Evaluation of Walking for Health

Final Report to Macmillan and the Ramblers

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Foreword

We know that the combination of outdoor exercise and social interaction offered by Walking for Health is good for everyone's wellbeing. Two thirds of adults in England currently don't meet the Chief Medical Officer's guidelines on physical activity, and walking is one of the easiest things people can do to change this.

In 2012, the national management of Walking for Health passed from Natural England to the Ramblers and Macmillan Cancer Support. We wanted more people, whether they were affected by cancer or another health condition or simply wanted to be healthier, to become more active by being able to walk with their local scheme.

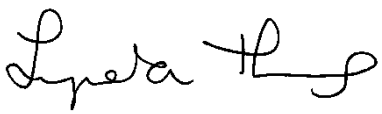
We commissioned this evaluation to help us understand more about the impact of the programme, and to inform the work we do as a national team to support Walking for Health schemes locally. We're delighted to publish the findings of this evaluation report, which highlight a great number of achievements.

The report shows that schemes are doing particularly well at reaching older people and helping them to stay active. Also, walkers and volunteers report high levels of satisfaction with the programme and say that it has not only brought physical benefits, but has also reduced loneliness and social isolation. It is also encouraging that, through partnerships with support groups and other means, schemes are increasing the numbers of new walkers who are affected by cancer and other long term health conditions and are increasingly focusing on how they can support the most inactive people to be more active.

The report also highlights ways in which we can increase the programme's impact, such as improving reach to BME communities and lower socio-economic groups, and retaining less active and less healthy participants. It shows that the programme has the potential to be highly cost effective when supporting inactive people into activity. We know that we need to get better at engaging with these audiences and supporting them to stay more active through Walking for Health over the long term.

We will use the feedback from this report to inform our work to support schemes to engage inactive people, and to diversify its reach. This will be a key priority for us over the next two years, and we are looking forward to working with schemes and local partners to achieve this.

Benedict Southworth
Chief Executive
The Ramblers



Lynda Thomas
Chief Executive
Macmillan Cancer Support

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Executive Summary

1. Evaluation Aims and Methodology

This report presents the results of the evaluation of the national Walking for Health programme, undertaken by Ecorys UK and Norwich Medical School, University of East Anglia between 2014 and 2016. The aims of the study were to provide evidence of the programme's impact on health and wellbeing and to identify lessons learnt to support on-going development and improvement. The evaluation focuses on the first three years of the Ramblers and Macmillan partnership that has hosted Walking for Health (2012-15).

The evaluation methodology comprised of both quantitative and qualitative components. The former included an analysis of programme monitoring data (collected from new participants via a registration form), a longitudinal telephone survey conducted with new walkers commencing Walking for Health in 2014, who were then followed up four and eight months later, and a pedometer study, designed to provide an objective assessment of changes in walking levels. Qualitative analysis drew on in-depth case study research, undertaken with nine Walking for Health schemes representing all programme regions and a mix of scheme sizes and delivery models, alongside in-depth interviews undertaken with representatives from the national Walking for Health team and related key stakeholders (national public health bodies, charities working in the health field and local authorities). Finally, the cost-effectiveness of the programme and cost-benefit analysis was undertaken using the MOVES model[1], to help estimate the return on investment from Walking for Health schemes.

2. Background and Rationale for Walking for Health

Established in 2000, Walking for Health is an England-wide network of health walk schemes that delivers free, regular, short group-walks that are open to all. The programme aims to reach people who are currently inactive, or who need support to remain active, to improve their health and wellbeing.

The aim of Walking for Health is grounded in a strong rationale, based upon evidence of the importance of physical activity in reducing long-term health risks and the potential for physical activity to help people living with and beyond cancer. The programme also strongly complements the growing body of evidence highlighting the benefits of physical activity for personal wellbeing and overall quality of life. Within the range of physical activities available to local communities, Walking for Health meets a specific need for accessible opportunities to participate in moderate physical activity, which allows them to raise or to maintain their activity rate to meet the Government's recommended level.

Walking for Health schemes are funded and delivered at a local level. Each scheme has a coordinator who oversees and develops the scheme, supported by a number of volunteers including walk leaders and cascade trainers. Support for local volunteering further enhances the potential for wellbeing benefits to be delivered by the Walking for Health programme.

[1] MOVES was developed by the University of East Anglia's Medical School specifically for Sport England to help to demonstrate the economic benefits of participating in sport and wider physical activity. It is intended for use by those commissioning these types of activities.

3. Delivering Walking for Health

National programme team and accreditation

The national programme team, which has been hosted by the Ramblers in partnership with Macmillan since 2012 (and subsequently extended to run to at least March 31st 2018) provides infrastructure to support delivery across the whole of England. Stakeholders consulted for the evaluation were generally positive about the rationale, operation and effectiveness of the Macmillan and Ramblers partnership.

In order to help meet the overarching programme aim of improving people's health and wellbeing, the Ramblers and Macmillan set nine specific objectives for Walking for Health for 2012-15. One key objective was to raise awareness of the value of Walking for Health among health and social care professionals (in order for example to facilitate the signposting of target groups and access to funding). In support of this, the national programme team has played a particularly important role in developing a common identity and product for Walking for Health, as a health activity that meets specific criteria. This includes ensuring that the programme and its local level schemes are fit for purpose for engaging people with long-term health conditions and those who are inactive, in moderate-level physical activity.

A rigorous process of accreditation has therefore been a key focus of the national programme team since 2012. All schemes should now meet the requirement of providing at least one walk between 10-30 minutes per month, walks that last no longer than 90 minutes, and walks set at a moderate pace that make walkers feel warmer, breathe harder and their heart beat faster (whilst still being able to talk to others around them). There was a broad consensus amongst stakeholders and local schemes consulted that this accreditation role has been executed effectively, and that there is now a widespread understanding and acceptance of the need for schemes to include shorter health walks.

> The accreditation process has highlighted the benefits of a national coordination role. Moving forwards, there is the potential for more targeted promotion amongst national-level health organisations and groups in order to raise the profile of Walking for Health. Other areas which would benefit from an increased level of national support include the engagement of target groups in local Walking for Health schemes, the development of local partnerships, and the diversification of scheme funding.

Number and size of local schemes

A further specific objective set by Ramblers and Macmillan was to increase the availability of and participation in Walking for Health. The effects of accreditation are shown in the decline in the number of registered schemes between April 2014 and March 2015, from 591 to 400. Some schemes merged with others as a result of the accreditation process and some chose not to apply for accreditation.

Nonetheless, analysis of scheme data also shows that individual schemes vary significantly in terms of their number and range of programmed walks, and in terms of how many regular walkers participate in these walks. The average was 47 regular walkers and the highest number was over 3,000. This suggests significant potential for individual schemes to expand in order to help increase participation in Walking for Health, providing that the required resources can be accessed.

Following the completion of the accreditation process, in future years, further analysis will be required to assess how far the programme has met its objective to extend scheme coverage. One lesson from the evaluation is that this extended coverage could be achieved in different ways; expanding the number of schemes but also the size of schemes.

Volunteer inputs and scheme funding

Further objectives of the Walking for Health programme include supporting the sustainability of local schemes, specifically through helping them to recruit and retain a sufficient pool of volunteers and to secure a diversity of additional funding.

Volunteer time and inputs are critical to the delivery of Walking for Health. Some 11,000 volunteer walk leaders are estimated to have contributed to Walking for Health schemes in 2013; only 16% of schemes experienced a decline in walk leader numbers (compared with 2012). Corroborating the finding from the national programme team's survey (that 69% of volunteers were 'very satisfied' with their Walking for Health experience), walk leaders who were interviewed for the evaluation also appeared to be highly satisfied, driven for example by the experience of being able to give something back to the community. One specific success factor was reported to be the take-up of training provided to volunteers through a cascade approach, whereby scheme coordinators are trained as trainers; this training approach was also highly valued by volunteers. Nonetheless, some of the case studies did report challenges in sustaining a sufficient pool of committed volunteers to run their schemes.

Data from the 2013 Audit of Walking for Health schemes suggests that individual schemes are economical to run, with average annual funding of around £11,000 (increasing to budgets of up to £85,000 for the largest schemes). Within this context, the majority of schemes (53%) were funded by local authorities (an increase from 38% in 2012), while 11% were funded by NHS bodies (a decrease from 25% in 2012). This reflects the switching of responsibilities for public health from the NHS to local authorities, as a result of the Health and Social Care Act 2012.

Whilst it was evident that local authority schemes in particular are developing more strategic links and partnerships with health professionals and other groups, including signposting links with external organisations, these were generally not found to have levered in additional funding.

The case studies undertaken for the evaluation highlighted the potential for schemes to diversify their funding beyond local authorities and the public sector; many of the case study schemes had applied successfully for external funding from sources such as the Big Lottery. There is also the potential to diversify recruitment of volunteers beyond existing channels such as Walking for Health participants.

Engagement of target groups

A specific programme objective is to engage people affected by cancer and other long-term health conditions as well as people from specific health inequality groups in Walking for Health (including older adults, people from black and minority ethnic communities and people on lower incomes).

Local schemes use a variety of methods to recruit new walkers, which vary in their level of effectiveness. The most widely used methods of promotion have been word of mouth and posters in venues such as leisure centres and church halls. There is a risk that reliance on these approaches limits the schemes' ability to engage with more diverse groups of walkers, including those affected by specific health issues.

Schemes have increasingly recognised the potential of the Walking for Health association with Macmillan to facilitate health sector partnerships, and as a result of this, increased their drive to engage with GPs through targeted promotion at GP surgeries and engagement with health professionals and commissioners. However there is the potential for lessons from individual schemes' successful engagement of health professionals to be shared more widely across the programme.

These process findings are reflected in the data on the demographic profile of Walking for Health participants. The evidence suggests that Walking for Health is successful at targeting and engaging older adults, since the vast majority of participants are in the over-55 age group. 4.3% of all walkers and 7.3% of new walkers in the year to March 2015 had been diagnosed with cancer, an increase on the year to September 2014; these figures compare to a cancer prevalence rate of 3.2% for the overall population. Some 33.6% of walkers registered in the year to March 2015 had at least one serious health condition (excluding cancer).

However, the evaluation found that further actions are needed to meet the programme aim of reaching those groups that are considered to need most support for accessing Walking for Health:

- Overall, based upon self-reported data, participants in Walking for Health tended to be healthier, and no less active, than people of comparable age within the general population.
- Only 3.4% of walkers in the year to March 2015 belonged to ethnic minority groups (compared to 15% of the national population).
- In the year to March 2015, 5.3% of walkers lived in the 20% most deprived areas as defined by the Index of Multiple Deprivation (compared with 10% of the national population).

Despite such challenges, the case study research demonstrated examples of good practice in attracting people with long-term health conditions, engaging with health professionals, and engaging with 'harder-to-reach' groups who are physically inactive. For example, there were examples of successful signposting schemes whereby cancer and heart patients are signposted directly on to the programme, and schemes which use community venues and health talks to reach out to people living in deprived areas.

An important lesson from the experience of reaching and engaging target groups is the need for more systematic analysis of health inequalities in local areas to support Walking for Health scheme targeting, as well as the recruitment of walk leader 'champions' from target populations.

4. Outcomes and Impact of Walking for Health

An important focus of the evaluation was the extent to which the Walking for Health programme generates positive outcomes and impacts for participants. Programme achievements were explored with respect to changes in overall physical activity, walking, sedentary behaviours (sitting), and improvements in general health and wellbeing.

- **Overall, participants in Walking for Health maintained their levels of weekly physical activity over the full period of the survey (8 months),** even allowing for some drop out**.** This is a positive finding given the aims of the programme to sustain moderate-level physical activity, and the older target group engaged. On average, participants were undertaking around 2.5 days of (at least 30 minutes) moderate physical activity at the baseline and final follow-up stages of the survey. Furthermore, half of the respondents reported that it was unlikely they would have found a similar scheme in the absence of Walking for Health. Qualitative evidence pointed to the importance of Walking for Health in helping older people to maintain their physical activity when stepping down from more vigorous or other walking activities. Amongst the minority of respondents who increased their level of activity between Wave 1 and Wave 3 of the survey (including people who self-reported themselves as inactive at Wave 1 according to standard definitions), positively, a proportion of these attributed this change to involvement in Walking for Health. However (and aligning with the findings above on the engagement of target groups), it should be noted participants continuing on the programme after four months were generally more active and healthier than those who ceased participating.
- **Walking for Health leads to a significant short-term overall increase in levels of weekly physical activity after first joining the programme; however this increase is generally not sustained.** Statistically significant increases in levels of walking (38.2 more minutes per week) and moderate physical activity (1.17 extra days of at least 30 minutes per week) were detected through the survey after the four month interval. However, at the eight month mark, physical activity levels had dropped back to those immediately after the first walk. One possible explanation for this trend is that the initial enthusiasm of walkers, as well as the opportunity to try out different types of walks offered by some Walking for Health schemes, drives this initial increase, before walkers settle back into more manageable levels of activity. A minority of respondents also dropped out of Walking for Health schemes altogether (including some who were 'inactive' at Wave 1).
- **There was an improvement observed in a number of measures of wellbeing.** Statistically significant improved scores were observed for general mental health (as measured by the Warwick Edinburgh Mental Wellbeing Scale), loneliness, and social interaction. Overall life satisfaction did not change. The qualitative responses to the survey and in-depth interviews conducted for the case studies confirmed that the social aspects of Walking for Health represent an important benefit for many participants, for example the opportunity for increased social interaction.

Similarly, the key personal benefits experienced by the volunteers involved in Walking for Health were reported to be increased levels of physical activity, enjoyment but also personal satisfaction derived from their volunteering duties.

The evaluation evidence identified the following positive factors which have resulted in high satisfaction levels amongst participants, as well as facilitating physical activity and social benefits. This provides useful learning for local Walking for Health schemes.

- The regularity of walks and in particular the opportunity to attend walks on a weekly basis.
- The role of the walk leaders in creating a welcoming atmosphere and encouraging social interaction.
- Walks starting and ending in accessible locations (i.e. in town centres or near to public transport nodes)
- Allowing walking groups to divide into smaller groups, of faster and slower walkers, when requested by the walkers.

- Offering a variety of walks that cater for differing abilities.
- Providing the conditions for social interaction outside of the walking activity, such as starting and finishing at social meeting places such as cafes.
- Being free of charge and open to all.

5. Return on Investment

Based upon a combination of Walking for Health programme data and the evaluation survey, the MOVES model indicates that Walking for Health has the potential to be highly cost-effective, at £3,775 per Quality-Adjusted Life Year (QALY) gained. This cost per QALY is well below the NICE recommended threshold cost of £30,000. Furthermore, based on the total value of QALYs gained, the potential Return on Investment (benefit-cost ratio) is estimated to be £3.36 per £1 invested in Walking for Health. MOVES also estimates that the programme delivers cost savings to the NHS of £0.58 for every £1 invested.

The MOVES model assumes that the physical activity undertaken for any evaluated programme is additional to what would have occurred in its absence. Whilst no counterfactual data was available to thoroughly test this assumption with regards to Walking for Health, this scenario is broadly consistent with the overall evaluation finding that Walking for Health helps participants to maintain a level of regular, moderate-intensity physical activity. The analysis is also based conservatively on the specific time spent undertaking walking through Walking for Health (rather than assuming that Walking for Health impacts on all physical activity, even if it may do so in practice for some participants). This equates to 75 minutes of walking per week. MOVES also assumes that the level of physical activity is maintained over the longer-term (in the base case for 5 years or more); this is necessary for physical activity to generate sufficient positive health gains (as well as being consistent with the objectives of Walking for Health to help people to remain active). However, even after adjusting these assumptions through sensitivity testing (shorter time horizon, lower level of additionality), the cost-effectiveness results remain positive.

The lessons for Walking for Health and its local schemes from the economic analysis are that cost-effectiveness can be maximised, and a positive return on investment is achievable, through engagement with those target groups who are more likely to be disengaged from and face barriers to accessing similar physical activities in their local area. Crucially, schemes also need to support such groups to remain engaged in walking (or other physical activities) over the longer-term.

6. Key Recommendations

The evaluation identified a number of recommendations to help improve the Walking for Health programme. These are organised below in relation to the future priorities of engaging with health professionals and Walking for Health target groups, and support for sustainability.

Engaging with health professionals

The evaluation recommends that Walking for Health schemes consider adopting the following good practices to promote stronger engagement with health professionals (where relevant):

- Close links with local authority public health departments, since this can facilitate working relationships and opportunities for increased partnership working with the wider health community (some schemes are managed within local authority public health departments).
- Regular attendance of scheme coordinators at Clinical Commissioning Group meetings and Health and Well Being Boards, to promote Walking for Health schemes and network with specific health bodies and groups.
- Targeted promotion at GP surgeries by sending Walking for Health promotional packs including leaflets and posters.
- Training community champions with existing links to GP surgeries to be walk leaders, and starting their walks from a surgery.
- Engaging with and meeting the criteria for social prescribing and exercise on prescription initiatives.
- Establishing signposting schemes with patient recovery programmes to Walking for Health walks.
- Including Walking for Health on local exercise referral systems that are used by medical professionals.

The evaluation recommends that such local initiatives are supported by increased engagement with national level health bodies from the national programme team, to help ensure that Walking for Health can be recommended through social prescribing and local exercise referral schemes, and to help increase the engagement of particular groups with health conditions. For example, it was suggested that Walking for Health should work with national bodies to help ensure that sufficient incentives are in place for GP surgeries to refer to the programme – one mechanism highlighted was to ensure that more local surgeries adhere to the voluntary Quality and Outcomes Framework.

Stakeholders interviewed for Walking for Health suggested a number of specific national bodies and networks that the programme could engage more intensively with, including:

- Mental health charities.
- Charities supporting older people.
- Other large charities connected with the health and social care sector.
- National agencies promoting preventative health (such as Public Health England).

Engaging with target groups

The evaluation recommends that strategies and actions are developed to help retain participants on Walking for Health schemes who are less active to begin with. This could be achieved through more intensive support, and/or by tailoring specific walks to their needs.

The evaluation recommends that a greater focus and more resources are invested in engaging effectively with BME and lower income groups (who may suffer from a higher prevalence of health conditions and physical inactivity). A number of specific actions emerged from the evaluation:

- There is a need to build relationships with 'community champions' (i.e. those with close links to relevant local communities), who can promote the walks and be trained as walk leaders in order to attract and help retain hard-to-reach groups.
- Schemes should be encouraged to promote Walking for Health within a greater diversity of venues with close links to the community (for example local pharmacies), in order to raise the profile of walking groups.
- There is the potential to link up more effectively with local physical activity strategies and other programmes, with Walking for Health supporting local actions to engage specific groups in physical activity.
- Key lessons learnt from the pilot programme *every step counts* (run by the Ramblers and targeting the most inactive) should be collated and mainstreamed across the general Walking for Health programme.
- The national programme team should play a facilitative role in sharing such good practice approaches with respect to engaging target groups, alongside approaches to engaging with relevant health professionals and health bodies (as discussed above).

Support for sustainability

The evaluation recommends that the national programme team supports sustainability by helping to develop the Walking for Health 'offer' for local commissioners, as a key potential funder. This could be achieved by developing the following:

- A clearer specification of what Walking for Health provides as a health preventative and management measure, including its inputs, outputs, health outcomes and return on investment, drawing on the cumulative evidence and data from the evaluation work conducted to date.
- Identifying the role of Walking for Health within a broader pathway that can help to secure longer-term involvement in physical activity; this means schemes developing clearer links with progression walks.
- Highlighting reassuring evidence that walk leaders are well trained and safety procedures are in place on the walks.

The evaluation recommends that the national programme team provides further support to local schemes for volunteer recruitment and retention, in terms of:

- Facilitating the sharing of good practice on local volunteer recruitment and management.
- Publicising as widely as possible the benefits of volunteering for Walking for Health through existing forums such as the Macmillan Volunteering village.

7. Methodological Lessons and Recommendations

There are a number of useful lessons from the study that should be taken on board by future evaluations.

The survey instruments and questions employed for measuring physical activity and walking provided valid and relevant measures of change in one of the principal outcomes of interest to Walking for Health. The pedometer study proved less effective due to a number of practical issues associated with the use and return of pedometers. The majority of measures of wellbeing were also fit-for-purpose; EQ-5D proved less useful due to the length of the questions, and their suitability to be asked as part of a telephone survey. Overall, using a combination of quantitative and qualitative methods (including in-depth case studies) improved the quality of the evaluation evidence. Finally, the MOVES model proved a useful tool for understanding the cost-effectiveness and return on investment of Walking for Health. The inputs and thus accuracy of the MOVES analysis could be tweaked in future years through access to improved data on the additionality of Walking for Health schemes, and the sustainability of participant involvement.

The following **recommendations** should be considered to increase the relevance and quality of future evaluations of Walking for Health:

- Principally, a solution should be found to the challenge of collecting robust baseline data prior to participants' involvement in Walking for Health. We recommend that the modified single item question used in the evaluation be included in walker registration forms; most importantly it will be necessary to significantly boost the response rate to this question amongst new walkers.
- More in-depth questionnaires could be administered with a sub-sample of participants before their first walk, both to help boost/actively monitor the number of physical activity measurements, and in order that a wider range of health and wellbeing outcomes have an appropriate baseline in place.
- A larger sample of schemes should be included in follow-up survey research in order to help boost overall survey numbers; this would allow for more detailed sub-group analysis, and for the detection of smaller changes in outcomes, in line with key programme objectives.
- The national programme should consider the potential for testing an experimental (e.g. randomised control trial) or quasi-experimental design in future evaluations of Walking for Health, to help robustly estimate the counterfactual position and hence the impact of Walking for Health on outcomes.

1.0 Introduction

1.1 Introduction

In July 2013, Ecorys, with the University of East Anglia (UEA), was commissioned by the Ramblers and Macmillan Cancer Support to undertake an evaluation of the national Walking for Health programme. This is the study's final report.

1.2 Walking for Health programme

Set up in 2000, Walking for Health is an England-wide network of health walk schemes that delivers free, regular, short group walks that are open to all. The primary objective of the Walking for Health programme is to increase the availability of and participation in regular, short walks delivered by local Walking for Health schemes so that people who are currently inactive, or who need support to remain active, are encouraged to walk to improve their health and wellbeing. Walking for Health particularly aims to reach those who need the most support to get or stay active, including people affected by cancer and other long-term health conditions, and those from recognised health inequality groups such as older adults, people from black and minority ethnic communities and people on lower incomes.[2] The programme was previously funded by Department for Health and run by Natural England, before the Ramblers became the host of Walking for Health from April 2012, entering an initial three year partnership with Macmillan Cancer Support which was subsequently extended to run to least March 31 2018.

Walking for Health schemes are funded and delivered at a local level. Each scheme has a scheme coordinator who oversees and develops the scheme, supported by a number of volunteers including walk leaders and cascade trainers. The national programme team, which is hosted by the Ramblers in partnership with Macmillan, supports delivery across the whole of England.

1.3 Evaluation aims

The overall aim of the study is to evaluate the Walking for Health programme for all participants, including people living with cancer, in order to provide evidence of the programme's impact and draw out key lessons for the Ramblers and Macmillan to support on-going development and improvement. The evaluation focuses on the first three years of the Ramblers and Macmillan's partnership hosting of Walking for Health (April 2012 – March 2015). The study has six specific objectives:

- To assess the extent to which Walking for Health is effective in achieving the outcomes set out in the logic model (see section 2.6).
- To assess the extent to which Walking for Health has been successful in engaging key target groups, including people living with or affected by cancer, those with other long-term health conditions, and those from recognised health inequality groups, which include Black and Minority Ethnic groups, older people and those on lower incomes.
- To identify best practice for raising awareness, engagement of target groups and local delivery and share this across Walking for Health schemes.

[2] Walking for Health: Business Plan 2013

- To provide on-going formative evaluation, identifying and sharing key learning and recommendations with Macmillan and the Ramblers, and draw out the strategic lessons that can inform and help shape the development of the programme. This aspect of the evaluation has drawn in particular on the specific objectives set for Walking for Health by the Ramblers and Macmillan (see section 2.4), as a point of reference.
- To assess the extent to which the Walking for Health national programme team has been effective at engaging and supporting existing and new schemes.
- To identify the full costs and benefits of Walking for Health, to provide an understanding of the value generated by Macmillan's and the Ramblers investment in Walking for Health.

1.4 Methodology

The methodology for the study consisted of a number of elements. These included:

- Review of programme documentation;
- Review of Walking for Health programme data;
- Qualitative case studies;
- Longitudinal surveys of walkers;
- Pedometer research; and
- Stakeholder consultation.

These elements are described in detail below.

1.4.1 Review of programme documentation

A review of existing relevant strategic and programme documentation was completed at the outset of the study. Throughout the study the evaluation team has also drawn on policy documents, academic literature and existing research and previous evaluations conducted on Walking for Health. A list of documents reviewed is included in Annex four.

1.4.2 Review of programme data

Descriptive and contextual information on the characteristics of Walking for Health schemes, volunteers and walkers is based on analysis of the Walking for Health database and data from the scheme audits of 2012 and 2013.

1.4.3 Qualitative case studies

The qualitative analysis presented in the report draws mainly on in-depth case study research undertaken on nine Walking for Health schemes[3]. A purposive sampling approach was adopted in the selection of the case studies. These included three schemes from each of the Walking for Health regions[4] covering a mix of scheme sizes and types of delivery models. The case studies were also selected on the basis that they

[3] The case study research tools are included in Annex One. The case study reports are available as separate standalone outputs of the evaluation.

[4] LASER – London, East of England, South East; CSWE – Central, South West, West Midlands; EMNE – East Midlands & North England

could potentially offer good practice approaches and transferable models and lessons, based on the national programme team's knowledge of scheme approaches to engagement and targeting. Table 1.1 sets out the region, size[5] and type of scheme chosen. The names of the schemes are kept anonymous throughout the report.

Table 1.1 Summary of case study schemes

Scheme	Lead organisation	Size	Region
A	Local authority	Medium	LASER
B	Local authority	Large	LASER
C	Local authority	Large	LASER
D	Local authority	Medium	CSWE
E	Local authority	Medium	CSWE
F	Volunteer-led	Small	CSWE
G	Volunteer-led	Small	EMNE
H	Local authority	Medium	EMNE
I	Local authority	Large	EMNE

An initial visit was undertaken to each case study area in spring/summer 2014 and then a follow-up visit was undertaken around one year later in spring/summer 2015. The follow-up visit provided a mechanism to explore any changes in the delivery approaches taken by schemes over time, whether there had been any changes around the outcomes and impacts for participants, and to explore further questions around their sustainability.

In addition to exploring process issues, semi-structured qualitative interviews provided an opportunity to explore the outcomes and impacts achieved by the programme in more detail, and key mechanisms of change. Each case study included the following research tasks:

- A review of scheme and walker data;
- Interview with the scheme coordinator;
- Interviews with a sample of walk leaders (and other volunteers if applicable);
- Interviews or focus groups with a sample of partners and stakeholders;
- Interviews or focus groups with participants (generally across at least two groups per scheme); and
- Observation of walks.

1.4.4 Longitudinal surveys of walkers

A key element of the research was three telephone surveys undertaken with new walkers by Ecorys Survey, Ecorys' survey division over the period March 2014 to July 2015. These included one baseline survey and two follow-up surveys, one at four months and a final eight month follow-up. For clarity, the

[5] Size is defined in terms of numbers of registered walkers i.e. small – less than 100; medium 100-300; large 300 or over.

surveys are hereafter referred to as Wave 1, Wave 2 and Wave 3 respectively. The questionnaires used in the surveys are included in Annex One.

The questionnaire was devised with reference to the logic model identifying the principal anticipated outcomes for the programme. Outcomes were assessed using the following scales:

- **Physical activity**: Impacts on recreational walking and sitting time were considered using questions from the International Physical Activity Questionnaire (IPAQ)[6]. Overall physical activity levels were measured using a modified version of the single item[7] that is used in the Walking for Health 'Outdoor Health Questionnaire' (OHQ)[8] (that new walkers routinely complete) and that was used in a previous evaluation of the programme[9]. Survey respondents were asked to report on the number of days that they were physically active in the previous week for a period of 30 minutes or more, and at a level where their breathing rate was raised.
- **Health:** Quality of life and health outcomes for Walking for Health participants were measured by Euroqual EQ-5D, which measures quality of life in five dimensions and was developed by the EuroQol Research foundation and used with their permission for this survey. The EQ-5D-5L version of the instrument was used for this analysis. This instrument consists of two components: a set of five questions and a visual analogue scale (VAS). Of the five questions, three are regarding the difficulty participants have in walking, washing or dressing, and doing usual activities (all scored on a five point scale from 'no difficulty' to 'unable to do activity'), one covers whether participants feel pain or discomfort according to severity (on a five point scale from 'no pain or discomfort to 'extreme pain or discomfort') and one concerns feelings of anxiety or depression (again scored on a five point scale from 'not anxious or depressed' to 'extremely anxious or depressed'). The EQ-5D VAS enables participants to score on a scale of 1-100 how good or bad they feel their health was on the day the survey was completed. A value of 100 equates to 'The best health you can imagine' whilst 0 corresponds to 'The worst health you can imagine'. As the Walking for Health Survey was conducted on the telephone, a modified version of the VAS was used, which is still recognised as a validated approach, where the scale was described verbally as opposed to the use of a visual 'thermometer' for scoring (by asking participants to rate their health on a scale of 1-100).
- **Mental wellbeing**: The primary change in mental wellbeing was assessed by looking at trends in scores computed from the Warwick Edinburgh Mental Wellbeing Scale (WEMWBS)[10]. The survey of walkers used 7 items from WEMWBS each with 5 response categories, summed to provide a single score ranging from 7-35 (and the scores adjusted as per the WEMWBS protocol). The items are all worded positively and cover both feeling and functioning aspects of mental wellbeing. Higher scores on WEMWBS indicate better well-being and thus a positive change in scores indicates improved well-being.

[6] Craig C., Marshall A., Sjostrom M., Bauman A.E., Booth M..L, Ainsworth B.E., Pratt M., Ekelund U., Yngve A., Sallis JF, Oja P (2003), *International physical activity questionnaire: 12-country reliability and validity.* Med Sci Sports Exerc. 2003;35:1381–95.

[7] The single item measure used in the OHQ is also intended for use as a screening question and not as an outcome measure in evaluations. The revised version of the single item question was also informed by the following article: Milton K., Clemes S., Bull F. (2013) *Can a single question provide an accurate measure of physical activity?* Br J Sports Med. 2013;47(1):44–8

[8] Now referred to as the Walker Registration Form

[9] Philips, R., Knox, A. and Langley, E. (2012), *What impact did Walking for Health have on the physical activity levels of participants?* Natural England Commissioned Reports, Number 075.

[10] Tennant R., Hiller L., Fishwick R., Platt S., Joseph S., Weich S., Parkinson J., Secker J., Stewart-Brown S. (2007), *The Warwick-Edinburgh Mental Well-being Scale (WEMWBS): development and UK validation.* Health Qual Life Outcomes 2007, 5:63.

- **Social interaction, loneliness, and life satisfaction***:* Social interaction and life satisfaction were assessed using two items from the European Social Survey 2012[11]. The former asks how frequently the respondent has met with friends, colleague and relatives, with six possible options. Overall life satisfaction is rated on a ten-point scale. Loneliness is assessed by asking the respondent how often they felt lonely (where 1 is 'never lonely', and 4 is 'often lonely') and is adapted from a question in the English Longitudinal Study of Ageing.

Sample and recruitment

New walkers attending their first walk in a select sample of schemes between March 2014 and November 2014 were invited to participate in the Wave 1 survey. The surveys with walkers took place across a sample of 43 Walking for Health schemes. An initial sampling framework (of 30 schemes) was developed that supported a mixed purposeful sampling method, aiming to capture typical schemes and maximum variation across a number of dimensions including: region; lead partner; annual budget; a mix of urban and rural walks, numbers of regular walkers. However, initial take-up of the survey was lower than expected. In order to meet a minimum baseline survey target, a number of larger schemes were included to boost the survey numbers. Within the timeframe of the study, however, it was not possible to reach the initial baseline target of 1,000 respondents. The implications of the lower baseline sample and statistical robustness of the follow-up samples are discussed below.

A list of those that had consented to take part at the registration stage was supplied to Ecorys Survey by the Ramblers. The aim was to contact participants within one week of completing their first walk so that the responses they gave in the Wave 1 survey were as close to 'baseline' levels of activity as possible. The maximum time allowed for chasing contacts was ten days. Out of 935 eligible participants (new walkers participating in the sampled schemes agreeing to take part in the survey within the eight month period), 520 participants[12] participated in the Wave 1 telephone survey, 94 refused to take part in the survey, 123 had wrong or missing numbers and 198 could not be reached within the ten day limit.

As is often the case in studies such as this, which involve a large number of people voluntarily participating and with follow up over a substantial period of time, a significant degree of follow-up attrition occurs. Of those 520 individuals who participated in Wave 1, 361 also completed the Wave 2 survey and 232 completed Wave 3 (where the Wave 2 survey was not completed, the individual was not contacted again for the final Wave 3 follow up). Thus 45% of the Wave 1 sample completed all three surveys. The rate of attrition through the waves was similar to a previous evaluation of the programme.[13] [14]

[11] For details of the survey see: http://www.europeansocialsurvey.org/

[12] It is estimated that the baseline sample is equivalent to 2.6% of the population (i.e. the total number of new walkers within an eight month period).

[13] Philips, R., Knox, A. and Langley, E. (2012), *What impact did Walking for Health have on the physical activity levels of participants?* Natural England Commissioned Reports, Number 075.

[14] There is no definitive benchmark on what a good rate of attrition should be as this depends on the length of time between follow-ups, the type of participant etc.

Table 1.2 Numbers participating in each wave of the survey

	Dates	Numbers	% of Wave 1
Eligible participants		*930*	-
Wave 1	March 2014- October 2014	520	-
Wave 2	July 2014 – February 2015	361	69%
Wave 3	October 2014 – June 2015	232	45%

Source: Evaluation surveys

As participants were self-selecting, in order to assess whether they were representative of Walking for Health participants generally, the sample was compared to all Walking for Health participants recorded on the database. Table 1.3 shows the characteristics of all those in the survey at Wave 1, compared with data collected by the Walking for Health programme through the Outdoor Health Questionnaire and included on the database over the survey period (1st April 2014 – 27th March 2015), as well as to data from the 2011 Census. It should be noted that Census data is for all ages and certain characteristics are affected by age (for example gender). Where census age data is shown below, it is the proportion of those over 16 only, rather than the whole population. The Wave 1 survey sample generally matched the characteristics of registered walkers on the Walking for Health database.

Table 1.3 Characteristics of Wave 1 sample compared to the Walking for Health Database and 2011 Census

Characteristic	All in Wave 1 (N=520)	Walking for Health Database (April 2014 – March 2015)	2011 Census (N=63.2m)
Females	75%	70%	51%
Aged 65+ (% of over 16s only)	53%	51%	18%
Educated to degree level or higher	26%	(Not collected)	27%
White	98%	96%	86%

Source: Wave 1 survey

Walking for Health OHQ responses for the period 1st April 2014 to 30th September 2014, the period for the Wave 1 survey, were also examined in order to ensure that this sample was broadly representative in terms of 'baseline' levels of physical activity. This shows that 25.7% of walkers registered with Walking for Health (sample size, 25,556) were 'active' (i.e. engaged in at least 5x30 minutes of moderately physical activity per week), as opposed to the 20.3% of Wave 1 respondents. While this is not a statistically significant difference (meaning that it could be due to chance), it is just on the borderline of statistical significance (p=0.056). The OHQ, it should be noted, takes place on registration rather than after the first walk (as per Wave 1 survey in this evaluation) and is undertaken by self-completion, rather than by interview – while these are small differences, they could also mean that the surveys are not directly comparable.

The analysis of follow-up responses focusses on the individuals who participated in all three waves (the 'constant sample'). The primary analysis presented in this report uses data presented from the constant sample whether or not they claimed to still be participating in Walking for Health walks at each follow-up. This is known as 'Intention to Treat' analysis, and is normal practice in public health evaluation.

The table below compares some of the main demographic characteristics (as collected in Wave 1) of those that went on to complete all three Waves of the survey (the constant sample) and those that did not. While there are minor variations, it can be seen that the composition of the constant sample is similar to that of those who did not complete all three surveys. The one exception to this is 'Age', with a statistically significant higher proportion of older people (65+) completing all three Waves of the survey.

Table 1.4 Characteristics of those in the constant sample compared to those that were not

Characteristic	Wave 1 – not in constant sample (n=288)		Wave 1 – in constant sample (n=232)	
	%	*Total number responding to question*	%	*Total number responding to question*
Females	77%	*288*	72%	*232*
Aged 65+	49%	*285*	58%	*231*
Educated to degree level or higher	27%	*288*	24%	*232*
Non-disabled or with a long-term health condition[15]	89%	*235*	90%	*187*
White	98%	*236*	98%	*192*

Source: Evaluation surveys

Due to the sample sizes, and the number of outcomes being measured, it was not possible to complete detailed sub-group analysis by particular demographic characteristics and/or target groups. The main sub-analyses were therefore based on age (65+) – as this was found to be a factor affecting moderate physical activity in a previous evaluation of the programme[16] – and physical activity levels. A key lesson for future studies is the need for higher samples of participants for each target group (e.g. BME). This could be achieved by involving a larger number of schemes in the survey.

A further sub-analysis was undertaken for all the main outcomes, comparing those who reported that they had left the programme at Wave 2, and those who reported they had not. These two groups are referred to in this report as 'ceased' and 'continued'.[17] The characteristics of those who 'ceased' participation at Wave 2 and those that continued are shown in Table 1.5 below. None of the differences in the profile of these two groups are statistically significant; however the differences between the percentages 'active' and percentages 'inactive' are close to being statistically significant.

[15] Disabled include those with long-term conditions, including cancer

[16] Philips, R., Knox, A. and Langley, E. 2012. *What impact did Walking for Health have on the physical activity levels of participants?* Natural England Commissioned Reports, Number 075.

[17] Included in the 'ceased' group were 12 participants that, while stating that they were still in the programme at Wave 2, had not walked in three months and later stated that they were no longer participating at Wave 3.

Table 1.5 Characteristics of those that continued at Wave 2 compared to those that did not

Characteristic	Ceased participation at Wave 2		Continued participation at Wave 2	
	%	*Total number responding to question*	%	*Total number responding to question*
Females	77%	*48*	70%	*184*
Aged 65+	48%	***48***	61%	***184***
Educated to degree level or higher	23%	*48*	24%	*184*
Non-disabled	89%	*44*	87%	*149*
White	100%	*45*	97%	*184*
Active (5 days or more moderate activity)	11.6%	*52*	22.7%	*180*
Inactive (zero days moderate activity)	38.5%	*52*	26.1%	*180*

Source: Evaluation surveys

Assessing the counterfactual

An important element in the construction of any evaluation methodology is an assessment of the counterfactual i.e. what would have happened in the absence of the intervention. A quasi-experimental approach involving the use of a matched comparator group is, in principle, a potential option to determine the impact of the programme. However, the requirement of developing and matching well-defined variables including demographic characteristics and pre-existing levels of physical activity would be costly to implement in practice. The difficulty of controlling for unobserved variables would also remain, including motivations to take part in physical activity. In light of these challenges, and within the resources available for this evaluation, it was not considered feasible to include a comparator group in the assessment.

It was agreed, therefore, that the research would focus on a longitudinal design with the Wave 1 results effectively acting as the counterfactual reference point in this instance. The longitudinal surveys allow for before-during-after comparisons of outcomes relating to physical activity, mental well-being and social inclusion. In order to provide an additional layer of analysis on the influence of the Walking for Health programme on positive outcomes, impact attribution questions for those who maintained or increased levels of walking and physical activity were included in the follow up surveys. These questions help to determine how far increases in walking activity would have occurred in the absence of the Walking for Health programme.

It is important to note that Wave 1 data was collected after the first Walking for Health session, rather than prior to it. This was necessitated by the nature of programme activity as this usually involves new participants turning up to a session and registering on the day, rather than pre-booking or registering. An additional questionnaire was suggested for self-completion by all new Walking for Health participants immediately prior to their first walk, but it was considered that this would be overly-burdensome for new walkers. The implication is that any changes in outcomes which may arise as a result of participating in

Walking for Health may have already begun to appear by the time the Wave 1 interview was completed, thus reducing the detectible magnitude of any intervention effect.

This may be particularly the case for measures of physical activity, since it can be hypothesised that individuals may increase their levels of physical activity in advance of joining a new activity in order that they are better prepared. Equally, participants may simply be active in other ways prior to joining a scheme. This is corroborated to some extent by a comparison with the measure of activity recorded through the OHQ (theoretically taken prior to walking); no statistically significant difference was found between the Wave 1 survey measure of activity and that recorded on the database by the OHQ. However, it should be noted that the response rate to this specific question in the OHQ is low and that the measurement may therefore be subject to significant bias (with for example those already active most inclined to respond).

To attempt to test the relevance of the Wave 1 physical activity question as a baseline measure, participants were asked to calculate their level of physical activity both for the seven days prior to interview, as well as providing an estimate for the seven days prior to attending their first Walking for Health walk. Table 1.6 shows that many participants reported themselves to be inactive - 30.6% reported no days of activity in the previous seven. Differences in the reporting of activity for the 'pre' and 'post' walk periods were very small and not statistically significant (albeit with the former question providing a non-validated measure of activity).

Table 1.6 Differences in the reported number of days that a total of 30 minutes or more of physical activity was undertaken at survey time and prior recall

	Prior to first walk		At survey time		Change
Activity level	**Percent**	**N**	**Percent**	**n**	**Percent**
Inactive (zero days)	32.5	169	30.6	159	-1.9
Insufficiently active (1-4 days)	46.0	239	47.9	249	+1.9
Active (5+ days)	21.5	112	21.5	112	0
TOTAL	**100.0**	**520**	**100.0**	**520**	

Source: Evaluation Wave 1 survey

Participants were also asked how many Walking for Health walks they had previously taken part in. The findings are given in Table 1.7. It was expected at Wave 1 that walkers would have undertaken one walk (since the survey took place in the days following the first walk) and 40% reported having undertaken one walk, however 24% reported having undertaken two walks, and 36% three or more walks. The results from this question highlight the difficulties of capturing a 'true' baseline through the methods that were possible at the time of the evaluation. This is not to say that options for improving the collection of validated baseline data should not be considered in the future, for example through the inclusion (but more rigorous administration) of validated questions in registration forms, or longer surveys administered to a sample of participants on joining the scheme.

Table 1.7 The number of times participants in the 'constant sample' had taken part in Walking for Health walks at wave 1

Number of times walked at wave 1 (constant sample)	% survey participants (n=231)
1	40.3%
2	23.8%
3	14.3%
4	7.8%
5	3.9%
6-10	4.8%
11+	5.2%
Number	231

Source: Evaluation Wave 1 survey

Given the lack of more suitable baseline measurements (as well as the broad alignment across the three measures of physical activity described above), it was decided that it was relevant to base the analysis of the programme's outcomes and impact on the measures taken from the Wave 1 survey. This was combined with comparison of outcomes with the non-constant sample and analysis of additionality questions, significance testing (outlined below), and qualitative case study data, as well as a theoretical appreciation that Walking for Health has an important role to play in *maintaining* levels of physical activity (i.e. beyond Wave 1 of the survey), to arrive at a rounded assessment of impact.

Statistical tests

Results from both the survey and the pedometer research have been obtained from a sample of people taking part in Walking for Health. Results from a sample can differ from those of the larger group simply due to chance (the composition of that particular sample). In order to be more certain that differences between groups (or changes over time) are not simply due to chance, tests of 'statistical significance' are carried out. These tests tell us, to a predefined level of certainty (confidence level), whether or not any difference is likely to be due to chance. In this report a confidence level of 95% has been used. This means that if a difference is reported as statistically significant, we can be 95% sure that this difference is not due to chance. Any results reported for differences between groups are statistically significant unless otherwise specified.

A smaller sample size reduces the likelihood of any differences between groups (or within the same group over different waves of the survey) reaching statistical significance. Power calculations carried out in the planning stages of this project estimated that (at a power of 90%) with a sample size of 400, it would be possible to detect a difference of 0.33 days of physical activity between baseline and follow up. With the actual sample achieved (232), revised calculations estimate that we would be able to detect statistically significant difference of at least 0.45 days of activity.[18] This means that the size of the sample does not allow for the detection of smaller changes.

Significance testing only tells us whether a result is likely to be arrived at by chance or not (due to the natural variability of samples). For example, it is possible to get a statistically significant result, and yet for the actual change reported to be so small so as not to be meaningful, and this is a common problem with large samples. Equally it is possible that there are real differences between groups and yet statistical significance is not reached simply due to chance or because there are insufficient numbers in the sample.

[18] Although this is dependent on the tests used and characteristics of the data.

Where using statistics to describe those in a sample (for example, the percentage of physically inactive participants), it is helpful to know how accurately the figure describes the larger group. A confidence interval around a result from a sample gives the range in which the result for the larger group is likely to lie. This is to a predefined level of confidence: 95% in this report. Many of the column charts in this document have 'error bars', and these show the confidence interval for the result in each column.

1.4.5 Pedometer research

Pedometer research was undertaken in order to provide an objective measure of physical activity trajectories amongst newly recruited Walking for Health participants. The purpose of the pedometer survey was not however to 're-validate' the results from IPAQ (i.e. to compare on an individual basis the steps counted from the pedometer with the self-reports of physical activity from IPAQ) but rather to provide an alternative measure of change in activity.

In total 186 pedometers were sent out by the team at UEA at baseline. Of these, 34 were sent to two larger schemes - 17 (9%) were sent to Scheme A and 17 (9%) were sent to Scheme B to distribute to the participating walkers and 152 (82%) were sent directly to walkers after their participation in the telephone survey. At baseline, 102 pedometers were returned with useable data; 55% of those sent out. Twelve (12%) of the 102 pedometers worn at baseline were from Scheme A and the remaining 90 (88%) came direct from walkers.

Eighty four of the pedometers sent out at baseline were not returned worn (45% of those sent out). Seventeen of the unworn pedometers came from Scheme B (20%), 5 came from Scheme A (6%) and the remaining 62 (74%) were those sent direct to walkers. Fifty (60%) of the unworn pedometers at baseline were returned with a note stating that the walker had decided they did not wish to participate in the study anymore or with no evidence that the device had been worn. The remaining 34 (40%) were returned over one week after they were worn, meaning they no-longer contained data for the wear period.

All 102 participants providing baseline data were sent a pedometer to re-wear at 4 months along with a reminder of the wear instructions. Of these, pedometers were returned having been worn by 73 participants (72% of the baseline sample). Of the 29 baseline participants who did not wear the pedometer at follow up, 13 (45%) returned the device with no evidence of wear or with a note to say the no-longer wished to take part in the study, 6 (21%) returned the device too late to use any data originally recorded, and 10 (34%) retained the device despite being re-contacted and asked to return it.

In terms of the limitations of this methodology, our initial focus for the pedometer study was to provide new walkers with devices at their initial walk via walk leaders in two schemes. However response rates were lower than expected. If this method of recruiting participants is considered in future, the importance of the host organisation in supporting and encouraging walk leaders in engaging with the process should be recognised (and possibly also addressed in initial training). When we mailed pedometers direct to walkers, levels of compliance were much better and were comparable to what we would expect, with most walkers providing good data. We used a standard protocol which incorporated reminders and provided all wearers with contact details of a researcher if they needed any help or advice. One limitation of any pedometer study however is that the pedometer can act as an intervention in itself and wearers increase their physical activity because they know they are wearing a device that measures it.[19] In this

[19] Clemes, S. A., & Deans, N. K. (2012), *Presence and duration of reactivity to pedometers in adults*, Medicine and Science in Sports and Exercise, 44(6), 1097–101. doi:10.1249/MSS.0b013e318242a377

case however all pedometers were sealed before being given out and did not provide the user with any visual feedback. This protocol has been shown in other studies to limit this reactivity.[20]

Further information on the methodology used for recruiting people for the pedometer research is provided in Annex Two.

1.4.6 Stakeholder interviews and workshop

The evaluation also draws on responses from 12 stakeholders consulted as part of the evaluation including four representatives of Macmillan and the Ramblers and eight external stakeholders. The external stakeholders were drawn from national public health bodies and charities working in the health field, through to stakeholders working in local authorities including public health teams as commissioners and developers of health improvement programmes. Key topics addressed in the stakeholder consultations included the effectiveness of the Ramblers and Macmillan partnership, programme branding, improving Walking for Health's profile and sustainability of local schemes.

A workshop was also held with the Walking for Health Management Team in November 2014 focusing on the effectiveness of the national team's guidance and support function. Annex one includes the stakeholder topic guides. Annex two provides a full list of stakeholders consulted for the study.

1.4.7 Economic analysis

In order to evaluate the Walking for Health programme in terms of cost-utility analysis and return on investment, evaluation data was inputted into the MOVES model[21]. The results compare the estimated costs and outcomes associated with participating in Walking for Health with those of a similar cohort of the population not participating in the programme. It is important to note that user numbers, frequency and duration of walks and retention of participants are the main variables inputted into the model. The impact analysis using the MOVES model therefore represents a conservative estimate based upon the time spent walking due to the programme (rather than accounting for any Walking for Health impacts on physical activity outside of the scheme). Conversely, the MOVES model assumes that participation in the inputted activity is *additional* to what would have happened in the absence of the programme or project. Whilst it is impossible to determine the counterfactual with any certainty without a control group (as outlined above), we include a number of sensitivity tests within our analysis including factoring in deadweight (based upon the survey data) as well as different time horizons for participation.

1.5 Summary of methodological limitations and lessons

The earlier sections highlighted the challenges associated with the methodology; principally that the evaluation did not have a control group, and that validated measures of physical activity and of health and wellbeing were not available from a robust sample of participants from prior to their first walk.

[20] Clemes S., Matchett N., Wane S., (2008), *Reactivity: An issue for short-term pedometer studies?* British Journal of Sports Medicine 42(1) P. 68-70

[21] MOVES was developed by the University of East Anglia's Medical School specifically for Sport England to help to demonstrate the economic benefits of participating in sport and wider physical activity. It is intended for use by those commissioning these types of activities.

The former issue was addressed within the methodology by employing the next best available evaluation design, a longitudinal study based upon follow-up measurements at two points in time[22]. We also undertook a comparison of outcomes with the non-constant sample (those who ceased to participate at Wave 2), analysis of additionality questions (to examine the perceived influence of the programme on participation) and significance testing. The survey data is also corroborated by qualitative data gathered from in-depth case studies, which were partly designed to test the theory of change that Walking for Health has an important role to play in maintaining levels of physical activity. Using a combination of approaches to assess the programme's additionality has helped to ensure a more robust and defensible evaluation approach, within the confines of the resource available.

The lack of robust pre-intervention baseline data should be considered a limitation of the study (and one which was not anticipated at the outset). The outcome and impact analysis is therefore focused on an assessment of changes in physical activity and wellbeing during participation in Walking for Health, with the working hypothesis that improvements would either accumulate over time, or else be effectively sustained through ongoing engagement in the programme (i.e. with no dip below Wave 1 outcome levels amongst the cohort of respondents at Wave 3). This reflects the main aim of Walking for Health to help sustain people's engagement in moderate level physical activity. Aside from this response, the evaluation has also raised the question of whether a true baseline can ever be measured completely accurately in a before-and-after study of this type of intervention, given that some participants may increase levels of physical activity in preparation for their first walk.

1.6 Report structure

The report is structured as follows:

- **Chapter 2** introduces the Walking for Health programme, including its context and rationale and outlines the main aims and objectives, activities, expected outcomes and impacts.
- **Chapter 3** provides a contextual analysis of the Walking for Health programme's activities and outputs.
- **Chapter 4** focuses on the outcomes and impacts of Walking for Health from the perspective of walkers, volunteers and stakeholders.
- **Chapter 5** reports on the analysis of the cost-effectiveness of the programme.
- **Chapter 6** provides further consideration and analysis of factors in delivery that contribute to the specific outcomes and cost-effectiveness reported.
- **Chapter 7** brings the research findings together to report on the key findings and learning points.
- **Annexes 1-4** include the research tools, further information on the research methodologies and lists of consultees and references.

[22] This in itself was considered by National Institute for Health and Care Excellence to represent an improvement over the majority of comparable programme evaluations which have only a single or no follow-up survey point.

2.0 Understanding Walking for Health

2.1 Introduction

This chapter provides an introduction to the Walking for Health programme, including its evolution over time, context and rationale. It then outlines the aims, inputs, activities, and expected outcomes and impacts of the programme, as well as the set of objectives and principles which guide delivery. Based on this, a logic model was developed to inform the evaluation, and is presented here. The information in this chapter is based on a review of existing programme documentation. It also draws on policy documents, academic literature and existing research and evaluations conducted on Walking for Health.[23] The overview of the role of the national Walking for Health team also draws on the workshop held with the national team in November 2014.

2.2 Programme evolution

2.2.1 History

Walking for Health originated as an initiative by Dr William Bird, a Berkshire based GP, who started to lead health walks from his surgery in 1996 at a time when walking was not regarded "serious exercise"[24]. In 2000, Walking for Health was rolled out as a national programme under the management of the Countryside Commission (later the Countryside Agency) in partnership with the British Heart Foundation (BHF).The Countryside Agency was merged into Natural England in 2006. Until 2005, the programme supported 205 schemes in areas with high health need[25]. By the time of a 2012 audit, which was completed for the Walking for Health national team, there were 70,000 regular walkers across 600 schemes.

From the outset, Walking for Health was delivered locally, with inputs from local authorities, primary care trusts and voluntary agencies as well as groups of volunteers. The Walking for Health National Centre (now known as the Walking for Health national programme team) provide support, advice, training, promotion and insurance and is responsible for the monitoring and evaluation of the scheme.

2.2.2 Involvement of the Ramblers and Macmillan

Following a change in central policy in 2010, the Government decided to divest (or dispose of) Walking for Health to the charitable sector. Following a competitive process the Ramblers became the new host of Walking for Health from April 2012, entering an initial three year partnership with Macmillan Cancer Support which was subsequently extended to run to at least March 31st 2018.

In this partnership Macmillan provides the majority of funding (£4.5m 2012-18) and their expertise, including encouraging greater activity among those affected by cancer. The Ramblers is primarily responsible for managing the national programme team, building on its experience as Britain's walking charity.

[23] A full list is provided in Annex four.

24 Villalba Van Dijk, L., Cacace, M., Nolte, E., Sach, T., Fordham, R. & Suhrcke, M. (2012), *Costing the Walking for Health programme*, Natural England Commissioned Reports, Number 099: foreword

[25] Ibid

Since the new partnership was established, the Ramblers and Macmillan established a new vision to return Walking for Health back to its original aim of encouraging activity by the most inactive people or people who need support to stay active, including those with long term health conditions. To support this, a new brand and national website was introduced, accreditation requirements were revised to better support consistency in the quality of local delivery, cascade and walk leader training updated and a quality assurance process introduced to ensure a consistent high level of competency among leaders. A communications marketing strategy was also launched, which included a health and social care engagement plan. It is important to note that the evaluation was conducted while changes to the composition of the schemes, through the accreditation process, and new marketing and promotion initiatives were being implemented. The impacts of some of these changes are shown by the case study analysis; however, given the timing of the evaluation's survey, it has not been possible for the survey analysis to address the impact of these changes on walking activity.

2.3 Context and rationale

2.3.1 Impacts of physical activity on health and well being

The current physical activity guidelines for the UK, as laid out in the Chief Medical Officer's guidelines, advocate moderate physical activity for at least 150 minutes per week.[26] However, survey evidence has shown that around one in two women and a third of men in England are damaging their health through a lack of physical activity, costing the UK an estimated £7.4bn a year.[27] Increasing physical activity could significantly reduce the individual risk of certain health conditions, such as coronary heart disease, type 2 diabetes, different types of cancer and depression[28]. More generally participation in physical activity leads to greater muscle, bone and immune system health.[29] What is more, evidence suggests that it is especially beneficial for people living with cancer and long-term health conditions[30]. Physical activity after treatment for cancer can reduce the impact of some debilitating side effects, such as swelling around the arm, anxiety, depression, fatigue, impaired mobility and weight changes.[31] A systematic review of evidence on the importance of physical activity for people living with and beyond cancer evidence shows that achieving sufficient activity levels can reduce the risk of dying from breast, bowel and prostate cancer, and reduce the recurrence of breast and bowel cancer.[32] As a consequence, increased physical activity levels could also reduce the economic burden associated with poor health outcomes.[33]

[26] Chief Medical Officers (2011), *Start active, stay active: a report on physical activity for health from the four home countries*'

[27] Public Health England (2014), *Everybody active, every day: an evidence-based approach to physical activity*.

[28] Department of Health (2011), *Start active, stay active: a report on physical activity from the four home countries*' Chief Medical Officers

[29] Department of Health (2011), *Start active, stay active: a report on physical activity from the four home countries*' Chief Medical Officers

[30] Walking for Health (2013), *The case for Walking for Health*: a briefing for Scheme Coordinators, February 2013

[31]Macmillan Cancer Support (2011), *The importance of physical activity for people living with and beyond cancer: A concise evidence review*

[32] Macmillan Cancer Support (2011), *The importance of physical activity for people living with and beyond cancer: A concise evidence review*

[33] Public Health England (2014), *Everybody active, every day: an evidence-based approach to physical activity*.

There is also a growing body of evidence, which suggests that increases in physical activity promotes mental health and wellbeing. It improves self-perception and self-esteem, mood and sleep quality, and it reduces stress, anxiety and fatigue[34]. In older people, staying active can improve cognitive function, memory, attention and processing speed, and reduce the risk of cognitive decline and dementia.[35]

The Marmot Review highlighted the importance of physical activity in addressing health inequalities and deprivation.[36] Statistics presented in the Walking Works report[37] showed that people on low incomes are less physically active. Around 45% of adults in the lowest income households are active for less than 30 minutes a week[38]. The report also demonstrated that certain ethnic groups are less physically active. In 2004, Indian, Pakistani, Bangladeshi and Chinese people in England reported lower than average levels of physical activity, with 51% of Bangladeshi men and 68% of Bangladeshi women active for less than half an hour a week.[39]

2.3.2 The role of walking

Walking at a pace of 5km/hour expends sufficient energy to be classified as a moderate intensity physical activity[40]. In this context, Walking for Health offers low-barrier access to moderate physical activity. It aims to be an inclusive scheme with the potential to increase the activity levels of a large number of people nation-wide, due to the fact that it is free to take part, participants do not need any special equipment and walking is a manageable activity for people of different capability levels[41]. A hypothesis which has been examined through the evaluation is how far Walking for Health walks are suited to introducing people who are inactive to start or increase their levels of physical activity – "stepping up" – or to supporting others to remain active when health problems occur – "stepping down".[42] Three systematic reviews support the view that walking delivers real health benefits, and that walking groups in particular can increase physical activity levels. A large-scale study summarising the findings of 19 studies on the effect of walking groups finds that they are an effective way to increase physical activity levels[43]. This is supported by research that finds that the most successful walking interventions can increase physical activity (walking) by 30-60 minutes per day[44]. In addition to increasing physical activity levels, walking has also been found to have direct mental health effects, such as positive effects on the symptoms of depression for some groups[45].

[34] McAuley E., Elavsky S., Motl R.W., Konopack J.F., Hu L., Marquez D.X. (2005), *Physical activity, self-efficacy, and self-esteem: longitudinal relationships in older adults*. J Gerontol B Psychol Sci Soc Sci, 60:268–275

[35] British Heart Foundation (2013), *National Centre Physical Activity and Health. Making the Case for Physical Activity*

[36] The Marmot Review (2010), *Fair Society Healthy Lives*

[37] The Ramblers and Macmillan (2013) , *Walking Works: Making the case to encourage uptake of walking as a physical activity and recognise the value and benefits of Walking for Health*

[38] Townsend N., Bhatnagar P., Wickramasinghe K, Scarborough P, Foster C, Rayner M. (2012), *Physical Activity Statistics*

[39] Joint Health Surveys Unit (2008), *Health Survey for England 2008*: *Physical Activity and Fitness*

[40] Department of Health (2011), *Start active, stay active: a report on physical activity from the four home countries' Chief Medical Officers*

[41] Walking for Health (2013), *The case for Walking for Health: a briefing for Scheme Coordinators*, February 2013

[42] The Ramblers (2013), Walking works Making the case to encourage greater uptake of walking as a physical activity and recognise the value and benefits of Walking for Health

[43] Kassavou, A., Turner, A., French, D.P., (2013), *Do interventions to promote walking in groups increase physical activity? A meta-analysis.* International Journal of Behavioural Nutrition & Physical Activity, 10, 18

[44] Ogilvie, D., Foster, C., Rothnie, H. (2007), *Interventions to promote walking: systematic review*, BMJ, 334, 1204 - 1207

[45] Robertson, R., Robertson, A., Jepson, R., Maxwell, M. (2012), *Walking for depression or depressive symptoms: A systematic review and meta-analysis*. Mental Health and Physical Activity, 5, 66-75

A particular focus of Walking for Health is engaging those with long-term health conditions, including cancer. The rationale that walking is particularly beneficial for this group is supported by evidence that physical activity can reduce fatigue during and after cancer treatment[46] and has a positive impact on overall quality of life[47].

A further part of the unique potential benefits from the Walking for Health programme arise from the fact that walks in many areas are in outdoor 'green' environments. These places are important because of their multifaceted potential to influence health.[48] In addition to serving as a venue for physical activity, a substantial body of literature documents wider benefits of experiencing 'green' environments. The seminal research by Kaplan and Talbot[49] in the 1980s outlined the psychological benefits of experiencing nature. More recent research has shown that time spent in natural environments is associated with reduced negative emotions and better energy levels, attention span and feelings of tranquillity compared with being in synthetic settings[50], as well as the promotion of social cohesion by providing areas for people to meet and participate in group activities[51].

External stakeholders interviewed for this evaluation consistently agreed that walking was beneficial for increasing people's activity levels and improving wellbeing, and particularly as a first step into exercise through providing a low level activity to participate in. Overall external stakeholders felt the case for walking compared to other activities was gradually improving because of the increasing awareness of the health benefits of walking. External stakeholders commented that walking may be preferable exercise for some people, as gyms could appear intimidating for older people and people with a range of health conditions who have lost confidence:

> *"The confidence of walking in a group with a leader, even if they are a volunteer they will have gone through some kind of training, I think that would be much more encouraging for some people than going to an intimidating gym."*
>
> *(national health body stakeholder)*

A number of stakeholders (both internal and external) commented that health professionals are increasingly valuing exercise and good nutrition, and starting to prescribe these approaches. Stakeholders generally agreed that there is potential for Walking for Health to increase the number of people who are signposted to walking by GPs and other health professionals by the developing the programme as a defined exercise that meets social prescribing criteria and raising awareness amongst the community of health professionals.

[46] Cramp, F., Byron-Daniel, J. (2012), *Exercise for the management of cancer-related fatigue in adults. status and date: New search for studies and content updated* (conclusions changed), published in Cochrane Database of Systematic Reviews, 11 (131)

[47] Mishra, S.I., Scherer, R. W., Snyder, C., Geigle, P. M., Berlanstein, D. R., Topaloglu, O. (2012), *Exercise interventions on health-related quality of life for people with cancer during active treatment*, The Cochrane Library

[48] Faculty of Public Health (2010), Great Outdoors: How Our Natural Health Service Uses Green Space To Improve Wellbeing Briefing Statement: Briefing Statement

[49] Kaplan, S., & Talbot, J. F. (1983), *Psychological benefits of a wilderness experience. Behavior and the Natural Environment, 6*, 163-203

[50] Bowler, D., Buyung-Ali, L., Knight, T., & Pullin, A. (2010), *A systematic review of evidence for the added benefits to health of exposure to natural environments. BMC Public Health, 10*(1), 456

[51] Maas, J., van Dillen, S. M., Verheij, R. A., & Groenewegen, P. P. (2008), *Social contacts as a possible mechanism behind the relation between green space and health*, Health and Place, 5(2):586-9

2.3.3 Recent policy developments

The Health and Social Care Act 2012 ("the Act") received Royal Assent on 27 March 2012. The Act gives a key new public heath duty to upper tier and unitary local authorities to take appropriate steps to improve the health of their population. The Act also established health and wellbeing boards as a forum where key leaders from the health and care system work together to improve the health and wellbeing of their local population and reduce health inequalities. The boards are tasked with working together with Clinical Commissioning Groups and councils to develop a shared understanding of the health and wellbeing needs of the community. Health and wellbeing board members will collaborate to understand their local community's needs, agree priorities and encourage commissioners to work in a more joined-up way. As a result, patients and the public should experience more joined-up services from the NHS and local councils in the future. In the context of these changes this evaluation examines levels of engagement between Walking for Health schemes and the new local governance structures for public health.

Based on research undertaken by UK Active[52], the National Institute for Health and Care Excellence (NICE) has called on local government to use its new responsibilities more effectively to boost physical activity. The research found that on average, local authorities were found to have spent 2.4% of their health budgets on tackling inactivity in 2013/14, compared with 38% on sexual health services, 12% alcohol misuse services and 4 % on adult obesity.[53] The new responsibilities for local authorities is an important consideration for this evaluation as local authorities make a key contribution to leading and funding Walking for Health schemes. The evaluation has therefore investigated how far local authorities and health and wellbeing boards prioritise Walking for Health as a mechanism for improving levels of physical activity.

2.4 Programme aims and objectives, inputs and activities

2.4.1 Aims and objectives

The vision for the programme, as outlined in the Walking for Health Business Plan 2013[54], is as follows:

> *"Everyone will have access to a short, free and friendly health walk within easy reach of where they live to help them become more active and stay active. People will enjoy an experience that Macmillan and the Ramblers have enabled, and they will be inspired to give something back."*

The Ramblers and Macmillan's aim[55] for Walking for Health is as follows:

> *"Our aim is to manage the national and regional functions of Walking for Health via the national programme team based at the Ramblers with support from Macmillan. The national programme team will work to improve the quality of support provided to schemes, the customer experience, scheme coverage, sustainability and, ultimately, through the indirect delivery model, enable more people to walk more often. These services will be provided free of charge to all schemes."*

[52] UKActive (2014), *Turning the Tide of Inactivity*
[53] UKActive (2014), *Turning the Tide of Inactivity*
[54] Ramblers, Walking for Health: Business Plan 2013: p. 2
[55] Ibid.

Furthermore, the Ramblers and Macmillan set nine specific objectives for Walking for Health, which cover key output, outcome and process aspects of the scheme. Since these underpin the effective delivery of the programme, they are revisited at various points throughout the evaluation report, as a means of explaining why the inputs and activities outlined in the logic model (see Figure 2.4) have translated into outputs and outcomes (or otherwise), and to help further judge the success of the scheme. The nine objectives are as follows[56]:

- To increase the availability of and participation in Walking for Health so that people who are currently inactive, or who need support to remain active, are encouraged to walk to improve their health and wellbeing. The programme will particularly aim to reach those that need the most support, including people affected by cancer and other long-term health conditions, and those from recognised health inequality groups such as older adults, BME communities and people on lower incomes.
- To ensure walks are free, short and easy, and open to all.
- To support local schemes to recruit and retain a sufficient pool of volunteers and ensure that those volunteers are well supported through training and resources.
- To raise awareness of the value of Walking for Health among health and social care professionals and encourage them to signpost patients to Walking for Health.
- To ensure financial sustainability of Walking for Health schemes, and support existing and new schemes to secure additional funding.
- To develop evidence on the beneficial impact of led walks and the effectiveness of Walking for Health.
- To ensure that Walking for Health is well-managed and local schemes are fully accredited, and meeting the required quality standards.

2.4.2 Inputs

National inputs

Walking for Health has funding at the national programme level from the Ramblers and Macmillan, which supports delivery across the whole of England. This includes funding for direct staff costs for the national programme team and additional costs for support activities such as the website, marketing, merchandise, training, insurance, and a database for monitoring and evaluation. The overall budget for the Walking for Health team from April 2012 to March 2015 was £1.89m. On top of this, the Ramblers made in-kind contributions of office space and 'back-office' functions, and Macmillan provided additional budget for the evaluation and targeted marketing. Both organisations make use of staff resources and expertise beyond the national programme team. With these additional contributions taken into account, the total costs to Macmillan and the Ramblers of managing the Walking for Health programme from 2012-15 are estimated at £2.75m.

Local inputs

Walking for Health schemes are funded and delivered at a local level. Each scheme has a scheme coordinator who oversees and develops the scheme, supported by a number of volunteers including walk leaders and cascade trainers.

[56] Walking for Health Business Plan 2013

Many Walking for Health schemes are funded directly at a local level, with the funding supporting scheme coordinator posts, volunteer management and equipment. However the schemes vary a great deal in how they are funded and managed, including schemes that are entirely run by volunteer coordinators, and include a range of funding sources particularly local authorities such as the NHS and charitable funds. Funding arrangements and budget amounts at the local level are explored further in section 3.1.

Critically, Walking for Health schemes also benefit significantly from 'in-kind' resources; in the most part this takes the form of volunteer time. The Walking for Health programme is based on a volunteer walk leader model, with volunteers generally providing the majority of time required to deliver the programme. Other volunteers include walk assistants and volunteers in administration/data entry roles, promotional and other roles.

2.4.3 Activities delivered by the national programme team

The programme objectives are supported by a range of activities undertaken by the Walking for Health national team. These include programme management; branding, communication and marketing; scheme accreditation; developing pilot projects and working closely with schemes to pioneer and roll out best practice, training and volunteer development; supporting resources; networking events and workshops; monitoring and evaluation; advocacy, in particular with health and social care professionals; and migrating walkers to other Ramblers and Macmillan activities.

The process of accreditation has been a key focus of the national team since 2012, when it was re-introduced by the Ramblers and Macmillan. The key objective of accreditation is to give walkers and partners added confidence in their local schemes. It acts as a quality assurance mark, promoting a common standard, and aims to strengthen the profile of Walking for Health and inspire the support of funders, partners, volunteers and walkers. The theory underpinning the accreditation process is that a common approach is crucial in helping Walking for Health to thrive and grow as a health-based activity.

There were eight requirements which schemes must meet to achieve the new accreditation standard, as outlined in the box below:

Accreditation requirements
1. All walks run by the scheme meet the definition of a Walking for Health walk i.e. at least one walk between 10-30 minutes per month; no longer than 90 minutes; and walking at a moderate pace that makes walkers feel warmer, breathe harder and their heart beat faster whilst still being able to talk to others around them.
2. The walker registration form (currently known as the Outdoor Health Questionnaire) or a version of the form that has been approved by the Walking for Health team must be used and completed by all new walkers or walkers who have experienced changes to their health.
3. Schemes must have up to date risk assessments in place.
4. Schemes must use the Walking for Health database or be able to supply the management information that is needed by the Walking for Health team to demonstrate our impact and progress on a quarterly basis
5. Schemes must use the Walking for Health brand in accordance with the brand guidelines.
6. Schemes need to keep their pages on the Walking for Health website up to date.
7. Schemes must complete the annual scheme audit.
8. Schemes should adopt a volunteering policy that ensures good standards of volunteer management.

A key change within the new accreditation process is that previously schemes were only required to offer at least one health walk every month that was suitable for beginners (by which is meant a flat walk of under one hour's duration with no stiles). The Ramblers and Macmillan also made accreditation compulsory. For some schemes this meant a significant change in requirements, and it has resulted in a fall in the number of recognised Walking for Health schemes as a short-term trade-off from the accreditation process, as discussed in section 3.3.

2.5 Expected outputs and outcomes

The inputs, activities and outputs described above for Walking for Health are then expected to generate a number of important benefits to participants, volunteers and stakeholders, as follows:

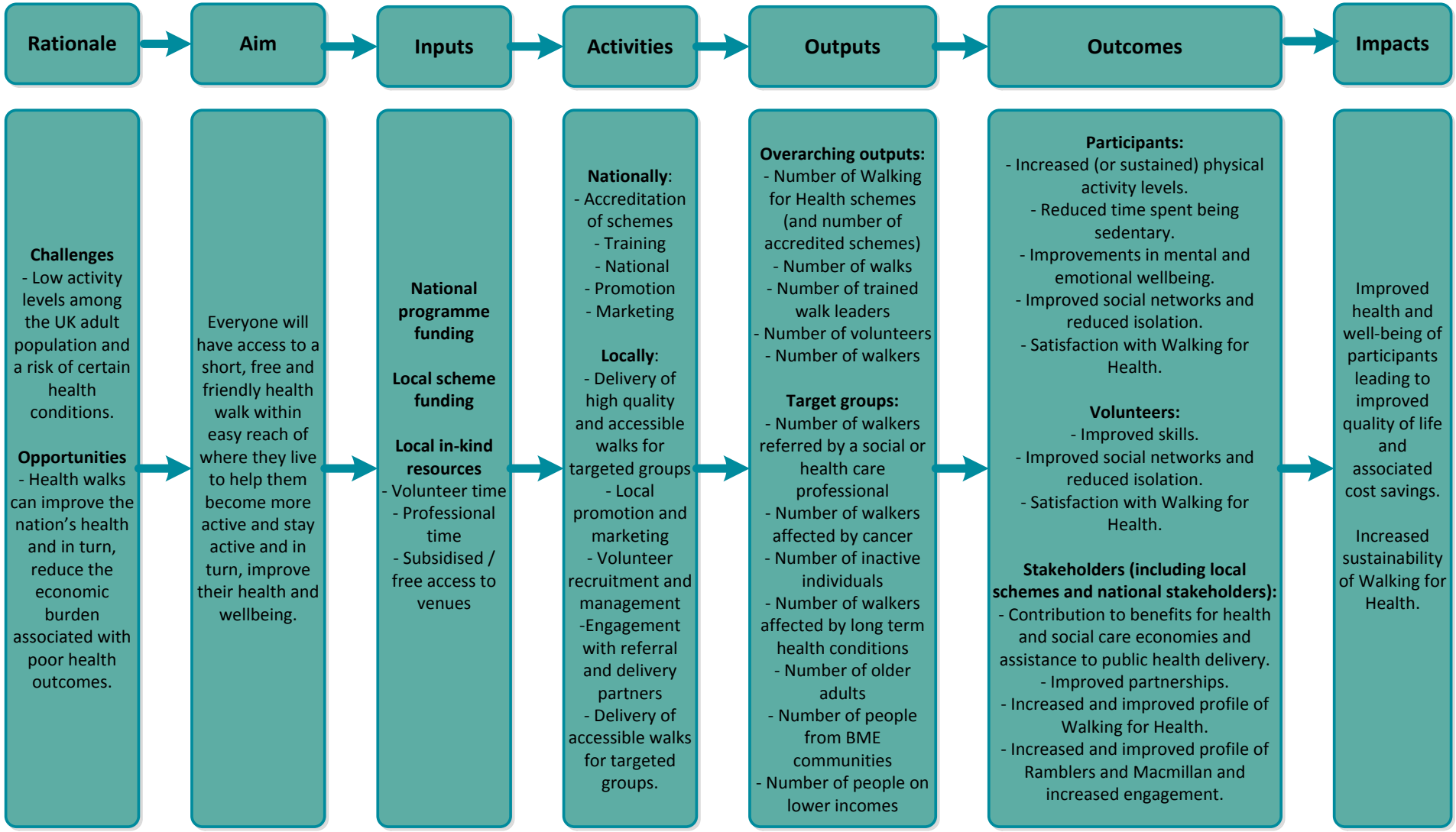
- **Participants**: As the focal point of Walking for Health activity, participants are expected to experience improved outcomes by attending regular group walks with a Walking for Health scheme. The most direct outcome of their participation is maintaining, or in some cases increasing (depending on whether participants 'step up' or 'step down'), physical activity through the health walks, but also potentially in other activities as well. As the review of evidence outlined earlier indicates, this may lead to improved physical health and mental-emotional well-being, e.g. improved self-image and anxiety. The latter is also promoted by the social character of the health walks, which is reported to lead to improved social networks and decreased social isolation. This is particularly relevant to health walks where participants tend to be older and/or with some disabilities and may therefore be more prone to social isolation. One of the target groups of Walking for Health is individuals living with cancer and long-term health conditions. There is evidence that physical activity not only reduces the risk of developing cancer but can also improve prognosis for those who have the disease[57].
- **Volunteers**: When volunteers participate in the health walks, they also profit from the health and social benefits of walking (as outlined above). Additionally, it can be expected that they improve their leadership, people management and other soft skills through the provided training and 'on-the-job experience'. Moreover, volunteers may experience great satisfaction and enjoyment through their volunteering activity[58].
- **Stakeholders**: Stakeholders, including the Ramblers and Macmillan, plus others such as local authorities and the NHS can also expect positive outcomes through the walking scheme. Local health and social care economies are expected to benefit both from improved health outcomes of individuals and improved partnerships among key stakeholders through a collaborative approach. It is important to note that the main focus of the evaluation is the impact of the programme on physical activity although longer-term impacts on health are considered using qualitative responses from the case studies and modelling approaches. Macmillan and the Ramblers may see positive outcomes with increased brand awareness and recognition as well as improved links between Walking for Health and other Ramblers and Macmillan activities.

[57] Ogunleye A.A., Holmes, M.D. (2009), *Physical activity and breast cancer survival*. Brest Cancer Research 2009, 11(5): 106.
[58] Walking for Health (2012), *Your Training Manual*

2.6 Logic model

Figure 2.1 includes a logic model summarising the key components of the Walking for Health programme detailed above. The assumptions underpinning these relationships are reflected in the programme objectives (see section 2.4) which characterise the programme's theory of change and provide a framework for assessing the delivery of Walking for Health.

Figure 2.1 Logic Model



2.7 Summary

This chapter has set out the context to the evaluation. The evaluation framework is underpinned by an understanding of the background and rationale of the Walking for Health programme, the national programme team's approach to its management and operation, the objectives adopted by the national team for the period 2012-15, and the theory of change underpinning the relationships between the programme's activities, outputs, outcomes and impacts.

The general context for the programme recognises the importance of maintaining regular physical activity in reducing long-term health risks and its potential to benefit people living with and beyond cancer. A growing body of evidence also highlights the positive effects physical activity can have on wellbeing and quality of life.

The specific rationale for the Walking for Health intervention relates in particular to the need to provide accessible opportunities for people to participate in moderate intensity physical activity and therefore raise their activity rates towards the Government's recommended levels. It also recognises the effectiveness of walking activity as a way of increasing physical activity amongst those with long-term health conditions.

Walking for Health schemes are funded and delivered at a local level. Each scheme has a scheme coordinator who oversees and develops the scheme, supported by a number of volunteers including walk leaders and cascade trainers. The national programme team, which is hosted by the Ramblers in partnership with Macmillan, supports delivery across the whole of England.

In order to support engagement with health professionals, the Ramblers and Macmillan have identified and encouraged a specific requirement for Walking for Health to be promoted as a health activity that meets specific criteria, in order to encourage signposting from health professionals.

The process of accreditation has been a key focus of the national programme team's activity since 2012, when it was re-introduced by the Ramblers and Macmillan. A key requirement of accreditation is that all walks meet the definition of a Walking for Health walk i.e. at least one walk between 10-30 minutes per month; no longer than 90 minutes; and walking at a moderate pace that makes walkers feel warmer, breathe harder and their heart beat faster whilst still being able to talk to others around them.

The evaluation framework builds from a logic model which shows how the key inputs, activities and outputs are expected to generate a number of important benefits to participants, volunteers and stakeholders. The assumptions underpinning these relationships (the programme's theory of change) are reflected in the programme objectives which provide a framework for assessing the delivery of Walking for Health.

The logic model identifies key outcomes for participants, volunteers and stakeholders. The most direct outcome of participation is maintaining, or in some cases increasing (depending on whether participants 'step up' or 'step down'), physical activity through the health walks, but also potentially in other activities as well. As the review of evidence indicates, this may lead to improved physical health and mental-emotional well-being.

3.0 Delivering Walking for Health

3.1 Introduction

This chapter provides an analysis of the Walking for Health programme's inputs, activities and outputs, as set out in the logic model. The analysis is generally based on the Walking for Health database, results of audit surveys conducted by the national programme team, the results of the evaluation baseline survey which provided additional data on the demographic characteristics of participants, and illustrative information provided through the case study research. Trend analysis between 2012 and 2015 is included where comparable data exists, and we also compare achievements against the programme's objectives, where relevant. Later chapters provide an assessment of the programme's outcomes and impact, its cost-effectiveness, and finally how delivery processes have influenced the translation of activities and outputs into the target outcomes of Walking for Health.

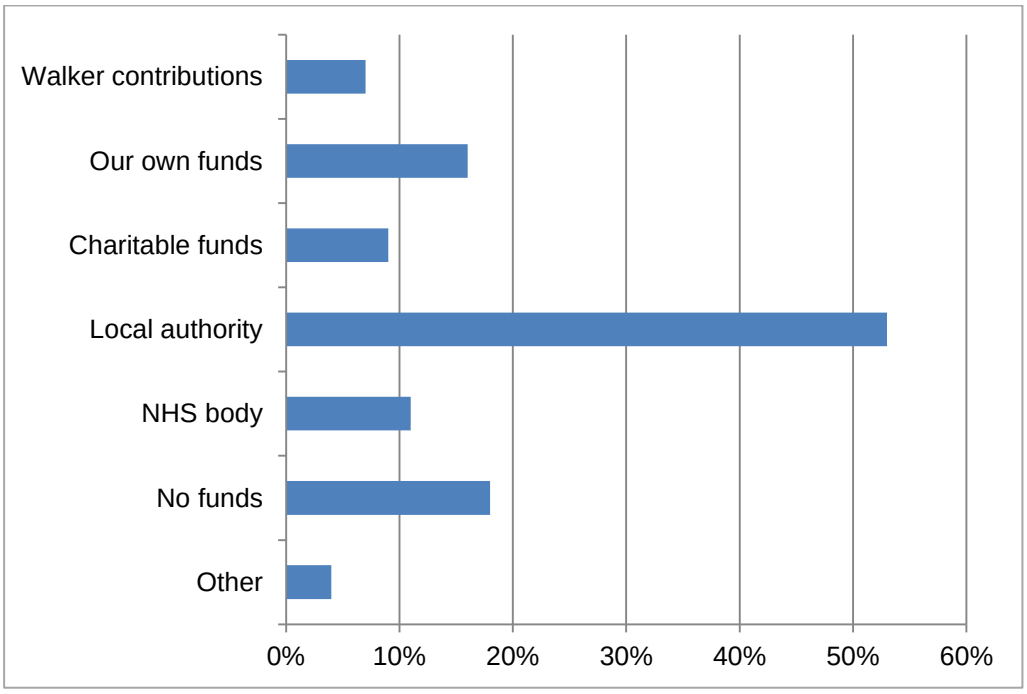
3.2 Inputs and funding

Alongside being free for all, a further objective of the Walking for Health programme is to help schemes to secure a diversity of funding and to support their financial sustainability. This section considers how schemes are currently funded and its importance in supporting the continuing operation of the schemes.

3.2.1 Key funding sources

Figure 3.1 presents data on responses to a question in the 2013 Audit Survey which asked scheme coordinators to state the most important sources of funding for the scheme[59]:

Figure 3.1 Main funding sources for schemes



Source: 2013 Audit Survey

[59] Percentages add up to more than 100% as multiple categories could be selected.

The graph shows that local authorities were the most important source of funding for the majority of schemes (53%); the next most important sources were 'own funds' and NHS bodies (the decrease from 25% in 2012 to 11% in 2013 can be attributed in part to responsibilities for public health switching from the NHS to local authorities as a result of Health and Social Care Act 2012, as highlighted in chapter two).

As noted in the previous chapter, volunteer time and inputs are key to the delivery of Walking for Health, in addition to any paid posts and other direct costs. For volunteer-led schemes the value of in-kind contributions is even more crucial since both the scheme coordinator and walk leaders will be volunteers. Even if the schemes are led by local authorities, the free time provided by the volunteers is still regarded as key to the efficient operation, sustainability and potential expansion of the schemes:

> "*It couldn't work without volunteers, no way; it wouldn't work without volunteers at all. We have 46 volunteers, even if they only do 2 hours a week that's 92 unpaid hours a week that volunteers are providing…the amount of money it is saving by having volunteers is immense*"
>
> (*scheme coordinator*)

The sustainability of scheme funding arrangements, and the effectiveness of related programme support, is considered in chapter 6.

3.2.2 Scheme budgets

The 2013 Audit survey provided data on the annual budget of Walking for Health schemes. A significant proportion of respondents indicated that their scheme did not have a specific annual budget. This does not mean that these schemes had no funding however, as many of the same respondents also indicated in the audit that their scheme received funding from various sources including local authorities. 'No annual budget' was therefore understood to mean 'no specific amount' rather than 'zero funding'. An average annual budget for these schemes was derived by weighting the 'no annual budget' responses on the basis of their responses to the question on who funds their scheme, and linking this to average annual budget figures for each of the funding categories (using responses from those who did provide a budget and source of funding).[60] This calculation resulted in a total average scheme cost estimate of nearly £11,000 per annum across all schemes.[61]

Of those schemes that provided an annual budget amount in their responses to the 2013 Audit survey, the amounts ranged from £200 to £85,000. Most of the case study schemes were not able to provide specific annual budget figures. For one scheme, however, the total amount of annual funding which covered the funding of two posts was £50,000 which was provided by the local authority's Sports Development and Public Health teams. Additional funding was provided for other overheads, such as branded materials including polo shirts and waterproof jackets for the volunteers.

[60] Schemes who said that they used their own funds and did not provide an annual budget were assumed to have a budget of zero, as no annual budget figures were provided for this group of respondents.

[61] This result can be compared to analysis undertaken for Natural England (2012) which concluded that the total recurring (economic) costs for a local scheme ranged from just under £15,000 to almost £60,000 per annum. An important limitation of the previous research was the very small sample of schemes that the analysis of costs was based on (a total of five out of more than 500 active schemes).

3.2.3 Role of scheme coordinator

Of the schemes that have a dedicated programme budget, the scheme budget is primarily used to support the scheme coordinator and assistant roles. The case studies suggested that it was common for scheme coordinators to be employed by the local authority and to be based within sports development or public health teams. The Walking for Health scheme coordinator role was generally combined with other local authority work and the time devoted to the role varied significantly from a few hours a week to a full-time role. The time inputs generally related to the size of the scheme. The scheme coordinator for one of the larger schemes, for example, was employed for three days per week. A second post was also funded, that of the volunteer coordinator, for 26 hours per week. For a smaller scheme, the scheme co-ordinator employed by the local authority was spending on average two hours per week managing the scheme.

The day to day work of the scheme coordinators varies depending on the resources and time available. On some of the larger schemes the role can involve more strategic work in developing partnerships and engagement with health professionals to support the recruitment of people with a wide range of health conditions. More generally, scheme coordinators liaise with the national and regional Walking for Health teams, deliver the walk leader training (if trained to do so) and oversee monitoring and data collection to input to the national Walking for Health database. A number of schemes were also using paid staff as walk leaders. In some instances this was to increase walk leader capacity where it was difficult to recruit a sufficient pool of volunteers and in others to provide additional support for people with health issues (such as those recovering from strokes) to participate in Walking for Health.

3.3 Walking schemes and walks

3.3.1 Number of schemes

The Walking for Health programme has objectives to extend scheme coverage across England to make health walks accessible to all, including the less active, and therefore reach more walkers ('enable more people to walk more often'). The Audit 2012 had recognised 599 schemes as Walking for Health schemes. However, between April 2014 and March 2015, the number of recognised Walking for Health schemes fell from 591 to 400, according to records kept by the Walking for Health team.[62] This can be accounted for by the merger of some schemes with others in their area over this period, and others becoming inactive when they decided not to apply for accreditation, or were no longer running walks due to staffing and / or funding issues.

3.3.2 Number and frequency of walks and size of schemes

In terms of the programme objective to extend scheme coverage, it is important to note that schemes vary significantly in the number and frequency of different health walks delivered and in their numbers of registered walkers. This point is important since it highlights how schemes are able to expand and contract to meet demand in their local area (without the need for a wholly new scheme for example), and how therefore there are other ways for the national programme team to meet the objective of reaching more walkers beyond simply expanding the overall number of schemes.

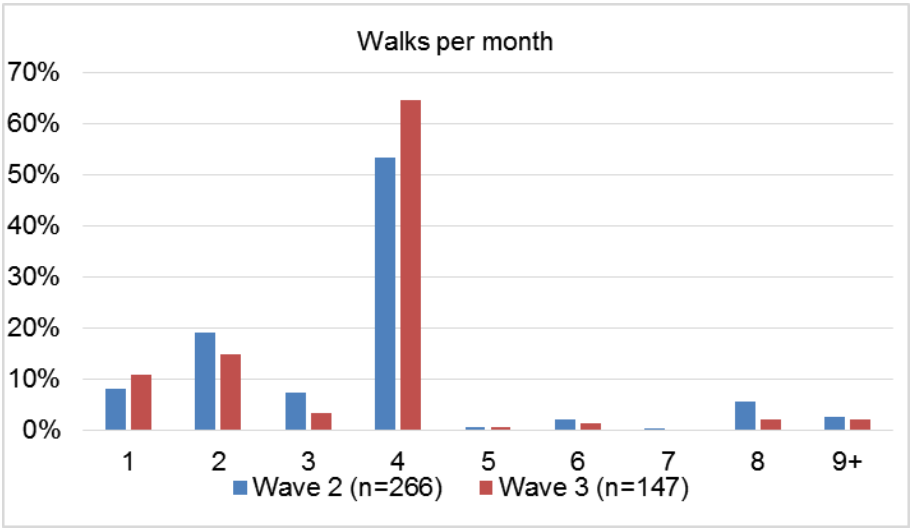
[62] It should be noted that henceforward in the report, analysis based on 2014-15 data from the database involves extrapolating the number of schemes using the database (306) to the estimated number of schemes overall. This is estimated to be 496 in the period between April 2014 and March 2015 based upon the number of accredited schemes reducing from 591 to 400 i.e. for the purposes of grossing up the number is assumed to be 496 (591 + 400 divided by 2).

Overall, data from the 2013 Audit suggests that across 526 Walking for Health schemes, 3,438 different walks were on offer throughout the year on a weekly, fortnightly or monthly basis, with 2,669 being run per week. Further data collection is required to understand recent changes in the number of walks and to answer the question of whether recent scheme closures/mergers have had any impact on scheme coverage. The majority of schemes in fact deliver more than one walk per week, with over one third of schemes delivering five or more walks per week. The latest detailed data from the 2012 Audit survey[63] showed that:

- Around a quarter of the schemes (26.9%) delivered one walk per week, with 5.5% delivering walks less frequently (such as monthly or every two weeks).
- 31.6% of all schemes delivered more than one, but less than five walks per week.
- 19.5% delivered five or more, but less than ten walks per week.
- 13.1% delivered ten or more, but less than 20 walks per week.
- At the other end of the spectrum, 28 schemes (4.4%) offered 20 walks or more per week and amongst them seven schemes were running more than 40 walks per week.

Along with evidence from the evaluation survey, which highlights how for the most part individual walkers nonetheless tend to take part in (on average) one walk per week; this suggests that schemes are able to run multiple walks per week for multiple groups of walkers. The figure below (derived from Waves 2 and 3 of the survey) shows that the majority of walkers attended four walks a month, with the next most common frequency being two walks a month.

Figure 3.2 Monthly frequency of walkers attending walks at Wave 2 and Wave 3



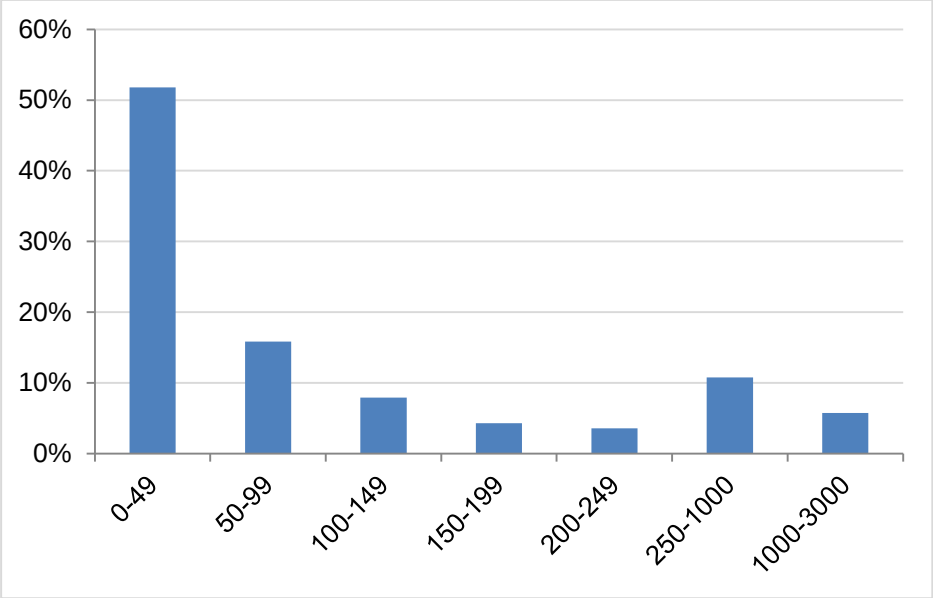
Source: Evaluation of Walking for Health Wave One and Wave Two surveys

[63] Question not repeated in the 2013 Audit.

3.3.3 Number of regular walkers

Schemes vary significantly in terms of the range and size of their programme of walks, and in terms of how many regular walkers participate. According to the 2013 Audit data, the number of 'regular' walkers[64] per scheme ranged from 0[65] to 3,019, with a mean average of 196 and a median of 47 regular walkers per scheme[66]. However, there was also a significant number of schemes with 250 or more regular walkers (16.5%), which gives a further indication of the variety within Walking for Health. Figure 3.3 illustrates this fact, giving an overview of the distribution of schemes by number of regular walkers.

Figure 3.3 Distribution of schemes by number of regular walkers



Source: Evaluation team calculations based on Walking for Health Audit 2013 data, n=139

Whilst the evidence suggests that there is the potential for schemes to expand, as illustrated by the diversity of frequency of delivery and numbers of walkers, the majority of schemes at this time had between 0 and 49 regular walkers (51.8% of schemes). Information on the total number of walkers per annum is provided in section 3.3.

3.3.4 Duration and location of walks

Walking for Health walks are expected to be free, easy and short in duration, and accessible from where people live. The 2013 Audit data highlighted a variety of durations of walks provided by Walking for Health. The data showed that the majority of walks lasted between 30 and 90 minutes (70%), while 17% of walks were 30 minutes or less and 14% lasted 90 minutes or more[67]. It is important to note that walks lasting 90 minutes or more are no longer recognised as Walking for Health walks based upon the accreditation criteria created in 2014. The vast majority of walks however were already meeting the criteria before the accreditation process was introduced.

[64] In the 2013 audit, the definition of regular walker had changed to someone who walks at least once a month or three times a quarter. In the 2012 audit, a regular walker was someone who walked at least once a quarter.
[65] A small minority of schemes reported the number of regular walkers to be zero.
[66] Based on 139 schemes reporting on this indicator in the 2013 audit.
[67] Total % larger than 100 due to rounding.

At all waves of the evaluation survey, participants still attending Walking for Health were also asked to report how long they typically spent on each walk, and how far they thought the walks were. The results corroborate the data from the Audit. At Waves 2 and 3, one hour was the modal (or most common) walk time, as reported by 61% of participants. A further 14% reported 90 minutes, whilst 15% reported that their walk lasted two hours[68]. Only 2% walked for less than 30 minutes. The proportion reporting a walk as lasting longer than two hours or less than one hour was 5% for each of these respective categories. Again, it should be pointed out that these results are not inconsistent with the introduction of accreditation requirements for walk lengths, given that the accreditation process was completed in March 2015 and the surveys commenced one year earlier.

When asked the distance of the walk, 22% did not feel they were able to provide an estimate. Of those that did, the modal distance was 2 miles reported by 35% of participants closely followed by an estimate of three miles from 32% of participants. The respective proportions reporting under two miles, and over 5 miles, were 4% and 5%.

Table 3.1 Walk duration and walk distance

Estimated typical walk duration	%
Up to 30 mins	2%
30 mins - 1 hour	3%
One hour	61%
1.5 hours	14%
Two hours	15%
Over two hours	5%

Estimated typical walk distance	%
Under 2 miles	4%
2 miles	35%
3 miles	32%
3-5 miles	22%
5+ miles	5%

(22% were not able to provide an estimate)

Source: Evaluation of Walking for Health Wave One and Wave Two surveys

The case study schemes analysed by the evaluation also provided evidence of a nuanced approach to walk duration and intensity. Some schemes offered internal progression opportunities for walkers. For example, some walkers interviewed for the case study work reported that their Walking for Health schemes had provided them with progression opportunities to increase the intensity and length of their walks (albeit within the 90 minute limit). For example, one of the larger schemes had designed seven 'progression walks', of between three to eight miles in length, which were aimed at regular walkers on the Walking for Health programme who had developed their fitness and were ready to take part in longer and/or faster paced walks.

Less formally, it was found that often groups allow walkers to return to the start or take a shorter route with a walk leader, if they are not able to complete the whole route, providing a vital option to encourage the least active to remain engaged. This highlights the success of Walking for Health schemes in attempting to cater for a wide range of physical activity and health needs, as well as some of the solutions adopted to the challenge of meeting the needs of both less and more active participants, even within a single scheme.

[68] It is important to note that walks longer than 90 minutes are no longer supported by Walking for Health; the surveys pre-dated the introduction of the 90 minute limit.

Most Walking for Health walks take place in local countryside or open spaces. For example, the case study schemes serving highly populated urban areas were providing walks in local beauty spots or nature reserves and were very well attended. Linked to this, a minority of the walks were designed to be of educational value, such as the wildlife and historical walks that come under the Walking for Health banner.

Walks commonly took place during the daytime or weekdays; a number of schemes commented that they had tried to establish evening and weekend walks with limited success. For example one scheme had established a walk in the early evening to attract office workers but this attracted a much lower number of walkers than the regular morning walks. The common view was that people who are working in the day are too busy in the evenings and weekends to attend this type of provision. This will nonetheless limit the participation of those who are less active and working but who may want to participate in health walks.

3.3.5 Targeted walks

While the vast majority of schemes in the 2013 Audit stated that their walks were open to all (70%), a significant proportion of schemes offered targeted walks for specific groups. The most frequently named target groups were people with long term health conditions (15.7% of all schemes), followed by people with disabilities (13.5% of schemes) and older people (12.4% of schemes). Other schemes offered specific walks in areas of deprivation (8.6%), or targeted black and minority ethnic groups (6.2%). 5.5% of schemes targeted people who had been diagnosed with cancer. A further 5.5% targeted walkers of a specific gender.

For example, one case study scheme included in the evaluation demonstrated how track-walking was being used to engage younger women (25-55) in moderate physical activity in a safe and secure environment. It also provides a good example of the flexibility built into health walks more generally to ensure that Walking for Health is accessible and caters to the needs of different walkers. Further examples of good practice in relation to Walking for Health's specific target groups are found in chapter 6.

Case Study Good Practice Evidence – Engaging with younger women

- One of the medium-sized schemes led by a local authority provides a short walk every Wednesday evening between 5.30pm and 7pm at a school's athletics track. The timing is flexible however and participants can turn up at any time between 5.30pm and 6.30pm. An advantage of this timing is that people working normal working hours are able to attend.
- The length of the walk is also flexible and beginners might only walk for 10 minutes initially. The length of time varies between 10 minutes and one hour and on average people spend about half an hour walking.
- Participants cannot be obliged to walk at a certain pace; however the walk leader gives advice to participants on the importance of walking at a minimum pace in order to raise the heart rate to improve fitness levels and this has the effect of encouraging people to walk at a moderate pace.
- The track walking is targeted at women of all ages (though it is not exclusive to women) to enable them to exercise in a safe and secure environment. However the majority of those who attend are in the 40-50 age category which is younger than the overall average for the scheme. The track walking has also attracted a couple of younger men with learning disabilities.

Case Study Good Practice Evidence – Engaging with younger women
• The overall numbers are increasing gradually – the average number of participants is approximately 8-10 per session rising from 3-4 in the last year. It is felt that the full potential of the walk could be realised with more publicity. With more funding the Council would do more to market the walk and currently the main way that participants hear about the walk is through word of mouth. • The key lessons is that track walking can offer a flexible way of engaging younger women in moderate physical activity in a safe and secure environment and can provide an opportunity for women to progress to more vigorous exercise.

3.4 Walkers and their characteristics

3.4.1 Number of walkers

The Ramblers and Macmillan aim to increase participation in Walking for Health. However, in line with the recent re-introduction of the accreditation process (which has resulted in fewer schemes and walks), it can be seen that following a trend towards an increase in the number of participants, more recently there has been a reduction in the number of registered walkers.

Using the data from the 2013 Audit, it can be estimated that Walking for Health walks attracted 103,368 regular walkers in 2013[69] (this figure is similar to the total number of registered walkers of 108,700 between September 2013 and August 2014[70], suggesting a high level of engagement amongst registered walkers). Looking at more recent data on the overall number of walkers (not only those who attend regularly), estimations extrapolating data from the database suggest that 82,569 walkers[71] (29,569 of them new) had attended walks between April 2014 and March 2015.

3.4.2 General profile of walkers

Walking for Health schemes must balance being open and accessible to all with the need to engage people who are currently inactive or who need support to remain active. Walking for Health aims in particular to reach those most in need of support, including people affected by cancer and other long-term health conditions, and those from recognised health inequality groups such as older adults, BME communities and people on lower incomes.

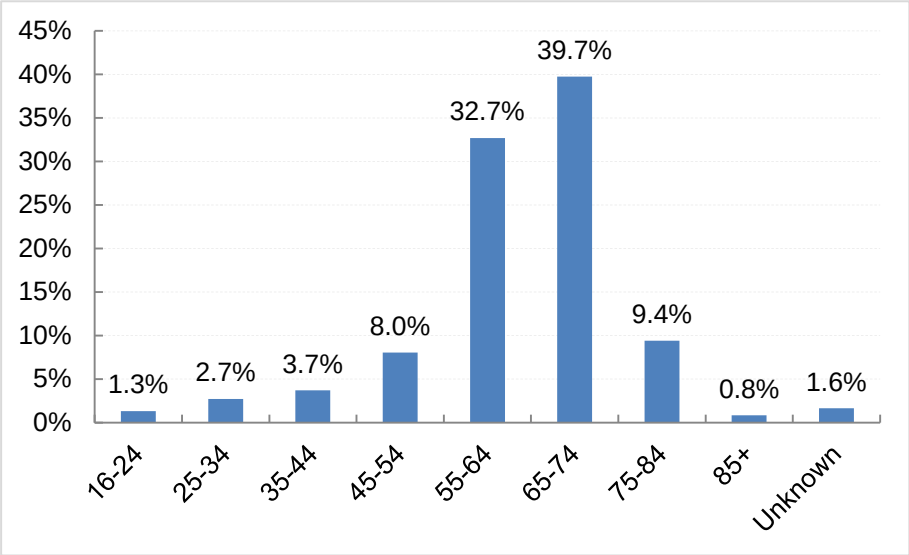
The demographic profile of Walking for Health walkers registered on the national database has remained consistent over the past three years. Between April 2014 and March 2015:

- The majority of walkers were female (70.3%).
- The majority of walkers were White (93.6%), with only 3.4% of walkers belonging to ethnic minority groups (Black 0.7%, Asian 1.8%, mixed 0.4%, other 0.5%). Given that their share in the overall population is 14.6% (Census 2011 data for England) people from ethnic minority groups remain under-represented among Walking for Health walkers.

[69] This is based on an extrapolation of data provided by 309 schemes in the 2013 Audit.
[70] Based on database figures and scaling up using the proportion of schemes on the database
[71] Scaling-up based on an assumed number of 496 schemes (as number of schemes reduced from 591 to 400 during the period in question i.e. 591+400 divided by 2).

As shown by the detailed breakdown of age in the graph below, the vast majority of walkers (83%) were 55 years or older. This compares to 28% of the general population, based on 2011 Census data, suggesting that Walking for Health has been effective at engaging with this target group.

Figure 3.4 Distribution of walkers by age



Source: Walking for Health National Database, April 2014 – March 2015

The table below shows how the profile of Walking for Health participants compares to the general population.

Table 3.2 Characteristics of Walking for Health Participants

Group	Walking for Health	Population (Census 2011)
Women	70.3%	51%
BAME	3.4%	14.6%
Over 55	83%	55%

Sources: Walking for Health National Database, April 2014 – March 2015; Census of Population 2011

3.4.3 Deprivation and Education levels

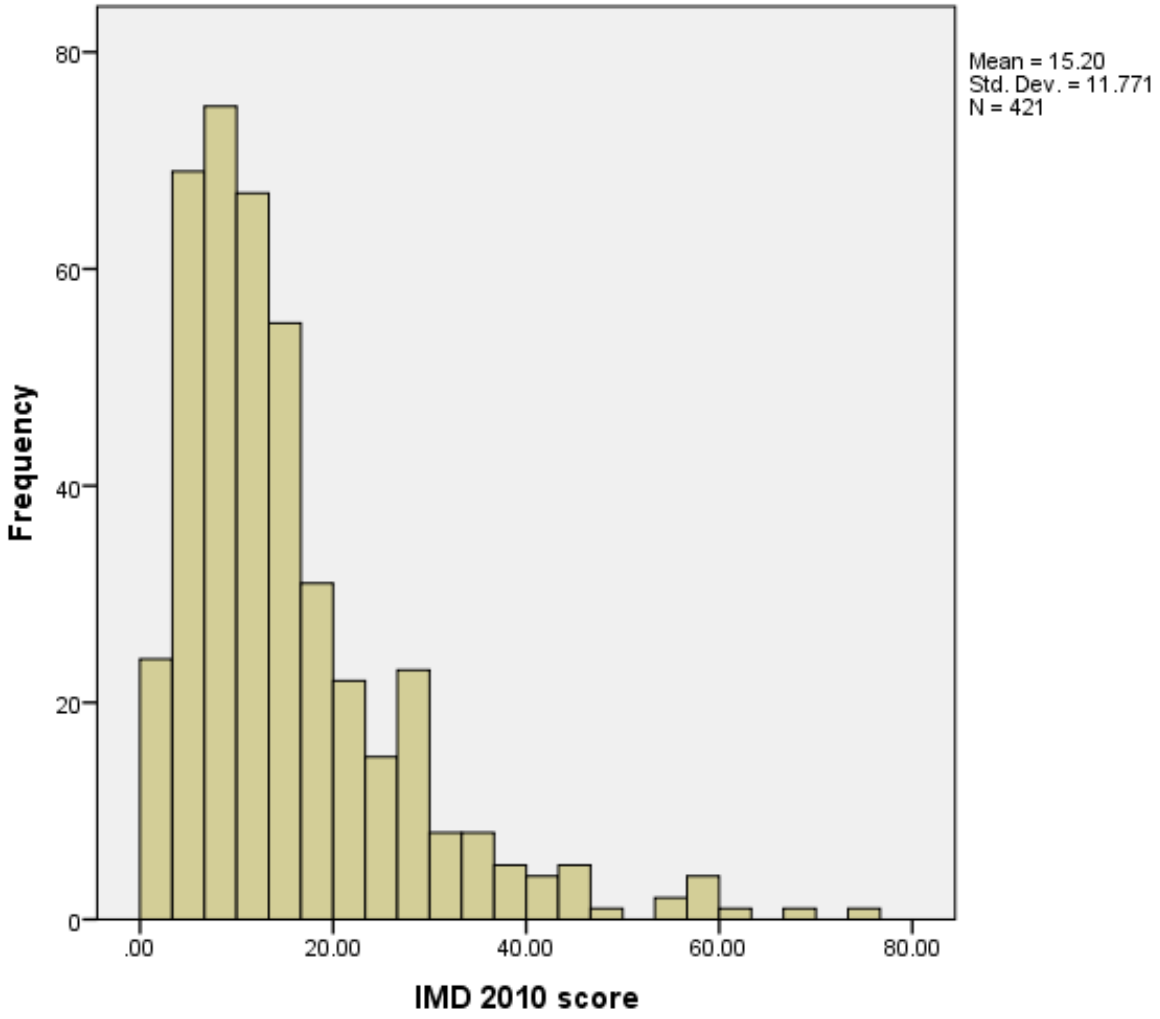
There is a proven correlation between the deprivation level of a local area, education and household income (as well as levels of physical activity).[72] It is therefore useful to analyse the place of residence of walkers, as a proxy for understanding their income levels. In the year to March 2015, 5.3% of walkers lived in the 20% most deprived areas using the Index of Multiple Deprivation (IMD) according to the database. This compares to about 10% of people in England who live in the 20% most deprived areas[73] and suggests that this group is also under-represented amongst Walking for Health walkers.

[72] Farrell, L., Propper, C., Shields, M., (2013). The Socioeconomic Gradient in Physical Inactivity in England, the Centre for Market and Public Organisation, Working Paper No. 13/311, July 2013, http://www.bristol.ac.uk/cmpo/publications/papers/2013/wp311.pdf (accessed 10.01.2014)

[73] Department for Communities and Local Government, (2011). English indices of deprivation 2010, Published 24 March 2011, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/6871/1871208.pdf (accessed 10.01.2014)

This analysis is reflected in the resident location data collected as part of the baseline survey completed for the evaluation. The frequency distribution of LSOA IMD scores for these participants is shown in Figure 3.5 (higher IMD scores represent higher levels of deprivation; 87.8 is the most deprived area).

Figure 3.5 Frequency distribution of Index of Multiple Deprivation scores in the baseline sample



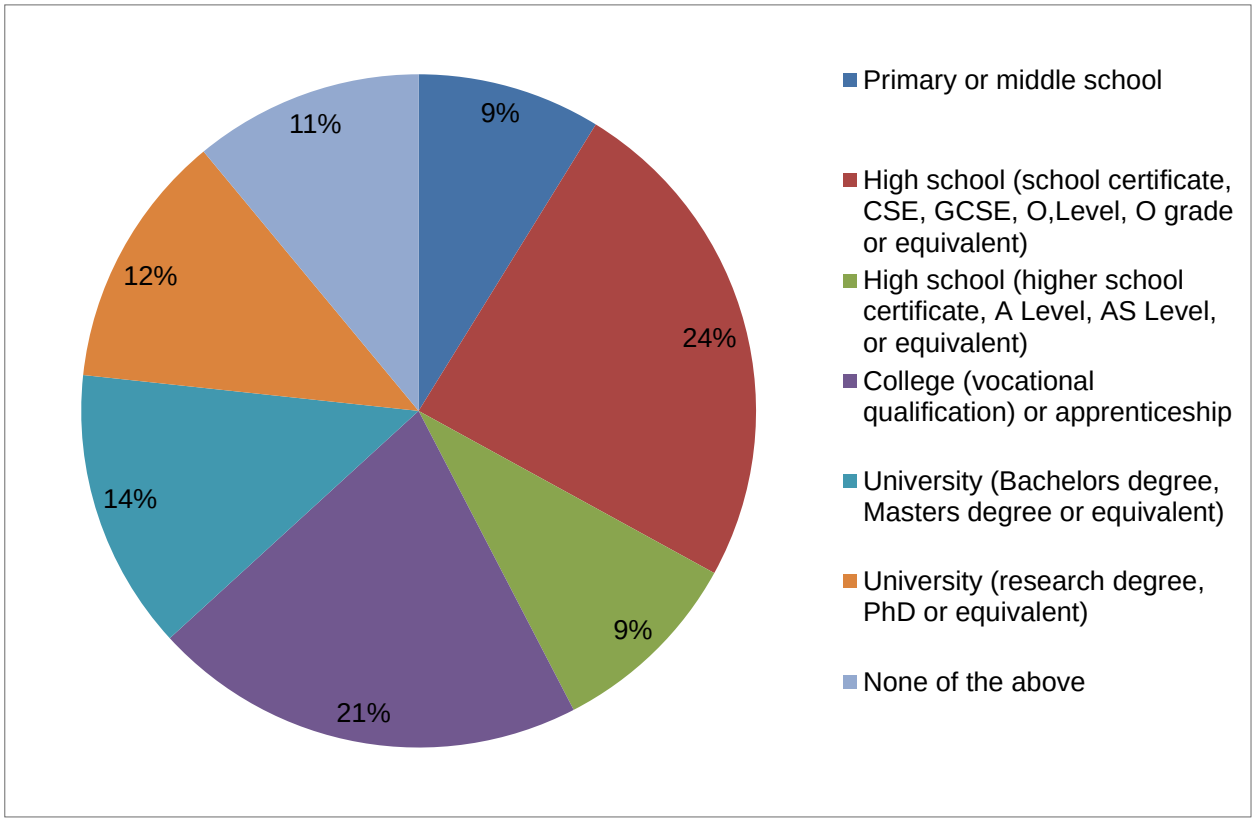
Sources: Evaluation of Walking for Health baseline survey; English indices of deprivation 2010
Note: Out of the 520 participants who provided information for the survey, a postcode was available for 421 (81.0%), which allowed their LSOA of residence and corresponding IMD score to be identified.

The right skew of the distribution in Figure 3.5 indicates that the survey sample came from generally affluent areas. The mean IMD LSOA score for survey participants was 15.2 compared to a national mean score of 21.7 for England. 50% of the sample lived in the least deprived areas with an IMD score of below 12, whilst just 34% of English LSOAs have a score below this. Only 4.3% of the sample lived in an area with an IMD score of above 40, compared to 14% of English LSOAs scoring above this.

Figure 3.6 details the percentage of participants by highest level of educational status. The sample for the Wave One survey was generally well educated, with just 11% of participants stating that they had none of the mentioned qualifications. The educational category with the greatest number of participants was the high school group (school certificate, CSE, GCSE, O Level, O grade or equivalent) with 126 participants (24.2%). In total 25.8% of participants had either an undergraduate or postgraduate university degree. Whilst this is lower than the 27% of the English population who had a degree in the UK Census, this

reflects the older age of this population, as fewer individuals went to university when many of the survey participants were young. In the Census, just 17.5% of English residents aged over 65 had a degree or higher, a much lower figure than in this sample.

Figure 3.6 The percentage of participants split according to highest level of education attained



Source: Evaluation of Walking for Health baseline survey, n =520

3.4.4 Inactivity, long-term health conditions and cancer

A key objective of Walking for Health is to increase the availability of and participation in Walking for Health for people who are currently inactive. As reported in chapter one, Walking for Health OHQ responses (April 2014-September 2014) reveal that around one quarter (25.7%) of walkers registered with Walking for Health can be classified as 'active' on joining the scheme, that is they take part in moderate physical activity for at least 30 minutes on at least five days each week. New physical activity guidelines superseded the focus on 5 x 30 minutes in 2011 however. A measure which can be used to compare activity levels more closely with national data is sedentary time. Sedentary time at baseline for the Walking for Health constant sample is 4.6 hours; the Health Survey for England 2012[74] reports the mean number of hours sedentary time as 4.9 hours.

Walking for Health aims to engage people affected by long-term health conditions, including cancer. According to the national database, 87.8% of all walkers between April 2014 and March 2015 reported that they had no long-term illness, health problem or disability which limits daily activities/work. Of those who did (9.8%), they most commonly reported a physical disability (3.2%), 'other' disabilities (1.6%) and mental health issues (1.7%). This is similar to the findings in the year up to September 2014 when 88.6% of all walkers reported that they had no disability. The proportion reporting that they had a disability in the

[74] Craig R, Mindell J (eds) (2013) *Health Survey for England 2012*, London: The Health and Social Care Information Centre

year to March 2015 (9.8%) was relatively low compared with the 18% reporting this within the total population[75].

Analysis of the Walking for Health database indicated a significant increase nationally in the participation of people living with and beyond cancer in the 12 months to September 2014 – it was estimated that 3,653 walkers who had been diagnosed with cancer participated in walks compared to 1,929 reported for the previous 18 months. In the year to March 2015 the database indicates that 3,567 walkers with cancer participated in the walks, of which 2,131 were new walkers. In percentage terms, 4.3% of all walkers and 7.3% of new walkers in this period were people who had been diagnosed with cancer; these figures compare to a cancer prevalence rate of 3.2% for the overall population[76]. These proportions are slightly higher than the numbers stated in the analysis of the 12 months up to September 2014, when 3.3% of all walkers and 5.6% of new walkers who had been diagnosed with cancer.

Some 33.6% of walkers registered in the year to March 2015 had at least one serious health condition (excluding cancer): 22.6% suffer from high blood pressure; 7.3% from asthma; 5.8% suffer from heart disease; 5.7% from diabetes; and 1.6% from chronic obstructive pulmonary disease (COPD).[77] These results are very similar to the percentages for the period between September 2013 and August 2014 when 22.2% were suffering from high blood pressure; 7.1% from Asthma; 5.6% suffer from heart disease; 5.4% from Diabetes; and 1.5% from chronic obstructive pulmonary disease (COPD).

Although a significant percentage of the walkers reported health conditions it is important to note that the prevalence of health conditions would be expected to be high in this population of older adults. It is noteworthy that the database sample appears, at least based on their self-report, to be healthier than would be expected of a general population sample of comparable age. For example figures from the 2012 Health Survey for England indicate that approximately 30% of all men and women in England have hypertension, with this figure rising to 65% in the over 65s. This prevalence is to be compared with just 22% of the database sample reporting they suffer from high blood pressure. Similarly, just 5.7% of the database sample reported having diabetes compared to an overall prevalence from the Health Survey for England of 5.8% in all adults in England, rising to a prevalence of 14% in over 65s.

The relatively low prevalence of those reporting that they are affecting by long-term health conditions also reflects that the relatively small proportion of walkers signposted to Walking for Health by GPs and other health professionals. According to the database based on walkers' self-reporting, 3,336 or 6.5% of walkers active between April 2014 and March 2015 had been signposted to the programme by their GPs or a health professional. This represents no change from the year to September 2014, when 2,805 or 6.6% of walkers active had been signposted to the programme by their GPs or a health professional. With regards to new walkers, 7.1% had been signposted by a health professional.

More generally, it can be hypothesised that whilst the open access approach pursued by Walking for Health schemes does not preclude providing support for the most health needy (as well as engaging other target groups), it is perhaps not surprising that this approach tends to attract people with characteristics that suggest they are healthier than the general population. This was evident within the case study schemes; most were running larger general health walks (with between 20-100 participants),

[75] Census of Population, 2011

[76] Cancer prevalence figures are from 2008 data based on analysis in Maddams, J., Brewster D. Gavin A., et al. *Cancer Prevalence in the United Kingdom: estimates for 2008*. Br J Cancer 2009; 101(3):541–547

[77] It should be noted that 'series health condition' is distinct from 'long-term health condition, health problem or disability' reported in previous paragraph.

which were open to all and aimed at anyone that would benefit from gentle exercise and social contact. Approaches to targeting and their effectiveness will be further explored in chapter five.

3.5 Satisfaction with Walking for Health

The objectives of Walking for Health also highlight the importance of Walking for Health walks being both enjoyable and well run. This is important to Walking for Health (and any physical activity scheme) since satisfaction with the experience is likely to be a key factor in sustaining participation.

Within the surveys, participants were asked a range of related satisfaction questions including: whether they anticipated attending Walking for Health walks in the future (constant sample only); whether they would recommend Walking for Health to others (all respondents, Waves 2 and 3); and how satisfied they were overall with the Walking for Health programme (Wave 1 all respondents; Waves 2 and 3 only those who had left the programme).

The vast majority of participants at Waves 2 and 3 (98%) would recommend the programme to somebody else.

At each of the two survey follow-ups, participants were asked if they were still participating in Walking for Health walks, when they had last attended a walk and, if they were no-longer participating, what the reasons were. The percentage of participants still attending a walk, and times since last walk is reported in table 3.3 below. This is reported for all respondents at Wave 2 and Wave 3 (not just those in the constant sample).

Table 3.3 Continued participation in the programme and time since last walk

Response	Wave 2 n=364	Wave 3 n=232
Still attending the same walk	71%	64%
Attending a different walk	4%	1%
Left the programme	25%	35%
Mean time since attending last walk (for those that left)	6.2 weeks	10.6 weeks

Source: Evaluation of Walking for Health surveys

The particularly high number of participants planning to continue on the walks at Wave 3 (Table 3.4) provides some indication of the programme's potential to provide longer-term impacts. The table shows a sizeable difference in the attitudes of those still attending at Wave 2 and Wave 3.

Table 3.4 Measures of general satisfaction with Walking for Health

Do you anticipate attending Walking for Health walks in the future?	Wave 1 n=520	Wave 2 n=261	Wave 3 n=145
Definitely	86.2%	69.8%	93.3%
Probably	8.1%	12.5%	4%
Possibly	4.6%	9.1%	2%
Definitely/probably not	1.2%	8.9%	0%
Don't know	0%	0%	0.7%

Source: Evaluation of Walking for Health surveys

The responses for overall satisfaction for all respondents from Wave 1, and those that had left the programme at Wave 2 and Wave 3 are shown below. While the majority of the respondents were 'very satisfied' with the scheme, there is a statistically significant difference between the percentage that were very satisfied at Wave 1, and those who had left their schemes and felt very satisfied at Wave 2.

Table 3.5 Measures of general satisfaction with Walking for Health at Wave 1 and for those that left the programme by Wave 2 and Wave 3

Satisfaction	Wave 1 n=520	Left programme Wave 2 n=88	Left programme Wave 3 n=50
Very satisfied	86.9%	64.8%	78.0%
Somewhat satisfied	9.4%	23.9%	16.0%
Neither satisfied nor dissatisfied	2.3%	5.7%	0%
Somewhat dissatisfied	1%	5.7%	6.0%
Very dissatisfied	0.2%	0%	0%

Source: Evaluation of Walking for Health surveys

Nonetheless, the reasons provided for drop-out were predominantly non-scheme related. Table 3.5 lists the percentage prevalence of reasons given for leaving the scheme. The modal response at both waves was that participants did not have enough time to attend walks. A large number also reported that they did not feel well enough to walk (further analysis revealed that there were close to statistically-significant lower levels of physical activity amongst those who no longer attended a scheme, reflecting this response). A substantial number stated that they now walked alone or with friends.

Table 3.6 Stated reasons for no-longer attending a Walking for Health Walk

Response	Wave 2	Wave 3
	n (%)	n (%)
I don't have time	27 (26%)	31 (35%)
I don't feel well enough	19 (18%)	21 (24%)
I walk alone or with friends now	25 (24%)	12 (13%)
The walks were too easy	8 (7%)	5 (5%)
The walks were too difficult	7 (6%)	4 (5%)
It was too difficult to get to the walks	4 (4%)	4 (5%)
I joined another walking group	3 (3%)	4 (5%)
I took up another activity	12 (11%)	4 (4%)
I don't enjoy the walks	1 (1%)	3 (3%)
I prefer to walk when the weather is better	0 (0%)	1 (1%)
TOTAL	106	89

Source: Evaluation of Walking for Health surveys

Note: Participants were able to give more than one response although the majority chose just one. Hence the values listed correspond to the percentage of responses rather than the percentage of survey participants.

3.6 Volunteers

Given how critical volunteer inputs are to the running of Walking for Health activities, the Ramblers and Macmillan also have an objective to support schemes to recruit and retain a sufficient pool of volunteers. The following section presents data on the number of volunteers, the profile of volunteers and hours of volunteer time contributed.

3.6.1 Number of volunteers

Based on the 2013 audit results, it is estimated that 10,982 volunteer walk leaders assisted across the Walking for Health schemes in 2013.[78] The results indicated that 38% of schemes increased their number of walk leaders over the previous year, while for 46% of schemes the number of volunteer walk leaders was reported to have stayed the same and 16% have experienced a decline in walk leader numbers, which can be regarded as a positive result given the programme objective to maintain a sufficient pool of volunteers.

Other volunteers according to the 2013 audit were active as walk assistants (2,316), in admin/data entry roles (608), in promotional (987) and other roles (722).[79] The total number of volunteers in other roles was therefore 4,633.

Data is not available showing trends in the number of volunteers since 2013.

[78] This is a linear extrapolation from 416 schemes reporting on this figures in the 2013 Audit

[79] All estimates based on linear extrapolation from 441reporting schemes in the 2013 Audit

3.6.2 Profile of volunteers

Based on available data from the Walking for Health database extracted in September 2014 and covering the 18 months prior to this, the majority of trained walk leaders continued to be female (61.6%) and in line with the walker demographic, the average walk leader was aged between 55 and 74 years old (75%). There is no updated information on the demographic characteristics of the volunteers.

3.6.3 Volunteer time

The 2013 Audit asked schemes to estimate how many hours of volunteer time are contributed to their scheme in a typical week. The variance in the numbers reported by schemes was high and answers ranged from 0 and 2,000 hours[80], with an average of 18.1 hours and a median of 10 hours committed per scheme.

The main role of volunteers, as highlighted above, is leading the walks. An important part of this role is planning and undertaking risk assessments of walks and then coordinating the delivery of the walks. It was evident from the case studies that walk leaders invest time into doing reconnaissance prior to the walk – it was not uncommon for walk leaders to be checking routes two or three times if necessary prior to doing a formal risk assessment. If walk leaders are not officially leading walks they assist by engaging with slower walkers and ensuring that nobody gets into problems on the route. Volunteers also play a role in introducing people to the ethos of Walking for Health and making people feel welcome.

Volunteer outcomes are reported in section 4.3 while challenges faced by schemes in recruiting a sufficient pool of volunteers and good practice approaches to overcome these challenges are considered in section 6.5.

3.7 Summary

This chapter has focused on the key characteristics of schemes and walkers in order to provide a contextual basis for the analysis of the programme's outcomes and impacts. The analysis of scheme data also goes some way to assessing progress in meeting some of the programme's specific high level aims and objectives.

An objective of the Walking for Health programme is to help schemes to secure a diversity of additional funding and support their financial sustainability; the progress in meeting this objective is examined in chapter six, however data analysis of funding sources provides contextual evidence on the current situation regarding the funding of local schemes:

- Data from the 2013 Audit survey indicates average annual funding of around £11,000 for local schemes. Of those schemes that provided an annual budget amount in their responses to the 2013 Audit survey, the amounts ranged from £200 to £85,000.
- In 2013 53% of schemes were funded by local authorities (an increase from 38% in 2012) while 11% were funded by NHS bodies (a decrease from 25% in 2012). These trends can be attributed in part to responsibilities for public health switching from the NHS to local authorities as a result of the Health and Social Care Act 2012.

[80] The 2,000 figure is driven by a small number of schemes with over 100 walk assistants

The scheme budget for local authority-led schemes is primarily used to support the scheme coordinator and assistant roles. This role was generally combined with other local authority work and the time devoted to the role varied significantly across schemes from a few hours a week to a full-time role.

The restructuring of some schemes through the process of accreditation, which was completed in March 2015, means that the baseline for analysis of scheme data has changed and therefore further analysis will be required in future years to assess how far the programme is meeting the objective to extend scheme coverage. The effects of accreditation are shown by recent trends in the number of schemes and walkers:

- Between April 2014 and March 2015 the number of schemes fell from 591 to 400; this decline is largely attributed to the accreditation process as some schemes merged with others as a result of the process and some did not apply for accreditation and are therefore no longer recognised as Walking for Health schemes.

- The reduction in schemes appears to have affected overall attendance levels. Estimations extrapolating data from the database suggest that 82,569 walkers (29,569 of them new) had attended walks between April 2014 and March 2015. This compares to a total number of registered walkers of 108,700 between September 2013 and August 2014.

Analysis of scheme data shows that schemes vary significantly in terms of the range and size of their programme of walks, and in terms of how many regular walkers participate. Around a quarter of the schemes delivered one walk per week, 32% of all schemes delivered more than one, but less than five walks per week and 20% delivered five or more, but less than ten walks per week.

Walking for Health is clearly successful in targeting older adults, as the vast majority of participants are in the over 55 age group. The majority of walkers are women (70%) and participants have generally reached a higher level of education that the population as a whole.

The levels of physical inactivity of participants at baseline appear to be similar to the wider population (as measured using a comparable measure of sedentary behaviour).

In percentage terms, 4.3% of all walkers and 7.3% of new walkers in the year to March 2015 had been diagnosed by cancer, an increase on the year ending September 2014; these figures compare to a cancer prevalence rate of 3.2% for the overall population.

Some 33.6% of walkers registered in the year to March 2015 had at least one serious health condition (excluding cancer). It is noteworthy however that the database sample appears, at least based on their self-report, to be healthier than would be expected of a general population sample of comparable age.

The analysis in this chapter has highlighted some challenges faced in reaching particular target groups:

- Only 3.4% of walkers in the year to March 2015 belonged to ethnic minority groups (compared to 15% of the national population).
- In the year to March 2015, 5.3% of walkers lived in the 20% most deprived areas using the Index of Multiple Deprivation (IMD) according to the database (compared to 10% of the national population).

The vast majority of participants are satisfied with Walking for Health.

Volunteer time and inputs are key to the delivery of Walking for Health, in addition to any paid posts and other direct costs:

- Some 11,000 volunteer walk leaders are estimated to have contributed to the Walking for Health schemes in 2013; only 16% of schemes experienced a decline in walk leader numbers (compared to 2012), a positive result overall given scheme objectives.

Overall, the analysis of programme data shows that while progress is undoubtedly being made, further actions need to be developed to meet the programme aim of reaching those that need the most support, particularly those from recognised health inequality groups such as older adults, BME communities and people on lower incomes. The issue of targeting is taken up further in chapter six which looks at challenges facing schemes and good practice examples of successful engagement approaches. Recommendations are then drawn from this analysis in the final chapter.

4.0 Outcomes and Impact of Walking for Health

4.1 Introduction

The previous chapter explored the inputs and outputs of Walking for Health, largely drawing on programme data to begin to assess whether relevant programme objectives were being met.. The focus of this chapter is on the outcomes and impact of Walking for Health, as they relate to the programme's overarching aim and the logic model developed by the evaluation team.

The key aim of Walking for Health is to get people more active and to help them stay active. Programme achievements with respect to changes in overall physical activity, and specifically with regards to walking and sitting, are explored in this section. Walking for Health also aims to increase people's wellbeing; this is explored from a variety of perspectives (mental wellbeing, social isolation and life satisfaction). Ultimately, engaging in regular physical and groups activities through the programme should lead to improvements in general health; this outcome is assessed using the EQ5D instrument, which measures quality of life.

The combined analysis draws upon the perspectives of walkers, volunteers and wider national-level stakeholders, gathered through both the robust longitudinal survey and case study qualitative fieldwork. After discussion of each set of outcomes, we also provide an assessment of impact as far as is possible; note that in the absence of a control or comparator group, this is based upon the triangulation of available data including pre and post measurements of outcomes, as well as the subjective opinion of participants.

Unless otherwise stated, survey findings in this chapter are reported for the 'constant sample' – those that completed all three waves of the survey - at baseline (Wave 1), four months (Wave 2) and eight months (Wave 3). In addition to this, sub-analysis examines differences for the main outcomes between those who were no longer part of the Walking for Health programme at Wave 2[81] ('ceased' at Wave 2) and those who still were (the demographic characteristics of this group can be found in chapter 1). Methodological explanations and issues are covered in more detail in section 1.4. After reporting results for each set of outcomes, a summary and discussion of the findings for each of the main outcomes areas – physical activity, wellbeing and general health – is provided at the end of each sub-section.

4.2 Physical activity amongst walkers

This section explores whether general physical activity and walking levels tend to increase (or are maintained) amongst new Walking for Health participants, how levels of inactivity change over an eight month period, and the specific contribution and impact of Walking for Health.

The broad finding is that across all measures of self-reported physical activity, there was an increase or improvement between Wave 1 and Wave 2 of the survey (four months later), followed by a subsequent decline between Wave 2 and Wave 3 (eight months later).

Increases between Wave 1 and Wave 2 included a 1.17 day average increase in moderate physical activity, an 18 percentage point increase (from 20% to 38%) in 'active' participants (undertaking at least 30 minutes of moderate physical activity on five or more days a week), a 13 percentage point reduction

[81] A small number of participants that said they were continuing with the programme at Wave 2, yet had not done a walk in the last three months, were classed as 'ceased at Wave 2'.

(from 29% to 16%) in the number of 'inactive' participants and a 38.2 minutes per week average increase in walking. Conversely between Waves 2 and 3 there was a general 0.97 day reduction in moderate physical activity, a 14.7 percentage point reduction in active participants, a 12.5 percentage point increase in inactive participants, and a 41.1 minute reduction in walking per week. Participants also maintained (but did not increase) their physical activity behaviours, as measured by the pedometer study.

Overall, the net outcome was that levels of moderate physical activity and walking were maintained between Wave 1 and the final follow-up at Wave 3 (itself a very positive finding particularly given the age group involved). Further evidence suggests that Walking for Health is making a significant contribution to the maintenance of activity. Illustrative cases point to the importance of Walking for Health for helping older people who wish to step down to maintain regular moderate exercise.

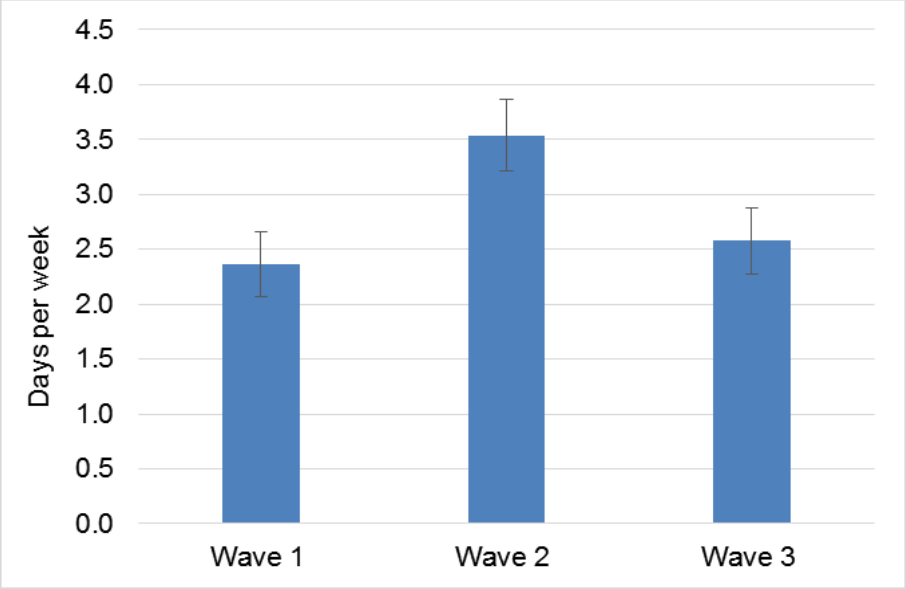
However, comparison of outcomes between those continuing to participate and those ceasing at Wave 2 suggests that those who are more engaged in physical activity and walking at the start are more likely to stay on the programme. This points towards the need for greater efforts to retain those participants who are less active in Walking for Health in order to meet programme objectives and maximise health outcomes.

4.2.1 Changes in moderate physical activity, walking and inactivity

4.2.1.1 *Moderate physical activity*

Firstly, participants were asked at each wave of the survey to estimate on how many days in the last week they had undertaken 30 minutes or more physical activity "*which was enough to raise your breathing rate*". This is the equivalent of physical activity undertaken at a moderate or greater intensity. Figure 4.1 shows trends in the mean number of days undertaken over the three study waves. The mean scores were 2.37 days of physical activity at Wave 1 (immediately after joining Walking for Health), 3.54 days at Wave 2 (four months later), and 2.58 days at Wave 3 (eight months later).

Figure 4.1 Mean number of days doing at least 30 minutes of moderate activity



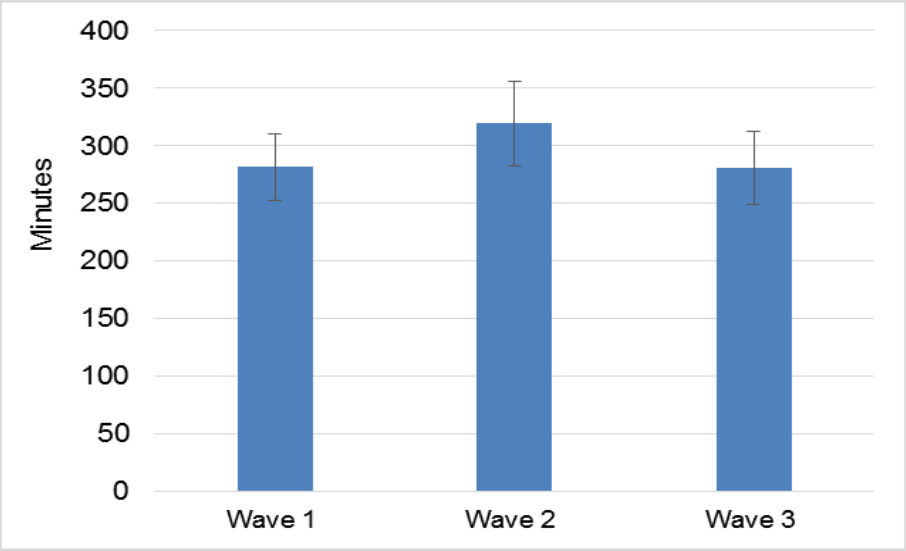
Source: Evaluation of Walking for Health surveys
Base: Constant sample (n = 232)

There was a statistically significant increase in the mean number of days between Wave 1 and Wave 2 ($p<0.001$) and a statistically significant decrease between Wave 2 and Wave 3 ($p<0.001$). There was no statistically significant increase between Wave 1 and Wave 3. This is despite 49% of respondents reporting an increase in moderate physical activity (any amount) between the baseline and four months later, and 18% reporting an increase between four and eight months later (28% reported an increase in total: see table 4.1). It is therefore clear that the activity levels of other respondents dropped back in parallel with those who increased their activity levels (and particularly after Wave 2 of the survey).

4.2.1.2 *Walking*

The survey detected a similar trend with regards to specific walking activity. All waves of the survey asked individuals to report on the number of days in the previous seven that they had walked for at least 10 minutes, as well as the time spent walking on a typical day. A measure of total time spent walking each week was then derived from this data. The means for the three waves were 281.4 minutes, 319.6 minutes and 278.5 minutes per week (Waves 1, 2 and 3 respectively). Reflecting the findings on levels of physical activity, there was a statistically significant increase in walking between Waves 1 and 2 ($p<0.05$), but no statistically significant difference between Waves 1 and 3.

Figure 4.2 Mean minutes per week walking



Source: Evaluation of Walking for Health surveys
Base: Constant sample (n = 232)

More positively, in general terms this equates to around 5 hours of walking per week across all survey Waves. This can be compared with a reported 2.7/2.5 hours per week for all adult males/females within the Health Survey for England[82]. It should be noted that there is an obvious discrepancy between the walking data and levels of moderate physical activity. For example, some respondents that reported undertaking less than one day of 30 minutes of moderate physical activity per week also reported that they walked during the same period. The discrepancy can potentially be explained by the fact that moderate physical activity, as defined by the validated measure used in this evaluation, is activity that raises one's breathing rate, and leisurely walking may not always do this.

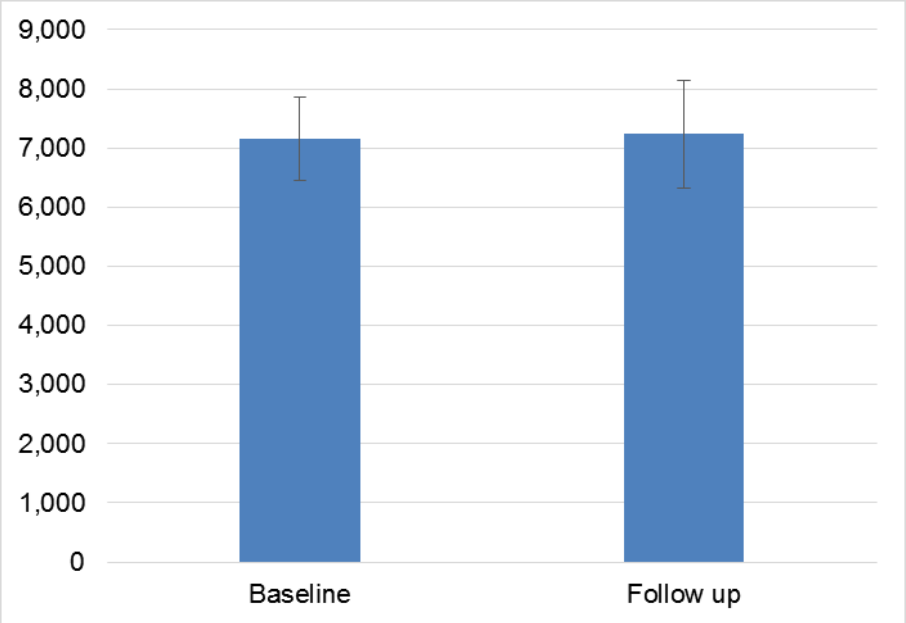
[82] Townsend N, Wickramasinghe K, Williams J, Bhatnagar P, Rayner M (2015). Physical Activity Statistics 2015. British Heart Foundation: London.

As detailed in chapter one, pedometer research was also used to provide a more objective measure of walking and physical activity amongst newly recruited Walking for Health participants. It should be acknowledged that results may be subject to a form of 'social desirability' bias, with respondents encouraged to walk for longer periods if wearing a pedometer[83]; however it is not possible to report on the extent to which the comparative results between baseline and follow-up stage (4 months later) might be influenced in this way.

At baseline the 102 participants wearing pedometers completed on average 7,145 steps per day (median = 6,608). The greatest number of mean steps per day recorded at baseline was 18,624 whilst the lowest was 393. The 72 (%) participants at follow-up completed on average 7,232 steps per day (median = 6,531). The greatest number of average steps per day recorded at follow-up was 25,800 whilst the lowest was 634. It is possible that participants with very low mean numbers of daily steps did not fully adhere to the wear instructions (i.e. they wore the device for less than 7 full days).

Figure 4.3 shows the mean number of steps taken at baseline and follow-up. The difference between baseline and follow-up is not statistically significant.

Figure 4.3 Mean number of steps taken at baseline (n=102) and at follow up (n=72)



Source: Evaluation of Walking for Health pedometer research

The results of the pedometer research are therefore broadly consistent with the survey findings on walking behaviour which showed that participants were at least maintaining their levels of walking. 10,000 steps per day is likely to enable participants to reach the recommended 150 minutes moderate activity per week[84]; 22 participants at baseline (21%) exceeded the 10,000 steps per day average recommended by Government guidelines. 15 participants (21%) exceeded the 10,000 steps per day average recommended by Government guidelines at follow-up.

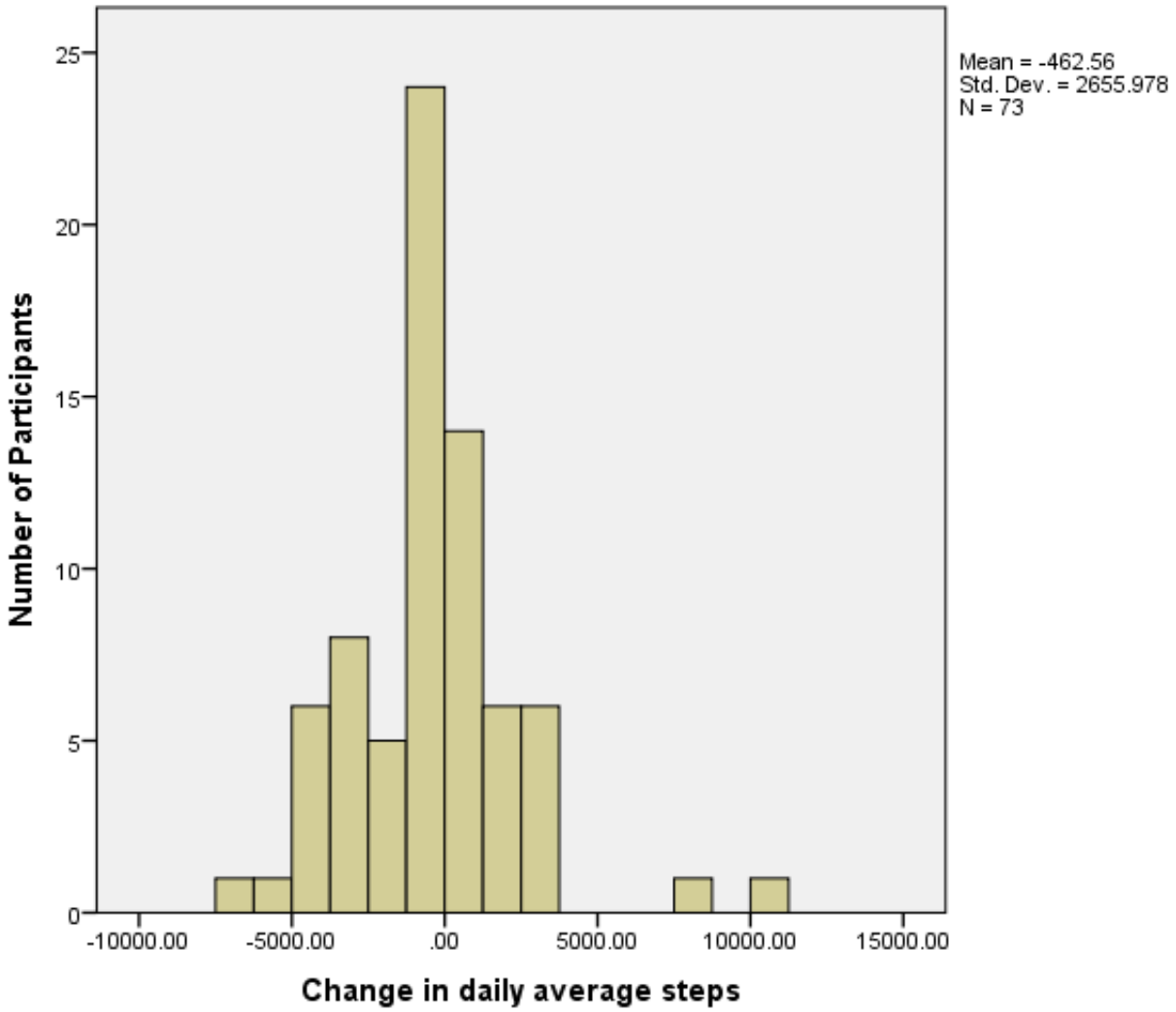
The slightly more positive results from the survey (increase in walking at Wave 2) can be explained by a number of factors. Firstly, the pedometer baseline was slightly delayed compared with the Wave 1 survey (by three weeks or more). Secondly those in the pedometer study constituted a smaller subsample.

[83] Please see chapter one for a further discussion of this point.
[84] Department of Health (2011), *Physical activity guidelines for Adults (19–64 years)*

Pedometer readings (where the respondents are 'blinded' to the results, as in this study) may also be less prone to 'response bias' (whereby respondents potentially over-report physical activity when relatively new to a programme).

For the 73 participants that provided data at both baseline and follow-up (the 'constant sample') a change in the number of recorded steps was calculated. Figure 4.4 shows this distribution of change in steps per day recorded between baseline and follow-up. A positive value indicates that participants increased their mean daily steps whilst a negative value corresponds to a decline.

Figure 4.4 Frequency distribution of change in mean daily pedometer steps between Wave 1 and follow-up



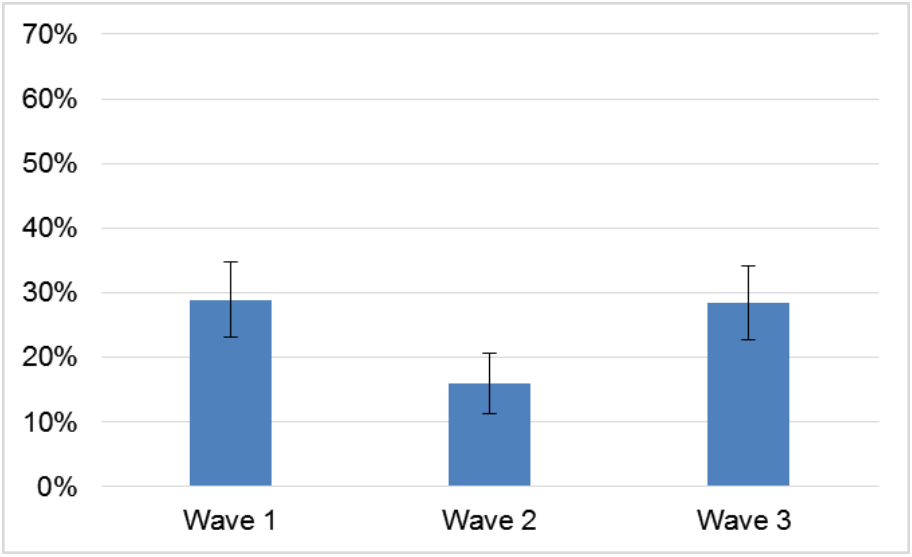
Source: Evaluation of Walking for Health pedometer research, n=73

On average, in the 'constant sample' participants recorded a decline in 462 steps per day between baseline and follow-up. This decline was not statistically significantly different from zero. The median change was a decline in 390 steps per day. Between baseline and follow-up, 28 (38%) participants saw increases in daily mean steps, whilst the remaining 45 (62%) recorded declines.

4.2.1.3 *Inactivity*

In order to further interrogate results against programme objectives, the percentage of walkers that can be classed as 'inactive' (undertaking zero days of 30 minutes of moderate activity in the past week) is shown in figure 4.5; this follows the same trend across the three survey waves as the other physical activity outcomes.

Figure 4.5 Percentage doing zero days of at least 30 minutes of moderate activity



Source: Evaluation of Walking for Health surveys
Base: Constant sample (n = 232)

At Wave 1, 28.9% of participants reported being inactive (in the past week), at Wave 2, 15.9% and at Wave 3, 28.4%. There was no statistically significant difference between Wave 1 and Wave 3; however there was a statistically significant decrease between Wave 1 and Wave 2 ($p<0.001$), and a statistically significant increase between Waves 2 and 3 ($p<0.01$). This compares with a reported rate of inactivity (defined as undertaking less than 30 minutes of moderate physical activity per week) of over 26% amongst the 55-74 age group, according to the Health Survey for England[85], and an inactivity rate amongst 55-64 year olds of 32%, according to Sport England's latest Active People Survey.[86]

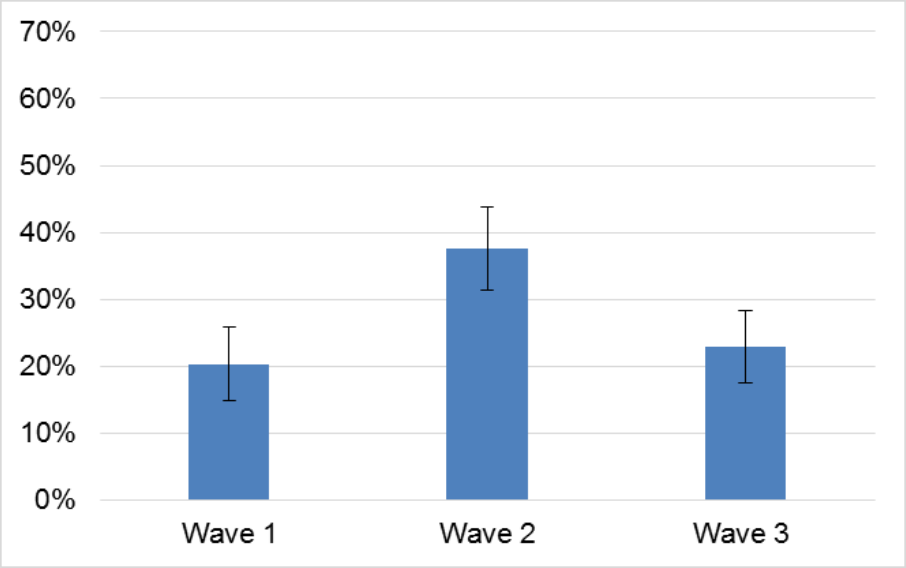
Further analysis of this data reveals that 19% of survey respondents (constant sample) reported moving from inactive to more active between Waves 1 and 2. Positively, 11% of respondents still reported moving from inactive at baseline to becoming more active at Wave 3 (see table 4.1). However, any overall gain was offset by others who reporting slipping into inactivity between Waves 1 and 3; these included some respondents who had dropped-out from Walking for Health schemes by Phase 2, but also continuing members of Walking for Health walks who reported participating less than once per week. The latter finding however may highlight the importance of Walking for Health to this group, as the sole significant physical activity that they are participating in, albeit on a bi-weekly or monthly basis.

[85] Townsend N, Wickramasinghe K, Williams J, Bhatnagar P, Rayner M (2015). *Physical Activity Statistics 2015*. British Heart Foundation: London.
[86] Sport England (2015) Active People Survey 9

4.2.2 Meeting national guidelines

NHS guidelines recommend that all adults, including those aged 65 and over undertake at least 150 minutes per week of moderate aerobic activity. This is broadly equivalent to undertaking at least 30 minutes or more of moderate intensity physical activity on at least five days a week (which can be more precisely measured using the survey question). Figure 4.6 details the rates of participants who were 'active' against this measure at each wave of the survey.

Figure 4.6 Percentage doing at least 30 minutes of moderate activity on five days or more



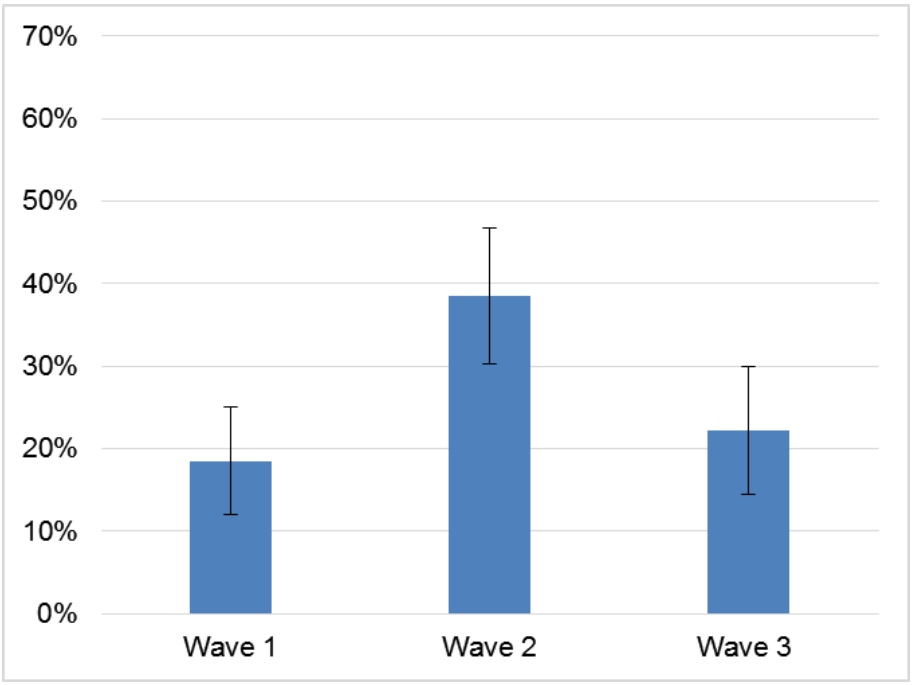
Source: Evaluation of Walking for Health surveys
Base: Constant sample (n = 232)

Changes in this outcome mirror the general trend in the physical activity rate. At Wave 1, 20.3% of participants were meeting the 5x30 min target, at Wave 2, 37.5%, and at Wave 3, 22.8%. There was no statistically significant difference between Waves 1 and 3; however there was a statistically significant increase between Waves 1 and 2 ($p<0.05$), and a statistically significant decrease between Waves 2 and 3 ($p<0.05$). This suggests that the programme may have an initial continued positive effect on moving some people who are less active towards meeting the 5x30 minute target, but that the aggregate percentage of those who are 'active' then drops back to the level immediately after first joining Walking for Health.

Data from the Health Survey for England (from prior to when the revised 150 minute guidelines were published) indicates that 40% of men and 28% of women undertake at least 5x30 minutes of activity; however this declines significantly with age[87]. A comparison with more recent data from the Welsh Health Survey, which still reports on the 5x30 minute measure, suggests that levels amongst those aged 55-64 are as low as 34% for men and 23% for women, and for men and women aged 65-74, 27% and 18% respectively (this compared with 37% of all men and 23% of all women in Wales)[88]. Positively, when the Walking for Health survey results were analysed by those respondents aged 65 years or over, the same trend and proportions of participants reporting five or more days of moderate activity are observed; there is no drop off amongst the older age group.

[87] Chief Medical Officers (2011), *Start active, stay active: a report on physical activity for health from the four home countries*'
[88] Welsh Government (2014) *Welsh Health Survey*

Figure 4.7 Percentage aged 65+ doing at least five days of 30 minutes or more moderate activity

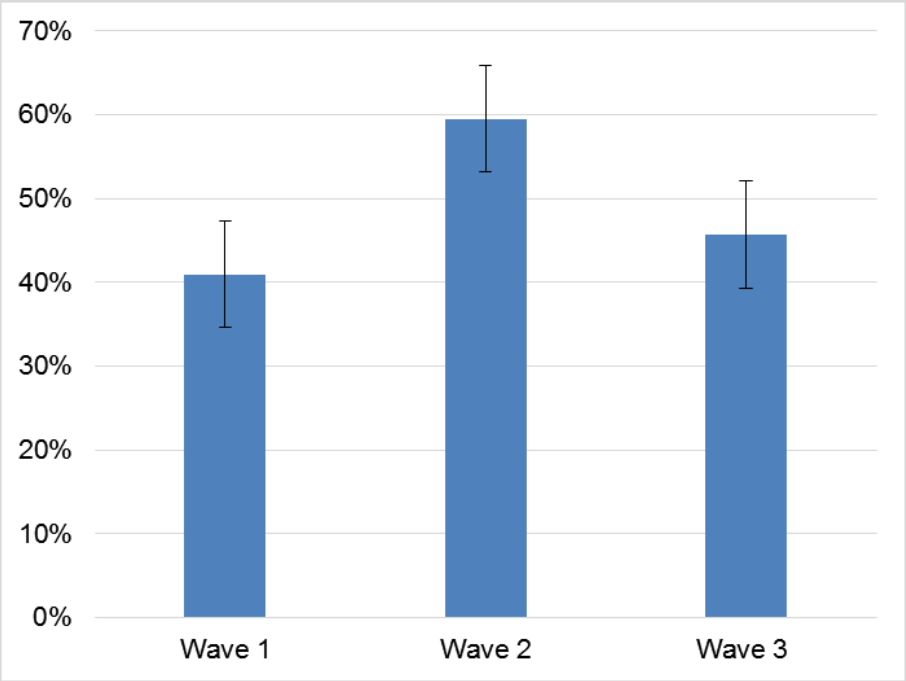


Source: Evaluation of Walking for Health surveys
Base: Constant sample (n = 232)

The percentage of participants undertaking three or more days of moderate intensity activity was also analysed to allow comparison with a previous evaluation of the programme by Phillips et al (2010)[89], which reported a decrease in moderate physical activity for walkers on the programme over 9 months. The survey results for this evaluation (Figure 4.8) show that the proportion of participants doing three days or more of physical activity was at least maintained rather than decreased, ranging from 40.9% at Wave 1 to 59.5% at Wave 2 and 45.7% at Wave 3. There was no statistically significant difference between Wave 1 and Wave 3; however there was a statistically significant increase between Wave 1 and Wave 2 ($p<0.001$), and a statistically significant decrease between Waves 2 and 3 ($p<0.01$). The previous evaluation of the programme also reported a higher decline in moderate intensity activity for those aged 65 and over.

[89] Philips, R., Knox, A. and Langley, E. (2012), *What impact did Walking for Health have on the physical activity levels of participants?* Natural England Commissioned Reports, Number 075. Note that while Philips et al used the same measure for self-reported, moderate physical activity, they used a different approach to data collection and analysis, with an average of four reports of moderate activity over nine months being compared to activity reported through the Walking for Health Outdoor Health Questionnaire on joining Walking for Health.

Figure 4.8 Percentage doing at least 30 minutes of moderate activity on three days or more



Source: Evaluation of Walking for Health surveys
Base: Constant sample (n = 232)

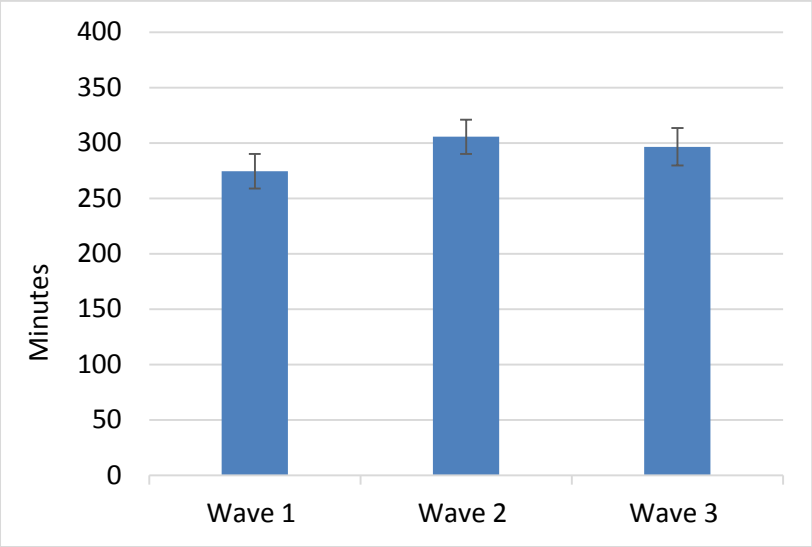
Finally, the current UK guidelines for physical activity recommend that all adults should minimise the amount of time spent being sedentary for extended periods. Figure 4.9 shows trends in mean of minutes per day spent sitting. There was a relatively small, but statistically significant, increase in daily time spent sitting between Wave 1 and Wave 2 (mean 275 minutes increasing to 306 minutes, $p<0.001$), and between Wave 1 and Wave 3 (mean 275 minutes at Wave 1 to 296 minutes at Wave 3, $p<0.05$).

It is possible for people both to increase their weekly moderate physical activity and the time spent sitting, since they may also reduce their time spent undertaking less intensive (i.e. lighter) physical activity in parallel with this. It is not clear from a review of the literature how far any additional time spent sitting may offset the health gains associated with increased moderate-level activity.

However, 275 minutes is equivalent to around 4.5 hours per day of sitting at Wave 1. Comparable figures for the national population are that half of 65-74 year olds spend 6 hours or more a day sitting (weekday or weekend)[90]. Only around 20% of those aged 65-74 spend less than 4 hours per day sitting. Despite evidence of a slight increase in sitting, this further suggests that Walking for Health can help older age groups in particular to remain more active, in this case through minimising sedentary behaviour relative to the population overall.

[90] Townsend N, Wickramasinghe K, Williams J, Bhatnagar P, Rayner M (2015). *Physical Activity Statistics 2015*. British Heart Foundation: London.

Figure 4.9 Mean reported minutes per day typically spent sitting



Source: Evaluation of Walking for Health surveys
Base: Constant sample (n = 232)

4.2.3 Contribution and impact of Walking for Health

4.2.3.1 *Maintaining physical activity*

The survey analysis found that improvements in activity and walking amongst new walkers tended to occur between Waves 1 and 2 (up to four months after baseline) before falling back at Wave 3 (up to eight months after baseline). While the findings do not show a continued increase in walking and physical activity over the period, when participation rates were tested at Wave 3 the level of activity had nonetheless not dropped below that at the baseline (taken immediately after the participants' first walk). Rather, participants maintain a certain level of weekly physical activity whilst taking part in Walking for Health walks (identified in the previous chapter as occurring on average weekly, and of 60 minutes duration) over an eight month period (at least), which is a positive finding given the age group engaged. Further evidence suggests that for some participants it is Walking for Health that is contributing to the maintenance of activity

It is not possible to provide a definitive explanation for diverging patterns of activity between Waves 1 and 2, and Waves 2 and 3 of the survey, since the phasing of the evaluation activities did not allow for systematic research into the reasons behind the drop-off in activity. One possible explanation is that the programme initially drives up walkers' physical activity due to their initial enthusiasm and interest in trying out the different walking opportunities on offer; however over time walkers exercise their preferences and settle into more manageable levels of activity. The precise reasons for the drop off after four months could provide a useful focus for future research.

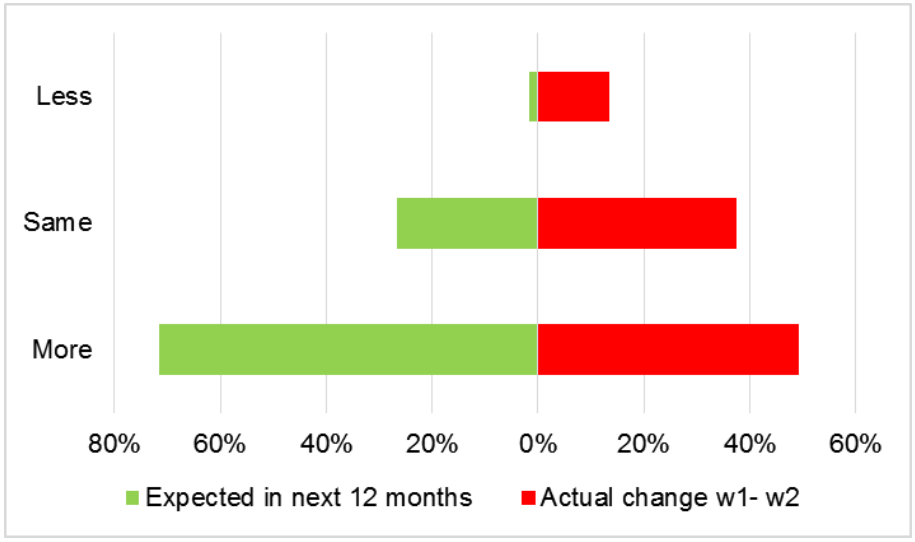
4.2.3.2 *Stepping down*

In explaining a decrease in physical activity in walkers in a previous evaluation of the programme, Phillips et al (2012)[91] suggested that one possible reason was that participants joined the Walking for Health Programme in order to 'step down' their physical activity, for example, due to age or ill health. A question was consequently introduced into this survey at baseline (Wave 1), asking participants if they expected their physical activity over the next 12 months to increase, stay the same, or to decrease.

When this question was asked at Wave 1, very few (1.7%) participants expected to decrease physical activity, 26.7% expected to maintain current levels, and 71.6% to increase their physical activity over the next 12 months. The low percentage expecting to decrease may partly be explained by the timing of the survey, as respondents had already started to participate in the programme, and/or response bias.

The charts below show the percentages of respondents reporting in Wave 1 that they expected to undertake more/less/the same physical activity compared to actual changes in physical activity (the number of days of moderate physical activity of 30 minutes or more). They indicate that participants were generally over-optimistic about the amount of activity they would do in the future. Predicted and actual behaviour at Wave 1 and Wave 2 showed similar patterns; however between Wave 2 and Wave 3, as time has passed, there is a greater lag between expected and actual behaviours.

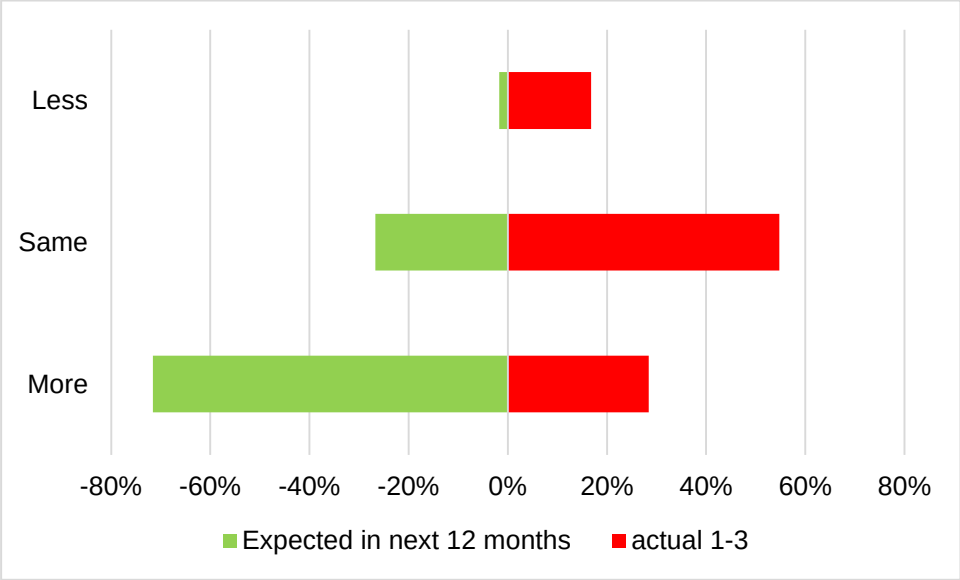
Figure 4.10 Expected change in physical activity over the next 12 months at baseline compared to actual change in moderate physical activity between Wave 1 and Wave 2



Source: Evaluation of Walking for Health surveys
Base: Constant sample (n = 232)

[91] Phillips, R., Knox, A. & Langley, E. (2012), *What impact did Walking for Health have on the physical activity levels of participants?* Natural England Commissioned Reports, Number 075.

Figure 4.11 Expected change in physical activity over the next 12 months at baseline, compared to actual change in moderate physical activity between Wave 1 and Wave 3



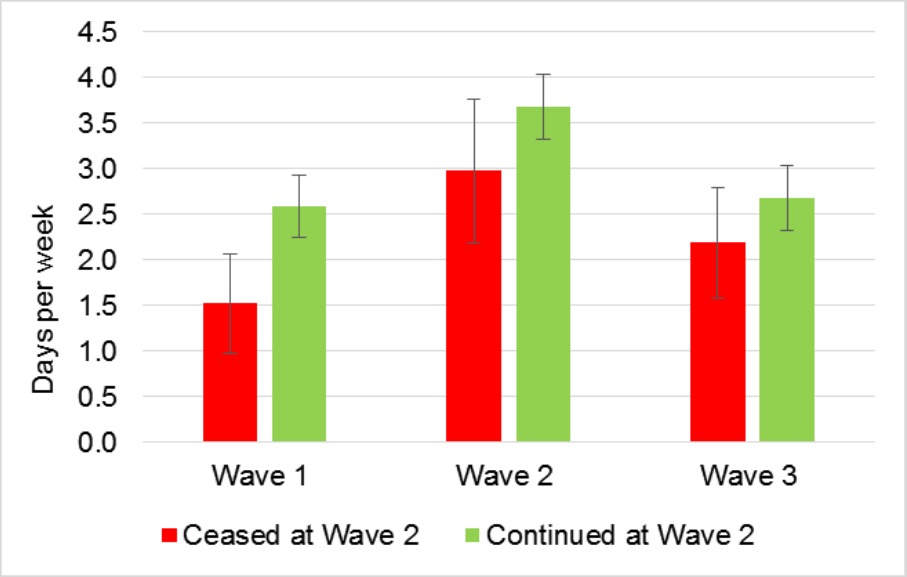
Source: Evaluation of Walking for Health surveys
Base: Constant sample (n = 232)

In practice, many of the case study interviews with walkers showed how Walking for Health schemes had provided opportunities for older walkers to step down from more vigorous physical activity. Whilst this may involve a reduction in some form (frequency, duration and/or intensity of activity), illustrative examples from the case study work supports the overall analysis that Walking for Health is effective in allowing people to maintain a certain level of participation in physical activity as their health changes. The case studies highlighted many examples of walkers who had been active in the past (including walking, swimming, sailing) but who, due to old age and diminished health, were no longer able to maintain past levels. The schemes therefore allowed older participants to continue to be physically active and enjoy outside activities, but at a more appropriate level considering their current capabilities and level of ambition to take part in physical activity. For example one walker who was in his late 80s said he had been a keen walker all of his life. He started participating in the Walking for Health programme just under one year prior to the interview because his health had required him to step down from longer and more challenging walks. He was finding that the walk is still good for exercise and thinks that the pace of the walk is "just about right"; however he also enjoys the company.

4.2.3.3 *Additionality of Walking for Health outcomes*

Outcomes amongst those that continued with the programme at Wave 2 were compared with those that had ceased participating in Walking for Health, in order to help assess the counterfactual position (i.e. how far these outcomes would have occurred in the absence of taking part in Walking for Health). This evidence is less conclusive. Those continuing reported more days of moderate activity at Wave 1 (means 2.59/1.52 days, $p<0.005$); other differences however were not statistically significant (figure 4.12).

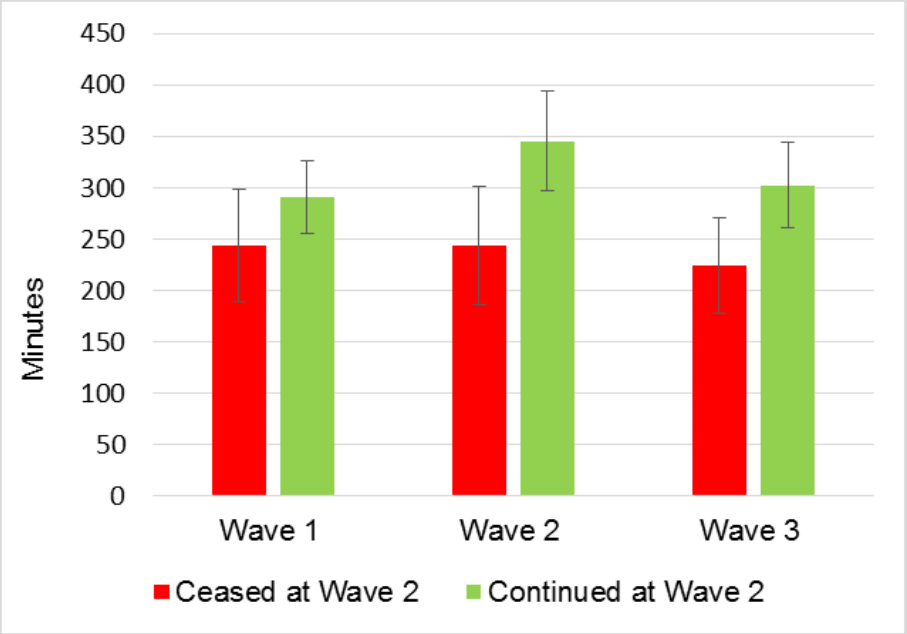
Figure 4.12 Mean number of days doing at least 30 minutes of moderate activity for those continuing at Wave 2 and those not



Source: Evaluation of Walking for Health surveys
Base: Constant sample (n = 232)

As shown in figure 4.13, there were also no statistically significant differences in minutes of walking per week between those that ceased the programme at Wave 2 and those who continued (at Waves 1, 2 or 3).

Figure 4.13 Mean minutes per week walking for those continuing at Wave 2 and those not

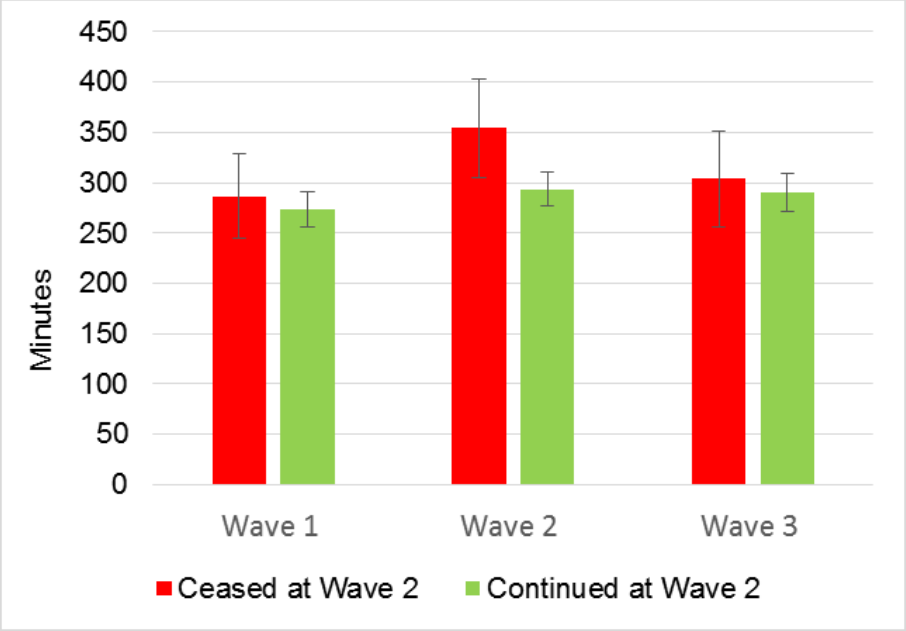


Source: Evaluation of Walking for Health surveys
Base: Constant sample (n = 232)

It is difficult to interpret these findings without a larger sample of responses from those who left Walking for Health (only 25% of survey respondents at Wave 2 had left their schemes), as well as without having conducted further qualitative research with this group. Potentially these participants were less engaged in Walking for Health from the start, as well as less likely to meet national recommended levels of physical

activity. This is supported by Figure 4.14 below, which highlights how those that ceased participation in Walking for Health reported more minutes per day spent sitting at every wave, and that this was statistically significant at Wave 2 (means 354.5 minutes, 293.8 minutes, p<0.05).

Figure 4.14 Mean reported minutes per day typically spent sitting for those continuing at Wave 2 and those not



Source: Evaluation of Walking for Health surveys
Base: Constant sample (n = 232)

Another corroborating theme that emerged from the survey and qualitative analysis was the frequency with which people ceased walking because of health problems; however this may not always have been permanently:

> *"They are excellent; I only stopped because of problems with my foot."*
>
> *(Walker: female, 65+, disabled)*

> *"I am just getting over an operation, but as soon as I feel fit enough I shall be joining the group again in the near future."*
>
> *(Walker: male, 65+)*

Given the increase in physical activity at Wave 2 it is also possible that some scheme leavers took up another activity in place of Walking for Health. Confirming this, table 3.6 previously indicated that amongst those who had left Walking for Health, 24% were continuing to walk alone or with friends, 11% had taken up some other physical activity, and 3% had joined another walking group.

What precisely motivated those who left the scheme to take up another activity is unknown (evidence of positive displacement is considered below); however these findings broadly reflect the survey responses to a further question designed specifically to test (albeit somewhat speculatively) the additional contribution of Walking for Health to changes in physical activity. The specific question asked was '*Without the Walking for Health scheme, do you think you would have still increased/decreased/maintained your physical activity by the same amount?'* (the available responses were 'Definitely not', 'Probably not', 'Probably yes', 'Definitely yes' and 'Don't know').

Of those who reported increasing their levels of moderate physical activity for example (see table 4.1), 64% also reported that this was probably or definitely due to Walking for Health at Wave 2 (50% attributed the increase to Walking for Health at Wave 3).

Table 4.1 Attribution of changes in physical activity to Walking for Health

	W1-2	Reported due to programme	W1-3	Reported due to programme
Increased days moderate activity	49.1% (n=114)	64% (n=73)	28.4% (n=66)	50% (n=33)
Moved from 'inactive' to *more* active (i.e. any amount of moderate activity above 'inactive')	18.5% (n=43)	55.8% (n=24)	11.2% (n=26)	38.5% (n=10)
Moved from 'active' to *less* active (i.e. any activity level less than recommended weekly amount)	4.3% (n=10)	50.0% (n=5)	5.6 % (n=13)	15.4% (n=2)

Source: Evaluation of Walking for Health surveys
Base: Constant sample (n = 232)

Whilst such additionality questions are not validated, the findings are broadly in line with responses to the question on whether participants would have joined a similar walking group in the absence of their Walking for Health scheme; almost 50% of respondents said that they were either 'unlikely' or 'very unlikely' to have joined another walking group. Reponses to the open-ended questions included in the surveys, as well as individual interviews undertaken with walkers as part of the case studies, were also consistent with the quantitative findings, and suggested that it is the motivating role of Walking for Health that has been key to improving and/or sustaining individuals' physical activity rates.

> *"[Walking for Health] is very good - it gives me something to aim for when I know I'm going on a 3 mile walk"*
>
> *(Walker: female, 65+)*

> *"It's fantastic, gets me out the house, fit and active."*
>
> *(Walker: Male, under 65)*

> *"No way would I have been able to do this a year ago; I would have struggled, but now it's easy"*
> *(walker)*[92]

> *"I feel fitter for it, definitely…it helps us walk more - because of this we have built up our strength and the ability to do it"*
>
> *(walker)*

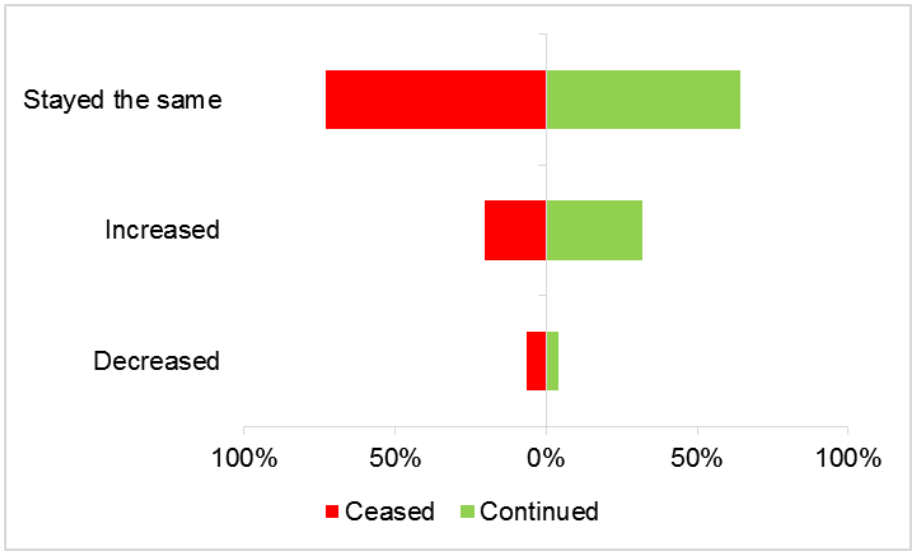
> *"I think it does make you walk a lot more, rather than getting the car out. We hardly take the car out now; we'd rather have a good walk or cycle"*
>
> *(walker)*

It is also important to test for evidence of displacement of involvement in existing sport or physical activities when participants join a new physical activity programme, as part of evaluating impact. Participants were therefore asked "*Has the amount of time you spend participating in other sport,*

[92] Demographic characteristics were not recorded for the case study interviews with walkers.

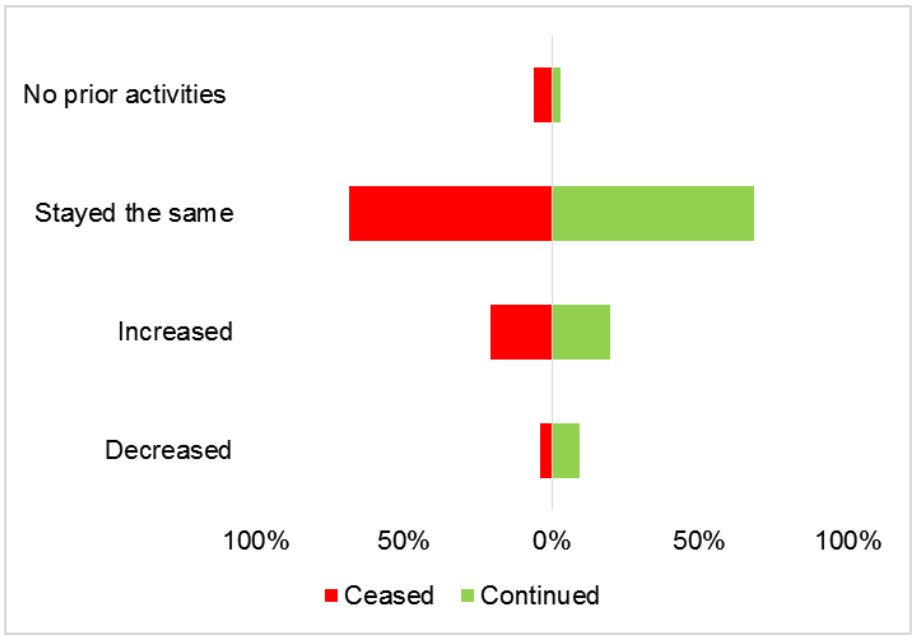
exercise or walking activities increased, decreased or stayed the same?" The responses can be found in the charts below (4.15-16) for those that continued on the programme, and for those that ceased participation at Wave 2 (there are no significant differences). There is limited evidence from these responses of negative displacement.

Figure 4.15 Participation in other physical activity at Wave 2, for those continuing at Wave 2 and those not



Source: Evaluation of Walking for Health surveys
Base: Constant sample (n = 232)

Figure 4.16 Participation in other physical activity at Wave 3, for those continuing at Wave 2 and those not



Source: Evaluation of Walking for Health surveys
Base: Constant sample (n = 232)

Conversely, some participants reported increased time spent on other activities. Participants were asked which specific sport or exercise activities they had usually participated in since joining Walking for Health. The open-ended responses at Wave 3 have been summarised into the following main categories (only

categories with 5 or more responses are included; some respondents participated in more than one activity).

Table 4.2 Types of physical activity participated in since joining Walking for Health

Response	Wave 3
Walking (including 'dog-walking')	41.6%
Gardening	10.5%
Swimming	7.7%
Keep-fit / exercise classes (including 3 'aqua-aerobics)	7.7%
Bowling (including indoor bowls)	6.2%
Cycling	4.8%
Yoga	4.3%
Dancing (including 3 'line-dancing')	4.3%
Golf	3.8%
Tai-chi	3.3%
Gym (this could possibly include exercise classes)	3.3%
Tennis	2.4%

Source: Evaluation of Walking for Health surveys
Base: Number respondents = 222; Number of responses in categories with more than 5 responses = 209

As noted above it is unclear from the survey data the extent to which participation in other activities is causally associated with Walking for Health (i.e. positive displacement). The case studies provided some examples of schemes giving confidence to walkers to try new physical activities such as curling, bowling, tennis and community gardening, thereby facilitating participants to step-up to more vigorous activities and to increase their physical activity levels overall. However, a general finding from the case studies was that schemes generally do not have formal links with other groups or sport/physical activity providers, to which people who may wish to increase (or change their type activity) could be signposted. Walks are generally provided as standalone activities, and not as part of a pathway towards greater physical activity. This reflects the predominant finding from the displacement analysis, that 70% of respondents maintained the same level of participation in other physical activities, despite joining Walking for Health – overall displacement in either direction was minimal.

In the absence of a true counterfactual that would pinpoint the specific impact of Walking for Health on people's physical activity rates, it cannot be estimated precisely how far changes (including the maintenance of physical activity) are attributable to the programme. However, the overall weight of evidence available to the evaluation suggests that Walking for Health plays a positive role in helping to increase or maintain physical activity levels for a significant minority if not majority of its participants.

One lesson for future evaluations of Walking for Health is to ask more specific questions at the baseline stage regarding participants' pre-existing levels of activity, and in particular the type of activities that they were taking part in, and to link this to their motivations for taking part.

4.3 Social outcomes

This section examines the social outcomes of Walking for Health. The analysis explores the effects of Walking for Health on specific measures of mental wellbeing and social interaction over the eight month period of the surveys. Four measures relating to social outcomes are analysed. In three of the four, statistically significant changes were detected when comparing Wave 1 data to Wave 3 (at eight months). These show a small positive change in mental wellbeing, a reduction in respondents' levels of loneliness and an increase in social interaction. There was no statistically significant change in overall life satisfaction.

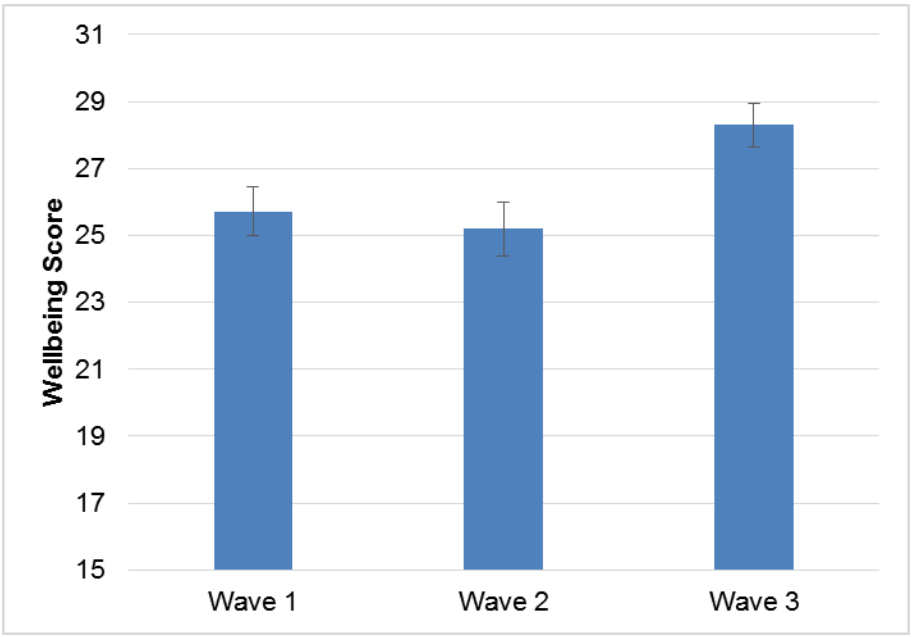
In order to provide further evidence of causality, participants were asked whether or not they felt changes in life satisfaction were due to the programme. A majority of those showing an improvement in life satisfaction attributed this to the programme.

Qualitative feedback from the case studies indicates that the social aspects of the walk are very important for many participants. Positive comments about the social aspects of the walks were also markedly the most common type of comment in the open-ended survey data. The qualitative feedback also demonstrates the particular social benefits of Walking for Health to older people, widows and people with learning disabilities.

4.3.1 Mental wellbeing

The primary change in mental wellbeing was assessed by looking at trends in scores computed from the Warwick Edinburgh Mental Wellbeing Scale (WEMWBS) Figure 4.17 shows the mean scores for WEMWBS across the three waves of the survey. The scores for each wave were 25.7 at Wave 1, 25.2 at Wave 2, and 28.3 at Wave 3. The results show a statistically significant difference between Wave 1 and Wave 3 ($p<0.001$), and a positive shift towards the maximum score that any individual can gain on WEMWBS (35).

Figure 4.17 Mean Warwick Edinburgh Mental Wellbeing Scale scores

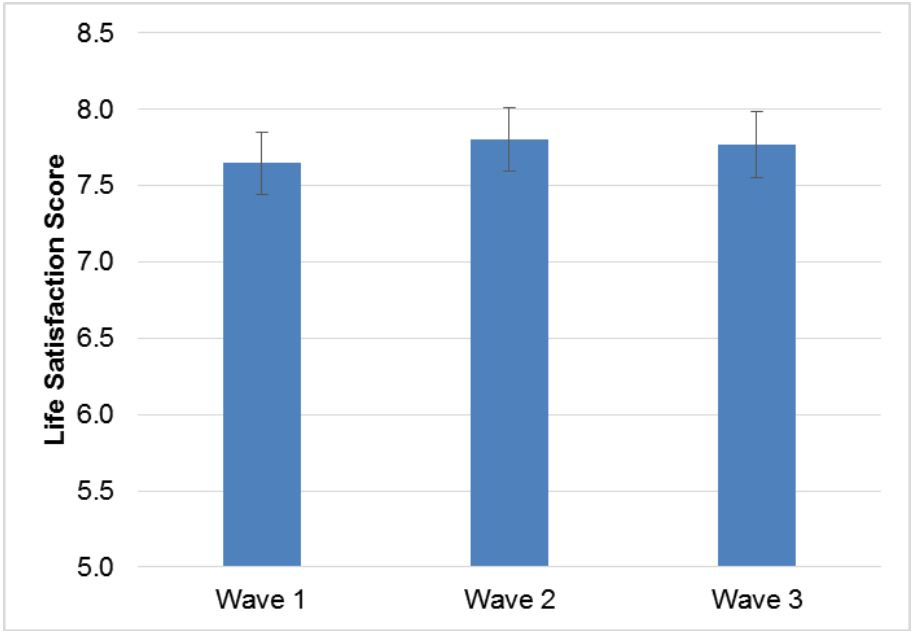


Source: Evaluation of Walking for Health surveys
Base: Constant sample (n = 232)

4.3.2 Life satisfaction

The Office of National Statistics uses a question on life satisfaction as a further way of examining changes in wellbeing. Across the three waves of the survey participants were asked to rate their satisfaction with their life in general on a scale from 0-10, where 0 represents completely unsatisfied and 10 represents completely satisfied. Figure 4.18 shows the mean scores for life satisfaction across the three waves of the survey. Mean scores for each wave were 7.6 at Wave 1, 7.8 at Wave 2, and 7.7 at Wave 3. In contrast to the WEMWBS analysis there was no significant change in average scores across the three waves of the survey. It is possible that life satisfaction is driven by broader concerns than those which affect mental wellbeing, including material issues such as housing and employment (and as such is a relatively more stable outcome for individuals and less sensitive to any short-term changes). The average scores at all waves of the survey are slightly higher than the UK average of 7.51 recorded in 2013/14[93], therefore it can be concluded that the average happiness rating for Walking for Health participants is at a higher level than the average for the UK as a whole.

Figure 4.18 Mean life satisfaction scores (all in constant sample)



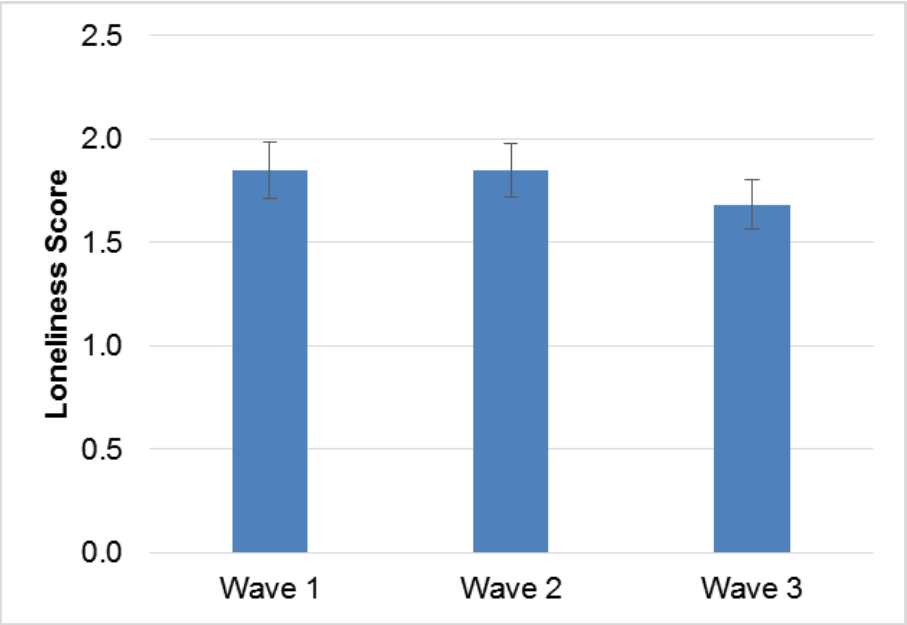
Source: Evaluation of Walking for Health surveys
Base: Constant sample (n = 232)

4.3.3 Loneliness and social interaction

Loneliness was measured using a single item scale which simply asked participants how often they felt lonely (where 1 is 'never lonely', and 4 is 'often lonely'). Figure 4.19 shows the mean scores for loneliness across the three waves of the survey. Mean scores for each wave were 1.8 at Wave 1, 1.9 at Wave 2, and 1.7 at Wave 3. There is a statistically significant improvement between Wave 1 and Wave 3 ($p<0.01$) and between Wave 2 and Wave 3 ($p<0.01$). The small positive change in the loneliness score mirrors the results on mental wellbeing.

[93] ONS (2014), *Measuring National Well-being, Life in the UK*, 2014

Figure 4.19 Mean loneliness scores



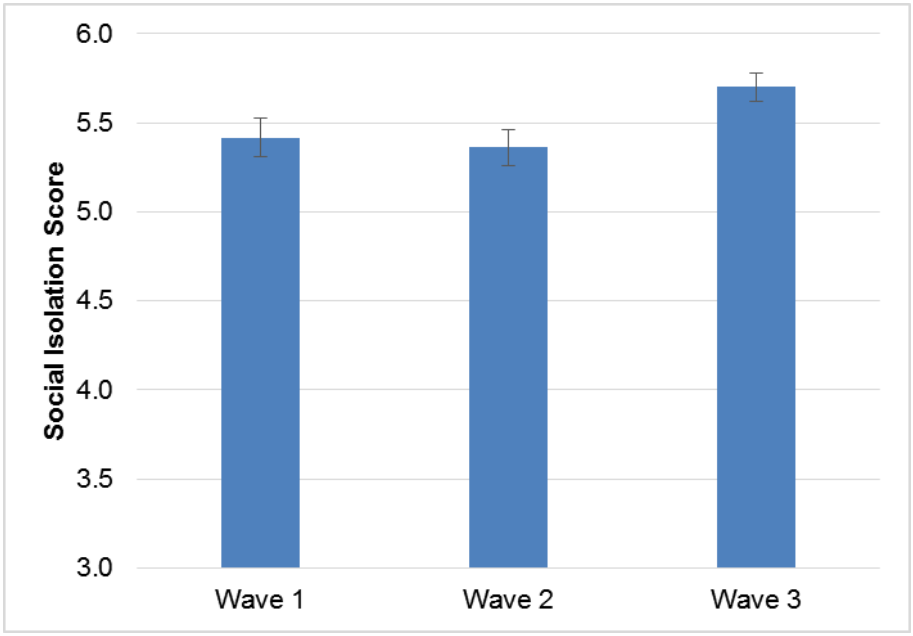
Source: Evaluation of Walking for Health surveys
Base: Constant sample (n = 232)

The survey also asked participants to report the degree of social interactions they engaged in. Specifically, respondents were asked how often they meet socially with relatives, friends or colleagues – a score of 1 indicates 'never', a score of 6 'every day').

Figure 4.20 shows the mean scores for social interaction across the three waves of the survey. Mean scores for each wave were 5.4 at Wave 1, 5.5 at Wave 2, and 5.7 at Wave 3. There is a statistically significant small improvement between Wave 1 and Wave 3 ($p<0.001$) and between Wave 2 and Wave 3 ($p<0.001$). Specifically, at Wave 1, 58.6% of participants reported social interaction every day, compared to 75.3% at Wave 3. At the same time, 3.8% of participants at Wave 1 reported social interaction less than once a week, compared to just 0.9% at Wave 3. While the percentage of respondents to the Wave 1 survey meeting relatives, friends or colleagues less than once a week was just under 4%, the equivalent for the UK for 2012 was 36%[94]. Those taking part in Walking for Health therefore reported themselves to be socially better-connected compared with the national average.

[94] European Social Survey. 2012. ESS Data: Norwegian Social Science Data Service.

Figure 4.20 Mean social interaction scores



Source: Evaluation of Walking for Health surveys
Base: Constant sample (n = 232)

A large proportion of the qualitative comments from the surveys reflected on the social benefits of taking part in Walking For Health, and on the friendliness of other walkers; this was clearly the most common theme arising from the open survey responses:

> *"The people I have met are the nicest anyone can meet."*
>
> *(Walker: male, 65+)*

> *"It's a lovely way to meet people, getting out, and having new experiences."*
>
> *(Walker: female, under 65)*

For some people and particularly those who had recently moved into the area, or who lived on their own, the opportunity to meet new people was particularly important:

> *"I enjoy being part of the walking group, being with the other members of the group is very nice for me, as I am living on my own now."*
>
> *(Walker: 65+, female)*

> *"The walks have helped me, I moved to this country 12 months ago and the walks helped me to be more active and meet people."*
>
> *(Walker: under 65, female)*

Case study evidence based on focus groups and one to one interviews with walkers provided additional qualitative evidence on the effects of the Walking for Health programme in reducing social isolation and loneliness amongst older people. Amongst those walkers interviewed for the case studies, exercise was generally regarded as the most important motivation for taking part in the walks, but meeting new people was also important. Indeed, many participants valued social interaction as the key benefit they derived from Walking for Health.

"…it has enriched my social life."

(Walker)

"When I retired I wanted to meet new people; [through the walks] you meet a lot of people in the same boat and you can learn a lot about local history and locations."

(Walker)

"I enjoy the walking but I also enjoy the socialising."

(Walker)

"The social side is as important, we have a coffee break and people walk with each other and mix and match, that is very important…They like the social side as well as the exercise, they are both important for health patients. The men like to walk together"

(Walk leader)

There was evidence of people socialising outside of Walking for Health walks, and even holidaying together.

"They also do summer events, go to the cinema together, meals. It's fantastic for people socially, massively social for people on their own…It all expands from the walk, it all happens because they have met here and made friends, and they go on to do other things, it's brilliant"

(Scheme coordinator)

"It's just nice to meet some new people…we have a raffle and a social night and a meal"

(Walker)

The case studies also provided corroborating evidence of Walking for Health schemes helping people who had relocated to a new area to 'settle in' and to get to know their local area. Examples from the case studies showed how the walks can help people to learn about their neighbourhood – one walker said that she found it exciting to discover and explore new things, and to 'get off the beaten track'.

A particularly positive finding from the case study research is that Walking for Health is providing opportunities for inter-generational interaction. Older people particularly valued the opportunity to converse with younger people over the shared interest of walking. Specifically in terms of mental wellbeing, there was also evidence that attending the walks has helped in reducing the isolation of recently bereaved older people:

"I lost my husband three and half years ago so you look for things to do to meet new people."

(Walker)

"He had his rehabilitation with us twice a week. He lost his wife so his friend told him to come out on the walks with us as he was very depressed and isolated. At first he didn't speak to anyone but now he does. We do get widows and widowers come along and they do integrate in"

(Walk leader)

For example, one walker used to walk with her husband and is now a widow. The opportunity to take part in a group activity was key to her taking part, and has been vital to her enjoyment. The walk has enabled her to make new friendships and has encouraged her to take part in other social activities outside of the walk. She now goes on holiday with another walker and has recently been away together for weekends with three other walkers.

According to carers interviewed for the case studies, participants with learning difficulties have also benefited from Walking for Health in terms of giving them an opportunity to interact in a low-key way:

> *"It boosts their self-confidence, and it is transferable, they will talk to people they know a bit, and then there will be new people. They might be nervous about going initially…it improves their verbal skills and ability to cross the road, turn taking, not just pushing past people, and then getting back and having a coffee and a chat"*
>
> *(Carer)*

The cumulative evidence from walkers and walk leaders was found to support the more general claims of Walking for Health stakeholders, who view group walking as being beneficial for reducing social isolation amongst both the public and for people with particular health conditions. One national charity highlighted the value of group walking for mental health patients:

> *"Social interaction should never be underestimated in improving the determinants of health…The group aspect of the walks is hugely important"*
>
> *(National stakeholder)*

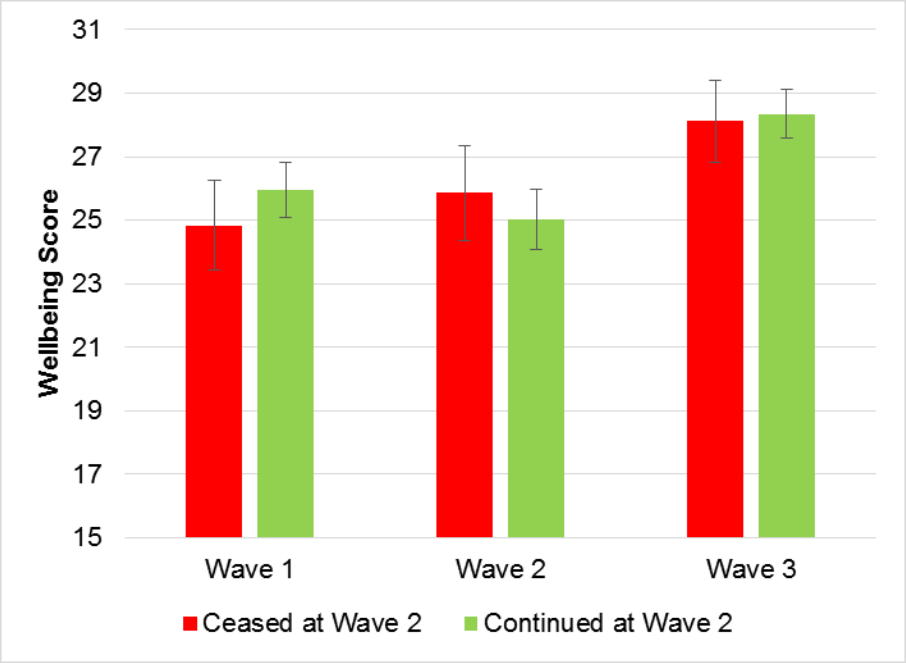
This view was echoed by local authority representatives involved in the commissioning of Walking for Health:

> *"We see it as an important part of our physical activity offer….low level activity and reducing social isolation, they are the main benefits of walking"*
>
> *(Local authority representative)*

4.3.4 Contribution and Impact of Walking for Health

Following the approach for physical activity, outcomes amongst those that continued with the programme at Wave 2 (four months) were compared with those that had ceased participating in Walking for Health, in order to help assess the counterfactual position (i.e. how far these outcomes would have occurred in the absence of taking part in Walking for Health). As shown in figure 4.21, there was no statistically significant difference between the two groups at any of the waves. Aside from the small sample size (meaning greater margin for error), it could be that even short-term participation in Walking for Health can have a positive effect on wellbeing as it is possible that the programme provides an initial impetus to trying new activities and meeting new people which in themselves can generate improved wellbeing (as explored in the qualitative analysis above). Equally, and particularly given that based on their general characteristics Walking for Health participants tend to be healthier, relatively active and less deprived, it could be that participation in Walking for Health are just one of a number of positive factors contributing towards the overall wellbeing of participants.

Figure 4.21 Mean Warwick Edinburgh Mental Wellbeing Scale scores for those continuing at Wave 2 and those not



Source: Evaluation of Walking for Health surveys
Base: Constant sample (n = 232)

The impact of the programme on wellbeing will of course differ by individual. In order to provide further evidence of causality, participants showing an improvement in life satisfaction were asked how far this improvement could be attributed to the programme.[95] Of those who did show an improvement in life satisfaction, 70% at Wave 2 and 55% at Wave 3 felt that the programme played an important role in this change. While the numbers of responses are relatively small, the results lend additional weight to the assertion that short-term participation in Walking for Health can help to increase wellbeing.

Table 4.3 Reported attribution of improvements in life satisfaction to Walking to Health

	W1-2 % improved	OF IMPROVERS-reported improved due to programme	W2-3 % improved	OF IMPROVERS-reported improved due to programme
Life Satisfaction	29.0% (n=67)	70.0% (n=47)	32.5% (n=75)	55.4% (n=18)

Source: Evaluation of Walking for Health surveys
Base: Constant sample (n = 232)

4.4 General quality of life, health and mental health

Quality of life and health outcomes for Walking for Health participants were measured by Euroqual EQ-5D, which measures quality of life in five dimensions and was developed by the EuroQol Research foundation and used with their permission for this survey. The EQ-5D-5L version of the instrument was used for this analysis. This instrument consists of two components: a set of five questions and a visual analogue scale (VAS).

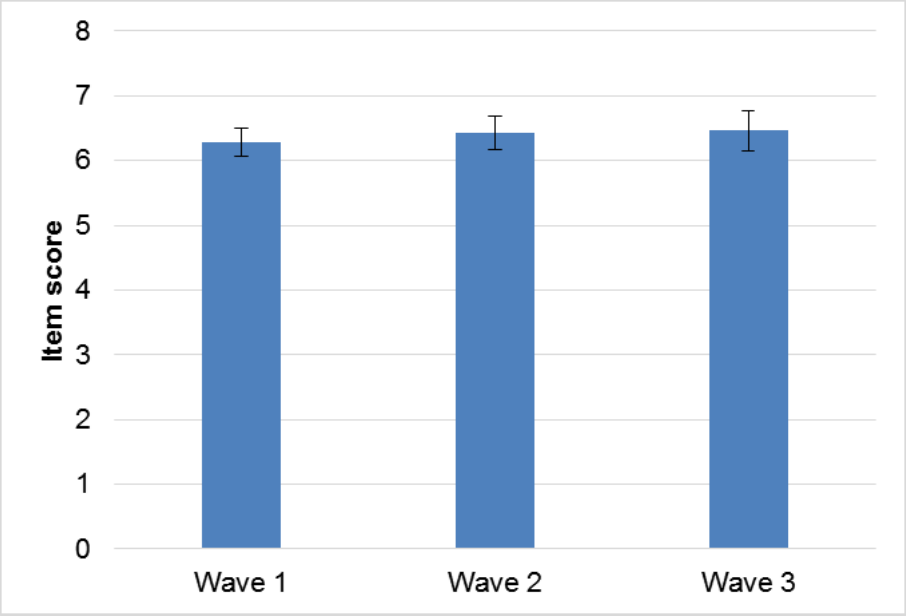
[95] Life satisfaction was the only social outcome question that the survey question on attribution was applied to.

No significant changes were found for all participants when assessing responses for the EQ-5D general health questionnaire, or for the EQ-5D VAS. Average scores for the respondents were similar to general population scores.

There is some evidence of direct health benefits from the qualitative feedback gathered during the case studies and from the surveys – these included a diverse range of examples from a smaller number of participants, who felt that the programme had directly impacted upon their physical and mental health.

Figure 4.22 shows the mean score for the three survey waves for EQ-5D DS (a descriptive system, comprising of five dimensions linked to quality of life and health). A higher score indicates poorer health. Mean scores for each wave were 6.28 at Wave 1, 6.42 at Wave 2, and 6.46 at Wave 3. These scores are not statistically significantly different.

Figure 4.22 Mean EQ-5D DS scores; a higher mean score signifies worse health

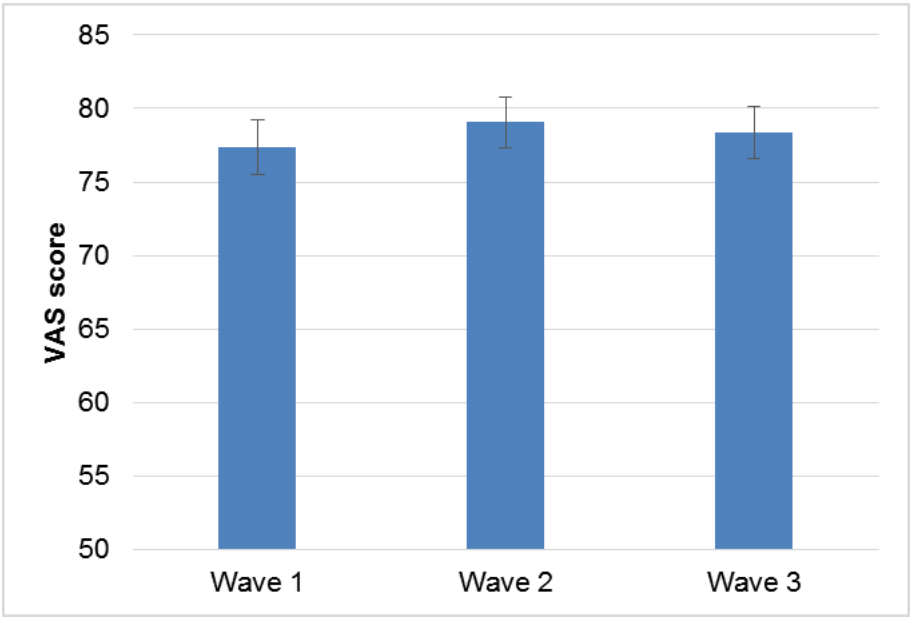


Source: Evaluation of Walking for Health surveys
Base: Constant sample (n = 232)

Figure 4.23 shows trends in EQ-5D VAS scores across the three survey waves; this asks respondents to rate their health (on a scale of 1-100). Lower values indicate poorer reported health on the day of interview. The mean VAS score at Wave 1 was 77.7, 79.1 at Wave 2 follow up, and 78.4 at Wave 3. The differences in scores are not statistically significant. The scores appear similar to EQ-5D VAS norms for the UK population for this age group, which are 81.7 for those aged 55-64, 77.3 for those aged 65-74, and 73.8 for those aged 75+ (58% of the constant sample were aged 65 and over).[96]

[96] Szende, A, Janssen, B., Cabases J (Eds), (2015), *Self-Reported Population Health: An International Perspective*, Springer

Figure 4.23 Mean EQ-5D VAS scores (all in constant sample)



Source: Evaluation of Walking for Health surveys
Base: Constant sample (n = 232)

Whilst the survey generated limited quantitative evidence of direct health benefits; qualitative data and case study interviewees provided a range of illustrative examples. The physical health benefits explained by walkers consulted as part of the case studies included the following:

> *"I lost 11 pounds when I retired owing to increased walking – I wouldn't have done that amount or at that pace; it's the continual walking that makes your heart rate increase"*
>
> *(Walker)*

> *"We [my partner and I] couldn't walk before because we had asthma but now we can get up hills and we don't use our inhalers at all"*
>
> *(Walker)*

> *"I definitely feel healthier for coming along, it pushes you, quite a lot is uphill. I have a breathing problem so I would probably give up if I was on my own. It pushes you to do that little bit extra"*
>
> *(Walker)*

One of the case studies, a medium-sized scheme, also demonstrated how Walking for Health had improved the physical activity levels and health specifically of people with learning difficulties:

> *"The woman that I support has lost quite a bit of weight through the walking and she has also increased her speed. She used to ask 'when are we going back' after 10 minutes but now she will walk a lot further"*
>
> *(Carer)*

In a few examples, survey and case study respondents stated that the walks had helped with pre-existing health problems or mental health (with the social aspects of the walks also having a positive effect on participants' mental health):

> *"I'm in rehabilitation at the moment, I suffer from Parkinson's, and the walks are very good."*
>
> *(Walker: male, 65+, disabled)*

> *"It's just brilliant I would recommend it to everyone. I was type 2 diabetic; since joining the walking scheme and a slimmer's programme I am no longer diabetic and Walking for Health played a great part in this… I now walk my dogs longer than before."*
>
> *(Walker: female, under 65)*

> *"Joining the programme has saved my state of mind. The walk leaders always put in extra effort for preparations and the walk itself; they give 1 to 1 to the walkers."*
>
> *(Walker: female, under 65)*

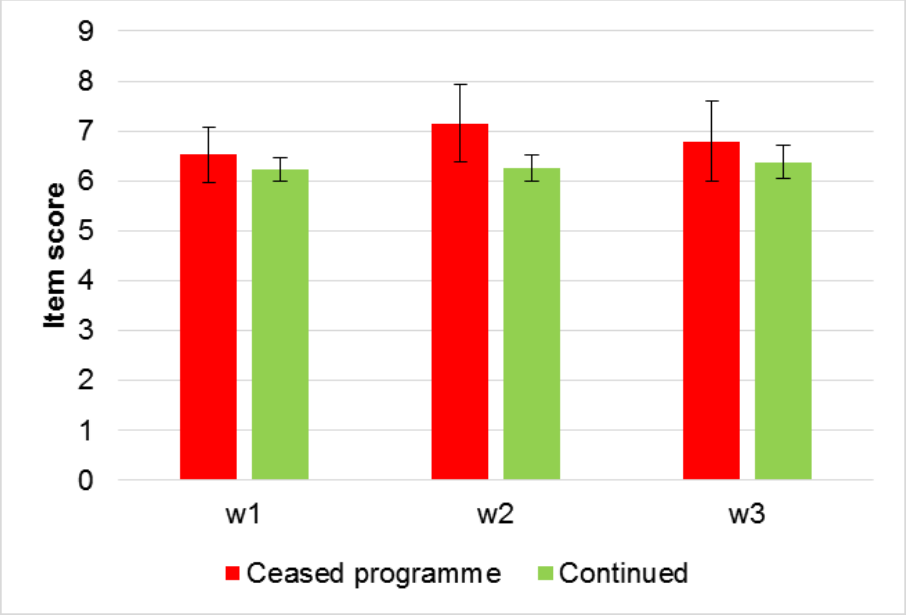
> *"I do it to look after my health but it's nice to get out and talk to people – this helps with my depression."*
>
> *(Walker)*

For example, one older walker who had suffered from osteoporosis said that the regular walking was crucial to keeping her bones as strong as possible. She said that she aimed to walk at least three hours every week and that the programme was helping to keep her exercise regular and patterned. Another walker described how she had been suffering from depression and how her participation in Walking for Health had helped her. The social contact and inclusiveness of the group was considered to have been a very important aspect, but she also felt that the walks themselves gave people with mental health problems an opportunity to get outside and forget their problems. This walker also reported reduced stress levels and better sleep as a result of being part of the group.

4.4.1 Contribution and impact of Walking for Health

When comparing those that continued with the programme to those that ceased participating in Walking for Health at Wave 2, a statistically significant difference was found for the EQ-5D DS score at Wave 2; those continuing the programme at Wave 2 reported a lower score (and better health) than those that left the programme (means 6.24, 7.15, $p<0.05$).

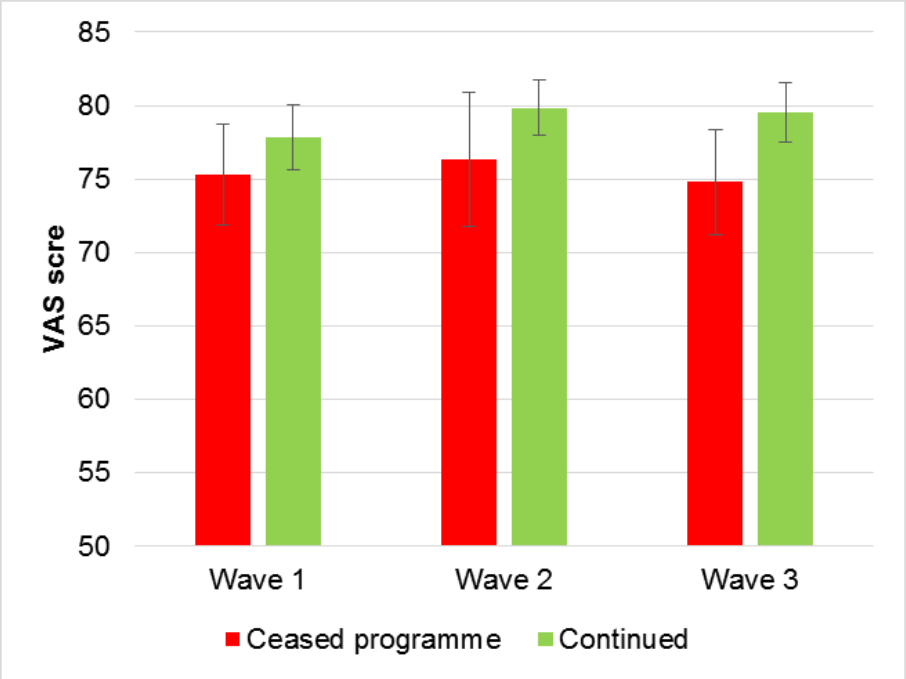
Figure 4.24 Mean EQ-5D DS scores for those continuing at Wave 2 and those not



Source: Evaluation of Walking for Health surveys
Base: Constant sample (n = 232)

When comparing those that continued with the programme, to those that ceased participating in Walking for Health at Wave 2, a statistically significant difference was found for the VAS score at Wave 3, with those continuing the programme at Wave 2 reporting a higher score (and better health) than those that left the programme (means 79.5, 74.8, p<0.005).

Figure 4.25 Mean EQ-5D VAS scores for those continuing at Wave 2 and those not



Source: Evaluation of Walking for Health surveys
Base: Constant sample (n = 232)

Despite the clear difference in health levels between those who continued participating up to and beyond Wave 2 and those who did not, as shown by the charts above, it is not possible to be conclusive on whether continued participation in the programme contributes to better health levels. This is partly because those with poorer health may decide not to continue at an early stage (as shown in section 4.2, those who continued were also more physically active at baseline which may be associated with better health).

At both Waves 2 and 3, participants were asked their views on whether they thought any change, compared to the previous wave, in their EQ-5D VAS would have occurred in the absence of attending the Walking for Health programme. Table 4.4 reports the percentage of respondents whose quality of life has improved and, of those, the percentage who thought it was definitely or probably due to Walking for Health. As with other outcome areas, a higher proportion attributed an improvement to the Walking for Health programme at Wave 2, than at Wave 3; however numbers of respondents are small and should be treated with caution.

Table 4.4 Reported attribution of changes in quality of life to Walking to Health

	W1-2 % improved	OF IMPROVERS- reported improved due to programme	W2-3 % improved	OF IMPROVERS- reported improved due to programme
EQ-5D VAS	29.2% (n=52)	65.4% (n=34)	25.7% (n=46)	34.7% (n=17)

Source: Evaluation of Walking for Health surveys
Base: Constant sample (n = 232)

4.5 Volunteer outcomes

The evaluation's main focus in terms of programme benefits has been outcomes for walkers; therefore no surveys of volunteers were completed for this study. Volunteer satisfaction and the benefits for volunteers from taking part in Walking for Health have been the subject of a separate survey undertaken by the national programme team, which aimed to gauge volunteer satisfaction.[97]

Interviews with volunteers as part of the case studies for this evaluation provided some qualitative evidence on outcomes for volunteers. In line with the findings of the national programme team's survey, walk leaders consistently highlighted the direct physical and social benefits from leading Walking for Health walks to themselves.

4.5.1 Social benefits

The social benefits of Walking for Health were often cited as the key benefits that volunteers derived from supporting the delivery of Walking for Health (as many were already relatively physically active). The qualitative feedback from the case studies was generally consistent with the national programme team's survey, which indicates that the most significant gains relate to social improvements, feelings of contributing to the community, and knowledge of and involvement in the local area and community. Interviews undertaken for the case studies showed that many of the walk leaders had formed strong friendships and had found that the experience enriched their social life.

[97] The Ramblers and Macmillan (2014) Volunteer Survey 2014 – Headline findings

"It's a very good social group. I think it's more important to do it as a group than as an individual because as a group you get more involved in the social side, talking, so whatever your problem is you're sharing your problem. So the social and walking side are both important."

(Walk leader)

"We [my partner and I] live on our own so it's having company… We got involved for the social side, you give up working full-time and there's a huge gap in your life"

(Walk leaders)

"We look forward to it…a lot of ladies say they wouldn't want to walk on their own. And there's lots of new friendships been made through the walk"

(Walk leader)

4.5.2 Physical activity benefits

In terms of physical benefits, some walk leaders felt that the routine of walk leading had increased their physical activity and fitness levels, and furthermore had encouraged them to try new activities:

"What Walking for Health has led me to do is take up other things that were happening in [the local area]. I found out about their dancing classes, and then I've moved on to more advanced dancing classes, so it's opened lots of doors for me. I went into Walking for Health immediately after I retired. I was a psychiatric social worker so I was out and about, but I wasn't actually doing a regular exercise programme"

(Walk leader)

"We do everything now, we joined the gym. We would like to get more fit….we also do swimming classes and walk with the U3A, the Ramblers, we are full-time keeping fit…we do something every day of the week, we're never at home!"

(Walk leader)

It was also evident that Walking for Health provides an avenue for people that had overcome their own health problems to act as role models for participants with similar conditions. One walk leader explained how she had progressed from participating in her local scheme, to becoming a walk leader and acting as a role model to others:

"I would never have attempted it (walk leading) if I hadn't been walking so regularly. In the past I had trouble getting out of chairs with my arthritis. I was so chuffed with myself"

(Walk leader)

4.5.3 Active citizenship

Corroborating the finding from the national programme team's survey that 69% of volunteers were very satisfied with their Walking for Health experience, walk leaders who were interviewed during the case study visits appeared to be highly satisfied. The majority of these walk leaders interviewed had also been volunteering on the walks for more than five years. A particularly rewarding part of their experience was reported to be helping others and catering to the needs of different people, as one walk leader explained - "*I wanted to give something back to the community*." Many of the volunteers enjoyed meeting people from diverse backgrounds and seeing their physical health improve. Volunteers of several schemes had received awards for their involvement in Walking for Health, including 'outstanding effort' awards for volunteer walk leaders from one community award scheme.

Volunteer walk leaders were highly satisfied with the training and support which is provided by the programme. There is also a strong culture of exchanging information and learning amongst the volunteers and walkers value this “strong team ethic”. Walk leaders were also highly positive about the support that they received from the more experienced walk leaders when they started the role.

Walk leaders consistently valued the management and leadership function provided by scheme coordinators. Generally, scheme coordinators also provided a clear ‘champion’ role, which steered and galvanised the walk leaders.

4.6 Summary

Based on the findings of the survey and qualitative responses from the case studies, the following conclusions can be made with respect to the participant outcomes of Walking for Health:

- The Walking for Health programme is helping many participants to maintain their levels of physical activity over the medium term (8 months+). Average levels of walking and physical activity at Wave 3 (8 months) did not drop below those at Wave 1, and furthermore half of the respondents reported it to be unlikely that they would have joined a similar walking group in the absence of their local scheme. Qualitative evidence points to the importance of Walking for Health in helping older people in particular to maintain their levels of physical activity when stepping down from more vigorous or other walking activities.
- Pedometer research was undertaken to provide an objective measure of walking trajectories amongst newly recruited Walking for Health participants. The results of this research were broadly consistent with the survey findings on walking behaviour as it suggested that Walking for Health was allowing participants to maintain their levels of walking at four months.
- There are significant short-term overall increases in levels of weekly physical activity and walking after first joining the programme; however these increases are generally not sustained. Statistically significant increases in levels of walking (38.2 more minutes per week) and moderate physical activity (1.17 extra days of at least 30 minutes per week) were detected through the survey after the four month interval. However, at the eight month mark, physical activity levels had dropped back to those immediately after the first walk. One possible explanation for this trend is that the initial enthusiasm of walkers, as well as the opportunity to try out different types of walks offered by some Walking for Health schemes, drives this initial increase, before walkers settle back into more manageable levels of activity. A minority of respondents also dropped out of Walking for Health schemes altogether (including some who were ‘inactive’ at Wave 1).
- There was an improvement observed in a number of social measures between Wave 1 and Wave 3 of the survey. Improved scores were seen for general mental health (as measured by the Warwick Edinburgh Mental Wellbeing Scale), loneliness, and social interaction. Overall life satisfaction did not change. The qualitative responses through open-ended comments and more in-depth interviews in the case studies suggest that the social aspects are an important benefit for many participants. In their qualitative responses to the surveys and in the case study interviews participants valued the opportunity for social interaction as a key benefit.

- There was no overall evidence of improvements in reported in quality of life as measured by EQ-5D DS scores. Similarly there was no improvement in self-reported health status, as measured by EQ-5D VAS scores. Reflecting the findings above, participants continuing on the programme after four months were generally healthier than those who ceased participation. This could either be because ill-health caused individuals to leave the programme, or that the programme improved the health of those that remained on it.
- Corroborating the finding from the national programme team's survey that 69% of volunteers were very satisfied with their Walking for Health experience, walk leaders who were interviewed during the case study visits appeared to be highly satisfied. The key benefits for Walking for Health volunteers related to the social benefits of taking part, as well as increased levels of physical activity and active citizenship benefits, in terms of the enjoyment and satisfaction derived from being able to give something back to the community.

Comparison of outcomes between those continuing to participate and those ceasing at Wave 2 suggests that those who are more physically active and who regularly walk more, are more likely to stay engaged in the programme. Greater effort needs to be made to retain those on Walking for Health schemes who are less active to begin with, for example through providing more targeted and intensive support for this group, and tailoring walks to their needs.

5.0 Economic Analysis of Walking for Health

5.1 Introduction

This chapter presents a set of economic assessments of the Walking for Health programme. The analysis builds from a simple consideration of the costs of running the programme to more complex economic analyses which take account of the programme's costs and benefits.

The analysis in this chapter begins with a comparative assessment of the unit costs for the total numbers of participants involved in Walking for Health. It then compares the short-term cost-effectiveness of the programme with other schemes, based upon the conversion of physical activity outcomes at four months into MET-hours gained per day. Finally, more complex cost-utility analysis is presented. This expresses the longer-term return on investment (ROI) from the intervention in terms of NHS costs avoided as well as cost per Quality-adjusted life years (QALYs) gained, following input of the scheme parameters into the MOVES model (and in comparison with a similar group who did not participate). It is important to note that the ROI calculation is underpinned by a number of assumptions, not least that participation is sustained over time (in line with programme objectives). Sensitivity analysis is nonetheless conducted to assess how varying this and other key assumptions impacts upon the cost-benefit ratio generated by MOVES.

The analysis of survey responses presented in the previous chapter covered a range of other outcomes including mental wellbeing and social interaction. Physical activity is used as the key outcome measure in the economic analysis since comparable cost-effectiveness benchmarks are more readily available for this outcome, more robust work has been undertaken to place a financial value on undertaking physical activity, and because in our view the maintenance of moderate physical activity levels is the clearest and most attributable benefit of Walking for Health. Conversely there is limited evidence upon which to draw in relation to the economic value of social effects such as increased social interaction and wellbeing. Finally, the cost-utility analysis estimates the impact of Walking for Health on QALYs gained, which provide a broad measure of quality of life. It should nonetheless be remembered, when considering the overall value for money of Walking for Health that the benefits extend beyond increases physical activity.

5.2 Output-focused analysis

As explained in chapters two and three, annual programme costs can be calculated by aggregating the cost to the Ramblers/Macmillan of running the national Walking for Health programme with overall local scheme budget costs. The total programme costs to Macmillan and the Ramblers of running the Walking for Health programme from 2012-15 were estimated to be £2,745,079. The annual funding for the programme at national level is therefore assumed to be £915,026. The preferred method for assessing scheme budgets is to consider responses to the 2013 Audit survey as this provides the most comprehensive and up to date data. As set out in section 3.2, analysis of this data provides a revised average scheme cost estimate of nearly £11,000 per annum.

A summary of the steps involved in calculating annual programme costs are set out in the table below:

Table 5.1 Estimation of programme costs

Steps in calculation	Figures
Average cost per scheme based on analysis of 2013 audit survey responses (A)	£10,810
Estimated number of schemes in 2014-15 (B)	496
Total annual scheme costs (A x B) = C	£5,361,760
Annual funding for national team (£2,745,079 divided by 3) (D)	£915,026
Total annual programme costs (C + D)	**£6,276,786**

Source: Ecorys analysis

Drawing on the expenditure analysis above and programme data, the unit cost calculation for Walking for Health is set out in the table below. The estimated unit cost per participant (£76) provides a strong indicator of the efficiency of the programme, as well as a basis for comparison (over time and with other schemes).

Table 5.2 Derivation of programme unit costs

Annual programme expenditure	Key outputs	Unit cost
	Total participants in Walking for Health (April 2014-March 2015)	Per participant in Walking for Health
£6,276,786	82,569	£76

Source: Ecorys analysis

For example, the estimated unit cost of Walking for Health is found to be closely aligned with that of the Big Lottery Fund's Fit as a Fiddle programme, which funded community based physical activities for older people (including walking and exercise referral) across England. Ecorys' 2012 evaluation found the unit cost of Fit as a Fiddle to be £77.39. Similar to Walking for Health, unit costs at an individual scheme level did vary significantly, from £36.56 to £408.12.[98]

5.3 Cost-effectiveness analysis

One considerable challenge in drawing cost-effectiveness comparisons with the results of other studies is the diversity of outcome measures used. The cost of moving an individual from inactive to active was initially considered for inclusion in the analysis here, yet it was not possible to identify directly comparable benchmarks from similar interventions. Examples of other outcome measures used across studies which have been subject to cost-effectiveness analysis include the number of additional steps taken per day, precise changes in the minutes of moderate or vigorous physical activity undertaken per day, or the percentage meeting physical activity guidelines. A further difficulty in comparative analysis is in the often major differences in the size (number of participants) and duration (follow-up period) of the studies.

[98] Ecorys UK and Centre for Social Gerontology, University of Keele (2013), Fit as a Fiddle Final evaluation report; the estimation of costs did not include volunteer time.

One study that has attempted to make cost-effectiveness results from different studies comparable is Wu et al (2012).[99] Their pragmatic approach, which can be followed for Walking for Health, is to translate outcomes recorded across a number of studies into the quantity of physical activity produced among the population reached, measured in MET-hours (METs are a physiological measure expressing the energy cost of physical activities[100]). Several physical activity studies use MET-hours and most of the ones using other measures can – under some assumptions – be transformed into the increase in MET-hours.

Wu et al firstly conducted a large scale systematic review of physical activity interventions to identify a subset of interventions that a) are of some acceptable quality standard (according to the authors) and b) have been shown to be effective in terms of increasing physical activity. They then further harmonised the results of these studies to produce a comparable set of 'cost-effectiveness' results (expressed as 'cost per MET hour gained'). This sample provides a relevant set of cost-effectiveness benchmarks for Walking for Health, albeit based upon a sample of successful interventions.

As mentioned above, the first step to making the evaluation results comparable to the studies in Wu et al is to convert the outcome measure into MET-hours gained. One of the outcome measures used in chapter four is the change in the number of physically active days per week, with 'physically active days' defined as days during which participants undertook "at least 30 minutes of moderate physical activity". Expressed in terms of MET hours, 30 minutes of moderate physical activity equates to at least 1.5 MET-hours.

An important limitation of the approach adopted here is that we must restrict the analysis to increases in physical activity four months after first participating in Walking for Health, since this provides a definitive metric that can be converted into MET-hours. The analysis does not include the effects of the programme in helping participants to maintain physical activity, which is highlighted in chapter four as the key medium to longer-term positive outcome of Walking for Health. This is because we do not know precisely *how much* of this physical activity Walking for Health is responsible for maintaining (and hence cannot convert this into MET-hours) in the absence of either a pre-intervention baseline or more robust counterfactual.

Despite such limitations we include the analysis here since it allows us to compare the short-term cost-effectiveness of Walking for Health with other schemes, as well as providing a useful illustration of how it is possible to undertake such cost-effectiveness analysis in practice. It is recommended that the analysis is updated once more robust impact data becomes available.

Using the conversion formula given by Wu et al, the outcome measure is converted into METs as follows:

[99] Wu S., Cohen D., Shi Y., Pearson M, and Sturm R. (2011), *Economic Analysis of Physical Activity Interventions*, Am J Prev Med. 2011 February ; 40(2): 149–158.

[100] A MET stands for "the ratio of energy expended divided by resting energy expenditure, either measured or estimated from body size. MET hours gained are derived by multiplying the METs associated with the type and intensity of the activity promoted by the intervention by the time spent performing the activity using hours as the unit of analysis. Estimating MET-hours as effectiveness measures accounts for the major parameters of physical activity including frequency, duration, and intensity" (Wu S., Cohen D., Shi Y., Pearson M, and Sturm R. (2011), Economic Analysis of Physical Activity Interventions, Am J Prev Med. 2011 February ; 40(2): 149–158.)

Table 5.3 Conversion of active days to METS

Change in number of active days per week at four months	MET-hours gained per day = (change in active days)*1.5 MET hours/7)
1.17	0.251

Source: Ecorys analysis

'At least 30 minutes of physical per day' should be seen as the lower boundary of the effect. Many people may of course be doing more than 30 minutes. If we doubled the assumed minutes (which would equate to the typical time spent on Walking for Health walks as measured by the survey, as well as to the definition of a "day spent being physically active" used by Wu et al), this would accordingly double the METs effect for Walking for Health (0.52).

If the estimated range of MET hours gained through Walking for Health (0.251-0.52) is compared to the range of programme effects found by Wu et al, it appears that the Walking for Health outcome at four months fits within the range of effect sizes found by Wu et al.

Similar conclusions can be drawn from comparing the effect size of Walking for Health with those reviewed by another review paper, Laine et al 2014[101], although there the effect size ranges are somewhat larger. This is likely because this particular review did not limit the derived cost-effectiveness results to just the 'successful', effective physical activity interventions, but to all those that did meet the inclusion criteria. The focus of Laine et al though was more specifically on community- and population-level physical activity interventions – hence interventions closer in focus to the Walking for Health. Out of the studies cited in Laine et al, one of the most comparable is an evaluation of a community-based "10,000 steps" project promoting walking and enhancing the use of pedometers. Its effect was 0.38 MET-hours gained per day.

In order to compare the cost-effectiveness of Walking for Health results with other schemes, Wu et al's approach is followed whereby interventions examined to one year are standardised for a potential 10,000 target population (where interventions were shorter than one year, it was assumed that the shorter term actual effect was sustained for 1 year). In order to obtain the total physical activity benefits in this hypothetical year, MET-hours gained per person per day are therefore multiplied by the (assumed) one-year duration and then by 10,000.

For the estimated METs calculated above (0.251) this provides a total population benefit of 912,500 METs (or 1,825,000 if we double the minutes) from Walking for Health. Similarly, the total standardised annual intervention cost to reach 10,000 people is calculated as the cost per participant (£76) multiplied by 10,000, which gives £760,000. Dividing costs by physical activity benefits provides a cost-effectiveness ratio of £0.83 per MET hour gained (or £0.42 in the more optimistic assumption). Again this is well within the range of cost-effectiveness ratios presented in the Wu et al (and in the Laine et al) study.

[101] Laine J. (2014) Cost-effectiveness analysis of population-level physical activity interventions, America Journal of Health Promotion, Volume 29, No. 2

5.4 Cost-Utility Analysis and Return on Investment (Cost-Benefit Analysis)

Cost-Utility Analysis (CUA) is a specific form of economic evaluation based upon the quality of the health outcomes produced or forgone by health programmes or treatments.[102] The approach followed here compares the expected costs amongst a cohort of people who were not participating in the Walking for Health programme with the expected costs associated with a cohort who were involved. For the 'non-participating' cohort the costs include the health care costs of treating people who develop conditions such as diabetes, heart disease, cancer, or depression. The costs of the 'participating' cohort include setting up and maintaining a Walking for Health programme as well as the health care costs of treating the same conditions as in the non-participating cohort.[103] However, as suggested by evidence reviewed in chapter two, a more active lifestyle can reduce the likelihood of developing these conditions, and the savings derived from avoiding some of these events would be expected to help offset some or all of the programme costs. The key benefits monetised here therefore relate to the savings to the healthcare system from not having to treat diseases, and the value of the QALYs gained (based upon willingness to pay).

Cost-effectiveness analysis does not provide an indication of the value of the outcomes achieved. 'Return on investment' (ROI) is a form of monetised Cost-Benefit Analysis (CBA) which measures the cost of the programme against the financial and health outcomes returned from the programme, from the perspective of the investor. It therefore provides a value of the financial return of Walking for Health schemes given the monetary value of running the programme and the health outcome returns on investment given the health benefits of the programme.

5.4.1 Modelling approach

In order to evaluate the Walking for Health programme in terms of cost-utility analysis and return on investment, parameters from the Walking for Health survey were input into the MOVES model. At the heart of the MOVES model is an 'epidemiological engine' which links the increases in units of physical activity (METs) with changes in disease prevalence over time. The model then assesses both the financial return to the NHS (health expenditure averted) and health impacts (QALYs gained) based upon the estimated increases in physical activity (METs gained) for the following diseases – Type 2 Diabetes, Coronary Heart Disease, Cardiovascular Disease (Stroke), Dementia, Depression, Breast Cancer, Colon Cancer, as well as injuries. The results are produced for both the 'treatment' group and the counterfactual group ('no Walking for Health intervention').

It should be noted that when calculating the financial and health impacts, the cost of disease management is based on general pathways of care for the patient group and not each individual pathway. An underestimation of the cost of disease management may result where treatments and procedures additional to standard care arise across a varying population. Furthermore, the cost of injuries as a result of the uptake of walking for health and inpatient costs, such as trips to the GP, are not included within the model.

It is expected that the participating cohort will have a lower likelihood of developing chronic health conditions and therefore that their health outcomes should be better. Better health outcomes are reflected in terms of quality-adjusted life years (QALYs). The QALY measures a person's quality-of-life over a

[102] Drummond, M.F.; Sculpher, M.J.; Torrance, G.W.; O'Brien, B.J.; Stoddart, G.L. *Methods for the economic evaluation of health care programmes*. Third edition. Oxford: Oxford University Press, 2005

[103] Savings in management costs associated with treatment for those who contract diseases (e.g. a need for fewer trips to the GP) are not factored into the model.

defined period of time. Quality of life (also known as utility) is defined on a 0 to 1 scale, with 0 representing dead and 1 representing perfect health. This utility value is used to weight individual years of life. To illustrate, 10 years lived at a quality of 0.6 would represent 6 QALYs (10 x 0.6). The key advantage of the QALY is that it allows changes in quality or in length to be summarised in a single measure.

The financial return on investment to the NHS is a measure of the amount of money saved in treatment costs by the NHS brought about as a result of the programme. The net investment of the programme is calculated as the NHS costs avoided minus the total programme investment. The model calculates the number of each disease averted for the intervention and on intervention, and the total cost for the disease averted in the two groups. The calculation of the financial return on investment can be presented as follows:

(Treatment Costs Saved – Programme Investment) / Programme Investment	=	**Financial Return on Investment**

The treatment costs saved are calculated as the money saved by the NHS as a result of the programme preventing some illnesses. These are defined as the costs of averting diseases such as Type 2 diabetes, Coronary Heart Disease, Cerebrovascular Disease, and Depression. A positive value would indicate that the programme saved enough money in terms of these treatment costs averted to cover the cost of the programme. However, even if the figure is negative, and there is less return than that being invested, this does not necessarily imply that the programme is not worthwhile. In this case, consideration and comparison of the health benefits of the programme by undertaking a cost-utility analysis of the potential impact of the programme on QALYs gained was considered alongside the cost savings to the NHS.

The health outcome return on investment is calculated as the measure of the benefits achieved by the programme monetised in terms of the willingness to pay for the benefits. The calculation of the health outcome return on investment can be presented as follows:

ALYs Gained x Willingness to Pay Threshold / Programme Investment	=	**QALY Return on Investment**

5.4.2 Inputs and assumptions

MOVES models the impact of an intervention based upon its recorded inputs and outputs. This requires the user to input information on the baseline level of activity, sex, age of participants, the number of hours spent walking and the intensity and frequency of walking. In the case of Walking for Health, inputs were generally taken from the Wave 1 and Wave 3 survey data. The specific assumptions are highlighted below.

This means that the Cost-Utility Analysis underpinning MOVES is based conservatively on the average time spent walking during Walking for Health walks (rather than any wider effects on physical activity). This is considered to be a legitimate approach to the economic evaluation of Walking for Health given the key finding from the previous chapter that Walking for Health helps participants to maintain regular, moderate-intensity physical activity through their participation in Walking for Health walks. The results of the modelling are nonetheless sensitive to the level of additionality delivered by the programme (the survey analysis showed that some participants may have taken part in similar walking groups in the absence of Walking for Health) as well as to the sustainability of participation, and different scenarios are therefore tested to investigate the impact of varying this on the results.

The information was then matched to the number of Metabolic Equivalent Task (METs) used by individuals involved in the walking intervention, which was calculated through computation of the time and duration of the physical activity. Once the minutes of METs are matched to the walking intervention (casual or strenuous), the impact on the number of cases of disease is calculated. The model then compares the number of cases occurring to the same population assuming they did not take part in the intervention.

The key input parameter values are shown in Table 5.4, overleaf. The model required the input parameters to be rounded to whole numbers, and thus, the duration and frequency values have been rounded down to the nearest integer. Where possible, values were rounded down to take a more conservative estimate of the intervention.

The input assumptions were generally derived from survey responses regarding basic participation and retention levels on Walking for Health schemes, baseline levels of physical activity and analysis of programme expenditure, detailed as follows:

- Demographic data, such as a median age, percentage of male and females were estimated using the survey results.
- The starting activity level was assumed as moderately inactive on the basis of the survey responses and the average number of days of 30 minutes or more of physical exercise taken part in. Participants averaged 1 day of 30 minutes of exercise, which most closely matched the definition outlined by the General Practice Physical Activity Questionnaire (GPPAQ) of being moderately inactive.[104] As a result, participants have been defined as moderately inactive on the assumption that participants have a sedentary job and undertake some but less than an hour of physical exercise and/or cycling per week or a standing job and no physical exercise or cycling.
- The duration of walks was calculated as the average of the number of minutes individuals spent specifically on a Walking for Health walk taken from the Wave 3 survey results, representing the duration of the 'intervention'. The frequency of the intervention was assumed to be the average calculation of the number of times walkers took part in Walking for Health on a monthly basis, based on the survey responses.
- The length of the programme was assumed to be 243 as the length of the programme follow up was 8 months e.g. *8 months x 30.4 days* (average number of days in a month) = 243 days. The total number of sessions was defined as the programme length, assumed as *243/(frequency*7(days in a week))*. It should be noted that the model accounts for participants continuing on the programme past the defined length of the programme.
- A five year time horizon has been assumed within the model in order to account for the health benefits from physical activity, which is cumulative over the medium to longer-term. The time-horizon assumes that the same level of physical activity is continued throughout this period and therefore that the programme changes not only peoples' attitudes towards and enjoyment of physical activity, but also their medium to longer-term behaviours. Conversely, the five year time horizon also assumes that there will be no gain in health benefits from the intervention (or wider participation in physical activity) beyond the five years. One-year and 10-year time horizons are therefore also tested in the sensitivity analysis to reflect the potential effect of different time horizons on mortality and morbidity.

[104] The GPPAQ provides a classification of physical activity based on lifestyle and hours spent doing various physical activities.

Table 5.4 Input Parameter Values

Category	Parameters	Values	Assumptions
Demographics	Age Group	60+	Modal age-band in survey data taken as age group
	Starting Activity Level	Moderately Inactive	Based on baseline no. of days of 30 minutes or more exercise from Wave 1 survey
Activity	Type	Walking	
	Intensity	Brisk	Requirement of Walking for Health accreditation
	Duration	1 hrs	The average duration of Walking for Health in wave 3 = 74.35 mins. Thus, this was rounded down to the nearest whole no. in hours
	Frequency	1 day per week	The average no. of walks per month = 3.14. (As 0 walks per week cannot be assumed, a frequency of 1 was assumed.)
	Length of Programme	243	Whilst the schemes are continual, the programme input parameters are based upon 8 months (The length of the last follow up survey.) (8 x 30.4days)
	Total Number of Sessions	35	The length of the programme/frequency. i.e. 243/7 = 34.71 (rounded to 35)
Scale	Time Horizon	5 years	
	Begins with	82,569	The number of participants registered in 2014-2015
	Ends with	53,741	The drop-out rate from the Wave 3 survey data was 35%, which has been applied here.
	Drop-outs rate	830.43	Drop-out rate per week
Costs	Total Cost	£6,276,786	See table 5.1 - estimation of programme cost
	Average Cost	£76.02	(£6,276,786/82,569 participants)

Source: Ecorys/UEA analysis

- The number of participants entering the model at the start has been modelled to reflect the number of registered walkers as of 2014-2015.
- The average cost per participants was calculated on the basis of annual programme costs (see table 5.1) and number of registered participants.

The cost-utility results are displayed in table 5.5.

Table 5.5 Cost-Utility Results

Results	Expected costs calculated for the cohort of participants	Expected QALYs calculated for the cohort of participants
No Intervention	£3,768,451	1,413,410
Walking for Health Intervention	£6,422,623[105]	1,414,113
Difference with Walking for Health Intervention	+£2,654,172	+703 (G)**
Incremental cost-effectiveness ratio (NICE acceptable threshold = £30,000/QALY gained)	£3,775 per QALY gained	

Source: Ecorys/UEA analysis; Moves

Whilst the walking intervention leads to an increase of costs in comparison to no intervention - a £2,654,172 increase (£6,422,623 - £3,768,451) - the aggregated QALYs gained from the walking intervention was greater than no intervention, giving an incremental net gain of 703 QALYs.[106] The result presents the ICER value to be £3,775 per QALY gained, which is far below the £30,000 cost per QALY benchmark value recommended by NICE. If this result was only half as positive for example the cost per QALY might still be around £7,000 per QALY, which by current standards of health care funding is still very cost-effective.

These results are also cost-effective when compared with the existing evidence that exists on community-based walking and exercise programmes; one systematic review found incremental cost effectiveness ratios (compared with minimal intervention) of £7,300 and £12,100 per QALY gained respectively.[107]

Probabilistic sensitivity analysis which seeks to present the result of changes in each parameter simultaneously is included in annex four.

The Return on Investment results are displayed in tables 5.6 and 5.7, based upon the reference scenario. The financial return on investment to the NHS is presented in table 5.6. The NHS costs avoided comprise of the treatment costs saved from treating type 2 diabetes, coronary heart disease, cerebrovascular disease (stroke), and depression, as a consequence of taking part in Walking for Health. The detailed calculation of the NHS costs avoided, reflecting the above disease costs saved, are included in annex four.

[105] The expected cost figure for Walking for Health intervention takes into account the modelled expected NHS costs that remain after costs avoided are deducted (see table 5.6a and annex three).
[106] The derivation of the QALYs gained figure is detailed in annex three.
[107] Windle, G, Hughes, D, Linck, P, Russell, I and Woods, B. Is exercise effective in promoting mental well-being in older age? A systematic review. Aging & Mental Health, 2010, Aug; 14(6):652-669

Table 5.6 The financial return on investment to the NHS

Calculation steps	Results
Total programme investment	£6,276,786
NHS costs avoided	£3,622,614
Net investment in programme	-£2,654,172
Financial Return on Investment to the NHS	(-£2,654,172/(£6,276,786) = -£0.42 (per £1 invested)[108]

The monetised return on investment of the total QALYs gained is presented in table 5.7.

Table 5.7 The return on investment based on willingness to pay for QALYs

Calculation steps	Results
QALYs gained	703
Total value of QALYs gained (WTP[109]*QALYs)	£21,080,555
Return on Investment QALY**	= (£21,080,555/£6,276,786) = £3.36 (per £1 invested)

Source: Ecorys/UEA analysis; Moves

The financial return on investment to the NHS is £0.58 for every £1 invested (or a loss of £0.42 for every £1 invested). The negative number therefore indicates that the programme costs more to deliver than the costs saved in terms of treatment costs (at a given rate of participation, retention and baseline level of physical activity). However, by taking into account the monetised quality of life benefits, a more comprehensive case for investment can be made. The return on investment based on willingness-to-pay for QALYs presents a positive result of £3.36 per £1 invested.

5.4.3 One-way Sensitivity Analysis

As there were uncertainties surrounding the assumptions of the baseline model, sensitivity analysis was conducted to test differing scenarios, as set out below.

1) Total cost of the Walking for Health programme

The total annual programme costs for the incremental analysis have been discussed above. A study for Natural England in 2012 conducted analysis on the average cost of walking schemes.[110] The average total cost per scheme at the lower and upper end were calculated as £14,549 and £25,353 respectively. The total annual programme costs were therefore calculated, and the upper and lower total expenditure values of £5,420,887 and £8,993,409 were tested in sensitivity analysis. The sensitivity analysis reports that at both budgets, the walking intervention remains a cost-effective intervention at the £30,000 NICE threshold value. At the upper budget, the value returned to the NHS becomes more negative, at -£0.59,

[108] i.e. 42 pence is being lost for every pound invested in the programme.
[109] WTP – Willingness to Pay. In this case the NICE threshold value of £30,000 per QALY gained is used as a measure of how willing the NHS is to pay for the benefits. Note that this measure does not take account of the savings made to the NHS through the reduction in treatment costs.
[110] Natural England (2012), *Costing the Walking for Health programme*

and the return in terms of QALYs also decreases to £2.34 per QALY. At the lower budget, the value of return on investment to the NHS becomes less negative, and the return on investment on QALYs increases.

2) Time horizon

The initial analysis assumed a five-year time horizon on the basis of evidence suggesting physical activity can have a decreasing effect on all-cause mortality[111]. A conservative estimate of the benefits to physical activity was taken, by accounting for the benefits from the programme intervention for five years. The five-year time horizon was tested to allow for the assumption that the benefits may be realised over a shorter and longer period. A one-year time horizon would imply no significant return on investment overall, as well as low cost-effectiveness. This demonstrates the importance of sustaining behavioural change amongst individual participants beyond one year if good value for money is to be secured from the investment of Walking for Health. In this context, it is worth noting that respondents to the Wave 3 survey showed a general willingness to continue to take part in regular walks.

3) QALY values from the Survey

The EQ-5D values modelled into MOVES collected from the surveys were tested in a scenario analysis. The results from the survey presented very similar EQ-5D values as those elicited from the general population. The total number of QALYs accrued in the no intervention and intervention was greater than from the modelled values, however, the difference remained very similar. The EQ-5D values from the survey most likely presented the participants as having a higher quality of life than the quality of life modelled and assumed calculated by Szende and Williams (2004)[112]. Therefore the results of the cost-effectiveness did not vary. The result remained cost-effective.

4) Change in additionality assumption

A different additionality scenario is presented based upon participants being more likely to have engaged in a similar physical activity in the absence of Walking for Health. The scenario is based on responses to a survey question at Wave 1, where participants were asked how likely it would have been for them to have joined a different walking group if the Walking for Health group was not available at the time they joined. Based on assumed probability weightings for each of the response categories, it is estimated that around 56% of respondents would not have found a similar group elsewhere (table 5.8).

[111] Ekelund U. et al (2015), *Physical activity and all-cause mortality across levels of overall and abdominal adiposity in European men and women: the European Prospective Investigation into Cancer and Nutrition Study (EPIC)* Am J Clin Nutr 2015 ajcn.100065; First published online January 14, 2015.

[112] Agota S. and Williams A. (2004), *Measuring Self-Reported Population Health: An International Perspective based on EQ-5D.* On behalf of The EuroQol Group's International Task Force on Self-Reported Health. 2004. EuroQol Group ISBN 963 94 56 47 0.

Table 5.8 Additionality of Walking for Health

If the [scheme name] walking group was not available at the time you joined, how likely is it that you would have joined a different walking group?	Percentage	Assumed probability respondents would not have attended a similar group
Very likely	11%	0.1
Likely	34%	0.3
Neither likely nor unlikely	4%	0.5
Unlikely	10%	0.7
Very unlikely	39%	0.9

Sources: Evaluation survey (Wave 1)
Base: All Wave 1 respondents (excluding don't knows)

This percentage is then applied to the number of participants continuing with the scheme at eight months, thereby adjusting the model's input assumption regarding number of participants. After allowing for this change (deadweight), the programme remains relatively cost-effective (£12,660 per QALY gained), with an overall ROI greater than one.

5) Summary of scenario testing

Table 5.9, overleaf, presents the results of the scenario testing with respect to Return on Investment.

Table 5.9 Results of One-way Sensitivity Analysis (Return on Investment)[113]

Results: Return on Investment	Average cost of scheme adjusted to £5,420,887	Average cost of scheme adjusted to £8,993,409	A 1-year Time Horizon	A 10-year Time Horizon	QALY values from the survey	Change in additionality assumption – 50% less likely to engage
Total programme Investment	£5,420,887	£8,993,409	£6,276,786	£6,276,786	£6,276,786	£6,276,786
NHS Costs Avoided	£3,622,614	£3,622,614	£94,349	£3,622,614	£3,622,614	£1,778,616
Net Investment in Programme	-£1,798,196	-£5,370,795	-£6,182,437	-£2,654,172	-£2,654,172	-£4,498,170
Financial Return on Investment to the NHS	-£0.33	-£0.59	-£0.98	-£0.42	-£0.42	-£0.72
Total value of QALYs gained (WTP*QALYs)	£21,080,555	£21,900,000	£516,115	£21,080,555	£21,080,555	£10,651,749
Return on Investment QALY	£3.89	£2.34	£0.08	£3.36	£3.36	£1.70

Source: Ecorys/UEA analysis; Moves calculations

Table 5.1 presents the results of the scenario testing with respect to the cost per QALY.

[113] Note that values have been rounded to the nearest whole number. Some variation is due to rounding error. Also these figures were generated from the MOVES model which is stochastic and means that each individual time the model is run it gives slightly different results. The numbers may not appear to agree exactly if calculating from the output table above.

Table 5.10 Results of One-way Sensitivity Analysis (cost per QALY)

Results: Return on Investment	Average cost of scheme adjusted to £5,420,887	Average cost of scheme adjusted to £8,993,409	A 1-year Time Horizon	A 10-year Time Horizon	QALY values from the survey	Change in additionality assumption – 50% less likely to engage
Cost: No Intervention	£3,716,451	£3,733,644	£96,576	£3,711,574	£3,760,098	£1,852,667
Cost: Walking Intervention	£5,515,543	£9,104,439	£6,279,013	£6,365,746	£6,414,270	£6,350,667
Difference	£1,799,092	£5,370,795	£6,182,437	£2,654,172	£2,654,172	£4,498,170
QALYs: No Intervention	1,425,141	1,387,326	282220	1404053	1,646,364	706,137
QALYS: Walking intervention	1,425,846	1,388,031	282237	1404757	1,647,069	706,493
QALY difference	705	705	17	704	705	355
ICER VALUE – Cost per QALY	£2,552	£7,622	£359,060	£3,767	£3,767	£12,660.21

Source: Ecorys/UEA analysis; Moves calculations

5.5 Summary

This chapter has examined the value for money of the Walking for Health programme. The analysis of the programme's value for money builds up from an initial analysis of cost per participant to cost-effectiveness analysis, which examines cost per outcomes at the initial stage of engagement, to a more comprehensive assessment of the long-term costs and benefits of the programme.

Analysis shows that Walking for Health is cost-efficient when the unit costs (£76 per participant) are compared with similar Big Lottery funded community-based physical activities for older people evaluated by Ecorys. If the programme adopts a more proactive targeting approach in the future, this is likely to drive up the unit cost per participant (as it is expected that engagement costs will need to increase); however overall value for money would improve if these costs are outweighed by improvements to physical activity (and health) outcomes.

Cost-effectiveness analysis, based on the relationship between the physical activity outcomes of the Walking for Health programme at four months and programme expenditure, produced a ratio of £0.83 per MET hours gained (or £0.42 in the more optimistic assumption). This is well within the range of cost-effectiveness ratios derived from evaluations of comparable interventions. An important limitation of the cost-effectiveness analysis is that it is based upon short-term increases in physical activity at four months, in order to facilitate the conversion of outcomes into MET-hours gained (and thus comparison with other schemes). It is not based upon the programme's longer-term outcome of helping participants to maintain moderate-level physical activity, since Walking for Health's precise contribution to this is not known.

Cost-utility and cost-benefit analyses are based conservatively on the specific time spent undertaking walking through the programme (around 75 minutes of walking per week). Using data from the surveys as

input parameters, the modelling of Walking for Health's cost-effectiveness indicates that that the intervention is potentially highly cost-effective, at £3,775 per QALY gained. This is well below the value of NICE's recommended willingness to pay threshold of £30,000 per QALY. Converting the number of QALYs gained into a monetary value gives an estimated potential return on investment (benefit-cost ratio) of £3.36 per £1 invested. Taken alone, the potential financial cost saving to the NHS is less positive.

The MOVES model assumes that the physical activity undertaken for any evaluated programme is additional to what would have occurred in its absence. Whilst no counterfactual data was available to thoroughly test this assumption with regards to Walking for Health, this scenario is broadly consistent with the overall evaluation finding that Walking for Health helps participants to maintain a level of regular, moderate-intensity physical activity. MOVES also assumes that the level of physical activity is maintained over the longer-term (in the base case for 5 years or more); this is necessary for physical activity to generate sufficient positive health gains (as well as being consistent with the objectives of Walking for Health to help people to remain active). However, even after adjusting these assumptions through sensitivity testing (shorter time horizon, lower level of additionality), the cost-effectiveness results remain positive.

The results of the MOVES analysis are therefore positive, from the perspective that even accounting for some drop off and deadweight associated with the scheme, if assumptions regarding the retention and longer-term behaviour change of participants hold true (and which are explicit in the programme's objective of supporting people to be more active and supported by the finding that the vast majority of participants at eight months intend to continue participating), then the Walking for Health programme has the potential to be highly cost-effective.

The lessons for Walking for Health and its individual schemes are that cost-effectiveness (and the return on investment) can be maximised through greater engagement with target groups (and particularly those with few other options to participate in organised physical activity in their local area), and through supporting such groups to remain engaged in walking or other physical activity beyond a 12-month period. These assumptions suggest there is a need for additional research into the longer-term impacts of Walking for Health on changes in physical activity in order to analyse how far walking behaviour is sustained in future years.

Going forwards there is also the potential for the MOVES model to be applied to local schemes (i.e. using local scheme inputs). Modelling the costs and benefits of local scheme delivery approaches could be appealing to commissioners as it would show the potential value for money of investing in Walking for Health within a local area, providing certain conditions are satisfied (for example x number of walkers are engaged over a four month period, x% of participants are inactive etc).

6.0 Process lessons from Walking for Health

6.1 Introduction

This chapter provides an analysis of the factors that have contributed to the achievement of Walking for Health's outputs and outcomes. These are again linked to the delivery of the detailed programme objectives. The effectiveness of programme delivery is considered from two perspectives which are inter-linked; the first is a consideration of effective approaches and challenges in delivery for Walking for Health schemes at the local level, and the second focuses on the role of the national programme team in supporting effective local delivery. From this analysis we derive a set of further learning points for the programme.

6.2 Increasing participation and engagement of target groups

A key objective of Walking for Health is to increase participation in health walks, with a focus on reaching those most in need of support (including people affected by cancer and other long-term health problems and health inequality groups). The previous chapters noted how the accreditation process may have led to a reduction in the number of Walking for Health schemes, and that some target groups are under-represented in Walking for Health. Schemes must strike a difficult balance between open access, and reaching these target groups. Nonetheless, it was also found that there is wide variation in the number of walkers by scheme, suggesting that some have been more successful in helping to increase participation than others. The following section explores the strengths and weaknesses of the approaches taken to engage walkers in Walking for Health, both generally and in terms of targeting specific groups, and includes any good practice identified.

6.2.1 General scheme promotion

Raising awareness of Walking for Health amongst the widest possible pool of eligible walkers is important for meeting programme objectives. The evidence suggests that local schemes use a variety of methods in support of the recruitment of new walkers, with varying degrees of effectiveness.

It is clear that word of mouth is an extremely important route to recruitment for Walking for Health. As shown by the responses to the Wave 1 survey in table 6.1, nearly half of responses indicated that the participant was told about the scheme by an unspecified person, and a further 6.3% stated that the participant had heard about it from a health professional. It seems that posters and advertisements are also an important recruitment route, with 22.9% of responses highlighting this route. The website appears not to be such a significant route to recruitment, with just 7.5% of responses naming it. Of the 15 participants who mentioned a charity other than Macmillan Cancer Support or the Ramblers, 8 referred to Age UK.

Table 6.1: Source of where participants found out about the scheme

Source	Total
	Percent
Told about it by someone (not covered above) / word of mouth	46.2%
Poster/advertisement	25.6%
Website	7.5%
GP/Nurse/Physio/Other health professional	6.3%
Leaflet	4.2%
Other Charity	3.0%
Ramblers	2.6%
Location (e.g. Leisure Centre or Church)	1.8%
Already Knew About the Scheme	1.4%
Pharmacy	0.8%
Press	0.4%
Macmillan Cancer Support	0.2%
TOTAL	**100%**

Source: Evaluation of Walking for Health baseline survey
Base: 496 responses - Participants were given the opportunity to specify three different sources of where they found out about the scheme, and if they specified "Other – please state" then details were captured in a fourth sub-question. At least one source was named by 479 people (92.1%) but only 17 people (3.3%) specified a second source, and no-one specified a third. Of the 40 participants that responded "Other - please state", 30 different sources were given. The table combines the data for the first and second sources (including categorised responses to the "Other – please state" sub-question). The base value reflects the number of responses and not the number of individual participants responding.

Most of the case study schemes reported that word-of-mouth was their most used method of recruiting new walkers. The case studies suggested that walk leaders and walkers were generally proactive in promoting Walking for Health to friends and acquaintances. The use of word of mouth appeared to be particularly important to small and medium-sized schemes where there were limited resources for other marketing activities. One case study highlighted the potential value of social media in engaging younger people, through the use of Twitter and Facebook, although no data was available on the effectiveness of this approach and this method did not appear to be used widely.

The case studies also confirmed that posters displayed in local community venues, leisure centres, libraries and retail outlets such as pharmacies were another effective way of advertising schemes. For example a number of walkers interviewed for one of the case studies said that they had heard about their scheme by seeing posters on a notice board situated in a leisure centre reception. Many of the schemes were also being promoted through sports and social clubs. The church also helped to recruit participants in several areas.

A number of schemes commented on the effectiveness of using screens and noticeboards in local GP surgeries to increase participation. Some of the case study schemes also worked with other partner organisations such as community centres to promote the scheme. To a lesser or greater degree, this highlights the benefits of partnership working in helping to raise awareness of Walking for Health schemes and recruit new walkers; nonetheless partnership working is also considered to be an area for development (see sections 6.2 and 6.3 below).

The following small, volunteer-led scheme operating in a rural area demonstrated the importance of using a variety of media to publicise Walking for Health walks.

Case Study Good Practice Evidence – Comprehensive approach to marketing and promotion

- The scheme's approach involved approaching local organisations and media, and sending out publicity material on a regular basis. New walkers were often recruited through word of mouth but many had also seen articles in the local newspaper as the scheme coordinator was regularly sending press releases to local newspapers. The scheme coordinator also maintained a mailing list which included hospital departments, libraries, swimming pools, sheltered housing providers and GP surgeries. The updated schedule of walks is sent to organisations on the mailing list on a regular basis and recipients are provided with posters and leaflets to display.
- Walking group members are also encouraged to distribute leaflets and posters in their local villages (e.g. churches or shops), and the Walking for Health database suggests that a relatively high proportion of walkers first found out about the scheme through taking a leaflet or reading a poster.
- The scheme coordinator has also talked to local health groups including Age UK, the Alzheimer's Society and Mind.
- The effectiveness of the scheme's approach to marketing and promotion was helped by the scheme coordinator's background in marketing and public relations. This shows how volunteers skills can be utilised in delivering different aspects of the programme.

For the larger schemes it was more difficult to gauge the effectiveness of particular publicity methods given that a greater range of promotional methods were being employed simultaneously. It was also recognised that reliance on word of mouth can be less effective for engaging new and more diverse groups of walkers including those affected by specific health issues. This is explored below.

6.2.2 Group targeting

A particular aim of Walking for Health is to reach those that need the most support to be physically active, including people affected by cancer and other long-term health conditions, and those from recognised health inequality groups such as older adults, BME communities and people on lower incomes.

Most stakeholders stressed that a balance needs to be struck between Walking for Health offering a more targeted approach to delivering health walks, focusing on specific groups, and trying to benefit the greatest number of people. A number of national level external stakeholders believed that Walking for Health should be both open and targeted, highlighting the importance of open groups for prevention as well as for those people who are managing a wide range of long term conditions:

"Walking for Health should be promoted as a preventative health measure for all, so encouraging people of all ages to stay healthy and connect with nature and avoid health conditions and the need for prescriptions. I like that it is targeted at people with specific health conditions too as people may lose confidence so it may help them feel more confident as they know the leaders know what they are doing and will be looked after if they have any health issues on the walk. So I think it should be promoted as both a keep fit option for people who are already fit and also for people who are unwell"

(national level external stakeholder)

Local authority stakeholders were also keen for Walking for Health to remain open to all to promote inclusion:

"I think that's where Macmillan have been quite successful. There was a fear, 'its Macmillan, it will be about walks for people with cancer', and that hasn't played through, so that's really good, it's better for them [cancer patients] to be in an inclusive group"

(local stakeholder)

Walking for Health is able to strike such a balance since, as some stakeholders commented, it is seen as being a responsible programme, with walk leaders perceived to have knowledge of health conditions, which gives people with such conditions the confidence to participate.

One stakeholder representing a national health body commented that open and targeted approaches had their benefits and drawbacks, and that targeting should probably be determined flexibly according to local need. For example, as one stakeholder suggested, targeting specific groups could be a focus in affluent local authority areas (as some schemes currently do: see section 3.3), while in deprived areas the emphasis could be on promoting Walking for Health as a programme open to all.

Some external stakeholders nevertheless felt there was scope to improve the promotion of the programme to specific target groups to help recruit more walkers from priority groups, including people living in deprived areas, and people with health conditions and mental health issues. The effectiveness of schemes in targeting specific groups is considered below.

Targeting health inequality groups

National programme objectives encourage schemes to engage with health inequality groups, including older adults, BME communities and people on lower incomes.

While many of the schemes do not have an explicit objective to target **older age groups**, it is clear that older people are attracted to Walking for Health more than other specific groups. Data presented in chapter three showed that the vast majority of walkers are 55 years or older. The case studies highlighted particular reasons why schemes have been successful at engaging older people. The schemes do not necessarily adopt a specific targeting approach to attract older people; however the social accessibility of schemes was seen as key to attracting older people; this means starting and finishing the walks near public transport nodes and venues such as cafes where walkers can meet and socialise. The social benefits of the walks also appear to encourage older people to attend on a regular basis, as supported by the outcome evidence presented in chapter four.

Programme data on the profile of participants presented in chapter three showed that the programme attracts a very small minority of people from **BME groups** and significantly lower than their the proportion in the population as a whole. According to the 2013 Audit survey results, a very small minority of schemes

(less then 2%) actively target BME groups. A number of the case study schemes did not have any current engagement or any future plans to develop their engagement with particular BME groups. In some areas this appeared to be a consequence of the population characteristics of the area as the ethnic minority populations were relatively small; however scheme coordinators expressed a desire to research and understand the physical activity needs of particular ethnic groups if sufficient resources were available to do this.

Engagement with BME groups had been attempted by some schemes, albeit with limited success to date; it was felt that an important lesson from this experience was the need to recruit walk leader 'champions' from the target populations. Partnership working was also seen as essential to engaging particular target groups, but in some cases schemes reported that they faced staff capacity constraints in terms of pursuing this engagement.

The case studies provided a limited number of successful examples of walking groups being set up to meet the needs of particular ethnic groups. The following medium-sized local authority-led scheme operating in a central urban area demonstrated the importance of using a community outlet to publicise Walking for Health walks to BME groups.

Case Study Good Practice Evidence – Approach to attracting people from BME groups

- A local pharmacy initiated women-only walks to encourage its female customers from the local ethnic minority population to take regular exercise. The walk was being promoted in the local pharmacy through posters and word of mouth.
- The pharmacist delivers monthly 'health talks' where customers are encouraged to attend the health walks. The women-only group is now well established and has brought together walkers of a range of ethnicities.
- The Pharmacy pay a coordinator an hour or two a month to oversee the walk, complete the administration and risk assessment, and also oversee the Pharmacy's health talks. The Pharmacy set up the walk originally by employing a project coordinator with Big Lottery Funding seven years ago.
- The female group is now well established and has brought together a range of ethnicities including Filipino, Chinese and British women. The women interviewed for the case study were all local residents and customers of the pharmacy. Some of them had seen the walks advertised in the pharmacy or heard about it at the pharmacy's health talks, and some of them had been recruited by friends through word-of-mouth.
- A key learning point from this initiative is the potential effectiveness of using particular outlets (in this case a local pharmacy) with close links to the community and located in areas of need to raise the profile of walking groups to ethnic minority groups.
- This example also demonstrates the potential for local pharmacies to contribute to the ongoing running costs of walking groups.

Internal stakeholders interviewed for the evaluation also highlighted the *every step counts* programme as an example of good practice in engaging groups within the local community in walking and physical activity. *every step counts* is a walking outreach project run by the Ramblers that supports the most

inactive people to take part in 12 week programmes of tailored walks. A pilot of *every step counts* took place in three locations (Bristol, Blackburn with Darwen and the London Borough of Southwark). It was funded by the Big Lottery until March 2015. A key lesson from this programme was highlighted as needing to build relationships with community champions who can promote the walks and be trained to become a walk leader in order to attract hard to reach groups to walking. Internal stakeholders suggested that the lessons from the delivery of this programme could be taken on board in providing guidance to local schemes.

Overall, the case study evidence also points to a need for schemes to link up more effectively with broader physical activity strategies and programmes within their local areas, since Walking for Health can potentially support strategies and actions to engage specific groups in physical activity.

People with long-term health conditions, illnesses and disabilities and those affected by cancer

The majority of the case study schemes did not have a specific focus on targeting people with long-term health conditions, illnesses or disabilities and those affected by cancer. This means that they did not have a specific mechanism or approach for engaging with these particular groups; however this does not preclude such groups from being involved in health walks more generally.

Those schemes that did have some specific focus were generally larger schemes with the staff capacity to establish specific walking groups that cater for groups with particular health conditions. For example, one scheme's programme included a walk for people with learning disabilities who attend with their carers, a walk for people with mental health conditions, and a new walk designed for people recovering from strokes or living with dementia or other conditions that require additional support.

Schemes with a strong focus on health issues were also generally those with established health links such as engagement with local authority public health teams, CCGs and Health and Wellbeing Boards. Schemes led by local authorities clearly have an advantage in establishing such links over volunteer-led schemes. Partnerships had also been established with day centres to engage people with physical disabilities and learning difficulties (one of the larger case study schemes was using this method), and with children's centres to promote family walks and engage young parents.

However, there was also evidence that schemes can effectively engage with health target groups, providing that local champions are identified for Walking for Health. This is illustrated in the following example, where a Breast Cancer Centre was referring patients as part of a 'Walk Well' referral scheme to Walking for Health walks. This example nonetheless also highlights some of the challenges involved in establishing referral systems; time is required to change perceptions and embed effective processes.

Case Study Good Practice Evidence – Engagement with cancer patients
• This is a fairly new and innovative initiative that arose from a chance conversation between the scheme coordinator and a breast cancer consultant at a survivorship event run by the consultant. • Despite initial drive and enthusiasm from these two individuals, it took two years to establish it with a safe (confidential) effective referral system and trained mentors. Cancer care nurses were initially resistant due to their understaffing and they also felt that it was 'yet another thing' to talk to patients about during their consultations. • After trial and error the scheme now has a simple, effective referral system. The consultant dictates a letter (as for all other referrals) which is sent to the scheme coordinator and contains pertinent patient information. The patient is contacted by telephone by the walks scheme and an arrangement is made to meet them on their first walk with a mentor. This personal, 'joined up' system is seen as a key to success, as attested to by both parties. • Early referral to exercise is also seen as key to adoption by the patient as the appropriate "teachable moment" is when patients start their therapy, not as an afterthought after surgery. Offering the walks scheme as part of a total package of surgery, hormone therapy, chemotherapy and weight reduction programme embeds Walking for Health and gives it medical legitimacy and enshrines walking as a treatment. Including walking in this treatment package is something the consultant is promoting amongst colleagues.

One further important lesson with respect to engaging cancer patients (and other target patient groups) has been the need to promote Walking for Health at the right phase of their rehabilitation, which often requires an individualised approach. For some patients, they may not feel able to take part until later on in their journey:

> *"So it is looking more at the survivorship programme, once people are towards the end of treatment. People often have side effects from treatment, so they need to be at the right point."*
>
> *(Macmillan Cancer Information and Support Facilitator)*

Walking for Health can be an important exercise option for patients undergoing treatment:

> *"I had treatment for oesophageal cancer and I was told the best thing for me to do was walking and the doctor said going on two walks a week is fantastic. I like the walks we do. I carried on walking all the way through and felt great; the only time I didn't walk was for the six weeks when I was having radiotherapy"*
>
> *(Walker)*

Similarly, a cardiac rehabilitation walk was established for one of the large case study schemes that targets patients in phase four cardiac rehabilitation.

Case Study Good Practice Evidence – Engagement with heart disease patients
• A Cardiac Rehabilitation Programme (Action Heart) organises two weekly walks that fall under a Walking for Health scheme's umbrella. These walks are open to all but do include a higher proportion of people who have heart problems, as they are advertised as a 'moving on' option for people who have completed their Action Heart programme, either instead of or in addition to their gym-based exercise. • Some patients are referred to Walking for Health after six months, but the majority after 12 months, if they have passed their ECG stress test, which indicates that they are fit to exercise. • The scheme has demonstrated the benefits of engaging with local programmes that have a focus on rehabilitation through the long-term maintenance of changes to lifestyle and physical activity in rehab patients.

The case study schemes nevertheless generally faced challenges in engaging with people affected by cancer (and other specific health conditions). Overall, schemes felt that health and social care providers could be far more engaged with Walking for Health to help engage their target health groups. Larger schemes with more resources, or those with identified local champions, appeared better-placed to develop effective strategies for patient engagement. However such opportunities will not be available in all cases. In the future, the Ramblers and Macmillan could potentially play a key role in helping to facilitate signposting to the scheme from GPs, hospitals and support services for cancer patients. The success and inhibiting factors associated with engaging with such health professionals, and the role of the national programme team, are explored in more detail below.

One scheme has also attempted to establish a partnership with Boots. Macmillan facilitated this link with Boots through their Information Pharmacists programme as an initial pilot to examine approaches to involving Boots in Walking for Health more widely. The scheme coordinator gave talks to Boots staff at several branches to encourage them to refer people to Walking for Health. However to date this has not generated new participants. Interviewees felt that the reason why it has not been successful was that signposting has been too reliant on individual Boots staff. It was felt that a more strategic and systematic marketing campaign by Boots was required to raise awareness of the programme.

6.3 Engaging with health professionals

A further important objective of Walking for Health is to raise awareness of the value of the programme among health and social care professionals. This is critical for encouraging the signposting of patients to Walking for Health, as described above. Section 3.4 confirmed that specific signposting of walkers is at a relatively low level (at around 6.5% of walkers).

The case study research suggested that certain schemes recognise the potential for the Walking for Health association with Macmillan to facilitate engagement with health professionals and, as a result of this, have increased their drive to engage with GPs through targeted promotion at GP surgeries. In some cases this had led to an increase in the number of recommendations from GPs.

Alongside identifying local champions of Walking for Health, clearly where schemes are based from or involve GP surgery staff as volunteers, the opportunities for engaging with health professionals and hence signposting to the scheme increases. The following smaller, volunteer-led scheme provides a good

example of such an approach, consisting of one regular walking group that starts and finishes at a local GP surgery.

Case Study Good Practice Evidence – Engagement with GPs

- The scheme is entirely volunteer-led. It does not receive funding from any public or private sources. The scheme coordinator is a volunteer who saw the potential benefits of Walking for Health for her patients (in her role as a Practice Nurse).
- The scheme coordinator acts as a 'champion' for the scheme locally; she has been pivotal in the recruitment of both new walk leaders and walkers and her role in the surgery has been key to engaging GPs in the benefits of walking.
- The walks are advertised on the surgery website and the screen in reception. The Practice Nurse also mentions the scheme whilst doing patients' NHS Health Checks (for everyone aged 40-74), cholesterol checks and at lifestyle counselling groups to people who are at risk of diabetes.
- The partners and GPs at the Practice have all worked there for a number of years and know the scheme well. GPs therefore routinely recommend Walking for Health as an option for exercise referral. The success of the scheme has helped the surgery win the Royal College of General Practitioners (RCGP) 'Practice of the Year' award. The surgery is very committed to Walking for Health and held a celebration event to mark the fifth anniversary of the Walking for Health scheme.
- A GP at the surgery gave the following feedback on the scheme, highlighting in particular the important role of the scheme coordinator as 'champion' of the scheme:

  "*This excellent group is a place I encourage people to access with both physical and psychological needs. Due to meeting regularly and going for some time, people with tremendous needs end up being supportive and encouraging to others. I find it works well on many levels… [the scheme coordinator] provides a very positive and empowering spirit. The group is highly visible on a Tuesday afternoon and that also provides real example to the community*."

It was also evident that in the period between the two phases of the case study research (between summer 2014 and summer 2015) some schemes had adopted a more strategic focus in their engagement with health professionals. Over the same period there was also a small increase in the proportion of walkers signposted from health professional (according to the database). In a couple of cases, schemes had benefitted from the coordinator moving into the local authority's public health team, where they had been able to develop partnerships and referral routes with health professionals.

The case study example below demonstrates how one of the larger local authority-led schemes had been particularly proactive in engaging with local public health agendas.

Case Study Good Practice Evidence – General engagement with health agendas
• The scheme coordinator was regularly attending meetings at the local Clinical Commissioning Group, which is attended by nine local GP surgeries. Through the CCG, the scheme coordinator had linked up with district nurses and was attending their meetings to promote Walking for Health. The scheme coordinator also attended Health and Wellbeing Board meetings every quarter which is attended by over 30 local organisations including school nurses, sports practitioners, the Dementia Friendly Society, and the local Citizen Advice Bureau. As a result, in 2014/15, the scheme introduced a new walk for people recovering from a stroke or living with dementia. The scheme coordinator also circulates a Health Walks pack to each GP and has seen an increase in the number of GP recommendations or health professional recommendations in the past year.

It was clear from the case studies that some schemes were creating (or benefitting from) the right conditions for stronger engagement with health professionals to develop in the future. Nonetheless, aside from the smaller examples described above, larger local authority-led schemes were generally making more progress in terms of developing links with health professionals. The evidence suggests that schemes with more limited resources require guidance and additional support or staff resources to strengthen such links.

The case studies highlighted particular reasons why some schemes face challenges in engaging health professionals in the Walking for Health programme, aside from limited resources to promote their schemes. For example, the coordinator of a medium-sized scheme had done two presentations to the local Clinical Commissioning Group (CCG) but the presentations had not been able to affect the number of recommendations from GPs – this was borne out by the scheme's data which showed that only 3% of walkers had been recommended by their GP or a health practitioner. A partner of this scheme commented that it has been "*difficult to change the mind-set of GPs who continue to focus on gyms as the main route for exercise referrals*". Engagement with health professionals was shown to be constrained in some instances by the lack of commitment of health professionals to promoting physical activity (or Walking for Health) as a health prevention activity.

Some stakeholders felt that health and social care professionals could play more of a role in promoting Walking for Health as a form of treatment. However external national-level stakeholders commented that at present it is difficult for health and social care professionals to do this as Walking for Health as the health benefits of Walking for Health as an intervention must be clearly specified and communicated to health stakeholders:

> *"Its quite a busy market, health and social care, walking being one aspect…Walking for Health is one of many things on offer…health professionals are supposed to make every contact count, and social care making every visit count…Its been quite challenging for health and social care to understand what's out there."*
>
> *(local stakeholder)*

External stakeholders were generally of the view that the Walking for Health programme team could be doing more to promote the programme to the health care sector:

> *"They could definitely do more promotion in the general health care sector…GPs should be the number one of the social prescribing commissioners…the programme should be trying to get approved as a social prescribing intervention, so that GPs can prescribe it like they would do any medication."* *(national stakeholder)*

6.4 The Walking for Health experience

Chapter three reported that, overall, participants were very satisfied with Walking for Health. Whilst satisfaction levels were lower amongst those who left the scheme, the reasons cited for leaving were predominantly non-scheme related. This section explores the specific reasons for this high level of satisfaction, including aspects of the programme design which have facilitated it.

Little difference was apparent when satisfaction of survey participants with different components of the programme was examined (Table 6.3). The vast majority (in all cases over 95%) of participants were either 'Satisfied' or 'Very satisfied' with all aspects of the scheme. No respondents were 'Very dissatisfied' with any aspect.

Table 6.2 Aspects of satisfaction at Wave 2

Ratings (n=273)	Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
Time of day	0%	1.8%	1.8%	18.3%	78.0%
Frequency of walks	0%	0.4%	0%	24.9%	74.7%
Location of walks	0%	0.4%	2.6%	21.2%	75.8%
Distance	0%	0.4%	2.2%	27.5%	70.0%
Speed group walked at	0%	1.1%	2.2%	32.2%	64.5%
Group leader	0%	0%	0%	14.3%	85.7%
Number of people	0%	0%	3.3%	29.3%	67.4%
Communication	0%	0%	0.7%	19.4%	79.9%
Overall	0%	0%	0.4%	14.7%	85.0%

Source: Evaluation of Walking for Health surveys

Table 6.3 Satisfaction for those leaving the programme at Wave 2 and Wave 3

	Very dissatisfied	Somewhat Dissatisfied	Neither satisfied nor dissatisfied	Somewhat satisfied	Very satisfied
Wave 2 (n=90)	0%	5.5%	6.6%	23.3%	64.4%

Source: Evaluation of Walking for Health surveys

At the end of the survey, participants were asked if they had any further comments to make on their experience of Walking for Health. The responses to this question also provided insights into key success factors. All comments provided were transcribed. Each response was classified according to whether it was generally positive, negative, or neutral about Walking for Health. While this is necessarily a somewhat subjective process, for Wave 2, only 7.9% of comments could be described as negative and for Wave 3 just 5.5%. Very few of the negative comments however were complaints; rather they were predominantly about the suitability of the walk for that particular individual (for example, the terrain or pace). The remainder were positive, neutral, ambiguous or suggestions.

In order to provide a simple summary of them, a word cloud was created using the 'Wordle' package. A word cloud is a visual representation of text data. It consists of a series of tags, or single words, and the importance of each tag is shown with font size according to the frequency with which it appears in the transcript. This format is useful for quickly perceiving the most prominent terms and for locating a term to

determine its relative prominence. The resulting cloud is shown in Figure 6.1. The social benefits and enjoyment of the programme come through strongly with 'enjoy' being the most prominent word, followed by 'people' and 'friendly'.

Figure 6.1 A word cloud highlighting the most common words used in the verbatim quotes collected in response to open ended question (Wave 3 responses)

This was also evident through the case study research. Walkers' satisfaction with the programme and willingness to attend regularly was supported by the sense of wellbeing it produced, as the case study interviews indicated that Walking for Health was seen as providing a forum for like-minded people to meet and form new friendships based on a shared interest. Therefore, while the social benefits of the schemes can be considered to be outcomes in themselves (see section 4.2), they also help to create the conditions for an effective and sustainable activity focused on improving levels of physical activity.

While many of the survey comments were of a generally positive nature, some specific themes within the comments have been identified and are drawn out below.

The volunteer walker leaders, scheme co-ordinators and organisation

There were numerous positive comments about the importance of the role of the leaders in creating a welcoming atmosphere and encouraging social interaction:

> *"The leaders are so welcoming and encouraging."*
>
> *(Walker: female, 65+)*

> *"It's all positive. The leaders are really good, they involve everybody, and no-one feels left out."*
>
> *(Walker: female, 65+)*

The programme was also described as well run and organised:

> *"The schemes are really well organised, the group is very nice, it's a really well thought out thing."*
> *(Walker: male, under, 65, long term or life limiting illness)*

The pace and variety

Comments indicated the benefits of schemes offering a variety of walks and catering for different abilities.

> *"The programme is good and variable long/short…it's perfect. Depending on how I feel I can choose the pace.*
>
> *"(Walker: male, 65+)*

Corroborating this, walkers interviewed for the case studies commonly expressed their satisfaction with the variety of walks on offer, in terms of their length, pace and intensity.

However, with a range of ability levels, it can be challenging to run walks that suit everyone in terms of pace, length, terrain and time. There were a number of comments about this (for example that the pace was too fast or too slow), and this was one reason why people left the programme. Often however, they moved to other walking programmes.

> *"I enjoy the walks very much, but I am going to try walks that maybe help me to walk at a faster pace."*
>
> *(Walker: male, 65+)*

> *"The walk I did got very boring, they were very slow and people used them as a chit chat rather than a walk, in the end it wasn't a health walk. So I walk alone now. The scheme did not change my habits in any way."*
>
> *(Walker: female, 65+)*

> *"The people in the walking group were very friendly, but the walking pace was far too fast for myself and my friend."*
>
> *(Walker: female, age not declared)*

A very few individuals commented on the lack of variety in walks:

> *"We only go once a fortnight now as they do the same walks and one is very boring when you've been several times, they are very good though…"*
>
> *(Walker: female, under 65)*

These comments and those in the sections above may be influenced by both an individual's motivation for joining the Walking for Health Programme and their life circumstances. For those for whom the social aspects of the programme are more important, as long as they are able to keep up with the walks, the pace or variety may not be so important. It is possible that those more interested in getting fit, or the walking itself, may be more sensitive to the pace, location or variety of the walks.

The case studies provided further evidence on the contribution of the above factors that enable walkers to maintain participation in Walking for Health. Walkers from across the case studies also commented that the accessibility and length of the walks encouraged them to attend the walks on a regular basis.

The social accessibility of the schemes was supported by the common practice of finishing (or breaking up) the walk with refreshments, which was highly valued by participants across the case study schemes.

> *"I don't think you'd come up the Park on your own. You wouldn't come out every Thursday at 10.30 on your own. It makes a difference, you meet up. I like socialising with people in the group…people recommend theatres, museums as well so that's nice, I'm looking for that the social side as well"*
>
> (walker)

The regular schedule is seen as key to helping people sustain their physical activity:

> "*My Thursday morning walk is an important part of my week.*"
>
> (walker)

> "*…it helps to make me more regular with the activity and gives me more focus...*"
>
> (walker)

> *"I wanted to keep fit, but as I did not like jogging, walking seemed like the best option. I did not have friends who were walkers, so Walking for Health was ideal."*
>
> *(walker)*

As detailed in section 4.2.2, a key factor is providing opportunities for walkers to socialise and build friendships. This is generally achieved by ending the walks near a café or other sociable environments.

Participants also often commented on the inclusive nature of Walking for Health, which helped to facilitate the social benefits. Inclusive approaches have included:

- The provision of additional support to enable people recovering from particular conditions (such as strokes or cardiac procedures) or with learning difficulties to participate (with support from their carers).
- Shorter/slower walks that could be undertaken by people with limited mobility, including those using walking aids such as Zimmer frames and mobility scooters.
- Rural walks which enabled people to access the local countryside. This benefit was most commonly expressed by female participants, who said they would not feel safe or comfortable walking in rural or isolated areas on their own. In contrast, urban walks in local nature spots were valued by local residents who could not afford to travel by car or public transport to access rural activities.

There were very few negative views from walkers interviewed through the case studies. However some felt that it was difficult at first to mix with people on the walks because of existing cliques. It was suggested by these participants that walk leaders/volunteers could do more to facilitate interaction although this was a minority view.

6.5 Sustainability of delivery approaches

Two of the key objectives for the programme in the period 2012-5 relate to ensuring the sustainability of delivery approaches. These focus on supporting schemes to secure additional funding and supporting local schemes to recruit and retain a sufficient pool of volunteers and ensure that those volunteers are well supported through training and resources. The role of the national programme team in supporting

these objectives is considered in section 6.6. This section focuses on the issues, challenges and successes of local schemes in ensuring their sustainability.

6.5.1 Access to funding sources for local schemes

The case studies generally reflected the 2013 Audit survey results on funding sources, presented in section 3.1, as the majority were supported by local authority funding. Whilst the case studies suggests that a range of funders are contributing to Walking for Health, they also highlight the potential for many schemes to further diversify their funding base through accessing external funds beyond local authorities and the public sector.

The case studies demonstrated the importance of accessing small amounts of 'top-up' funding to cover items such as the production of promotional literature and volunteer expenses. This was particularly the case for volunteer-led schemes. One scheme for example had secured annual funding of £1,000 from a 'Lifestyle Fund' administered by the local Clinical Commissioning Group (CCG). The funding had been used to produce leaflets and cover volunteer expenses, including walkie talkies for the walk leaders to improve communication between them during the walks. Another scheme attracted an annual grant of £5,000 per year from the Big Lottery Fund 'Awards for All' programme to fund meetings, overheads and volunteer expenses. A small volunteer-led scheme received a small community grant from the local council to support the running of the scheme (otherwise funds were raised through fundraising events such as coffee mornings, cake sales and annual birthday and Christmas parties).

The case study evidence suggests that the local authority-led model provides a number of advantages regarding sustainability of funding:

- Local authorities are able to provide in-kind support for Walking for Health schemes through making use of local authority owned premises free-of-charge.
- Local authorities can provide greater capacity to develop external partnerships and promote the scheme to appropriate health organisations. This can help to diversify schemes and increase take-up from particular target groups.
- Progression walks can be offered, as walk leaders are insured by the local authority to provide these. Although these now fall outside of the Walking for Health umbrella, the progression walks offer groups the flexibility to explore new places, try more challenging terrain or walk longer distances.

In the first phase of the research (summer 2014) there was some concern that local authorities would start to reduce or cut their funding for the scheme coordinator posts. At this time it was felt that the reduction of local authority resources would have a severe impact on the sustainability of the schemes.

In the second phase of the research (summer 2015) schemes appeared to be more confident that funding would continue and that the long-term sustainability of the schemes had been secured. This can be attributed in part to the fit with the local authority's new public health responsibility. In one case it was considered that there was limited risk of the scheme being affected by reduced budgets as the local authority had identified the scheme as a priority for 2014-15 and, as a result, had freed up the Physical Activity Specialist's time to focus on maintaining and developing the scheme's programme of walks.

However, there are still several challenges facing local authority-led schemes:

- Some of the local authority-led schemes analysed for the case studies were focused on maintaining, rather than expanding, their Walking for Health provision. This was partly due to the wider context of

local authority cuts, with a number of scheme coordinators commenting that all local authority commitments are reviewed on an annual basis. Whilst local authorities consistently appreciated the contribution Walking for Health makes to their public health priorities, the case study analysis suggests that local authorities were generally not in a position to provide the additional scheme coordinator capacity or resources that would enable schemes to expand walk numbers or diversify types of walk on offer. A wider survey of schemes would be required to test whether this analysis is typical of all local authority-led schemes.

- There was limited evidence of local authority schemes leveraging external funding to help grow their Walking for Health schemes (for example from the NHS). Although most local authority schemes had developed some partnerships and referral links with external organisations, these were not levering in additional funding per se. A possible explanation is that schemes require more time for the effects of the refocusing of schemes through accreditation to bed in and to allow them to communicate the benefits of schemes in terms of impacts on physical activity and health more effectively to appropriate funding bodies.

The case studies of volunteer-led schemes demonstrate that this model of delivery can be cost-effective and successful. One volunteer-led scheme explained that it has been able to follow the Walking for Health ethos through ensuring that walks allow for walks of a moderate intensity, are accessible to everyone regardless of disability or health needs and are free of charge to all. The case studies have shown that a possible limitation of the volunteer-led model is that volunteers have limited capacity to develop and maintain local partnerships and tap into additional sources of funding; however this is not a general conclusion given the small number of cases in question. The national Walking for Health team may have a role to support and complement these efforts, for example through raising awareness of Walking for Health as a national programme and its mental and physical health benefits. Moreover, direct support for applying for funding would help volunteer-led schemes become more efficient at raising their own funds.

6.5.2 Ensuring a sufficient pool of volunteers

The need to ensure a sufficient pool of volunteers partly depends on maintaining satisfaction levels and ensuring a sense of ownership. Volunteer satisfaction was explored in detail in section 4.3. Walk leaders interviewed for the case studies demonstrated a high degree of commitment and responsibility towards maintaining the walks they delivered. Route planning tended to be a shared activity between scheme coordinators and walk leaders, although in one scheme a ‘lead’ walk leader was responsible for route planning. Schemes consistently emphasised the importance of involving walk leaders in route planning, to increase their ownership of their local scheme.

The following medium-sized local authority-led scheme operating in an urban fringe area demonstrated the importance of volunteers in supporting the delivery of an efficient walking scheme. The case study highlighted the importance of the scheme coordinator’s role in facilitating commitment and enthusiasm from volunteers.

Case Study Good Practice Evidence – Volunteer commitment

- For this scheme it was clear there is a high level of commitment amongst the walk leaders who according to one partner organisation are always "*very keen, very enthusiastic and willing to help*". If walk leaders are not officially leading walks they will help out by engaging with the slower walkers and ensuring that nobody gets into problems on the route.
- Walk leaders invest time in doing reconnaissance prior to the walk – it is not uncommon for walk leaders to check the route two or three times if necessary prior to doing a formal risk assessment. They are flexible to change the planned route according to the weather or the particular needs of the walkers attending.
- The walk leaders feel valued by the scheme coordinator and are trusted to take an active role in the planning and promotion of the scheme. The walk leaders play an active role in searching for new walking routes and adding variety to "keep the programme fresh". Quarterly committee meetings are held to allow all volunteers to contribute ideas in the development of the scheme.
- There is also a strong culture of exchanging information and learning amongst the volunteers and walkers value this "strong team ethic". Walk leaders were also highly positive about the support that they received from the more experienced walk leaders when they started the role.
- A community award scheme recognised the efforts of the walk leaders through awards for "outstanding effort". One walk leader who had delivered a 'walks after work' programme for the last 5 years was given an award for his "great feedback received on the quality of his walks and his knowledge about the local area" Another received an award for his signing skills for deaf people.

The analysis above emphasises the importance of maintaining the current pool of volunteer walk leaders, and developing further capacity to recruit, train and coordinate new walk leaders and other volunteers to grow and diversify the programme in the future. However a challenge for some schemes was maintaining a sufficiently large pool of volunteers to ensure cover was available if regular walk leaders could not attend on certain weeks. One medium-sized scheme had aspirations to increase the number of walk leaders as the current number was not regarded as sufficient to support a structured rota system for walk leaders. There was not always a pool of reserves to draw on if a walk leader has to drop out and this is considered a risk to the operation of the scheme. The scheme coordinator was also doubling up as a walk leader, to address the shortfall in walk leader capacity..

A related challenge highlighted in the case study research was the external recruitment of walk leaders. Case study evidence suggests that volunteers are typically recruited from the pool of regular walkers. While this has been an effective method of recruitment for some schemes (as regular walkers are familiar with the approach and ethos of Walking for Health), there is evidence from some schemes that reliance on this method alone can become a barrier to expansion.

> *"We rely on a central core of walk leaders, that is one of the problems we face, the recruitment of walk leaders. The walk leaders aren't getting any younger, they ask the walkers if any of them want to volunteer but it falls on deaf ears, they want to come along but they don't want to lead the walks, I think that is fairly typical on all the walks"*
>
> *(scheme coordinator)*

Requiring too regular a commitment was identified as a barrier to engaging volunteers:

> *"A lot of people don't want to train as walk leaders as they don't want the commitment of having to turn out every week"*
>
> *(walk leader)*

Scheme coordinators identified perceptions regarding the time commitments and level of responsibilities involved in being a walk leader as the main reasons why they faced challenges with recruitment.

The 2013 Audit asked schemes to estimate how many hours of volunteer time are contributed to their scheme in a typical week. The responses indicate an average was 18.1 hours and a median of 10 hours committed per scheme.

The case studies provided some examples of proactive approaches to recruitment, for example one scheme included biographies of walk leaders in its promotional literature in order to advertise the benefits of volunteering. In most cases however there were no particular formal channels for promoting volunteering – recruitment was generally from the pool of more established walkers who are more familiar with the scheme's ethos and approach. Schemes found it easier to recruit volunteers if they had a large committed pool of walkers to draw on.

6.6 Role of national programme team

A key aim of the evaluation is to assess the extent to which the national programme team has been effective at engaging and supporting existing and new schemes. As set out in chapter two, the key activities of the national team include: programme management; branding; communication and marketing; scheme accreditation; training and volunteer development; provision of support resources; networking; events and workshops; monitoring and evaluation; advocacy, in particular with health and social care professionals; and migrating walkers to other Ramblers and Macmillan activities.

6.6.1 Training

An important objective of the national programme team has been to ensure that volunteers are well supported through training and resources. This contributes to the wider programme objective of supporting local schemes to recruit and retain a sufficient pool of volunteers.

The Walking for Health national team employs a dedicated training officer who delivers training to scheme coordinators, who in turn cascade the training down to walk leaders. Local authority stakeholders in the case studies generally believed that scheme coordinators were effective in executing their role of training, managing and supporting volunteers, providing an indication of the effectiveness of the cascade training. The cascade training has also generally been highly valued by scheme coordinators.

The take up of the training provided by scheme coordinators through the cascade approach has also been very good. Based on data provided by the national programme team, close to 3,000 walk leaders were trained between July 2013 and October 2014. These included a combination of new walk leaders and existing walk leaders that had come through Natural England's training programme but had been advised to update their skills and knowledge.

Overall the training and insurance procedures for volunteers were seen by external stakeholders as being well managed, and essential to the overall structure and support model. In this regard Walking for Health was seen as an exemplar programme.

While the one day training programme was viewed very positively overall, some walk leaders felt too much emphasis was placed on managing and communicating with people with particular conditions and disabilities, who in practice would be receiving additional support to participate in the walks, as demonstrated in the case studies. However feedback from walkers and their carers suggested that the caring approach adopted by walk leaders and the knowledge that walk leaders are trained is a valued part of their experience of Walking for Health.

6.6.2 Accreditation

The programme rationale for a scheme accreditation process is that promoting Walking for Health to people who are currently inactive requires consistency in the quality of provision of short and accessible walks. Evidence from the case studies suggests that the main role and benefit of the national Walking for Health team to schemes in the period between 2012 and 2015 was indeed training and guidance relating to the process of accreditation. This support was seen as crucial in helping to provide an overall structure for the local management and delivery of Walking for Health schemes but also to support the branding of Walking for Health as a programme of health walks (through ensuring consistent provision of short and accessible walking opportunities for inactive people). The accreditation process was designed to support broader objectives for the programme including raising awareness of the value of Walking for Health among health and social care professionals.

Several of the case study schemes commented that the new accreditation requirements (detailed in chapter two) had improved the structure and quality of Walking for Health locally. For example it was felt that the accreditation process helped to make some schemes' management approaches more structured. In some cases the process of accreditation led directly to the introduction of 10-30 minute walks. The Walking for Health accreditation is also viewed as important in providing a "*badge of quality assurance*" and giving the schemes a brand identity – local stakeholders commented that the consistent provision of shorter walks are what makes the programme different from other walking groups offered.

The first phase of the case study research suggested a mixed reception for introduction of shorter walks; however responses were generally more positive during the second phase of the research. This appeared to reflect the increasing buy-in of the schemes to the idea of shorter walks as a means of attracting less active people.

However some scheme coordinators and stakeholders interviewed as part of the case studies continued to believe that shorter walks had limited appeal and were less popular. This may suggest that the provision of shorter walks needs to be combined with efforts on the demand-side to attract more people with longer-term health conditions and people who are inactive which the shorter walks are targeted at.

Wider stakeholders viewed the move to focus Walking for Health on short walks positively as it is recognised that the real impact organisations can make is in moving people from inactivity to activity. As a result of accreditation, Walking for Health is seen as resonating well with the public health policy focus on moderate activity. One local authority stakeholder felt the introduction of the shorter walks was timely and was the main reason they had commissioned the scheme locally:

> *"That was one of the requirements that you must have the entry level walks. That coincided with the national change so that worked well locally as that's what we were asking for anyway"*
>
> *(local authority representative)*

There was also still some concern from schemes that the cap on the progression walks limited the programme, as progression walks addressed a gap between the longest walks offered by Walking for Health of 90 minute walks and the Ramblers provision. It was felt that the previous arrangement whereby progression walks could be seen as a recognised part of Walking for Health delivery had encouraged

some people to increase their activity levels within a familiar environment. Concerns were raised that the removal of progression walks from Walking for Health made their provision more dependent on local authority funding at a time of spending cuts.

6.6.3 Volunteer recruitment

As highlighted above, most of the case study schemes were very reliant on recruiting walk leaders and other volunteers from within their existing pool of walkers, and some were consequently struggling to maintain their current walk programme. Some walk leaders felt there was a particular opportunity for the national team to help increase the pool of volunteer walk leaders – it was felt that Ramblers would be able to identify potential volunteers from the pool of volunteers already supporting Ramblers walks. This could be a potential avenue for building the capacity of Walking for Health schemes, by increasing the pool of walk leaders (as well as their ethnic diversity). The Macmillan 'volunteering village' has been promoted to schemes as a possible source for recruiting new volunteers but there was little evidence of take-up of this opportunity in the case studies.

6.6.4 Helping local schemes to access funding

There was no evidence that the involvement of Ramblers and Macmillan had helped to secure in-kind resources for schemes, although external stakeholders valued the national programme team's role in raising the profile of Walking for Health to potential commissioners through the *Walking Works* report, which was produced by The Ramblers and Macmillan to provide an overview of research on the benefits of regular walking. It was felt that the findings from the report, in particular the benefits of walking in terms of health outcomes will help scheme leads to influence potential local funders.

A number of scheme coordinators envisaged that the Macmillan and Ramblers association with Walking for Health should be useful in securing external funding, and possibly sponsorship, in the future. Several schemes felt that this would be essential in expanding their scope and increasing participation levels going forwards as funding would enable the schemes to enhance their promotional activity. One volunteer-led scheme suggested the Walking for Health team could help improve the sustainability of the programme by providing support for grant applications.

The case study research did not find any evidence that the Macmillan and the Ramblers brands had played a part in helping to secure in-kind inputs for local Walking for Health schemes to date. Feedback from the schemes was that it is too early to have seen any evidence of impact; however schemes expect the brands to play an important role in the future.

6.6.5 Other on-going support and advice

In terms of other on-going support and advice, the regional development officers (RDOs) and support officers from the national programme team liaise with the scheme coordinators themselves, via phone and email, or in person. Some scheme coordinators have attended regional network meetings and have found these a useful opportunity to share information and good practice with other schemes.

Most of the external stakeholders consulted had accessed the Walking for Health website, but some had only done so as a precursor to the interview. Most stakeholders were positive about the website content. Overall the website was seen as being easy to navigate, using clear fonts and images. Several stakeholders commented that they found it easy to find the *Walking Works* report on the website. One stakeholder commented that it was not very overt which organisations were running the programme.

One external stakeholder commented that the new website was a "definite improvement", although it seemed more geared to the needs of health and social care professionals than beneficiaries. Another

stakeholder commented that evidence demonstrating the benefits of walking could be stated more clearly upfront on the website in a *"Research has shown"* section, and felt that more facts and figures could be provided in the *"benefits for people"* information in the general section to encourage participation. The local authority stakeholders consulted referred to the website regularly for information and found it useful.

Generally, the website and e-alerts tailored for walkers, walk leaders and scheme coordinators were viewed positively. The level of support provided by the RDOs was also viewed positively given their capacity constraints and the reduction in resources for the RDO roles compared to the period prior to 2012 when Natural England were running the programme. It is understood that in 2012 the number of RDOs was reduced from nine to three.

6.6.6 National level advocacy and promotion

The national programme team recognised that it was important to develop the identity and branding of Walking for Health before commencing a systematic programme of engagement with national health organisations. National level promotion and advocacy was therefore less of a priority for the national team in the first three years and the programme's resources focused on ensuring that schemes reached a common standard in the delivery of health walks via the accreditation process.

Examples of the national programme team's approach to national level advocacy included two planned press pushes a year; for example a cancer press push in summer 2014 saw Walking for Health on the front page of a number of national newspapers. There have been examples of other effective promotional work although this appears to have been taken forward on a reactive basis when approached by other organisations. For example an article in the British Heart Foundation's support magazine generated an increase in calls from potential walkers interested in joining walks. In Slimming World, there was a case study and guidance on walking that goes out to half a million people who are interested in improving their physical activity.

Some external stakeholders were unable to comment on the national team's promotional work as they had not previously been made aware of the programme – this may be indicative of the lower priority afforded to national level advocacy in the first three years. However Ramblers and Macmillan were seen as being well placed to raise the profile of the programme, and bring their different expertise and audiences together. Most of the national stakeholders consulted for the evaluation had limited knowledge of the Walking for Health programme. Some had some broad knowledge of the aims of the programme but had not worked jointly with the national team. One stakeholder commented that they had heard about Walking for Health through the Fit as a Fiddle programme, run by Age UK. The stakeholder was unclear about the link between Age UK and Walking for Health, and thought there could be real benefits for Walking for Health in linking up with Age UK to promote the programme to Age UK service users.

Some external stakeholders identified specific challenges around promoting Walking for Health, as described above and would like to know more about Walking for Health to encourage them to support the programme at a national, regional and local level. One stakeholder highlighted that the training standards reached by the volunteer walk leaders could be promoted more clearly, to reassure participants with health conditions that any emergencies would be well managed. This would also reassure health professionals signposting people to the programme. Some would feel more confident promoting Walking for Health if they were able to cite a robust evaluation demonstrating the tangible benefits of walking.

6.6.7 Marketing and branding

Several schemes felt the new branding was an improvement, and more clearly demonstrated the health benefits of the programme. In the first phase of the case study research (spring/summer 2014) some

schemes were concerned that the Ramblers connection might be off-putting for people seeking more moderate exercise, given the traditional association of the Ramblers with longer, more challenging walks. This concern regarding the Ramblers' role was less apparent in the second phase of the research in summer 2015.

Free templates have been created which schemes can use – these are free and include programme and poster templates with all the necessary branding that schemes can just drop their walk details in. The interviewees believe that the new posters are much improved and that the Walking for Health branding is useful as a means of promoting the health benefits of the scheme.

Furthermore, in the first phase of the case study research several local authority led schemes reported that they were not using the new national branding as they thought this would be confusing for users; however this has changed as schemes are now required to use the main logo as part of the accreditation process.

Overall external stakeholders felt Walking for Health's messaging is correct for attracting those who are the least active and key target groups including those with long term health conditions including cancer:

> *"I think Walking for Health is a much better brand for the programme than the Ramblers…there might be someone there that understands their health needs, and its less intimidating. Everyone sees Ramblers as these hearty older people who go off and do twenty mile walks, whereas this is seen as less intimidating"*
>
> (*national stakeholder*)

External stakeholders were keen for Walking for Health to retain a consistent message, as it is seen to be a very enduring programme, which is well promoted through word of mouth and volunteers.

As above, some stakeholders felt Walking for Health's messaging could be strengthened by enhancing the evaluation evidence demonstrating the health benefits of walking activity, although some were aware that the *Walking Works* report has been endorsed by Public Health England.

Stakeholders felt there was potential for greater 'joint messaging' across national level public health organisations to increase the take-up of moderate-intensity outdoor activities by physically inactive people:

> "*I think there is an opportunity for us all to get together and talk about how physical activity in the natural environment is positive for people's wellbeing, the broad evidence is indisputable in my mind…irrespective of whatever condition they have…I think there is an opportunity for us to be more joined up in talking about physical activity and the natural environment"*
>
> *(national charity representative)*

Developing a consistent brand and product identity was seen by stakeholders as key to engaging with health stakeholders and attracting additional funding from local authority and health sector commissioners.

Stakeholders also highlighted the importance of developing strong case studies and disseminating these at national conferences as there are too many stakeholders to target individually.

6.6.8 Supporting scheme engagement with specific target groups

Wider stakeholders were unable to comment on the extent to which Macmillan and the Ramblers have supported partnership working and stakeholder involvement in Walking for Health locally. Local authority stakeholders felt the Ramblers and Macmillan have supported partnership working locally to some extent, mainly through the work of the RDOs. However, wider stakeholders suggested that creating partnerships with other large, national charities is key to promoting Walking for Health to a wider audience.

A challenge of the targeting as it stands at the moment is that it assumes that all of the groups can benefit equally. Public health and local authorities can have specific target groups that they are interested in tailoring the Walking for Health message to, so it is believed that Walking for Health needs to join up with other local strategies that target particular groups. Promotion was seen to be primarily the responsibility of local scheme coordinators; however it was felt that the national programme team have a continuing role to play in identifying good practice approaches to targeting and then promoting its take-up through promotion to the schemes.

6.7 The partnership

Stakeholders were generally positive regarding the rationale, operation and effectiveness of the Macmillan and Ramblers partnership. The rationale for the partnership was clear to many stakeholders given the depth of Macmillan's experience of engaging and developing relationships with health professionals and groups and Ramblers' vast experience in supporting the delivery of organised walks (as well as engaging people in physical activity). One stakeholder commented that the programme has demonstrated how charities can work together effectively to deliver a national programme for physical activity.

Interviews highlighted some operational 'teething problems' in the relationship. This was partly a result of the different cultures and ways of working of the two organisations given that 'one is a big charity and the other a smaller charity'. However there was a sense from the interviews with stakeholders (internal and external) that the initial operational problems had been addressed and that roles and responsibilities in the management and operation of the programme had become more clearly defined.

6.8 Summary and conclusions

The analysis in this chapter has addressed a key evaluation aim which is to identify and share key learning that can inform the development of the programme.

The key findings with regard to process lessons at the scheme level are as follows:

- The evidence suggests that local schemes use a variety of methods in support of the recruitment of new walkers, with varying degrees of effectiveness. The most effective methods of promotion have been word of mouth and posters in community outlets. Volunteers also play an important role in recruiting new walkers. There is a risk however that reliance on word of mouth can limit a scheme's ability to engage with more diverse groups of walkers including those affected by specific health issues.

- There is a general consensus amongst stakeholders that a balance needs to be struck between Walking for Health offering a targeted approach to delivering health walks, focusing on specific groups, and trying to benefit the greatest number of people by offering walks that are open to all. The evidence nevertheless suggests that there is scope to improve the promotion of the programme to specific target groups to help recruit more walkers from these groups.
- Schemes increasingly recognise the potential for the Walking for Health association with Macmillan to facilitate engagement with health professionals and, as a result of this, there are some signs that schemes are increasing their drive to engage with GPs through targeted promotion at GP surgeries and engagement with health professionals and commissioners more generally. However generally schemes face challenges in increasing this engagement because of resource constraints.
- The schemes have had limited success in engaging people from BME groups and deprived communities. Generally the case studies point to the need for schemes to engage more effectively with wider strategies to address health inequalities in order to support scheme targeting. The evidence also suggests there is potential for recruiting more walk leader 'champions' from the target populations.
- The viability of the Walking for Health programme is based on a volunteer walk leader model, with volunteers generally providing the majority of the hours required to deliver the programme. The reliance on volunteers creates challenges to some schemes' in terms of maintaining a sufficient pool of volunteers to sustain regular weekly walks.
- The majority of schemes are supported by local authority funding. Although most local authority schemes had developed some partnerships and referral links with external organisations, these were generally not levering in additional funding per se.
- The case studies highlight the potential for many schemes to further diversify their funding base through accessing external funds beyond local authorities and the public sector. The evidence has shown that even small pools of money can be useful in supporting the sustainability of schemes, for example by supporting targeting activities and volunteer recruitment.
- The case study research has demonstrated examples of good practice in attracting people with long-term health conditions, engaging with health professionals and engaging with harder-to-reach groups who are physically inactive. There were examples of successful referral schemes whereby cancer and heart patients are referred directly on to the programme and schemes which use health talks at community meeting points to reach out to people living in deprived areas.
- Overall the evidence also points to a need for schemes to link up more effectively with the broader physical activity strategies and programmes within their local areas as Walking for Health can potentially support strategies and actions to engage specific groups in physical activity.
- The evidence identified a number of factors which have helped to facilitate the high satisfaction levels as well as the physical activity and social benefits derived from Walking for Health (these were shown by the survey responses and were common across many of the case studies). Specific factors included: the regularity of walks; the role of the walk leaders in creating a welcoming atmosphere and encouraging social interaction; walks starting and ending in accessible locations; the variety of walks and catering for different abilities; and providing the conditions for social interaction beyond the walking activity, such as starting and finishing at appropriate meeting places such as cafes.

The analysis in this chapter has helped to assess the extent to which the Walking for Health national programme team has been effective at engaging and supporting existing and new schemes. The key findings and learnings in respect of this objective are as follows:

- The national team's key role in the 2012-15 period has been to roll out scheme accreditation to ensure the Walking for Health 'product' is fit for purpose. There is a broad consensus that this role has been executed effectively.
- The take up of training to volunteers provided by a cascade approach whereby scheme coordinators are trained as trainers has been very good and the training approach highly valued.
- The national programme team has to date had limited involvement in helping to support the targeting and engagement efforts of the schemes and partnership development (including support for sustainability).
- The national programme team has played an important role in developing Walking for Health branding in order to ensure that the national programme and delivery at the local level is fit-for-purpose as a programme which promotes health walks to people with long-term health conditions and those who are currently inactive. Raising the profile of Walking for Health could be helped by more targeted promotion by the national programme team.
- There is potential for the national programme team to play a greater facilitative role in rolling out good practice approaches particularly with respect to the targeting of BME groups, people living in deprived communities and in targeting people with health conditions through engagement with health professionals and health bodies.

The key recommendations that emerge from this chapter (and others) are included in chapter seven.

7.0 Evaluation Conclusions

7.1 Introduction

This chapter summarises the findings and learning points from the evaluation research. In the sections below, conclusions, learning points, and specific questions for further research are addressed in relation to the programme objectives and key evaluation criteria. Each section includes specific recommendations for consideration by the national programme team and local schemes. The final section highlights some key methodological lessons from the study.

7.2 Relevance

The aim of Walking for Health is grounded in a strong rationale, based upon evidence of the importance of physical activity in reducing long-term health risks and the potential for physical activity to help people living with and beyond cancer. The programme also strongly complements the growing body of evidence highlighting the benefits of physical activity for personal wellbeing and overall quality of life. It aims to be an inclusive scheme with the potential to increase the activity levels of a large number of people nation-wide, due to the fact that it is free to take part in, participants do not need any special equipment and walking is a manageable activity for people of different abilities. Walking for Health groups are especially suited to introducing people who are inactive to physical activity – "stepping up" – or to supporting others to remain active when health problems occur – "stepping down".

The national programme team has responded effectively to the changing policy agenda by putting Walking for Health schemes on a firm footing to promote themselves within the changing policy funding context. This has been achieved by allowing local schemes (through the accreditation process) to develop a clearer product identity with potential appeal to health commissioners.

7.3 Participant outcomes

An important focus of the evaluation has been the extent to which the Walking for Health programme generates positive outcomes and impacts for participants. Programme achievements have been explored with respect to changes in overall physical activity, including walking and sitting, people's wellbeing and improvements in general health.

It is important to note that the evaluation was conducted while changes to the composition of the schemes, through the accreditation process, were taking place and new marketing and promotion initiatives were being implemented by the national programme team. The impacts of some of these changes are shown by the case study analysis; however, given the timing of the evaluation's longitudinal survey (which pre-dated the completion of the accreditation process in March 2015), it has not been possible for the survey analysis to consider the impact of these programme changes on participant outcomes.

Based on the findings of the survey from the period March 2014 – June 2015 and qualitative responses from the case studies, the following conclusions are made with regard to participant outcomes of Walking for Health:

- Overall, participants in Walking for Health maintained their levels of weekly physical activity over the full period of the survey (8 months), even allowing for some drop out**.** This is a positive finding given the aims of the programme to sustain moderate-level physical activity, and the older target group engaged. On average, participants were undertaking around 2.5 days of (at least 30 minutes) moderate physical activity at the baseline and final follow-up stages. Furthermore, half of the respondents reported that it was unlikely they would have found a similar scheme in the absence of Walking for Health. Qualitative evidence pointed to the importance of Walking for Health in helping older people to maintain their physical activity when stepping down from more vigorous or other walking activities.
- Amongst the minority of respondents who increased their level of activity between Wave 1 and Wave 3 of the survey (including people who self-reported themselves as inactive at Wave 1 according to standard definitions), positively, a proportion of these attributed this change to involvement in Walking for Health. However (and aligning with the findings above on the engagement of target groups), it should be noted participants continuing on the programme after four months were generally more active and healthier than those who ceased participating.
- Walking for Health leads to a significant short-term overall increase in levels of weekly physical activity after first joining the programme; however this increase is generally not sustained. Statistically significant increases in levels of walking (38.2 more minutes per week) and moderate physical activity (1.17 extra days of at least 30 minutes per week) were detected through the survey after the four month interval. However, at the eight month mark, physical activity levels had dropped back to those immediately after the first walk. One possible explanation for this trend is that the initial enthusiasm of walkers, as well as the opportunity to try out different types of walks offered by some Walking for Health schemes, drives this initial increase, before walkers settle back into more manageable levels of activity. A minority of respondents also dropped out of Walking for Health schemes altogether (including some who were 'inactive' at Wave 1).
- Comparison of outcomes between those continuing to participate and those ceasing at four months suggests that those who are more engaged in physical activity and walking at the start are more likely to stay on the programme.
- There was an improvement observed in a number of measures of wellbeing. Statistically significant improved scores were observed for general mental health (as measured by the Warwick Edinburgh Mental Wellbeing Scale), loneliness, and social interaction. Overall life satisfaction did not change. The qualitative responses to the survey and in-depth interviews conducted for the case studies confirmed that the social aspects of Walking for Health represent an important benefit for many participants, for example the opportunity for increased social interaction.
- There was no evidence of improvements in reported quality of life as measured by EQ-5D DS scores. Similarly there was no improvement in self-reported health status, as measured by EQ-5D VAS scores. Participants continuing on the programme after four months were generally healthier than those who ceased participating.
- Corroborating the finding from the national programme team's survey that 69% of volunteers were very satisfied with their Walking for Health experience, walk leaders who were interviewed during the case study visits appeared to be highly satisfied. Key benefits for volunteers were increasing levels of physical activity and the enjoyment gained from being able to give something back to the community.

Overall, the evidence suggested a number of factors that have helped to facilitate high satisfaction levels, as well as the physical activity and social benefits from the programme:

- The regularity of walks, in particular opportunities to attend walks on a weekly basis.
- The role of the walk leaders in creating a welcoming atmosphere and encouraging social interaction.
- Walks starting and ending in accessible locations.
- Allowing walking groups to divide into smaller groups of faster and slower walkers when requested by the walkers.
- The variety of walks and catering for different abilities.
- Providing the conditions for social interaction beyond the walking activity such as starting and finishing at appropriate meeting places such as cafes.
- Being free of charge and open to all.

Evaluation recommendations:

Strategies and actions should be developed to focus on retaining those on Walking for Health schemes, who are less active to begin with. This could be achieved through more intensive support, and/or by tailoring walks to their needs.

Future research priorities:

- Further investigation of why participants' levels of physical activity tend to decline four months after starting to participate in Walking for Health.
- More systematic research on schemes' links to progression opportunities (including walks and other physical activity): opportunities, barriers and good practice.

7.4 Economic analysis

The economic analysis of the programme has utilised a number of approaches.

A cost-effectiveness approach, based on analysis of the relationship between the physical activity outcomes of the Walking for Health programme at four months and programme expenditure, derived a ratio of £0.83 per MET hour gained (or £0.42 in the more optimistic assumption). This is well within the range of cost-effectiveness ratios derived from evaluations of comparable interventions.

Using data from the survey as an input to the MOVES model suggests that the Walking for Health programme has the potential to be highly cost effective, at £3,691 per QALY gained. Although there is a cost associated with the programme, the evidence suggests that it is more cost effective than no intervention at all due to the additional QALYs it generates. The estimated cost per QALY is substantially less than the NICE recommended threshold cost of £30,000 per QALY gained. The potential return on investment (or benefit-cost ratio, which compares the value of QALYs gained with the cost of the programme) is estimated to be £3.36 per £1 spent.

The MOVES model assumes that the physical activity undertaken for any evaluated programme is additional to what would have occurred in its absence. Whilst no counterfactual data was available to

thoroughly test this assumption with regards to Walking for Health, this scenario is broadly consistent with the overall evaluation finding that Walking for Health helps participants to maintain a level of regular, moderate-intensity physical activity. The analysis is also based conservatively on the specific time spent undertaking walking through Walking for Health (rather than assuming that Walking for Health impacts on all physical activity, even if it may do so in practice for some participants). This equates to 75 minutes of walking per week. MOVES also assumes that the level of physical activity is maintained over the longer-term (in the base case for 5 years or more); this is necessary for physical activity to generate sufficient positive health gains (as well as being consistent with the objectives of Walking for Health to help people to remain active). However, even after adjusting these assumptions through sensitivity testing (shorter time horizon, lower level of additionality), the cost-effectiveness results remain positive.

The assumptions underpinning the model suggest there is a need for additional research into the longer-term impacts of Walking for Health on changes in physical activity in order to analyse how far walking behaviour is sustained in future years.

A limitation of applying the MOVES model in a national evaluation exercise is that it can only effectively provide an assessment of a 'hypothetical' scheme which reflects the average cost per participant based on national data. It is limited therefore in terms of comparing the cost-effectiveness of different types of delivery approaches and does not account for differences between schemes in set up costs or ongoing maintenance costs.

Evaluation recommendations:

The national programme team should consider applying cost-benefit modelling to a variety of scheme types in order to demonstrate the value for money of the Walking for Health 'product' to potential commissioners. The application of the MOVES model, for example, to local schemes (i.e. using local scheme inputs) could be potentially appealing to commissioners as it can show the potential value for money of investing in Walking for Health providing certain conditions are satisfied (for example x number of walkers are engaged over a four month period, x% of participants are inactive etc).

Future research priority:

- The national Cost Benefit Analysis of Walking for Health using the MOVES model should be updated once more robust longer-term impact data is available for the programme, and in particular data on how long participants remain engaged in walking and/or other physical activity.

7.5 Meeting specific programme objectives

This section returns to the key process objectives highlighted in chapter two in order to provide an overall assessment of the programme's progress and achievements between 2012 and 2015.

7.5.1 Widening the programme's reach to people who are currently inactive

Over the period 2012-2015 the Walking for Health national programme team has sought to increase the availability of and participation in Walking for Health so that people who are currently inactive, or who need support to remain active, are encouraged to walk to improve their health and wellbeing. Participants who are new to the programme have similar levels of activity to the population as a whole and it has not been possible to do trend analysis to assess whether the programme is improving its effectiveness in

targeting inactive people is over time. The survey findings indicate that only a small proportion of participants move from being inactive at baseline to active after eight months.

Overall, the evidence nonetheless points to the effectiveness and long-term potential of the Walking for Health brand in promoting the programme to those who are currently inactive. The accreditation process, which has been a key focus of the national programme team, has provided an overall structure for the local management and delivery of Walking for Health schemes and supported the branding of Walking for Health as a programme of health walks (through ensuring consistent provision of short and accessible walking opportunities for inactive people).

The accreditation process and the resulting reductions in the number of registered walkers and numbers per scheme has made it difficult to provide an assessment of the effectiveness of the programme's engagement approaches in the 2012-15 period. The recent decline in the number of schemes is largely attributed to the accreditation process as some schemes merged with others as a result of the process and some did not apply for accreditation and are therefore no longer recognised as Walking for Health schemes. The reduction in schemes has therefore also affected overall attendance levels.

Case study evidence nevertheless shows that schemes use their resources efficiently to promote the scheme to prospective walkers. While word of mouth is often important, the distribution of leaflets and posters provide an effective means of attracting new walkers. Volunteers also play an important role in communicating the benefits of the schemes to the wider community of potential participants. The case studies suggest that there is still scope for schemes to improve their engagement approaches through more focused targeting of local clubs, community groups and retail outlets.

Future research priority:

- The national programme team should continue to monitor changes in participation numbers (including new walkers) against a new baseline position in March 2015, the date when the accreditation process was completed.

Targeting specific groups

A particular aim of Walking for Health is to reach those that need the most support, including people affected by cancer and other long-term health conditions, and those from recognised health inequality groups such as older adults, BME communities and people on lower incomes. A related objective is to raise awareness of the value of Walking for Health among health and social care professionals and encourage them to signpost patients to Walking for Health.

Increasing effectiveness in targeting people affected by cancer is shown by analysis of the database which indicates an increase in the proportion of walkers affected by cancer. In the year to March 2015, 4.3% of all walkers and 7.3% of new walkers were affected by cancer. This is a higher proportion than suggested by the analysis of the 12 months up to September 2014 when 3.3% of all walkers and 5.6% of new walkers were affected by cancer.

Although a significant percentage of participants have reported living with health conditions, the prevalence of health conditions would be expected to be high in older adults who form the majority of participants. It is noteworthy that participants appear to be healthier than would be expected of a general

population sample of comparable age. It is reasonable to assume however that the programme will attract an increasing proportion of walkers affected by long-term health conditions in future years given the effectiveness of the accreditation process in developing a clearer brand identity for Walking for Health as a programme of health walks.

Regarding other key target groups, programme data on the profile of participants shows that the programme attracts a very small minority of people from BME groups. Moreover, in the year to March 2015, 5.3% of walkers lived in the 20% most deprived areas using the Index of Multiple Deprivation (IMD) according to the database.

Targeting people with long-term health conditions could be improved through more targeted promotion by the national programme team to health professionals and health bodies. This is seen as an important step to ensuring that Walking for Health can be recommended through social prescribing and local exercise referral schemes.

The findings also suggest that work is needed to engage more effectively with BME groups and lower income groups. There is potential for Waking for Health to complement the *every step counts* programme which is a 12 weeks outreach programme as Walking for Health provides a natural progression by providing more sustainable walking opportunities. A key lesson from this programme was highlighted as needing to build relationships with community champions who can promote the walks and be trained to a walk leader in order to attract hard to reach groups to walking. There is a potential to embed the lessons from this programme into Walking for Health.

A further learning point from the case study research is using particular venues (for example local pharmacies) with close links to the community to raise the profile of walking groups to local communities. With guidance from the national team, local schemes could also be more proactive in developing links with Health Champions[114].

Evaluation recommendations:

The national programme team should place greater emphasis (and resources) on mechanisms to identify and share information and good practice on specific targeting approaches. There is scope to develop more resources for schemes such as templates for action that can be adapted to local circumstances. The evaluation research has identified a number of examples of engagement with health professionals that provide examples of good practice sharing and should be replicated across schemes, where relevant:

- Strengthening links with (or being managed from within) the local authority public health department as this facilitates working relationships and opportunities for increased partnership working with the wider health community.
- Targeted promotion at GP surgeries by sending Walking for Health promotional packs including leaflets and posters.
- Regular attendance by the scheme coordinator at meetings of CCGs and Health and Well Being Boards to promote the Walking for Health schemes and establish links with specific health bodies and groups.

[114] Health Champions are trained volunteers who are helping to transform health and wellbeing in their communities. Health Champions work in a range of settings, including GP Practices and acute hospitals http://www.altogetherbetter.org.uk/health-champions

- Community champions with existing links to GP surgeries training to be walk leaders and starting groups from the surgery.
- Establishing referral schemes with patient recovery programmes to Walking for Health walks.
- Including Walking for Health on local exercise referral systems which are used by medical professionals.
- Encouraging Walking for Health schemes to engage with and meet the criteria for social prescribing and exercise on prescription initiatives.
- Working with national bodies to ensure incentives are in place for GP surgeries to signpost to the programme – one mechanism highlighted in the interviews was to ensure that referrals to physical activity schemes had Quality and Outcomes Framework (QOF) points.

The efforts of local schemes should be supported by increased engagement with national level health bodies from the programme team, as a step towards ensuring that Walking for Health can be recommended through social prescribing and local exercise referral schemes (as well as to help increase the engagement of particular groups with health conditions). For example, it was suggested that Walking for Health should work with national bodies to help ensure that sufficient incentives are in place for GP surgeries to signpost to the programme – one mechanism highlighted was to ensure that more local surgeries adhere to the voluntary Quality and Outcomes Framework.

Specific national bodies and networks that the programme could engage more intensively with include:

- Mental health charities.
- Charities supporting older people.
- Other large charities connected with the health and social care sector.

Ramblers and Macmillan should also enhance links with Public Health England, for example through more targeted promotion of the Walking for Health 'product' and its appeal to commissioners. This is particularly important given Public Health England's role in supporting public health teams in local authorities to develop health prevention strategies. The development of Walking for Health as a specific preventative intervention that can be promoted to commissioners is taken up further below in the section on funding and sustainability.

It is recommended that the national programme team promotes Walking for Health as a vehicle for supporting people to maintain independent living and reduce social isolation. Much of the work around promoting the health benefits of Walking for Health has focused on the physical activity health benefits, for example the *Walking Works* report. The evaluation survey evidence points to the social benefits of Walking for Health, in particular its effect in reducing loneliness and social isolation, which could be used a basis for engaging with organisations such as the Social Care Institute for Excellence (SCIE).

Schemes should be encouraged as much as possible to develop links with local physical activity strategies. This should ensure that the Walking for Health product is offered as part of a 'pathway' to increasing physical activity, linking to potential progression opportunities and by supporting local actions focused on targeting specific groups that are currently inactive.

The national programme team should identify further ways to promote the health benefits of Walking for Health in order to attract people who are currently inactive. For example more facts and

figures on the benefits of walking and physical activity could be provided in the "benefits for people" information in the general section of the Walking for Health website to encourage participation.

Future research priority:

- Mapping walking group locations against the country's most deprived areas to provide an assessment of Walking for Health's accessibility for people on lower incomes.
- Research into the specific needs of different target groups and their experience of Walking for Health

7.5.2 Funding and sustainability

The national programme aims to ensure the financial sustainability of Walking for Health schemes, and support existing and new schemes to secure additional funding. Local authorities make a significant contribution to the funding of local Walking for Health schemes particularly by funding the scheme coordinator role. The case studies have demonstrated the advantages of the local authority-led model namely the capacity of some scheme coordinators based within local authorities to develop external partnerships and promote the scheme to appropriate health organisations in order to help diversify their schemes and increase take-up. Over the period of the evaluation there appeared to be an increasing confidence that funding would continue and that the long-term sustainability of the schemes would be secured. This can be attributed in part to the fit with the local authority's new public health responsibility. Such engagement is seen to be more challenging for volunteer-led schemes as these generally have more limited staff capacity and connections to develop such relationships.

However in some cases scheme coordinators still only have limited time to spend on Walking for Health as this role is combined with other responsibilities. Case study evidence shows that additional funding gained from sources such as the Big Lottery Fund and funding provided through local funding programmes (e.g. initiatives delivered through of health and wellbeing boards) can nonetheless make a valuable contribution to the financial overheads of delivering Walking for Health schemes.

Based on the case study research to date there is little evidence that the brands of Macmillan and the Ramblers have helped to secure in-kind inputs. This suggests that further guidance or sharing of good practice is required on ways of using the Macmillan and Ramblers branding, in order to attract resources from wider partners. However it will also be important to build on the accreditation process by promoting Walking for Health as a clearly defined and identifiable product that not only meets social prescribing criteria but also fits into developing pathways to participation in physical activity.

Future research priority:

- Mapping schemes success in accessing additional funding sources so good practice can be identified and shared.

Evaluation recommendations:

The national programme team should support the financial sustainability of local schemes by helping to develop the Walking for Health 'offer' to local commissioners. This could be taken forward through the following actions:

- Developing the case for Walking for Health as a specific preventative measure to commissioners – this means providing a clearer specification on what a typical Walking for Health scheme provides as a preventative intervention including scheme-related inputs, outputs and health outcomes. Drawing on the lessons from the modelling of programme cost-effectiveness from this evaluation, the cost and benefits of a typical Walking for Health scheme could be used to demonstrate potential cost savings to the NHS and health benefits.
- Highlighting reassuring evidence to participants and GPs that walk leaders are well trained and safety procedures are in place on the walks.
- Identifying and sharing good practice models for delivering Walking for Health within the local authority's public health responsibility.
- Identifying the role of Walking for Health within broader pathways that lead to longer-term involvement in physical activity; this means enabling schemes to develop clearer links with a range of progression activities.

7.5.3 Volunteers

The programme also aims to support local schemes to recruit and retain a sufficient pool of volunteers and ensure that those volunteers are well supported through training and resources. The viability of the Walking for Health programme is based on a volunteer walk leader model, with volunteers providing the majority of hours required to deliver the programme. The volunteering model brings continuity and scale to the programme that would not be achievable otherwise; however the maintenance of a sufficient pool of volunteers to ensure the sustainability of schemes presents challenges for some schemes.

Future research priority:

- Developing a clearer understanding of issues surrounding the availability of volunteers for schemes through more systematic research, for example by undertaking an audit of volunteer skills.

Evaluation recommendations:

The national programme team could provide further support to local schemes for volunteer recruitment and retention. Potential actions include:

- Facilitating the sharing of good practice on volunteer recruitment and management.
- Publicising as widely as possible the benefits of volunteering for Walking for Health through existing forums such as the Macmillan Volunteering village.

7.6 Methodological lessons and recommendations

The earlier sections have highlighted the challenges and limitations of the methodology. As it was not possible within the confines of the evaluation to use a comparator group methodology, the evaluation adopted a longitudinal approach to the assessment of impact additionality with the baseline effectively acting as the counterfactual reference point for the analysis; however it was not possible to collect data on validated measures of physical activity, health and wellbeing from participants prior to their first walk. The evaluation nevertheless also raised the question of whether a true baseline can ever be measured completely accurately in a before-and-after physical activity study, given that some participants may increase levels of physical activity in preparation for their first walk.

To help improve the relevance and quality of the evaluation findings, the longitudinal survey analysis was considered alongside a comparison of outcomes with the non-constant sample (those who ceased to participate at four months), analysis of additionality questions (to examine the influence of the programme on participation) and significance testing. The survey data was also corroborated with qualitative data gathered from in-depth case studies, as well as a theoretical appreciation supported by qualitative analysis that Walking for Health has an important role to play in helping to maintain levels of physical activity. Using a combination of approaches supported a more robust and defensible evaluation approach. Nevertheless there are lessons from the study that should be taken on board in future evaluation studies.

The survey instruments and questions employed for measuring physical activity and walking (the modified single item question from the OHQ and the IPAQ question) provided valid and relevant measures of change in one of the principal outcomes of interest to Walking for Health. However, it is possible that the single-item measure of physical activity used in the surveys was not sensitive enough to measure change, given the size of the constant sample. The size of the sample did not allow for the detection of changes of less than 0.45 days of 30 minutes of physical activity between baseline and eight months. Sample sizes would therefore need to be increased to detect smaller changes in behaviour (see below). This would also facilitate greater sub-group analysis. The pedometer study proved less effective due to a number of practical issues associated with the use and return of pedometers. The majority of measures of wellbeing were also fit-for-purpose; EQ-5D proved less useful due to the length of the questions, and their suitability to be asked as part of a telephone survey.

Many of the case study interviews with walkers showed how the schemes provide opportunities for older walkers to step down from more vigorous physical activity. This may partly explain the finding that Walking for Health helps participants to maintain (rather than increase) physical activity over the medium-term. A lesson here for future evaluations is to ask more specific questions at the baseline stage regarding participants' pre-existing levels of activity (and to link this to their motivations for taking part), beyond simply the objective measurement of activity levels. The outcomes assessment can then be related more closely to the motivations or reasons for taking part, whether this is maintaining a certain level of activity for those who are stepping down from more vigorous activity for health or other reasons, or increasing activity for those who were previously inactive.

Finally, the MOVES model proved a useful tool for understanding the cost-effectiveness and return on investment of Walking for Health. The inputs and thus accuracy of this analysis can be tweaked in the future through access to improved data on the additionality of Walking for Health schemes, and the sustainability of involvement. For example, a key assumption the economic analysis is that the programme leads to longer-term changes in behaviour beyond one year. For this assumption to be tested, a further longer-term follow-up survey of participants could be undertaken to help assess rates of attrition beyond 12 months, as well as the persistence of outcomes.

Ideally, a randomised control method or quasi-experimental design would be introduced into future evaluations of Walking for Health, to robustly estimate the counterfactual position and hence impact of Walking for Health. In the absence of this the following options should be considered for boosting the robustness of the longitudinal survey approach:

- Using the revised validated single item question on physical activity, and capturing baseline data from all new participants, as part of the walker registration forms. Walking for Health volunteers for example could be encouraged to more closely supervise the completion of this specific question, to help boost the response rate for evaluation purposes.
- Investigating the option of administering a more detailed survey to a sub-sample of participants before their first walk, in order that a robust baseline is in place for a wider range of outcomes for follow-up (this may also enable the response rate on the key measure of physical activity to be more carefully monitored, through the sampling strategy).

- Boosting the sample size for follow-up surveys (and oversampling of specific target groups). This would require drawing from a larger sample-frame of schemes, but would allow for a more robust analysis of changes in physical activity (through the detection of smaller changes) as well as the development of a deeper analysis of change within particular sub groups.

Annex One: Research Tools

1. **Participants questionnaires**
2. **Case study research tools**
3. **Stakeholder topic guides**

Evaluation Baseline Questionnaire

Good morning / afternoon / evening, my name is _____ and I work for Ecorys Survey. We understand that you have recently attended _____[insert name of walk]. Your local walk is run by Walking for Health and we would like to understand how, if at all, these walks benefit people like you. Working closely with Walking for Health, Ecorys and the University of East Anglia are undertaking independent research to find this out. We would like to invite you to participate in this research. If you are happy to take part, in a moment I will ask you some questions; they will only take about 15 minutes. If now isn't a convenient time, may I arrange to call you at another time this week? We would then like to give you a call in about four months time to see if anything has changed.

Are you happy to take part in this survey?

☐ Yes *(interviewer note: proceed with survey)*

☐ No *(interviewer note: check if they would like to take part in the survey in another format (e.g. posting a hard copy). If not, thank them for their time and end the survey)*

I will explain the tasks full as I go along but please interrupt me if you do not understand something or if things are not clear to you. Please also remember that there are no right or wrong answers. We are only interested in your personal view. You do not have to answer the questions if you do not want to and you can chose to opt out of the survey at any stage. We can also assure you that your responses will remain confidential and the information you provide will not be shared with anyone outside Ecorys and the University of East Anglia.

INTERVIEWER NOTE: **Please record the name of the walk and the name of the Walking for Health scheme, as confirmed by the information provided on the database. Some walkers may not realise their walk is part of the national Walking for Health programme.**

1. **How did you find out about the _____[insert name of walking group]?** ***(interviewer to select all that apply)***

☐ GP/Nurse/Physio/Other health professional
☐ Pharmacy
☐ Press
☐ Poster/advertisement
☐ Leaflet
☐ Website
☐ Macmillan Cancer Support
☐ Ramblers
☐ Told about it by someone (not covered above)
☐ Other – please state:

_____

2. **If the _____[insert name of walking group], was not available at the time you joined, how likely is it that you would have joined a different walking group? I will read out five responses so please let me know which one you agree with.** *(interviewer to read out responses and select one)*

☐ Very likely ☐ Likely

☐ Neither likely nor unlikely ☐ Unlikely

☐ Very unlikely ☐ Don't know

3. **How many times have you taken part in walks with _____[insert name of walking group]?** *(interviewer to insert number)*

4. **How much time did you spend on your first walk?** *(interviewer note: this should only include the time spent undertaking the walk and should not include any time allocated to form filling, briefings at the start etc)*

_____ hours and _____minutes

5. **How far did you walk on your first walk?**

_____miles or _____km

I would now like you to ask about the amount of physical activity you take part in.

6. **In the past week, on how many days have you done a total of 30 minutes or more of physical activity, which was enough to raise your breathing rate? This might have included sport, exercise and brisk walking with Walking for Health or at other times or cycling for recreation or to get to and from places, but should not include housework or physical activity that is part of your job.** *(select one)*

0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐

7. **This question is about all the walking that you did in the last 7 days solely for recreation, sport, exercise or leisure. During the last 7 days (not including today) on how many days did you walk for at least 10 minutes at a time in your leisure time?** (*select one)*

0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐

8. **How much time did you usually spend on one of those days walking in your leisure time?**

(*interviewer to complete)*

_____ hours per day _____ minutes per day

9. **This is about the time you spent sitting on weekdays during the last 7 days. Include time spent at work, at home, while doing course work and during leisure time. This may include time spent sitting at a desk, visiting friends, reading, or sitting or lying down to watch television. During the last 7 days how much time did you usually spend sitting on a week day?** (*interviewer to complete)*

_____ hours per day _____ minutes per day

In order for us to understand how the Walking for Health programme benefits people over time, we would like to understand how much walking and sitting you did before taking part in your first

Walking for Health walk. Your answers may not be very different to the ones you have just told me, but I would like to just check.

10. **So, prior to taking part in your first Walking for Health walk, on how many days did you do a total of 30 minutes or more of physical activity, which was enough to raise your breathing rate? This might have included sport, exercise and brisk walking or cycling for recreation or to get to and from places, but should not include housework or physical activity that is part of your job.** *(select one)*

0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐

11. **This question is about all the walking that you did solely for recreation, sport, exercise or leisure. Prior to taking part in your first Walking for Health walk, in an average week, on how many days did you walk for at least 10 minutes at a time in your leisure time?** (*select one)*

0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐

12. **How much time did you usually spend on one of those days walking in your leisure time?**

(*interviewer to complete)*

_____ hours per day _____ minutes per day

13. **This is about the time you spent sitting on weekdays, including time spent at work, at home, while doing course work and during leisure time. This may include time spent sitting at a desk, visiting friends, reading, or sitting or lying down to watch television. Prior to taking part in your first Walking for Health walk, in an average week, how much time did you usually spend sitting on a week day?** (*interviewer to complete)*

_____ hours per day _____ minutes per day

14. **Prior to taking part in your first Walking for Health walk, what were your expectations of the amount of physical activity that you would undertake over the coming year?** *(interviewer to read out responses and select one)*

☐ You expected to be more physically active over the next year than you have been in recent years.

☐ You expected to be less physically active over the next year than you have been in recent years.

☐ You were not expecting that the amount of physical activity you do over the next year will change compared to recent years.

I would now like you to answer some questions on your general wellbeing. This will help us to see if Walking for Health is contributing to any changes to your overall wellbeing.

15. **On a scale of 0 to 10, where 0 is 'not at all satisfied' and 10 is 'completely satisfied', how satisfied are you with your life nowadays?** *(Interviewer to complete)*

16. **I would just like to check if this was different to the time before you took part in your first Walking for Health walks, so on a scale of 0 to 10, where 0 is 'not at all satisfied' and 10 is 'completely satisfied', how satisfied were you with your life before you took part in your first**

Walking for Health walk? *(Interviewer to complete)*

17. **I am going to read out some statements about feelings and thoughts. Thinking about the last four weeks, for each one, I would like you to tell me how often you have experienced the feeling: none of the time, rarely, some of the time, often, or all of the time.** *(Interviewer to read out and select one per row)*

	None of the time	Rarely	Some of the time	Often	All of the time
I've been feeling optimistic about the future					
I've been feeling useful					
I've been feeling relaxed					
I've been dealing with problems well					
I've been thinking clearly					
I've been feeling close to other people					
I've been able to make up my own mind about things					

18. **How often do you meet socially with relatives, friends or colleagues? I will read out six responses so please let me know which one you agree with.** *(Interviewer to read out responses and select one)*

□ Never □ Less than once a month □ Several times a month □ Once a week
□ Several times a week □ Every day □ Don't know

19. **And on average, prior to taking part in your first Walking for Health walk, how often did you meet socially with relatives, friends or colleagues? I will read out the same six responses so please let me know which one you agree with.** *(Interviewer to read out responses and select one)*

□ Never □ Less than once a month □ Several times a month □ Once a week
□ Several times a week □ Every day □ Don't know

20. **How often do you feel lonely? I will read out four responses so please let me know which one you agree with.** *(Interviewer to read out responses and select one)*

□ Often □ Sometimes □ Rarely □ Never □ Don't know

21. **And on average, prior to taking part in your first Walking for Health walk, how often did you feel lonely? I will read out the same four responses so please let me know which one you agree with.** *(Interviewer to read out responses and select one)*

☐ Often☐ Sometimes ☐ Rarely ☐ Never ☐ Don't know

We are also interested in what you think about your health at the current time, so that we can then measure impacts of the programme at a later date on participants' health. I will ask you a few brief and simple questions about your own health state today. If you prefer not to answer any particular question, please say so.

INTERVIEWER NOTE: **It maybe necessary to remind the respondent regularly that the timeframe is today. If the respondent does not feel comfortable answering these questions, please skip to**

question Q27.

22. First, I would like to ask you about mobility, would you say that you…

***INTERVIEWER NOTE:* Unlikely to need to read last response out.**

□ have no problems in walking about?
□ have slight problems in walking about?
□ have moderate problems in walking about?
□ have severe problems in walking about?
□ are unable to walk about?

23. Next, I would like to ask you about self care. Would you say you……

INTERVIEWER NOTE: Unlikely to need to read last response out.

□ have no problems washing or dressing yourself?
□ have slight problems washing or dressing yourself?
□ have moderate problems washing or dressing yourself?
□ have severe problems washing or dressing yourself ?
□ are unable to wash or dress yourself?

24. Next I'd like to ask you about usual activities, for example, work, study, housework, family or leisure activities. Would you say you…
□ have no problems doing your usual activities?
□ have slight problems doing your usual activities?
□ have moderate problems doing your usual activities?
□ have severe problems performing your usual activities?
□ are unable to do your usual activities?

25. Next, I would like to ask you about pain and discomfort. Would you say you……
□ have no pain or discomfort?
□ have slight pain or discomfort?
□ have moderate pain or discomfort?
□ have severe pain or discomfort?
□ have extreme pain or discomfort?

26. Finally, I would like to ask you about anxiety and depression. Would you say you…….
□ are not anxious or depressed?
□ are slightly anxious or depressed?
□ are moderately anxious or depressed?
□ are severely anxious or depressed?
□ are extremely anxious or depressed?

27. I would now like to ask you a different task. To help you say how good or bad your health state is, I'd like you to try to picture in your mind a scale that looks a bit like a thermometer. The best state you can imagine is 100 at the top of the scale and the worst state you can imagine is 0 at the bottom. I would now like you to tell me the point on the scale where you would put your own health state today. (insert number 1 – 100 below)

Finally, the last few questions.

28. I know you have only recently joined the Walking for Health programme but based on your experiences so far, how satisfied are you with the Walking for Health programme? I will read out five responses so please let me know which one you agree with. *(interviewer to read out responses and select one)*

☐ I am very satisfied

☐ I am somewhat satisfied

☐ I am neither satisfied nor dissatisfied

☐ I am somewhat dissatisfied

☐ I am very dissatisfied

☐ Don't know

29. Do you think you will attend another Walking for Health walk in the future? I will read out five responses so please let me know which one you agree with. *(interviewer to read out responses and select one)*

☐ Definitely

☐ Probably

☐ Possibly

☐ Probably not

☐ Definitely not

☐ Don't know

30. Which of the following age categories do you fall within? *(interviewer to read out responses and select one)*

☐ 16-24

☐ 25-44

☐ 45 – 64

☐ 65+

☐ Prefer not to say

31. Could you tell me what the highest level of education you have completed is? I will read out some options so please let me know which one applies to you. *(interviewer to read out responses and select one)*

☐ Primary or middle school

☐ High school (school certificate, CSE, GCSE, O Level, O grade or equivalent)

☐ High school (Higher School Certificate, A Level, AS Level, or equivalent)

☐ College (vocational qualification) or apprenticeship

☐ University (Bachelor's degree, Master's degree or equivalent)

☐ University (research degree, PhD or equivalent)

☐ None of the above

32. **That's the last question I would like to ask you but do you have any other comments about Walking for Health that you would like to tell me? These could be positive or negative.** *(Interviewer to complete, a sample of verbatim quotes is important)*

Thank you very much for your time. As I mentioned at the start, we would like to give you a call back in about four months time so that we can see if anything has changed. Would this be ok?

☐ Yes

☐ No

Thank you. Goodbye.

Evaluation Follow-up Questionnaire

Good morning / afternoon /evening, my name is _____ and I work for Ecorys Survey. We understand that you have taken part in _____[insert name of walk]. Your local walk is run by Walking for Health and we would like to understand how, if at all, these walks benefit people like you, and as part of this, we spoke to you about _____ months ago. We would now like to ask you some more questions; they will only take about 15 minutes and it doesn't matter if you are no longer walking with the group. If now isn't a convenient time, may I arrange to call you at another time this week? We would then like to give you a final call in about four months time to see if anything has changed.

Are you happy to take part in this survey?

☐ Yes *(interviewer note: proceed with survey)*

☐ No *(interviewer note: check if they would like to take part in the survey in another format (e.g. posting a hard copy). If not, thank them for their time and end the survey)*

I will explain the tasks full as I go along but please interrupt me if you do not understand something or if things are not clear to you. Please also remember that there are no right or wrong answers. We are only interested in your personal view. You do not have to answer the questions if you do not want to and you can chose to opt out of the survey at any stage. We can also assure you that your responses will remain confidential and the information you provide will not be shared with anyone outside Ecorys and the University of East Anglia.

INTERVIEWER NOTE: **Please record the name of the walk and the name of the Walking for Health scheme, as confirmed by the information provided on the database.**

First, we would like to find out how much, if any, walking you are doing as part of Walking for Health.

1. **How long ago did you last attend a Walking for Health walk?** *(interviewer to complete number of months, or number of weeks or number of days)*

_____months ago OR _____ weeks ago OR _____ days ago

2. **Are you still taking part in _____[insert name of the walk]?** *(If no, interviewer to prompt if respondent is attending a different Walking for Health walk or none at all)*

☐ Yes (Go to Q8)

☐ No, but I am taking part in a different Walking for Health walk (Please provide the name of the walk and Go to Q8)

☐ No, I am not taking part in Walking for Health walks anymore (Go to Q3)

3. **I would like to find out why you are no longer attending Walking for Health walks. I'm going to read out some possible reasons and after each one, I'd like you to say either yes or no depending on if it applies to you. You can say yes to as many of the reasons that apply to you.** *(interviewer to read out responses and select all that apply)*

☐ I don't have time

☐ I don't enjoy it

☐ I don't feel well enough

☐ The walks were too difficult

☐ The walks were too easy

☐ It was too difficult to get to the walks

☐ I prefer to attend walks when the weather is warmer

☐ I joined another walking group

☐ I took up another activity

☐ I walk on my own or with friends now

Are there any other reasons that I haven't mentioned?

☐ Other reason Please state: _____

4. **When you were still taking part in Walking for Health walks how many walks did you typically attend each month?** *(Interviewer to complete)*

INTERVIEWER NOTE: **Please try to complete the average per month. If frequency is less than once a month, please complete the average per year**

_____ walks per month.

_____walks per year

5. **And how much time did you typically spend on a walk?** *(Interviewer to complete)*

_____ hours and _____minutes

6. **How far did you typically walk, if you know?** *(Interviewer to complete)*

_____miles or _____km

7. **I'd like to ask you how satisfied you were with the Walking for Health programme. Please say yes when I read out the level of satisfaction that applies to you.** *(interviewer to read out responses and select one)*

☐ I was very satisfied

☐ I was somewhat satisfied

☐ I was neither satisfied nor dissatisfied

☐ I was somewhat dissatisfied

☐ I was very dissatisfied

INTERVIEWER NOTE: **Skip to Q12**

8. **How many Walking for Health walks do you typically attend each month?** *(Interviewer to complete)*

INTERVIEWER NOTE: **Please try to complete the average per month. If frequency is less than once a month, please complete the average per year.**

_____ walks per month.

_____walks per year

9. **And how much time do you typically spend on a walk?** *(Interviewer to complete)*

_____ hours and _____minutes *(Interviewer to complete)*

10. **How far did you typically walk?**

_____miles or _____km *(Interviewer to complete)*

11. **I would like to know how satisfied you were with certain aspects of the walk you took part in. I will read out a list of statements and for each one, can you tell me if you were very satisfied, satisfied, neither satisfied nor dissatisfied, dissatisfied or very dissatisfied?** *(Interviewer to read out and select one per row)*

	Very satisfied	Satisfied	Neither satisfied nor dissatisfied	Dissatisfied	Very dissatisfied
The time of day of the group walk					
The frequency of the group walks					
The location of the group walks					
The distance the group walks					
The speed the group walks					
The walk leader					
The number of people that take part in the group walks					
The level of communication between the walk leader and you					
The Walking for Health programme overall					

In order for us to understand how the Walking for Health programme benefits people over time, I would like to ask you some questions about the amount of physical activity you take part in.

12. **In an average week, on how many days do you do a total of 30 minutes or more of physical activity, which was enough to raise your breathing rate? This might include sport, exercise and brisk walking with Walking for Health or at other times or cycling for recreation or to get to and from places, but should not include housework or physical activity that is part of your job.** *(select one)*

0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐

INTERVIEWER NOTE: **Compare response to previous survey and tailor following question appropriately.**

13. **That's more/less/the same number of days you stated when you previously undertook this survey. Without the Walking for Health scheme, do you think you would have still increased/decreased/maintained your physical activity by the same amount? I will read out four responses so please let me know which one you agree with.** *(interviewer to read out responses and select one)*

☐ Definitely not

☐ Possibly not

☐ Probably yes

☐ Definitely yes

☐ Don't know

14. **This question is about all the walking that you did solely for recreation, sport, exercise or leisure. In an average week (not including today), on how many days did you walk for at least 10 minutes at a time in your leisure time?** (*select one)*

0 ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐

15. **How much time do you usually spend on one of those days walking in your leisure time?**

(*interviewer to complete)*

_____ hours per day _____ minutes per day

INTERVIEWER NOTE: **Compare response to previous survey and tailor following question appropriately.**

16. **That's more/less/the same number of days you stated when you previously undertook this survey. Without the Walking for Health scheme, do you think you would have still increased/decreased/maintained your walking hours by the same amount? I will read out four responses so please let me know which one you agree with.** *(interviewer to read out responses and select one)*

☐ Definitely not

☐ Possibly not

☐ Probably yes

☐ Definitely yes

☐ Don't know

17. **This is about the time you spent sitting on weekdays, including time spent at work, at home, while doing course work and during leisure time. This may include time spent sitting at a desk, visiting friends, reading, or sitting or lying down to watch television. In an average week, how much time did you usually spend sitting on a week day?** (*interviewer to complete)*

_____ hours per day _____ minutes per day

INTERVIEWER NOTE: **Compare response to previous survey and tailor following question appropriately.**

18. **That's more/less/the same amount of time you stated when you previously undertook this survey. Without the Walking for Health scheme, do you think you would have still increased/decreased/maintained your walking hours by the same amount? I will read out four responses so please let me know which one you agree with.** *(interviewer to read out responses and select one)*

☐ Definitely not

☐ Possibly not

☐ Probably yes

☐ Definitely yes

☐ Don't know

19. Since joining Walking for Health and not including the walks you participate in as part of this programme, has the amount of time you spend participating in other sport, exercise or walking activities increased, decreased or stayed the same? (select one)

☐ Increased

☐ Decreased

☐ Stayed the same

☐ I didn't do any other sport activities before participating in Walking for Health

19a. (Open question) Which specific sport or exercise activities have you usually participated in since joining Walking for Health?

19b. (for those who answered 'increased' or 'decreased' to Q18) How many more, or less hours do you spend participating in other sport, exercise or walking activities compared with the time before you joined Walking for Health?
(Complete one) *Where possible, please complete the average hours per week only. If your participation is less frequent, please complete hours per month*

☐	More hours per week	☐	Less hours per week
☐	More hours per month	☐	Less hours per month

19c. (for those who answered 'stayed the same' to Q18) How many hours do you spend participating in other sport, exercise or walking activities?
(Complete one) *Where possible, please complete the average hours per week only. If your participation is less frequent, please complete hours per month*

☐	Hours per week	☐	Hours per week
☐	Hours per month	☐	Hours per month

19d. Without the Walking for Health scheme do you think you would have still increased/decreased/maintained this other physical activity by the same amount?

☐ Definitely not

☐ Possibly not

☐ Probably yes

☐ Definitely yes

☐ Don't know

I would now like you to answer some questions on your general wellbeing. This will help us to see if Walking for Health is contributing to any changes to your overall wellbeing.

20. **On a scale of 0 to 10, where 0 is 'not at all satisfied' and 10 is 'completely satisfied', how satisfied are you with your life?** *(Interviewer to complete)*

☐

INTERVIEWER NOTE: **Compare response to previous survey and tailor following question appropriately.**

21. **That's more/less/the same compared to what you stated when you previously undertook this survey. Without the Walking for Health scheme, do you think your satisfaction with your life would have increased/decreased/stayed the same by the same amount? I will read out four responses so please let me know which one you agree with.** *(interviewer to read out responses and select one)*

☐ Definitely not

☐ Possibly not

☐ Probably yes

☐ Definitely yes

☐ Don't know

22. **I am going to read out some statements about feelings and thoughts. Thinking about the last four weeks, for each one, I would like you to tell me whether you have experienced the feeling none of the time, rarely, some of the time, often, or all of the time.** *(Interviewer to read out and select one per row)*

	None of the time	Rarely	Some of the time	Often	All of the time
I've been feeling optimistic about the future					
I've been feeling useful					
I've been feeling relaxed					
I've been dealing with problems well					
I've been thinking clearly					
I've been feeling close to other people					
I've been able to make up my own mind about things					

23. **How often do you meet socially with relatives, friends or colleagues? I will read out six responses so please let me know which one you agree with.** *(Interviewer to read out responses and select one)*

☐ Never ☐ Less than once a month ☐ Several times a month ☐ Once a week

☐ Several times a week ☐ Every day ☐ Don't know

24. **How often do you feel lonely? I will read out four responses so please let me know which one you agree with.** *(Interviewer to read out responses and select one)*

☐ Often☐ Sometimes ☐ Rarely ☐ Never ☐ Don't know

We are also interested in what you think about your health at the current time, so that we can then measure impacts of the programme at a later date on participants' health. I will first ask you a few brief and simple questions about your own health state today. If you prefer not to answer any particular question, please say so.

INTERVIEWER NOTE: **It maybe necessary to remind the respondent regularly that the timeframe is today. If the respondent does not feel comfortable answering these questions, please skip to question 30.**

25. First, I would like to ask you about mobility, would you say that you…

INTERVIEWER NOTE: **Unlikely to need to read last response out.**

□ have no problems in walking about?
□ have slight problems in walking about?
□ have moderate problems in walking about?
□ have severe problems in walking about?
□ are unable to walk about?

26. Next, I would like to ask you about self care. Would you say you……

INTERVIEWER NOTE: Unlikely to need to read last response out.

□ have no problems washing or dressing yourself?
□ have slight problems washing or dressing yourself?
□ have moderate problems washing or dressing yourself?
□ have severe problems washing or dressing yourself ?
□ are unable to wash or dress yourself?

27. Next I'd like to ask you about usual activities, for example, work, study, housework, family or leisure activities. Would you say you…
□ have no problems doing your usual activities?
□ have slight problems doing your usual activities?
□ have moderate problems doing your usual activities?
□ have severe problems performing your usual activities?
□ are unable to do your usual activities?

28. Next, I would like to ask you about pain and discomfort. Would you say you……
□ have no pain or discomfort?
□ have slight pain or discomfort?
□ have moderate pain or discomfort?
□ have severe pain or discomfort?
□ have extreme pain or discomfort?

29. Finally, I would like to ask you about anxiety and depression. Would you say you…….
□ are not anxious or depressed?
□ are slightly anxious or depressed?
□ are moderately anxious or depressed?
□ are severely anxious or depressed?
□ are extremely anxious or depressed?

30. I would now like to ask you a different task. To help you say how good or bad your health state is, I'd like you to try to picture in your mind a scale that looks a bit like a thermometer. The best state you can imagine is 100 at the top of the scale and the worst state you can imagine is 0 at the bottom. I would now like you to tell me the point on the scale where you would put your own health state today. *(interviewer to insert number 1 – 100 below)*

31. **That's more/less/the same compared to what you stated when you previously undertook this survey. Without the Walking for Health scheme, do you think your overall health state would have increased/decreased/stayed the same by the same amount? I will read out four responses so please let me know which one you agree with.** *(interviewer to read out responses and select one)*

☐ Definitely not

☐ Possibly not

☐ Probably yes

☐ Definitely yes

☐ Don't know

Finally, the last few questions.

INTERVIEWER NOTE: If the respondent is no longer walking with Walking for Health (as per Q2), please skip question 32 and move to question 33.

32. **Do you think you will continue to attend Walking for Health walks in the future? I will read out five responses so please let me know which one you agree with.** *(interviewer to read out responses and select one)*

☐ Definitely

☐ Probably

☐ Possibly

☐ Probably not

☐ Definitely not

☐ Don't know

33. **Would you recommend Walking for Health to other people, such as colleagues, friends or family?** *(interviewer to select one)*

☐ Yes

☐ Maybe

☐ No

34. **That's the last question I would like to ask you but do you have any other comments about Walking for Health that you would like to tell me? These could be positive or negative.** *(Interviewer to complete, a sample of verbatim quotes is important)*

INTERVIEWER NOTE: If this is the second survey to be completed with the respondent, please read out statement A. If this is the third survey to be completed with the respondent, please read out statement B.

A. **Thank you very much for your time. As I mentioned at the start, we would like to give you a call back in about four months time so that we can see if anything has changed. Would**

this be ok?

☐ Yes

☐ No

B. Thank you very much for your time. Walking for Health may wish to contact some people involved in this study in future years to help with research and evaluation. Would you be happy to be contacted in the future?

☐ Yes

☐ No

Thank you very much for your time. Goodbye.

CASE STUDIES

Topic Guide for Scheme Co-ordinators

This topic guide is designed for scheme coordinators involved in Walking for Health. The topic guide should be treated as a flexible tool and the questions should be appropriately tailored to each individual. Prior to the interview, the researcher will review monitoring data related to the scheme.

Background

1. **How long have you been a Scheme Co-ordinator for?**

Probe for how long they have been involved in Walking for Health.

2. **What were your reasons / motivations for becoming a Scheme Co-ordinator?**

Probe for motivations for stepping up to a scheme co-ordinator and for getting involved in Walking for Health.

3. **Can you tell me what your role as Scheme Co-ordinator involves?**

Probe for how much walking they take part in.
Have the conditions for your role changed since we last spoke? How has this affected the way the scheme runs in your local area?

4. **In you opinion, what is the overall aim of the Walking for Health programme?**

Local Delivery of Walking for Health

5. **Can you describe your Walking for Health scheme?**

Probe for number of walks and locations, number and type of walks, number of volunteers, number of participants, plus any changes over time.

6. **What is the aim of your Walking for Health scheme?**

7. **Are you aware of any similar initiatives in your local area?**

Probe for how Walking for Health differs from other initiatives, or any areas of duplication or crowding out.

8. **How is your walking scheme funded?**

Probe for in-kind and financial resources and sources. Plus how they ensured that inputs are procured at a reasonable cost.
How did schemes who were successful in securing external funding manage this and why they are more confident in seeking funding
Motivations for commissioning and any significant barriers/plans to cut funding. If there has been a threat of withdrawal of in kind or financial support from LAs – how realistic is this and what would the consequences likely be?

Which part of LAs funding is currently from i.e. parks and leisure, social care or public health. How does this affect the way the scheme operates/ what the main target audiences are etc?
Impact of scheme coordinators having limited hours allocated to the programme, understanding LA funding for staff and other elements, impact of not having funding for scheme coordinator

9. Are there any threats to the sustainability of the scheme?

How vulnerable are they to funding cuts, would they be able to transition to voluntary led service etc
Do they have enough time to effectively deliver the scheme?
Probe for hours spent and what ideally would spend. Reasons for limited numbers of hours available.

10. Can you describe the involvement of any partners in your scheme?

Probe for partnership working at a national and local level (including Health and Wellbeing Boards and Commissioning Groups), the nature of partners' involvement and the added value of their involvement.
Implications of having no partners
Constraints to expanding partnership working
Examples of how partnership working helps schemes to extend reach into new communities

11. What are the barriers and enablers to the NHS incorporating Walking for Health as a core programme?

Referrals by health professionals: what is being done to engage them, successes and failures.
Do they use new HSCP section of website?

12. What other aspects of your partnership working are working particularly well?

Probe for any aspects that are working less well.

13. Do you have any particular groups of individuals that you aim to recruit to your walks?

Examples might be people affected by cancer, with long term health conditions or disabilities, from deprived areas, and older people
Efforts to target men and BME groups : successes and failures.
Targeting people with cancer and other long-term health conditions: successes and failures.
Why have they chosen those particular groups over others?
If not targeting, why not

14. How do you raise awareness of your Walking for Health scheme / walks?

Probe for successful awareness raising approaches, particularly for target groups, plus stakeholders. Explore extent to which they receive referrals from partners and the effectiveness of this. Also explore ways that the profile could be increased further.

Do they have promotional volunteers who are separate to walk leaders? How effective are these?

15. Can you describe the type of individuals that take part in your walks? How has the profile of your walkers changed over the last 12 months?

Probe for increases / decreases in numbers of walkers, new walkers, retention of walkers, changes in types of walkers.
Probe for whether they are recruiting inactive people or people who are stepping down their activity as a result of illness

16. **How do you ensure that your walks effectively cater for individuals with different needs?**

Probe for successful approaches of supporting people affected by cancer, with long term health conditions or disabilities, from deprived areas and older people. Explore approaches that are working well and less well and any walks that demonstrate good practice.Probe: catering for both people who want to step up and people that are having to step down

17. **What different walks do you offer and why? Has this changed recently due to accreditation?**

Probe: Implementing shorter walks – takeup and issues surrounding this. Have new audiences been attracted to these walks?
Which walks are health walks within the accreditation criteria and which are added extras that need to find new homes do they link with other organisations to keep longer walks running or does their own insurance cover them.

Progression walks for those who want something more strenuous?
Any schemes that also run progression walks - How do they encourage walkers to progress onto these from Walking for Health? Is this successful or are walkers reluctant to move on as they have formed friendships in their existing group?
Probe capacity for introducing new walks – what is possible given current vols etc.
Probe evening and weekend walks for workers
More info on regularity of walks, is there a benefit to walkers of having a pattern – does it help them to ensure they attend each time.
Probe why some schemes keep the location the same each time whereas others prefer different locations. Do different approaches work better indifferent settings i.e. urban v rural?

18. **How do you recruit and support volunteers for Walking for Health?**

Clarify number of volunteer walk leaders. Most schemes have either had an increase or a decline in the number of volunteers in the past few years. What has this change meant for the scheme?
Information on volunteers who are not leading walks: what are they doing and how do they feel about their activities, how do schemes get volunteers to do the other tasks
Probe for successful recruitment channels.
How volunteers have been recruited: explore if any attempts to recruit outside pool of current walkers (and if not, why not).
Methods of encouraging volunteer satisfaction and retention

19. **What aspects of your Walking for Health scheme do you think work particularly well? What do you think has helped you to be so successful in this area?**

Probe for anything that has worked less well.

20. **Have you faced any challenges delivering Walking for Health in your area? How have these been overcome?**

Probe for any challenges relating to recruiting new walkers (especially those in target groups), adapting the scheme to align with new national priorities, monitoring and evaluation, working with partners, recruiting and supporting volunteers etc.

21. **Without the national Walking for Health programme, to what extent do you think your walks would have still been delivered?**

National Delivery of Walking for Health

22. **How often do you communicate with the national Walking for Health team?**

Do they have a good relationship with the national team? Why or why not?

23. **What support do you receive from the Walking for Health team to help you deliver your scheme? Is this the right type and level of support?**

Probe for the type of support they receive (e.g. awareness raising, branding, staff and volunteer training, guidance, support for volunteers), whether it meets their needs, any gaps, and if anything could be improved.

Explore use of resources provided by national team including the 'volunteering village' , template press release etc

Probe for types of support that would be welcomed that don't receive at the moment and why needed e.g. grant applications

24. **How effective do you think the OHQ survey and database are for monitoring Walking for Health?**

Explore strengths and weaknesses / challenges of the OHQ survey, the database and any other monitoring processes. Probe for how effective these processes are and if anything could be improved.
what do they do to get the data inputted, challenges of keeping up to date. Why do some not use the database at all

25. **How effective is the Walking for Health branding?**

Explore the extent to which they use the national branding and how it supports the delivery of their local scheme.

Schemes will all now be required to use the national Walking for Health branding. Explore views on compulsory branding, if there has been any challenges with using this in conjunction with other logos they are required to use by funders etc. What benefits do they feel that using the branding brings them?

Explore use of free template that has been created which schemes can use – this is a free programme template with all the necessary branding that schemes can just drop their walk details in, same with posters as well.

Explore use of merchandise provided by the national team

26. **Are there any other benefits of being part of a national programme?**

27. **Overall, how effective have Ramblers and Macmillan been in managing Walking for Health?**

Probe for aspects that are working well and less well. If they were involved prior to 2012, explore how the new delivery arrangements compare to the previous ones. Probe for any benefits of having Ramblers and Macmillan involved, such as the profile of the organisations and whether their involvement has helped to secure in-kind resources.

28. **How effective was the cascade training?**

29. **Is there anything that could be done to improve the Walking for Health programme?**

Benefits

30. **How do you think Walking for Health benefits the individuals that take part in the walks?**

Probe for benefits to physical wellbeing, mental wellbeing, social inclusion etc.

31. **How do you think Walking for Health benefits the volunteers?**

Probe for benefits to skills and knowledge, physical wellbeing, mental wellbeing, social inclusion etc.

32. **How do you think Walking for Health benefits your partners?**

Probe for benefits for local health and social care economies and assist local public health delivery, plus benefits to Ramblers and Macmillan.

33. (If not covered above) **To what extent has Walking for Health supported increased partnership working between organisations?**

Probe for the type of partnerships created, whether these partnerships would have been established without the programme, and the extent to which they are likely to be sustained.

Sustainability

34. **What are your plans for your Walking for Health scheme over the next 12 months?**

Probe for whether they are looking to expand.

35. **To what extent do you think your Walking for Health scheme will be sustainable?**

Probe for how the scheme will be sustainable, the role of the National Walking for Health team in supporting sustainability, and if they require any support to make their scheme sustainable.

Other Comments

36. **What are the key lessons that have been learnt from this programme?**

37. **Do you have any other comments (positive or negative) about your involvement in Walking for Health?**

Topic Guide for Volunteers

This topic guide is designed for volunteers involved in Walking for Health, for example walk leaders. The topic guide should be treated as a flexible tool and the questions should be appropriately tailored to each individual.

Background

1. **How long have you been volunteering with Walking for Health for?**

2. **Prior to volunteering with Walking for Health, had you undertaken any other volunteering?**
Probe for whether they had previously volunteered with Ramblers or Macmillan.

3. **Before volunteering with Walking for Health, how physically active were you?**
Probe for the amount of walking they did and whether they took part in other walks / physical activities.

4. **How did you find out about Walking for Health?**
Probe for how long they have been involved in Walking for Health.

5. **What were your reasons / motivations for volunteering with Walking for Health?**
Probe for whether they have been involved in volunteering before.

6. **How much time do you spend volunteering with Walking for Health?**
Record average hours per week/month they spend volunteering with Walking for Health and explore frequency of volunteering.

7. **Can you describe the volunteering role you undertake through Walking for Health?**
Probe for the type of activities they undertake and how much time they volunteer (e.g. hours per week or per month).

Delivery of Walking for Health

8. **What do you enjoy most about volunteering with Walking for Health?**

9. **Is there anything you do not enjoy about volunteering with Walking for Health?**

10. **What support do you receive from the Walking for Health team to help you undertake your volunteering role? Is this the right type and level of support?**
Probe for the type of support they receive (e.g. training, guidance, support for monitoring), whether it meets their needs and if anything could be improved.

Particular benefits of the walk leader training.

11. **To what extent are you satisfied with your level of involvement in the management and running of the scheme?**

Explore methods of encouraging volunteer satisfaction and retention e.g. meetings / social gatherings

12. **Are you aware that Walking for Health is delivered by Ramblers and Macmillan? Do you think there any benefits of having these organisations involved?**

Do volunteers feel that they are receiving enough information about the national programme and what has the coordinator done to support with this, i.e. encouraged them to sign up to the volunteer newsletter?

13. **Are there any benefits of volunteering as part of a national programme?**

14. **In your opinion, what is the best way to encourage people to volunteer with Walking for Health?**

Interviewer note: Questions 13-19 are designed for walk leaders.

15. **Can you describe a typical Walking for Health walk that you lead?**

Probe for location of walk, time of walk, length of walk, number of participants, number of volunteers etc, plus any changes to the walks over time.

16. **Do you have any particular groups of individuals that you aim to cater for on your walks?**

Examples might be people affected by cancer, with long term health conditions or disabilities, from deprived areas, and older people

17. **Do you help to raise awareness of your Walking for Health walks? If so, how?**

Probe for successful awareness raising approaches, particularly for target groups, plus stakeholders. Explore extent to which they receive referrals from partners and the effectiveness of this. Also explore ways that the profile could be increased further.

18. **Can you describe the type of individuals that take part in your walks? How has the profile of your walkers changed over the last 12 months?**

Probe for increases / decreases in numbers of walkers, new walkers, retention of walkers, changes in types of walkers.

19. **How do you ensure that your walks effectively cater for individuals with different needs?**

Probe for successful approaches of supporting people affected by cancer, with long term health conditions or disabilities, from deprived areas and older people. Explore approaches that are working well and less well and any walks that demonstrate good practice.

20. **What aspects of your walks do you think work particularly well? What do you think has helped you to be so successful in this area?**

Probe for anything that has worked less well.

21. Have you faced any challenges delivering walks in your area? How have these been overcome?
Probe for any challenges relating to recruiting new walkers (especially those in target groups), catering for different individuals, finding suitable locations etc.

Benefits

22. What benefits have you experienced as a result of volunteering with Walking for Health?
Probe for the following benefits:

- *Skills and knowledge*
- *Phyiscal wellbeing (e.g. reduced illness, increased mobility)*
- *Mental wellbeing (e.g. confidence, feeling more positive)*
- *Social networks and inclusion*
- *Other*

For each benefit, explore the extent to which the benefit would have occurred without the programme and whether they are likely to lead to long-term benefits.

23. (If not covered above) **As a result of volunteering with Walking for Health, have your overall levels of walking changed at all?**
Probe for whether they have increased/decreased levels of walking outside of the Walking for Health walks, and the extent to which any changes would have occurred without the programme.

24. (If not covered above) **As a result of volunteering with Walking for Health, have your overall levels physical activity changed at all?**
Probe for stepping up, maintaining or stepping down physical activity levels, reduced / increased participation in other activities, and the extent to which any changes would have occurred without the programme.

25. As a result of taking part in Walking for Health, have you considered volunteering with the programme?
Probe for whether they already undertake volunteering, whether they are interested in volunteering with the programme or with other Ramblers or Macmillan initiatives.

Sustainability

26. Over the next 12 months, do you think you will continue to volunteer with Walking for Health? Why / why not?

27. In the future, how likely is it that you will get more involved with other activities or volunteering offered by Ramblers or Macmillan?
For example attending other walks run by Ramblers or attending events held by Macmillan.

28. **To what extent do you think Walking for Health will contribute to lasting benefits for you?**

Other Comments

29. **Would you recommend volunteering with Walking for Health to other individuals? Why/why not?**

Explore whether there are any particular types of people they would recommend the volunteering role to.

30. **Is there anything that could be done to improve the Walking for Health programme?**

31. **Do you have any other comments (positive or negative) about your involvement in Walking for Health?**

Topic Guide for Partners

This topic guide is designed for partners involved in Walking for Health, for example Local Authority or NHS. The topic guide should be treated as a flexible tool and the questions should be appropriately tailored to each individual.

Background

1. **Could you give me an overview of your role and your organisation?**

Probe for the aims and strategic priorities of the organisation and key activities.

2. **In what way is your organisation involved in Walking for Health?**

Probe for when the organisation got involved in Walking for Health (i.e. before or after Ramblers and Macmillan took over the programme in 2012) and what their role is.

3. **What was the motivation of your organisation for getting involved in Walking for Health?**

Probe for strategic fit with local plans or strategies, development of strategic partnerships, delivery of outcomes in response to local needs etc.

4. **In you opinion, what is the overall aim of the Walking for Health programme?**

Local Delivery of Walking for Health

5. **How does your organisation add value to Walking for Health?**

Probe for in-kind or financial inputs.

6. **How do you work with other partners (including Ramblers and Macmillan) to support the delivery of Walking for Health?**

Probe for partnership working at a national and local level, plus aspects that are working well and less well.

7. **Do you have any particular groups of individuals that you aim to involve in the walks?**

Examples might be people affected by cancer, with long term health conditions or disabilities, from deprived areas, and older people

8. **How effectively is Walking for Health engaging and working with particular target groups?**

Probe for engagement of people affected by cancer, with long term health conditions or disabilities, from deprived areas and older people. Also explore approaches that are working well and less well.

9. (If applicable) **How effectively is Walking for Health engaging and supporting volunteers?**

Probe for successful awareness raising approaches, particularly for target groups, the role of the partner organisation in supporting volunteers, and ways that the profile could be increased further.

10. **How, if at all, has the profile of Walking for Health changed over the last 12 months?**

Probe for increased awareness among participants and stakeholders, reasons for this, and ways that the profile could be increased further.

11. **Do you help to recruit and support volunteers for Walking for Health? If so, how?**

Probe for successful recruitment channels.

12. **What aspects of the Walking for Health scheme do you think work particularly well? What do you think has helped the scheme to be so successful in this area?**

Probe for anything that has worked less well.

13. **Have there been any challenges delivering Walking for Health in your area? How have these been overcome?**

Probe for any challenges relating to recruiting new walkers (especially those in target groups), adapting the scheme to align with new national priorities, monitoring and evaluation, working with partners, recruiting and supporting volunteers etc.

14. **Are you aware of any similar initiatives in your local area?**

Probe for whether the organisation delivers / funds any similar activities, how Walking for Health differs from other initiatives, or any areas of duplication or crowding out.

15. **Without the national Walking for Health programme, to what extent do you think your walks would have still been delivered?**

National Delivery of Walking for Health

16. How effective is the Walking for Health branding?
Explore the extent to which they use the national branding and how it supports the delivery of their local scheme.

17. Are there any benefits of being part of a national programme?

18. Overall, how effective have Ramblers and Macmillan been in managing Walking for Health?
Probe for aspects that are working well and less well. If they were involved prior to 2012, explore how the new delivery arrangements compare to the previous ones. Probe for any benefits of having Ramblers and Macmillan involved, such as the profile of the organisations and whether their involvement has helped to secure in-kind resources.

19. Is there anything that could be done to improve the Walking for Health programme?

Benefits

20. As a result of being involved in Walking for Health, has your organisation experienced any benefits?
Probe for whether the programme has supported their strategic priorities and aims.

21. (If not covered above) **To what extent has Walking for Health supported increased partnership working between organisations?**
Probe for the type of partnerships created, whether these partnerships would have been established without the programme, and the extent to which they are likely to be sustained.

22. How do you think Walking for Health benefits the individuals that take part in the walks?
Probe for benefits to physical wellbeing, mental wellbeing, social inclusion etc.

23. How do you think Walking for Health benefits the volunteers?
Probe for benefits to skills and knowledge, physical wellbeing, mental wellbeing, social inclusion etc.

Sustainability

24. Over the next 12 months, do you think you will continue to take part in Walking for Health?
Probe for any changes to the nature of their involvement.

25. To what extent do you think Walking for Health schemes will be sustainable locally?
Probe for how the schemes will be sustainable.

Other Comments

26. What are the key lessons that have been learnt from this programme?

27. Do you have any other comments (positive or negative) about your involvement in Walking for Health?

Topic Guide for Walkers

This topic guide is designed for individuals taking part in Walking for Health walks. It can be used to inform one to one interviews or focus groups. The topic guide should be treated as a flexible tool and the questions should be appropriately tailored to each individual.

Background and decision to join Walking for Health

1. **How long have you been attending Walking for Health walks?**

2. **Before taking part in Walking for Health walks, how physically active were you?**

Probe for the amount of walking they did and whether they took part in other walks / physical activities.

3. **How did you find out about Walking for Health?**

Explore how easy it was to find information about Walking for Health and if anything could be improved.

4. **What were your reasons / motivations for joining Walking for Health?**

Probe for physical activity reasons (stepping up, maintaining or stepping down), health reasons, social reasons etc. Explore if there was anything/ anyone that helped / encouraged them to get involved.

5. **Do you undertake any volunteering with Walking for Health?**

If yes, please consider asking some of the questions on the volunteer topic guide.

6. **Are you aware of any other walking groups in your area that you could have joined?**

Probe for reasons why they did not join other walking or physical activity groups.

Experiences of Walking for Health

7. **How often do you attend Walking for Health walks?**

8. **Can you describe a typical Walking for Health walk that you attend?**

Probe for location of walk, time of walk, length of walk, number of participants, number of volunteers etc.

9. **How satisfied are you with the pace and distance of the walks?**

10. **How satisfied are you with the walk leader(s)?**

Explore what the walk leaders' role is, how they help walkers, how they cater for different walkers, how well they lead the walk, how they communicate with walkers etc.

11. **What do you like about the Walking for Health walks?**

12. **Is there anything you don't like about the Walking for Health walks?**

13. **Is there anything that could be done to improve the walks?**

14. **Are you aware that Walking for Health is delivered by Ramblers and Macmillan? Do you think there any benefits of having these organisations involved?**

Benefits

15. **What benefits have you experienced as a result of taking part in Walking for Health walks?**

Probe for the following benefits:

- *Phyiscal wellbeing (e.g. reduced illness, increased mobility)*
- *Mental wellbeing (e.g. confidence, feeling more positive)*
- *Social networks and inclusion*
- *Other*

For each benefit, explore the extent to which the benefit would have occurred without the programme and whether they are likely to lead to long-term benefits.

16. (If not covered above) **As a result of taking part in Walking for Health, have your overall levels of walking changed at all?**

Probe for whether they have increased/decreased levels of walking outside of the Walking for Health walks, and the extent to which any changes would have occurred without the programme.
Probe how schemes encourage walkers move on to activities beyond Walking for Health.
Do they do additional 'everyday' walking as a result of being part of Walking for Health. i.e. do they walk more to get from a to b instead of taking the bus or driving now?

17. (If not covered above) **As a result of taking part in Walking for Health, have your overall levels physical activity changed at all?**

Probe for stepping up, maintaining or stepping down physical activity levels, reduced / increased participation in other activities, and the extent to which any changes would have occurred without the programme.

18. **As a result of taking part in Walking for Health, have you considered volunteering with the programme?**

Probe for whether they already undertake volunteering, whether they are interested in volunteering with the programme or with other Ramblers or Macmillan initiatives. Also explore whether there is anything that would encourage them to take up volunteering or stopping them from taking up volunteering..

Sustainability

19. **Over the next 12 months, do you think you will continue to take part in Walking for Health walks?**

Probe for any changes in participation levels.

20. **In the future, how likely is it that you will get more involved with other activities or volunteering offered by Ramblers or Macmillan?**

For example attending other walks run by Ramblers or attending events held by Macmillan.

21. **To what extent do you think Walking for Health will contribute to lasting benefits for you?**

Other Comments

22. **Would you recommend Walking for Health to other individuals? Why/why not?**

Explore whether there are any particular types of people they would recommend the walks to.

23. **Do you have any other comments (positive or negative) about your involvement in Walking for Health?**

Stakeholder topic guide

Background
1. Could you give me an overview of your role and your organisation? *Probe for the aims and strategic priorities of the organisation and key activities.*
2. Are you aware of Walking for Health schemes? What knowledge of Walking for Health did you have prior to being asked to take part in the interview. Please tell us what you know about the programme
Benefits of Walking
3. What is your view on the benefits of walking (esp. group walking) as a way of getting people more active and improving wellbeing? Compared to other activities?
4. What evidence are you aware of that supports the benefits of walking in improving physical activity and wellbeing? Do you know of the Walking Works report? If yes, has this influenced your thinking?
Relationship with Walking for Health
5. What do you see as the overall aim of the Walking for Health programme?
6. What is your organisation's connection to Walking for Health? *Probe for when the organisation got involved in Walking for Health (i.e. before or after Ramblers and Macmillan took over the programme in 2012) and what the extent of involvement is.*
7. Why were (are) you/your organisation interested in engaging with Walking for Health (or walk schemes generally)? Where does/could Walking for Health (or walk schemes) fit within your organisation's priorities and activities or the services you provide? ? *Probe for strategic fit with national/local plans or strategies, development of strategic partnerships, delivery of outcomes in response to local/population level needs etc .any barriers for them engaging in it / referring people / supporting schemes*
The partnership
8. Are you aware of the partnership responsible for the running of Walking for Health? *Probe for what they know about the organisations that have run Walking for Health over its history and in particular awareness of the current partnership that are running the programme, and the role that they both play in this?*
9. Do you have any links directly with either the Ramblers or Macmillan and if so, in what form?
10. Have you had any communication from the Walking for Health team directly as a result of your involvement? If yes, then what form did this take, and if not, what contact or support would help you in the future?
11. What do you see to be the challenges of this partnership delivering the programme?
12. What changes to the programme are you aware of as a result of it being run by the current partnership? **13. What impact do you feel these have had on the profile of Walking for Health? Do/would the changes make a difference to you in terms of how you view/support the programme?**
14. Overall, how effective have Ramblers and Macmillan been in managing Walking for Health? *Probe for aspects that are working well and less well. If they were involved prior to 2012, explore*

how the new delivery arrangements compare to the previous ones. Probe for any benefits of having Ramblers and Macmillan involved, such as the profile of the organisations and whether their involvement has helped to secure in-kind resources.
15. Do you/would you be willing to promote Walking for Health to your stakeholders? How and why or why not? What priorities should Walking for Health address in order for you to promote it?
16. Please let us know what, if any challenges you encounter when promoting/would foresee in promoting Walking for Health?
17. What more would you need to know about Walking for Health to encourage you to support the programme on a national / regional / local level?
18. Do you favour a more targeted approach to delivering health walks, focusing on specific groups, or do you think it's (more) appropriate to try and benefit the greatest number of people? *Probe for any specific target groups they would want to promote a scheme like this to*
19. (If applicable) **How effectively is Walking for Health (and other health walks programmes) engaging and working with particular target groups?** *Probe for engagement of people affected by cancer, with long term health conditions or disabilities, from deprived areas and older people. Also explore approaches that are working well and less well.*
20. (If applicable) **How effectively is Walking for Health engaging and supporting volunteers?** *Probe for successful approaches to recruiting and managing volunteers*
21. To what extent have Macmillam and the Ramblers supported partnership working and stakeholder involvement in Walking for Health locally? *Probe for the type of partnerships created, whether these partnerships would have been established without the programme, and the extent to which they are likely to be sustained.*
22. What other types of physical activity schemes compete for your attention, who are you most likely to engage with and why?
23. What level and kind of evidence are needed for you to promote a physical activity programme such as Walking for Health?
24. Do you have Walking for Health schemes locally? Are they successful? Would you change anything about the way they are run? What do you see to be the benefits to the schemes you have been involved with, of being part of Walking for Health?
Messaging and branding
25. What messaging relating to Walking for Health are you aware of?
26. Do you think Walking for Health's messaging is correct for attracting those who are the least active to Walking for Health? *Probe on the role of the branding.*
27. Do you think Walking for Health's messaging and approach are correct for attracting key target groups including those with long term health conditions including cancer? How else do you think these groups can best be targeted?
Improving Walking for Health's profile / presence
28. What sense/opinion do you have of Walking for Health's current profile/presence?
29. (If applicable) How, if at all, has the profile of Walking for Health changed over the last 12 months?

Probe for awareness among participants and stakeholders, reasons for this, and ways that the profile could be increased further.
30. Have you accessed the Walking for Health website? What do you think of the content?
31. Have you been in contact with Walking for Health staff?
32. Do you help to raise awareness of Walking for Health programme locally? *Probe for successful awareness raising approaches, particularly for target groups, plus stakeholders. Explore ways that the profile could be increased further.*
33. What role do/could Health and Social Care professionals play in promoting Walking for Health as a form of treatment? Why do you think they do this / not do this (as applicable)?
34. What more could be done to encourage Health and Social care professionals to recommend their clients to Walking for Health?
35. What suggestions do you have for Walking for Health to enhance its profile across the health and social care sector locally / nationally?
Sustainability
36. To what extent do you think Walking for Health schemes are sustainable locally? *Probe for how schemes will be sustainable and the role of the National Walking for Health team in supporting sustainability.*
37. When commissioning services related to health and physical activity, what are your top three priorities that Walking for Health should address (or did address that others didn't if they have previously commissioned Walking for Health)?
38. Who in your opinion who are the main competitors to Walking for Health re physical activity commissioning in your area?
39. What type or level of evidence is required by you to fund Walking for Health. Prompts to include increased physical activity or economic savings?
40. In commissioning do you tend to prioritise projects which benefit the greatest number of people, even in a small way, or do you tend to focus on targeting smaller groups who need programmes the most?
41. What do you perceive to be the barriers and enablers for commissioning physical activity programmes in comparison to other prevention programmes?
42. How do you think your relationship with Walking for Health will evolve if at all over the next 12 months? **43.** *Probe for any changes to the nature of their involvement.*
44. How would you like to see Walking for Health develop in the next 3 years?
45. Do you have any other comments (positive or negative) about Walking for Health?

Annex Two: List of stakeholder consultees

External Stakeholders

Stakeholder organisation	Key Contact and position
Department of Health	Beelin Baxter - Senior Physical Activity Policy
Public Health England	Justin Varney, Deputy Director of Well Being
Sport England	Kay Thomson - Strategic Lead for Health
Devon CC	Tina Henry
Dudley Clinical Commissioning Group	Balraj Johal
Royal College of Medicine	Helen Cooke - Head of Innovation Networks
MIND	Gavin Atkins - Community Programmes and Grants team

Internal stakeholders

Stakeholder organisation	Key Contact and position
Macmillan	Juliet Bouverie – Director for Services and Influencing
	Jacquetta Fewster - Walking for Health project manager
Ramblers	Benedict Southworth - CEO
	Jackie Hayhoe– programme manager

Annex Three: Additional information on methodology

Pedometer Research

Everyone participating in the survey was asked at the end of their first telephone interview if they would be willing to wear a pedometer for two one-week periods. The contact details of those expressing willingness to do this were sent to the team at UEA and pedometers were dispatched (where a unit was available) within a working week to ensure the device was worn as quickly as possible after the participant had attended their first walk. The pedometer used was the Yamaxx Digi-Walker CW-700 device. This is commonly used in research studies as it has an on-board memory meaning it can be read by the research team rather than requiring the participant to return a reading, plus the 'clamshell' design means it can be sealed shut which helps prevent reactivity associated with participants being able to read their own step-counts.

All participants were sent a consent form, instruction sheet, plus wear diary with their pedometer. The instruction sheet asked participants to wear the pedometer during waking hours for a seven day period starting on the Monday after they received the device. The wear diary allowed them to record times that the device was not worn (for example they forgot to wear it or were swimming) but these diaries were generally very poorly completed or not returned and hence were not used in this research. Each participant returning a worn pedometer at baseline was sent another four months later and asked to repeat wear, and this constituted the follow-up. As the device has a two week memory (the best of any pedometer available on the market) participants were asked to return it immediately after completing wear so that their data was not lost. All participants were sent an email message (or text message if no email was available) reminding them to return the device. In some cases participants contacted the research team because they had not been able to wear the device when instructed. In these cases they were asked to wear the device the following week. As the Digiwalker memory only stores the cumulative total for an entire week, it was not possible to determine if the device was worn or not on any given day and therefore all values presented are based on an assumption the device was worn for 7 days as specified on the included instructions.

Cost-effectiveness analysis (chapter 5)

Break down of NHS Costs avoided and calculation of health outcomes

Calculation steps NHS Cost avoided	Year 1	Year 2	Year 3	Year 4	Year 5	Total of treatment cost averted
Type 2 Diabetes	£7,444	£42,828	£139,579	£270,907	£514,415	£975,173
Coronary Heart Disease	£21,676	£87,466	£170,144	£229,596	£277,106	£785,988
Cerebrovascular disease (Stroke)	£33,340	£129,437	£237,484	£295,780	£33,116	£1,027,157
Breast Cancer	£0	£0	£0	£0	£0	£0
Colorectal Cancer	£0	£0	£0	£0	£0	£0
Dementia	£0	£0	£0	£0	£0	£0
Depression	£31,889	£119,649	£207,407	£236,155	£236,155	£834,296
Total	£94,349	£379,379	£754,615	£1,032,438	£1,361,833	£3,622,614

The NHS costs avoided are calculated as the number of cases averted within each disease group as a product of the cost for each year. The costs averted in each year are then summated as the total treatment cost averted, to calculate the final NHS cost avoided as presented in Table 5.6a. The costs associated with the disease group were searched and defined from the literature.[115116117118119120]

The calculation of the total QALYs gained is presented below. For each disease group, the total QALYs averted and expected have been calculated over the 5 year period (representing the time horizon taken for the first scenario). The total QALYs averted and expected have been calculated on the number of walking for health participants, the average population QALY value and the QALY disutility for each

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disease group (defined from the literature as a value between 0 and 1). Through the model simulation, the number of expected cases and the number of averted cases for each disease group is computed. The total QALYs averted is then calculated as the number of participants multiplied by the population average QALY value minus the number of averted cases as a product of the disease disutility. The total QALYs expected is calculated as the number of participants multiplied by the population average QALY value minus the number of expected cases as a product of the disease utility.

Calculation Health Outcomes	Total QALYs averted in 5 years	Total QALYs expected in 5 years	Total QALYs gained in 5 years
Type 2 Diabetes	202490.02	202497.25	7.23
Coronary Heart Disease	202277.63	202516.30	239.68
Cerebrovascular disease (Stroke)	202325.46	202513.46	188.00
Breast Cancer	202496.09	202496.09	0.00
Colorectal Cancer	202496.09	202496.09	0.00
Dementia	202496.09	202496.09	0.00
Depression	202264.62	202531.39	267.78
Total	1416844.98	1417547.67	702.7

Example
Year 1, number of type 2 diabetes expected cases = 3 (A)
Population Average QALY = 0.7536 (B)
Type 2 Diabetes Disutility = 0.015 (C)
Number of Participants = 53741 (D)

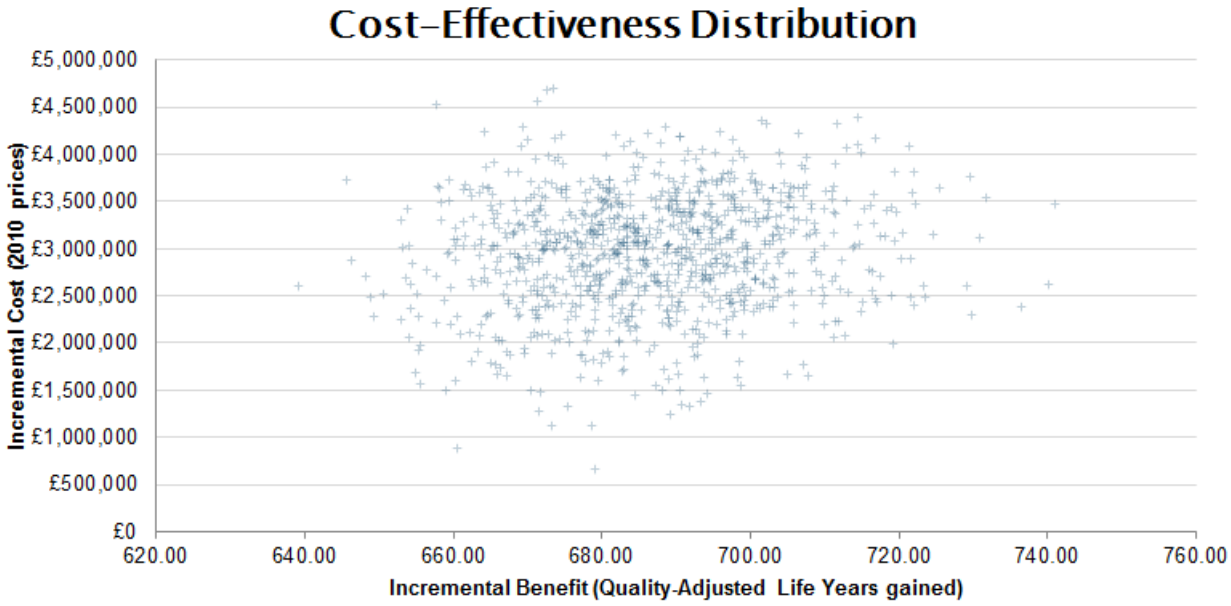
=[(D)*(B) – (A)*(C)] = Expected QALYs in Year 1

The total QALYs expected for the five years is calculated as the summation of the expected QALYs over the five years, calculated in the same manner as above.

Probabilistic sensitivity analysis

Due to the many assumptions made surrounding the input parameters, sensitivity analysis was conducted to test the robustness of the assumptions on the initial result. The input parameters in this case are assigned a range of distributed inputs and the model can randomly select one value within the range specified for each input, to present the result. The cost-effectiveness plane is produced when 1,000 iterations are run to record the result each time for each iteration. This presents the probability each result, when inputs are varied around the uncertainty will be cost-effective. Each point represents the two components of the ICER against one another – costs vs benefits. This shows how each component varies around its mean and how each component varies with respect to each other. Figure 1 shows the cost-effectiveness distribution when uncertainties around the input parameters are varied in probabilistic sensitivity analysis.

Figure 1 Cost-effectiveness distribution



A very dispersed pattern, rather than a closely concentrated one, indicates that we must take care particularly in interpreting the single number ICER (the average value masks the variation underneath).

Figure 2 presents the cost-effectiveness acceptability curve which compares the results of the ICER values from the probabilistic sensitivity analysis with the threshold willingness to pay. As the threshold rises, the proportion of simulations being cost-effective increases. At the £30,000 NICE threshold value, all the ICER 1000 iterations are cost-effective. Therefore, the probability that the programme is cost-effective is 100%. The curve also gives a good understanding of what the probability of cost-effectiveness will be given how much the funder is willing to pay per QALY gained.

Figure 2 Cost-effectiveness acceptability curve

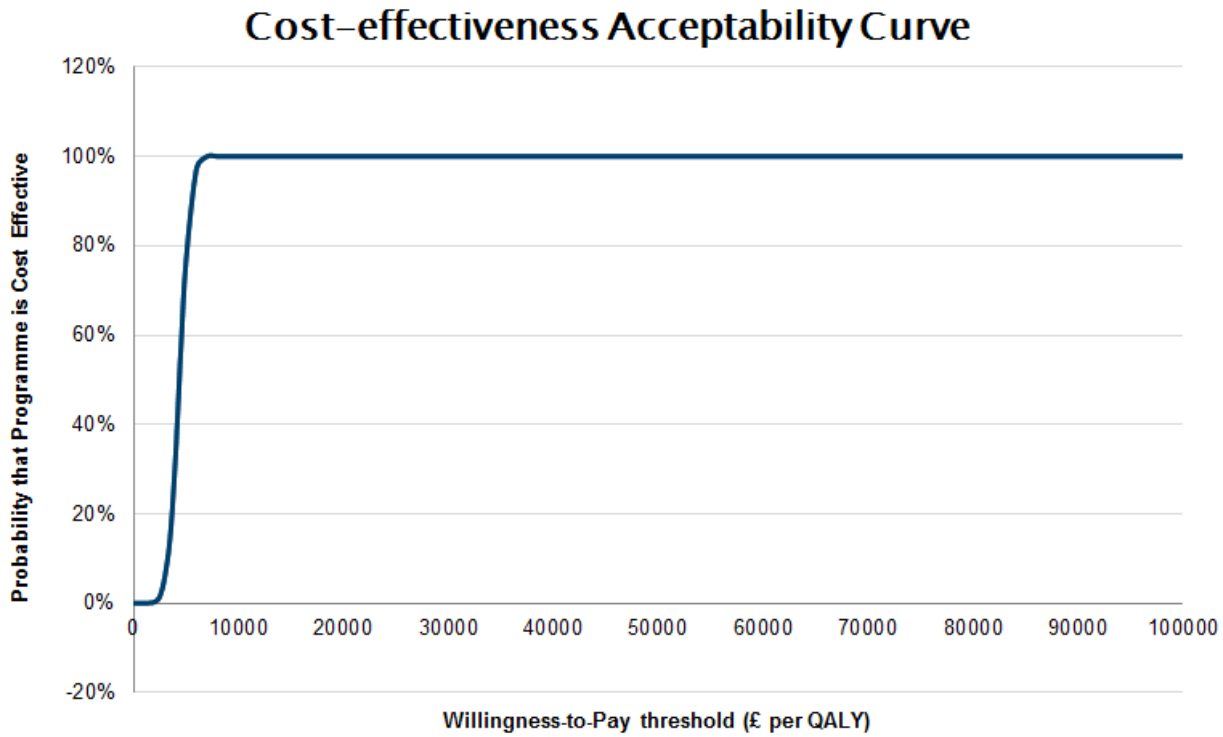
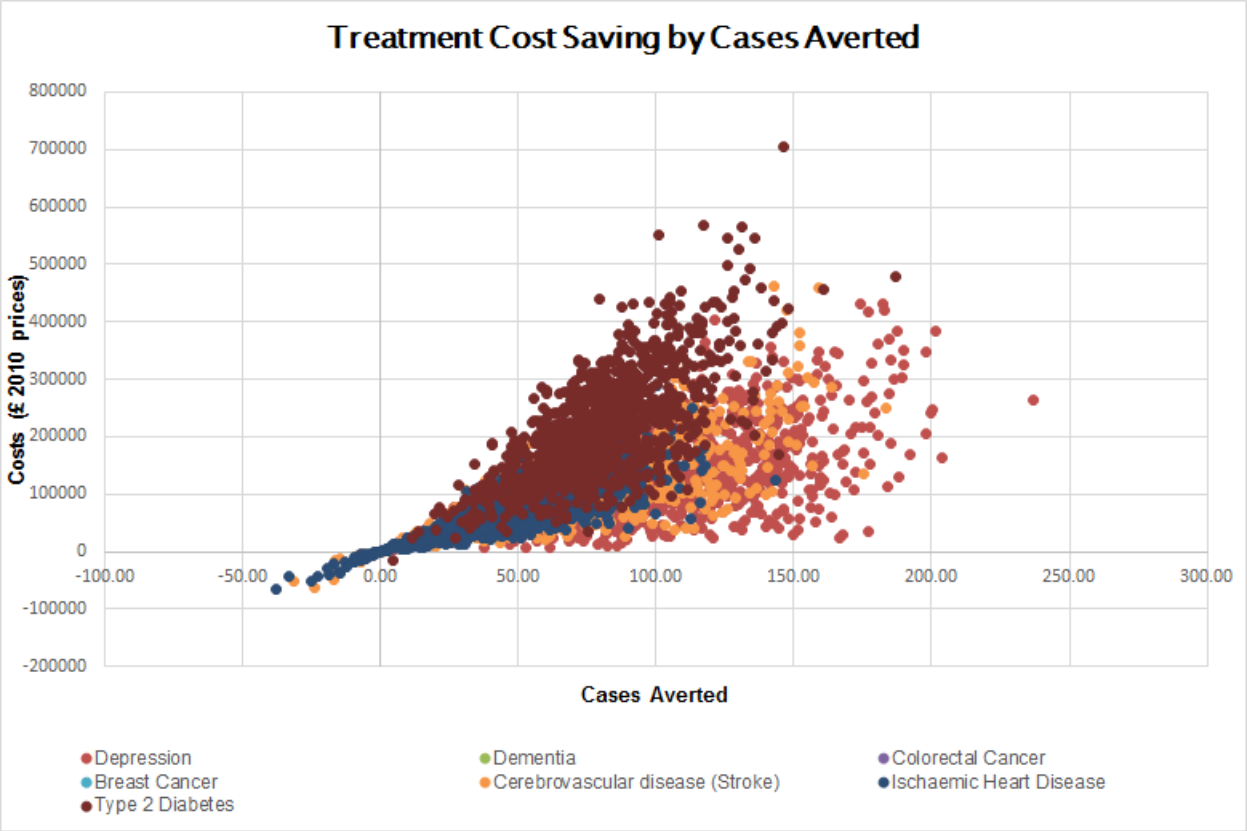


Figure 3 displays the variability of the results for each simulation and each disease as the number of cases averted and the consequent reduction in treatment costs. For each disease, the number of cases averted and the savings or cost differs. For a number of diseases, there are negative cases averted, which are the disease cases occurring in spite of the health walks provision. The distribution of the graph shows that a large number of depression and type 2 diabetes cases will be averted. Additionally, cases of stroke and ischaemic heart disease will be averted at a certain cost value. Diseases such as breast cancer, colorectal cancer, and dementia do not appear to be averted. This is due to the time to effect of the intervention. The benefits to health can take a length of time to influence some diseases, which leads to different lags. The model adjusts for this by assuming different lag lengths depending on the disease. For Ischaemic heart disease, Stroke and Depression, we assume a 2 year lag, while for Type 2 diabetes we assume a 3.2 year lag and for cancers and dementia we assume a 17 year lag.

Figure 3 Treatment cost saving by cases averted



ECORYS

Annex Four: Documents reviewed

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