

# **Implementation of ‘CLICK into Activity’ in South Somerset: Social Prescribing through primary care referral of ‘at risk’ populations to community leisure services**

Final Evaluation Report

2015-2018

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## **Final Evaluation Report**

**2015-2018**

**September 2018**

This final report was produced by Emma Bird and Jane Powell from the Centre for Public Health and Wellbeing at the University of the West of England, Bristol (UWE Bristol).

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# **Executive Summary**

## **Background**

Physical inactivity is an important and largely avoidable cause of ill health, costing the National Health Service and the UK economy billions in direct and indirect expenditures (Public Health England, 2016). An increase in long-term conditions and an ageing population has created pressure on the delivery of services in general practice. This has led to General Practitioners (GPs) and commissioners advocating and developing collaborative working practices with social prescribing services in the community (Kimberlee, 2015). Social prescribing schemes allow GPs to refer patients to a non-medical service with the aim of improving patients' health and wellbeing (Bickerdike et al., 2017).

In March 2013, Sport England launched a Lottery-funded initiative called 'Get Healthy Get Active' (GHGA), investing in numerous UK-based projects designed to tackle inactivity through participation in sport. CLICK into Activity, a social prescribing initiative based in South Somerset, was one of sixteen projects to receive backing in 2015 from Sport England during round two of GHGA funding. The preventive approach taken through CLICK into Activity was to refer inactive people from general practice and encourage individuals to play a central role in engaging with exercise specialists in community leisure services to improve health and wellbeing and support them to become more physically active.

## **CLICK into Activity**

### **Aims and objectives**

Briefly, the CLICK into Activity programme was a twelve-week physical activity programme for inactive, hypertensive, pre-diabetic, diabetic or overweight/obese people residing in South Somerset, UK. It works through referral from general practice to a tailored physical activity programme delivered in community leisure centres and venues by trained exercise specialists.

The overall aim of CLICK into Activity was to engage individuals in sport and physical activity in an area where there are known to be high levels of physical inactivity. At the

time of funding there were 12,181 CLICK Federation patients diagnosed with pre-diabetes (N=443), type II diabetes (N=2,674), or hypertension (N=9,064). In response to these figures, the specific target outcomes for CLICK into Activity agreed with Sport England were as follows:

- To engage 2,160 adults diagnosed with hypertension, pre-diabetes, or diabetes with CLICK into Activity.
- To support 1,080 inactive adults diagnosed with hypertension, pre-diabetes, or diabetes to participate in at least one 30-minute session of sport or physical activity.
- To support 780 inactive adults diagnosed with hypertension, pre-diabetes, or diabetes to participate in at least one 30-minute session of sport or physical activity per week for 12 weeks.
- To support 550 inactive adults diagnosed with hypertension, pre-diabetes, or diabetes to participate in at least one 30-minute session of sport or physical activity per week after 6 months of intervention.
- To support 432 inactive adults diagnosed with hypertension, pre-diabetes, or diabetes to participate in at least one 30-minute session of sport or physical activity per week after 1 year of intervention.

### **Project partners and project management**

CLICK into Activity was led by South Somerset District Council. Project partners included:

- Somerset Activity and Sports Partnership (SASP)
- CLICK GP Federation
- Somerset Health and Wellbeing Board
- Public Health at Somerset County Council
- University of the West of England, Bristol (UWE)

A steering group, comprised of members representing project partners was formed at the start of the project, with meetings held roughly every three months. Two exercise specialists employed by South Somerset District Council were responsible for programme delivery in community leisure centres and venues located across the target area.

## **Project funding**

CLICK into Activity commenced in September 2015 and was funded for three years. It was funded through Sport England's 'Get Healthy Get Active' funding stream. A total of £334,140 was awarded to South Somerset District Council in 2015 to deliver and evaluate the programme. A further £45,000 was provided by Somerset Health and Wellbeing Board, £22,500 from South Somerset District Council, £56,160 from the Broadway, Chard, Crewkerne and Ilminster (CLICK) Federation, and £16,000 from Somerset Activity and Sports Partnership (SASP). The total funding for this project was £453,800.

## **Target audience**

Referral to the CLICK into Activity programme was conducted in nine general practices. Patients diagnosed with pre-diabetes, type II diabetes, hypertension, or those that were obese or overweight were invited to participate in CLICK into Activity via two channels:

- Direct contact with surgery staff during a routine appointment.
- Mail-out by GP surgery to patients diagnosed with one of the stated long-term conditions.

Surgery staff were able to make direct referrals to an exercise specialist, either making an appointment or directing the individual to reception to book an appointment. As the programme became more established, newspaper stories, social media, leaflets, posters and word of mouth were all used to promote the programme in the target area. An 'inactive' individual was defined according to the Sport England screening tool: The Single Item Measure for Physical Activity (SIM PA). Referred patients reporting a total of 30 minutes or more of physical activity on zero or one days in the past week were deemed eligible to participate in the programme.

## **Changes to programme management, partners and delivery**

During the project, there were changes in project personnel:

- The South Somerset District Council (SSDC) project manager changed roles during the first year of the project (January 2016). The role was quickly filled by an existing SSDC member of staff with knowledge of the CLICK into Activity programme.

- One of the original project partners, Intelligent Health, was removed from the project in February 2016. Their role was to collect and process participant data for the purposes of the evaluation. The collection and processing of data was filled by existing project partner, UWE, who extended their remit to complete this task. The change in study protocol was approved by the UWE Ethics Committee on 16<sup>th</sup> October 2016.
- In March 2017 one of the two exercise specialists employed by SSDC left the project. The role was filled in May 2017 by another locally-based exercise specialist experienced in working with inactive or low-active individuals.

#### Changes in project delivery:

- Due to technical software issues there was a six-month delay in initiating participant recruitment.
- There was difficulty in recruiting participants from two of the CLICK GP Federation surgeries. In November 2017, following consultation with the project steering group Crewkerne Health Centre surgery was removed from the programme. This was after the surgery had left the GP Federation and the project was no longer a priority for them. In June 2018, West One surgery – also located in Crewkerne – was removed from the project after leaving the GP Federation.
- One surgery, originally located outside of the CLICK GP Federation, expressed interest in joining the programme and after joining the Federation was invited to join the project in June 2017.
- In response to participant feedback, adapted sports sessions delivered by exercise specialists were reduced for the final year of the project, with additional and more popular circuit training sessions provided.
- In the original evaluation protocol 10 randomly selected participants were to be invited to wear an accelerometer (an electronic device that measures physical activity levels) for seven days at baseline and then again for seven days at the end of the programme, to compare self-reported questionnaire responses with objectively measured physical activity. There was difficulty recruiting participants to this aspect of the evaluation, and of those that did agree to wear an accelerometer the data were found to be invalid.

Changes to patient eligibility criteria:

- In an attempt to boost recruitment, the eligibility criteria were discussed with the steering group and Sport England and it was agreed that inactive obese/overweight adults (with a body mass index (BMI) >25) were eligible to participate in the programme (December 2017) in addition to those diagnosed with pre-diabetes, type II diabetes, or hypertension.

## **Evaluation of CLICK into Activity**

### **Centre for Public Health and Wellbeing (UWE, Bristol)**

In September 2015 a research team from the Centre for Public Health and Wellbeing Research, UWE Bristol, was commissioned to undertake an evaluation of CLICK into Activity. The Centre is multidisciplinary and spans physical, health and social sciences. Its aim is to impact directly on population health and wellbeing, and to enable ethical and reflexive contributions to policy and practice. Its mission is to advance knowledge, inspire people and transform futures, addressing the grand challenges and wicked issues in public health locally, nationally and internationally.

### **Evaluation aims and objectives**

The evaluation was based on the RE-AIM framework (Glasgow et al., 1999). RE-AIM is a multi-level framework that allows for the measurement of public health effects of complex interventions and also identifies the barriers and facilitators to implementation. Using a combination of **process**, **outcome** and **economic** evaluation methods, RE-AIM generates evidence about the public health impact of a programme for communities, organisations, or regions interested in replicating promising practices (Jauregui et al., 2015).

The broad aim of the evaluation was to better understand the **population impact** of CLICK into Activity on inactive adults diagnosed as pre-diabetic, diabetic, hypertensive, or overweight/obese (body mass index (BMI) >25).

To achieve these aims, the evaluation had five specific objectives:

1. To better understand the **REACH** of CLICK into Activity through the measurement of intervention engagement, participation rates and participant characteristics
2. To better understand the **EFFECTIVENESS** of CLICK into Activity through the measurement of changes in primary and secondary outcomes relating to physical activity, sport, and quality of life
3. To better understand CLICK into Activity **ADOPTION** through an assessment of delivery settings and staffing
4. To better understand CLICK into Activity **IMPLEMENTATION** through an assessment of programme delivery and programme costs
5. To better understand CLICK into Activity **MAINTENANCE** over time through an assessment of long-term follow-up outcomes

## **Methods**

A mixed methods approach was utilised to generate evidence about the process, outcomes and economic costs of CLICK into Activity.

- Survey data were collected from CLICK into Activity participants at four time points (baseline, 3-month follow-up, 6-month follow-up, 12-month follow-up).
- Qualitative telephone interviews were conducted with programme participants and a range of project stakeholders.
- Attendance data were collected from all CLICK into Activity sessions.
- Data on resource use and actual costs incurred were recorded to estimate training and programme delivery costs.



## Key findings

Summary results are presented according to each domain of the RE-AIM framework.

### Reach

#### Respondent characteristics

- A total of 621 adults were recruited to the project and provided baseline data. Of these, 602 were found to be 'inactive' and eligible for the programme (96.9%). These individuals formed the baseline sample.
- The majority of participants were referred due to a diagnosis of pre-diabetes, diabetes, or hypertension (N = 558, 92.7%). 22 obese or overweight individuals were referred to the programme (3.65%) and 22 individuals diagnosed with one of the original long-term conditions and obesity/overweight were referred (3.65%).
- Most participants were female (N = 379, 63%) and more than half of participants were aged 70 years and above (N = 309, 51.3%).
- The vast majority of participants identified as being of White ethnic origin (N = 580, 96.3%).
- Just over one fifth of individuals were qualified to degree level (N = 128, 21.3%), and the majority of participants reported an annual household income in the £10,000-£19,999 bracket (N = 177, 29.4%).
- Roughly two thirds of respondents described themselves as being in a relationship (N = 394, 65.5%).
- Approximately 60% reported having a long-term illness or disability.
- More than 80% of respondents were categorised as overweight (N = 134, 22.3%, BMI 25-29kg/m<sup>2</sup>) or obese (N = 369, 61.3%, ≥30.0kg/m<sup>2</sup>).

#### CLICK into Activity participation

- A total of 326 attended at least one 30-minute CLICK into Activity session during the 12-week programme (54.2%).
- There were no differences in sex, ethnicity, education, marital status and body mass index (BMI) among those that attended at least one CLICK into Activity session compared with non-participants. However, a significantly larger

proportion of participants was aged 70 or above compared with non-participants (55.2% vs 46.5%, respectively), and a significantly higher proportion of non-participants reported having a long-term disability compared with participants (65.5% vs 56.4, respectively).

### Qualitative feedback

- Feedback indicated that the programme was reaching the target population but there was disappointment among respondents regarding the number of people that joined the 12-week programme.
- Interviews identified a range of barriers and facilitators to programme participation, from individual-level factors such as personal motivation, management of existing health issues, and the importance of joining a group containing ‘people like me’, to social-/environmental-level factors including class scheduling, social support from friends and family and health care professionals, and perceptions of the physical environment (e.g. weather, access, safety, area aesthetics).

### Effectiveness

#### Changes in survey responses from baseline to three-month follow-up

- A total of 602 participants eligible for the CLICK into Activity programme completed baseline measures, with 186 participants completing measures at 3-month follow-up, 80 participants at 6-month follow-up and 41 participants at 12-month follow-up. Follow-up survey response rates were relatively low (particularly at 6- and 12-month follow-up) so the findings presented should be interpreted with caution.
- A comparison of baseline and 3-month follow-up data revealed significant positive changes in:
  - Total minutes of sport per week
  - Total minutes of physical activity per week
  - Total vigorous physical activity per week
  - Total moderate physical activity per week
  - Total walking per week

- Mental wellbeing score
- There was a positive trend from baseline to 3-month follow-up body mass index and grip strength scores, but these trends were not found to be statistically significant.
- A comparison of respondent outcomes according to participation in CLICK into Activity revealed no significant differences in:
  - Total minutes of physical activity per week
  - Total vigorous and moderate physical activity per week
  - Total walking per week
  - Body mass index
  - Grip strength
- Total minutes of sport per week and mental wellbeing scores were found to be significantly higher among those that did not attend a CLICK into Activity session.

#### Qualitative feedback

- Individuals described numerous positive changes in their general outlook and perceptions of their health and wellbeing as a result of being referred to CLICK into Activity.
- A range of positive changes, including increased mobility, weight loss, reduced symptoms from long-term conditions, increased core strength, increased purpose and feelings of happiness were identified.

### **Adoption**

#### Surgery recruitment

- The majority of participants were recruited from Springmead surgery (N = 123, 20.4%), closely followed by Essex House surgery (N = 106, 17.6%).
- Two of the original surgeries (Crewkerne Health Centre and West One) did not have adequate resources to recruit participants to the programme, and were therefore withdrawn as CLICK into Activity referral locations.
- One surgery, originally located outside of the CLICK GP Federation, expressed interest in joining the programme and after joining the Federation was invited to join the project in June 2017.

## Qualitative feedback

- Most agreed that GP referral to social prescription is a good idea, but there was also consensus that more needs to be done to improve GP surgery engagement with projects similar to this.
- Project participants and stakeholders alike reported issues and concerns related to the process of GP referral to CLICK into Activity.
- Exercise specialists valued mail-drops by GP surgeries as a good method for alerting eligible individuals to the study and credited the strategy with boosting recruitment figures.
- There was also acknowledgement that the referral process is not simple; GPs and primary care services are under increasing pressure.
- Some respondents provided suggestions for improving the referral process. Interviews also explored setting-based feedback, with respondents highlighting the need for activity-appropriate space.

## Implementation

### Attendance

- Attendance registers revealed that 54.2% (N = 326) of those recruited to the programme participated in at least one 30-minute CLICK into Activity session provided.
- The average number of sessions attended by those that attended at least one session was nine (Mean = 8.63, SD = 5.97).
- Adherence among participants that attended at least one session ranged from 1 session (N = 25, 8%) to 32 sessions (N = 3, 0.94%).
- A total of 104 participants attended at least 12 sessions during the course of the 12-week programme (32%).

### Costs and resources

- From a funder perspective the total cost of implementing CLICK into Activity over three years was £174K.
- An average cost estimate of the CLICK twelve-week programme was £535 per person enrolled and attending at least one session (N=326).

- There is potential for cost variation in implementing CLICK into Activity delivery in each community setting based on the role of General Practitioners in emphasising the importance of physical activity for 'at risk' patients and ensuring that enrolments turn up for the first session and are retained in the programme.
- The opportunity cost comparisons of implementing the CLICK into Activity Programme compared with the direct cost of disease management of common health conditions related to physical inactivity demonstrate the potential value for money of GP referral to physical activity programmes delivered in a community setting.

### Qualitative feedback

- The role of exercise specialists in providing a safe and supportive environment for participants to not only engage with the programme but also to participate in programme activities was seen to be a critical feature of programme success. Participants described the importance of the exercise specialists' interpersonal communication skills in providing them with the confidence to attend the first sessions, and frequently mentioned the value of having a 'friendly face' supporting them from their initial appointment right through to the end of the 12-week programme.
- The content of CLICK into Activity sessions was popular, with particular praise for circuit-style activities, and the way that sessions were tailored according to individuals' needs.
- Participants also described feelings of increased control over their activity levels at CLICK into Activity sessions as sessions progressed. The exercise specialists were seen to provide support and guidance to aid participants to work towards a suitable activity target.
- Class attendance was generally perceived to be good, and most respondents were keen to interact and build social relationships with others in a similar situation.
- CLICK into Activity sessions were found to promote social support and build a sense of connectedness, with many respondents reporting feelings of social isolation prior to referral to the programme.
- Respondents identified concerns with the advertising and promotion of CLICK into Activity, and they made suggestions for improving programme uptake.

- Communication between project stakeholders was also seen to be integral to successful implementation. Support provided by the project lead (SSDC) was particularly valued by the exercise specialists delivering the programme. Exercise specialists also referred to communication difficulties with software providers during the early stages of the project and reported that they would prefer to use paper-based methods for recording information.
- The main implementation issue described by the exercise specialists related to technology failures during the early stages of project delivery. They described problems with recording attendance due to a lack of signal in rural areas, and the negative implications of this on their work load.

## **Maintenance**

### Changes in survey responses from baseline to six- and 12-month follow-up

- Follow-up survey completion rates at 6- and 12-month follow-up were particularly low (6-month N = 80; 12-month N = 41) and means that interpretation of findings should be considered with caution.
- A comparison of baseline with 6- and 12-month follow-up data revealed significant positive changes in:
  - Total minutes of sport per week
  - Total minutes of physical activity per week
  - Total vigorous physical activity per week
  - Total moderate physical activity per week
  - Mental wellbeing score
- Total walking per week was found to be significantly higher at 6-month follow-up, although this was not observed at 12-month follow-up.

### Qualitative feedback

- The exit route strategy for participants leaving the programme after 12-weeks was highlighted with respondents commenting favourably on the numbers of options available and reporting positive intentions engaging with services offered.

- Interviews with project stakeholders identified the importance of CLICK into Activity as a means for developing links with agencies interested in promoting a similar health and wellbeing agenda.

## **Recommendations**

### **Programme development**

1. Establish a strong multi-agency team. Schedule regular meetings throughout the life of the project that ensure all stakeholder views are valued.
2. Careful consideration of programme eligibility criteria is important. The initial CLICK programme criteria were restricted to those diagnosed with pre-diabetes, diabetes, or hypertension. Once eligibility was relaxed to include obese and overweight participants, recruitment was seen to improve and more inactive individuals targeted by the programme were reached.
3. Consider possible barriers related to individuals' engagement and how these will be mitigated during programme delivery. Barriers might be individual (For example, personal motivation, lacking confidence or self-efficacy, etc.), or social (For example, concerns about making friends, class scheduling, etc.) or environmental (For example, class location, access to venue, safety concerns, adverse weather).
4. Consider the programme infrastructure that will be required (For example, IT systems) and put in place contingency plans to mitigate possible problems (For example, software failure or access issues).
5. Employ a programme delivery team that is passionate about physical activity and cares for every individual to pass through the programme. Employees should be supportive and positive role models that have experience working with, or an appreciation of, inactive individuals and how to tailor programme activities to their specific needs.

### **Marketing and recruitment strategy**

6. A multifaceted approach to marketing GP referral programmes such as CLICK into Activity should be developed and implemented in advance of project recruitment. Strategies such as targeted mail-drops from GP surgeries to potentially eligible

patients were perceived to be particularly effective and may help to boost recruitment from the outset of a project.

7. An enthusiastic marketing and recruitment strategy should be maintained throughout the life of the project, with continual investment from project partners. This will help the project to build momentum and increase engagement.
8. Work with GP surgeries in promoting the programme, while appreciating the workload pressures that primary care is facing. Reassuring practices that the GP referral programme is working towards improved health outcomes, and should not be viewed as competition may help to foster positive relationships.

### **Programme implementation**

9. Class content should be tailored to the individuals' needs and abilities. This will help to promote feelings of self-worth, self-efficacy and increased control over one's health and wellbeing outcomes.
10. Programme delivery teams should recognise and value individuals' improvements in mental health in the same way as progress in physical health outcomes.
11. Programme delivery teams should be aware that not all health professionals will appreciate the value of physical activity for prevention and may need further information or training to develop their knowledge base.
12. Be aware of existing community assets, beyond primary care, and consider how to engage them in promoting the programme to the community (For example, Health Trainers).
13. Promote the social benefits of group-based physical activity. It provides an opportunity to meet new people, make friends, and participate alongside people in a similar situation.
14. If a programme is time-limited, offer a wide range of alternative activity groups in the local area. Encourage participants to attend taster sessions recommended by the delivery team before exiting the programme to aid transition. Building relationships with locally-based group leaders is strongly recommended.

### **Conclusions**

CLICK into Activity, a social prescribing initiative based in South Somerset, was one of sixteen projects to receive funding in 2015 from Sport England. The preventive approach



taken through CLICK into Activity was to refer inactive people from general practice and encourage individuals to play a central role in engaging with exercise specialists in community leisure services to improve health and wellbeing and support them to become more physically active. The 12-week programme targeted inactive individuals diagnosed with hypertension, pre-diabetes, diabetes and those who were classed as overweight or obese. The RE-AIM framework provided a useful approach to measure the public health effects of CLICK into Activity and also to identify the barriers and facilitators to programme implementation.

Numerous challenges including low recruitment, limited long-term follow-up data, changes to project management, project partners and programme delivery, were encountered during implementation. The ongoing monitoring of programme implementation during meant that many of these challenges were mitigated by the hard work of the project management team and dedication of exercise specialists, evidence of which is clear from the positive findings reported. This evaluation has identified key learning points from the implementation of CLICK into Activity that should be used to inform the development of future community-based physical activity programmes.

Overall, the short-term findings reported here suggest that CLICK into Activity has resulted in positive outcomes for many participants, with significant improvements observed for a range of outcomes assessed through this evaluation: total minutes of sport per week; total minutes of physical activity per week; total vigorous physical activity per week; total moderate physical activity per week; total walking per week; and, mental wellbeing score. These findings are complemented by in-depth qualitative feedback from CLICK into Activity participants, project partners and exercise specialists responsible for programme delivery, with CLICK into Activity perceived favourably as a strategy for promoting physical activity among the inactive. An assessment of programme resources and costs indicated that the opportunity costs of implementing CLICK into Activity demonstrate the potential value for money of GP referral to physical activity programmes delivered in a community setting.

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# **1. Introduction**

## **1.1 Background**

### **1.1.1 Physical inactivity**

Physical inactivity is an important and largely avoidable cause of ill health, costing the National Health Service and the UK economy billions in direct and indirect expenditures. The cost of absenteeism, early retirement and social benefits has to be added to the cost of drugs to treat diabetes and its complications, outpatient visits and inpatient treatments (Public Health England, 2016). The prevalence of diabetes and pre-diabetes is also increasing in the UK (Diabetes UK, 2018).

It is estimated that physical inactivity contributes to almost one in ten premature deaths (based on life expectancy estimates for world regions) from coronary heart disease and one in six deaths from any cause (Lee et al. 2012). An analysis of the Global Burden of Diseases, Injuries and Risk Factors Study found physical inactivity and low physical activity to be among the ten most important risk factors in England (Newton et al. 2015).

### **1.1.2 'Get Healthy Get Active' initiative**

In March 2013, Sport England launched a Lottery-funded initiative called 'Get Healthy Get Active' (GHGA), investing in numerous UK-based projects designed to tackle inactivity through participation in sport. CLICK into Activity, an initiative based in South Somerset, was one of sixteen projects to receive backing in 2015 from Sport England during round two of GHGA funding.

### **1.1.3 South Somerset in context**

South Somerset is home to an estimated 166,526 individuals. It has an ageing population, with those aged 45 and above higher than the English average. Women are marginally over-represented in the district (50.9%) (Office for National Statistics, 2016). Census data revealed that the vast majority of individuals in South Somerset identify as being of White ethnic origin (98.1%), with the Black and Minority Ethnic (BME) population lower than the English average, at 1.9% (Office for National Statistics, 2011).

The overall aim of CLICK into Activity was to engage individuals in sport and physical activity in an area where there are known to be high levels of physical inactivity. Through this, it aimed to reduce NHS direct treatment costs through collaborative working between general practice and community leisure services in South Somerset. These costs are vast. The Total Annual Diabetes Expenditure Direct Cost Estimates for Somerset Clinical Commissioning Group (CCG) was £1.38m in 2013-2014 and the Total Expenditure for Somerset CCG for five, of over 20 conditions preventable and manageable by physical activity was £4.84m (2013-14) (Public Health England, 2016). These five conditions were ischaemic heart disease, ischaemic stroke, breast cancer, colon/rectum cancer and diabetes mellitus. £4.84m is a direct cost estimate to CCGs for the five conditions (i.e. not costs to other parts of the NHS and the wider health and social care system). The estimates provided here are a significant underestimate of the full economic cost and therefore a starting point in understanding the economic costs of physical inactivity as a result of treating health outcomes through collaborative working between general practice and community leisure services.

#### **1.1.4 Social prescribing**

An increase in long-term conditions and an ageing population has created pressure on the delivery of services in general practice. This has led to General Practitioners (GPs) and commissioners advocating and developing collaborative working practices with social prescribing services in the community. Social prescribing schemes allow GPs to refer patients to a non-medical service with the aim of improving patients' health and wellbeing (Bickerdike et al., 2017). The aim is to share the burden of managing long term health conditions using a holistic approach to prevention of disease (and its associated costs) through a shift away from a reactive, disease-focused model of care (Kimberlee, 2016). A social prescribing scheme might involve debt advice, volunteering activities, or physical activities (Pescheny et al., 2018). The preventive approach taken through CLICK into Activity was to refer inactive people from general practice and encourage individuals to play a central role in engaging with exercise specialists in community leisure services to improve health and wellbeing and support them to become more physically active.

### **1.1.5 CLICK into Activity**

Briefly, the CLICK into Activity programme is a twelve-week physical activity programme for inactive, hypertensive, pre-diabetic, diabetic or overweight/obese people residing in the Broadway, Chard, Langport, Ilminster and Crewkerne (CLICK) GP Federation (South Somerset, UK). It works through referral from general practice to a tailored physical activity programme delivered in community leisure centres and venues by trained exercise specialists. Prior to CLICK into Activity, there was no provision in the CLICK Federation of designated programme interventions for GP referral that met NICE recommendations for adults diagnosed as pre-diabetic, diabetic or hypertensive to receive 'intensive healthy lifestyle interventions' designed to increase overall physical activity levels and/or improve diet (NICE, 2012). As such, the overall aim of CLICK into Activity was to work collaboratively with General Practices to engage individuals in sport and physical activity in an area where there are known to be high levels of physical inactivity.

## **1.2 Project management and partners**

CLICK into Activity was led by South Somerset District Council. Project partners included:

- Somerset Activity and Sports Partnership (SASP)
- CLICK GP Federation
- Somerset Health and Wellbeing Board
- Public Health at Somerset County Council
- University of the West of England, Bristol (UWE)

A steering group, comprised of members representing project partners was formed at the start of the project, with meetings held roughly every three months. Two exercise specialists employed by South Somerset District Council were responsible for programme delivery in community leisure centres and venues located across the target area. Training in Motivational Interviewing techniques was provided to exercise specialists.

## **1.3 Funding**

CLICK into Activity was funded through Sport England's 'Get Healthy Get Active' funding stream. A total of £334,140 was awarded to South Somerset District Council in 2015 to deliver and evaluate the programme. A further £45,000 was provided by Somerset Health and Wellbeing Board, £22,500 from South Somerset District Council, £56,160 from the Broadway, Chard, Langport, Ilminster and Crewkerne (CLICK) Federation, and £16,000 from Somerset Activity and Sports Partnership (SASP). The total funding for this project was £453,800.

### **1.3.1 Centre for Public Health and Wellbeing, UWE Bristol**

In September 2015 our research team at the Centre for Public Health and Wellbeing Research (was Public Health and Wellbeing Research Group), UWE Bristol, was commissioned to undertake an evaluation of CLICK into Activity. The Centre for Public Health and Wellbeing is multidisciplinary and spans physical, health and social sciences. Our aim is to impact directly on population health and wellbeing, and to enable ethical and reflexive contributions to policy and practice. Our mission is to advance knowledge, inspire people and transform futures, addressing the grand challenges and wicked issues in public health locally, nationally and internationally.

We undertake research that makes a difference to practice. We want to influence policy. We want the public – society – to be involved in building assets in their communities, and to benefit from our work. We want to create change – we believe in social justice and equality of opportunity globally. Perhaps most of all, we want to help those in society that are most vulnerable and affected by structural inequalities across the life-course. Research in public health and wellbeing reflects systems thinking, partnership working and synergies between different professional and academic contributions to public health. Our research is translational and aspires to contribute to real world scenarios, therefore aiming to enable ethical and reflexive contributions to policy and practice.

## **1.4 Purpose of this report**

This report presents the findings from the evaluation of the CLICK into Activity programme and it includes an overview of evaluation methods, results, key findings and recommendations.



## **2. Project implementation**

### **2.1 CLICK into Activity aim and objectives**

The overall aim of CLICK into Activity was to engage individuals in sport and physical activity in an area where there are known to be high levels of physical inactivity. At the time of funding there were 12,181 CLICK Federation patients diagnosed with pre-diabetes (N=443), type II diabetes (N=2,674), or hypertension (N=9,064). In response to these figures, the specific target outcomes for CLICK into Activity agreed with Sport England were as follows:

- To engage 2,160 adults diagnosed with hypertension, pre-diabetes, or diabetes with CLICK into Activity
- To support 1,080 inactive adults diagnosed with hypertension, pre-diabetes, or diabetes to participate in at least one 30-minute session of sport or physical activity
- To support 780 inactive adults diagnosed with hypertension, pre-diabetes, or diabetes to participate in at least one 30-minute session of sport or physical activity per week for 12 weeks
- To support 550 inactive adults diagnosed with hypertension, pre-diabetes, or diabetes to participate in at least one 30-minute session of sport or physical activity per week after 6 months of intervention
- To support 432 inactive adults diagnosed with hypertension, pre-diabetes, or diabetes to participate in at least one 30-minute session of sport or physical activity per week after 1 year of intervention

### **2.2 Project timeline**

The project commenced in September 2015 and was funded for three years. In early 2018 the project lead (South Somerset District Council) agreed with funders Sport England a change to the project delivery end date. CLICK into Activity project delivery will end at the end of December 2018. There was no change to the independent evaluation end date (31<sup>st</sup> August 2018).

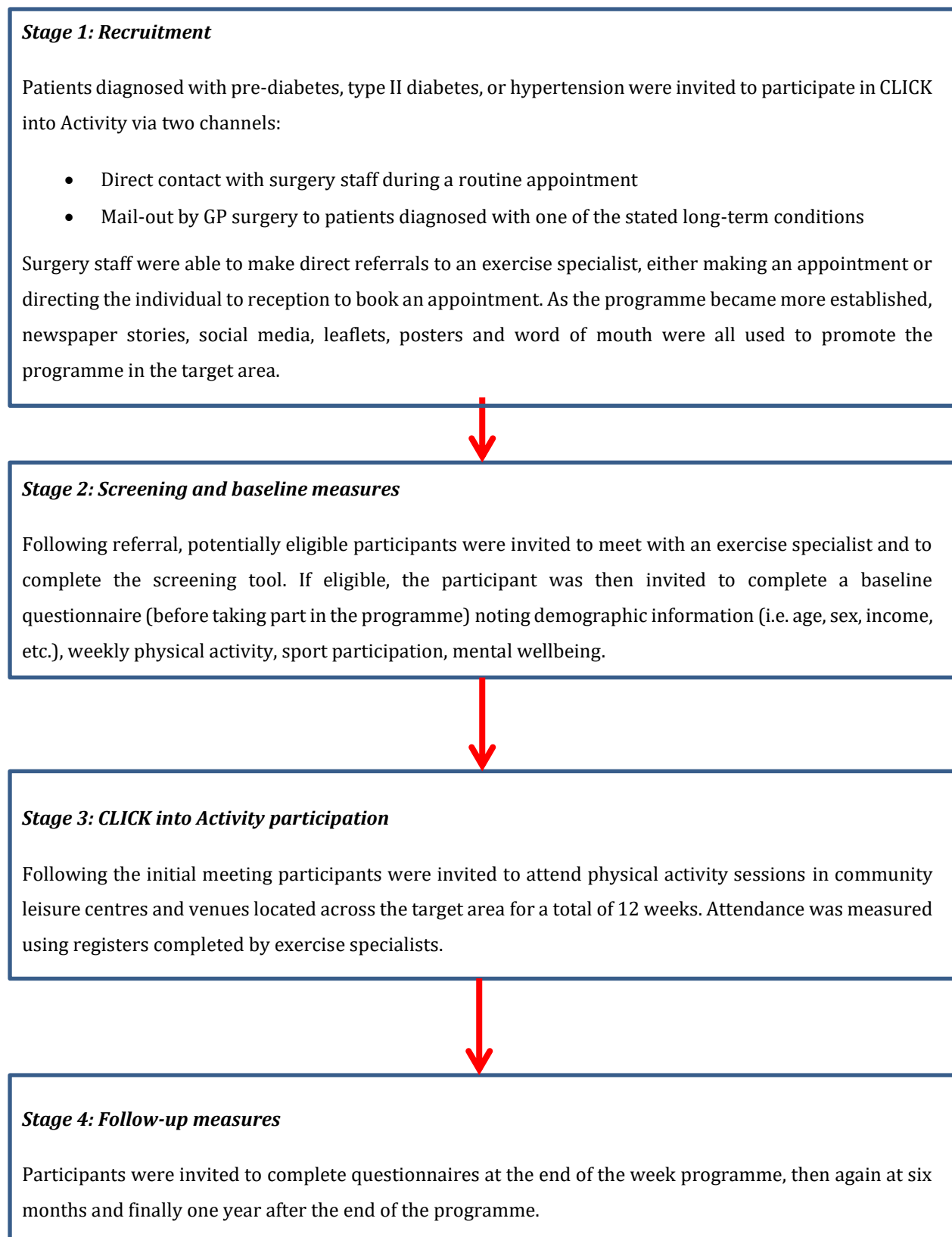
## **2.3 Target audience**

At the start of the project the CLICK into Activity programme targeted inactive CLICK GP Federation patients diagnosed with pre-diabetes, type II diabetes, or hypertension. An 'inactive' individual was defined according to the Sport England screening tool: The Single Item Measure for Physical Activity (SIM PA). Referred patients reporting a total of 30 minutes or more of physical activity on zero or one days in the past week were deemed eligible to participate in the programme.

## **2.4 Project pathway**

The route from referral to participation in CLICK into Activity to the end of the project is presented below in Figure 2.1.

Figure 2.1. CLICK into Activity project pathway



## **2.5 Changes to programme management, partners and delivery**

During the project, there were changes in project personnel, project delivery, and project eligibility criteria:

### **2.5.1 Personnel changes**

- The South Somerset District Council (SSDC) project manager changed roles during the first year of the project (January 2016). The role was quickly filled by an existing SSDC member of staff with knowledge of the CLICK into Activity programme.
- One of the original project partners, Intelligent Health, was removed from the project in February 2016. Their role was to collect and process participant data for the purposes of the evaluation. The collection and processing of data was filled by existing project partner, UWE, who extended their remit to complete this task. The change in study protocol was approved by the UWE Ethics Committee on 16<sup>th</sup> October 2016.
- In March 2017 one of the two exercise specialists employed by SSDC left the project. The role was filled in May 2017 by another locally-based exercise specialist experienced in working with inactive or low-active individuals.

### **2.5.2 Delivery changes**

- Due to technical software issues there was a six-month delay in initiating participant recruitment.
- There was difficulty in recruiting participants from two of the CLICK GP Federation surgeries. In November 2017, following consultation with the project steering group Crewkerne Health Centre surgery was removed from the programme. This was after the surgery had left the GP Federation and the project was no longer a priority for them. In June 2018, West One surgery – also located in Crewkerne – was removed from the project after leaving the GP Federation.
- One surgery, originally located outside of the CLICK GP Federation, expressed interest in joining the programme and after joining the Federation was invited to join the project in June 2017.

- In response to participant feedback, adapted sports sessions delivered by exercise specialists were reduced for the final year of the project, with additional and more popular circuit training sessions provided.
- In the original evaluation protocol 10 randomly selected participants were to be invited to wear an accelerometer (an electronic device that measures physical activity levels) for seven days at baseline and then again for seven days at the end of the programme, to compare self-reported questionnaire responses with objectively measured physical activity. There was difficulty recruiting participants to this aspect of the evaluation, and of those that did agree to wear an accelerometer the data were found to be invalid.

### **2.5.3 Changes to eligibility criteria**

- In an attempt to boost recruitment, the eligibility criteria were discussed with the steering group and Sport England and it was agreed that inactive obese/overweight adults (with a body mass index (BMI) >25) were eligible to participate in the programme (December 2017) in addition to those diagnosed with pre-diabetes, type II diabetes, or hypertension.

## 3. Evaluation approach and methods

### 3.1 RE-AIM evaluation framework

The evaluation was based on the RE-AIM framework (Glasgow et al., 1999). RE-AIM is a multi-level framework that allows for the measurement of public health effects of complex interventions and also identifies the barriers and facilitators to implementation. Using a combination of **process**, **outcome** and **economic** evaluation methods, RE-AIM generates evidence about the public health impact of a programme for communities, organisations, or regions interested in replicating promising practices (Jauregui et al., 2015).

### 3.2 Aims and objectives

The broad aim of the evaluation was to better understand the **population impact** of CLICK into Activity on inactive adults diagnosed as pre-diabetic, diabetic, hypertensive, or overweight/obese (body mass index (BMI) >25).

To achieve these aims, the evaluation had five specific objectives:

1. To better understand the **REACH** of CLICK into Activity through the measurement of intervention engagement, participation rates and participant characteristics
2. To better understand the **EFFECTIVENESS** of CLICK into Activity through the measurement of changes in primary and secondary outcomes relating to physical activity, sport, and quality of life
3. To better understand CLICK into Activity **ADOPTION** through an assessment of delivery settings and staffing
4. To better understand CLICK into Activity **IMPLEMENTATION** through an assessment of programme delivery and programme costs
5. To better understand CLICK into Activity **MAINTENANCE** over time through an assessment of long-term follow-up outcomes

A summary of the RE-AIM framework and how each of its domains were applied to the CLICK into Activity programme is presented below in Table 3.1.

Table 3.1 The RE-AIM Framework and its application to CLICK into Activity

| Domain   | Data source  |
|--|--|
| <p>REACH</p> <ul style="list-style-type: none"> <li>• Number of eligible individuals that were recruited to the study</li> <li>• Number of eligible individuals that participate in CLICK into Activity sessions</li> <li>• Comparison of respondents' socio-demographic characteristics based on participation in CLICK into Activity</li> <li>• Comparison of respondents' physical activity and mental wellbeing based on participation in CLICK into Activity</li> <li>• Reflections on recruitment and participation</li> </ul> | <ul style="list-style-type: none"> <li>• Baseline surveys</li> <li>• Attendance registers</li> <li>• Baseline and follow-up surveys, and attendance registers</li> <li>• Baseline and follow-up surveys, and attendance registers</li> <li>• Qualitative interviews</li> </ul> |
| <p>EFFECTIVENESS</p> <ul style="list-style-type: none"> <li>• Physical activity and mental wellbeing outcomes</li> <li>• Reflections on programme effectiveness</li> </ul>   | <ul style="list-style-type: none"> <li>• Baseline and follow-up surveys</li> <li>• Qualitative interviews</li> </ul>   |
| <p>ADOPTION</p> <ul style="list-style-type: none"> <li>• Number of GP surgeries recruited</li> <li>• Number of delivery sites</li> <li>• Reflections on adoption of CLICK into Activity and individual and setting-levels</li> </ul>   | <ul style="list-style-type: none"> <li>• Qualitative interviews</li> <li>• Qualitative interviews</li> <li>• Qualitative interviews</li> </ul>   |
| <p>IMPLEMENTATION</p> <ul style="list-style-type: none"> <li>• Respondent adherence to the programme</li> <li>• Reflections on implementation of CLICK into Activity (organisational support for delivery, positives and negatives of the programme and suggestions for improvement)</li> <li>• CLICK into Activity cost and resource use estimates</li> </ul>   | <ul style="list-style-type: none"> <li>• Attendance registers</li> <li>• Qualitative interviews</li> <li>• Economic evaluation</li> </ul>  |
| <p>MAINTENANCE</p> <ul style="list-style-type: none"> <li>• Physical activity and mental wellbeing outcomes</li> <li>• Reflections on sustainability plans for CLICK into Activity</li> </ul>  | <ul style="list-style-type: none"> <li>• Baseline and follow-up surveys</li> <li>• Qualitative interviews</li> </ul>   |

### **3.3 Study population**

Referral to the CLICK into Activity programme was conducted in eight General Practices located in the CLICK GP Federation (Broadway, Chard, Ilminster and Crewkerne) and one GP surgery which later joined the Federation (Langport surgery). Patients diagnosed with pre-diabetes, type II diabetes, hypertension, or those that were obese or overweight were invited to participate in CLICK into Activity via two channels:

- Direct contact with surgery staff during a routine appointment.
- Mail-out by GP surgery to patients diagnosed with one of the stated long-term conditions.

Surgery staff were able to make direct referrals to an exercise specialist, either making an appointment or directing the individual to reception to book an appointment. As the programme became more established, newspaper stories, social media, leaflets, posters and word of mouth were all used to promote the programme in the target area. To identify those individuals that were classified as 'inactive', potentially eligible participants were invited to completion Sport England 'Single Item Measure for Physical Activity' (SIM PA). Only those reporting that they engaged in 30 minutes of physical activity on no days (or one day) were considered 'inactive' and thus eligible to proceed. These screening data were used to assess the REACH of the CLICK into Activity programme.

### **3.4 Data collection, measures, outcomes**

#### **3.4.1 Baseline outcomes and measures**

Following the screening process, all eligible participants were asked to complete a face-to-face baseline assessment with an exercise specialist at an initial consultation at their GP surgery. The following data were collected:

- Weekly physical activity (via short International Physical Activity Questionnaire (IPAQ)).
- Sport participation (via Single Item Sport England Measure (SISEM)).
- Mental wellbeing (via Warwick Edinburgh Mental Well-Being Scale (WEMWBS)).



Each of these measures is recommended by Sport England and validated for use. Data on participants' socio-demographic characteristics using items from Sport England's Standard Evaluation Framework (i.e. age, sex, ethnicity, income, etc.) were also collected.

Finally, participants' grip strength was objectively measured using a dynamometer, and an exercise specialist measured participants' height and weight objectively. These data were used to assess the REACH, EFFECTIVENESS and MAINTENANCE of the CLICK into Activity programme.

A copy of the baseline questionnaire can be found in Appendix A.

### **3.4.2 Follow-up outcomes and measures**

Participants were asked to provide exercise specialists with follow-up data at three time points after the end of the 12-week programme: three months (immediately at the end of their 12-week programme), six months, and 1-year after completing the CLICK into Activity programme. Follow-up appointments were either conducted face-to-face at the GP surgery or at home via telephone (if more convenient). Follow-up surveys were identical to baseline measures. For those providing follow-up data over the phone, participants were asked to give an estimate of their height and weight. For these remote participants, grip strength data were not possible to collect. These data were used to assess the REACH, EFFECTIVENESS and MAINTENANCE of the CLICK into Activity programme.

### **3.4.3 Process evaluation methods**

In order to better understand the impact of CLICK into Activity we conducted a mixed methods process evaluation. Qualitative methods were designed to elicit in-depth feedback on CLICK into Activity, to better understand the impact of CLICK into Activity on physical activity and to identify considerations for wider roll-out of the intervention post-Sport England funding.

Qualitative interviews were conducted as follows:

- Ten CLICK into Activity participants were invited to complete two telephone interviews, (N=20) once immediately at the end of the 12-week programme and once again 1-year after programme completion.
- Each of the three exercise specialists involved in CLICK into Activity implementation was invited to take part in a telephone interview. The two exercise specialists employed by the project from the outset completed one telephone interview six months into the data collection period, and completed a second approximately 1 year later. After one exercise specialist moved on to a new role, the new exercise specialist completed a telephone interview six months after joining the team.
- Two project stakeholders and members of the project steering committee, one the CLICK into Activity project manager and the other a GP based at one of the participating GP surgeries, completed a telephone interview approximately two years into project implementation.

To provide structure to telephone interviews a topic guide was developed. Semi-structured interviews explored participants' general health and wellbeing, participation and engagement, enjoyment, perceptions of content, delivery style and wider implementation. Interviews were approximately 30 minutes in duration. Semi-structured telephone interviews with exercise specialists and CLICK into Activity stakeholders explored CLICK into Activity training, perceptions of participants' health and wellbeing, intervention fidelity, successes/challenges, intervention delivery, data collection, and potential for maintenance. All audio data were recorded using a digital recorder (via Skype for Business) and transcribed verbatim.

Quantitative data were collected in the form of CLICK into Activity attendance data. Exercise specialists completed attendance registers at the start of each session, detailing delivery date, session length and session content. These data were used to categorise respondents as 'participants' (those that attended at least one 30-minute session of CLICK into Activity) and 'non-participants' (those that did not attend at least one 30-minute session of CLICK into Activity). This allowed for comparison of respondent characteristics

based on participation in the programme; a method that has been reported previously (Adams et al., 2017; Van Acker et al., 2011).

Qualitative and quantitative process evaluation data were used to assess the REACH, EFFECTIVENESS, ADOPTION, IMPLEMENTATION, and MAINTENANCE of the CLICK into Activity programme.

### **3.4.4 Economic evaluation methods**

Data on resource use and actual costs incurred were collected by the project lead (South Somerset District Council) and recorded via spreadsheet between September 2015 and August 2018. Actual costs incurred (e.g., personnel costs, travel, facilities hire) were used to estimate training and programme delivery costs.

Costs were categorised as follows:

- CLICK into Activity preparation resources.
- CLICK into Activity delivery resources.
- CLICK into Activity research and development resources to reflect the actual mainstream costs of the programme in a real-world delivery scenario.

Programme delivery costs are recurrent and would occur once a programme is funded through mainstream funding mechanisms. Preparation costs are mostly non-recurrent, one-off training costs, as once staff have been trained to refer to and deliver CLICK into Activity there is no need to repeat the training. However, preparation costs have been included in the totals here, reflecting an assumption that everyone receives refresher training. As such, the cost estimate reflects the maximum possible cost in the real world.

CLICK into Activity cost and resource use data were used to assess the IMPLEMENTATION, of the CLICK into Activity programme.

## **3.5 Data cleaning and analysis**

### **3.5.1 Quantitative data**

All paper-based survey data were collected by exercise specialists and securely shared with the UWE evaluation team. Quantitative survey data were entered into IBM SPSS Statistics v.22. When assessing overall CLICK into Activity target outcomes (e.g., changes

in physical activity), matched baseline and follow-up survey responses were treated as paired samples. When assessing differences in participation among respondents that attended at least one 30-minute CLICK into Activity session with those that did not, survey data were treated as independent samples. As survey responses to continuous variables were found to be normally distributed paired-samples and independent-samples t-tests were conducted, where appropriate. Chi square tests of association were conducted with categorical data to assess differences between groups (e.g. sex, age group, participation in sport (Yes or No)). IPAQ survey data were cleaned in line with IPAQ survey guidance (IPAQ Research Committee, 2004).

Paper-based attendance data were entered into a Microsoft Excel spreadsheet and matched against survey data using participant identifiers. This allowed us to categorise respondents according to participation in CLICK into Activity. Those identified as attending at least one 30-minute CLICK into Activity session were categorised as 'participants' while those that did not attend an initial session were 'non-participants'. Attendance data were also used to estimate the average number of CLICK into Activity sessions attended by respondents during the 12-week programme.

### **3.5.2 Qualitative data**

All qualitative data were transcribed verbatim and analysed using NVivo 10 (QSR International). Qualitative data were transcribed verbatim and analysed using NVivo 10 (QSR International). Data were explored using thematic analysis (Braun & Clarke, 2006), with the coding process based predominantly on mapping data against each of the RE-AIM dimensions in line with recently published guidance. Drawing closely upon key concepts of the RE-AIM framework, analysis of qualitative data included feedback from CLICK into Activity recipients and a range of stakeholders to present a balanced assessment of the programme and the factors that may have had an impact on the reach, effectiveness, adoption, implementation and potential sustainability of CLICK into Activity.

### **3.6 Ethical approval**

The study was considered service evaluation, and therefore did not require NHS ethical approval. The study was assessed by the University of the West of England Ethics

Committee and was granted ethical approval from in September 2015 (Ref: HAS/15/08/008). In response to the change in study protocol relating to the collection and processing of data by UWE an ethical amendment was requested, with approval granted on 16<sup>th</sup> October 2016.

## 4. Results

This section presents the main results from the RE-AIM evaluation of CLICK into Activity. Results are presented according to each domain of the RE-AIM framework.

### 4.1 Reach

Objective 1: To better understand the **REACH** of CLICK into Activity through the measurement of intervention engagement, participation rates and participant characteristics.

#### 4.1.1 Recruitment

A total of 5,193 individuals diagnosed with pre-diabetes, diabetes, hypertension and/or obesity/overweight registered at one of the nine participating GP surgeries were sent a referral letter or were referred to the programme during direct contact with surgery staff during a routine appointment. Of these, 621 adults were recruited to the project and provided baseline data (29% of target engagement with programme (Target = 2,130 individuals, See 2.1 for details)).

A total of 602 participants were found to be 'inactive' and eligible for the programme (96.9%). These individuals formed our baseline sample. At an initial screening appointment with an exercise specialist, 19 adults were deemed to be 'too active' and therefore excluded from the programme.

Of the 602 eligible participants, 326 attended at least one 30-minute CLICK into Activity session during the 12-week programme (54.2%), while the remaining 276 did not (45.8%).

A comparison of those attending CLICK (participants) versus those that did not attend (non-participants) is presented below (See 4.1.3).

#### 4.1.2 Respondent characteristics

Table 4.1 indicates that the majority of eligible participants recruited to the programme were referred due to a diagnosis of pre-diabetes, diabetes, or hypertension (N = 558, 92.7%). In December 2017, the eligibility criteria were relaxed to allow obese and overweight individuals to participate in CLICK into Activity. Between December 2017 and

the end of the data collection period (May 2018) 22 obese or overweight individuals were referred to the programme (3.65%) and 22 individuals diagnosed with one of the original long-term conditions and obesity/overweight were referred (3.65%).

Table 4.1 Respondent eligibility criteria at baseline

| <b>Condition</b>   | <b>Total</b> |          |
|--|--------------|----------|
|  | <b>N</b>     | <b>%</b> |
| Original criteria (January 2016 – November 2017)                     |              |          |
| <i>Pre-diabetes, diabetes, hypertension</i>                          | 500          | 83.1     |
| Amended eligibility criteria (December 2017 – May 2018)              |              |          |
| <i>Pre-diabetes, diabetes, hypertension</i>                          | 58           | 9.7      |
| <i>Obesity/overweight</i>  | 22           | 3.6      |
| <i>Pre-diabetes, diabetes or hypertension AND Obesity/overweight</i> | 22           | 3.6      |

As shown in Table 4.2 most participants were female (N = 379, 63%) and more than half of participants were aged 70 years and above (N = 309, 51.3%). The vast majority of participants identified as being of White ethnic origin (N = 580, 96.3%). Just over one fifth of individuals were qualified to degree level (N = 128, 21.3%), and the majority of participants reported an annual household income in the £10,000-£19,999 bracket (N = 177, 29.4%). Roughly two thirds of respondents described themselves as being in a relationship (N = 394, 65.5%).

Table 4.2 Respondent characteristics at baseline (N=602)

| Characteristic                                  | Total |      |
|---|-------|------|
|   | N     | %    |
| Sex   |       |      |
| <i>Male</i>                                     | 220   | 36.5 |
| <i>Female</i>                                   | 379   | 63.0 |
| Age   |       |      |
| 18 – 34   | 17    | 2.8  |
| 35 – 50   | 42    | 7.0  |
| 51 – 69   | 229   | 38.0 |
| 70 or above                                     | 309   | 51.3 |
| Ethnicity                                       |       |      |
| <i>White</i>                                    | 580   | 96.3 |
| <i>Mixed ethnic group</i>                       | 3     | 0.5  |
| <i>Black British</i>                            | 1     | 0.2  |
| <i>Asian</i>                                    | 2     | 0.3  |
| <i>Asian British</i>                            | 2     | 0.3  |
| <i>Other</i>                                    | 4     | 0.7  |
| Education                                       |       |      |
| <i>Degree/degree level qualification</i>        | 128   | 21.3 |
| <i>A level or equivalent</i>                    | 50    | 8.3  |
| <i>Professional qualification*</i>              | 166   | 27.6 |
| <i>O level passes/GCSE passes or equivalent</i> | 91    | 15.1 |
| <i>CSE/SCE</i>                                  | 32    | 5.3  |
| <i>Other</i>                                    | 18    | 3.0  |
| <i>No qualifications</i>                        | 108   | 17.9 |
| Annual household income                         |       |      |
| <i>Up to £9,999</i>                             | 84    | 14.0 |
| <i>£10,000 - £19,999</i>                        | 177   | 29.4 |
| <i>£20,000 - £29,999</i>                        | 77    | 12.8 |
| <i>£30,000 - £39,999</i>                        | 41    | 6.8  |
| <i>£40,000 - £49,999</i>                        | 23    | 3.8  |
| <i>£50,000 or above</i>                         | 28    | 4.7  |
| <i>Don't know</i>                               | 99    | 16.4 |
| <i>Prefer not to say</i>                        | 65    | 10.8 |
| Marital status                                  |       |      |
| <i>Single</i>                                   | 54    | 9.0  |
| <i>Have partner but do not live together</i>    | 7     | 1.2  |
| <i>Live with partner</i>                        | 47    | 7.8  |
| <i>Married and live with partner</i>            | 340   | 56.5 |
| <i>Married and separated from partner</i>       | 21    | 3.5  |
| <i>Divorced</i>                                 | 47    | 7.8  |
| <i>Widowed</i>                                  | 79    | 13.1 |

Note. Some columns do not total N = 602 or 100% due to missing data. \*Nursing, midwife, City and Guilds.



Table 4.3 presents respondents' health status at baseline. Approximately 60% reported having a long-term illness or disability. Individuals' height and weight was used to calculate body mass index (BMI) (weight (kg) / height metres (m<sup>2</sup>)). More than 80% of respondents were categorised as overweight (N = 134, 22.3%, BMI 25-29kg/m<sup>2</sup>) or obese (N = 369, 61.3%, ≥30.0kg/m<sup>2</sup>).

Table 4.3 Respondents' health status at baseline (N=602)

|                              | <b>Total</b> |          |
|------------------------------|--------------|----------|
|                              | <b>N</b>     | <b>%</b> |
| <b>Long-term disability</b>  |              |          |
| <i>Yes</i>                   | 364          | 60.5     |
| <i>No</i>                    | 231          | 38.4     |
| <b>Body Mass Index (BMI)</b> |              |          |
| <i>25 or under</i>           | 52           | 8.6      |
| <i>25-29</i>                 | 134          | 22.3     |
| <i>30 or above</i>           | 369          | 61.3     |

Note. Some columns do not total N = 602 or 100% due to missing data. BMI = body mass index.

Evidence suggests that low muscle strength may be linked to higher risk of premature death (Leong et al., 2015). In our sample, the mean baseline grip strength was 25.43 Llbs (equivalent to 11.53 Kgs).

Respondents were asked to complete the Warwick Edinburgh Mental Wellbeing Scale (WEMWBS) at baseline. Each item is scored on a scale from 1 (none of the time) to 5 (all of the time), and then summed to provide a total score (out of a possible 70 points). The population norm for WEMWBS score is 51.61 (SD = 8.71) (NHS Digital, 2014). As shown in Table 4.4, the mean score for participants at baseline was lower than this (Mean WEMWBS Score = 47.74, SD = 10.88).

Table 4.4 Baseline responses to the Warwick Edinburgh Mental Wellbeing Scale (WEMWBS) (N=602)

| WEMWBS Item                                    | N   | Total |       |
|--|-----|-------|-------|
|  |     | Mean  | SD    |
| I've been feeling optimistic about the future  | 585 | 3.08  | 1.09  |
| I've been feeling useful                       | 588 | 3.26  | 1.23  |
| I've been feeling relaxed                      | 568 | 3.05  | 1.26  |
| I've been feeling interested in other people   | 588 | 3.72  | 1.15  |
| I've had energy to spare                       | 527 | 2.06  | 1.04  |
| I've been dealing with problems well           | 583 | 3.40  | 1.14  |
| I've been thinking clearly                     | 588 | 3.82  | 1.12  |
| I've been feeling good about myself            | 565 | 2.87  | 1.23  |
| I've been feeling close to other people        | 585 | 3.64  | 1.16  |
| I've been feeling confident                    | 570 | 3.15  | 1.24  |
| I've been able to make my mind up about things | 590 | 3.97  | 1.07  |
| I've been feeling loved                        | 585 | 3.86  | 1.16  |
| I've been interested in new things             | 575 | 3.20  | 1.34  |
| I've been feeling cheerful                     | 588 | 3.44  | 1.09  |
| WEMWBS Total score                             | 485 | 47.74 | 10.88 |

Note. Some columns do not total N = 602 due to missing data. Each item is scored on a scale from 1 (none of the time) to 5 (all of the time), and then summed to provide a total score out of a possible 70 points.

Table 4.5 presents respondents' baseline mean weekly time engaged in physical activity or sport. The average time spent in moderate and vigorous physical activity was very low at baseline, while the mean weekly time spent walking was found to be 39.67 minutes per week (SD = 60.04).

Only three participants (0.5% baseline sample) reported participation in sport (1 x 30 minutes per week) at baseline. As shown in Table 4.5, participants' mean weekly time spent participating in sport was very low (Mean minutes/week = 0.20, SD = 2.31). Given the study eligibility criteria, these low baseline physical activity values were to be expected.

Table 4.5 Respondents' mean weekly time engaged in physical activity at baseline (N = 602)

|  | <b>N</b> | <b>Mean (Min/week)</b> | <b>SD</b> |
|--|----------|------------------------|-----------|
| Mean total minutes of vigorous PA per week       | 600      | 0.65                   | 4.71      |
| Mean total minutes of moderate PA per week       | 599      | 10.11                  | 19.88     |
| Mean total minutes of walking per week           | 594      | 39.67                  | 60.04     |
| Mean total minutes of physical activity per week | 592      | 50.54                  | 63.45     |
| Mean total minutes of sport per week             | 598      | 0.20                   | 2.31      |

Note. Some columns do not total N = 602 due to missing data.

Sedentary behaviour (i.e. time spent inactive) is increasingly recognised as an important factor associated with all-cause and cardio metabolic disease-related mortality (Biddle et al., 2016; Chau et al., 2016). As shown in Table 4.6, at baseline respondents spent seven hours of the day, on average, sitting and inactive (Mean minutes/week = 3092.48, SD = 1362.15).

Table 4.6 Participants' mean weekly time spent sitting at baseline

|  | <b>N</b> | <b>Mean (Min/week)</b> | <b>SD</b> |
|--|----------|------------------------|-----------|
| Mean total minutes of sitting per week | 572      | 3092.48                | 1362.15   |

Note. Some columns do not total N = 602 due to missing data.

#### **4.1.3 Participation in CLICK into Activity programme activities**

Exercise specialists were asked to keep a record of attendance at CLICK into Activity sessions to monitor engagement with the programme. Of the 602 individuals recruited to the programme, 326 were recorded as attending at least one CLICK into Activity session (54.2%). These individuals were categorised as 'participants', while the remaining respondents were categorised as 'non-participants' (i.e. N = 276 individuals that did not attend at least one 30-minute CLICK into Activity session). The average number of sessions attended by those that attended at least one session was nine (Mean = 8.63, SD = 5.97). Adherence among participants that attended at least one session ranged from 1 session (N = 25, 8%) to 32 sessions (N = 3, 0.94%). A total of 104 participants attended at least 12 sessions during the course of the 12-week programme (32%).

A comparison of CLICK into Activity participant characteristics (i.e. those that attended at least one CLICK into Activity session) with the characteristics of non-participants indicates no differences between groups for sex, ethnicity, education, and marital status. However, a significantly larger proportion of participants was aged 70 or above compared with non-participants (55.2% vs 46.5%, respectively) (Table 4.7).

Table 4.7 Baseline characteristics according to CLICK into Activity participation (N=602)

|  | Participants |      | Non-participants |      | p    |
|--|--------------|------|------------------|------|------|
|  | N            | %    | N                | %    |      |
| Sex  |              |      |                  |      |      |
| <i>Male</i>                                  | 121          | 62.6 | 99               | 36.0 |      |
| <i>Female</i>                                | 204          | 37.1 | 174              | 63.3 | 0.87 |
| Age  |              |      |                  |      |      |
| 18 – 34                                      | 6            | 1.8  | 11               | 4.0  |      |
| 35 – 50                                      | 14           | 4.3  | 28               | 10.2 |      |
| 51 – 69                                      | 125          | 38.3 | 104              | 37.8 |      |
| 70 or above                                  | 180          | 55.2 | 128              | 46.5 | 0.01 |
| Ethnicity                                    |              |      |                  |      |      |
| <i>White</i>                                 | 318          | 97.5 | 261              | 94.9 |      |
| <i>Mixed ethnic group</i>                    | 1            | .3   | 0                | 0.0  |      |
| <i>Black British</i>                         | 1            | .3   | 2                | .7   |      |
| <i>Asian</i>                                 | 1            | .3   | 1                | .4   |      |
| <i>Asian British</i>                         | 1            | .3   | 1                | .4   |      |
| <i>Other</i>                                 | 1            | .3   | 3                | 1.1  | 0.84 |
| Education                                    |              |      |                  |      |      |
| <i>Degree/degree level</i>                   | 76           | 23.3 | 52               | 18.9 |      |
| <i>A level or equivalent</i>                 | 24           | 7.4  | 26               | 9.5  |      |
| <i>Prof qualification*</i>                   | 77           | 23.6 | 88               | 32.0 |      |
| <i>GCSE or equivalent</i>                    | 48           | 14.7 | 43               | 15.6 |      |
| <i>CSE/SCE</i>                               | 15           | 4.6  | 17               | 6.2  |      |
| <i>Other</i>                                 | 15           | 4.6  | 3                | 1.1  |      |
| <i>No qualifications</i>                     | 68           | 20.9 | 40               | 14.5 | 0.15 |
| Annual household income                      |              |      |                  |      |      |
| <i>Up to £9,999</i>                          | 38           | 11.7 | 46               | 16.7 |      |
| <i>£10,000 - £19,999</i>                     | 112          | 34.4 | 65               | 23.6 |      |
| <i>£20,000 - £29,999</i>                     | 46           | 14.1 | 31               | 11.3 |      |
| <i>£30,000 - £39,999</i>                     | 15           | 4.6  | 26               | 9.5  |      |
| <i>£40,000 - £49,999</i>                     | 12           | 3.7  | 11               | 4.0  |      |
| <i>£50,000 or above</i>                      | 11           | 3.4  | 17               | 6.2  |      |
| <i>Don't know</i>                            | 59           | 18.1 | 40               | 14.5 |      |
| <i>Prefer not to say</i>                     | 32           | 9.8  | 32               | 11.6 | 0.63 |
| Marital status                               |              |      |                  |      |      |
| <i>Single</i>                                | 26           | 8.0  | 28               | 10.2 |      |
| <i>Have partner but do not live together</i> | 3            | .9   | 4                | 1.5  |      |
| <i>Live with partner</i>                     | 25           | 7.7  | 22               | 8.0  |      |
| <i>Married and live with partner</i>         | 192          | 58.9 | 147              | 53.5 |      |
| <i>Married and separated from partner</i>    | 9            | 2.8  | 12               | 4.4  |      |
| <i>Divorced</i>                              | 21           | 6.4  | 26               | 9.5  |      |
| <i>Widowed</i>                               | 49           | 15.0 | 30               | 10.9 | 0.33 |

Note. Some columns do not total N = 602 due to missing data. \*Nursing, midwife, City and Guilds.

A significantly higher proportion of non-participants reported having a long-term disability compared with participants (65.5% vs 56.4, respectively). Respondents' BMI according to participant and non-participant status was found to be broadly comparable, with approximately 60% of each group having a BMI score of 30 or above (Table 4.8).

Table 4.8 Baseline health status according to CLICK into Activity participation (N=602)

|                       | Participants |      | Non-participants |      | p    |
|-----------------------|--------------|------|------------------|------|------|
|                       | N            | %    | N                | %    |      |
| Long-term disability  |              |      |                  |      |      |
| <i>Yes</i>            | 184          | 56.4 | 180              | 65.5 |      |
| <i>No</i>             | 138          | 42.3 | 92               | 33.5 | 0.03 |
| Body Mass Index (BMI) |              |      |                  |      |      |
| <i>25 or under</i>    | 34           | 10.4 | 18               | 6.5  |      |
| <i>25-29</i>          | 70           | 21.5 | 64               | 23.3 |      |
| <i>30 or above</i>    | 193          | 59.2 | 175              | 63.6 | 0.20 |

Note. Some columns do not total N = 602 due to missing data.

An assessment of baseline WEMWBS responses according to CLICK into Activity session participation revealed that responses were broadly similar across groups with total scores both below the WEMWBS population norm (Table 4.9).

A comparison of each different form of baseline weekly physical activity revealed no differences between those that participated in CLICK into Activity and those that did not (Table 4.10). There was also no significant difference in time spent sitting at baseline among participants and non-participants (Table 4.10).

Table 4.9 Baseline WEMWBS scores according to CLICK into Activity participation (N=602)

| WEMWBS Item                                    | Participants |       |      | Non-participants |       |       | p    |
|--|--------------|-------|------|------------------|-------|-------|------|
|  | N            | Mean  | SD   | N                | Mean  | SD    |      |
| I've been feeling optimistic about the future  | 318          | 3.09  | 1.07 | 267              | 3.07  | 1.12  |      |
| I've been feeling useful                       | 318          | 3.23  | 1.18 | 270              | 3.29  | 1.28  |      |
| I've been feeling relaxed                      | 308          | 3.10  | 1.22 | 260              | 2.98  | 1.30  |      |
| I've been feeling interested in other people   | 320          | 3.75  | 1.12 | 268              | 3.68  | 1.18  |      |
| I've had energy to spare                       | 280          | 2.13  | 1.03 | 247              | 1.97  | 1.05  |      |
| I've been dealing with problems well           | 314          | 3.36  | 1.13 | 269              | 3.45  | 1.15  |      |
| I've been thinking clearly                     | 319          | 3.84  | 1.11 | 269              | 3.80  | 1.13  |      |
| I've been feeling good about myself            | 310          | 2.91  | 1.21 | 255              | 2.83  | 1.25  |      |
| I've been feeling close to other people        | 317          | 3.62  | 1.20 | 268              | 3.65  | 1.13  |      |
| I've been feeling confident                    | 313          | 3.16  | 1.18 | 257              | 3.15  | 1.30  |      |
| I've been able to make my mind up about things | 321          | 3.93  | 1.08 | 269              | 4.02  | 1.05  |      |
| I've been feeling loved                        | 318          | 3.82  | 1.14 | 267              | 3.90  | 1.19  |      |
| I've been interested in new things             | 308          | 3.16  | 1.33 | 267              | 3.25  | 1.36  |      |
| I've been feeling cheerful                     | 321          | 3.09  | 1.07 | 267              | 3.46  | 1.07  |      |
| WEMWBS Total score                             | 263          | 47.98 | 10.6 | 222              | 47.45 | 11.21 | 0.59 |

Note. Some columns do not total N = 602 due to missing data. Each item is scored on a scale from 1 (none of the time) to 5 (all of the time), and then summed to provide a total score out of a possible 70 points.

Table 4.10 Baseline weekly physical activity according to CLICK into Activity participation (N = 602)

|   | Participants |                 |         | Non-participants |                 |         | P    |
|---|--------------|-----------------|---------|------------------|-----------------|---------|------|
|   | N            | Mean (Min/week) | SD      | N                | Mean (Min/week) | SD      |      |
| Mean total minutes of vigorous physical activity per week | 325          | 0.82            | 5.72    | 275              | 0.45            | 3.12    | 0.35 |
| Mean total minutes of moderate physical activity per week | 325          | 9.76            | 21.82   | 274              | 10.53           | 17.34   | 0.64 |
| Mean total minutes of walking per week                    | 322          | 42.33           | 62.63   | 272              | 36.51           | 56.78   | 0.24 |
| Mean total minutes of physical activity per week          | 320          | 53.18           | 67.89   | 272              | 47.44           | 57.77   | 0.27 |
| Mean total minutes of sport per week                      | 325          | 0.28            | 2.65    | 273              | 0.11            | 1.82    | 0.38 |
| Mean total minutes of sitting per week                    | 305          | 3018.03         | 1442.59 | 267              | 3177.53         | 1261.34 | 0.16 |

Note. Some columns do not total N = 602 due to missing data.



#### 4.1.4 Qualitative feedback on CLICK into Activity reach

Qualitative interviews were conducted with CLICK into Activity participants, exercise specialists, and two members of the project steering group to better understand how well the programme reached the target population and to explore possible reasons for CLICK into Activity participation or non-participation. Feedback indicated that the programme was reaching the target population (i.e. inactive adults diagnosed with hypertension, pre-diabetes, diabetes, obesity/overweight) but there was disappointment among respondents in the number of people that joined the 12-week programme. The project did not meet its original engagement target (N = 2,160) and one project steering group member suggested that the initial target was potentially too optimistic to achieve in the given time frame. Interviews identified a range of barriers and facilitators to programme participation, from individual-level factors such as personal motivation, management of existing health issues, and the importance of joining a group containing ‘people like me’, to social-/environmental-level factors including class scheduling, social support from friends and family and health care professionals, and perceptions of the physical environment (e.g. weather, access, safety, aesthetics). A selection of respondents’ comments is presented in Box 4.1 below:

Box 4.1. Individual- and social-/environmental-level factors influencing CLICK into Activity participation

##### **Individual-level factors**

###### ***Personal motivation for joining CLICK into Activity***

I hate exercise. I am never going to like it but I’ll do it for 12 weeks and hopefully I’ll lose weight. That will be a quick fix and that’s me done forever. *Participant 2*

###### ***Fear of exacerbating existing health issues***

There were two [participants] that had falls and broken wrists and I tried to encourage them to come back but that didn’t happen. *Exercise specialist 1*

###### ***‘People like me’***

I think also knowing that people going to be there are in a very similar situation to them. They know that there won't be a load of 'gym bunnies' or men in Lycra. They'll turn up and other people won't be fit and will be like them. *Stakeholder 1*

I think what encourages them is that they know that the people there have been referred for similar conditions, because they know what the criteria is with the conditions so they know when they first come there is going to be likeminded people there. I think they feel comfortable working within that same sort of age group, it's sociable, there's no pressure on them so they can do as much and as little as they want to do... *Exercise specialist 3*

[Participants] were frightened to come through the door at first you know they had lots of pre-conceived notions about what it would be about and it was just putting those people at ease and I found that relationship with the type of patients that were coming in then I found that that was really rewarding. *Exercise specialist 2*

### **Social-/environmental-factors**

#### ***Class scheduling***

Being retired, I found it easy to [attend] because it was sort of early afternoon and later afternoon, which suited me down to the ground. *Participant 4*

The only thing that didn't really suit, it was the fact it was in the middle of the day. I found I had two days [a week] that had an interruption in the middle of both. Personally, I would prefer to do something earlier in the morning, but I do know that a lot of people who attended the class don't move around terribly much first thing in the morning, and they found later on much better. *Participant 6*

I didn't go to the Wednesday class mainly because it was in the evening, and Wednesday's my skittle night and nothing interferes with that! *Participant 4*

#### ***Social support from friends and family and health care professionals***

My friend was asked to join through his surgery, and he went to [CLICK into Activity] and he came back and he was enthusiastic. So, I said 'Oh, I will come and have a look'. So,

I went along as his buddy for a couple of weeks. I found that it was probably just what I needed so I then asked my doctor to refer me. *Participant 4*

It's just that rapport that you get with the patients in that initial setting in the GP surgery. I think if you can get them on board in there and they like you they'll come. *Exercise specialist 2*

The exercise specialist's one to one appointment with the patient prior to activity have been so important. Because they feel happy that they've met the person who's going to be delivering their activity, they then feel comfortable to attend the session. *Stakeholder 1*

I think the CLICK into Activity is very important because of its link through the doctor. It's not something that anybody has actually got to go looking for on their own. Your doctor suggests you do it, or gives you the idea to do it. The initial consultation [with an exercise specialist] is at the surgery, you haven't got to go somewhere strange, with people you don't know. You've already met [an exercise specialist] before you actually go into her class, and I think that link is very important. *Participant 6*

I think if you were to take that [referral] outside of the surgeries then I don't think you'd get such a good turnout for the appointments because I think the GP or the practice nurse has referred them so it looks more of a sort of...how can I put it...professional. *Exercise specialist 3*

### ***Weather***

I live a little way from the venue, and I walk there every time and walk back again so I don't find difficulty getting there. It's just sometimes inclement weather that makes it a little difficult. *Participant 7*

As long as people are able to get there [to a CLICK into Activity session] and they're accessible. I have worked in village halls in villages that are like a bit too rural in the past and so like trying to get there in the weather can [be] difficult. *Exercise specialist 2*

### ***Access***

I drive [to CLICK into Activity sessions]. Because we live out in the country so, you know, walking isn't an option! Public transport isn't [an option] either, so I drive.

*Participant 6*

The location was important. If the hall was at the top of the hill, less people were attending, especially if there was no parking. So, if people could park for free this was best. *Stakeholder 1*

Some people don't like even paying to use the car park even though they've got a free exercise session. *Exercise specialist 2*

### ***Safety***

In rural Somerset the evening sessions were not successful, and that was down to the target population not feeling confident going out when it was dark. So, when the winter came and the nights were drawing in people weren't feeling comfortable leaving their house to go to an activity session. Whereas daytime sessions were attracting more people, so this affected how many people attended. *Stakeholder 1*

[Participants] didn't want to go out in the evening [to attend a CLICK into Activity session]. Most of the participants are retired, they are all over 50. All of them had been retired, elderly and driving on country lanes at night time, they didn't feel safe. So I changed the sessions to the day time. *Exercise specialist 1*

## **4.2 Effectiveness**

Objective2: To better understand the **EFFECTIVENESS** of CLICK into Activity through the measurement of changes in primary and secondary outcomes relating to physical activity, sport, and quality of life.

### **4.2.1 Survey response rates**

A total of 602 participants eligible for the CLICK into Activity programme completed baseline measures. CLICK into Activity exercise specialists were responsible for collecting

baseline and follow-up data either face-to-face at a GP surgery or via telephone. Follow-up survey completion rates at 3, 6 and 12 months after CLICK into Activity participation were comparable with other Sport England-funded projects, but rates were low (particularly at 6 and 12 months) (Table 4.11). This means that interpretation of findings should be considered with caution. In this section we present the findings from a comparison of matched baseline and 3-month follow-up data.

Table 4.11 Participant survey response rates

|           | <b>N</b> | <b>%</b> |
|-----------|----------|----------|
| Baseline  | 602      | -        |
| 3 months  | 186      | 30.90    |
| 6 months  | 80       | 13.29    |
| 12 months | 41       | 6.81     |

#### 4.2.2 Changes in target outcomes

A comparison of mean weekly minutes of sport at baseline with responses at 3-month follow-up revealed a significantly higher duration of sport participation three-month follow-up ( $p < 0.001$ ) (Table 4.12).

Table 4.12 Total minutes of sport/week at baseline and 3-month follow-up

|           | <b>Mean min/week</b> | <b>SD</b> |
|-----------|----------------------|-----------|
| Baseline  | 0.16                 | 2.20      |
| Follow-up | 19.17                | 33.39     |
| p         | <0.001               |           |
| N         | 186                  |           |

Note. Some columns do not total N = 186 due to missing data.

Respondents' total weekly physical activity was calculated by summing weekly minutes of vigorous and moderate physical activity and walking (IPAQ Research Committee, 2014) (Table 4.13). A comparison of matched baseline and 3-month follow-up responses revealed a significant increase in total weekly physical activity ( $p < 0.001$ ).

Table 4.13 Total minutes of physical activity/week at baseline and 3-month follow-up

|           | <b>Mean min/week</b> | <b>SD</b> |
|-----------|----------------------|-----------|
| Baseline  | 53.94                | 73.34     |
| Follow-up | 303.19               | 285.01    |
| <i>p</i>  | <0.001               |           |
| <i>N</i>  | 180                  |           |

Note. Some columns do not total N = 186 due to missing data.

Table 4.14 presents baseline and 3-month follow-up physical activity according to intensity domain. Weekly minutes of vigorous and moderate physical activity were found to be significantly higher at 3-month follow-up ( $p < 0.001$ ). For walking, the weekly minutes spent walking were significantly higher at 3-month follow-up (Mean = 116.15, SD = 136.26,  $p < 0.001$ ).

Table 4.14 Total minutes' physical activity/week by domain at baseline and 3-month follow-up

|                                   | <b>Mean min/week</b> | <b>SD</b> |
|-----------------------------------|----------------------|-----------|
| <b>Vigorous physical activity</b> |                      |           |
| <i>Baseline</i>                   | 0.76                 | 6.12      |
| <i>Follow-up</i>                  | 57.78                | 67.89     |
| <i>p</i>                          | <0.001               |           |
| <i>N</i>                          | 185                  |           |
| <b>Moderate physical activity</b> |                      |           |
| <i>Baseline</i>                   | 8.83                 | 21.19     |
| <i>Follow-up</i>                  | 127.00               | 161.81    |
| <i>p</i>                          | <0.001               |           |
| <i>N</i>                          | 185                  |           |
| <b>Walking</b>                    |                      |           |
| <i>Baseline</i>                   | 44.07                | 65.75     |
| <i>Follow-up</i>                  | 116.15               | 136.26    |
| <i>p</i>                          | <0.001               |           |
| <i>N</i>                          | 182                  |           |

Note. Some columns do not total N = 186 due to missing data.

Table 4.15 presents a comparison of respondents' objectively measured body mass index (BMI) at baseline and 3-month follow-up. The proportion of individuals within the 'normal' weight range (BMI 25 or under) was higher at 3-month follow-up than at baseline, and the proportion categorised as 'obese' (BMI 30 or above) was lower at 3-month follow-up than at baseline. However, these differences were not found to be statistically significant.

Table 4.15 Respondents' body mass index at baseline and 3-month follow-up

|                              | <b>Baseline</b> |          | <b>3-month follow-up</b> |          | <b>p</b> |
|------------------------------|-----------------|----------|--------------------------|----------|----------|
|                              | <b>N</b>        | <b>%</b> | <b>N</b>                 | <b>%</b> |          |
| <b>Body Mass Index (BMI)</b> |                 |          |                          |          |          |
| <i>25 or under</i>           | 19              | 10.9     | 22                       | 13.1     | 0.76     |
| <i>25-29</i>                 | 44              | 25.1     | 44                       | 26.2     |          |
| <i>30 or above</i>           | 112             | 64.0     | 102                      | 60.7     |          |

Note. Some columns do not total N = 186 due to missing data.

Mean grip strength was found to be higher at three-month follow-up compared with baseline, although this difference was not found to be statistically significant (Table 4.16).

Table 4.16 Mean grip strength at baseline and 3-month follow-up (Llbs)

|           | <b>Mean (Llbs)</b> | <b>SD</b> |
|-----------|--------------------|-----------|
| Baseline  | 51.36              | 158.20    |
| Follow-up | 68.38              | 198.05    |
| p         | 0.36               |           |
| N         | 186                |           |

WEMWBS scores were seen to be significantly higher at three-month follow-up when compared with baseline scores (Table 4.17). Follow-up scores were found to be higher than the WEMWBS population norm (Mean = 51.61, SD = 8.71) (NHS Digital, 2014).

Table 4.17 Mean responses to the Warwick Edinburgh Mental Wellbeing Scale (WEMWBS) at baseline and 3-month follow-up

|           | <b>Mean WEMWBS Score</b> | <b>SD</b> |
|-----------|--------------------------|-----------|
| Baseline  | 49.01                    | 10.01     |
| Follow-up | 54.69                    | 9.29      |
| p         | <0.001                   |           |
| N         | 147                      |           |

Note. Some columns do not total N = 186 due to missing data.

#### 4.2.3 Changes in target outcomes measures by participation in CLICK into Activity

Possible differences in outcomes among those that attended at least one 30-minute CLICK into Activity session ('participants') and those that did not ('non-participants') were explored. Three hundred and twenty-six respondents (54.2%) attended at least one 30-minute CLICK into Activity session. This section presents the impact of CLICK into Activity on key outcome measures according to 'participant' or 'non-participant' status. Matched baseline and three-month data responses were compared (Table 4.18). It is important to acknowledge the low follow-up survey response rates and to therefore interpret these findings with caution.

Table 4.18 Survey response rates by participation at baseline and 3-month follow-up

|          | <b>Participant</b> |          | <b>Non-participant</b> |          |
|----------|--------------------|----------|------------------------|----------|
|          | <b>N</b>           | <b>%</b> | <b>N</b>               | <b>%</b> |
| Baseline | 326                | -        | 276                    | -        |
| 3 months | 160                | 49.08    | 26                     | 9.4      |

A comparison of 3-month follow-up participant and non-participant responses revealed that non-participants reported significantly more minutes of sport each week compared with CLICK into Activity participants ( $p < 0.001$ ) (Table 4.19).



Table 4.19 Total minutes of sport per week by participation at baseline and 3-month follow-up

|           | Participant   |       | Non-participant |       | p       |
|-----------|---------------|-------|-----------------|-------|---------|
|           | Mean min/week | SD    | Mean min/week   | SD    |         |
| Baseline  | 0.00          | 0.00  | 1.15            | 5.88  |         |
| Follow-up | 14.78         | 30.30 | 46.15           | 39.10 | <0.001* |
| N         | 160           |       | 26              |       |         |

Note. Some columns do not total N = 186 due to missing data.

Table 4.20 presents respondents' physical activity data separated by participant and non-participant status. Unlike the findings presented in Table 4.19 on 3-month sport participation, a comparison of mean weekly minutes of physical activity revealed no significant difference between 3-month participant and non-participant responses reported on 3-month vigorous or moderate physical activity, walking, or total physical activity (all  $p > 0.05$ ).

Table 4.20 Mean minutes of physical activity per week by participation at baseline and 3-month follow-up

|                                   | <b>Participant</b>   |           | <b>Non-participant</b> |           | <b>p</b> |
|-----------------------------------|----------------------|-----------|------------------------|-----------|----------|
|                                   | <b>Mean min/week</b> | <b>SD</b> | <b>Mean min/week</b>   | <b>SD</b> |          |
| <b>Vigorous physical activity</b> |                      |           |                        |           |          |
| <i>Baseline</i>                   | 0.88                 | 6.60      | 0.00                   | 0.00      |          |
| <i>Follow-up</i>                  | 56.72                | 71.20     | 67.88                  | 43.64     | 0.44     |
| <i>N</i>                          | 160                  |           | 26                     |           |          |
| <b>Moderate physical activity</b> |                      |           |                        |           |          |
| <i>Baseline</i>                   | 8.64                 | 22.37     | 10.00                  | 11.83     |          |
| <i>Follow-up</i>                  | 127.94               | 171.00    | 118.08                 | 83.06     | 0.77     |
| <i>N</i>                          | 160                  |           | 26                     |           |          |
| <b>Walking</b>                    |                      |           |                        |           |          |
| <i>Baseline</i>                   | 45.54                | 64.54     | 34.84                  | 73.06     |          |
| <i>Follow-up</i>                  | 114.91               | 139.44    | 112.12                 | 109.25    | 0.92     |
| <i>N</i>                          | 160                  |           | 25                     |           |          |
| <b>Total physical activity</b>    |                      |           |                        |           |          |
| <i>Baseline</i>                   | 55.57                | 73.67     | 43.84                  | 71.91     |          |
| <i>Follow-up</i>                  | 299.56               | 296.91    | 298.08                 | 170.30    | 0.98     |
| <i>N</i>                          | 160                  |           | 26                     |           |          |

Note. Some columns do not total N = 186 due to missing data.

A comparison of 3-month follow-up BMI according to participant status found no significant difference in the proportion of participants and non-participants categorised as normal, overweight or obese (Table 4.21).

Table 4.21 Respondents' body mass index by participation at baseline and 3-month follow-up

|                    | Participant |      | Non-participant |      | p    |
|--------------------|-------------|------|-----------------|------|------|
|                    | N           | %    | N               | %    |      |
| Baseline           |             |      |                 |      |      |
| <i>25 or under</i> | 17          | 10.6 | 4               | 15.4 |      |
| <i>25-29</i>       | 35          | 21.9 | 9               | 34.6 |      |
| <i>30 or above</i> | 97          | 60.6 | 13              | 50.0 |      |
| Follow-up          |             |      |                 |      |      |
| <i>25 or under</i> | 16          | 10.0 | 6               | 23.1 | 0.17 |
| <i>25-29</i>       | 38          | 23.8 | 6               | 23.1 |      |
| <i>30 or above</i> | 90          | 56.3 | 12              | 46.2 |      |

Note. Some columns do not total N = 186 due to missing data.

Mean grip strength was slightly lower among participants than non-participants at 3-month follow-up, although this difference was not found to be statistically significant (Table 4.22).

Table 4.22 Mean grip strength by participation at baseline and 3-month follow-up (Llbs)

|           | Participant |      | Non-participant |      | p    |
|-----------|-------------|------|-----------------|------|------|
|           | Mean        | SD   | Mean            | SD   |      |
| Baseline  | 24.66       | 9.17 | 28.27           | 9.75 |      |
| Follow-up | 26.24       | 9.63 | 28.50           | 9.61 | 0.28 |
| N         | 125         |      | 22              |      |      |

Note. Some columns do not total N = 186 due to missing data.

Responses to the Warwick Edinburgh Mental Wellbeing Scale were found to be significantly higher at 3-month follow-up among those that did not participate in at least one 30-minute CLICK into Activity session, compared with those that did ( $p < 0.001$ ) (Table 4.23). Three-month follow-up total WEMWBS scores for both participants and

non-participants were found to be higher than the population norm. It is notable that scores for both participants and non-participants were found to improve by approximately 5 points.

Table 4.23 Mean responses to the WEMWBS by participation at baseline and 3-month follow-up

|           | <b>Participant</b> |           | <b>Non-participant</b> |           | <b>p</b> |
|-----------|--------------------|-----------|------------------------|-----------|----------|
|           | <b>Mean</b>        | <b>SD</b> | <b>Mean</b>            | <b>SD</b> |          |
| Baseline  | 48.13              | 10.10     | 54.13                  | 7.47      |          |
| Follow-up | 52.79              | 9.96      | 59.84                  | 6.94      | 0.001    |
| N         | 125                |           | 22                     |           |          |

Note. Some columns do not total N = 186 due to missing data.

#### 4.2.4 Qualitative feedback on CLICK into Activity effectiveness

Qualitative interviews were conducted with CLICK into Activity participants, exercise specialists, and two members of the project steering group to better understand the effectiveness of CLICK into Activity through the measurement of changes in primary and secondary outcomes relating to physical activity, sport, and quality of life. Improvements in physical health and mental wellbeing were reflected in qualitative feedback. Individuals described numerous positive changes in their outlook and perceptions of their health and wellbeing as a result of being referred to CLICK into Activity. A range of positive changes, including increased mobility, weight loss, reduced symptoms from long-term conditions, increased core strength, increased purpose and feelings of happiness were identified. One GP based at a participating surgery and a member of the project steering group provided broadly positive feedback about the programme but did raise a concern about the intensity of the programme and how this was tailored to participant ability. A selection of respondents' comments is presented in Box 4.2 below:

## Box 4.2. Changes in outcomes targeted by CLICK into Activity

### **Changes to physical health outcomes**

[A participant] no longer needs her insulin during the day. That's what this project is about isn't it? Diabetes. Through exercise, through being in a social circle [at CLICK sessions], and being influenced by the people on the CLICK project. She was in tears, there was no hope for her. This project gave her hope, the belief she could do it, and she has done it and she's doing it. And it's fantastic. *Exercise specialist 1*

One gentleman just this week came up to me and said I've only been coming for six weeks he said I've been back to the GP I'm no longer diabetic I'm now pre-diabetic. He has done a little bit of tweaking of his diet and things like that, and stopped drinking quite so much, so it's all a combination of things. But six weeks of doing that, that's amazing isn't it? *Exercise specialist 2*

I can bend a bit better and I can bend down a bit quicker. I would say my balance has improved a lot. *Participant 1*

When I first started I was classed as COPD, and since then with my check ups and that, they have now put me down to asthmatic. So, it's obviously improved my lung function. *Participant 3*

I can walk further, I'm not so breathless. We do kettle bells, we are on a bicycle, I can do an awful lot more. I have got a lot more energy. *Participant 5*

I feel the difference because I've lost three inches of my waist. *Participant 7*

I went along and was so grateful, really. I really, really enjoyed it, and what I got out of it was - because I am really quite disabled - they went out of their way, well, they all did to make things easier for me. I found then after time that I was becoming more and more mobile. *Participant 9*

I did find the last time I went I actually walked across the room without my stick. It was fabulous, you know, I was really, really chuffed with myself. *Participant 9*

One person felt she'd been pushed too hard too soon and had strained something and it made her feel worse. My personal view is that you'll never find anything where 100% people are entirely happy with it. So, she dropped out quite quickly and was quite upset because she had to go and see a physio as she'd hurt her shoulder.

*Stakeholder 2*

### **Changes to mental health outcomes**

It works. I saw it in my own eyes how it... I know exercise helps but it was the mental health side as well and the social side. I really saw the transformation in people and the change in people. *Exercise specialist 1*

This group gave her hope, it gave her a family feel, and it gave her something to look forward to, which for her mental health alone is uplifting. *Exercise specialist 1*

Well, I feel quite good actually...I mean obviously a bit tired afterwards, but I feel mentally energetic, because my memory's bad. Yes, so I feel mentally more fitter, I don't know...'clearer' if you like. *Participant 1*

Not laughed so much for ages, you know, and laughing is good for you as well. *Participant 9*

### **Changes in general health and wellbeing**

To sum it up in a sentence, it's brought me back to life. It's as if I have been in hibernation and I have come back to life again. I'm a lot happier, fitter and I can do that little bit more, and I can walk a little bit further, and I can stretch a little bit further, and I've lost quite a lot of weight, and I am a happier, happier person since. It's given me more hope and a more positive attitude. It just does me so much good. I even bought a t-shirt believe it or not. It says 'I got CLICKed into Life.' *Participant 3*

It has literally transformed the lives of some of the participants. *Stakeholder 1*

The feedback I've had from patients has been so positive. *Stakeholder 2*

The one thing I like to see is when the patient first enters the room and when they leave after doing the twelve weeks the comparison, it's like a different person, it's unbelievable. *Exercise specialist 2*

I love it I sweat buckets every time! *Participant 3*

It give me more energy, lost weight, toned up, I felt a lot better in myself. I used to suffer a bit of depression, but I feel a lot better in myself now, and meeting people helped as well. Seeing other people in my position. I thoroughly enjoyed it. It's a shame its only 12 weeks! *Participant 3*

Some of my patients who are regular attenders [at the GP surgery], when they're on the programme they've actually come to see me less. It's the social thing. We have less time to do the social aspect these days, so that's great from my view. *Stakeholder 2*

## 4.3 Adoption

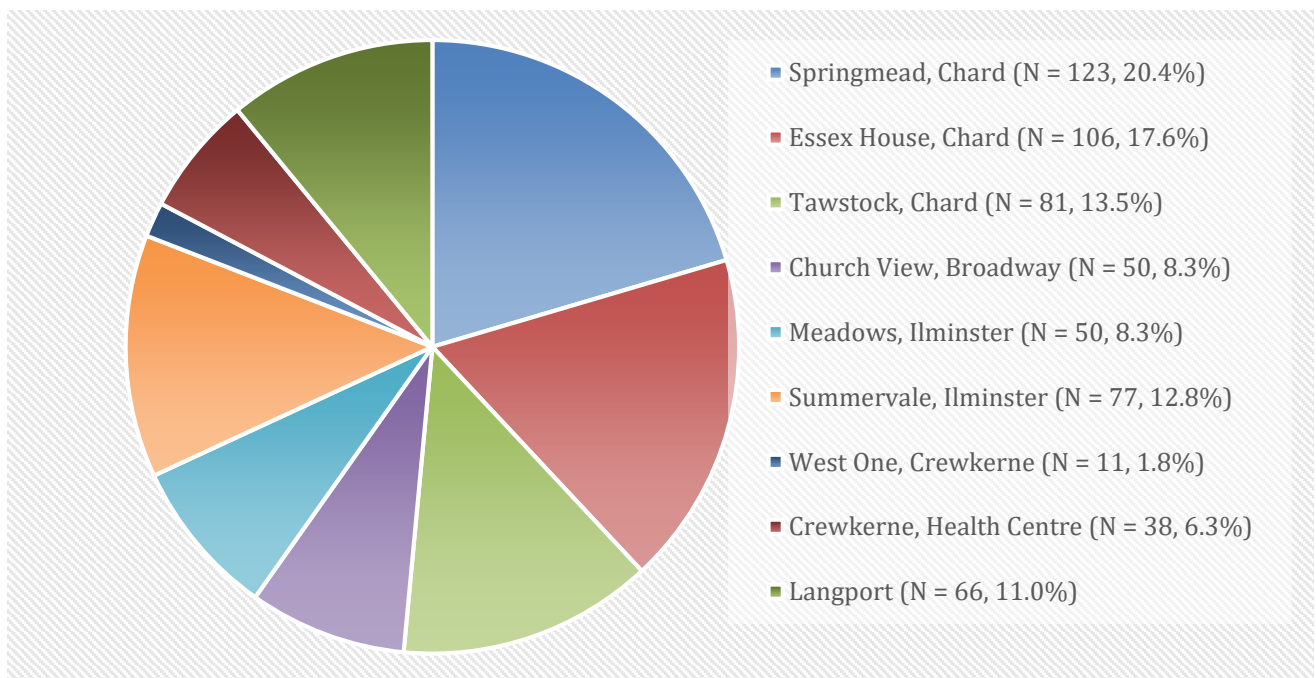
To better understand CLICK into Activity **ADOPTION** through an assessment of delivery settings and staffing.

### 4.3.1 Recruitment according to GP surgery

Individuals were recruited between January 2016 and May 2018 from one of nine GP surgeries in South Somerset. As shown in Figure 4.1, the majority of participants were recruited from Springmead surgery (N = 123, 20.4%), closely followed by Essex House surgery (N = 106, 17.6%). With the exception of Langport, all surgeries were involved with CLICK into Activity from its inception. Given the lack of intensive healthy lifestyle programmes available in the region, there was lots of interest in CLICK into Activity as a concept. Two of the original surgeries (Crewkerne Health Centre and West One) did not

have adequate resources to recruit participants to the programme, and were therefore withdrawn as CLICK into Activity referral locations. One surgery, originally located outside of the CLICK GP Federation, expressed interest in joining the programme and after joining the Federation was invited to join the project in June 2017. A total of sixty-six participants (11.0%) were recruited from this surgery between June 2017 and May 2018.

Figure 4.1. Respondent recruitment by GP surgery



#### 4.3.2 Qualitative feedback on CLICK into Activity adoption

Qualitative interviews were conducted with CLICK into Activity participants, exercise specialists, and two members of the project steering group to better understand the role of CLICK into Activity delivery settings and staff and how this may have affected programme outcomes. Project participants and stakeholders alike reported issues and concerns related to the process of GP referral to CLICK into Activity. Most agreed that GP referral is a good idea, but there was also consensus that more needs to be done to improve GP surgery engagement with projects like this. Exercise specialists valued mail-drops by GP surgeries as a good method for alerting eligible individuals to the study and credited the strategy with boosting recruitment figures. There was also acknowledgement that the referral process is not simple; GPs and primary care services



are under increasing pressure. Some respondents provided suggestions for improving the referral process. Interviews also explored setting-based feedback, with respondents highlighting the need for activity-appropriate space. Box 4.3 presents a selection of respondent feedback:

Box 4.3 Feedback on CLICK into Activity adoption at the setting and staff level

**GP referral process**

The hardest part [of the practice manager role] is definitely engaging with doctors' surgeries. It's tricky, because I have the contact details for practice managers and maybe one or two others, so for me, I have to get the whole project message through those members of staff to everyone else at the practice. That can be so tricky. No matter how many times I try, sometimes the message just doesn't get through. And promoting and referral is more difficult. This is not every surgery, some have been excellent, but it does depend on the practice manager. In my opinion, if a practice manager is there to help patients in their area, then they are the ones that are referring or promoting the project. If they're there to treat illness or manage people then they just don't seem to refer. *Stakeholder 2*

Some surgeries are doing enough [to highlight CLICK into Activity] and some definitely aren't. There are two of three surgeries that have been really good and positive. Regular letters sent to patients and other strategies. Others struggle to remember the project because they have so much going on. In some practices it's taken a really long time to find out the names of diabetic nurses and using them to directly refer into the project. In other areas it's been really hard to make it clear that we're not competition. There are different circumstances to navigate depending on the surgery. *Stakeholder 1*

Everyone was very enthusiastic [about GP referral process] at the beginning [of the programme]. To begin with [the enthusiasm] was great, but it's tailed off and I think this is because of the pressures that the surgeries are under. People have stopped thinking about good ideas and prevention but just gone to firefighting mode. *Stakeholder 2*

In our surgery we've had a change of receptionist so our reception team is very different. So, it's slipped off the radar. No one's been pushing it. *Stakeholder 2*

I thought 'Great I'm going to be a team with the doctors, we are going to really work together'. I thought doctors knew everything. I thought they were knowledgeable, they're doctors, you know, they know everything. I thought doctors would know the benefits of exercise, but I was shocked to see that some of them needed educating. They didn't believe in exercise. One nurse told my patient 'Oh, don't worry about being overweight, you need a bit of extra weight on you if you get ill' and I was appalled at the attitude of some of the people who were working for the NHS. *Exercise specialist 1*

Doctors don't seem to be preventing illness, they just seem to be treating illness. That is not what I believe in. I didn't have everyone on board, and it was a battle, I was constantly having to remind them to refer and I didn't expect that I thought they would be wanting to use me. *Exercise specialist 1*

At Crewkerne there are still quite a few hurdles to get over just because of the sheer weight of the work that they had there, and I think the patient base as well seems to be a lot bigger. *Exercise specialist 3*

There is another surgery in Crewkerne which is West One and we have been again to see the practice manager and he is a very, very difficult person to pin down. On a weekly basis he [practice manager] has been promising to instigate a mail out, but as of this week it still hasn't been done. *Exercise specialist 3*

From my experience [of the referral process] so far, apart from one or two GPs that are referring, it seems to be more coming from people like the diabetic nurses. GPs seem to have been relying on the mail-outs. *Exercise specialist 3*

### **Value of the 'mail-drop'**

Since the letters have been going out from the GPs, [recruitment has] been a lot better. *Exercise specialist 2*

There was one surgery that wasn't referring very well. But now they're sending letters out to their patients. They are now referring a lot better since the letters have been going out and people are responding to them. *Exercise specialist 1*

### **Pressure on primary care services**

It [CLICK into Activity] has generally [met my expectations]. I'm slightly worried...certainly to begin with it was brilliant and it worked really well for the first 12 months...I'm worried that it's slightly coming off the boil now. It's been a great time of change in primary care. Personally, I've noticed that our referrals into the project are dropping slightly because we've got so many other things to worry about, and I suspect other surgeries might be finding the same thing. *Stakeholder 2*

Life [as a GP] is much more tick boxy and dictated to than it was when I qualified. Our patient numbers are increasing exponentially, so the number of people I'm responsible for and their complexity is getting far worse, currently. There's a drive to push patients out of the hospital and into the community and it can be really, really difficult and hard at times. *Stakeholder 2*

I think the surgeries have been generally welcoming to do this; it would be great if everyone was on board and behind physical activity. It's just a fact of life that there are so many other things pulling on their time. *Stakeholder 1*

The IT is always a nightmare at the surgeries, the times I've tried to sort out IT and it's still an ongoing problem, but you know it doesn't stop me from doing what I'm doing. *Exercise specialist 3*

### **Strategies for improving referral process**

I think being in the surgery every week helps. So, if you see someone every week you get to remember who they are and what they're promoting. Having flyers and leaflets around is useful to keep things in mind. I think there is a real danger that there's so much out there that we don't know it all, and I know that everyone's looking at things like 'health connectors' in the local community. To me, they are perfectly placed to help signpost people to things like CLICK before they even get to see the GP. *Stakeholder 2*

Information, probably brief information, on a patient and how they've performed [on CLICK into Activity programme] might be quite useful to pop into the notes. Some GPs will moan that they didn't want to see more paperwork, but most will be interested. We don't get to know who's been along and so this would give us good insight.

*Stakeholder 2*

I think continual promotion [is important] because there can be a lot of promotion at the beginning of the project, but then not so much as you get into the project and I think things get a little bit lost. I think this is what I've found coming into CLICK. There hasn't been that continual promotion with the practice managers. I know they're difficult people to speak to but maybe just getting along to some of the practice team meetings, meeting with the health coaches, going along to some of their team meetings because I think that's the crux [of the issue] ... you can't just do it once and expect it to filter through to everybody. *Exercise specialist 3*

### **Venue**

Crewkerne is light and airy it's warm, you are upstairs it's really good for mental health and well-being as well because you've got all that green space [outside]. I found the venues in Ilminster really challenging. Ilminster was not my favourite area to work in. I preferred Crewkerne even though Ilminster was probably busier in the end. The venue was great for access parking but it was quite small, low ceiling a bit of a different feel to it you know enclosed, indoors. *Exercise specialist 1*

We went in the winter [to the community centre in Ilminster] and it was really hard. [The exercise specialist] was finding it hard to get the heating on and for it to be warm for when you got there. I mean it's been all right at the George Reynolds Centre, but I think to a certain extent it's better to have it too hot where you can open the windows but to have it too cold, especially if somebody is elderly, I think you need it warm in the winter. *Participant 1*

The venue that we use in Crewkerne is perfect for many reasons its right next to a carpark the disabled people can't always walk too far. *Exercise specialist 1*

I'm having a problem at one of the venues called the George Reynolds Centre which is in Crewkerne. It's a very nice venue, the problem is it doesn't suit my style of activity because there isn't any parking outside the door for me to take equipment. If I get a space I'm either having to park sort of illegally for a while, or I'm having to do like four or five trips backwards and forwards with equipment and then I have to get it upstairs there's a lift. *Exercise specialist 3*

## 4.4 Implementation

To better understand CLICK into Activity **IMPLEMENTATION** through an assessment of programme delivery and programme costs.

### 4.4.1 CLICK into Activity attendance

Attendance registers revealed that 54.2% (N = 326) of those recruited to the programme participated in at least one 30-minute CLICK into Activity session provided. The average number of sessions attended by those that attended at least one session was nine (Mean = 8.63, SD = 5.97). Adherence among participants that attended at least one session ranged from 1 session (N = 25, 8%) to 32 sessions (N = 3, 0.94%). A total of 104 participants attended at least 12 sessions during the course of the 12-week programme (32%).

### 4.4.2 Technology

Participant engagement with CLICK into Activity and local physical activity service provisions was originally planned to be monitored using web-based software 'My Activity Tracker' (MAT). MAT was designed to provide participants with monitoring information about their physical activity behaviour and to encourage individuals to become more active. Six months into project delivery, one of the original project partners, Intelligent Health, was removed from the project. Their role was to collect and process participant MAT data. After their removal as a project partner, it was not possible to use the MAT technology. Attendance and survey data were recorded via paper-based methods, with data processing and analysis conducted by the UWE research team. The change in study protocol was approved by the UWE Ethics Committee on 16<sup>th</sup> October 2016.

### **4.4.3 CLICK into Activity costs and resources**

This section examines the associated costs of CLICK into Activity from a funder perspective. These can then be compared with cost savings from prevention of treating diseases linked to 'at risk' populations. Cost estimates are presented in Table 4.24.

#### **4.4.3.1 Programme costs**

The CLICK programme in Somerset was funded by Sport England 2015-2018. A condition of funding was that each programme would be evaluated by an independent evaluation team and that data would be collected from participants to ensure there was a change in patient outcomes and value for money (return on investment). Research and infrastructure development costs associated with running the scientific research study would not be part of mainstream NHS implementation and funding of the CLICK programme. These costs have been identified in a separate category for information In Table 4.24, but are not included in the final cost analysis for that reason.

Costs presented in Table 4.24 provide a starting point or base estimate for understanding the economic costs of physical activity in treating health outcomes. From a funder perspective the total cost of implementing CLICK into Activity over three years was £174K. An average cost estimate of the CLICK twelve-week programme was £535 per person enrolled and attending at least one session (N=326). There is potential for cost variation in implementing CLICK into Activity delivery in each community setting based on the role of General Practitioners in emphasising the importance of physical activity for 'at risk' patients and ensuring that enrolments turn up for the first session and are retained in the programme. The mechanism of referral and social support is important to patient attendance and retention through boosting self-efficacy. It is also important to establish levels of activity and to have accuracy of referral from General Practice.

Table 4.24 Cost estimates for CLICK into Activity

|   | Nov 2015 -<br>Oct 2016<br>£ actual | Nov 2016-<br>Oct 2017<br>£ actual | Nov 2017 -<br>Oct 2018<br>£ estimate |
|---|------------------------------------|-----------------------------------|--------------------------------------|
| <b>Delivery Cost Estimate</b>   |                                    |                                   |                                      |
| Staff (Salaries two exercise specialists)   | 42,128                             | 43,368                            | 41,215                               |
| Equipment   | 4,002                              | 1,723                             | 1,250                                |
| Hire of Facilities  | 27,063                             | 26,696                            | 25,000                               |
| Surgery Room Hire (in Kind)   | -22,080                            | -22,080                           | -22,080                              |
| Promotion & Publicity   | 7,358                              | 3,210                             | 4,000                                |
| Transport/Travel  | 441                                | 360                               | 500                                  |
| <b>Sub Total</b>  | <b>58,912</b>                      | <b>53,277</b>                     | <b>49,885</b>                        |
| <b>Preparation Cost Estimate</b>  |                                    |                                   |                                      |
| Training & Coaching fees/expenses   | 4,871                              | 4,451                             | 3,000                                |
| <b>Sub-total</b>  | <b>4,871</b>                       | <b>4,451</b>                      | <b>3,000</b>                         |
| <b>Research &amp; Infrastructure Development</b>  |                                    |                                   |                                      |
| IT Infrastructure   | 22,500                             | -                                 | -                                    |
| Evaluation & Research   | 12,500                             | 16,250                            | 16,250                               |
| <b>Sub-total</b>  | <b>35,000</b>                      | <b>16,250</b>                     | <b>16,250</b>                        |
| Annual Cost of Implementation (Preparation and Delivery)  | <b>63,783</b>                      | <b>57,728</b>                     | <b>52,885</b>                        |
| Total Cost of Implementation over 3 Years from a funder perspective                                       |                                    |                                   | <b>£174,396</b>                      |
| Average Cost per person based on at least one attendance at CLICK into Activity 12-week programme (n=326) |                                    |                                   | <b>£535</b>                          |

#### **4.4.3.2 Cost savings from a funder perspective**

PHE (2016) considers costs for the five conditions for which Population Attributable Fractions (PAFs) are available for physical inactivity (ischaemic heart disease, ischaemic stroke, breast cancer, colon/rectum cancer and diabetes mellitus) to estimate costs from these diseases that can be attributed directly to physical inactivity. Costs for each NHS CCG in England are provided as a data annex to the main report (PHE, 2016).

These data demonstrated the Total Annual Diabetes Expenditure Direct Cost Estimates for Somerset CCG was £1.38m in 2013-2014. Total Expenditure 2013-2014 for five, of over 20 conditions preventable and manageable by physical activity incurred by Somerset CCG was £4.84m. These five conditions were ischaemic heart disease, ischaemic stroke, breast cancer, colon/rectum cancer and diabetes mellitus. £4.84m is a direct cost estimate to CCGs for the five conditions (i.e. not costs to other parts of the NHS and the wider health and social care system). The cost to the wider economy of Somerset has to be added to that when considering the magnitude of cost-savings compared with implementation cost. These opportunity cost comparisons of implementing the CLICK into Activity Programme compared with the direct cost of disease management of common health conditions related to physical inactivity demonstrate the potential value for money of GP referral to physical activity programmes delivered in a community setting.

#### **4.4.4 Qualitative feedback on CLICK into Activity implementation**

Qualitative interviews were conducted with CLICK into Activity participants, exercise specialists, and two members of the project steering group to better understand how the CLICK into Activity programme was delivered and to identify some of the important barriers and facilitators associated with project success. The role of exercise specialists in providing a safe and supportive environment for participants to not only engage with the programme but also to participate in programme activities was seen to be a critical feature of programme success. Participants described the importance of the exercise specialists' interpersonal communication skills in providing them with the confidence to attend the first sessions, and frequently mentioned the value of having a 'friendly face' supporting them from their initial appointment right through to the end of the 12-week programme.



The content of CLICK into Activity sessions was popular, with particular praise for circuit-style activity, and the way that sessions were tailored according to individuals' needs. Participants also described feelings of increased control over their activity levels at CLICK into Activity sessions as sessions progressed. The exercise specialists were seen to provide support and guidance to aid participants to work towards a suitable activity target. Class attendance was generally perceived to be good, and most respondents were keen to interact and build social relationships with others in a similar situation. CLICK into Activity sessions were found to promote social support and build a sense of connectedness, with many respondents reporting feelings of social isolation prior to referral to the programme. Respondents identified concerns with the advertising and promotion of CLICK into Activity, and they made suggestions for improving programme uptake. Communication between project stakeholders was also seen to be integral to successful implementation. Support provided by the project lead (SSDC) was particularly valued by the exercise specialists delivering the programme. The main issue described by the exercise specialists related to technology failures during the early stages of project delivery. They described problems with recording attendance due to a lack of signal in rural areas, and the negative implications of this on their work load. They also referred to communication difficulties with software providers during the early stages of the project and reported that they would prefer to use paper-based methods for recording information. Box 4.4 presents a selection of respondent feedback:

#### Box 4.4 Feedback on CLICK into Activity implementation

##### **CLICK into Activity promotion**

I just think that initially it was only my surgery, or seemed to be the only one, that was taking any notice of [CLICK into Activity]. That's down to the individual surgeries obviously and you can't do much about it, only let them know what's available, I appreciate that. But, no, I don't think it was very well advertised by the surgeries.

*Participant 7*

When we first started it took several weeks for [attendance at CLICK into Activity sessions] to pick up. Mainly because we had the feeling...that probably the nursing staff at the Health Centre hadn't picked up on the idea of [CLICK into Activity]. *Participant 10*

I actually went to the doctors and I said 'Look, I need to do some exercises of some sort, I want to keep fit', and he gave me the [CLICK into Activity] card. But I actually asked him, which I think is a shame, because I think if I'm diabetic and I had a bit of high blood pressure as well, I think the doctors should offer this sort of thing, straight away. I shouldn't have had to have done all that really. *Participant 1*

### **The role of the exercise specialist**

It's been great to see how much the exercise specialists enjoy their work, and how passionate they are. *Stakeholder 1*

It was [the exercise specialist] who runs the class, she's really, really good. She is a real 'people person'. She was able to bring the best out in you, encourage you. *Participant 5*

Oh, I think [the exercise specialist is] very encouraging, and enthusiastic. She set my mind at rest and I think everybody else as well who was there. When I first started and I took the circuits [session], I thought 'Have I bitten off more than I can chew?' I soon got into it though. It's the warm up exercise, it's the way [the exercise specialist] eased everybody into it and how she helped when we were doing the circuits. A lot of encouragement! *Participant 1*

The only words to describe [the exercise specialist] are 'excellent' and 'awesome' in what she does. She is very, very dedicated. She deserves a medal, literally. She is very, very good, she knows what she's doing, she does care about each and every one of the people who are taking part, and she works everything round the people that are there, and how, what their issues are and she's always on the alert to make sure everyone is ok. *Participant 2*

Aaah! [The exercise specialist] is fantastic. She is so easy going, she doesn't push you. She just encourages you. I've never met a nicer person. *Participant 3*

[The exercise specialist is] not like a personal trainer who will stand and yell at you until you have managed to do so many push ups! *Participant 6*

I like her [exercise specialist]! She's a lovely lady, she really is. When you first arrive, she says 'Hello, how are you, how are you today?' She makes everybody feel at home, I suppose. *Participant 8*

[The exercise specialist] knows how to sort of treat us 'older people', in the fact that caution has to be adhered to. You, know, you don't want to push people too hard. *Participant 10*

It's really understanding the participants, they are inactive to start with, they're quite immobile, a lot of them. So, they are not going to be able to do jumping squats and jumping lunges. It's important to realise that most of the people that have these conditions are probably 60 plus so already you are thinking about knees and ankles, and you have to do things that are quite low impact. *Exercise specialist 2*

### **Class content**

The type of class was important. We did have adapted sports, like table tennis, played on normal tables and then boccia and 'new age' curling in a normal sports hall and chair volleyball. Some of these are really good fun to attend but I think for this type of project, the circuits style delivery is better for these types of patients and was much more popular. I think this was because people felt they were getting more for their time. The numbers are picking up where adapted sports has been swapped for circuits. *Stakeholder 1*

The people that attended all had different sort of disabilities, put it that way, or impairments, and that was considered. You didn't feel like you were being picked on, if you know what I mean. It was very friendly as well... I did enjoy it and yeah it was very, very good. *Participant 7*

Some people just come along for the company and the music! *Exercise specialist 2*

Most people that do come are pleasantly surprised by how much fun it is. It's no pressure. All the exercises are kind of hidden in amongst the fun to start with, with the music. *Exercise specialist 2*

I try to adapt it so that everybody is included but I also try and let them know that if they need to sit out or if any reason they need to sit down they can. So it's all been quite easy going and everybody joins in as one really so I'm not really seeing any segregation or anything like that. *Exercise specialist 2*

I always say to them 'I don't mind showing you this [exercise] every single time you come. If you forget the exercise please come and ask me so that you do it in the right way' and they go 'Oh, I know, it's me again. It's that exercise again' and I go 'Good you've asked me again!' And, you know they are quite happy to approach me and I think if they're approaching me that's good. *Exercise specialist 2*

### **Attendance**

Class size was high and there were always new people coming in. I believe that [the exercise specialist] had to split the group, because there were so many people and not everyone could do all the [circuits] stations. So, it did make it a bit difficult. But we managed it and everybody got something out of it. I don't mind a lot of people; the more the merrier! *Participant 2*

I like it when there's more people. First of all, I didn't...I would be quite happy just to be there with just a couple, but I like it now, now I have got my confidence up. *Participant 3*

No there haven't been any issues really [with large classes]. I mean sometimes if it's a bit packed and they haven't got enough equipment for everybody. Like the Pilates circles and that. But, we make do we do with other things. *Participant 3*

They decided to have two sessions because, you know, it was getting too much at times, where up to 20 people [attended]. It's not a very big room. The other thing was that people weren't as disciplined [at the circuit training], even though [exercise specialist] did tell them what to do in the circuit training. You would be going around in a circuit and you would suddenly find somebody shoot across, or cut across back, you know, and you would have to decide which ones to miss out and carry on with. *Participant 4*

[Class size] didn't make any difference to me because the type of exercise you are doing you are working against yourself. You are not competing with anybody; you are just getting on with your own thing. So, it didn't really matter if there were fewer or more people there, it didn't make a lot of difference. Occasionally some people didn't realise you had to go around, like in a circuit, and they would jump from one [station] to another. That can be a little irritating sometimes. *Participant 5*

Sometimes it was a bit over crowded and because some people were unable to sort of get up and do the whole lot. It tended to be that some people were unable to go from one thing to another like follow round in a circle. Sometimes you went to move on and you couldn't because somebody was you know just doing that one [station] all the time. *Participant 7*

I think it's really better to have at least have, say six people at the minimum. I mean, I have done it with three [participants] and we have got used to it, we're quite jolly you know. But I think really, it's a shame [when] you don't have at least six as the minimum. *Participant 1*

I think there are certain amount of people that who won't do [CLICK into Activity]. They'll come to the first and second sessions, and for whatever reason that's it, you never seen them again. But there are a high percentage of people that come along and they enjoy joining in and once they're joining in they're hooked. *Participant 10*

### **Supportive group delivery**

I got to know lots of people and it's nice to chat to other people and see how they're doing. *Participant 3*

I would say 4 or 5 weeks in [to the 12-week programme] you can see a change in [participants]. You know their character, you can see they are coming out of their shell, and have more energy. And they are more sociable. *Participant 5*

It's a very friendly group you know everybody chats to everybody. When you don't go, you know, for a couple of weeks - I didn't go because I had a cold - they say 'Where have you been you know?' It's nice. *Participant 8*

I did find that a lot of [participants] were a bit sort of reticent, you know, to talk to you in the beginning. But they soon came out of their shell, so to speak, and, yes, we have quite a good lot of people. *Participant 7*

It's a pity it's only for a few weeks because once 12 weeks were up, it's sad really because you don't see [the other participants] anymore. *Participant 8*

Many people that are coming have been widowed and haven't really got a lot of friends. They've made quite good friends there and carried on being friends afterwards. *Exercise specialist 2*

I can remember a while back when a lady came along to the initial meeting in the GP surgery and then she said she would come along and give it a try. She did warn me before she came 'I don't really like class settings, I don't really like exercise and I don't like classes'. But she came along and she went 'No, it's not for me' and she didn't come back. *Exercise specialist 2*

I think everybody was a bit nervous to start, and then as you got to know people and more and more people joined, the old ones were, like, helping the new ones, and it was just amazing because everybody said they were so nervous [at the start], and the older ones made the new ones feel so welcome. *Participant 3*

They also meet people in a similar situation and start to develop quite close personal connections. Some of them go out to coffee once a week because they have got to know each other and then moved onto an exit route. People are joining all the time so there's no real development of cliques. *Stakeholder 1*

### **Importance of communication and functioning technology**

I love working for the Council. They're so professional, and that makes me feel really sort of safe in my work, and trusting because they are 'by the book'. All the training we had about equalities was great because that makes you more understanding of the world. I can't fault South Somerset District Council, they've been amazing. *Exercise specialist 2*

Any ideas that I had, [SSDC] would listen and take it on board. They made me feel really valued and a part of the team. *Exercise specialist 1*

At the very, very beginning [of the project] we had all the problems with the IT. I didn't...I felt quite unsupported by [software providers]. *Exercise specialist 2*

The [My Activity Tracker software] didn't work. There was no internet and it was very embarrassing actually when the systems didn't work. It looked very unprofessional. *Exercise specialist 2*

The only issue I think really is the technology side of things. It can be quite draining [when it does not work] and it sort of affects your personality. We're not meant to be bombarded with technology that's not working, we're there to be the face of this project, and our personalities are meant to shine through. The technology side definitely has been a huge issue with this project. I think the problem they've got is they don't understand that we're rural and not in the city and there's no signal. *Exercise specialist 2*

Initially [when using the My Activity Tracker software] I was doing a lot of extra work at home. That was when it was all bothering me a little bit, you know. It wasn't working

correctly. Sometimes the phones were working, sometimes they weren't. *Exercise specialist 2*

## 4.5 Maintenance

To better understand CLICK into Activity **MAINTENANCE** over time through an assessment of long-term follow-up outcomes.

### 4.5.1 Six-month and 12-month follow-up response rates

Follow-up survey completion rates at 6- and 12-month follow-up were particularly low (Table 4.25). This means that interpretation of findings should be considered with caution. In this section we present the findings from a comparison of matched baseline and 6- and 12-month follow-up data.

Table 4.25 Total minutes of sport/week at baseline and 6- and 12-month follow-up

|           | N   | %     |
|-----------|-----|-------|
| Baseline  | 602 | -     |
| 6 months  | 80  | 13.29 |
| 12 months | 41  | 6.81  |

### 4.5.2 Changes in target outcomes measures at 6- and 12-month follow-up

A comparison of mean weekly minutes of sport at baseline with responses at 6- and 12-month follow-up revealed a significantly higher duration of sport participation at both follow-up points (Table 4.26).

Table 4.26 Total minutes of sport/week at baseline and 3-month follow-up

|                   | Mean min/week | SD     |
|-------------------|---------------|--------|
| Baseline          | 0.00          | 0.00   |
| 6-month follow-up | 34.05         | 117.46 |
| p                 | 0.01          |        |



|                    |        |       |
|--------------------|--------|-------|
| N                  | 80     |       |
| Baseline           | 0.00   | 0.00  |
| 12-month follow-up | 21.83  | 42.60 |
| p                  | <0.001 |       |
| N                  | 41     |       |

Note. Some columns do not total N = 80 or N = 41 due to missing data.

Respondents' total weekly physical activity was calculated by summing weekly minutes of vigorous and moderate physical activity and walking (IPAQ Research Committee, 2014) (Table 4.27). A comparison of matched baseline and 6- and 12-month follow-up responses revealed a significant increase in total weekly physical activity ( $p < 0.001$ ).

Table 4.27 Total minutes of physical activity/week at baseline and 6- and 12--month follow-up

|                    | <b>Mean min/week</b> | <b>SD</b> |
|--------------------|----------------------|-----------|
| Baseline           | 67.40                | 86.32     |
| 6-month follow-up  | 258.38               | 182.39    |
| p                  | <0.001               |           |
| N                  | 77                   |           |
| Baseline           | 71.98                | 81.60     |
| 12-month follow-up | 216.38               | 196.32    |
| p                  | <0.001               |           |
| N                  | 40                   |           |

Note. Some columns do not total N = 80 or N = 41 due to missing data.

Table 4.28 presents a comparison of baseline physical activity with 6-month and 12-month physical according to intensity domain. Across all physical activity domains, weekly minutes of physical activity were found to be significantly higher at 6- and 12-month follow-up (all  $p < 0.01$ ). This was with the exception of weekly walking minutes, which were broadly comparable at baseline and 12-month follow-up (Baseline M = 61.10, SD = 74.01; 12-month follow-up M = 86.59, SD = 78.19).

Table 4.28 Total minutes' physical activity/week by domain at baseline and 6- and 12-month follow-up

|                                   | <b>Mean min/week</b> | <b>SD</b> |
|-----------------------------------|----------------------|-----------|
| <b>Vigorous physical activity</b> |                      |           |
| <i>Baseline</i>                   | 0.38                 | 3.35      |
| <i>6-month follow-up</i>          | 81.38                | 76.95     |
| <i>p</i>                          | <0.001               |           |
| <i>N</i>                          | 80                   |           |
| <b>Moderate physical activity</b> |                      |           |
| <i>Baseline</i>                   | 11.58                | 27.99     |
| <i>6-month follow-up</i>          | 82.41                | 76.89     |
| <i>p</i>                          | <0.001               |           |
| <i>N</i>                          | 79                   |           |
| <b>Walking</b>                    |                      |           |
| <i>Baseline</i>                   | 55.06                | 76.27     |
| <i>6-month follow-up</i>          | 89.68                | 78.47     |
| <i>p</i>                          | 0.01                 |           |
| <i>N</i>                          | 78                   |           |
| <b>Vigorous physical activity</b> |                      |           |
| <i>Baseline</i>                   | 0.00                 | 0.00      |
| <i>12-month follow-up</i>         | 53.66                | 80.89     |
| <i>p</i>                          | <0.001               |           |
| <i>N</i>                          | 41                   |           |
| <b>Moderate physical activity</b> |                      |           |
| <i>Baseline</i>                   | 10.60                | 25.88     |
| <i>12-month follow-up</i>         | 72.63                | 80.26     |
| <i>p</i>                          | <0.001               |           |
| <i>N</i>                          | 40                   |           |
| <b>Walking</b>                    |                      |           |
| <i>Baseline</i>                   | 61.10                | 74.01     |
| <i>12-month follow-up</i>         | 86.59                | 78.19     |
| <i>p</i>                          | 0.16                 |           |
| <i>N</i>                          | 41                   |           |

Note. Some columns do not total N = 80 or N = 41 due to missing data.

WEMWBS scores were seen to improve significantly from baseline to 6-month and baseline to 12-month follow-up (Table 4.29). Follow-up scores were found to be higher than the WEMWBS population norm (Mean = 51.61, SD = 8.71) (NHS Digital, 2014).

Table 4.29 Mean WEMWBS responses (WEMWBS) at baseline and 6- and 12-month follow-up

|                    | <b>Mean WEMWBS Score</b> | <b>SD</b> |
|--------------------|--------------------------|-----------|
| Baseline           | 49.00                    | 10.36     |
| 6-month follow-up  | 57.09                    | 8.90      |
| p                  | <0.001                   |           |
| N                  | 66                       |           |
| Baseline           | 48.58                    | 10.56     |
| 12-month follow-up | 58.14                    | 10.98     |
| p                  | <0.001                   |           |
| N                  | 36                       |           |

Note. Some columns do not total N = 80 or N = 41 due to missing data.

#### 4.5.2 Qualitative feedback on CLICK into Activity maintenance

Only a small sample of participants provided 6- and 12-month follow-up data, limiting our understanding of the longer-term effects of CLICK into Activity. However, qualitative interviews were conducted with CLICK into Activity participants, exercise specialists, and two members of the project steering group to explore the longer-term potential of CLICK into Activity. The exit route strategy for participants exiting the programme after 12-weeks was highlighted, as well as participant engagement or intention to engage with services offered. This included discussion of the acceptability of paying for a service like CLICK into Activity. Interviews with project stakeholders identified the importance of CLICK into Activity as a means for developing links with agencies interested in promoting a similar health and wellbeing agenda. Box 4.5 presents a selection of respondent feedback:

#### Box 4.5 Feedback on CLICK into Activity maintenance

##### **Exit route strategy**

We've tried to make sure that we're not taking away any custom from existing activity options in the area. I've chatted with exercise instructors already delivering sessions in the area. Most of them have agreed to allow CLICK into Activity participants a free

session once they've finished CLICK to see if it's something for them. The instructors were quite happy to offer that as it might mean more people coming along. *Stakeholder 1*

We've also helped to put on other things, like adapted sports, following on from CLICK adapted sports session. A couple of people that were in the CLICK project wanted to help others and volunteered to offer adapted sports sessions. *Stakeholder 1*

We've also set up walking netball, and we also have an exit route run by one of the exercise specialists through Age UK. Most of the class consists of people who've been referred by the other exercise specialist. They're having to move venues because she has so many people in the class! There have been some real success stories. *Stakeholder 1*

There are also some gyms that offer a class for people who've had heart or other clinical problems, and the people that deliver them are well placed to deliver those from CLICK as they suffer from long term conditions. We try to use what's there and plug the gaps where we need to, I guess. *Stakeholder 1*

### **Physical activity intentions and behaviours**

My friend and I, we were just talking today and we're thinking we are going to actually join the gym and pay a monthly fee, and we can go to that class and then maybe go down and use the bicycles or the treadmills or whatever, and do it on a regular basis. *Participant 5*

It has inspired me to lose some weight. I did lose weight doing the exercise, but of course Christmas came in the middle [of the 12-week programme], and I put some weight on at Christmas but then I lost that again. So, that has inspired me since then to go on to lose more weight. *Participant 6*

[Since completing 12 weeks of CLICK] I've actually stayed on with [the exercise specialist] to help her there because she asked me if I would be a volunteer for her class. After her class I run a Sport 50 class [exit route]. [The class] is open to anybody, So, it

means that people can bring spouses or friends with them and encourage other people of the same age, who maybe have arthritis but aren't diabetic or have high blood pressure. Or even people who just feel they need to go out and have a bit more exercise because they're stuck at home. The cost for Sports 50 is the hire of the hall...and that we split between us. *Participant 6*

The place that I'm at [home], I mean we've got people here [in these flats] of 90-odd [years of age]. So, you know, it's got to have a lift in it. But I find it beneficial by using the stairs. I'm getting a bit faster now (laughs)! *Participant 7*

I've had people come in, one lady in particular I can remember from the very, very beginning of the study she came in and she was so introverted and withdrawn and she was literally not hardly leaving the house at all, and she came in, she came to every session and it was really sad when she had to leave. But she's gone on to... she's gone on to carry on with an exit class, she's carrying on... she's further gone on and done Zumba, she's now just joined a walking group and she's also joined a walking netball. She's done all that and she's like a totally different person, she's just so confident now in herself of what she's doing you just can't believe the difference. *Exercise specialist 2*

### **CLICK into Activity roll-out costs**

I think £2 [per session] for a pensioner. If they aren't earning a lot...I think that's fair. The thing is, to get people going, I think it needs to be free even if it's only for a few weeks. Just so they get interested. And then charge [once they become a regular attendee]. *Participant 1*

There is a new Centre opened up down here but it's just too expensive. I wouldn't mind paying a fiver a session or something like that, but down here they want you to join for the year and it's too expensive. I would be willing to pay £5 or £6 a [CLICK] session. *Participant 3*

You are talking now about a lot of people who are pensioners. In our area, all the parking is charged for, unless you can park on the street and you can't always get parking on the street. You are talking about having to pay probably 80p per session for

your parking. So [if] you start charging £5 a week, you are going to lose people very rapidly. If you charge a couple of pounds a session, then you might be all right. But I think the big thing about the CLICK into Activity is it gives people a chance to start exercising without having to worry about paying for it, because they don't know if they are going to enjoy it. *Participant 6*

We have only got a certain amount of money available, you know, for like pocket money and things like that. So, we couldn't go much beyond probably £2 or £3 [per session]. That might not sound a lot to you but it's an awful lot of money, you know, when you have got a fixed income like a pension. *Participant 9*

### **Development of inter-agency relationships**

It's been really good to developing links at other organisations, like Sport England and obviously the GP surgeries. That has provided such a breakthrough for us, as prior to CLICK we didn't really have any contact with them. It's been a way to get a foot in the door. *Stakeholder 1*

I'd like to feedback that it's been a really good project to be a part of. Just look at the steering group and how people from all walks of life have joined together to make it work. It's disappointing that it hasn't worked as much as I hoped it would. What I would not like to lose is all those people who work in the locality, with no ulterior motive. It's a good news story not a bad one. It's a very positive message and it's a positive project in a time when there's not much positive in GP land! *Stakeholder 2*

## 5. Key findings and recommendations

A summary of findings is presented according to each domain of the RE-AIM framework.

### Key findings

#### Reach

##### Respondent characteristics

- A total of 621 adults were recruited to the project and provided baseline data. Of these, 602 were found to be 'inactive' and eligible for the programme (96.9%). These individuals formed the baseline sample.
- The majority of participants were referred due to a diagnosis of pre-diabetes, diabetes, or hypertension (N = 558, 92.7%). 22 obese or overweight individuals were referred to the programme (3.65%) and 22 individuals diagnosed with one of the original long-term conditions and obesity/overweight were referred (3.65%).
- Most participants were female (N = 379, 63%) and more than half of participants were aged 70 years and above (N = 309, 51.3%).
- The vast majority of participants identified as being of White ethnic origin (N = 580, 96.3%).
- Just over one fifth of individuals were qualified to degree level (N = 128, 21.3%), and the majority of participants reported an annual household income in the £10,000-£19,999 bracket (N = 177, 29.4%).
- Roughly two thirds of respondents described themselves as being in a relationship (N = 394, 65.5%).
- Approximately 60% reported having a long-term illness or disability.
- More than 80% of respondents were categorised as overweight (N = 134, 22.3%, BMI 25-29kg/m<sup>2</sup>) or obese (N = 369, 61.3%, ≥30.0kg/m<sup>2</sup>).

##### CLICK into Activity participation

- A total of 326 attended at least one 30-minute CLICK into Activity session during the 12-week programme (54.2%).

- There were no differences in sex, ethnicity, education, marital status and body mass index (BMI) among those that attended at least one CLICK into Activity session compared with non-participants. However, a significantly larger proportion of participants was aged 70 or above compared with non-participants (55.2% vs 46.5%, respectively), and a significantly higher proportion of non-participants reported having a long-term disability compared with participants (65.5% vs 56.4, respectively).

### Qualitative feedback

- Feedback indicated that the programme was reaching the target population but there was disappointment among respondents regarding the number of people that joined the 12-week programme.
- Interviews identified a range of barriers and facilitators to programme participation, from individual-level factors such as personal motivation, management of existing health issues, and the importance of joining a group containing 'people like me', to social-/environmental-level factors including class scheduling, social support from friends and family and health care professionals, and perceptions of the physical environment (e.g. weather, access, safety, area aesthetics).

### Effectiveness

#### Changes in survey responses from baseline to three-month follow-up

- A total of 602 participants eligible for the CLICK into Activity programme completed baseline measures, with 186 participants completing measures at 3-month follow-up, 80 participants at 6-month follow-up and 41 participants at 12-month follow-up. Follow-up survey response rates were relatively low (particularly at 6- and 12-month follow-up) so the findings presented should be interpreted with caution.
- A comparison of baseline and 3-month follow-up data revealed significant positive changes in:
  - Total minutes of sport per week
  - Total minutes of physical activity per week



- Total vigorous physical activity per week
- Total moderate physical activity per week
- Total walking per week
- Mental wellbeing score
- There was a positive trend from baseline to 3-month follow-up body mass index and grip strength scores, but these trends were not found to be statistically significant.
- A comparison of respondent outcomes according to participation in CLICK into Activity revealed no significant differences in:
  - Total minutes of physical activity per week
  - Total vigorous and moderate physical activity per week
  - Total walking per week
  - Body mass index
  - Grip strength
- Total minutes of sport per week and mental wellbeing scores were found to be significantly higher among those that did not attend a CLICK into Activity session.

#### Qualitative feedback

- Individuals described numerous positive changes in their general outlook and perceptions of their health and wellbeing as a result of being referred to CLICK into Activity.
- A range of positive changes, including increased mobility, weight loss, reduced symptoms from long-term conditions, increased core strength, increased purpose and feelings of happiness were identified.

#### **Adoption**

##### Surgery recruitment

- The majority of participants were recruited from Springmead surgery (N = 123, 20.4%), closely followed by Essex House surgery (N = 106, 17.6%).
- Two of the original surgeries (Crewkerne Health Centre and West One) did not have adequate resources to recruit participants to the programme, and were therefore withdrawn as CLICK into Activity referral locations.

- One surgery, originally located outside of the CLICK GP Federation, expressed interest in joining the programme and after joining the Federation was invited to join the project in June 2017.

#### Qualitative feedback

- Most agreed that GP referral to social prescription is a good idea, but there was also consensus that more needs to be done to improve GP surgery engagement with projects similar to this.
- Project participants and stakeholders alike reported issues and concerns related to the process of GP referral to CLICK into Activity.
- Exercise specialists valued mail-drops by GP surgeries as a good method for alerting eligible individuals to the study and credited the strategy with boosting recruitment figures.
- There was also acknowledgement that the referral process is not simple; GPs and primary care services are under increasing pressure.
- Some respondents provided suggestions for improving the referral process. Interviews also explored setting-based feedback, with respondents highlighting the need for activity-appropriate space.

#### **Implementation**

##### Attendance

- Attendance registers revealed that 54.2% (N = 326) of those recruited to the programme participated in at least one 30-minute CLICK into Activity session provided.
- The average number of sessions attended by those that attended at least one session was nine (Mean = 8.63, SD = 5.97).
- Adherence among participants that attended at least one session ranged from 1 session (N = 25, 8%) to 32 sessions (N = 3, 0.94%).

- A total of 104 participants attended at least 12 sessions during the course of the 12-week programme (32%).

#### Costs and resources

- From a funder perspective the total cost of implementing CLICK into Activity over three years was £174K.
- An average cost estimate of the CLICK twelve-week programme was £535 per person enrolled and attending at least one session (N=326).
- There is potential for cost variation in implementing CLICK into Activity delivery in each community setting based on the role of General Practitioners in emphasising the importance of physical activity for 'at risk' patients and ensuring that enrolments turn up for the first session and are retained in the programme.
- The opportunity cost comparisons of implementing the CLICK into Activity Programme compared with the direct cost of disease management of common health conditions related to physical inactivity demonstrate the potential value for money of GP referral to physical activity programmes delivered in a community setting.

#### Qualitative feedback

- The role of exercise specialists in providing a safe and supportive environment for participants to not only engage with the programme but also to participate in programme activities was seen to be a critical feature of programme success. Participants described the importance of the exercise specialists' interpersonal communication skills in providing them with the confidence to attend the first sessions, and frequently mentioned the value of having a 'friendly face' supporting them from their initial appointment right through to the end of the 12-week programme.
- The content of CLICK into Activity sessions was popular, with particular praise for circuit-style activities, and the way that sessions were tailored according to individuals' needs.
- Participants also described feelings of increased control over their activity levels at CLICK into Activity sessions as sessions progressed. The exercise specialists

were seen to provide support and guidance to aid participants to work towards a suitable activity target.

- Class attendance was generally perceived to be good, and most respondents were keen to interact and build social relationships with others in a similar situation.
- CLICK into Activity sessions were found to promote social support and build a sense of connectedness, with many respondents reporting feelings of social isolation prior to referral to the programme.
- Respondents identified concerns with the advertising and promotion of CLICK into Activity, and they made suggestions for improving programme uptake.
- Communication between project stakeholders was also seen to be integral to successful implementation. Support provided by the project lead (SSDC) was particularly valued by the exercise specialists delivering the programme. Exercise specialists also referred to communication difficulties with software providers during the early stages of the project and reported that they would prefer to use paper-based methods for recording information.
- The main implementation issue described by the exercise specialists related to technology failures during the early stages of project delivery. They described problems with recording attendance due to a lack of signal in rural areas, and the negative implications of this on their work load.

## **Maintenance**

Changes in survey responses from baseline to six- and 12-month follow-up

- Follow-up survey completion rates at 6- and 12-month follow-up were particularly low (6-month N = 80; 12-month N = 41) and means that interpretation of findings should be considered with caution.
- A comparison of baseline with 6- and 12-month follow-up data revealed significant positive changes in:
  - Total minutes of sport per week
  - Total minutes of physical activity per week
  - Total vigorous physical activity per week
  - Total moderate physical activity per week
  - Mental wellbeing score

- Total walking per week was found to be significantly higher at 6-month follow-up, although this was not observed at 12-month follow-up.

#### Qualitative feedback

- The exit route strategy for participants leaving the programme after 12-weeks was highlighted with respondents commenting favourably on the numbers of options available and reporting positive intentions engaging with services offered.
- Interviews with project stakeholders identified the importance of CLICK into Activity as a means for developing links with agencies interested in promoting a similar health and wellbeing agenda.

### **Recommendations**

#### Programme development

1. Establish a strong multi-agency team. Schedule regular meetings throughout the life of the project that ensure all stakeholder views are valued.
2. Careful consideration of programme eligibility criteria is important. The initial CLICK programme criteria were restricted to those diagnosed with pre-diabetes, diabetes, or hypertension. Once eligibility was relaxed to include obese and overweight participants, recruitment was seen to improve and more inactive individuals targeted by the programme were reached.
3. Consider possible barriers related to individuals' engagement and how these will be mitigated during programme delivery. Barriers might be individual (For example, personal motivation, lacking confidence or self-efficacy, etc.), or social (For example, concerns about making friends, class scheduling, etc.) or environmental (For example, class location, access to venue, safety concerns, adverse weather).
4. Consider the programme infrastructure that will be required (For example, IT systems) and put in place contingency plans to mitigate possible problems (For example, software failure or access issues).

5. Employ a programme delivery team that is passionate about physical activity and cares for every individual to pass through the programme. Employees should be supportive and positive role models that have experience working with, or an appreciation of, inactive individuals and how to tailor programme activities to their specific needs.

#### Marketing and recruitment strategy

6. A multifaceted approach to marketing GP referral programmes such as CLICK into Activity should be developed and implemented in advance of project recruitment. Strategies such as targeted mail-drops from GP surgeries to potentially eligible patients were perceived to be particularly effective and may help to boost recruitment from the outset of a project.
7. An enthusiastic marketing and recruitment strategy should be maintained throughout the life of the project, with continual investment from project partners. This will help the project to build momentum and increase engagement.
8. Work with GP surgeries in promoting the programme, while appreciating the workload pressures that primary care is facing. Reassuring practices that the GP referral programme is working towards improved health outcomes, and should not be viewed as competition may help to foster positive relationships.

#### Programme implementation

9. Class content should be tailored to the individuals' needs and abilities. This will help to promote feelings of self-worth, self-efficacy and increased control over one's health and wellbeing outcomes.
10. Programme delivery teams should recognise and value individuals' improvements in mental health in the same way as progress in physical health outcomes.
11. Programme delivery teams should be aware that not all health professionals will appreciate the value of physical activity for prevention and may need further information or training to develop their knowledge base.

12. Be aware of existing community assets, beyond primary care, and consider how to engage them in promoting the programme to the community (For example, Health Trainers).
13. Promote the social benefits of group-based physical activity. It provides an opportunity to meet new people, make friends, and participate alongside people in a similar situation.
14. If a programme is time-limited, offer a wide range of alternative activity groups in the local area. Encourage participants to attend taster sessions recommended by the delivery team before exiting the programme to aid transition. Building relationships with locally-based group leaders is strongly recommended.

## 6. Conclusions

CLICK into Activity, a social prescribing initiative based in South Somerset, was one of sixteen projects to receive funding in 2015 from Sport England. The preventive approach taken through CLICK into Activity was to refer inactive people from general practice and encourage individuals to play a central role in engaging with exercise specialists in community leisure services to improve health and wellbeing and support them to become more physically active. The 12-week programme targeted inactive individuals diagnosed with hypertension, pre-diabetes, diabetes and those who were classed as overweight or obese. The RE-AIM framework provided a useful approach to measure the public health effects of CLICK into Activity and also to identify the barriers and facilitators to programme implementation.

Numerous challenges including low recruitment, limited long-term follow-up data, changes to project management, project partners and programme delivery, were encountered during implementation. The ongoing monitoring of programme implementation during meant that many of these challenges were mitigated by the hard work of the project management team and dedication of exercise specialists, evidence of which is clear from the positive findings reported. This evaluation has identified key learning points from the implementation of CLICK into Activity that should be used to inform the development of future community-based physical activity programmes.

Overall, the short-term findings reported here suggest that CLICK into Activity has resulted in positive outcomes for many participants, with significant improvements observed for a range of outcomes assessed through this evaluation: total minutes of sport per week; total minutes of physical activity per week; total vigorous physical activity per week; total moderate physical activity per week; total walking per week; and, mental wellbeing score. These findings are complemented by in-depth qualitative feedback from CLICK into Activity participants, project partners and exercise specialists responsible for programme delivery, with CLICK into Activity perceived favourably as a strategy for promoting physical activity among the inactive. An assessment of programme resources and costs indicated that the opportunity costs of implementing CLICK into Activity demonstrate the potential value for money of GP referral to physical activity programmes delivered in a community setting.



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## Appendices

### Appendix A. Baseline questionnaire



## Effect of CLICK into Activity on physical activity levels of diabetic, pre-diabetic and hypertensive adults

### Baseline questionnaire

#### Screening item

*[Guidance for exercise specialist: The project aims to recruit people who answer **zero (0) or one to this item**. Recruitment data should be collected and recorded from **all** people approached. This is extremely important to show the process of recruitment, particularly the number of people that projects need to approach in order to find one inactive participant. Exact wording is essential.]*

1. In the past week, on how many days have you done a total of 30 min or more of physical activity, which was enough to raise your breathing rate? Please tick one box.

[This may include sport, exercise and brisk walking or cycling for recreation or to get to and from places, but should not include cardiac rehabilitation, housework or physical activity that may be part of your job]

- 0 (Zero)
- 1
- 2
- 3
- 4
- 5
- 6
- 7

**Grip strength test**

*[Guidance for exercise specialist: Please complete grip strength test with participant.  
Please enter the participant reading into the box below.]*

2. Please enter the participant reading into the box below.

Grip strength test reading

**Self-report height and weight**

3. What is your height?

\_\_\_ **feet**

\_\_\_ **inches**

4. What is your weight?

\_\_\_ **stone**

\_\_\_ **pounds**

## **International Physical Activity Questionnaire**

*[Guidance for exercise specialist: IPAQ short form. There are 9 items; all of which are to be completed at baseline. Exact wording is essential.]*

We are interested in finding out about the kinds of physical activities that people do as part of their everyday lives. The questions will ask you about the time you spent being physically active in the **last 7 days**. Please answer each question even if you do not consider yourself to be an active person. Please think about the activities you do at work, as part of your work around the house or garden, to get from place to place, and in your spare time for recreation, exercise or sport.

5. Think about all the **vigorous** activities that you did in the **last 7 days**. **Vigorous** physical activities refer to activities that take hard physical effort and make you breathe much harder than normal. Think *only* about those physical activities that you did for at least 10 minutes at a time.

During the **last 7 days**, on how many days did you do **vigorous** physical activities like heavy lifting, digging, aerobics, or fast bicycling?

\_\_\_ **days per week**

No vigorous physical activities *Skip to question 7*

6. How much time did you usually spend doing **vigorous** physical activities on one of those days?

\_\_\_ **hours per day**

\_\_\_ **minutes per day**

Don't know/Not sure

7. Think about all the **moderate** activities that you did in the **last 7 days**. **Moderate** activities refer to activities that take moderate physical effort and make you breathe somewhat harder than normal. Think *only* about those physical activities that you did for at least 10 minutes at a time.

During the **last 7 days**, on how many days did you do **moderate** physical activities like carrying light loads, bicycling at a regular pace, or doubles tennis? Do not include walking.

\_\_\_ **days per week**

No moderate physical activities *Skip to question 9*

8. How much time did you usually spend doing **moderate** physical activities on one of those days?

\_\_\_ **hours per day**

\_\_\_ **minutes per day**

Don't know/Not sure

9. Think about the time you spent **walking** in the **last 7 days**. This includes at work and at home, walking to travel from place to place, and any other walking that you might do solely for recreation, sport, exercise, or leisure.

During the **last 7 days**, on how many days did you **walk** for at least 10 minutes at a time?

\_\_\_ **days per week**

No walking *Skip to question 11*

10. How much time did you usually spend **walking** on one of those days?

\_\_\_ **hours per day**

\_\_\_ **minutes per day**

Don't know/Not sure

11. The next question 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 spend **sitting** on a **week day**?

\_\_\_ **hours per day**

\_\_\_ **minutes per day**

Don't know/Not sure



### **Single Item Sport England Measure**

12. I'd like you to think about any **Sport** that you have done in the **last 7 days**. By **Sport** we mean any competitive or non-competitive sporting activity, including sessions of deliberate exercise such as running or jogging. Think only about those sports or exercises that you did for at least 10 minutes at a time.

During the last 7 days, on how many days did you take part in any **sport**?

\_\_\_ **days per week**

No sport ***Skip to question 14***

13. How much time did you usually spend doing sport on one of those days?

\_\_\_ **hours per day**

\_\_\_ **minutes per day**

Don't know/Not sure

## **About you**

14. What is your gender?

- Male
- Female

15. Date of birth

Month  Year

16. What is your ethnic group?

- White
- Mixed ethnic group
- Black
- Black British
- Asian
- Asian British
- Any other group

17. Do you have any long-term illness, health problem or disability which limits your daily activities or the work you can do?

- Yes
- No

18. Which of the following qualifications do you have? [Please tick the one that best describes you]

- Degree / degree level qualification (including higher degree)
- A level or equivalent
- Professional qualification such as nursing, midwife, City and Guilds
- O level passes / GCSE passes or equivalent
- CSE/SCE
- Other
- No qualifications

19. What is your annual household income, that is income from all sources, before tax and other deductions?

- Up to £9,999
- £10,000 – £19,999
- £20,000 – £29,999
- £30,000 – £39,999
- £40,000 – £49,999
- £50,000 or more
- Don't know
- Prefer not to say

20. What is your marital status?

- Single
- Have a partner but do not live together
- Live with partner
- Married and live with partner
- Married and separated from partner
- Divorced
- Widowed

21. Do you have an existing medical condition (for example Type II diabetes)

- Yes [Please provide details in the space provided below]
- No

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22. Below are some statements about feelings and thoughts. Please tick the box that best describes your experience of each over the last 2 weeks.

[Guidance for exercise specialist: Exact wording is essential.]

| Statement  | 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 feeling interested in other people       |                  |        |                  |       |                 |
| I've had energy to spare                           |                  |        |                  |       |                 |
| I've been dealing with problems well               |                  |        |                  |       |                 |
| I've been thinking clearly                         |                  |        |                  |       |                 |
| I've been feeling good about myself                |                  |        |                  |       |                 |
| I've been feeling close to other people            |                  |        |                  |       |                 |
| I've been feeling confident                        |                  |        |                  |       |                 |
| I've been able to make up my own mind about things |                  |        |                  |       |                 |
| I've been feeling loved                            |                  |        |                  |       |                 |
| I've been interested in new things                 |                  |        |                  |       |                 |
| I've been feeling cheerful                         |                  |        |                  |       |                 |

23. If *you would be happy* for us to *contact you* by telephone to talk about your experiences of CLICK into Activity, please check the following box.

Yes, I am happy to be contacted again

**This is the end of the questionnaire, thank you for participating.**