the CHC health trainers was the time lag between conducting the mini MOT and full health check, in terms of the likely impact on the clients’ motivation. This is supported by the monitoring data, which suggests that certain groups are more likely to exit the service than others during this period. For example, none of the 19 mini MOT clients who identified themselves as being from a non-White British ethnic group received a full health check. This creates cause for concern in that, although only 3.5% of the population in County Durham are from black and minority ethnic backgrounds, CVD deaths in these groups can be up to 50% higher than in the general population (Westerby, 2011; Durham County Council & NHS County Durham, 2012). The literature on similar CVD screening interventions suggests that taking the service to culturally appropriate venues within the community can be effective in increasing coverage amongst particular groups (Frank & Grubbs, 2008; Harris et al., 2011). The CHC service operates at venues and events where local people are likely to congregate, but closing the gap between the mini MOT and full health check might be necessary to avoid any loss-to-follow-up from ‘hard to reach’ groups. Operating an appointment system was suggested as a potential solution. However, a study involving a primary care-based health check service in Stoke-on-Trent found that offering the choice of attending a drop-in clinic or booked appointment appeared to be more effective and cost-effective than offering the option of booked appointments alone (Kumar et al., 2011).

The CHC health trainers also raised concerns about the lack of data linkage between the different health check providers, which was perceived to contribute to unnecessary competition and duplication of effort. As a result, the staff and service leads within the
NHS were anxious about being able to meet the targets set by the local authority commissioners, in spite of general agreement that the process was one of ‘trial and error’. The NHS Health Check Programme has been rolled out at a time of economic austerity, which understandably contributes to anxieties around value for money and the merits of a population-wide preventive approach. Evaluation of the programme will therefore be critical in ensuring success, given that there has been no previous implementation of systematic CVD prevention on this scale anywhere in the world (Dalton & Soljak, 2012). Participants reported some initial implementation barriers, which resulted in frustrations for the commissioners and health trainers. Staff described the process as a learning curve and service leads reported that organisational learning was a key outcome from the first six months of operation of the CHC service. Recruitment and training of a cohort of skilled staff was also seen as an important outcome, both for the organisation and the individual members of staff. The impact of these types of services on health trainers, users and local communities are recognised as key outcomes of the overall health trainer programme (Department of Health, 2007).

**Early evidence of success**

Participants in this evaluation found the health trainer CHC service to be an acceptable way of delivering CVD risk screening in local communities and workplaces in County Durham. This was reinforced by the high level of user satisfaction recorded in the patient experience questionnaire. There is some evidence to support the belief that similar lay health adviser (LHA) programmes can be more successful than professional-led interventions, particularly in increasing access to care amongst so-called ‘hard to reach’ populations (Swider, 2002; Andrews et al., 2004). Reviews have found promising benefits in the use of LHAs to improve outcomes for selected conditions (Lewin et al., 2005; Viswanathan et al., 2009; Carr et al., 2011). The most recent review by Carr et al. (2011) found that, although LHAs were not proven to be cost-effective in promoting screening uptake in a UK context, they were successful in building social capital and demonstrating high degrees of acceptability. In our evaluation, there was a perception amongst key stakeholders that health trainers might be more successful than GPs or pharmacists in encouraging people to access appropriate lifestyle interventions. This was not supported by the quantitative monitoring data, which possibly highlights poor recording rather than a lack of signposting by the health trainers. Significant numbers of clients were referred to their GP for support, largely due to concerns relating to blood pressure and/or BMI. Smaller numbers were referred to a specific lifestyle intervention, but presumably others were given information about local services. People may have chosen to access these services at a later date or made lifestyle changes on their own, as suggested by the qualitative feedback from those who had received a health check.

Evidence is scarce to support the assumption that informing someone they are at high risk of disease will lead them to make significant behaviour changes, particularly in the longer term. A similar programme of nurse-run health checks was introduced in five GP practices across Bedfordshire in the early 1990s. Patients followed up after three years
were found to have reduced their intake of saturated fat resulting in lower cholesterol levels, compared to patients who had not received a health check (Haq, Yeo & Jackson, 1995). However, the programme had no impact on smoking behaviour or alcohol intake. A recent Cochrane Review – based on eight trials providing data on cardiovascular mortality and eight on cancer – found that general health checks in adults did not reduce morbidity or mortality (Krogsboll et al., 2012). The health checks delivered as part of these trials were conducted by physicians in primary or secondary care settings. In contrast, a systematic review of community-based programmes for the prevention of CVD found small but consistent positive changes in overall CVD risk (Pennant et al., 2010). A primary study conducted in the USA also found that CVD educational interventions (delivered by masters level-trained health educators) reduced health service utilisation and medication usage, resulting in lower costs (Nawathe et al., 2010). The best evidence in support of the CHC service comes from a similar study conducted in Liverpool, which found that a theory-based health trainer-led intervention to improve heart health resulted in an incremental cost per quality adjusted life year (QALY) of £14,480 (Barton et al., 2011). This is more favourable than the threshold of £30,000 per QALY set by the National Institute of Health and Clinical Excellence (NICE), suggesting that the intervention represented value for money. Although the study involved relatively small numbers, this may have been a conservative estimate if the benefits of the intervention were sustained beyond the six-month trial period.

**Strengths and Limitations of the Evaluation**

The analyses reported here relate only to the first six months of operation – or the first three months in the case of the full health checks – of the CHC service. Client information gathered by the CHC health trainers during routine practice was used as the basis for the quantitative element of the evaluation. The limitations of this type of secondary data analysis include concerns about the accuracy of the data sources and how to deal with incomplete or inconclusive information (Robson, 2011). For example, the mini health MOT involves measuring the client’s weight and height, which are then used to calculate their body mass index (BMI). This information is recorded in paper form, but the CHC service monitoring database only indicates whether the client was identified as being overweight (yes/no) or obese (yes/no). Therefore, an assumption had to be made that any client not identified as overweight or obese had a BMI below 25kg/m². There are likely to have been recording errors given that the prevalence of overweight and obesity within the sample was lower than expected. Furthermore, this meant it was not possible to calculate useful statistics such as average BMI (by age, gender, deprivation quintile, etc.), which could also be used to chart improvements over time if the measures were repeated. The same is true of blood pressure, which was recorded as high (yes/no) or pre-high (yes/no), rather than by giving numeric values.

Participants in the interviews and focus groups were selected using a purposive sampling strategy of key stakeholders associated with one community health check.
service in northern England. Therefore, they may not have been representative of all stakeholders involved in the delivery of community health checks. By involving the service leads in identifying potential participants, we are likely to have spoken only to individuals who are largely supportive of the service. The relatively small sample size of 20 participants might also cause concern. However, credibility in qualitative research depends less on sample size than on the richness of the information gathered (Patton, 1990). Selective sampling was felt to be more suitable than representative sampling in this context because it maximises the researcher’s ability to draw conclusions that take adequate account of local conditions and values (Lincoln & Guba, 1985). We acknowledge that service users are a key stakeholder group that are not represented in the qualitative element of this evaluation, and this is due to time and resource constraints. Instead, we sought to incorporate their feedback by including data from the patient experience questionnaire (although this is completed voluntarily and therefore results in a highly self-selected sample). Furthermore, our intention was that this work would constitute a pilot for one or more larger-scale evaluations that are likely to focus primarily on the views, experiences and outcomes for service users.

As with any qualitative research, the findings presented here solely reflect the views of the participants, which limits the ability to generalise to the wider population. However, the purpose of the evaluation was to inform action, enhance decision-making and apply knowledge to solve problems locally. We assert that the chosen methodology allowed for the collection of data of sufficient depth to address the aim and objectives. Use of a mixed methods approach (i.e. methodological triangulation) and involving different groups of stakeholders (i.e. data triangulation) enabled us to effectively capture a range of views on the CHC service and enhance the reliability of the evaluation (Denzin, 1978). Trustworthiness of data interpretation was addressed by having all members of the research team independently analyse the interview transcripts (i.e. triangulation of analysis). An additional element of trustworthiness was achieved by feeding back the initial findings and interpretations to the service leads for comments, as well as presenting this information at a national nutrition and health conference. Finally, using extracts from participants’ verbatim accounts has increased the dependability of the findings by grounding our interpretations within the data (Johnson, 1997).

**Implications for Practice and Future Research**

The findings of this evaluation, in conjunction with those from the existing literature, have resulted in a number of implications for service delivery and future research in relation to the health trainer CHC service in County Durham. We evaluated the delivery of the CHC service between January and June 2012 and, following discussions with the service leads, we are aware that many potential areas for improvement have been or are being addressed. However, the following implications may also be relevant to those involved in research, service planning or provision in relation to similar community-based cardiovascular risk assessment programmes.
Service planning and delivery

- Delivering the CHC service in communities and workplaces appears to be an effective way of engaging people and removing some of the barriers that they face in accessing ‘mainstream’ health services. It is important to remain flexible and tailor services to the local context, in recognition that different community groups or workforces are likely to have specific needs and preferences.

- Reducing or removing the time lag between delivering the mini health MOT and full health check should help to increase adherence to the programme. Previous research suggests that offering the choice of attending a drop-in clinic or booked appointment may be the most effective and cost-effective approach.

- Uptake of the full health check is a key concern for the CHC service and certain population groups have lower levels of uptake than others. These groups include black and minority ethnic (BME) groups, older people and, to an extent, those from socio-economically disadvantaged communities. The service is particularly successful in engaging those from less affluent areas at the mini MOT stage and it is important that efforts are made to retain these individuals, to avoid creating intervention-generated inequalities.

- The lower retention levels for older people and women need not be problematic if these individuals go on to receive a full health check from a GP or pharmacist. Conducting some follow-up activity with these clients and improving the links between the different providers of the NHS Health Check Programme would facilitate monitoring of this situation. Improved communication and data linkage between the various providers would also help to avoid any duplication of effort.

- Consistency in terms of branding of the CHC service with other providers of the NHS Health Check Programme and the ‘Check 4 Life’ (mini health MOT) programme would help the health trainers to establish their identity in this new role. This might make it easier for them to approach people in local communities and to raise awareness of the service. However, it could be off-putting to some people in certain settings and would also set the CHC health trainers apart from the core health trainers in County Durham. A flexible approach is required.

- Gender differences in the way that men and women respond to services and also in the way that CVD risk is calculated must be taken into account. It appears that delivering mini MOTs in community settings is a particularly successful way to engage women, while the full health check appeals more to men. The CHC service has identified a number of men at high risk of CVD who might not have been aware of this risk without the intervention of a health trainer. At the same time, many women were found to be low risk, even though they might be overweight.
or obese. Health trainers require appropriate training to communicate carefully the level of risk to avoid either unnecessary anxiety or false reassurance.

- Previous research has shown that health checks alone are unlikely to be sufficient in terms of prompting people to change their lifestyles. The CHC service is funded in part to deliver lifestyle interventions to people identified as being at moderate risk of CVD. However, around two-thirds of clients were found to be at low or high risk and therefore must be signposted to another service rather than supported directly by the CHC health trainers. Efforts are needed to ensure these clients have access to appropriate support and also to ensure that anyone identified as being high risk actually seeks advice from their GP. Furthermore, realistic targets should be set, based on the level of CVD risk in the population and taking into account the differences between sub-groups.

Monitoring, evaluation and future research

- The collection of complete, individual-level data is essential to monitor the characteristics of those who access the CHC service and how these change with time and geography. Signposting into other services also needs to be recorded, to monitor the extent to which the service could be achieving behaviour change as opposed to simply informing people of their CVD risk.

- This evaluation has highlighted the importance of linking the data gathered during mini health MOTs and full health checks, in order to identify whether there are particular groups who are successfully engaged at the mini MOT stage and then retained or lost-to-follow-up for any reason at the full health check stage. This information can then be used to explore potential barriers and facilitators to accessing the CHC service.

- Repeating the mini MOT at the end of any lifestyle intervention delivered by a health trainer would enable the collection of before-and-after data, which would contribute to evaluating the impact of these interventions on individual clients. Conducting some form of follow-up with those who access other services or decline the offer to receive any form of lifestyle intervention would also help to evaluate the impact of the NHS Health Check Programme as a whole.

- Rigorous process and outcome evaluations are needed to provide further evidence for both the CHC service and the NHS Health Check Programme, given the innovative nature of these population-wide, strategic approaches to CVD prevention. These evaluations would potentially add to the existing evidence base on ways to improve cardiovascular health and address health inequalities.
- The CHC service should be evaluated in comparison with other health check providers to determine whether a health trainer-led approach to vascular risk assessment can be effective, cost-effective and equitable. This formative evaluation suggests that the CHC approach is feasible within the context of County Durham, but it needs to be implemented and evaluated on a larger scale.

- Future qualitative work is required to explore in-depth the experiences of various stakeholders in the CHC service, including service users, staff, workplace representatives and primary care practitioners. This knowledge would be useful in determining the acceptability of both the NHS Health Check Programme and the ‘Check 4 Life’ programme from a range of different perspectives.
Appendices

Appendix A: Focus Group and Interview Topic Guides

Health trainer focus groups

- **For new staff:** Recruitment to the CHC service
  - Views of the application process and training programme
  - Expectations of the role
  - Experiences of service delivery to date
- **For existing staff:** Relationship with the CHC service
  - Experience of referring to / receiving referrals from this service
  - Views on if and how the service complements their work
- Integration of the CHC service into local health systems
  - Links with other public health practitioners / teams
  - Relationships with primary care staff
- Views on the NHS Health Check Programme
- Outcomes of programme delivery to date
  - What has worked well / early evidence of success
  - What works less well / potential areas for improvement
- Anticipated outcomes for individuals and communities
- Suggested areas for improvement

Key stakeholder interviews

- Description of their role in (or awareness of) the CHC service
  - Any issues related to implementation and service delivery
  - Development problems
- Integration of the CHC service into local health systems
  - Links with other public health practitioners / teams
  - Relationships with primary care staff
- Views on the NHS Health Check Programme
- Outcomes of programme delivery to date
  - What has worked well / early evidence of success
  - What works less well / potential areas for improvement
- Anticipated outcomes for individuals and communities
- Suggested areas for improvement
Appendix B: H-Diagram for Completion by Core Health Trainers

The H-diagram was printed on a sheet of A4 paper and circulated to the core health trainers at a whole team meeting, along with instructions for completion and a pre-paid envelope. Managers sent one reminder to staff, approximately two weeks after the initial meeting, asking them to complete and return the diagrams to the evaluation team.
References


