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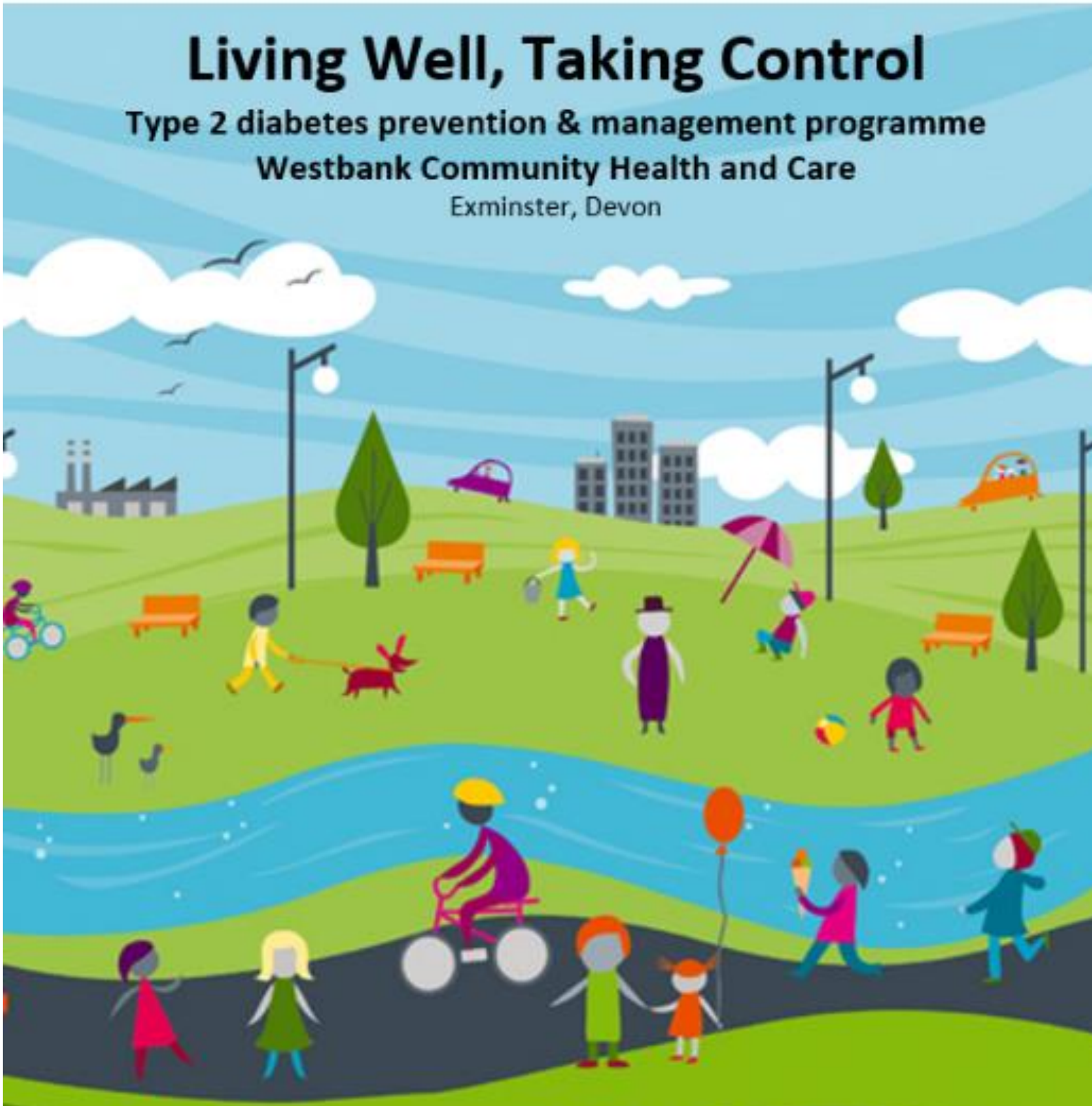
Living Well, Taking Control

Type 2 diabetes prevention & management programme

Westbank Community Health and Care

Exminster, Devon



Social Return on Investment (SROI) Analysis Final Report

Zoe Clifford & the UWE SROI Research Group. March 2015

We would like to thank all of the participants who have taken part in this study. We are particularly appreciative towards Alexis Walsh, Ruby King and Amy Clarke at Westbank for their time and assistance in producing the information necessary in undertaking this analysis.

The evaluation has been led by Zoe Clifford, Public Health Specialty Registrar on behalf of the University of the West of England (UWE) Health and Social Sciences Department with support from a team of researchers from UWE which includes Mat Jones, Dr Emma Solomon, Oliver Biggs, Dr Richard Kimberlee and Michele Kok. Phil Aubrey of Well UK has contributed to this report as part of the wider evaluation group.

Additionally, thank you to Public Health Registrars Kate Blackburn and Sarah Weld for taking the time to discuss the evaluation and provide ideas and comments.

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Abbreviations

BMI	Body Mass Index
BMJ	British Medical Journal
CCG	Clinical Commissioning Group
CVM	Contingent Valuation Methods
DCE	Discrete Choice Experiments
FPG	Fasting Plasma Glucose
GMS	General Medical Services
GP	General Practitioner
IGT	Impaired Glucose Tolerance
IGR	Impaired Glucose Regulation
LWTC	Living Well, Taking Control
NEW Devon CCG	Northern, Eastern and Western (Devon) Clinical Commissioning Group
NICE	National Institute for Health and Clinical Excellence
NNT	Numbers needed to treat (to prevent one case)
PCP	Pioneering Care Partnership
RP	Revealed Preference
QOF	Quality and Outcomes Framework
SP	Stated Preference
SROI	Social Return on Investment
UWE	University of the West of England
WHO	World Health Organisation
WTA	Willingness to Accept
WTP	Willingness to Pay

Glossary of SROI terms

Attribution – The credit that an organisation or person's contribution can take, or be given, for generating an outcome

Beneficiary – People or organisations that experience positive or negative change (or outcomes) as a result of the activities

Benefit Period – The length of time outcomes and impacts last for a stakeholder

Deadweight – A measure of the amount an outcome would have happened anyway had the activity not taken place

Discounting / Discount rate – The process by which future financial costs and benefits are adjusted into present-day values, to account for the decreasing value of money over time. (Discount rate is the interest rate used to discount future costs and benefits)

Displacement – The rate or assessment of how much of the outcomes displaces other outcomes, (usually most pertinent for fiscal outcomes)

Drop-off – The deterioration rate at which an outcome would have a reduced impact over time

Impact Map – A map or table diagram, that describes and captures how an activity and resources required for it lead to particular outputs and beneficial (or non-beneficial) outcomes and changes for different stakeholders

Outcome – The essential final benefits or negative consequences that result from an activity, mainly defined from the perspective of the stakeholder

Proxy value – an approximation or derived value where an exact market-traded measure of value is not possible to obtain

SROI – Social Return on Investment

Stakeholder – People or organisation that experience negative or positive change as a result of an activity, and have an effect on, or are affected by the activity.

Executive summary

Background:

Diabetes mellitus is a group of metabolic disorders in which blood glucose is persistently raised. Type 2 diabetes is the most common form of diabetes, accounting for 90–95% of cases. The prevalence of type 2 diabetes increases with age. In the UK, 1 in 20 people older than 65 years of age has diabetes. Furthermore, many people have type 2 diabetes that has not yet been diagnosed.

Diabetes can cause serious long-term health problems. It is the most common cause of visual impairment and blindness in people of working age. It is responsible for most cases of kidney failure and lower limb amputation (other than accidents). People with diabetes are up to five times more likely to have cardiovascular disease and stroke than those without diabetes.

It is recommended that individuals at risk of developing type 2 diabetes are offered an intensive lifestyle change programme providing tailored advice, and weight management (NICE, 2012). At or around the time of diagnosis, people with type 2 diabetes should be offered structured education and the provision of individualised and ongoing nutritional advice (NICE, 2009).

'Living Well, Taking Control' (LWTC) is a community project based at Westbank Community Health and Care in Exminster and is focused on the prevention and management of type 2 diabetes, in non-clinical, community settings.

Social Return on Investment (SROI) is a framework for measuring and accounting for a much broader concept of value; it seeks to reduce inequality and environmental degradation and improve wellbeing by incorporating social, environmental and economic costs and benefits.

Aim:

The aim is to evaluate LWTC using SROI methodology to define, measure and value the impact experienced by those involved with the project. This goes much wider than the clinical changes such as weight loss which participants might have experienced. The evaluation aims to identify the wide range of people for whom the project might have created a change for. It attempts to tell the story of these changes from the stakeholders perspective and ensure that the wider social, environmental and economic outcomes are explored.

Methods:

The report presents the findings of an evaluation following SROI methodology. Stakeholders were identified and involved in the SROI process and were consulted through focus groups, interviews and questionnaires.

Results

The evaluation identified outcomes for 248 participants of LWTC as well as project staff, people supporting friends or relatives who attend LWTC, Westbank Community Health and Care, and partner agencies. The 15 outcomes generated by LWTC were:

- A Healthier diet
- Better mental health
- Weight loss
- Healthier diet (for people supporting participants)
- Raised profile of Westbank
- More integrated working
- Increased income
- Reduced NHS costs
- Increased physical activity
- Improved social networks
- Lower risk of developing Type 2 diabetes
- Increased future job prospects
- Increased knowledge
- Increased GP capacity
- Accommodation for support group
-

Results from the qualitative analysis showed stakeholders placed a high value on the outcomes from the service:

"Until I was referred to this group I wasn't even aware that I had a problem. I was concerned as to what the problems were and what was going to happen. Going through the process here made me aware that yes it's a problem but it's controllable."

"it's new, it's innovative and we need to commission it"

"The group helps remind me of what the alternative could be."

"I was aware but never really concentrated on it until I started coming to the group. So there's no doubt in my mind that it's helped me achieve how I want to live."

"I think it's important, the positivity of the whole thing. You're preventing. You're doing better. Rather than treatment."

"it helps to keep a balance... and you know, it gives you that incentive that other people want by being together and people you're familiar with. And the routine you get into of coming to a class and you know, education."

Outcomes experienced by participants account for 75% of the value of the social return created by the programme.

For every £1 invested in the programme, an estimated £5.80 of social return is generated over a three year period.

The sensitivity analysis shows that the true value of the social return for every £1 invested is likely to be between £1.30 and £6.57.

Conclusions

The report demonstrates a significant social return for the investment made, and the feedback from participants and stakeholders clearly illustrates the programme's positive impact on creating change for participants. This report provides a tool for working with public health commissioners and other funding bodies to identify possible sources of funding to secure ongoing delivery of the project.

Chapter 1: Background

Introduction

Social Return on Investment (SROI) is a framework for measuring and accounting for a much broader concept of value. It seeks to reduce inequality and environmental degradation and improve wellbeing by incorporating social, environmental and economic costs and benefits.

'Living Well, Taking Control' (LWTC) is a community project based at Westbank in Exminster and is focused on the prevention and management of type 2 diabetes, in non-clinical, community settings. The project plan incorporated various forms of evaluation including a plan to conduct an SROI.

At the time of the SROI, the project was involved in a randomised control trial. This aims to provide evidence of any clinical changes relating to pre diabetes for the participants.

The aim of this SROI is to evaluate the impact of LWTC on the lives of those involved and to capture and value the expected and unexpected changes that the project has created. This goes much wider than the clinical changes which participants might experience.

The objectives are:

- To identify, consult and involve stakeholders in the SROI process.
- To identify suitable indicators that would enable the measurement of outcomes and social impact of LWTC.
- To produce an Impact Map and SROI Report.
- To use this initial report as a base for identifying the changes necessary to sustain and improve the social value of LWTC.
- To produce a summary document that can be used to demonstrate the social value of investing in LWTC.

Social Return On Investment (SROI)

SROI measures change in ways that are relevant to the people or organisations that experience or contribute to it. It tells the story of how change is being created by measuring social, environmental and economic outcomes and uses monetary values to represent them. This enables a ratio of benefits to costs to be calculated. For example, a ratio of 1:3 indicates that an investment of £1 delivers £3 of social value. SROI is about value, rather than money. Money is simply a common unit and as such is a useful and widely accepted way of conveying value. It is a story about change.

The SROI has six stages:

1. Establishing scope and identifying key stakeholders. It is important to have clear boundaries about what the SROI analysis will cover, who will be involved in the process and how.

2. Mapping outcomes. Through engaging with the stakeholders to develop an impact map, or theory of change, which shows the relationship between inputs, outputs and outcomes.

3. Evidencing outcomes and giving them a value. This stage involves finding data to show whether outcomes have happened and then valuing them.

4. Establishing impact. Having collected evidence on outcomes and monetised them, those aspects of change that would have happened anyway or are a result of other factors are eliminated from consideration.

5. Calculating the SROI. This stage involves adding up all the benefits, subtracting any negatives and comparing the result to the investment. This is also where the sensitivity of the results can be tested.

6. Reporting, using and embedding. Easily forgotten, this vital last step involves sharing findings with stakeholders and responding to them, embedding good outcomes processes and verification of the report.

For details of what is involved in any steps, why they are important and a worked example, the Guide to SROI should be referred to (SROI Network, 2009).

The methodology is based on a set of seven principles (outlined in table 1). The principles underpin each stage of the process.

This report aims to summarise each of the stages undertaken for an evaluative SROI of LWTC whilst demonstrating that the underlining principles have been adhered to.

Table 1 SROI Principles

Principle	Explanation
Involve stakeholders	Stakeholders are people or organisations that experience change as a result of the activity. They are best placed to describe the change. Stakeholders need to be identified and involved in consultation throughout.
Understand what changes	Changes can be positive and negative. Stakeholders should be able to identify what changes.
Value the things that matter	Many outcomes are not traded in markets and as a result their value is not recognised. Financial proxies can be used in order to recognise the value of stakeholder identified outcomes.
Only include what is material	Determine what information and evidence must be included in the accounts to give a true and fair picture about impact.
Do not over-claim	Only claim the value that organisations are responsible for creating.
Be transparent	Demonstrate the basis on which the analysis may be considered accurate and honest, and show that it will be reported to and discussed with stakeholders.
Verify the result	Look for peer review and/or independent assurance.

Host organisation - Westbank Community Health and Care

Westbank was established in 1986, running as a registered charity for over 20 years until transferring to a company limited by guarantee in 2007. The organisation works to provide care, empower, and improve the health of communities and individuals across Devon. Since its inception, Westbank has been providing practical support (e.g., shopping, transport, and befriending) for vulnerable and socially isolated people, support for carers, and day care. Westbank works in partnership with 12 GP practices, engaging volunteers who provide practical and emotional support to patients, and ensures that the volunteer's voices are considered in the new Health and Social Care arrangements locally.

Westbank's Community Care and Healthy Living Centre is based in Exminster, Devon. The Community Care Centre offers care and support to more dependent members of the community through a range of services. The Healthy Living Centre opened in 2004, and provides people of all ages the opportunity to enjoy a wealth of activities to keep the body and mind healthy. The centre aims to empower and improve the health of local people, especially those who feel marginalised in the local rural community and aims to reach socially excluded groups and individuals. The Centre includes a gym with disabled access equipment, after school and holiday club for children, gymnastics club, community café, conference and meeting facilities. Fitness classes, smoking cessation, weight management, stress management, complimentary therapies, workshops and training are also delivered

both in house and through experts from other organisations. Westbank is supported by a team of more than 100 paid staff and over 300 volunteers.

Project overview - Living Well, Taking Control

'Living Well, Taking Control' (LWTC) is a £1.2 million programme funded by the Big Lottery and is delivered by four community and voluntary sector partner agencies in the North East of England, West Midlands, and Devon. LWTC is focused on the prevention and management of the long-term condition, type 2 diabetes, in non-clinical, community settings. The programme is delivered from October 2013-June 2015.

The aim of this programme is to promote positive health and wellbeing for participants who have a raised HbA1c level that would indicate they are either pre-diabetic (42-47 mmol/mol), or have recently been diagnosed with type 2 diabetes (≥48 mmol/mol). The programme encourages weight loss through positive behaviour changes and provides participants with the information, resources, and support required to reduce their blood glucose level and hopefully prevent type 2 diabetes from being diagnosed (pre-diabetics), or allow them to successfully manage their condition (type 2 diabetics).

The overall programme approach is to focus on 5 healthy lifestyle issues:

1. Understanding your body and your condition
2. Healthy Diet
3. Regular physical activity
4. Positive mental health & well being
5. Achieve and maintain a healthy weight

The LWTC programme has several key aspects associated with behaviour change theory. The main focus of the programme is to educate participants about type 2 diabetes (or pre diabetes), healthy eating, physical activity, and positive mental health and well-being in ways that are relevant to the participants' lifestyles. The programme also works with participants to identify the barriers associated with changing their diet and activity behaviours, and providing participants with examples of how they can overcome such barriers. Goal setting plays a large role in the programme, where participants are encouraged to set goals at each of the four weekly group sessions and review their progress with the goals at following group sessions and follow-up sessions.

The programme includes the following core elements:

- GP based identification and referral
- A community education programme to create a diabetes friendly community
- Structured education

- Individually tailored lifestyle advice, enhanced through peer support and evidence-informed behaviour change programmes
- Specialist nutritional and healthy eating advice (including advice on understanding food labelling)
- Advice on physical activity recommendations, activity types, and practicalities
- Support for managing stress, anxiety and depression

The core component of the programme comprises four weekly group sessions. These sessions are usually delivered in an education room at the participants' GP surgery or local community centre, but if such facilities do not exist, then an alternative convenient venue may be used. Ideally, each group will consist of 10-12 participants, although these numbers may vary over time depending on GP referrals and recruitment.

Each of the four group sessions focuses on a different topic:

1. Pre-diabetes/type 2 diabetes and a healthy lifestyle
2. Healthy eating
3. Physical activity
4. Positive mental health and well-being

As well as improving participants' understanding of type 2 diabetes, healthy eating, physical activity, and positive mental health and well-being, these sessions will allow participants the opportunity to ask questions, review their current behaviours, discuss the benefits and barriers to changing behaviour, and set goals.

Following the four weekly group sessions the participants will be offered a follow-up service that comprises:

- One-to-one follow-up in months 2, 3, 6, 9, and 12 to review goals, changes and identify any additional support required.
- 5 hours of one-to-one or group support through local community services

The follow-up review sessions can be delivered within the context of a group session, or via text, email, or phone calls. Review sessions will consist of:

- Reviewing goals
- Exploring health behaviour changes made
- Reviewing methods for managing long term conditions (e.g., diabetes)
- Review of clinical metrics (e.g., HbA1c, BMI, blood pressure, waist circumference)
- Any additional support required
- Referral onto required services

Project area

The LWTC programme is led by Westbank Community Health Care (Devon). Partner agencies include Health Exchange (Birmingham), HealthWORKS (Newcastle), Pioneering Care Partnership (PCP; Darlington), and Well UK. It is part of a wider portfolio called 'South

West Well-being Programme' led by Westbank, which is focused on the promotion of well-being for people with long-term conditions or vulnerable to ill health. The diabetes projects in the West Midlands and North East are extensions to the SWWB programme.

Westbank is in the Eastern locality of the NHS Northern, Eastern and Western Clinical Commissioning Group (NHS NEW Devon CCG). The Eastern locality has a population of c378,000 and is divided into four sub-localities. There are 53 GP Practices in the CCG area.

Chapter 2 Literature review

As described in the previous chapter, LWTC is a group based lifestyle intervention for people with pre diabetes or who have been newly diagnosed as having type 2 diabetes. A literature review was undertaken to provide context and supporting evidence to this method of intervention. The review also briefly explored health economic techniques for valuing the outcomes in comparable interventions with the rationale of informing the methodology for the SROI.

What is type 2 diabetes?

Type 2 diabetes mellitus is a metabolic disorder that results in hyperglycaemia (high blood glucose levels) due to the body:

- Being ineffective at using the insulin it has produced
  and/or
- Being unable to produce enough insulin

Type 2 diabetes was formerly known as non-insulin-dependent or adult-onset diabetes due to its occurrence mainly in people over 40. However, it is becoming more common in young adults, teens and children and accounts for roughly 90% of all diabetes cases worldwide (Diabetes UK, 2012).

Type 2 diabetes has serious implications and is associated with a reduced life expectancy and an increased risk of long-term health complications. It often necessitates people having to take medication for the rest of their lives. There are currently 2.6 million people in the UK diagnosed with diabetes, the majority of which have type 2 diabetes. Approximately 10 per cent of NHS spending goes on diabetes and its complications, this equates to £9 billion per year or £1 million an hour (Diabetes UK, 2009).

What are the risk factors for type 2 diabetes?

A number of factors can increase the risk of developing type 2 diabetes. These include:

- Being overweight or obese
- Having a waist size of 31.5 inches or more (women) or more than 37 inches (men)
- Consuming an unhealthy diet
- Physical inactivity
- Having a first-degree relative with type 2 diabetes
- Having high blood pressure or raised cholesterol levels
- Being of South Asian and African-Caribbean descent
- Smoking

Obesity is the most potent risk factor for type 2 diabetes. It accounts for 80– 85 per cent of the overall risk of developing type 2 diabetes and underlies the current global spread of the condition (Hauner, 2010).

The likelihood of developing type 2 diabetes is also influenced by genetics and environmental factors. For example, research shows that:

- If either parent has type 2 diabetes, the risk of inheritance of type 2 diabetes is 15%
- If both parents have type 2 diabetes, the risk of inheritance is 75% (Stratton, 2000).

What is pre diabetes?

Pre diabetes is typically described as blood glucose concentrations higher than normal, but lower than diabetes thresholds. This state of chronically raised blood glucose confers a high risk of progression to type 2 diabetes (up to 50% risk of progression over a six year period). It is estimated to affect seven million people in the UK (Diabetes UK, 2012).

Pre diabetes is sometimes known as intermediate hyperglycaemia. It should be highlighted that the term pre diabetes has been criticised in literature because many people with pre diabetes do not progress to diabetes, which might imply that no intervention is necessary because no disease is present. The counter argument is that the term 'pre diabetic' conveys the potential seriousness and may encourage people to make the relevant lifestyle changes.

What is the prevalence of type 2 diabetes and pre diabetes?

Around 366 million people worldwide have diabetes mellitus and it is predicted that this number will reach 552 million by 2030 (Unwin *et al.,* 2010). It is estimated that up to half of these people are unaware of their condition. In the UK, more than 2.7 million people are diagnosed with type 2 diabetes whilst a further 750,000 people are believed to have the symptoms but are yet to be diagnosed with the disease.

A recent study published in the *British Medical Journal (BMJ)* estimates that more than a third of adults in England now have pre diabetes, and the prevalence has tripled over the past eight years (Mainous *et al.,* 2014). The finding came from an analysis of 20 000 people who took part in the Health Survey for England and provided a blood sample.

How can pre diabetes be identified?

Impaired glucose regulation (IGR) is a term that refers to blood glucose levels that are above the normal range but are not high enough for the diagnosis of Type 2 diabetes. IGR is used to describe the presence of impaired fasting glucose (IFG) and/or impaired glucose tolerance (IGT), which are intermediate states of abnormal glucose regulation that exist between normal blood glucose levels and Type 2 diabetes. IGR is asymptomatic and can often go undiagnosed for many years.

According to WHO, people are at high risk of developing diabetes if they have one of two distinct states:

- Impaired fasting glucose (IFG), defined as a fasting plasma glucose (FPG) concentration of ≥6.1 and <7.0 mmol/L, without impaired glucose tolerance (IGT);

- Impaired glucose tolerance IGT, defined as an FPG concentration of <7.0 mmol/L and a 2 hour postload plasma glucose concentration of ≥7.8 and <11.1 mmol/L, measured during a 75 g oral glucose tolerance test (OGTT).

Additionally, there is the HbA1c test, also known as the haemoglobin A1c or glycated haemoglobin test. By measuring glycated haemoglobin (HbA1c), clinicians are able to get an overall picture of what our average blood sugar levels have been over a period of weeks/months.

The World Health Organisation (WHO) suggests the following diagnostic guidelines for diabetes:

- Non-diabetic: HbA1c below 42 mmol/mol (6.0%)
- Pre diabetes/IGR: HbA1c between 42 and 47 mmol/mol (6.0–6.4%)
- Type 2 diabetes: HbA1c of 48 mmol/mol (6.5%) or over

Two large-scale studies - the UK Prospective Diabetes Study (UKPDS) and the Diabetes Control and Complications Trial (DCCT) - demonstrated that improving HbA1c by 1% (or 11 mmol/mol) for people with type 1 diabetes *or* type 2 diabetes cuts the risk of microvascular complications by 25%. Research has also shown that people with type 2 diabetes who reduce their HbA1c level by 1% are:

- 19% less likely to suffer cataracts
- 16% less likely to suffer heart failure
- 43% less likely to suffer amputation or death due to peripheral vascular disease

Stratton *et al.,* (2000)

It is estimated that globally 15 percent of adults has either IFG or IGT based on the WHO criteria (The DECODE Study Group, 2003; Qiao *et al*., 2003; Santaguida *et al*., 2005). Between 5 and 12 percent of these people then develop Type 2 diabetes each year (Santaguida *et al.,* 2005).

What is the national policy context and guidance?

NHS Health Checks

Identifying people at an increased risk of Type 2 diabetes is a key strategy in the prevention of the disease. *The Healthy Lives, Healthy People* White Paper (DH, 2010) highlighted the Government's intention to continue with the *NHS Health Check* programme; a vascular risk assessment and management programme aimed to help prevent heart disease, stroke, Type 2 diabetes and kidney disease. Everyone between the ages of 40 and 74, who has not already been diagnosed with one of these conditions, will be invited (once every five years) to have a check to assess their risk of heart disease, stroke, kidney disease and diabetes and will be given support and advice to help them reduce or manage that risk.

NICE

The National Institute for Health and Clinical Excellence (NICE) published *Prevention of Type 2 diabetes: population and community interventions* (NICE, 2011). The guidance focuses on adults aged 18-74 in high risk groups and the general population.

There are 11 recommendations aimed at benefiting the health of adults (aged between 18-74), particularly those from black and minority ethnic groups, and those from low socioeconomic groups. The recommendations detail who should take action and what action they should take:

1. Integrating national strategy on non-communicable diseases.
2. Local joint strategic needs assessments.
3. Developing a local strategy.
4. Interventions for communities at high risk of Type 2 diabetes.
5. Conveying messages to the whole population.
6. Conveying messages to the local population.
7. Promoting a healthy diet: national action.
8. Promoting a healthy diet: local action.
9. Promoting physical activity: national action.
10. Promoting physical activity: local action.
11. Training those involved in promoting healthy lifestyles.

Furthermore, guidelines for the prevention of Type 2 diabetes in people at risk of diabetes at individual patient level were published July 2012. The guidance does not advocate a national screening programme for type 2 diabetes, rather the recommendations remind practitioners that age is no barrier to being at high risk of, or developing, type 2 diabetes. There are 20 recommendations and it suggests that these can be used alongside the NHS Health Check program. The recommendations include providing intensive lifestyle change programmes, raising awareness of physical activity and providing tailored advice and weight management and dietary advice (NICE, 2012).

NICE have published other guidelines relevant to the prevention of Type 2 diabetes including obesity (NICE, 2014; NICE, 2015), behaviour change (NICE, 2007) and the promotion of physical activity (NICE, 2013).

Diabetes UK

The Diabetes UK position statement makes a number of recommendations relating to impaired glucose regulation (IGR):

- IFG and/or IGT should be known as IGR or non-diabetic hyperglycaemia (NDH); however, pre diabetes may be more appropriate to communicate IGR to the public.
- Risk factors for IGR should be considered to be the same as the risk factors for Type 2 diabetes.
- Diabetes UK supports diabetes and IGR screening programmes, with an initial risk assessment, followed by blood tests if appropriate.
- Diabetes UK recommends that screening programmes should be established across the UK.
- People diagnosed with IGR (or at risk of developing Type 2 diabetes) should be offered intervention.
- Lifestyle modification should be the first choice to prevent or delay Type 2 diabetes – in line with NICE guidance.
- Pharmacotherapy that is not currently licensed for use in the UK for the specific management of IGR is not recommended.

- Weight loss medications and bariatric surgery may be considered as an option for the management of obese individuals with IGR as per NICE guidance.
- IGR should be communicated in a clear and consistent manner to minimise misunderstandings, highlighting its seriousness, the risks if it is not managed and outlining ways to prevent progression to Type 2 diabetes.
- People identified with IGR should be followed up and monitored on an annual basis (at least).

Diabetes UK (2009)

The International Diabetes Federation (IDF)

The IDF strategy for diabetes prevention presents a diabetes prevention plan which is based on modifying risk factors in two target groups:

- people at a high risk of developing type 2 diabetes
- the entire population.

It states that both groups should be targeted simultaneously and activities tailored to meet specific local needs. For people with an increased risk of developing type 2 diabetes, a three-step plan is proposed:

1. ***Identification*** of those who may be at a higher risk.
2. ***Measurement*** of risk.
3. ***Intervention*** to prevent the development of type 2 diabetes.

For the population approach it recommends:

- advice relating to maintaining a healthy weight and participating in physical activity is highlighted
- approaches need to be culturally sensitive
- cultural beliefs (e.g. about obesity) need to be understood and addressed.

The strategy states Government initiatives should include:

- advocacy
- community support
- fiscal and legislative actions.

Alberti *et al.,* (2007)

World Health Organisation (WHO)

In 2011, WHO published an addendum to the diagnostic criteria and addressed the use of HbA1c in diagnosing diabetes mellitus. The report states:

- *'The WHO consultation concluded that HbA1c can be used as a diagnostic test for diabetes, provided that stringent quality assurance tests are in place and assays are standardised to criteria aligned to the international reference values, and there are no conditions present which preclude its accurate measurement.'*
- *'An HbA1c of 6.5% is recommended as the cut off point for diagnosing diabetes. A value less than 6.5% does not exclude diabetes diagnosed using glucose tests. The expert group concluded that there is currently insufficient evidence to make any formal recommendation on the interpretation of HbA1c levels below 6.5%.'*

WHO (2011).

How do people change lifestyle behaviours?

It is clear from the policy context and guidance that there is a focus on enabling individuals to achieve lifestyle behaviour changes. Behaviour change has been described in literature in different ways and various models have been developed. Most theories sit within the discipline of psychology and the focus on the individual. They describe to varying extents the societal influences but firmly hold the emphasis on behaviour change on the individual. Individual behaviour is then illustrated as either a continuum or within clearly defined stages. Stages models help with the understanding of how different influence might help people progress towards behaviour change at different points in their journey.

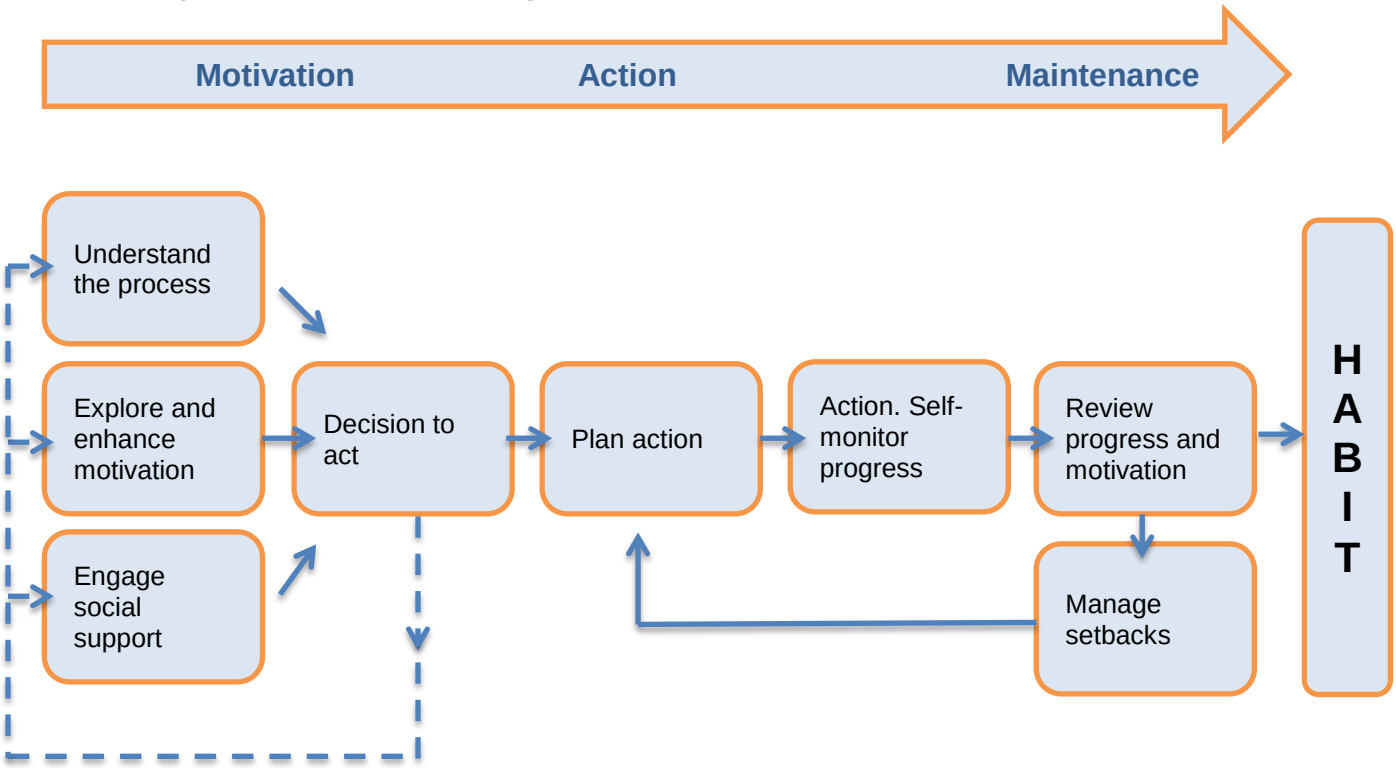
Greaves (2014) synthesises the research from systematic reviews and wide consultation with leading experts in the field to formulate a list of recommendations for the optimal content of diabetes prevention programmes. He develops this further into a model depicting a set of stages for behaviour change. This is the Process model. The project staff stakeholder group identified that the LWTC programme is based on the Process model of supporting lifestyle behaviour change.

The model recognised motivation as the first step and that the drivers of motivation vary between people. It recommends that programmes are individually tailored to address this. The motivation requires people to be able to see the benefits of the change and for them to feel that they can achieve it.

The second stage of the model involves deciding what to change. This requires good, reliable knowledge. This is the planning stage and people might consider how they will cope with different scenarios.

The third stage is maintenance. Greaves (2014) describes this as ‘learning from experience’ and acknowledges that it often takes people several attempts, each time revisiting what happened, accessing and addressing the barriers and often supporting one another through it.

Figure 1 Model of change



Over-arching philosophy:
Emphasise empowerment / ownership of goals, risk and actions.
Develop tools, strategies and motivation to manage lifestyle in the long term

Greaves (2012).

Are lifestyle interventions effective at preventing or delaying the onset of type 2 diabetes among people identified as having pre diabetes?

There are a number of major randomised controlled trials (RCTs) across a diverse range of countries, communities and settings which demonstrate the effect of lifestyle interventions on preventing or delaying the progression to type 2 diabetes in high risk groups including those with impaired glucose tolerance (Pan *et al.,* 1997; Tuomilehto *et al.,* 2001; Diabetes Prevention Program Research Group. 2002). However, these are not UK based programmes. The primary aim of lifestyle interventions is to prevent or delay development of type 2 diabetes and its complications by targeting obesity and physical inactivity, the two most important modifiable risk factors of diabetes development.

It has been demonstrated that only relatively modest changes in lifestyle are required to delay or prevent Type 2 diabetes (Tuomilehto *et al*., 2001). Follow-up counselling, and engaging social support also appear to be important for success, even across diverse cultural groups (Standards of Medical Care in Diabetes, 2008; Yates *et al.,* 2007). A structured education programme which has a clear philosophy incorporates behavioural change and psychological support may be necessary for people identified with IGR to make sustainable changes. Group education may be a good method of providing educational support (Troughton *et al.,* 2008).

The largest of these trials is the Diabetes Prevention Programme (DPP) in the United States of America and involved a lifestyle intervention with the aim of participants achieving at least 7% weight loss and 150 minutes of physical activity per week. The methods used to assist people in achieving these goals were:

- individual case managers or "lifestyle coaches;"
- frequent contact with participants;
- a structured 16-session core-curriculum that taught behavioural self-management strategies for weight loss and physical activity;
- supervised physical activity sessions;
- a more flexible maintenance intervention, combining group and individual approaches, motivational campaigns, and "restarts;"
- individualization through a "toolbox" of adherence strategies;
- tailoring of materials and strategies to address ethnic diversity;
- an extensive network of training, feedback, and clinical support.

A total of 1079 people participated in the lifestyle intervention arm of the trial. At 24 weeks, 50% of the participants in the intervention group had achieved the weight loss goal and 74% had achieved the activity goal. In this trial, lifestyle intervention reduced the incidence of diabetes by 58%, and one case of diabetes was prevented for every 6.9 people treated for three years (The DPP Research Group, 2002).

The Finnish diabetes prevention study (DPS) showed a 58% relative risk reduction in diabetes for those who received individualized advice and behavioural support compared to those who only received general health advice (Tuomilehto et al., 2001).

Moore *et al.,* (2011) describe a RCT of a group based lifestyle intervention in Australia for people identified as having pre diabetes. The Healthy Living Course was a six month programme. The intervention group significantly improved their diabetes knowledge, motivation to change, positive affect, healthy eating and activity levels and showed significantly greater reductions in weight, body mass index, waist circumference, diastolic blood pressure and fasting plasma glucose in comparison with controls. The intervention group also changed their diagnostic status from pre-diabetes to non-diabetes at a greater rate than the wait group (43% vs. 26%) who received standard care from their GPs.

A systematic review of RCTs evaluating lifestyle interventions to prevent or delay type 2 diabetes in people with impaired glucose tolerance found that lifestyle interventions reduced the rate of progression to type 2 diabetes by 50% compared to standard advice alone (pooled hazard ratio 0.51, 95% CI, 0.44–0.60) (Gillies *et al.,* 2007).

Should the wider impacts of such programmes be considered?

As evident from the preceding analysis, lifestyle interventions can be effective at reducing this risk in the pre diabetic population. However, research focuses on clinical outcomes for people attending lifestyle interventions and often fails to explore the wider social outcomes for all parties involved in both delivering and receiving such interventions.

The Public Services (Social Value) Act came into force on 31 January 2013. It requires people who commission public services to think about how they can also secure wider social, economic and environmental benefits. The Act applies to contracts for public services, including contracts that are primarily for public services with an element of goods or works, which are over the EU threshold (currently £111,676 for central government and £172,514 for other public bodies). This includes all public service markets, from health and housing to transport and waste.

SROI is a method of defining, measuring and valuing the wider social outcomes and describing the process of change through the eyes of beneficiaries. Health Economics is a discipline which can assist with the valuation. To understand how the SROI can value social outcomes, the following summary of literature briefly outlines valuing techniques in Health Economics.

What is the role of SROI methodology in Health Economics?

"Appropriately used, economic measures of impact can help provide greater transparency about the impacts of alternative spending, what the costs are, who those benefits and costs will affect, and over what time period. In essence, they can help clarify the consequences of choosing one action over another"

(PHE and UCL, 2014).

Cost-benefit analysis (CBA) is the standard economic technique for deciding whether those benefits are worth the cost of producing them. CBA seeks to provide economic values (expressed in pounds sterling) for as many of the costs and benefits as possible to allow decision-makers to assemble an overall assessment of whether or not it is worth investing in a specific area.

One of the most important things in cost-benefit analysis is to be very clear on what is included in the benefits. Different cost-benefit analyses make different choices on what to measure, particularly in terms of benefits.

What valuation methods are available?

Stage 3 of the SROI process involves evidencing outcomes and assigning a financial proxy to place a value on the outcome. Valuation methods are often viewed as the hardest part of the SROI process because it involves attempting to monetise diverse aspects of social benefit, assessing current and future value and determining the value for specific populations compared to the value for society as a whole. SROI also gives values to things that are harder to value so are routinely left out of traditional economic appraisal.

The two techniques in Health Economics for valuing are **Revealed Preference** (RP) and **Stated Preference** (SP). RP techniques are not collected by asking individuals for their opinions or views. They are instead collected through direct observation of actual responses to complement or substitute goods. Where price does not reflect the actual value of a good or commodity, or no market value for a good or commodity exists, ***shadow pricing*** can be used. Shadow pricing is a proxy value of a good, often defined by what an individual must give up to gain an extra unit of the good.

Collecting data on SP involves asking individuals directly to express how they feel about the impacts of a project. This method is usually applied where impacts are involved which either do not have a market price, or a market price is deemed inappropriate. Stated or expressed preferences are a contingent valuation method of data collection which involve the use of either **willingness to pay (WTP)** or **willingness to accept (WTA)** measures of a good or commodity. Although most researchers would prefer to use revealed preference data in assessments of willingness to pay, such preference data are not always available.

The general controversy surrounding these methods among economists (and others) is based on the fact that decisions are hypothetical, which means that respondents do not have incentives to be well informed when making their decision and that their stated decision may not reveal how they would act if the decision would have been real. However, despite the criticism of eliciting preferences based on hypothetical scenarios there has been a large increase in the use of SP studies over the past few decades (Carson and Hanemann, 2005). The reasons are related to the shortcomings of the RP approach; nonexisting markets, market failures, and/or that the analysts may not be well informed about the decision alternatives individuals face.

How can we measure Stated Preference (SP)?

There are then two main methods for the stated preference (SP) option. These are **Contingent Valuation Methods** (CVM) and **Discrete Choice Experiments** (DCE). DCE presents participants with alternative scenarios to choose between. It does not directly ask for monetary valuations, but rather asks respondents to choose between alternatives, so it is argued that DCE is easier for people to understand.

In DCE respondents choose one alternative out of two or more alternatives on offer. Each respondent may be asked to repeat the choice exercise multiple times; with the levels of the attributes changing according to an experimental design. In some cases, each choice set may also include a base case or status quo alternative, so the respondent has the choice of remaining with the current service or product.

By contrast, in a contingent ranking exercise respondents must rank all of the alternative options on offer and, in this case, the data are said to be strongly ordered. While contingent ranking data offers much richer information than discrete choice experiments, they are more cognitively demanding (Louviere *et al.,* 2000).

An alternative approach employed in some CVM studies is a simple bidding game where a respondent is asked to bid up or down by the interviewer in an iterative fashion to converge upon his or her maximum. An advantage of the bidding game is that it requires only yes/no responses to each bid and thus has more market realism than single open-ended questions asking respondents for their maximum WTPs.

An important disadvantage of the bidding game is the threat of starting-point bias, where the respondent's final WTP value is not independent of the first bid prompted by the interviewer.

Are there examples of how willingness to pay has been used?

There is a growing number of Stated Preference studies accessing the willingness to pay for health. The method has generally been used to set a monetary value on a package of health and/or non-health benefits in the context of a specific intervention.

Applications to chronic diseases include WTP for cholesterol- lowering medication and willingness to devote leisure time to a program that included medication, diet, and exercise (Hammerschmidt *et al*., 2003); diabetic patients' WTP to reduce the risk of complications (Johannesson *et al.,* 2003); and WTP for symptom relief of gastroesophageal reflux disease (Kleinman *et al.,* 2002).

What is the value of the willingness to pay for diabetes prevention?

There is limited research into willingness to pay for diabetes prevention programmes. Johnson *et al.,* (2006) conducted WTP surveys with 582 people in America who were identified to be at high risk of developing type 2 diabetes. They were presented with a range of hypothetical risk reduction programmes. The research found that many respondents underestimate their personal risk of developing diabetes. Those with a low perceived risk were less likely to indicate that they would participate in a diabetes prevention program. Individuals had the strongest preference for programs with large weight loss goals, fewer restrictions on diet, and larger reductions in the risk of diabetes. Respondents were willing to pay $1,500 over 3 years to participate in a lifestyle intervention programme. Individuals with a high perceived risk were willing to pay more than individuals with lower perceived risk. These rates varied between $63 and $5 per month for a three-year course depending on the diet restrictions, hours of exercise, hour of counselling, use of medication, the goal that was set with respect to weight loss and the percentage expected reduction in risk of type 2 diabetes.

More recently, Veldwijk *et al.,* (2013) used a Discrete Choice Experiment (DCE) questionnaire to assess five different lifestyle program attributes. A total of 391 questionnaires were completed by Dutch adults aged 35-65 who had type 2 diabetes. Respondents were willing to pay €128 per year for individual instead of group consultation and €97 per year for 10 kilograms anticipated weight loss.

Could Willingness To Pay be assessed as part of the SROI evaluation?

The reliability of stated preference approaches have been debated at length in the environmental economics literature (Marsh *et al.,* 2012). However, Marsh *et al.,* (2012) argues that if economists are to value the broader range of outcomes generated by public health interventions, a new valuation approach will be required.

Where it is difficult to establish a financial proxy for an outcome where there is no clear market good that would produce the same outcome, the WTP method could be used as part of the SROI. However, the limitations to this approach will be considered.

Concluding remarks from literature review

From the preceding analysis is can be concluded that type 2 diabetes is a major Public Health concern. People with chronically raised blood glucose levels have an increased risk

of developing type 2 diabetes. Lifestyle interventions have shown to be effective at changing clinical outcomes. Social and economic outcomes from such interventions are often not included in evaluations. Valuing the wider social outcomes can be problematic but the SROI provides a methodological approach where valuing techniques can be informed by Health Economics.

Chapter 3 Scope and stakeholders

Stage 1: Scope

The scope of an SROI analysis is an explicit statement about the boundary of what is being considered. It is often the result of negotiations about what is feasible for you to measure and what you would like to be able to improve or communicate.

Purpose

The aim of the SROI is to define, measure and value the social impacts of the 'Living Well Taking Control' (LWTC) project in Devon.

Audience

The SROI is primarily for Westbank Community Health and Care as an opportunity to measure wider social outcomes from LWTC. The organisation may use this to share good practice and maximise on the positive attributes of the project.

Potential funders are the key audience for the SROI evaluation. This could include Local Authorities, Clinical Commissioning Groups or National Funding Bodies. The SROI will also provide evaluation evidence to the current funders, The BIG Lottery Fund.

Resources

Time was allocated from a Public Health Specialty Registrar for two days a week over a six month period.

Who undertook the SROI?

The SROI was undertaken by a Public Health Specialty Registrar on behalf of the University of the West of England (UWE) Health and Social Sciences Department. Stakeholders were involved in each of the stages of the SROI and contributed significantly.

What activities does it focus on?

The SROI aimed to include the core elements of 'Living Well, Taking Control' in Devon:

- Development phase
- Case identification
- The referral process
- Initial consultation
- Group sessions delivered over a four week period

- One-to-one or group follow-up session in months 2, 3, 6, 9, and 12 to review goals, changes and identify any additional support required.

Although the project model is delivered across three locations outside Devon (Darlington, Newcastle and Birmingham), these were excluded from the SROI. The rationale for this is that they are some variations in delivery and clearly work with different populations. Thus, separate SROIs could be conducted.

People who are referred to the project but do not attend were not be included in the scope. In these cases the project would only be able to claim limited change, if any, for the person. Whilst it might be interesting to explore why a person has never attended, the limited resources do not make this a priority for the SROI.

What timescale (period) does the analysis cover?

The SROI analysed from 1st April 2013 – 31st December 2014. The project was established in April 2013 and this initial period until November 2013 can be viewed as a development stage for the project. The SROI included this stage in the scope because of the potential outcomes during this time period for some stakeholders.

Groups started in November 2013. Thus, including up until December 2014 means that potentially some participants would have completed their 12 month follow up consultations.

Is the analysis a forecast, a comparison against a forecast or an evaluation?

This SROI is an evaluation to provide an assessment of the social value.

Stakeholders

Stakeholder identification and analysis

Stakeholders are defined as people or organisations that experience change, whether positive or negative, as a result of the activity being analysed. In SROI analysis we are concerned primarily with finding out how much value has been created or destroyed and for whom. It is essential to identify these for LWTC at the beginning of the SROI, so they can be included throughout the process.

The first stage in SROI is to identify an initial list of stakeholders and record what change they might be likely to have experienced. A list was compiled by the researcher and this was then given to the LWTC project manager to comment on and add to if necessary. This list of stakeholders was presented to a sample of project participants to ensure that all of the relevant stakeholders were included.

Once the stakeholders were identified, a decision was made on whether they needed to be included in the SROI. One of the principles of SROI is to only include what is material. A simple stakeholder analysis was performed to assess if the outcomes for each of the stakeholders were likely to be material. Where they were not likely to be material, the

stakeholder was not included. In SROI terms, materiality refers to where the outcome is relevant and significant. For significance, the quantity and value of the change has passed a threshold where it influences decisions and actions.

Table 2 Summary of stakeholders

Stakeholder	**Reason for inclusion**
Project participants	Likely to experience significant change
Indirect project participants: partners, friends, family attending the group	Those attending the sessions to support the participant will also be exposed to the information about diet, exercise and diabetes.
Project staff	Employed by project and thus experience significant change.
Westbank	The project is hosted and supported by the organisation Westbank. It is reasonable to expect that the project would generate change for the organisation.
Volunteers at LWTC	Volunteers are involved in the project and thus are likely to experiences changes for themselves.
Westbank gym	Participants of LWTC are often introduced to the gym facilities at Westbank so the project is likely to generate a change for staff at this facility.
GP practices referring to the project	Time may be saved if the Practice is not having to deliver information/education
Local diabetes support group	Possible change in workload / group attendance
NHS (all)	Saving in spend if health outcomes achieved for people attending the project
Stakeholder	**Reason for exclusion**
People referred to the project but have never attended a group session	Unlikely that any significant changes can be attributed to the project
Other local GP practices not currently referring to the project	Unlikely to create any change if they do not refer patients
Big Lottery Fund	Minimal impact
Members of the local community	Benefit likely to be too diffuse to measure in this analysis and difficulties in determining who would properly represent stakeholders in the community
Tea for Two participants	Locally commissioned and delivered sessions to people with diabetes. A different model to LWTC. Two clinically based sessions. Does not include people assessed as having pre diabetes. Minimal impact likely.
Family and friends of project participants (who do not attend the groups)	Benefit likely to be too diffuse to measure in this analysis and difficulties in determining who would properly represent stakeholders
Weight Watchers - potentially going to have a diabetes group	Not currently established. Likely to be a future stakeholder but the SROI is to evaluate and not to forecast

The purpose of stakeholder consultation is to identify and understand the change experienced by the stakeholders; this includes positive, negative and unexpected change.

The main stakeholder group this SROI focuses on is project participants. This refers to anyone identified with pre diabetes or newly diagnosed with diabetes who has attended the LWTC sessions. The SROI network usually refers to such service users as beneficiaries. However, this might insinuate that we assume they have benefited and thus experienced only positive outcomes from the project. To avoid this assumption, we will refer to this group as 'participants' throughout the report.

There were 248 participants in the LWTC programme in the evaluation period. Their demographics are shown in table 3. The majority are White British retired people aged 55 or over.

Table 3 Demographics of participants of LWTC

	n	%			
Gender			**Smoker**	**n**	**%**
Male	145	58.5%	Smoker	14	5.6%
Female	95	38.3%	Non smoker	213	85.9%
Not recorded	8	3.2%	Not recorded	21	8.5%
Age group			**Employment status**		
Under 55 years	44	17.7%	Employed	68	27.4%
55-64 years	57	23.0%	Carer	4	1.6%
65-74 years	100	40.3%	Retired	116	46.8%
75 years or over	38	15.3%	Self employed	17	6.9%
Not recorded	9	17.7%	Student	3	1.2%
Ethnicity			Unemployed	3	1.2%
White British	218	87.9%	Long term sick or disabled	8	3.2%
Other	10	4.0%	Other	6	2.4%
Not recorded	20	8.1%	Not recorded	23	9.3%

Methods of stakeholder engagement and data collection

The SROI needed to be delivered within the allocated resources and thus it was important to prioritise where the evaluation would focus. Priority was given to consulting with stakeholders where the outcomes were most likely to be material. Therefore focusing on stakeholder groups with the largest numbers and groups which are most likely to experience significant change.

Table 4 shows the range of methods used for data collection and consultation. The evaluation takes a predominantly qualitative approach, although quantitative information was also collated. The SROI aims to identify the social return in the widest possible sense. It aims to identify what changes for stakeholders and describe how they view the chain of events in the change they experience. It was felt that the qualitative approach was most appropriate for exploring this.

Quotes from stakeholders are used throughout the report to help illustrate their views in their words. For the purpose of maintaining anonymity, all of the names used in this report have been changed.

Table 4 Methods of stakeholder engagement

Stakeholder and how they affect or are affected by the activity	Group size	Method of involvement	How many
Project participants - With pre-diabetes - With newly diagnosed diabetes	248 participants (86 with diabetes and 153 with pre diabetes)	Focus groups Interview*	19 with pre diabetes 10 with diabetes 1 with pre diabetes
Indirect project participants: partners, friends, family attending the group	92	Focus groups	4
Project staff	4	Interview	3
Westbank	1 organisation	Questionnaire	7 staff
Volunteers	9	Questionnaire	1
Westbank gym	4 staff	Questionnaire	1
GP practices referring to the project	12 practices	Questionnaire Desk based research	Based on desk based research
Local diabetes support group	1 group at Westbank	Focus group	1 group (approx. 15 people)
NHS (all)	1 organisation	Desk based research	Based on desk based research

** One person with pre diabetes was interviewed instead of involved in the focus group because they no longer attend the programme.*

Focus groups

The SROI focuses primarily on project participants because they are likely to have experienced the greatest number of changes and the most significant changes. A sample of 12% of LWTC participants were consulted over seven focus groups and one interview.

Since participants are already attending group sessions for LWTC, focus groups were conducted using these already formed groups. This has the advantage of convenience for the participants. However, as already formed groups, it is possible that participants have developed 'roles' within the group with some people dominating the discussion more than others. The focus group structure is presented in appendix 1.

Interviews

Those directly involved with the project on a daily or weekly basis are also likely to have experienced significant changes. These stakeholders include project staff. These people were involved in the SROI predominantly through semi-structured interviews and informal discussions. The interview structure is presented in appendix 2.

Survey

There are a number of stakeholder groups who have some contact with LWTC but their time commitment and involvement is not at the same level as project staff or participants. This includes a range of stakeholders from staff within Westbank to people who refer to LWTC. These groups were consulted through an online survey to ensure that their views are included. The LWTC project manager sent an initial email to introduce the research and this was followed up with the researcher emailing the online survey to people and giving a two week deadline for the completed surveys. Reminders were sent just before the deadline. See appendix 3 for the survey questions.

LWTC data

Participants are asked to complete a paper based questionnaire at the beginning of the programme and then at regular review intervals (see appendix 4 for a copy of the questionnaire). This is collected and recorded alongside measurement data. This data was analysed as part of the SROI.

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Chapter 4: Inputs, Outputs and Outcomes

The second stage of the SROI process starts to build an impact map. Stakeholders have been identified in the scope and it is this stage which starts to consult with these groups to capture the change that has been created.

The Impact Map

The Impact Map was informed by the engagement with stakeholders and is central to the SROI. Appropriate sections of the Impact Map are included throughout this report. However, the full impact map can be viewed in appendix 5.

The Impact Map details how resources (inputs) are used to deliver activities (outputs) and thus create change (outcomes). By involving stakeholders, the aim is to capture the process of change leading to the final outcome. By identifying these logical steps, it is then easier to identify appropriate indicators to measure the magnitude of the change. All of this is recorded on the Impact Map. Constructing the Impact Map ensures that the outcomes that matter to those who are directly affected will get measured and valued.

Identifying inputs

Participants of LWTC were asked about their input and many discussed time, travel and commitment to the sessions. Groups are held at various locations and participants usually described how the groups were easy to get to and they generally did not view their input to be that great:

Rosie: '*I'm very lucky obviously cause I live on the bus route and I don't have to pay a bus fare. But for instance, I've been invited to Exminster tomorrow afternoon which is going to be expensive in time and petrol, so if everybody had to go to you know, Exminster, it would discourage them.'*

The BIG Lottery input is the financial grant administered to Westbank for delivering LWTC.

A sample of Westbank staff, volunteers, LWTC project staff and the gym staff were asked about what they felt their input has been. They identified their time as an input.

Valuing inputs

Westbank received funding from The BIG Lottery for LWTC. Financial records show that during the period analysed for the SROI, the total expenditure was £119,446 between start up and the end of December 2014. Table 5 provides a breakdown of costs. This included just over five months of a start-up period where participants had not been recruited. However, this period is included in the SROI analysis because it reflects the true input for creating the outcomes.

Table 5 LWTC Project expenditure Jun 13 – Dec 14.

Project Budget	Cumulative costs to Dec 2014
Revenue cost	
Salaries National Insurance & pension	£ 81,722
Recruitment	£ 347
Venue Hire	£ 7,038
General running expenses	£ 2,213
Producing information	£ 1,022
Training for staff and volunteers	£ 3,108
Travel for staff and volunteers	£ 3,599
Consultancy & advice/evaluation	£ 1,400
Tutor costs	£ 884
Activity costs	£ 3,164
Total Revenue Costs	£ 104,497
Capital costs	
Office equipment	£ 449
Other - Project Equipment	£ 14,500
Total Capital Costs	£ 14,949
Total Revenue & Capital Costs	£ **119,446**

Volunteers had contributed a total of 163.5 hours to LWTC during the evaluation period. Volunteers affect the delivery of the programme and it was thus decided that their input should be represented in terms of a financial value because it could be argued that without their input, additional staff time would be required and the cost to the Big Lottery could be greater. The hours are valued at the National Minimum Wage for people age 21 and over for simplicity. The National Minimum Wage is £6.50 an hour. This equates to an input of £1062.75.

If the volunteer roles were paid, the work might be valued higher than the National Minimum Wage. Whilst this is noted, it would be very difficult to predict the true market value of the roles occupied by the volunteers.

The time of project participants is considered as an input but not given a financial value in line with the current standard SROI approach (The SROI Network, 2012).

Similarly, the time of practitioners in partner agencies has not been assigned a financial value. Practitioners would be referring clients as part of their job role. The process should not be very time consuming and any time spent might result in slightly less time on other tasks but would not in reality increase the cost of a Practitioner.

The total financial input for the project can be crudely calculated as costing £485.92 per participant:

$$\frac{\text{Big Lottery funding (18 months)}}{\text{£119,446}} + \frac{\text{Volunteers}}{\text{£1062.75}} = \text{£485.92}$$

248 participants

However this calculation does not differentiate between the initial development costs and the costs of maintaining the delivery of the established programme. An alternative calculation is to cost participants against the delivery period of the programme only, and to exclude the development and set up costs. Using the same overall financial inputs to cost the programme for an 11 month delivery period this gives the following cost per participant.

$$\frac{\text{11 months costs for programme delivery}}{\text{£73644.24}} = \text{£296.95}$$

248 participants

Monitoring evidence shows an increase in the referral and take up flow of participants over the course of the programme's delivery. This suggests that the cost per participant would reduce from £296.96 over a longer delivery period.

Clarifying outputs

The output describes the quantitative summary of the activity. The output for the participants is attending four education sessions over a period of a month and then attending reviews at 3, 6, 9 and 12 months. For the evaluation period, not all participants would have completed the full twelve month programme and it is also acknowledged that some participants might miss some of the sessions as highlighted above when the cost per person was calculated. Furthermore, some participants attended additional sessions.

Finally, the same output is repeated for several stakeholders and included in SROI at this stage because they form part of the theory of change. This is an estimate and it should be noted that it is not counted in the calculation, so there is no risk of double counting.

Describing outcomes

The SROI Network talks about distance travelled in terms of changes and recognise that changes are part of a chain of events. It highlights that some outcomes take place very slowly over a period of years. For example, the ultimate outcome identified by pre-diabetic participants of LWTC was to not develop type 2 diabetes. However, these stakeholders

identified that this was a long term outcome and there were many intermediate outcomes which come before this.

Central to any SROI evaluation is an understanding of the value of a final outcome (e.g. improved well-being or improved employability) to different stakeholders. SROI can also capture the way that identified outputs contribute to outcomes and their necessary pre-requisites, and as such captures the logic that underpins the inherent process of change. It is useful to understand the theory of behaviour change. LWTC is routed in Greaves (2012) model of behaviour change. This model has been explained in the literature review. Where possible, the chain of events for each outcome has been explored using this theoretical basis.

It is important to note that whilst the chains of events diagrams tend to be presented first in the analysis below, this is for clarity in the report. The actual process was true to the SROI principles by involving participants in the discussions. Participants identified all the outputs and outcomes in the focus groups. These were written on post-it notes and put on an A2 size piece of paper. Discussions with the groups helped to move the post-it notes into the relevant chains of events. They were then involved in discussions about how the chain of events might look (this is summarised in table 6). Finally, the researcher has applied the model of behaviour change and presented this in simple diagrams. However, the chains of events are often complex and thus these models provide a fairly simplistic view. The chain of events was not explored as much for the other stakeholders due to resource constraints.

Table 6: Output and outcomes

Stakeholders	**Outputs**	**The Outcomes (What changes)**
Who will we have an effect on? Who will have an effect on us?	*Summary of activity in numbers*	*Description* *How would we describe the change?*
Participants: pre-diabetic and newly diagnosed diabetic LWTC attendees	248 people on the LWTC programme. Attending once a week sessions for four weeks and then reviews at 3,6,9 and 12 months	(a) A Healthier diet: Able to talk to a specialist in the field and as a result feel well supported and increased knowledge of the importance of a healthier diet. This knowledge helped with understanding food labels better. Regularly check food labels and now buy and eat less food high in saturated fat, salt or sugar and/or eat foods higher in dietary fibre and/or eat more fruit/vegetables. As a result, overall, a healthier diet.
		(b) Increased physical activity: Increased knowledge and awareness of diabetes and appreciated the need to exercise for a healthier lifestyle. Joined a gym or organised walks or other exercise groups and exercise more regularly now.
		(c) Better mental health: Increased physical activity and as a result sleep better and therefore feel better in myself.
		(d) Improved social networks: Attended groups and met new people. The diabetes is what everyone has in common so all offer support to one another. Some meet outside the group and go for walks.

Participants with a BMI>25	190 people with a starting BMI of 25 or greater	(e) Weight loss: Became more aware of the amount of food being eaten. Stopped snacking between meals and had small meal portions. Ate less food and lost weight.
Participants with pre diabetes	153 pre-diabetics attending weekly sessions for one month and then reviews at 3,6,9 and 12 months	(f) Lower risk of developing Type 2 diabetes: Able to talk to a specialist and clarify mixed messages. Increased knowledge about a healthier diet and made changes to diet resulting in HbA1c reading decreasing and lowering chance of becoming diabetic
Indirect participant: Partners/family members/friends of pre-diabetic or diabetic participants who attend the group with their partner for support.	92 people attending at least one session of the programme	(g) Healthier diet: Attended groups to support partner/family member/friend. Learnt more about type 2 diabetes and increased knowledge about what constitutes a healthier diet. As a result, made changes to my diet to eat healthier.
Project staff	4 project staff employed directly by Westbank to deliver LWTC	(h) Increased future job prospects: Learnt more about working with this client group and as a result of this gained knowledge and experience, it has enhanced CV and widened job opportunities for the future.
Westbank	1 organisation	(i) Raised profile: Increased opportunities to work with other agencies and as a result raised the profile of the organisation.
Volunteers	9 regular volunteers*	(j) Increased knowledge: Gained experience of working with this client group and increased knowledge about type 2 diabetes.
Westbank gym	2 staff	(k) More integrated working within the organisation: Receives participants from LWTC and improved joined up working between these two elements of Westbank.
GP practices referring to the project	12 GP practices	(l) Increased GP capacity: LWTC participants do not attend their GP surgery as often. This results in the NHS experiencing a lower demand for its GP services, freeing up capacity. (m) Increased income: Obtaining QOF points for providing support for patients who have been newly diagnosed with type 2 diabetes.
Local diabetes support group	1 local diabetes support group at Westbank meeting monthly	(n) Accommodation for support group: provided for the group by Westbank
NHS (all)	1 organisation	(o) Reduced NHS costs: Participants make lifestyle changes which help to prevent them from developing type 2 diabetes or help them to effectively manage their diabetes. This leads to less complications, medication and in-patient support. The outcome is reduced costs for the NHS.

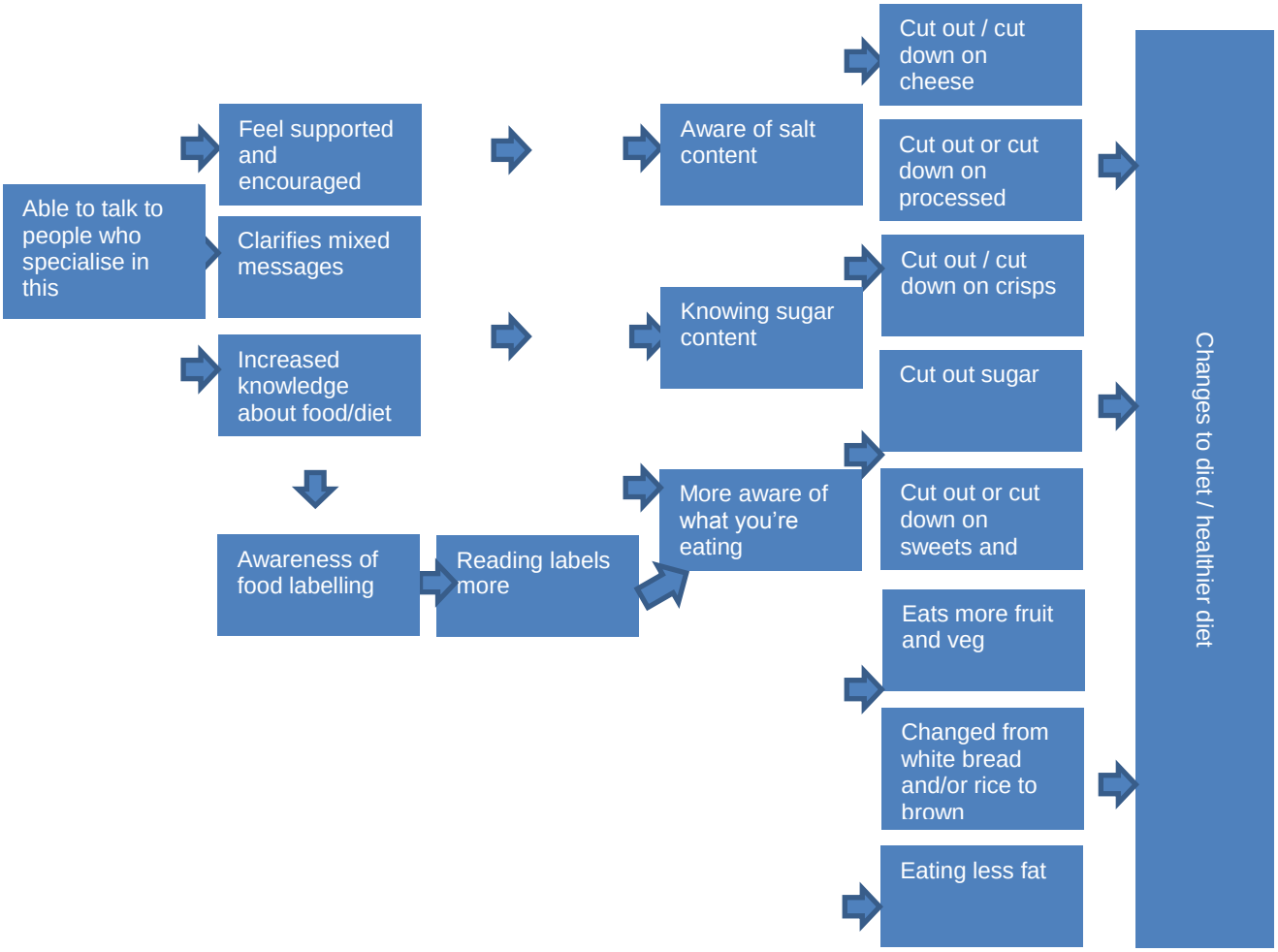
* A total of 15 people have volunteered with LWTC but some of these assisted with just one session. The impact is likely to be minimal on those who have volunteered for only one session. Thus, 9 volunteers were identified as assisting regularly with the programme.

(a) A healthier diet

Careful consideration was given to the outcome of a healthier diet. The chain of events resulting in the final change for participants was different depending on specific dietary goals they set (see figure 2). It was considered if the outcome should be more specific e.g. increased dietary fibre, decreased sugar content in diet. However, whilst the dietary changes may have differed between participants, the overall outcome they were all discussing was a change in their diet. The differences between the chains were not material since they all resulted in the same outcome. It was thus decided to value this as the final outcome.

The limitation to this is clearly that some people may have made numerous dietary changes and yet they will be counted alongside those who made one small change. However, it would be over simplistic to attempt to measure the magnitude of the change for an individual by simply counting the number of dietary changes anyway.

Figure 2 Chain of events leading to a healthier diet, as identified by participants



Motivation:
People with pre diabetes in focus groups often described how the LWTC programme had made them more aware of the consequences of becoming diabetic and the benefits of lifestyle changes. This helped to create motivation.

Frank: *'I think it's made me aware of the potential negative effects of certain foods. I've always been aware of them but to realise that they actually affect me. I've always thought I was fairly healthy and the right side of weight and what have you. Maybe it's an aging thing as well but I was finding I had gradually started going in the wrong direction. So it pulled me back in the right direction. And the same with exercise. Not things I'd never know before but it's made me more conscious of them and doing something about them'*

Beth: *'I found the most useful thing was drawing my attention to the sugar content in a lot of products. I knew about the fat. I know now the sugar aspect of it. Now I'm much more aware of the sugar content especially in lower fat and reduced fat products. They just increase the sugar.'*

June: "*Yeah sugar content. Yeah which was surprising wasn't it. Those bars… the sugar in those cereal bars. You think you're buying it to be healthy.*"

The way in which this knowledge was passed on to participants was important:

Matt: *"The great thing about this course is 'A' the people talking, talk with you they don't talk at you. Which I think is very good. I think Ruby is very good cause she doesn't sort of bang the table and tell you. You ask her a question and she answers it in a very relaxed sort of way you know. So I think the awareness thing. But you can only become aware if you listen when people are talking to you. And you know, they're very listenable to".*

Action:
The increased awareness was then linked to a change in behaviour of reading labels more and identifying foods high in sugar.

Alcohol was identified by some as an area where they had taken action. This was viewed very much as a dietary outcome and the change they made was related to the calories in alcoholic drinks as oppose to other possible health effects.

Frank: "*I still drink but I don't drink at home if it's just me and my wife there. She might have one but I don't. I still drink in company. If I go out for dinner I drinks and if I've got friends in I drink but I won't drink otherwise so it cuts it down."*

Andrew: "*Yeah I think it's made me more aware of the dietary effects of alcohol. The calories and sugar and I've cut down considerably."*

Maintenance:
Participants discussed examples of how they had taken actions to change elements of their diet.

Rosie: *'well I am very very careful about how much fat I eat, ok? So that instead of, and in particular the high fat foods, I don't eat any saturated fat and I only have either olive oil or sunflower oil and I am very mean with the amount I use. For instance instead, if I'm cooking (and I cook... I don't eat any processed foods), instead of putting in a glug of oil, I'll carefully measure it.'*

Andrew: *'I've changed my diet. I've cut out the cakes. I no longer take sugar in my hot drinks which took a bit of getting use to and I'm aware of the labelling on food these days and stay away from anything that's considered unhealthy.*

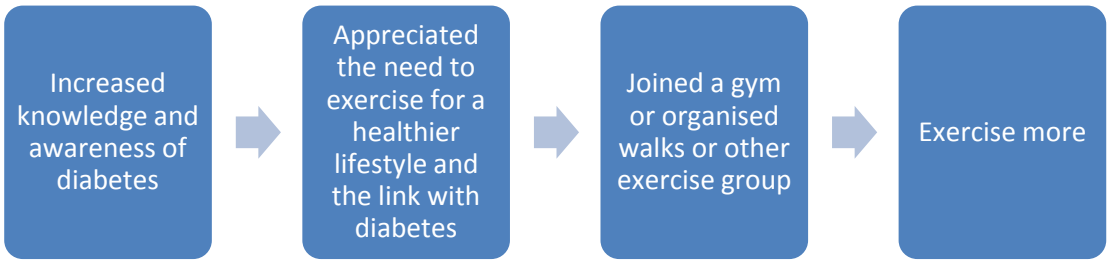
Some people gave examples of how they didn't always follow their plan but self-monitored this and changed the behaviour accordingly. For example, Matt attends the group with his wife and described the increase in knowledge and reading food labels as an action towards having a healthier diet. He was clearly aware of the actions they wanted to take and was monitoring and reflecting on when this does not necessarily happen:

Matt: *"It's also made me much more aware. I mean my wife's always been aware what you eat. Fat and that sort of thing and what's in the packs. I even do that sort of thing myself now and look at things. Ur, you know and you just have to be careful cause my wife brought some soup the other day and when she got it home.. she'd brought it cause it was low fat or something and then she suddenly looked to see how much sugar was in it. You know, I've forgotten what it was but it was quiet alarming. So you're much more conscious of these sort of things."*

(b) Increased physical activity

The motivation to exercise more was clearly linked by participants to an increased knowledge and awareness of diabetes. The action was often described in terms of joining fairly structured and organised activities such as the gym or a walking group. Westbank has a gym on the premises and a number of participants described being introduced to this through LWTC. Walking groups take place from Westbank and again participants were introduced to these through being part of LWTC.

Fig 3: Chain of events leading to increased physical activity



Some people were already exercising but increased the amount they were doing:

Mary: "I think I've upped the gym to every day. I don't know. I use to do it four or five times a week but now it's every day.... And then I've got my tap twice a week on top of that. And I cycle everywhere".

Rob: "I'm fairly new to the area, um they introduced me to the gym at Westbank and I go and do a little bit of exercise there once or twice a week and I think that's very good…when you get there, it's quiet a nice place. Everybody's very nice there. And you know, you feel quiet at home. And when you're stood on the running machine, you're looking out at the hills."

Generally people talked about joining organised activities to increase their physical activity. They tended not to highlight changes built into their lifestyle such as walking to the local shop instead of driving. It might be that they have made these changes as well but perhaps do not value these in the same way as the planned events which are perhaps clearer to define and demonstrate.

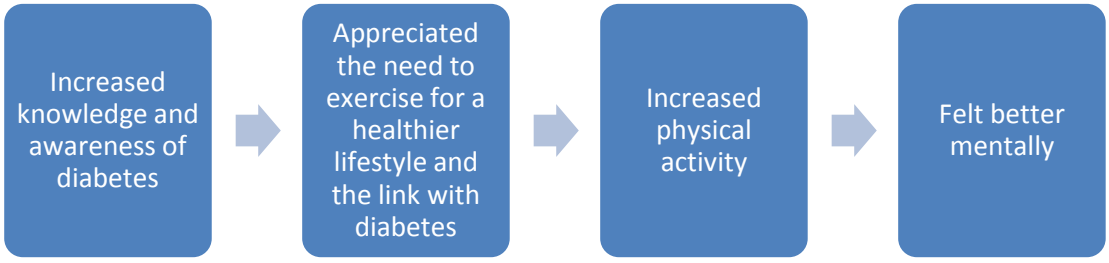
(c) Better mental health

Fewer participants identified better mental health as an outcome and the chain of events leading to this was more difficult to identify than that of dietary or physical activity changes. The chain of events was different for different people but often seemed to include the increase in physical activity.

One participant describes how exercise had helped him to achieve better mental health but a physical problem more recently had meant he was swimming as regularly as he had done previously.

Andrew: "*When I was swimming regularly, I did feel physically and mentally better. More alert. Just more alert".*

Figure 4: Chain of events contributing to better mental health



The motivation to change was the knowledge of having pre diabetes or type 2 diabetes. As a result they found out more through LWTC about the impact of physical activity and the action was increasing their physical activity. The maintenance of this action came from feeling that their mental health had improved. This is probably an unintended but possible change from the programme. Whilst it does overlap with increased physical activity, it has been counted

as a separate outcome because only a minority identified improved mental health and the complexity of the chain of events leading to this means it would be too simplistic to say this was purely from increased physical activity.

One lady described how it they experienced changes mentally:

Interviewer: Do you think it has made a difference?
Nancy: Body wise no but mentally yes.

However, Nancy could not really articulate how she felt different mentally or how LWTC had contributed to this.

Some participants talked openly about other stresses in their lives and how that related to lifestyle changes. The groups appear to be a safe place for people to talk openly about stresses they are experiencing and the group seems to offer support and encouragement for many of the participants.

"Stress isn't good when you've got this condition. I try to walk as much as I can"

(d) Improved social networks

The chain of events leading to improved social networks was difficult to identify. Many participants clearly gained something through the social interaction and support of the group. Some described how they met outside the group for example to go walking.

Figure 5: Chain of events leading to improved social networks

In has long been recognised that supportive social interactions can be associated with increased physical activity and decreased fat consumption (Zimmerman and Connor, 1989). Whilst there is clear interaction between the outcome of improved social networks and two of the other outcomes (healthier diet and increased physical activity), it is viewed that these are separate outcomes and not necessarily all part of the same chain of events for most participants.

Frank: *"And sharing the experiences and what have you. You don't obviously get that with the GP or a one to one. "*

Nancy: *Yeah, it helps to keep a balance... and you know, it gives you that incentive that other people want by being together and people you're familiar with. And the routine you get into of coming to a class and you know, education.. for me.*

….I think that helps if you've got a friendly face. Somebody you know."

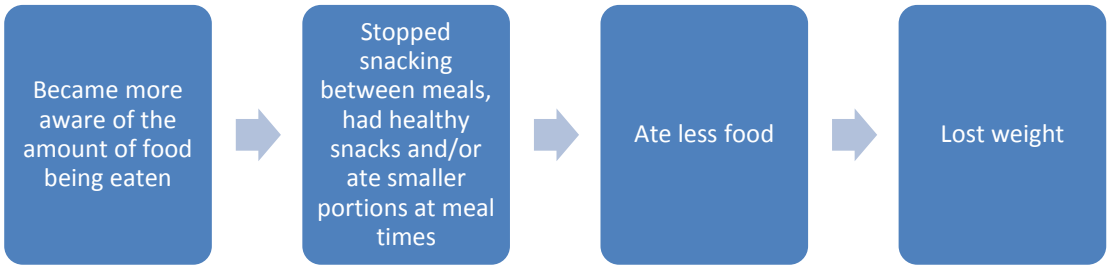
(e) Weight loss

Motivation

The weight loss motivation varied between participants. Although the risk of diabetes was a motivation to change, for some there were other motivations as well:

Rose: *"Um and I have found it very very valuable. It was fortuitous that my daughter was going to be married in June, this was, we started in February, and I needed to lose a lot of weight in order to get into my dress. And yes I've lost a stone in weight"*

Figure 6: Chain of events leading to weight loss



Action:

Whilst knowledge helps to inform the action stage of the Process model of lifestyle change, in the case of weight loss the knowledge was not about calories in various foods but instead an increased awareness of portion sizes they were consuming.

Participants identified ways in which they were eating less which had then lead to weight loss. Although the changes in sugar and fat content of their diet and increased physical activity would clearly contribute to this outcome, participants were much more focused on this outcome being a part of a chain of events involving eating less overall. They described strategies for dealing with snacking between meals or ensuring that they had smaller portion sizes. This might appear to over simplify weight loss but it was the way in which participants were identifying how they viewed the outcome and the chain of events.

Phil: *"Um, not eating between meals. I've tried to also cut out the scone with a coffee in the morning. I like my scone with coffee. I will still have it occasionally, um but generally I just cut out eating between meals a lot. I'm trying to cut down the quantity cause you get in the habit of filling your plate."*

Maintenance:

Many of the participants identified where setbacks could occur such as feeling hungry between meals. They had identified strategies to deal with this:

Nancy: *"Yeah if you get hungry between eating three times a day, just have stuff in the fridge that you can go to and pick on."*

Jenny: "*Hard boiled eggs, something like that.*"

Nancy: "*Yeah. Small salads."*

Jenny: "*Yeah that's what I do."*

Nancy: "*Homemade soups, all that sort of thing."*

Some participants talked about how small portion sizes had become the norm for them.

June: *"Then in the end you feel you can't eat as much as you use to. You use to load your plate up but I can't do it anymore. I suppose your stomach shrinks."*

Not everyone who intended to lose weight did. Some participants had planned actions in the form of setting goals and were clearly self-monitoring but they talked about setbacks. Rob described how he was struggling to lose weight:

Rob: **"**Don't get me wrong. I am trying…I know by coming here I know what I've got to do. I know what's in the foods"

(f) Lower risk of developing diabetes

Participants talked about how they were identified by their GP and the increased awareness of diabetes and increased knowledge of the risk of diabetes which then leads to other changes. This outcome was about the overall feeling people had that they had been empowered and taken control of their future health status.

Frank: 'I think it's sort or pulled me up short a bit. I'm sailing along fine for my age and then I suddenly realise that maybe there's an issue that I can or need to tackle, ur, before it becomes a problem'

<u>Motivation:</u>

Participants described how awareness of the long term risks and consequences of being diabetic had motivated them to make lifestyle changes:

Andrew: *"The group helps remind me of what the alternative could be. The fact that I was very surprised to be put on this. I think I was a bit border line anyway. But I was very surprised to be put on this group. I don't think there's a huge problem at the moment but it could have deteriorated. It's just thinking that could be ahead or I could go off in that direction. I think I'd become a bit complacent"*

Frank: *"I think that's probably the major benefit that I see, reading between the lines, it makes people aware of something they might not have been aware of. They might have been just heading into their health blindly almost. So it stops you in your tracks and makes you think hold on a minute. Like I said, you've got two choices. You can carry on as you are and just drift into diabetes and the associated ill health or you can… um you can deal with it"*

Action and maintenance:
Participants set goals with an overall aim of reducing the risk of diabetes. They discussed how this goal focused them and recognised the role of the group in this. After talking about what motivated him, Frank went on to say:

"…without a huge amount of difficulty but with some self-discipline and you've got a goal, um you can deal with it and manage it and I think that's where the group is beneficial. It gives you something to hang it on....I can't speak for others but for me it's really welcome."

Mike: *'Well the main thing that's changed for me is my hbA1c has gone down from 43 to 38'*

Careful consideration has been given as to whether this is a separate outcome or whether it describes the overall summative outcome of the other participants' outcomes. Outcomes such as weight loss, a healthier diet and increased physical activity could all arguably be on the pathway to this risk reduction outcome. Thus, there is a chance of double counting. However, from the five focus groups with people with pre diabetes the sense of reducing their risk of developing diabetes was a common theme. It was the overall feeling participants described of having some control that people valued highly. It has been included as a separate outcome but the impact of this can be explored in the sensitivity analysis.

(g) A healthier diet (for indirect participants)

Records showed that 92 people had attended at least one of the LWTC groups to support a participant. Often this was the participant's partner. Participants recognised partners as an important role in their change as one person stated:

"If they're going to support they need to understand it."

However, as well as their input into LWTC in terms of this informal support, partners, family members and friends attending the sessions also experienced unintended, positive changes. Their motivation to attend stemmed from wanting to support a loved one but they found that the group improved their knowledge and as a result they made dietary changes for themselves. Robs wife explained:

"It's been a benefit. That's why I came from the beginning...I didn't know whether it would be advisable but they said it was quite good cause you'll learn it and I see what could happen to me…..
… Rob thinks I keep on at him but since coming here I do worry about it and the weight.... when I see him eating certain things, it does make me angry. But he doesn't understand that sometimes. I'm just trying for his own good. I think we're all on the borderline at a certain age of getting diabetes. Coming here I know what could happen to me. That's why I came to the meetings really. I try to work with Rob and like the rest of them here to see if I can change things as well."

(h) Increased future job prospects

Staff are clearly skilled and knowledgeable in this area. However, they did identify how working with LWTC had developed some of their skills and allowed them to improve their

range of skills. This was viewed as being a benefit for them in the future in terms of improving their CV and improving job prospects.

Staff also highlighted the job satisfaction value gained.

Staff member (i): *"As part of the delivery team I have gained great value from witnessing the difference it has made to people's lives and receiving the positive comments and praises from people who have been through the programme".*

Staff member (ii): *"I get to meet all these lovely people every day.. cause my job is to help people make these changes and that's been a big deal for me… working here, a lovely place to work.. and I think that's important, the positivity of the whole thing. You're preventing. You're doing better. Rather than treatment."*

Whilst job satisfaction is very important, it has not been included in the impact map. It was viewed that it probably is not material. The staff involved are highly skilled and if they were not working on LWTC they would be likely to find alternative employment that would also provide job satisfaction.

(i) Raised profile of Westbank

For the organisation, LWTC has benefited from links with other organisations as described by one member of staff:
"It has enhanced our relationships with local practices and Devon CCG. It had also provided good links into research institutions"

Staff felt it had raised the profile of the organisation and expanded their core business:
It *"has helped to raise profile and enter the prevention 'market' at a professional level."*

"The success of this project has raised awareness of the work of Westbank in the local healthcare community and increased its reputation."

(j) Increased knowledge - Volunteers

For volunteers working with LWTC, the project has increased their knowledge of type 2 diabetes. However, volunteers were not interviewed, so it is difficult to know if this increased knowledge leads to any changes in their lifestyles such as increasing physical activity or changes in diet. Therefore, for the SROI the final outcome is increased knowledge. If there was more time to conduct further investigation, a sample of volunteers could have been interviewed to explore this further.

When asked about what they would do differently without LWTC, a volunteer stated that they would spend more time providing information and support to this client group.
"In participating I have expanded my awareness on several levels and no price can be put on that."

(k) More integrated working - Westbank Gym

Gym staff work closely with LWTC. The outcome for the gym staff, is better collaboration within the organisation. When asked about the impact that LWTC has had, one staff member said that it has:

"Increased cross department cooperation and working. Helped to give our service more cohesion"

The staff member did not feel that it had increased their confidence of working with this client group. This is probably because they were already confident and skilled in working with people with pre diabetes or type 2 diabetes.

It was clear that they felt that LWTC had a positive impact on their work and without the programme, they felt they would spend more time providing information and support to this particular group.

(l) Increased GP capacity

LWTC can reduce the number of GP visits from participants of the programme. This results in appointments at the referring GP surgeries being available to use with other patients. One Practice stated that working with LWTC has:

"It has been very positive. It is so good to be able to confidently refer patients to an organisation where you feel that something useful is being done."

(m) Increased income for GP surgeries

LWTC can help GP surgeries to obtain additional payments through QOF points. Quality and Outcomes Framework (QOF) is a payment mechanism to GP practices.

(n) Accommodation for local Diabetes Support Group

There is a local diabetes support group in the Westbank area. The support group use Westbank facilities free of charge for their monthly meetings. This has occurred through the group leaders links with LWTC and can be seen as an outcome created by LWTC.

The group were consulted about additional outcomes generated by LWTC. We presented the SROI work at one of these group sessions and asked attendees about their awareness of the group and if it had changed anything for them. Their awareness was minimal and LWTC was not significant for the majority since they were long-term diagnosed type 2 diabetics and not eligible for LWTC. Two people at the support group described how once they became aware of LWTC, it made them feel excluded because they did not meet the criteria. This is a potential unintended and negative outcome created by the project. However, given that the majority of those attending the support group had not been aware of LWTC, this outcome has not been included. Furthermore, in light of these conversations, Westbank have now offered a set number of places each year to people with a long term diagnoses of type 2 diabetes and this has been communicated through the local support group.

(o) Reduced NHS costs

The NHS benefits from the LWTC programme through reduced demand for services. Participants of the programme with pre-diabetes may have the outcome of lowering their risk of developing type 2 diabetes. The LWTC participants who are newly-diagnosed with type 2 diabetes increase their knowledge of the condition and make lifestyle changes, thus improving the management of their condition. As a result, it is likely that there will be less support required from the NHS for these participants, less medications and less in-patient care required. The overall outcome is reduced costs for the NHS.

Outcomes not valorised

There was a general consensus about most of the outcomes identified by the participants. However, there were a few outcomes which were only identified by one or two people and were not significant. These were not included since they are not material.

A material outcome is an issue that will influence the decisions, actions and performance of an organisation or its stakeholders. The first filter is Relevance. If an outcome is relevant then the significance of the issue needs to be considered.

Significance means that the real or potential scale of the outcome (both positive and negative) has passed a threshold that means it influences decisions and actions. The significance of the outcomes is assessed by reference to the magnitude of the impact and probability. Where the quantity of change is low, it may provide evidence that shows the change is not significant. SROI requires the outcomes to be valued. If the outcomes are given relatively low values compared to both the other values of their outcomes, and by comparison with the values of outcomes of other stakeholders, this may provide further evidence that the outcomes are not significant.

Improved sleep

One participant talked about improved sleep. Both short (under six hours) and long (over nine hours) sleep durations may have associations with increased risk of developing diabetes. Sleep deprivation may impair the balance of hormones regulating food intake and energy balance (Improving Diabetes Prevention, 2010). However, this was only explicitly talked about by one participant and on investigation, this was someone with a young child and the sleep pattern was predominantly dictated by the child's sleeping habits and not any changes created by the participant being part of LWTC. It was therefore not deemed material and not included.

Cheaper food bills

One participant mentioned cheaper food bills as an outcome but they were not sure if this was actually the reality or their perception:

> *"I think probably my food bills are cheaper."*

No one else mentioned this in the focus groups.

Feeling unsupported

Two participants talked about the negative unintended outcome of not feeling supported by the group based on the feeling that the group did not meet regularly enough.

> Rebecca: *I haven't found that the group from where we started and where we are today... it is the same group basically isn't it.. I haven't found that the group is very supportive cause I haven't really felt that I've got to know anyone particularly.*

This is an important point but with exploration it appeared that one of the participants found the support from a commercial slimming group and they had started attending the group as a result of being part of LWTC.

The outcome of participants feeling unsupported has not been included in the impact map because after careful consideration it was viewed that there was no evidence that it was material. Whilst this is an important outcome for people, it was only highlighted by two people in the focus groups and the impact reported seemed to be minimal because they had identified other means of support. Further investigation with participants should form part of mentoring and evaluating LWTC to explore if participants would prefer the groups to meet more regularly.

Feeling excluded from the programme

The local diabetes support group discussed how they felt disappointed that many of them could not be part of LWTC because they have had type 2 diabetes for a long period of time. Whilst this is acknowledged, the participants who raised this had not been aware of LWTC until the SROI focus group discussion. This is not therefore an outcome that LWTC has previously created. In addition, Westbank have now agreed a number of places on LWTC for people who have had type 2 diabetes long term. Thus, whilst some of the support group felt disappointed that they could not be involved in LWTC once their awareness of the project was raised in the focus group, this disappointment should be short term because of the quick response from Westbank.

Job satisfaction

Staff of LWTC talked enthusiastically about the job satisfaction they gained. Whilst they valued this highly and all interviewed talked about this outcome, it has not been included because it was likely to have a high 'deadweight' value. Since staff are highly skilled and educated in this area of work, it is likely that without LWTC they would be in alternative employment that would also provide job satisfaction. Deadweight explains how much of the outcome would have happened anyway and for this outcome, it is likely to be high. This would then leave a very small outcome value once deadweight had been deducted. Thus, the outcome was not viewed as material for the SROI.

Chapter 5 Evidencing outcomes

Once the outcomes have been mapped and described for each stakeholder, the third stage of SROI is to develop outcome indicators and use these to collect evidence of the outcome occurring.

There are four steps in stage 3:

- Developing outcome indicators

- Collecting outcomes data
- Establishing how long outcomes last
- Putting a value on the outcome

Table 7 below summarises the first two steps for this stage.

Table 7: Summary of outcomes, indicators and date collection source identified.

Stakeholders	Outcome	Indicator	Data collection
Participants: pre-diabetic and newly diagnosed diabetic LWTC attendees	(a) Healthier diet	Number of participants who made at least one of the following dietary changes between their initial assessment and last review group - Always or usually opt for a high fibre product over a low fibre alternative - Avoid using fat as a flavour enhancer where they had previously done so - usually or always now opt for a low fat alternative for products where they had not done so at the start of the programme - Increased fruit and/or vegetable intake	Baseline and latest review questionnaire
	(b) Increased physical activity	Number achieving the recommended 150 minutes of moderate intensity physical activity or 75 minutes of vigorous-intensity physical activity a week at last review.	Baseline and latest review questionnaire
	(c) Better mental health	Number with an increase in WEMWBS score between baseline and 6 month review.	Baseline and 6 month review questionnaire data
	(d) Improved social networks	Number of people who identify that they have made new friends, gained additional support from the social interaction or spend time socially with people from the group.	Focus groups
Beneficiaries with a BMI>25	(e) Weight loss	Number achieving a 5% weight loss at 6 months.	Baseline and 6 month review data.
Pre diabetic participants	(f) Lower risk of developing Type 2 diabetes	Number of participants with pre diabetes divided by 6.9 (based on a study showing that NNT was 6.9 to prevent one case of type 2 diabetes over a 3 year period).	Attendance data and desk based research.
Indirect participants: Partners/family members/friends of pre-diabetic or diabetic participants who attend the group with their partner for support.	(g) A healthier diet (for indirect participants)	Number of partners/family members/friends who have made some dietary change contributing to a healthier diet.	Attendance data
Project staff	(h) Increased future job prospects	Number of staff who identify that they have increased their knowledge and skills	Interviews
Westbank	(i) Raised the profile of	Number of organisations in contact with LWTC	Survey and discussions with

	Westbank		LWTC staff
Volunteers	(j) Increased knowledge	Volunteers self-report on the value of the opportunity to their personal development / career	Survey
Westbank gym	(k) More integrated working	Increased communications internally	Survey and discussions
GP practices referring to the project	(l) Increased GP capacity (m) increased income	Number of fewer GP appointments for LWTC beneficiaries Number of GP surgeries referring to LWTC.	Estimated from monitoring data Discussions with Westbank
Local diabetes support group	(n) Accommodation for groups	Number of meetings held	Discussions with Westbank
NHS	(o) Reduced NHS costs	Number of people reducing their HbA1c levels between baseline and 6 months	Literature review and LWTC measurement data

Developing outcome indicators

Indicators are identified to answer the question *'how do we know that the change has happened?'* SROI acknowledges that these can be subjective or objective or a combination of the two. They also mean that the quantity of the change can be identified and communicated.

Table 7 has summarised the indicators and many are self-explanatory. For the participant outcomes, literature was reviewed to assess standard definitions, indicators and methods of measuring. The indicators selected were based on this evidence and are outlined as follows:

(a) Healthier diet

The Eat Well Plate depicts a healthy balanced diet. This consists basically of a diet plentiful in fruit, vegetables and starchy foods, with some non-dairy sources of protein, some dairy and a small amount of foods and drinks which are high in fat and/or sugar. The indicator for the outcome of a healthier diet is that the participant has made at least one healthy dietary change which includes any of the following:

- Always or usually opt for a high fibre product over a low fibre alternative
- Avoid using fat as a flavour enhancer where they had previously done so
- Usually or always now opt for a low fat alternative for products where they had not done so at the start of the programme
- Increased fruit and/or vegetable intake

(b) Increased physical activity

The role of physical activity in type 2 diabetes prevention and management has been well documented (Hayes and Kriska, 2008; LaMonte *et al.,* 2005). International studies have found that modest weight loss of 5-7% and moderate physical activity for at least 30 minutes each day (150 minutes per week) lowered the risk of developing diabetes by 58% in overweight people with pre-diabetes (Tuomilehto *et al.,* 2001).

Physical activity includes leisure time physical activity (for example: walking, dancing, gardening, hiking, swimming), transportation (e.g. walking or cycling), occupational (i.e.

work), household chores, play, games, sports or planned exercise, in the context of daily, family, and community activities.

The WHO (2010) recommend that adults aged 18–64 should do at least 150 minutes of moderate-intensity aerobic physical activity throughout the week or do at least 75 minutes of vigorous-intensity aerobic physical activity throughout the week or an equivalent combination of moderate- and vigorous-intensity activity.

Recommended physical activity levels were reviewed in the UK and set in line with the WHO for adults with the recommendation being a minimum of at least 150 minutes of moderate intensity activity in bouts of 10 minutes or more (BHF and Loughborough University, 2010). One way to approach this is to do 30 minutes on at least 5 days a week. Alternatively, comparable benefits can be achieved through 75 minutes of vigorous intensity activity spread across the week or combinations of moderate and vigorous intensity activity.

The indicator is thus set at achieving the recommended minimum physical activity levels of either 150 minutes a week of moderate intensity or 75 minutes a week of vigorous intensity activity at the last review.

(c) Better mental health

The participant baseline and monitoring questionnaires included the Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS) which is a validated measure of mental wellbeing that has been used nationally, regionally and locally and seen as an effective tool. There is a fourteen-item and a seven-item (sWEMWBS) questionnaire that produces a single score. It is self-completed (for people aged 13+) to record 'statements about their thoughts and feelings over the past two weeks'. Individuals rate their feelings from 1 (none of the time) to 5 (all of the time) on all the seven or 14 questions. These are added up and averaged for all participants. The findings can be used to establish whether a specific population has low, average or high mental wellbeing. This can be used to identify which groups are most in need and where to target investment.

The indicator for the outcome of better mental health is that participants have increased their WEMWBS compared with the baseline score.

(d) Improved social networks

The quality and quantity of individuals' social relationships has been linked not only to mental health but also to both morbidity and mortality. People with adequate social relationships have been shown to have a 50% greater likelihood of survival compared to those with poor social relationships. This is comparable with the effect of quitting smoking, and is more influential than other risk factors for mortality, including obesity and physical inactivity (Holt-Lunstad *et al.* 2010). However, the concept of social support and social interactions through networks is difficult to conceptualise and to measure.

Participants in the focus groups talked about new friendships, the support they gain from one another and seeing others from the group socially. This is therefore used as the indicator.

(e) Weight loss

It is widely acknowledged that significant health benefits can be achieved from modest amounts of weight loss (NOO, 2010). Realistic targets for weight loss for adults are usually seen to be a maximum weekly weight loss of 0.5–1 kg, and a total loss of 5–10% of original body weight over the period of the intervention. Weight loss targets should be related to starting weight. People with BMI (body mass index) under 40 may be encouraged to aim for a loss of 5% body weight while those with a BMI over 40 might aim for 10% or greater (NOO, 2010).

NICE (2012) recommended that overweight and obese people with a high risk of developing diabetes should be advised and encouraged to reduce their weight gradually by reducing their calorie intake. This should include explaining that losing 5–10% of their weight in one year is a realistic initial target that would help reduce their risk of type 2 diabetes and also lead to other, significant health benefits.

The indicator selected for the weight loss outcome is a weight loss of 5% or greater between baseline and the 6 month review point.

(f) Lower risk of developing type 2 diabetes

Glycated haemoglobin (HbA1c) forms when red cells are exposed to glucose in the plasma. The HbA1c test reflects average plasma glucose over the previous 8–12 weeks. Unlike the oral glucose tolerance test, an HbA1c test can be performed at any time of the day and does not require any special preparation, such as fasting.

HbA1c is a continuous risk factor for type 2 diabetes. This means there is no fixed point when people are (or are not) at risk. WHO recommends a level of 48 mmol/mol (6.5%) for HbA1c as the cut-off point for diagnosing type 2 diabetes in non-pregnant adults.

HbA1c is recorded at baseline and at the 6 month and 12 month review for participants. The indicator used for lower risk of diabetes is whether the participant has lowered their HbA1c levels between baseline and their last review recording.

(g) A healthier diet (for indirect participants)

Family members, partners and friends of participants attending LWTC groups were consulted as part of the focus groups and they identified dietary changes. However, only a small number (three people) were consulted. The indicator is whether they made changes contributing to a healthier diet. It can not be assumed that the outcome therefore applies to all of these indirect participants and this presents a challenge within the given resources for this SROI to estimate the number who experienced this outcome.

(h) Increased future job prospects

This indicator is simply the number of project staff who self-report that they have increased their knowledge and skills regarding diabetes and/or working with this client group.

(i) Raised profile of Westbank

The indicator for the raise profile is the number of organisations who have contact with LWTC.

(j) Increased knowledge - volunteers

It is assumed that all volunteers will increase their knowledge either about diabetes and/or about working with this client group. The indicator is therefore the number of volunteers working with LWTC.

Whilst the outcome is the same as that of project staff, a slightly different indicator has been used. This is a pragmatic discussion because of the number of volunteers involved. Limited time did not make it possible to survey or interview all of the volunteers, so assumptions have been made based on the survey sample. Whereas, the number of project staff is much smaller and therefore there was the time to ask them is they experienced this outcome.

(k) More integrated working – gym staff

The indicator for this is staff reporting more contact and communications internally.

(l) Increased GP capacity

The indicator for this is a decrease in the number of GP appointments for participants of LWTC.

(m) Increased income – GP surgeries

The quality and outcomes framework (QOF) is part of the General Medical Services (GMS) contract for general practices and was introduced in April 2004. Practice participation in QOF is voluntary but most practices take part. For 2014/15, there are a maximum of 559 points available to practices across QOF, which in turn determine payments.

There are 11 diabetes indicators within the QOF for 2014/15. QOF reference DM014 is most relevant to the referrers to LWTC:

> "The percentage of patients newly diagnosed with diabetes, on the register, in the preceding 1 April to 31 March who have a record of being referred to a structured education programme within 9 months after entry on to the diabetes register"

The indicator requires that structured education is offered (preferably through a group education programme) to every person with diabetes and/or their carer from the time of diagnosis, with annual reinforcement and review. An alternative education programme of equal standard may be offered to people unable or unwilling to participate in group education sessions.

If GP surgeries refer to LWTC, they will fulfil the QOF requirement for providing structure education to people newly diagnosed with type 2 diabetes. Thus, the indicator used is simply the number of GP surgeries referring to LWTC.

(n) Local diabetes support group

Since the outcome is the provision of accommodation for the groups, the indicator is the number of support group sessions held at Westbank.

(o) Reduced NHS costs

Type 2 diabetes is estimated to cost the NHS £10 billion a year, mainly due to health complications (Diabetes UK, 2014). By attending LWTC, participants may make lifestyle changes which lead to a decreased risk of developing type 2 diabetes or developing

associated complications. As a result, the cost to the NHS is decreased. Thus the indicator is the number of participants who decrease their HbA1c levels between baseline and the 6 month review.

Collecting outcomes data

The data collected by the project was obtained from Westbank. Participants complete extensive questionnaires at baseline and at their review appointments. For the majority of the outcomes identified data was already available for the indicators selected. However, not all 248 participants have completed baseline and review questionnaires. For some, they have yet to reach the six month review point and for others the data was not complete at either baseline or their review so no change could be evidenced. For simplicity for the SROI, it has been assumed that the sample who have completed data are representative of the overall participant population. This is illustrated in table 8.

Table 8: Data collection and quantity of outcomes

a	**b**	***c***	***d***	***e***
No of people	**Outcome** ***How would we describe the change?***	**Indicator**	**Quantity & percentage of outcomes in study sample: n/respondents (percentage)**	**Quantity of outcomes applied to total number involved in LWTC a X d%**
248	(a) A Healthier diet	At least one healthy dietary change	62/65 (95%)	237
248	(b) Increased physical activity	Number achieving the recommended 150 minutes of moderate intensity physical activity or 75 minutes of vigorous-intensity physical activity a week at last review.	29/44 (66%)	149
248	(c) Better mental health	Number with an increase in WEMWBS score between baseline and 6 month review.	27/61 (44%)	110
248	(d) Improved social networks	Number of people who have made new friends gained additional support from the social interaction or spend time socially with people from the group.	7/29 (25%)	60
190	(e) Weight loss	Lost 5% or more since baseline	22/64 (34%)	65
153	(f) Lower risk of developing Type 2 diabetes	Number of people with pre diabetes attending LWTC divided by 6.9 (estimate of NNT to prevent one case in 3 years)	153/6.9	22

92	(g) Healthier diet – indirect participants	Self reported healthier changes in diet	4/4 (100%) reporting. *However, use 75% as an estimate for whole population given the small sample consulted and so not assuming that all will experience this*	69
4	(h) Increased future job prospects	Self reported increase in knowledge / experience / skills	3/3 (100%)	4
1	(i) Raised the profile of Westbank	Number of organisations in contact with LWTC	*Stakeholders consulted but difficult to quantify*	
9	(j) Increased knowledge	Volunteers self-report on the value of the opportunity to their personal development / career	1/1 (100%) self reporting ***However, use 75%*** *as an estimate for whole population given the small sample consulted and so not assuming that all will experience this*	7
4	(k) More integrated working	Increased communications internally	1/1 (100%) self reporting	4
248 participants of LWTC	(l) Increased GP capacity	Number of fewer GP appointments for LWTC beneficiaries	1 less appointment per participant	248
12 GP surgeries	(m) increased income	Number of GP surgeries referring to LWTC.		12
1 group	(n) Accommodation for groups	Number of sessions held	14 sessions for 2 hours each	14
248 participants of LWTC	(o) Reduced NHS costs	Number of people reducing their HbA1c levels between baseline and 6 months	60/70 (86%)	213

(a) A healthier diet

Participants were asked a series of questions about their diet at baseline and at reviews. Data was available for 65 participants. The indicator was if the participant had made at least one dietary change so they were self-reporting that the usually or always opt for the healthier alternative from the list of various foods and food groups presented. See appendix 4 for the complete list of questions. Out of the 65 participants where review data was available, 62 (95%) had made at least one change.

(b) Increased physical activity

The questionnaires at baseline and reviews asked participants to identify how many days during the last week they did moderate physical activity for more than ten minutes. They

were then asked how much time they typically spent on those days on physical activity. They were asked the same about vigorous physical activity. The responses to these questions give some indication of the number of participants achieving the recommended minimum physical activity levels.

There are clearly limitations to this data. Participants self-reported and were being asked to recall activities from the last week. The last week might not be representative of how they usually spend their time. It also relies on people being able to identify what constitutes moderate and vigorous physical activity, although some examples and guidance was given on this in the questionnaire.

The point of the last review was used to measure the indicator and this will vary for beneficiaries depending on how far through LWTC they are.

(c) Better mental health

A total of 61 participants had completed the WEMWBS at baseline and six months. There was no significant change in the scores. The baseline mean was 26.53 (95% CI: 25.02 – 28.05) and the six month mean was 26.33 (95% CI: 24.93 – 27.73). However, in terms of individual participants 27 showed improvements in wellbeing scores at six months.

(d) Improved social networks

The data for this outcome was collected from the focus groups. Seven (25%) people of the 29 involved in the focus groups talked about new friendship and social interaction and support they had gained through the group. This can be extrapolated to give an estimate that 60 out of all of the participants would be likely to have experienced this outcome assuming that the focus groups are representative. This obviously assumes that the focus groups were representative of the whole participant population.

(e) Weight loss

A total of 190 participants had a baseline BMI of 25 or greater. Of these 64 had reached at least the six month review and had their weight recorded. By the six month review 78%(n=50) lost some weight (see table 9). A total of 22 participants had lost at least 5% of their body weight.

Table 9 Weight change percentage between baseline and 6 months

Weight change	No.	%
10% or greater weight loss	4	6%
Between 5% and 9% loss	18	28%
Between 1% and 4% loss	28	44%
No change	5	8%
Between 1% and 4 % gain	7	11%
Between 5% and 9% gain	2	3%
10% of more gain	0	0%

Many of the participants have not yet reached their six month review although are nearing it and may have already lost at least 5% since participating in LWTC but this has yet to be recorded. Due to the fact that only around a third of participants had reached their 6 month point during the evaluation, the results have been used to predict the weight loss of the remaining participants. Thus the impact map estimated that 66 participants will have reduced their weight by at least 5% by six months.

(f) Lower risk of developing type 2 diabetes

Baseline and review data was available for 43 of the 153 people with pre diabetes. 84% had decreased their HbAC1c levels. However, this does not guarantee that they would not develop diabetes in the future or indicate how much they might have decreased their risk.

Literature was reviewed to inform this outcome. The Diabetes Prevention Programme describes a study which included 3234 participants with Impaired Glucose Tolerance, and compared intensive dietary and physical activity advice with standard advice. The results showed that the numbers needed to treat (NNT) to prevent one case of diabetes during a 3-year period was estimated to be 6.9 for the lifestyle intervention (Diabetes Prevention Program Research Group. 2002). Thus, this has been applied to the group with pre diabetes attending LWTC to provide an estimate. However, this is based on one study and the intervention was slightly different from LWTC in terms of frequency of support and the population is likely to have some differences.

(g) A healthier diet (for indirect participants)

Four partners of participants were present in the focus groups and all indicated that they had also made changes in their diets as a result of attending the group to support their spouse. Data from LWTC showed that a total of 92 people have attended at least one session to encourage and support a partner, friend or family member. The sample consulted was small and therefore it can not be assumed that all 92 people would report the same. Given the resource constraints of this SROI, it was not possible to sample a large proportion of the indirect participants. Thus it was felt that estimating conservatively that three quarters might report changes in diet seems reasonable.

(h) Increased future job prospects

Three of the four project staff were interviewed and they all talked about how the work had provided them with increased knowledge and skills which would benefit them in the future in the job market. It has been assumed for the SROI that this outcome would be likely for all four people working on the project despite their roles being different.

(i) Raised profile of Westbank

Feedback from the survey showed staff at Westbank valued that LWTC had raised the profile of the organisation. This was explored further in discussions with the Project Manager who felt that more organisations have an interest in the work of Westbank as a result of LWTC and therefore the profile of the organisation has been raised. However, quantifying the number of organisations or the degree of increased interest and awareness was difficult. The allocated resources for the SROI means that this is an outcome which remains difficult to quantify and evidence.

(j) Increased knowledge – Volunteers

Data from LWTC showed that nine people volunteer for the project. Only one person was included in the wider stakeholder survey due to resource constraints. Increased knowledge was identified as an outcome and it seems logical that given the nature of volunteering and the project, that this would be a likely outcome for the majority. To acknowledge that not all of the volunteers might have increased their knowledge of type 2 diabetes, it seems responsible to estimate for the SROI that this outcome applies to 75%.

(k) More integrated working - Westbank Gym

Four people work permanently at the Westbank gym. Only one person was consulted through the wider stakeholder survey and this helped to identify more integrated working as an outcome. This will have an effect on the whole team to a certain degree because it applies to better integration between teams within the organisation. Thus it has been assumed that this outcome applies to all four team members.

(l) Increased GP capacity

There is evidence from the 6 month review data that participants make lifestyle changes. These lifestyle changes are likely to be associated with fewer GP visits. For example, Hardiker *et al*., (2009) demonstrates that an increase in physical activity is associated with less GP visits. It is difficult to determine the actual decrease in the number of GP visits for the LWTC participants. Thus, for the SROI, a conservative estimate has been given that each participant sees the GP for one less appointment in the timeframe than they would have done previously. This is only an estimate and clearly some participants might see the GP considerably less. However, others might now be seeing the GP more often and the reasons for this may have nothing to do with type 2 diabetes. Without exploring attendance data further, it seems reasonable for the SROI purpose to take a conservative estimate of the effect on GP attendance.

(m) Increased income for GP surgeries

A total of 12 GP surgeries referred patients to LWTC in the timeframe of the SROI. This helps contribute to their QOF and thus generates income for all of these Practices.

11 QOF points are available to the GP surgery for QOF reference DM014 which is the percentage of patients newly diagnosed with diabetes, on the register that have a record of being referred to a structured education programme within 9 months after entry on to the diabetes register. It should be noted though, that some GP surgeries are predominantly or even solely referring people with pre diabetes to LWTC and not referring those who are newly diagnosed with type 2 diabetes. In these cases LWTC can not claim the impact of the outcome. This can be accounted for in the ‘deadweight’ section of the SROI impact map.

(n) Accommodation for local Diabetes Support Group

The local Westbank Diabetes Support Group has used the Westbank facilities 14 times during the timeframe for two hours per session.

(o) Reduced NHS costs

Review data for the six month point compared to baseline was recorded for 70 participants for HbA1c. A total of 60 (86%) of these had decreased their HbA1c levels. Since the data on the remaining participants is not yet available, it has been assumed that the 70 participants

are a representative sample of the overall participant population and thus it has been estimated that 213 (86%) of the overall population would experience this change which is used in this SROI for an indicator for reduced costs for the NHS.

Establishing how long outcomes last

The length of time that each outcome lasts is complex and difficult to estimate. Participants were often clear that they felt that the changes they had made were long term:

> Rob: *"What I'm trying to do is long term"*
> Rob's wife: *"Definitely long term"*
> Rob: *"I know what I've got to do. So it will be long term"*

Wider stakeholders also expressed that they thought that the changes would be long lasting

A review of literature indicates that behavioural change programmes aimed at weight management tend to have the greatest impact in the first three years following the programme and then see a significant decline in related behaviours (Foresight 2007; NICE 2006). Thus, whilst participants and other stakeholders felt strongly that the changes would be long term, the SROI takes a conservative view and estimates that changes last for 3 years.

The income generated for GP surgeries has only been valued as an outcome for two years. This is because the LWTC programme has been funded until June 2015. Practices will only receive the QOF points for the years that they are referring people to the programme.

Putting a value on the outcome

Ascribing monetary values to soft intangible outcomes is a challenging process. Financial proxies have been selected for each of the outcomes and in many cases, the value given is the average of two or more alternatives. Where possible, local alternatives have been found for the proxy to ensure that these are relevant to this population.

The financial proxies used do not indicate any endorsement for these services. They are simply local services found using an internet search.

(a) A Healthier diet

The financial proxy used is the combination of two alternative services which participants of LWTC could have used to improve their diet. These are an online course and one-to-one education and support from a private dietician locally. Both of these options where chosen because they could be accessed locally and included ways to increase the participants knowledge about a healthier diet as well as skills similar to those described by the LWTC beneficiaries such as understanding food labels.

Information on the British Nutrition Foundation online course. *'An Introduction to Healthy Eating and Nutrition'.* This is described as an entry level course in healthy eating and nutrition. It provides an introduction to the area of healthy eating and different aspects of nutrition. The cost is £35.

Blueberry Nutrition is an internet based company offering individual diet plans. The plan is devised by a nutritionist and a new plan is sent to the participants every month. A 28 day plan costs £45.99. The cost for just a one off 28 day plan has been included to inform the proxy of a healthier diet since participants might not need to purchase a new plan each month in order to make those healthier changes to their diet.

Libra Wellbeing is a locally based nutritionist lead company offering dietary advice. The cost of the service is:

£25 for a face to face appointment
£10 for diet plan (duration not stipulated)
£10 for dietary analysis

The financial proxy = $\frac{\text{BNF cost + Blueberry Nutrition + Libra Wellbeing}}{3}$

= $\frac{£35 + £45.99 + £55}{3}$ = £45.33

(b) Increased physical activity

Membership at the local leisure centre for use of the gym and classes costs £35.50 per month plus £10 joining fee. This is used as the financial proxy with the cost calculated for 12 months, thus totalling £436. A 12 month period was selected because this is often the minimum contract period for a gym membership and therefore if participants had selected this as the option for achieving the outcome of increasing physical activity, this would be likely to be the financial cost.

(c) Better mental health

It is difficult to find a financial proxy for the outcome of better mental health. Participants experiencing this outcome were not defining a state of mental health necessarily requiring counselling and thus the financial cost of private counselling sessions does not seem an appropriate proxy.

A locally delivered mindfulness course was selected as the proxy. This offers individually-tailored one-to-one coaching sessions and group courses and workshops using a range of approaches aimed at cultivating a positive sense of wellbeing. The course is 8-Weeks and based in Exeter. The cost of the course is £135.

(d) Improved social networks

Internet search of community groups and courses was undertaken to review the approximate cost of such groups which would be likely to result in enhanced social networks. It seems reasonable to estimate that such a group would cost £5 per session. Assuming that participants attended seven sessions, in line with the minimum number of sessions they would be likely to attend with LWTC, the total cost would be £35.

It should be acknowledged that it is likely that there would be other outcomes from these groups such as new skills acquired which are not achieved by going to LWTC.

(e) Weight loss

The two market leaders for weight loss groups are used as the financial proxy for this outcome. These groups were also mentioned by participants in the focus groups and comparisons made. The indicator is weight loss at 6 months and thus the weight loss groups were only calculated for six months, despite the fact that beneficiaries are part of LWTC for 12 months. Weight Watchers costs £117.25 (1 month at £10 then 5 months at £21.45) and Slimming World is £133.70 (£9.95 on first week then £4.95 per week thereafter for 25 weeks). The average cost between the two equals £125.48.

(f) Lower risk of developing Type 2 diabetes

The willingness to pay (WTP) approach was explored to give a value to this outcome. Participants in the focus groups were asked to play the value game. This involves selecting an outcome and asking the group if they would prefer to have that outcome or an alternative such as a luxury holiday. The alternative has a market price which can later be assigned to it. Further alternatives are offered until all of the alternatives and the actual outcome related to the project have been ranked in order of preference according to how much they value them.

The five pre-diabetic focus groups selected a lower risk of developing type 2 diabetes as the main outcome. This was the outcome they went on to play the value game with.

There was a general consensus among participants that they view the outcome of lowering the risk of developing type 2 diabetes as greater in value than a weekly grocery shop, a weekend away or their utility bills paid for a year. The majority placed the value of this outcome for them somewhere between a two week luxury holiday all expenses paid for two people and a brand new Kia car.

The two week ultimate luxury holiday was priced at £3990. This was for two weeks all-inclusive at the newly opened Biyadhoo Hotel in the Maldives in April/May 2015 for two people. The holidays was available from Kuoni. The Kia car was priced at £11,445 for the new Rio five door 'SR7'

Thus, if participants are valuing the outcome of lowering their risk of getting type 2 diabetes as somewhere between the value of the luxury holiday and the new car, the financial proxy is:

$$\frac{£3990 + £11,445}{2} = £7712.50$$

WTP has been summarised in the literature review and the limitations to this approach in the context of the SROI should be taken into account:

- The choices were not fully checked first to make sure that they were items that participants were likely to value. So the new car choice assumed that people drove and would want a new car.
- It was not piloted first.
- Groups tended to reach a consensus as to where they ranked the items. Clearly some of the participants were influenced by more vocal participants in the group.

- Assume the group is homogenous and that different ages, HbAC1 readings and presence of any co-morbidities does not change the value ranking people assign to the programme.
- Asking respondents to focus on one specific intervention in isolation acts as a kind of magnifying glass for stated WTP (Cookson, 2003).
- We expect that individuals who feel more at risk for getting a particular disease would have a higher WTP for a risk reduction program for that disease. However, risk and perceived risk of getting type 2 diabetes was not explored.
- There tends to be a preference for the status quo – so these are people who have experienced the group so might choose the group over the other options which they might have no experience of.

(g) A healthier diet (indirect participants)

This outcome has used the same financial proxy used for the outcome of a healthier diet for participants, since the outcome is the same and only the stakeholder group has changed. Therefore is has been valued at £45.33.

(h) Increased future job prospects

This outcome proved difficult to find an appropriate proxy and value. Staff talked about how the job had given them the opportunity to build on skills and knowledge. However, they are already highly skilled professionals and thus it was inappropriate to use any course about diabetes as a proxy. One staff member compared the value to the cost for them to have established their own business. This was only suggested by one of the three interviewees and would be difficult to establish a value for.

The decision was taken to use a career development course as a proxy. Springboard consultancy offers a four day course at £495 per person.

(i) Raised profile of Westbank

The proxy used is an away day event for staff and partner agencies. An internet search showed the lower price bracket to be around £700 from example from a company called KDM Events. This has been used for another outcome but since this would need to include external agencies, it is counted as a separate event and thus included in the impact map twice. An alternative would be to use the cost of advertising as a financial proxy. However, this is likely to exceed £700 so the away day seems like a conservative estimate for generating the outcome.

(j) Increased knowledge - Volunteers

Diabetes awareness one day course is used as the finance proxy for the increased awareness of type 2 diabetes for volunteers. This has been calculated for just a one day course to provide a conservative estimate but the increased knowledge as the outcome from working with LWTC is likely to be greater than that gained from attending a one day course. An awareness course from Diabetes UK is priced at £130.

(k) More integrated working - Westbank Gym

More integrated working would also be a likely outcome from a team building event for staff. An internet search showed the lower price bracket to be around £700 from an example from a company called KDM Events.

(l) Increased GP capacity

When asked what a GP surgery would be willing to pay for the service over a one year period, one practice responded as follows:

"For my 20 patients alone, £300 – this could be scaled up, assuming everyone else puts the same value on LWTC"

The average cost of a 12 minute GP appointment, including direct care staff costs, is £46 (Curtis, 2014). This will be used as the cost in the SROI.

(m) Increased income for GP surgeries

The value of a QOF point for 14/15 is £156.92. A maximum of 11 points are available for Practices to refer newly diagnosed people with diabetes to a structure education programme. This equals an increased potential income of £1,726.12 per Practice.

(n) Accommodation for local Diabetes Support Group

The financial proxy for this is the cost of room hire at Westbank to external agencies. The cost of this is £31.25 per session.

(o) Reduced NHS costs

Annual inpatient care, to treat short and long term complications of diabetes, is estimated at between £1,800 and £2,500 per patient. This compares with annual outpatient costs, which includes the cost of medications and monitoring supplies, estimated at between £300 and £370 per patient (Diabetes.co.uk, 2015). 80% of treatment costs for Diabetes in the UK is spent on complications (Diabetes UK, 2014).

However, we can not assume that all of those lowering the HbA1c levels would have developed complications. Furthermore, the results are likely to be evident much further in the future. Therefore, reduced costs have been estimated at the lower end of the annual outpatient cost of a patient with diabetes at £300 in order to not over claim.

Chapter 6 Establishing and calculating impact

Stage 4 involves assessing in a number of ways if the outcomes are the result of the activities at LWTC.

One of the key principles of SROI methodology is to avoid over claiming the impact of the activity being assessed. There are four elements to consider:

1. Deadweight: How much would have happened anyway?

2. Displacement: Has any of the change simply been at the expense of another party?
3. Attribution: Is any of the change down to the actions of others?
4. Drop off: Does the change drop off in future years?

Where any of these elements have the potential to affect the outcomes identified, a percentage estimate of their role has been given. This percentage is decided through stakeholder engagement, project data and external evidence where possible. However, the reality is that this percentage is often an estimate.

Deadweight

Deadweight describes how much of the outcome would have happened even if the project did not exist. In reality there is not a perfect comparison group to see what would have happened without the project and therefore the SROI acknowledges that this is always an estimate.

SROI methodology suggests for an evaluative analysis that this information can be obtained by asking stakeholders what other services they accessed or if they know of similar services in the area which they could have accessed. Participants expressed how they felt that LWTC was unique in their area in terms of specialist knowledge delivered in non-clinical settings and including people who have been assessed as having pre-diabetes.

The participant focus groups talked about what they thought might have happened if they had not been referred to LWTC. There was a clear consensus that changes they had experienced would not have happened to the degree in which they have without LWTC.

Frank: "*Yes I was aware but never really concentrated on it until I started coming to the group. So there's no doubt in my mind that it's helped me achieve how I want to live.*"

Participants described how they would have researched the information on the internet if they had been provided with the diagnoses from their GP. They highlighted how this might have increased their knowledge but they felt this route was unlikely to lead to the chain of event resulting in the outcomes they had experienced from LWTC.

Martha: *"I would have researched it on the internet… but 'the facilitator' makes it easy for you. She tells you all the glucose levels and things like that which I wasn't really aware of. Well, I was aware of it but I wasn't particularly interested in it. And she accesses all this information and makes it easier. Probably I'd get there in the end on the internet but you have to really know what you're looking for and understand it. But it's another reason she's useful. If you've got any questions she comes up with the answer."*

Researcher: "*Yeah what are the bits that the facilitator adds? Would you have just found that information anyway given a pointer."*

Maggie: *"Yeah but it might not have been the right information. I don't know. I don't know. Um you would have found out the basic stuff but I think she's gone further than that because it's your knowledge; it's your job to know this stuff isn't it (looking to the facilitator). And she does it very in depth more than I would have found out."*

Others describe how just being diagnosed with pre diabetes or diabetes was not enough for them but the invitation to join LWTC was the start of what contributed to the changes they made and outcomes they gained.

June: *I went to the GP cause I was called back in by the nurse after a blood test and she said you're borderline diabetic. So I said oh right oh. Didn't think much of it. She said I want to see you back here in three months and get off your arse and do something… she was really firm so I said ok then and just blar blar blar, just heard it all before sort of thing but um, then 'the facilitator's' letter came and I thought oh my god, perhaps the doctor has.. I thought it was a sort of, not punishment but I had to do this. And so I did it. But it was only you actually writing to me and asking me to join and sign up for it. And that was the incentive really.*

Participants discussed how they might have made some changes simply by finding out their diagnoses but they felt that these changes would have not been as significant as the transcript from one of the focus groups demonstrates:

Andy: "*I would be doing something about it. This just focused it and brought it into light."*

Researcher: *"So maybe some of those changes would have happened anyway."*

Frank: "*Yes I was aware but never really concentrated on it until I started coming to the group. So there's no doubt in my mind that it's helped me achieve how I want to live."*

Phil: *"I think for me it's just the need to lead a more healthier lifestyle. The need to actual do it not know I ought to. To actually do something about it. It spurs you into action a bit. Rather than, yeah, rather than just knowing that you should."*

Lyn: *"I probably wouldn't have done these things unless I'd been diagnosed. It was a shock when I found out, so I think it has helped a lot, cause as I say I would have probably just gone on. Um. This has taught me that I was pre-diabetic and do something about it."*

Sue: "*I'm interested in what the gentleman was saying over there. You know it. You know that you're over weight but when do you do something about it. You come to something like this and, you know, it pushes a button in you. Cause it's got to be in here I think. It's got to be in here. Just push the right buttons."*

Lyn: "*Yeah, there's a focus to come every three months and see everybody else."*

It seems reasonable to apply a deadweight value of 10% to show that a minimal of deadweight for participant outcomes is likely.

The outcome for project staff was increased future job prospects. The staff involved are highly qualified and skilled. If they had not been employed by the project, it is likely that they would have found similar work elsewhere. Therefore, the deadweight for this outcome is higher at 50% as an estimate.

Since interviewees indicated that they felt LWTC had provided elements of experience for them that alternative employment might not have provided, the outcome is still significant and the deadweight has been limited to 50%.

One interview participant, a facilitator at LWTC, talked about alternative employment that was available at the time and how the post at Westbank was different. When asked what working for LWTC had changed for her, she responded:

"a massive change. This has helped me develop my career virtually. It's helped me start in an easier place to develop my nutrition skills. You're not going straight into in-depth nutrition analysis. I'm starting with people. Yeah, getting to find my feet a bit in the area.

This facilitator at LWTC went on to describe how they were not many other jobs available in this field of work

"Especially not round here. I would have probably had to move"

Displacement

It is important to consider if the outcome is displacing other outcomes. It does not apply to all SROIs but is an important component to be aware of.

There was limited evidence of any displacement. Participants were asked in the focus groups about what they felt they had had to 'give up' to be involved of LWTC. People discussed how the venue and timing of the groups suited them generally and fitted around other activities and commitments they had.

June: "*Well it's not that regular enough is it. It's not like it's once a week. Then you'd have to set aside time. Which I still would anyway."*

One person talked about how the gym sessions they were attending clashed with a social group they use to attend with their husband so they were missing out on this social group. However, she has also mentioned how the gym was fairly friendly and sociable. The displacement was only highlighted by one person and seems minimal.

Overall, the displacement effects are considered to be minimal and range from 0% to 10% depending on the nature of the outcome.

Attribution

Attribution describes how much of the outcome is due to another organisation or other people. Attribution is calculated as a percentage (i.e. the proportion of the outcome that is

attributable to your organisation). It shows the part of deadweight for which you have better information and where you can attribute outcome to other people or organisations.

Some of the participants joined a walking group which clearly attributed to their increase in physical activity. For example, one participant described how the walking group had encouraged them to walk further:

Sue: "*I don't think I was walking.. I am walking far enough. But you know, I walk a lot but I didn't think I was walking far enough and when I went on that walk I realised I hadn't been walking far enough".*

However, even participants attending the walking groups did not attribute their change in physical activity and walking more to the walking group. They tended to feel that it was the raised awareness raised from LWTC that had created this change as one participant described:

Sue: *"We might go tomorrow. We're hoping to go tomorrow. It depends on the weather. No I don't think the groups, not the walking groups, has made me think I need to walk. I thought I need to walk when I came to this group (LWTC) but not the organised ones. It was just a matter of going and walking more".*

The gym at Westbank was also frequently mentioned in the focus groups. This had contributed to their increase in physical activity.

However, it was clear from the focus groups with participants that they felt that LWTC had created the change even where other agencies were involved. This was the catalyst for change and without the project they felt they were unlikely to have made those changes. Therefore, attribution is set at zero or a very low percentage.

The exception is the outcome of weight loss. Some participants talked about how they had also joined a slimming club. They highlighted how the frequency of these slimming groups had contributed to the outcome of weight loss for them.

June: *"But I suppose if I didn't have that weekly weigh in, I'd feel massively different from what I do. I know I'd just eat away. And that's it."*

To acknowledge that this might had been a contributing factor in the weight loss of some of the participants, the attribution value for this outcome has been set at 35%. However, analysis of the baseline questionnaires completed by participant's shows that a minority (3.6%) were part of a slimming group when they started LWTC. Indeed, most were also not part of other groups such as exercise groups when they started LWTC. This is illustrated in table 10 below.

Table 10: Other groups participants are involved in when starting LWTC

Group	n	%
Exercise group	18	7.3%
Swimming group	9	3.6%
Weight management group	6	2.4%
Yoga / relaxation group	4	1.6%
Team sport	3	1.2%
Mental health support group	2	0.8%
Cooking group	1	0.4%
Other	24	9.7%
Not known	42	16.9

Drop-off

It is suggested that people who significantly change their weight and HbAc1 levels can reduce their long term risk of type 2 diabetes if the weight loss can be sustained (Perreault *et al.,* 2012). On average, people who lose weight regain the weight lost within 3-5 years (Greaves, 2014).

Drop-off of impact is 66% drop off per year over a 3 year benefit period, although the majority of respondents felt the impacts would last well beyond 3 years, the SROI analysis has used a conservative view.

Discount rate

Discount rate is the element of drop of that takes account of the depreciation of value in future years. The discount rate of 3.5% has been used (suggested in HM Treasury Green Book) for calculating the present value of future benefits.

Calculating impact

With this process and all necessary data collected, the SROI can be calculated. The total value in this analysis is comprised of valuing the aggregate change for all material stakeholders, in each final outcome. This report accounts for the time period over which benefits are accrued, some of which can last into the future. Some outcomes can last beyond the initial intervention. Where this is the case, this value can be projected into the future using a discounted cash-flow approach. A drop-off rate is applied to acknowledge that outcomes are not maintained at the same level over time.

The financial impact of the HLW activities under analysis is calculated using the following formula:

(financial proxy for outcome x quantity of outcome)

-

(deadweight + displacement + attribution)

x

duration (adjusted for drop off and discount rate)

=

SROI ratio

Table 11 shows that the main stakeholder group to benefit (i.e. those with the greatest overall value for the outcomes), are the participants. Whilst this is fairly predictable, it does show that 25% of the social return value generated is for outcomes experienced by other stakeholders.

Table 11: Value of impact for each stakeholder group

Stakeholder	Value of impact	% of overall impact
Participants: pre-diabetic and newly diagnosed diabetic LWTC attendees	£217,260.47	69.7%
Indirect participants: Partners/family members/friends of pre-diabetic or diabetic participants who attend the group with their partner for support.	£ 2,814.99	0.9%
Project staff	£ 996.00	0.3%
Westbank	£ 598.50	0.2%
Volunteers of LWTC	£ 819.00	0.3%
Westbank gym	£ 2,394.00	0.8%
GP practices referring to the project	£ 28,909.30	9.3%
Local diabetes support group	£ 393.75	0.1%
NHS (all)	£ 57,510.00	18.5%
Total	£311,696.01	

Chapter 8 SROI calculation

Calculating the SROI is stage 5 of the process and includes four steps:

- Projecting into the future
- Calculating the net present value
- Calculating the ratio
- Sensitivity analysis

Projecting into the future

The first step in calculating your ratio is to project the value of all the outcomes achieved into the future. This takes account that some of the change identified last beyond the period of the activities analysed. This is where the drop-off, including the 3.5% discount rate is applied. A present value for each year is calculated and an overall total present value as shown below.

Present value each year after discounting	
Y1	£301,155.56
Y2	£226,957.81
Y3	£171,040.67
Total Present Value (PV)	£699,154.05

Calculating the net present value

In order to calculate the net present value (NPV) the costs and benefits paid or received in different time periods need to be added up. In order that these costs and benefits are comparable a process called discounting is used. Discounting recognises that people generally prefer to receive money today rather than tomorrow because there is a risk (e.g., that the money will not be paid) or because there is an opportunity cost (e.g., potential gains from investing the money elsewhere).

For the public sector, the basic rate recommended in HM Treasury's Green Book is 3.5%.

NPV = [Present value of benefits] - [Value of investments]

= £699,154.05 - 120,508.75

= £578,645.48

Calculating the ratio

$$\text{SROI ratio} = \frac{\text{Present Value}}{\text{Value of inputs}}$$

$$= \frac{£699,154.05}{120,508.75} = 1 : 5.80$$

So rounded to the nearest pound, the SROI ratio is 1:£5.80. **This means that the approximate value of the social return from LWTC is £5.80 for every £1 invested**.

An alternative calculation is the net SROI ratio. This divides the NPV by the value of the investment. Both are acceptable but the SROI is the headline figure used in this report.

$$\text{Net SROI ratio} = \frac{\text{Net Present Value}}{\text{Value of inputs}}$$

$$= \frac{£578,645.30}{120,508.75} = 1 : 4.80$$

Thus, if you deduct the initial investment from the final figure in your account to consider the

return on your money, the resulting net SROI ratio shows an estimated £4.80 social return for every £1 invested in LWTC

Sensitivity analysis

Given that an SROI is based on many assumptions, it is important to assess the extent to which the results would change if some of the assumptions made in the previous stages were different. The aim of such an analysis is to test which assumptions have the greatest effect on your model.

The standard requirement is to check changes to:

- estimates of deadweight, attribution and drop-off;
- financial proxies
- quantity of the outcome
- value of the inputs

Deadweight, attribution and drop-off

The rationale for the percentages used for deadweight, attribution and drop-off have been explained in the previous chapter. However, these are estimates and based on a number of assumptions. Table 12 illustrates how the SROI ratio would change if the deadweight, attribution and drop-off percentages are increased significantly. Whilst this changes the SROI, a worst case scenario of each of these elements being estimated at 50%, still shows for every £1 invested in LWTC, there would be a social value generated of £1.56. The evidence from the consultation with stakeholders shows that it would be very unlikely that deadweight, attribution and drop-off would equate to 50% each.

Table 12 SROI ratios after adjusting deadweight, attribution and drop-off

	SROI ratio
Deadweight at 50% for all outcomes	1 : 3.23
Drop-off at 50% for all outcomes	1 : 4.29
Attribution at 50% for all outcomes	1 : 3.15
Deadweight at 50% and **drop-off** at 50%	1 : 2.39
Deadweight at 50% and **attribution** at 50% for all outcomes	1 : 1.75
Attribution at 50% and **drop-off** at 50% for all outcomes	1 : 2.33
Attribution, deadweight and **drop-off** at 50% for all outcomes	1 : 1.30

Financial proxies

Table 13 shows the value of the impact for each outcome based on the financial proxy used and the quantity of each outcome.

Table 13: Impact for each outcome

Outcome	Impact (quantity times financial proxy, less deadweight, displacement and attribution)
a) A Healthier diet	£8,702.00
b) Increased physical activity	£52,620.84
c) Better mental health	£12,028.50
d) Improved social networks	£1,701.00
e) Weight loss	£4,771.38
f) Lower risk of developing Type 2 diabetes	£137,436.75
g) Healthier diet (for people supporting participants)	£2,814.99
h) Increased future job prospects	£996.00
i) Raised profile	£598.50
j) Increased knowledge	£819.00
k) More integrated working	£2,394.00
l) Increased GP capacity	£10,267.20
m) Increased income	£18,642.10
n) Accommodation for support group	£393.75
o) Reduced NHS costs	£57,510.00

The proxies used are subjective. Where possible, local alternatives that would generate the outcome have been identified and in many cases several alternative sources for the outcome have been identified and the average cost used. However, some of the impact values are large and if they were changed, they would change the SROI ratio. The sensitivity analysis explored this by replacing the two highest proxies with zero.

Box 1: Decreased risk of developing type 2 diabetes as an outcome and the proxy identified.

The highest value proxy used in the SROI was £7712 against the outcome of participants decreasing their risk of developing type 2 diabetes. The impact value accounts for 41% of the total impact in the evaluation.

The financial proxy was based on the value game with the focus groups. It has been included in the original estimate because whilst highly subjective, it was valued from consultation with those who identified the outcome. However, the limitations of this approach have been debated previously in this report.

For many, they felt this is what they valued most about the programme but also felt that they could not assign a monetary value to it. For many, they felt this was a truly priceless outcome and thus you would expect a high financial proxy in the SROI.

However, this has the potential to skew the overall ratio at the end because the value is high and a large proportion of people experience the outcome.

For the sensitivity analysis, this has been removed. In doing so, the ***SROI ratio becomes***
£1 : £3.24

The second highest impact value is from ***reduced NHS costs***. This was estimated from literature. If this is removed completely, ***the SROI ratio becomes £1 : £4.73.***

Finally, a sample of GP surgeries locally were invited to feedback about LWTC through an online questionnaire. However, a low response rate to these surveys means that some assumptions have been made regarding the outcomes for this stakeholder group. As outlined previously, these assumptions and estimated have been conservative but can not be confirmed without further research. If **the two GP outcomes are removed completely** in a sensitivity analysis to assume that there has been no benefit at all to this stakeholder group, the ***SROI ratio becomes £1 : £5.26***

The quantity of the outcome

Stage 3 of the process involved collecting outcomes data. However, not all participants had 6 month review data available. For most of the LWTC participant outcomes, the quantity was extrapolated from the available data and this was made explicit during stage 3. However, if the actual quantities recorded so far for the participant outcomes data are used, the following quantities can be used in the Impact Map:

Outcome	No. participants
(a) A Healthier diet	62
(b) Increased physical activity	29
(c) Better mental health	27
(d) Improved social networks	7
(e) Weight loss	22

This gives a ***SROI ratio of £1 : £4.64***

The value of inputs

The total cost of the project is included in the SROI. However this includes a start-up cost. The first participants were involved from the 12th November 2013. From financial records, the start-up costs can be estimated. For the sensitivity analysis, these have been excluded and a SROI ratio generated for including only the period were participants were active in the

programme. The input is therefore changed to £105,369.65 from The BIG Lottery. This changes the ***SROI ratio to £1 : £6.57.***

These calculations show that even when significant changes are made to the analysis the results still show clear evidence of social value being created up to 3 years after LWTC.

Chapter 7 Limitations, conclusions and recommendations

Limitations

- With the exception of one individual, all of the project participants were consulted through focus groups. This allowed for a larger sample size to be consulted within the resource constraints of the SROI but introduces a possible source of bias where there is the potential for dominant respondents within the groups. However, the focus groups were conducted as part of their usual LWTC meetings where individuals took it in turns to leave the group to have their clinical measurements taken. This potentially created times where any more dominant members would not be part of the conversation.
- The focus groups were with participants who had been involved with LWTC for at least 6 months. This was to ensure that they had been part of the programme long enough to experience changes. However, the outcomes for people at one month or their three month review might be different. This strategy also meant that people who failed to continue with the programme for at least 6 months were not consulted. An additional area to explore for the SROI could be consulting with participants who have only been part of the programme for a short time or have not continued the programme.
- The SROI includes the inputs over the time period identified in the scope. During this time there were 248 people who participated in LWTC. However, the participants were all at different stages of the programme. Most of the outcome indicators were based on six month review results and this data was extrapolated to give a portion of the 248 who would be likely to experience the outcome. However, some of the participants would have not reached the six month point in their programme and thus the true input cost would be greater than that reported.
- The outcome of 'lower risk of type 2 diabetes' was discussed within the focus groups. The majority of participants with pre diabetes felt very strongly that they valued the group supporting them to change their risk of developing type 2 diabetes. It could be argued that this is the summative outcome from all of the other participant outcomes and thus by including it might double count and over estimate the impact of the project. However, the qualitative research showed that it was the overall feeling that participants gained from this idea of decreasing their risk and should be valued as something separate.

- Furthermore, the mechanism for valuing the outcome of 'lower risk of type 2 diabetes' would benefit from further research. Assigning a proxy value was problematic. The literature review explored studies valuing risk reduction and diabetes prevention outcomes and it is clear that this is an area of work where there is very limited economic evaluation. The proxy used was very subjective and based on a bidding value game conducted in the focus groups. The sensitivity analysis has taken account of the possible issues with this outcome and exploded the impact that it has.
- The indicators for the 'healthier diet' outcome for participants was just evidence of one healthier dietary change. The majority of participants reported more than one dietary change. However, it should be acknowledged that this was a very crude measure and did not explore if those who had achieved at least one healthier dietary change had subsequently made less healthy choices in another area of their diet meaning that their overall diet had not become any healthier.
- The LWTC Project Manager provided contacts at local GP surgeries who might engage in the consultation and sent a number of emails explaining about the SROI evaluation. These contacts were asked to complete an online survey to help identify outcomes. However, no responses were received. This resulted in some assumptions being made about the outcomes for this stakeholder group. Furthermore, there is no clear evidence of a reduction in GP visits from participants of LWTC and this outcome was based on the logic that participants made lifestyle changes and as a result experienced health outcomes and as a result might have needed to visit their GP less frequently. To counteract this limitation, the two GP outcomes have been removed in the sensitivity analyses and produce a minimal impact on the SROI ratio.

Conclusions

The report demonstrates a significant social return for the investment made, and the feedback from participants and stakeholders clearly illustrates the programme's positive impact on creating change for participants. This report provides a tool for working with local mental health and public health commissioners and other funding bodies to identify possible sources of funding to secure ongoing delivery of the project.

Recommendations

- Use this report as a tool to demonstrate the value of LWTC and for working with local commissioners and other funding bodies to identify possible sources of funding to secure ongoing delivery of the project.
- Use the findings to demonstrate to wider stakeholders the value of referring people with pre diabetes or newly diagnosed type 2 diabetes to LWTC. Ensure that local GPs who do not currently refer to the project have the opportunity to review a summary of the main findings.

- Review within an appropriate timescale, the uptake of LWTC from local residents who attend the Westbank Diabetes Support group. This was a new offer which included for the first time people who have been diagnosed with type 2 diabetes more than six months ago.

- Consider how Westbank Community Health and Care could support people to achieve weight loss through more regular group meetings.

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Appendix 1: Focus group structure

Main focus	Description	Time
Background	Aims of the focus groups / SROI brief information Icebreaker/intro - ask participants: - Say there name and one thing you do differently as a result of the project	5 mins
Stakeholders	- Show the list of stakeholders. - Explain the meaning of a 'stakeholder' in SROI terms - Should anyone be added or taken off the list?	3 mins
Inputs	Ask 'what have you had to give up to be part of LWTC?' - Give the example of time, cost of travel.	7 mins
Outcomes	What has changed for you as a result of being part of LWTC? - Please write all of your answers on individual post-it notes. - Can be positive or negative - Include even the unexpected changes you have experienced - Check – are these all relevant and significant for the person? Group similar post-its Make links between them.	20 mins

	Agree 'end results' / changes are the outcomes Use sticky dots – indicate how many have experienced each outcome	
Valuing the outcome	Value game. - With one of the outcomes, against some picture cards of other items with a clearer value (such as a car or holiday), ask people to agree the order for what has the greatest values. - Repeat for 2-3 outcomes (probably will not have time to do any more than this).	10 mins
Deadweight	How much of this would have happened anyway (deadweight) - On a continuum in from 'none' to 'all'. Ask people to indicate on the line.	10 mins
Close	Anything more people want to add	5 mins
Additional activities/questions if there is time		
General questions	Attribution – build a consensus to how much is attributed to the project Which of the changes makes the biggest difference to you?	
Outputs	What changes have you made? - List on flipchart	5 mins
Indicators	Could you measure any of these outcomes? If so, how?	5 mins
Duration of change	Brief discussion on how long they think the change might last - Is there a difference at 4 weeks and now at 6 months?	

Appendix 2: Interview structure

Thank you for agreeing to take part in this evaluation. The aim of this interview is for us to find out more about your experience of and contact with the LWTC project and what you think about the impact it's having. The findings will form part of an evaluation report on the project. Your views and those of all consulted as part of the evaluation will be used to inform the final evaluation report.

INTRODUCTIONS

Can you tell me a bit about yourself and your involvement with the LWTC project?

- Name:
- Organisation and role within the organisation
- How and when did you/your organisation get involved with Healthy Connections?
- Were you already working with other services at Westbank?
- How would you describe your role in LWTC?

AIM OF HEALTHY CONNECTIONS

- What do you think are the aims of LWTC?
- Who do you think it is targeted at?
- Do you think the aims and target groups are right to meet the needs of the local community?

WHAT CHANGES?

- What impact do you think LWTC has on its participants / the wider community?
    - What are the benefits?
    - What do you think are the most / least effective aspects of the programme?
    - What are the negative or unintended consequences?
- How important are these changes?
- How would someone else know that this had happened and what would we show them? Could you measure it?
- How long do you think the change will last?
- How do you think LWTC compares with other similar projects/services?
- What would participants do if LWTC wasn't here?

COULD ANYTHING ELSE ACCOUNT FOR THESE CHANGES?

- What other services/support are you aware of participants accessing at the same time?
- Do you think anyone else contributes to the experience/change?

WHAT IS THIS SERVICE WORTH?

- If there was a charge for the service how much do you feel people would be willing to pay?
- Can you compare it to something else just as important?
- Which other ways might you achieve the same changes?

Appendix 3: Stakeholder survey

This was hosted on Survey Monkey for a two week period.

Westbank works to provide care, empower, and improve the health of communities and individuals across Devon.

Westbank runs a project for pre-diabetic and newly diagnosed type 2 diabetic people. You may already know this project as 'Living Well, Taking Control'. (LWTC)

We are in the process of evaluating the wider social impact of the project using a framework called Social Return on Investment (SROI). The aim is to measure and account for value in the widest sense.

SROI measures change in ways that are relevant to the people or organisations that experience or contribute to it. It tells the story of how change is being created by measuring social, environmental and economic outcomes.

We would appreciate your views as part of this evaluation. Please could you complete the following questionnaire by *****. The questions should take no longer than 15 minutes to complete and all responses are anonymous.

We appreciate that some of the questions might be difficult to answer, especially the ones asking about changes associated with the project.

The responses will inform a final SROI evaluation report and you will receive a copy of this in due course.

If you have any queries, please do not hesitate to contact Zoe Clifford, Public Health Specialty Registrar by emailing: zoeclifford@nhs.net

Name of organisation: ……
Your job title: ……..

1. When did you first become aware of the diabetes prevention project at Westank (referred to throughout this questionnaire as *LWTC)*?

Month _____ Year _____

2. What do you think are the aims of LWTC?

3. Did you know about Westbank before you found out about LWTC?

□Yes □No □Not sure

4. Since being aware of the *LWTC* please indicate if you agree or disagree with the following statements:

	Strongly agree	Agree	Neither agree or disagree	Disagree	Strongly disagree	NA
I feel like I know enough about LWTC to tell patients and/or colleagues about it						
It's clear where I can refer pre-diabetic and/or diabetic patients for information and support locally						
I work closely with LWTC						
I feel more confident working with pre-diabetics and/or type 2 diabetic patients						
I feel that LWTC is able to really support pre-diabetic and diabetic patients						
My knowledge of the needs of this client group has increased						
Has enabled me to spend more time on						

other projects/workload						
People are signposted to the work I am involved in from LWTC						
LWTC has no impact on my work						

5. Do you refer people to *LWTC*?
   - □Yes (please continue to question 6)
   - □No (please go to question 10)
   - □Not applicable (please go to question 10)

6. Are these people;
   - □ Pre diabetic type 2
   - □ Diabetic type 2
   - □A mix of type 2 pre-diabetic and type 2 diabetic

7. How many people have you referred to *LWTC* in the last 12 months?

8. How easy have you found the referral process?
   - □Very easy
   - □Easy
   - □Neither easy or difficult
   - □Difficult
   - □Very difficult
   - □Not applicable

Please explain:

9. Do you refer pre-diabetic and newly diagnosed type 2 diabetic patients to anywhere else?
□Yes □No □Not applicable to my role

If yes, please state where. _____

10. What do you think you have you contributed to LWTC? Please tick all that apply:
   - □Spending time to find out more about diabetes
   - □Additional time to assess if someone is pre-diabetic
   - □Time to refer people
   - □Time to form new working relationships with colleagues at LWTC and/or Westbank
   - □Time to brief people about LWTC
   - □Dealing with people referred <u>from</u> LWTC
   - □Nothing
   - □Other, please state:

11. Has working with LWTC had an impact on you and/or your organisation
   □Yes □No □Not sure

If 'yes', please describe how this has impacted:

12. If you were working with someone who was diabetic or pre-diabetic and LWTC did not exist locally, what do you think you would do differently?

□Spend more time providing information and support
□Refer them to another agency or group
□Do nothing
□Other. Please state:

13. We appreciate that it is very difficult to answer but if you had to try to put a value on the positive changes you think LWTC has created for you, how much would you be willing to pay over a one year period?

Appendix 4: Questionnaire used with participants at LWTC

Participant identifiers (Office use only)

Project & Cohort ID	
Participant ID number	
Date (of questionnaire)	
Time point (please tick)	**Six months / 12 months**

Biometric information (Office use only)

Is the participant on insulin? (Yes / No)	
Weight (Kg)	
Height (cm)	
Waist (cm)	
BMI (kg/m^2)	
Blood pressure (mmHg)	
HbA1c (mmol/mol or %) **Date of HbA1c measurement (DD/MM/YYYY)**	

Participant information

First name	
Family name	
Signature regarding consent statement **Signature:**	"I am happy for the information that I have given in this questionnaire to be used to evaluate and improve the activity [course or other term as appropriate]. I understand that any information I provide will be stored securely and kept confidential in line with the Data Protection Act 1998."

Date (DD/MM/YYYY)	
Employment status (please tick any that apply)	Employed / Carer / Retired / Self-employed / Student / Unemployed / Long term sick or disabled / Other / Not disclosed
What is the <u>highest</u> level of education that you have completed? (please tick the <u>highest level</u> you have completed)	1.Primary school 2.Some secondary school 3.Completed secondary school up to 16 years 4.Completed secondary school up to 18 years 5.Some additional training (apprenticeship, BTEC courses etc.) 6.Undergraduate university (degree) 7.Postgraduate university (masters degree or PhD)
Long term condition (please tick any that apply)	Chronic kidney disease / Stroke / Diabetes / Pre-diabetes / Coronary Heart Disease / High Cholesterol / Arthritis / Mobility problems / Depression / Other [please state]
Smoking status	Do you smoke? Yes No If yes, how many per day?
Do you have any disabilities? (please tick) If yes, please state.	Yes / No
Are you taking part in any OTHER activity groups to support your health? (please tick any that apply) Do not include this project.	Exercise group / weight management group/ cooking group / swimming group / team sport / yoga or relaxation group / mental health support group / Other [please state]

Health

By placing a tick in each group below, please indicate which statements best describe your own health state today.

a) Mobility	✓

I have no problems in walking about	
I have some problems in walking about	

b) Self care	✓
I have no problems with self care	
I have some problems washing or dressing myself	
I am unable to wash or dress myself	

c) Usual activities (e.g., work, study, housework, family, or leisure activities)	✓
I have no problems with performing my usual activities	
I have some problems with performing my usual activities	
I am unable to perform my usual activities	

d) Pain/discomfort	✓
I have no pain or discomfort	
I have moderate pain or discomfort	
I have extreme pain or discomfort	

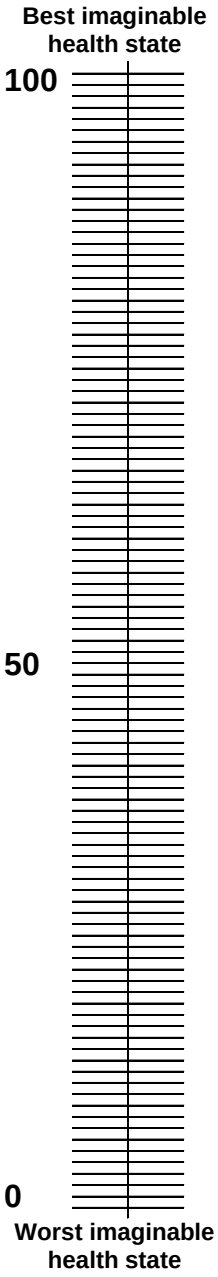
e) Anxiety/depression	✓
I am not anxious or depressed	
I am moderately anxious or depressed	
I am extremely anxious or depressed	

To help people say how good or bad a health state is, we have drawn a scale (rather like a thermometer) on which the best state you can imagine is marked 100 and the worst state you can imagine is marked 0.

We would like you to indicate on this scale how good or bad your own health is today, in your own opinion.

Please do this by drawing a line from the box below to whichever point on the scale indicates how good or bad your health state is today.

Your own health state today



Overall life satisfaction

All things considered, how satisfied are you with your life as a whole nowadays? Please tick the box that best describes your current overall life satisfaction.

Extremely Dissatisfied	0	1	2	3	4	5	6	7	8	9	10	Extremely Satisfied

Physical activity
The following questions ask you about the time you spent being physically active in the last 7 days.
By 'active' we mean doing anything using your muscles. Think about activities at work, school or home, getting from place to place, and any activities you did for exercise, sport, recreation, or leisure. You will be asked separately about brisk walking, moderate activities, and vigorous activities.

Walking
a) During the last 7 days, on how many days did you ***walk at a brisk pace***?
A brisk pace is a pace at which you are breathing harder than normal? This includes walking at work, while getting from place to place, at home and at any activities that you did solely for recreation, sport, exercise, or leisure.

Think only about brisk walking done for at least 10 minutes at a time.

Write in, put '0' if none

☐

Days (per week)

b) How much time did you typically spend walking at a brisk pace on each of those days?

Write in ☐ hours ☐ minutes

Moderate physical activity
a) During the last 7 days, on how many days did you do moderate physical activities?
'Moderate' activities make you breathe harder than normal, but only a little – like carrying light loads, bicycling at a regular pace, or other activities like swimming or social tennis. Do not include walking of any kind. Think only about those physical activities done for at least 10 minutes at a time.

Write in, put '0' if none

☐

Days (per week)

b) How much time did you typically spend on each of those days doing moderate physical activities?

Write in ☐ hours ☐ minutes

Vigorous physical activity

a) During the last 7 days, on how many days did you do vigorous physical activities? 'Vigorous' activities make you breathe a lot harder than normal ('huff and puff') – like heavy lifting, digging, fast bicycling, or other activities like running or playing football. Think only about those physical activities done for at least 10 minutes at a time.

Write in, put '0' if none

☐

Days (per week)

b) How much time did you typically spend on each of those days doing vigorous physical activities?

Write in ☐ hours ☐ minutes

Frequency of activity

Thinking about all your activities over the last 7 days (including brisk walking), on how many days did you engage in:

- At least 30 minutes of moderate activity (including brisk walking) that made you breathe a little harder than normal, **OR**
- At least 15 minutes of vigorous activity that made you breathe a lot harder than normal ('huff and puff')?

Write in, put '0' if none

Days (per week) ☐

Physical activity motivations

The following questions are about your motivations to achieve a healthy level of physical activity on a scale from zero (not at all) to ten (extremely).
A healthy level of physical activity is doing at least 30 minutes of moderate intensity physical activity on 5 or more days per week.
Please circle the number that best describes how you feel on each line.

	Not at all … **Extremely**										
How **important** is it for you to achieve a healthy level of physical activity?	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
How **confident** are you about being able to achieve a healthy level of physical activity over the next month?	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**

Diet

The following is a list of ways to reduce the amount of fat or increase the amount of fibre in your diet.

Please tick the box that best describes how often you do the following. If you do not include the foods listed below in your normal diet, please tick 'not applicable'.

Substitute specifically manufactured low fat foods	Usually or always	Sometimes	Rarely or Never	Not applicable
1. Eat frozen yogurt or low-sugar sorbet instead of ice cream?				
2. Use low-calorie or low-fat salad dressing instead of regular?				
3. Use yogurt instead of cream?				
4. Eat low-fat cheese instead of regular cheese?				
5. Drink semi skimmed, skimmed, or 1% milk instead of whole milk?				
6. Use spray oil instead of oil, margarine or butter?				

Avoid fat as a flavouring	Usually or always	Sometimes	Rarely or Never	Not applicable
7. Eat potatoes without oil, butter or margarine?				
8. Eat bread or toast without butter or margarine?				
9. Avoid adding butter, oil, or margarine to vegetables?				

Modify meats to be low in fat	Usually or always	Sometimes	Rarely or Never	Not applicable
10. Take the skin off chicken?				
11. Eat grilled meat, rather than fried?				
12. Trim the visible fat from your meat?				
13. Eat small portions of meat?				
14. Eat baked, grilled or steamed fish, rather than fried?				

Replace high fat meats with low fat alternatives	Usually or always	Sometimes	Rarely or Never	Not applicable
15. Eat beans (e.g., kidney beans, chickpeas) and/or pulses (e.g., lentils) instead of meat?				
16. Eat egg whites and/or low-fat cottage cheese instead of meat?				
17. Eat fish, chicken or turkey instead of red meat?				

Fruits and vegetables	Usually or always	Sometimes	Rarely or Never	Not applicable
18. Eat raw vegetables or fruit as part of a snack?				
19. Eat fruit as part of your breakfast?				
20. Eat a vegetable or fruit as part of your lunch?				
21. Eat two or more vegetables as part of your dinner?				
22. Eat fruit for dessert?				

Cereals and grains	Usually or always	Sometimes	Rarely or Never	Not applicable
23. Eat high-fibre cereals (e.g., All Bran, Bran Flakes, Quaker Oats, Shredded Wheat, Weetabix, Oatmeal) instead of low-fibre cereals (e.g., Cornflakes, Rice Krispies)?				
24. Eat whole-grain crackers (e.g., Ryvita whole-grain crackers) or whole-grain bread (e.g., wholemeal, granary,				

brown) instead of white bread or regular crackers?				

Substitute low-fibre foods for high-fibre foods	Usually or always	Sometimes	Rarely or Never	Not applicable
25. Eat whole-wheat (brown) pasta instead of regular pasta?				
26. Eat brown rice instead of white rice?				
27. Eat the skin on potatoes?				

Healthy eating motivations

The following statements are about your motivations to eat a healthier diet on a scale from zero (not at all) to ten (extremely).

A healthier diet is one that is low in fat, low in saturated fat, and includes plenty of fruit and vegetables, and plenty of starchy foods.

Please circle the number that best describes your feelings on each line.

	Not at all Extremely
How **important** is it for you to eat a healthier diet?	**0 1 2 3 4 5 6 7 8 9 10**
How **confident** are you about being able to eat a healthier diet over the next month?	**0 1 2 3 4 5 6 7 8 9 10**

Thoughts and feelings

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

	None of the time	Rarely	Some of the time	Often	All of the time
a) I've been feeling optimistic about the future					
b) I've been feeling useful					
c) I've been feeling relaxed					
d) I've been dealing with problems well					
e) I've been thinking clearly					
f) I've been feeling close to other people					
g) I've been able to make up my own mind about things					
h) I've been feeling happy or contented					
i) I've been feeling engaged or focused in what I've been doing					
j) I've been feeling energised or lively					
k) I've been feeling lonely					
l) I've been feeling like everything I do is an effort					
m) My sleep has been restless					

In the last six months, have you experienced a major life-changing event? Examples of major life-changing events include: being diagnosed with a serious illness, experiencing a loss, getting married, changing occupation)?
(Please circle)

Yes / No
If *yes*, could you please tell us what this was?

In the last six months, were you prescribed any **new** repeat medications?
(Please circle)
Yes / No
If *yes*, could you please tell us what these were?

In the last six months, did you have any operations?
(Please circle)
Yes/ No
If *yes*, could you please tell us what these were?

Appendix 5: Impact map