

Cambridge Centre
for Housing &
Planning Research

Evaluating the Public Health Outcomes of the Cambridgeshire Time Credits Project

Final Report

Dr Gemma Burgess

June 2017

Contents

1	Introduction.....	10
2	Research context	11
2.1	Community engagement and public health.....	11
2.2	Time Credits	12
2.3	Cambridgeshire Time Credits.....	14
2.4	Time Credits in Wisbech.....	16
2.5	Cambridgeshire Time Credits.....	18
2.6	Co-production	19
3	Research aims and methodology	20
3.1	Research aims.....	20
3.2	Methodology	20
3.3	Co-productive approach to research	22
3.4	Methodological challenges.....	23
4	Findings: outcomes from earning and spending Time Credits	25
4.1	The conceptual model.....	26
4.2	Outcomes for volunteers	28
4.3	Outcomes for organisations.....	35
4.4	Outcomes for the local community.....	37
4.5	Outcomes for co-production	37
5	Challenges and limitations	38
5.1	Lack of evidence	38
5.2	Hoarding Time Credits	38
5.3	Issues around value.....	38
5.4	Lack of spend activities	39
5.5	Challenges in developing internal spend opportunities.....	40
5.6	Pressures on staff	41
5.7	The network.....	42
5.8	Challenges in offering Time Credits	42
5.9	Outcomes for priority areas	42
5.10	Existing volunteers	42
5.11	Structural context.....	43
6	Gaps in evidence	44
6.1	Quantification.....	44
6.2	Savings to health and adult social care.....	44
6.3	Future research	45

7 Conclusion	46
Appendices	47
Outputs	47
Working papers	47
Conference presentations	47
Emerging findings papers	48
Public and practitioner engagement.....	48
Short films	48
Blogs	49
References.....	50

To cite this paper:

Burgess, G. (2017) Evaluating the Public Health Outcomes of the Cambridgeshire Time Credits Project: Final Report. Cambridge: Cambridge Centre for Housing and Planning Research

Acknowledgements

The evaluation is a collaboration with Spice, Cambridgeshire County Council and CHS Group, the Cambridge Centre for Housing and Planning Research (CCHPR) and the Cambridge Institute for Public Health (CIPH). The research team at CIPH included Dr Louise Lafortune (PI) and Caroline Lee.

We are very grateful for the investment of time, energy and expertise by Spice, the Cambridgeshire County Council and CHS Group. The co-productive approach worked very well and was a positive way to develop theories, test findings and create a range of outputs for different audiences.

We held a steering group meeting three times during the research with people in Wisbech. Members included organisations and volunteers. This was very useful throughout the research, enabling us to test out our understanding, revise the theory of change, test and amend fieldwork tools, discuss contacts and research approaches, and discuss findings to ensure that the final outputs reflect the experiences of participants. We are very grateful for the time and knowledge shared by the steering group.

We are of course indebted to the volunteers and members of organisations who gave their time to take part in the research and shared their experiences with us.

The research was funded by the NIHR School for Public Health Research (SPHR) Public Health Practice Evaluation Scheme (PHPES) which operates in collaboration with Public Health England. The views expressed are those of the author(s) and not necessarily those of the NHS, the NIHR or the Department of Health.

Executive summary

Aims and objectives

The aim of the research was to evaluate the outcomes of the Time Credits project in Wisbech, Cambridgeshire, with a focus on health outcomes. In particular, to determine the initiative's potential to tackle social exclusion and loneliness and to assess the extent to which it can improve wellbeing and increase community cohesion and social capital.

Community approach to public health

One increasingly important approach to reducing health inequalities is through improving social capital and reducing isolation. There is solid evidence that increased levels of community engagement and social participation have a positive impact on health behaviours, physical and emotional health and self-confidence, especially among disadvantaged populations. These benefits are so widely acknowledged that the National Institute for Health and Care Excellence guidance endorses community engagement as a strategy for health improvement.

Time Credits

Time Credits are a way of recognising and celebrating the time people spend volunteering with a local organisation, community group, volunteer group or a statutory sector service provider.

In exchange for their contribution, the volunteers 'earn' a Time Credit note, one for every hour they give. These can be 'spent' on a range of leisure and other opportunities, typically donated by organisations, local businesses and corporations to allow the community members to take advantage of their spare capacity. They can also be spent on activities run by other community members, on activities at the organisation they were earned with and to trade time and skills with other individuals.

Wisbech

Wisbech is a historic inland port on the River Nene to the north of Cambridgeshire. Agriculture and food production are central to the town's economy, but the nature of the employment created is often unattractive to young local people, low-skilled, seasonal, erratic and insecure and employs a high proportion of migrant labour. The town has above average levels of deprivation and a range of challenging social issues. High levels of recent migration have caused local tensions.

Time Credits in Wisbech

There are 16 active local organisations where people can earn Time Credits. These include schools, homeless hostels, children's centres, an adventure playground and a project supporting people into employment. Activities that volunteers can do to earn Time Credits include reading with children, running after school clubs, gardening, office work, working in a café and kitchen and litter picking. Volunteers can spend Time Credits on activities such as the gym, swimming, going to the cinema, having beauty and hair treatments, attending social events and going to the theatre.

Methods overview

The research used a mixed methods research design that included both quantitative and qualitative methodological tools. These included:

- Interviews with key stakeholders
- Literature review and systematic review of Time Credits and health outcomes
- Secondary data analysis
- Developing a theory of change
- Longitudinal survey with individual new Time Credit members
- Face to face interviews with individual Time Credit members
- Survey and face to face interviews with partner organisations
- Ethnographic methods including visual ethnographies and participant observation

Positive outcomes

The key positive outcomes identified are:

- Improvements in physical activity. Volunteers have seen some improvements in their physical health through earning Time Credits. Some of the health benefits come from lifestyle changes, for example, being busy through volunteering can help to reduce smoking and weight gain. Earning and spending Time Credits can boost the activity levels of volunteers. Organisations have seen volunteers develop a more active lifestyle. This is in part through the volunteering activities and in part through access to new activities by spending Time Credits e.g. going swimming.
- The combined effect of the benefits resulting from earning and spending Time Credits can be an improvement in mental health. This results from improvements in confidence and self-worth, and taking part in enjoyable activities. It also results from having greater social contact. The improvement in mood can simply be as a result of being busy and active.
- Earning Time Credits can help people to feel less lonely, which is significant because loneliness is a known key determinant of poor health. People can suffer from social exclusion and earning Time Credits is a way to get engaged with the local community and meet people. Earning Time Credits has helped some people to develop new social networks which make them feel more positive.
- Earning Time Credits has boosted some volunteers' confidence with knock on effects on improving their mental health. Volunteering gives people a routine and a purpose.
- Earning Time Credits has had a beneficial impact on the way in which some volunteers view themselves. Volunteering has given some people a sense of achievement. Some feel differently about themselves and viewed themselves more positively as a result of volunteering. Earning Time Credits can make volunteers feeling needed and appreciated. It leads to people feeling useful and that they are making a contribution to their community.

- Earning Time Credits has helped some people to develop their skills and learning. It has given some volunteers useful work related experience and a sense of personal satisfaction. For some people, volunteering is a way to learn the culture of working, which they are not used to, and helps them to get ready for paid employment.
- Volunteering has led to the identifying, developing and strengthening of skills. This has a positive impact on volunteers, boosting their confidence and helping to improve their employability. This provides new opportunities on both sides, volunteers gain skills and improved employability, but organisations can also identify suitable employees and in some cases have supported volunteers into paid employment.
- Strengthened family and wider relationships. For some people, spending Time Credits has had a positive impact on families and children. It gives families the opportunity and impetus to do activities together. Some volunteers share Time Credits to use with other people, helping to benefit others but also maintaining social networks.
- Time Credits give people access to activities that they might not otherwise be able to afford or would not have tried. These spend opportunities have positive impacts on their health and activity levels.

Challenges and limitations

The research identified a number of challenges and limitations in securing positive health outcomes through volunteering with Time Credits.

- Some people hoard their Time Credits rather than spend them which means they are missing out on the benefits that comes from spending Time Credits.
- Volunteers place a clear value on the time they have spent volunteering and want to see this value reflected in the spend activities. Some organisations have offered spend opportunities, which take time and resources to organise, and had no volunteers want to participate. In some cases, this has been because volunteers felt they could get 'better value' on other spend opportunities.
- Volunteers in Wisbech only use a small range of spend activities. At the moment, most volunteers spend their Time Credits on going to the cinema, going swimming, and on hair and beauty treatments, with some also spent on social events. These are very valued. However, it does mean that the Wisbech network is very reliant on three external organisations being willing to continue to accept Time Credits.
- One of the key challenges identified by organisations in working with Time Credits has been developing spend opportunities that are internal or community based.
- Generally, managing Time Credits within an organisation does take up staff time, most said that it took up more time than they had expected, but that it was not unmanageable.

- The Time Credits project has a range of target outcomes. Although the focus in the evaluation is on health, the research suggests that there has been more progress in the priority areas of strengthening families and skills and employment than on engaging or having an impact on older people, particularly the 'older old'.
- The qualitative research identified evidence of positive outcomes for volunteers. However, the strongest benefits may be concentrated on a core of regular non-traditional volunteers. For the people who were already volunteering, but had subsequently been offered Time Credits, they were a nice thing to have, but they were not critical in motivating them to volunteer and there had been little change in their circumstances.
- It is important to be realistic about what offering Time Credits can achieve. In a place where there are fundamental structural issues of poverty, deprivation, unemployment, low levels of education, poor health and poor lifestyle choices, one community project cannot be expected to 'fix' these problems, particularly in a context of reduced funding for local services.

Gaps in evidence

The biggest remaining gap in evidence is that of quantification. The research has found evidence of positive outcomes for some volunteers, but it has not been possible to quantify the degree of change.

There are several reasons for this. In order to measure change in people's health, wellbeing and circumstances, a baseline is needed of these measurements before people begin volunteering, and then after a period of time to capture any change. However, the Wisbech project was quite well established by the time the evaluation began and the sample of people who joined as new volunteers during the research was not large enough to collect a robust sample of measurements. For attempts to measure and quantify change to be successful, they need to be built into a project to collect data from the beginning, rather than retrospectively. There is also a need to establish a meaningful comparator of similar people who did not join the Time Credits scheme.

There was also a degree of research fatigue amongst the study population, because Wisbech was the pilot for Time Credits in Cambridgeshire, volunteers had already been surveyed about their views of the project. There was also a reluctance to participate in some forms of data collection, such as surveys, possibly reflecting confidence and literacy levels, people preferred to share their experiences in dialogue through interviews.

Without being able to quantify any degree of positive change, it is not possible to demonstrate measureable savings to health and adult social care, which is the ultimate goal of the Council's investment in the programme. The research has identified potential pathways to better health, but there is a lack of quantifiable evidence.

This does also in part reflect the circumstances of the particular group of volunteers active in Wisbech. Few had immediate or high level health needs, so any benefits are likely to only be realised over the long term. There are few older people who volunteer who are in receipt, or

likely to be in receipt in the near future, of direct support from adult social care services. There is no direct evidence of any reduction in service use in the short term.

Benefits in terms of any reductions in the use of public services are likely to be long term. It would therefore be difficult to measure them over these time periods and to attribute them to participation in volunteering. As mentioned, there is also a general context of poverty and poor lifestyles that weighs against the immediate benefits of volunteering. Time Credits are also a diffuse intervention so establishing cause and effect between earning and spending Time Credits and the specific outcomes is difficult, particularly when there may be other types of engagement with volunteers through other means.

There is strong qualitative evidence of positive change as a result of earning and spending Time Credits, particularly amongst 'non-traditional volunteers', but any direct health changes have not been proven beyond the qualitative evidence. The evidence is also of positive changes in the known determinants of health, rather than in actual measurable health improvements. For example, there is evidence of improvements in social isolation, and therefore an implied potential improvement in health because loneliness is a known and proven determinant of poor health, but actual health improvement has not been evidenced. There was no direct evidence of a reduction in health-related services and this was not mentioned in interviews.

Conclusions

There is a need for further research to build on this study in order to quantify the evidence of benefits to individuals, and to meet the need for quantified, measurable proof of financial savings to public budgets. Evidencing the outcomes of prevention interventions in public health is very difficult. Cause and effect can be difficult to clearly establish as there are multiple influences on peoples' lives. The benefits may only be evident over long time scales, but research tends to be short term. Alternatives to self-reported health, and to self-recall about service use, need to be used to develop robust measures of change.

The qualitative evidence from this research showed that earning Time Credits can have both direct and indirect health benefits for individuals. People gained a sense of purpose and felt that they were making a positive contribution which increased their life satisfaction and improved their mental health. They became more physically active and more socially connected. There is also evidence of increased confidence and development of skills and work experience to support moving into paid employment.

Spending Time Credits gave members resources to access activities and services that they would not otherwise be able to afford. Time Credits were spent on activities which lead to a more active lifestyle, such as swimming, with potential health benefits. They were also spent on family activities which may lead indirectly to positive health outcomes by improving social capital, social participation and overall wellbeing.

Time Credits are a relatively simple concept, but they are a complex community intervention with numerous interconnected outcomes and multiple pathways to positive change. They provide the opportunity to be active citizens, to share experiences and skills and make positive contributions that foster a sense of inclusiveness.

1 Introduction

Time Credits are a way of recognising and celebrating the time people spend volunteering with a local organisation, community group, volunteer group or a statutory sector service provider. In exchange for their contribution, the volunteers 'earn' a Time Credit note, one for every hour they give. These can be 'spent' on a range of leisure and other opportunities, typically donated by organisations, local businesses and corporations to allow the community members to take advantage of their spare capacity. They can also be spent on activities run by other community members, on activities at the organisation they were earned with, and to trade time and skills with other individuals.

Wisbech is in the East of England. It is an area with above average levels of deprivation and a range of challenging social issues. Wisbech is a market town with employment concentrated in agriculture and food processing, with inward migration from the EU to service these industries.

There are 16 currently active local organisations where people can earn Time Credits in Wisbech. These include schools, homeless hostels, children's centres, an adventure playground and a project supporting people into employment. Activities that volunteers can do to earn Time Credits include reading with children, running after school clubs, gardening, office work, adult learning opportunities, working in a café and kitchen and litter picking. Activities that volunteers can do to spend Time Credits include going to the gym, swimming, going to the cinema, having beauty and hair treatments, attending social events and going to the theatre.

The aim of the evaluation of the public health outcomes of the Cambridgeshire Time Credits project in Wisbech was to determine its potential to tackle social exclusion, loneliness and deprivation and to assess the extent to which it can reduce health inequalities. The research used a mixed methods approach that engages service users, practitioners and policy makers through interviews, surveys, focus groups and ethnographic research methods. One of the key research objectives was to analyse whether this type of project can secure positive health outcomes.

The Cambridge Centre for Housing and Planning Research (CCHPR) carried out this research in collaboration with Spice, the Cambridgeshire County Council Community Engagement Team, Cambridge Housing Society Group, and the Cambridge Institute of Public Health (CIPH). The study was funded by The Public Health Practice Evaluation Scheme (PHPES) of the National Institute for Health Research's School for Public Health Research (NIHR SPHR): sphr.nihr.ac.uk. The PHPES enables people who are introducing innovative public health initiatives to work in partnership with the National Institute for Health Research School for Public Health Research (NIHR SPHR) to conduct rigorous evaluations of their effectiveness. This scheme is particularly focused on local initiatives.

For more information about the evaluation please contact Dr Gemma Burgess on glb36@cam.ac.uk or 01223 764547.

2 Research context

This section outlines the context that has shaped this research and the analysis. Although not the specific aims of the study, research findings have been identified in relation to each area below and are discussed later in the report.

2.1 Community engagement and public health

One of the key contexts for the research was the recognition of the value of tackling health inequalities through community engagement.

One approach to reducing health inequalities is through improving social capital and reducing isolation (O'Mara-Eves et al, 2013; Public Health England, 2015). Chronic stress arising from factors associated with poverty – including lack of social capital, lack of control over life choices and inability to participate in the life of the community – has been linked to negative health outcomes especially in relation to mental health (Quinn and Knifton, 2012).

There is solid evidence that increased levels of community engagement and social participation have a positive impact on health behaviours, physical and emotional health, and self-confidence, especially among disadvantaged populations (O'Mara-Eves et al, 2013; Public Health England, 2015). These benefits are so widely acknowledged that the National Institute for Health and Care Excellence (NICE) guidance endorses community engagement as a strategy for health improvement (Public Health England, 2015: 6).

The social and economic determinants of health affect people's health by determining what resources are available to them. Variation in these resources (i.e. the social and economic determinants of health), results in 'health inequalities'. These are differences in people's health due to social, economic and geographical factors. Within the UK, in spite of universal access to health services, poor health remains strongly linked to social and economic disadvantage (Hawe and Shiell, 2000; NICE, 2012: 1).

The social and economic determinants of health that cause health inequalities are modifiable. Matters such as housing, education, employment, income, access to public services and personal behaviour can all be improved to enhance health outcomes and reduce health inequalities (O'Mara-Eves et al, 2013:3).

Reduction of health inequalities is one of the two overarching aims set out in *The Public Health Outcomes Framework for England, 2013 -2016*. Changes in the levels of health inequalities, however, can take years, or even decades, to manifest. Movement towards these outcomes, on the other hand, can be measured along the way. One of the four indicators to measure progress towards these overarching long-term goals is via improvements to the social and economic determinants of health (Department of Health, 2012).

The conceptual model developed during this research shows how we expect Time Credits to influence some of the social determinants of health and, by doing so, enhance health

outcomes and reduce health inequalities. The model is presented later in the report with an indication of where the research identified the strongest evidence.

2.2 Time Credits

A key context is that of time exchange, being the community model to bring about individual and/or collective positive change that was evaluated.

Time Credits are a way of recognising and celebrating the time people spend volunteering with a local organisation, community group, volunteer group or a statutory sector service provider. In exchange for their contribution, the volunteers 'earn' a Time Credit note, one for every hour they give. These can be 'spent' on a range of leisure and other opportunities, typically donated by organisations, local businesses and corporations to allow the community members to take advantage of their spare capacity. They can also be spent on activities run by other community members, on activities at the organisation they were earned with, and to trade time and skills with other individuals.

Time Credits are a development of the traditional time banking model. Edgar Cahn is often accredited for 'inventing' time banking, building his Time Dollars model in the 1980s (Weaver et al, 2015), as a means of rebuilding social networks and neighbourhood support in response to reduced social spending in the US (Boyle and Bird, 2014; Gregory, 2012). The first UK time banking project was set up in 1998 in rural Gloucestershire and the movement has grown rapidly since then (Seyfang, 2003 and 2004a; Boyle and Bird, 2014). In 2014, Timebanking UK (the umbrella organisation for time banks) had some 300 member organisations whose members had exchanged over 2 million time credits (Boyle and Bird, 2014).

Time banks are typically community-based organisations that provide the framework for giving and receiving services in exchange for units of time. One hour of time helping another member of the network equals one time unit, which can then be used to buy an hour of someone else's time (Cahn, 2004). The underlying logic is that of reciprocity and equality: the participants are encouraged to spend as well as earn time units, and everyone's time is valued equally, in other words, the value is the time the participants give rather than the skill (Gregory, 2014).

Time banking has been developed on the idea of there being two economies: the 'market economy' and the 'core economy'. The market economy relies on people's material, intellectual, financial and physical assets that can be traded at a commercial price in a competitive market (Granger, 2013). It picks and chooses the people, communities and specialised skills it needs, enabling those with marketable skills and resources to get more while excluding people who lack these skills and resources, such as the poor, the elderly, the frail and the uneducated.

The 'core economy', on the other hand, consists of the non-monetary, unmeasured sector of the economy comprising family, neighbourhood and community, including unpaid housework and caring for family and relatives (Boyle, 2003; Cahn, 2004). In the 'core economy', exchanges are built on a sense of obligation and reciprocity, rather than price determined by

supply and demand. Unlike the market economy and skills associated with this, the 'core economy' is often taken for granted and given little value (Cahn, 2004).

Co-production is a conceptual framework for bridging the two economies and elevating the function of the 'core economy' to a level equal to that of the market economy (Cahn, 2004). It regards the role of the social support provided by family and neighbours as essential in underpinning everything else in the economy and builds on a notion of all people as assets. Even those typically excluded from the traditional job market, such as the old, the young, the uneducated, disabled and ill, are regarded as capable of making an important contribution as everyone has something valuable to give (Boyle, 2003).

Set up in 2009 by a social enterprise called Spice, Time Credits is an example of an adaptation of the time banking model that enables organisations and existing service providers to play a greater role. Like time banks, the Spice model uses Time Credits as a way of recognising people for volunteering, only in this case the individual participants give their time to a local organisation, community group, volunteer group or a statutory sector service provider. In exchange for their contribution, they 'earn' printed Time Credit notes, one for every hour they give, which they can then 'spend' on a range of leisure and other opportunities, typically donated by organisations, local businesses and corporations to allow the community members to take advantage of their spare capacity (Weaver et al, 2015).

2.3 Cambridgeshire Time Credits

The Cambridgeshire Time Credits programme is jointly funded by Cambridgeshire County Council and Cambridge Housing Society (CHS). It was set up in collaboration with Spice in July 2014, following a successful completion of a nine-month pilot in Wisbech. The idea to support the development of multiple Time Credits networks across the county emerged as a response to the budget cuts that forced the County Council to identify new tangible ways to engage local communities, to build up community resilience, and to reduce and prevent the escalation of need. The County Council was particularly keen on models that could be built up and, after being supported during the initial set-up period, be able to run with less ongoing financial support from the Council.

In the summer of 2013, time banks were already in operation in Cambridge and other parts of the county, but the County Council was concerned that the time banking model may not take off in the more deprived areas where activities to engage the community were needed. The purpose of the Time Credits programme was to help bring the time banking model to new areas in a way that would enable organisations alongside individuals to act as the driving force to generate momentum for the movement, and that would enable larger numbers of people to get involved. A Spice Time Credits network was already running in neighbouring West Norfolk, with several corporate spend partners in Cambridgeshire. Wisbech's location bordering West Norfolk, together with its size and socioeconomic profile characterised by high levels of need and deprivation, were among the key factors leading to Wisbech being selected for the Time Credits pilot in 2013/2014.

Positive feedback from the pilot partners encouraged the Community Engagement team to seek further funding to commission Spice to expand the Time Credits programme to include other parts of Cambridgeshire, with an ultimate objective of developing a county-wide network of local Time Credit projects. In 2014, the Cambridgeshire Time Credit programme was allocated a total budget of £251,000 over three years, of which £10,000 per annum comes from CHS and the rest from the County Council.

The following priority areas were agreed upon:

1. Strengthening families
2. Skills and employment
3. Older people

The decision to focus on the high-need groups was born out of the necessity to devise new ways of delivering adult social care to meet the new 2015 Care Act obligations whilst reducing spending as a result of severe budget cuts. However, consideration was also given to who would potentially benefit the most from participation in the Time Credits initiative. The processes through which stakeholders believe Time Credits could help to achieve positive outcomes for each target group are described below:

Strengthening families - This objective, the working group believed, could be met through both earn and spend activities. One of the local earn partners was keen to engage parents by encouraging them to volunteer at their children's school and, by volunteering at the

school, become more comfortable around the school environment and in helping their children with their studies. Having earned the Time Credits, families could then spend them together to try new things and to undertake activities they may not otherwise be able to afford. During the pilot, it became evident that many of the active participants were from the lower end of the income scale, making the latter consideration particularly relevant.

Skills and employment - This objective was inspired by the poor employment figures in parts of Cambridgeshire and existing evidence of time banks' ability to successfully engage unemployed and economically inactive people. Preliminary findings from the Wisbech pilot project suggested that Time Credits incentivised people to engage with activities that enabled them to acquire new skills and work experience, which then helped them to improve their CVs and employability. People's volunteering pathways also seemed to develop over time, and many who started volunteering in jobs that require very basic skills eventually 'moved on' to more demanding tasks as their confidence increased. In addition to the benefits acquired from the earning activities, Time Credits could be spent to access additional training. The potential of Time Credits to help individuals and communities to enhance their social capital was regarded as a worthwhile goal for social as well as economic reasons, and an important step towards developing stronger, more resilient communities.

Older people - Organisations supporting older people or providing volunteering opportunities specifically for older people were not part of the Wisbech pilot project. However, Time Credits were thought to be a potentially useful tool for enabling and encouraging older people to support their communities, to facilitate greater levels of social activity among older individuals, and to keep newly retired people active for longer. Spice drew on their experience of engaging older people through targeted prevention programmes in other national Spice projects. Focus on reducing loneliness, social isolation and low activity levels was motivated by health and wellbeing concerns as well as the financial implications of health and social care needs. In particular, the funders were keen for Time Credits to be used to generate intergenerational activity to help build more integrated and cohesive communities.

2.4 Time Credits in Wisbech

Wisbech is a historic inland port on the river Nene to the north of Cambridgeshire. Following the draining of the fens from the 17th to 19th centuries the town became a prosperous port, but since has suffered economic decline. Agriculture and food production are central to the town's economy. However, due physical isolation and poor transport links the economic and housing growth seen in other parts of what is an affluent county has largely bypassed the town. Whilst agriculture is a stable and growing sector of the local economy, the nature of the employment created is often unattractive to young local people, is low-skilled, seasonal, erratic and insecure and employs a high proportion of migrant labour.

Measures of the population of Wisbech vary from around 23,000 (Cambridgeshire Insight, 2013) for the town itself to around 40,000 if the surrounding areas are included (Wisbech 2020, 2014). One particular consequence of the growth of the agri-food sector is that it has attracted a large influx of migrants, most recently from Eastern Europe (the A8 Accession countries that joined the EU during its 2004 enlargement). There is evidence that so far the migrant population has been relatively transient with a high rate of 'churn' and early waves of migration from Hungary and Portugal giving way to migrants from rural parts of Poland and Latvia (Haffenden et al., 2015). Fenland District as a whole has seen the largest proportional increase in the East of England (211%) in the non-UK born population between the 2001 and the 2011 census (Krausova and Vargas-Silva, 2013).

One consequence of this rapid population influx has been the impact on community cohesion. It is hard to be certain of the extent of the problems this has posed as the specific issues faced by Wisbech have often been picked up by the national press as emblematic of wider debates about immigration, and particularly EU migration from the A8 countries. The national press tends to focus on the increase in shops in the town centre catering for Eastern Europeans and articles will often contain comments from local people on the perception of segregation and an apparent decline in law and order. Some specific issues such as overcrowding do generate problems for those unfortunate enough to live in the vicinity of badly maintained and poorly run HMOs (Houses of Multiple Occupation). However, it is also the case that Eastern European foodstores have brought life to the town centre at a time when high street retailers are struggling. May 2013 saw anti-EU anti-migrant protests in the town but also responses from groups supporting the migrant community with the Mayor and local MP speaking out about the benefits migration has brought as well as the difficulties. There is evidence that, at least within the town, initial tensions have reduced over time (Rutter, 2015). Politically, whilst the area is represented by UKIP Councillors on the County Council, Fenland District Council is almost completely dominated by Conservatives, with two independent councillors representing Waterlees ward in Wisbech.

In contrast with Cambridgeshire as a whole Wisbech is at the centre of a cluster of wards with high levels of deprivation and contains the two most deprived wards in the county, with some seeing the highest proportion of benefits claimants in Fenland. Life expectancy is 6.8 years lower for men and 5.0 years lower for women in the most deprived area of Cambridgeshire, Waterlees in Wisbech, than in the least deprived (Cambridgeshire JSNA 2014/15). Other indicators where public health outcomes in Fenland are significantly worse than the average for England are excess weight and obesity amongst adults and physical

activity below the recommended levels (ibid). Levels of smoking are generally higher as is fuel poverty and mental health referrals for both adults and children (ibid). Children in Fenland experience some of the highest levels of various 'vulnerability factors' that relate to health, family or their environment leading to relatively poor outcomes in later life. These include poor educational performance for both children and parents, low levels of breastfeeding and high levels of teenage pregnancy and young mothers, the overcrowding that is a specific issue in Fenland as well as above average levels of hospital admission and self-harm.

Skill levels are low and there is persistent worklessness amongst the local indigenous population. Local services, including local community focused organisations, have experienced budget cuts and continuing insecurity in funding.

Whilst the strategic assessments cited identify the type of health inequalities faced by people in Fenland and Wisbech, the ethnographic methodology adopted in this evaluation adds a further layer of meaning to the statistics. Visiting Wisbech, and speaking with both the earn partners and the people they work with, allows us to identify the health problems people face in more detail. These relate to the social determinants of health discussed earlier. It may be the case that these are not perceived as health problems given that issues such as social isolation or low self-esteem are quite rightly perceived as negative in their own right. As a result, many of the earn partners may see tackling low self-esteem as important because of the way it inhibits employment opportunities. Likewise, social isolation may be perceived as a problem due to its negative impact on community cohesion.

Nevertheless, these are all known to have a negative impact on health behaviours and outcomes. The specific issues that have been observed so far indicate that unemployment, and the associated limited access to leisure facilities, including opportunities for exercise, is a problem for many Time Credits members. On top of this there are some members who have or have had problems of low self-esteem and also social isolation. Some individuals isolate themselves and do not engage with their immediate community, family, friends and neighbours. There are also additional problems of community isolation meaning that some individuals are unlikely to venture outside of their own community and geographical area. This further reduces opportunities to access leisure facilities and to interact with a wider group of people.

2.5 Cambridgeshire Time Credits

The local Wisbech Time Credit network is part of the wider Cambridgeshire Time Credits programme.

As of March 2017, Cambridgeshire Time Credits has grown across targeted localities of Wisbech, Cambridge, Huntingdon and St Neots, Ely and Littleport, March and Chatteris. Cambridgeshire Time Banks are also encouraged to trade in Time Credits through engagement with the local networks.

Since 2013, more than 1,800 people have given over 33,500 hours of their time through Cambridgeshire Time Credits. Eighty-six earn partners have engaged with the programme to date, offering earn opportunities and developing spend activities within their community groups and voluntary sector organisations.

Forty-three local businesses offer spend opportunities across 54 venues across Cambridgeshire and have seen over 11,700 Time Credits spent at their venues. Some of the Time Credits spent have been on group spend trips, where community members have come together in larger groups to spend together across the county.

Cambridgeshire Time Credits are also accepted and have been spent at national spend venues in the Spice network. Since the evaluation began, Cambridgeshire Time Credits have been spent in London and the North West of England.

2.6 Co-production

Co-production is an important contextual concept for the research because it is the ethos that underpins the Time Credits model.

The concept of co-production was originally developed to describe the involvement of ordinary citizens in the production of public services (Pestoff, 2006: 17). In very general terms, co-production means working together for an agreed outcome. In relation to services, the term co-production is typically used to refer to a situation where professional services are designed, developed and/or delivered *with* or *by* people, instead of *for* them (for example, see Needham and Carr, 2009). Co-production may be best described by its underlying principles and values of mutuality, reciprocity and equality (Boyle, 2003; Boyle et al, 2006; Boyle and Harris, 2009; Scottish Government, 2011).

In recent years, the concept of co-production has been widely adopted to refer to the organised involvement of citizens in the production of public services – a practice that has become increasingly regarded as essential for sustaining the current levels of service provision in the changing economic context (Brandsen and Pestoff, 2006; Pestoff, 2006) (Pestoff, 2006).

It puts emphasis on citizen involvement alongside professionals, and concerns people who use the services, i.e. service users themselves rather than ‘traditional’ volunteers (Verschuere et al, 2012). By actively participating in the delivery of the services they receive, service users gain at least partial control of the service agenda, but also assume responsibility (Burdney and England, 1983).

In health and social services, for example, service user co-production can enable service providers to tap into their clients’ non-financial assets - including skills, experiences and ability to provide mutual support - to help improve these services (Needham and Carr, 2009).

There is widespread acknowledgement of the possible benefits of co-production - such as its potential to improve service quality, responsiveness to customer needs and client satisfaction. It is widely believed that the implementation of co-productive practices in public sector service provision can not only help to improve the quality of these services, but can also make them more responsive and cost-effective (Boyle and Harris, 2012; Brudney and England, 1983; Pestoff, 2006).

Spice’s understanding of co-production builds on the co-operative, egalitarian ‘core values’ they share with the time banking movement. The definition of co-production which underpins the Spice theory of change is that of Boyle and Harris (2009). The authors define co-production as:

“...delivering public services in an equal and reciprocal relationship between professionals, people using services, their families and their neighbours. Where activities are co-produced in this way, both services and neighbourhoods become far more effective agents of change” (p. 11, quoted in Apteligen, 2015).

3 Research aims and methodology

3.1 Research aims

The aim of the research was to evaluate the outcomes of the Time Credit project in Wisbech, Cambridgeshire, with a focus on health outcomes.

The objective was to analyse the potential of Time Credits to address public health issues by:

- Reducing loneliness and social exclusion
- Improving wellbeing
- Increasing community cohesion and social capital.

3.2 Methodology

The evaluation had a mixed methods research design using both quantitative and qualitative methodological tools.

3.2.1 Interviews with key stakeholders

Individuals and representatives of organisations that were involved in the setting up and managing of the Cambridgeshire Time Credits programme were invited to take part in an in depth face to face semi-structured interview. The interviews (n=7) explored the rationale for the project, successes and challenges to date and any evidence of positive outcomes.

3.2.2 Literature review

Academic, policy and other grey literature were reviewed to inform the study. In particular, literature on time banking and Time Credits, on co-production in research, on co-production in public service provision, on health and volunteering, on contextual information about Wisbech and on ethnographic research methods was reviewed to inform the six working papers.

3.2.3 Developing a theory of change

A conceptual model of how Time Credits may lead to positive health outcomes was developed as part of the research. The processes and pathways described in this model were informed by a combination of our knowledge of how the Time Credits system works and existing evidence of the ways in which health and wellbeing are influenced by circumstances, social relationships, and the environment. This is a conceptual model of how Time Credits may potentially generate, or contribute to, positive health outcomes. A working paper was published that presents the model. The model was developed as the research progressed to reflect the research findings.

3.2.4 Scoping visits and informal interviews

Scoping interviews were carried out with all willing Time Credits partner organisations in Wisbech (n=17). These involved visiting the organisation to discuss what they do and how they use Time Credits. They allowed the organisation to gain an understanding of the research.

3.2.5 Face to face interviews with Time Credit members

Interviews were conducted with Time Credit members (n=47). Volunteers received a Time Credit for participating. Introductions were made through the partner organisations. Interviews were semi-structured and carried out face to face.

3.2.6 Survey of Time Credit members

The aim of the survey was to collect existing participants' perceptions and views of how their circumstances, health and wellbeing have changed during their engagement with the Time Credits scheme. It was a short two-page survey with easy to complete tick box responses.

3.2.7 Survey and face to face interviews with partner organisations

Interviews were conducted with Time Credit partner organisations in Wisbech (n=22). The interviews explored what the partner organisations do, who they work with and how they have incorporated Time Credits, as well as discussing the impact on volunteers and organisations. Interviews were semi-structured and carried out face to face.

3.2.8 Ethnographic methods and participant observation

Participant observation was ongoing throughout the fieldwork period. It involved attending events, managing earning opportunities and relevant meetings. It allowed us to gain insight into the interactions that take place between volunteers and organisations. The research explored the use of ethnographic methods to enable members of the community to be engaged in the research and to co-produce research data and knowledge.

3.2.9 Secondary data analysis

Secondary data about the local area (e.g. of incomes, health, demographic profile) was analysed to provide a context for the study and to be able to compare Wisbech with other areas and the national averages. This informed one of the working papers.

3.2.10 Systematic review

A systematic review of the grey and scientific literature of the use and potential of Time Credits and time banks in improving public health was undertaken. The review was registered on PROSPERO.

3.3 Co-productive approach to research

In line with Spice's strong commitment to co-production, the values and approach associated with the co-production of knowledge have been incorporated into the overall research design and strategy of this evaluation wherever possible. Co-production in research builds on the belief that the best research practice lies in a synthesis of academic research, practitioner knowledge and research participant 'expertise by experience' (for example, see Beebeejaun et al, 2015; Elliott et al, 2002).

The research had a stakeholder steering group which comprised members of Spice, Cambridgeshire County Council and CHS Group. This group met on a monthly basis and was a very valuable part of the research. Fieldwork tools, contacts, methodological approaches and emerging findings were discussed regularly, with further discussion by telephone and email in between monthly meetings. Outputs from the research were discussed and agreed upon between the group. This very collaborative approach supported a co-productive research process.

The research was also discussed at a quarterly meeting of the Cambridgeshire Time Credits Strategic Group, which oversees the county wide programme.

A steering group of Time Credits volunteers and partners in Wisbech was also established. It met formally four times during the research. The initial meeting outlined the study and was an opportunity to hear feedback on proposed methods. The second meeting discussed fieldwork tools, the third presented the conceptual model for feedback, and the final meeting presented the draft overall research findings for feedback and discussion.

3.4 Methodological challenges

The evaluation of Time Credits in Wisbech used a range of methodological techniques as a way of piloting different data collection techniques to see which were effective at identifying robust evaluation data. This section reflects on the challenges and limitations of some of the methods tested.

The overwhelming finding in relation to the methodologies tested was that qualitative interviews were the most successful technique for collecting data. In particular, face to face, in depth, semi-structured interviews were very effective. The interviews collected rich data about the effectiveness of Time Credits. However, one of the aims of the research was to attempt to move beyond qualitative data collection and try techniques to capture data that increase the feasibility of quantification, but these methods had limited success.

For example, an online survey was developed to be completed by new members. The proposal was to survey people when they joined the scheme to collect baseline data about their health and circumstances, and then to survey them again after six months to capture any change as a result of volunteering with Time Credits. An online survey was developed in Qualtrics, survey software subscribed to by the University of Cambridge. The survey used questions from national surveys to allow for comparison, and the EQ-5D.

The EQ-5D is a standardised instrument designed to assess peoples' quality of life. The survey used the EQ-5D-5L Web version. The EQ-5D contains a descriptive system (5 questions) as well as a visual-analogue-scale. This instrument is well validated, covers a number of domains related to wellbeing including physical, social, mental functioning, and can be used in economic evaluations, namely cost-utility analyses (converting the total scores into quality adjusted life years).

After piloting the survey, the partner organisations in Wisbech were introduced to the survey and were asked to include it in the induction of new members. Flyers were made to explain the survey and to encourage members to participate. Volunteers were offered Time Credits for completing the survey and a prize draw was offered to incentivise people to participate. The first wave of the survey ran from November 2015 to end of April 2016. The intention was to repeat the survey after six months. However, responses were low (11) and the survey sample was not large enough to be robust. On investigation, this was the result of only a relatively small number of new volunteers (23) joining a long-established Time Credits project in the Wisbech area over the survey timeframe.

The research suggests that a longitudinal survey using a validated health questionnaire needs a larger sample to gain sufficient responses to be meaningful. A larger number of respondents would be needed in the first wave of surveys to account for an unavoidable attrition rate. Studies that have used similar surveys tend to have small sample sizes, with sample sizes as small as twenty people in the second phase. It is likely that such a survey would gain a sufficient number of respondents if conducted using a larger sample, for example, by recruiting new members joining Time Credits projects across a number of areas.

A similar additional survey was developed for existing members. It was developed in discussion with members of the project and piloted. It was promoted through different mediums and incentives were offered to encourage completion. However, only 17 volunteers completed the survey.

It is possible that literacy issues discourage people from wanting to complete surveys, indeed, when piloting the surveys some people struggled to identify which age bracket they should tick. However, the research also tried to use non-written forms of data collection. For example, two groups of Time Credits volunteers planned to make a scrapbook to show the impact they feel Time Credits had for them as individuals and for their community. This was discussed with the researchers and materials were supplied. However, neither scrapbook was completed. A similar experience occurred with the use of photography. The research team discussed this with willing volunteers who were asked to use the cameras provided to take any photos they felt were relevant to earning and spending Time Credits. But only one volunteer returned any photographs.

Discussion of the challenges of encouraging volunteers to engage with the research with the stakeholder steering group suggests that local people have experienced a degree of research fatigue. Since the Time Credits pilot began there have been several efforts to assess the impact of the scheme, which probably accounts for a degree of reluctance to complete further 'tasks'. Generally, it was difficult to engage volunteers in the research beyond a willingness to take part in qualitative interviews. This meant that quantification of outcomes experienced as a result of volunteering was not possible.

4 Findings: outcomes from earning and spending Time Credits

This section of the report presents the research findings. It reflects on what the evidence shows about how volunteering with Time Credits can improve health outcomes, but also on the challenges and limitations identified.

Figure 1 presents the conceptual model developed during this research. It summarises how earning and spending Time Credits can lead to positive health outcomes and indicates where the research identified the strongest evidence.

This section of the report discusses these findings in more depth. It considers the outcomes that were identified for volunteers, organisations and the local community, and the extent to which Time Credits foster co-production.

4.1 The conceptual model

HOW EARNING AND SPENDING TIME CREDITS CAN LEAD TO POSITIVE HEALTH OUTCOMES



Figure 1: How earning and spending Time Credits can lead to positive health outcomes

The model shows that both earning and spending Time Credits may lead to positive health outcomes and a reduction in health inequalities. The outcomes may be direct or indirect and benefits may accrue to individuals, to the wider community, or to both individuals and communities.

The pathways to positive change can involve different stages. For example, earning Time Credits may increase social participation, which reduces loneliness, increases life satisfaction and therefore improves mental health. Increased social participation may also lead to a more active lifestyle, which increases physical activity and therefore improves physical health.

The relationship between activities related to Time Credits and health outcomes can be either direct or indirect. Some activities may impact health very directly. For example, a volunteer may spend their Time Credits to go swimming or to the gym, in which case the health benefit is immediate and directly linked to the activity.

Activities with direct health benefits may also contribute to other positive health outcomes indirectly. For example, using Time Credits to access health and leisure facilities may offer opportunities to expand social networks and reduce loneliness, leading to better mental health.

Activities that are not linked explicitly to health may also have a positive impact. For example, volunteering in a meaningful activity which also provides work experience can lead to improved employability, greater life satisfaction and therefore an improvement in mental health.

Sometimes the pathways to health outcomes can be quite complex, and may involve more than one 'waypoint', for example, when the emotional and psychological rewards from helping others improves mental wellbeing, which then leads to a reduction in depression and substance misuse.

The benefits arising from volunteering and social participation may also reinforce each other. For example, earning and spending Time Credits enables people to engage in a meaningful activity, to learn new skills and to meet new people. This can increase activity levels, strengthen one's social networks and boost self-confidence. Over time, each of these changes can have a positive impact on both mental and physical health.

In some instances, the positive health outcomes relate exclusively to the individual who earns or spends the Time Credits, for example, spending Time Credits to go the gym or the cinema. In other instances, the benefits may be more widespread, supporting positive outcomes across a group or community and can extend to those who are not actively involved in the Time Credit networks. This may be the case, for example, when Time Credit earning activities make additional or extended services available to community members more broadly.

4.2 Outcomes for volunteers

This section reflects on findings about the impact of earning and spending Time Credits for volunteers. Whilst this section is divided into separate headings, in reality these issues are inter-related and multi-directional.

The key outcomes identified are:

- Improvements in physical activity
- Improvements in mental health
- Reduced loneliness and social exclusion
- Improved self-confidence
- Making a positive contribution
- Skills development
- Work experience and pathways to paid employment
- Strengthened family and wider relationships
- Access to activities

4.2.1 Non-traditional volunteers

The research suggests that the Time Credits project has been successful in engaging with one particular category of volunteers. These 'non-traditional volunteers' (a term used by local organisations) can be defined as having little or no history of volunteering. The term refers to people who tend to be unemployed and/or on very low incomes, are in receipt of state benefits and may have long-term physical and mental health issues. They may be socially isolated and, crucially, have previously had little engagement with local community organisations. For this group, the research identified that the experience of earning Time Credits was overwhelmingly positive with strong evidence of both direct and indirect health benefits. The key pathways to health for this group are associated with improved confidence, community and social participation, and a reduction in loneliness.

4.2.2 Improvements in physical activity

Volunteers have seen some improvements in their physical health through earning Time Credits. Some of the health benefits come from lifestyle changes, for example, being busy through volunteering can help to reduce smoking and weight gain.

“I was told that I need to keep my weight down. So I thought, if I come here, it's better for me. If I'm on my feet all day that'll help me keep my weight down instead of sitting next door in my room all day, moping all the time, and succumbing to depression.”

Earning and spending Time Credits can boost the activity levels of volunteers.

“Going to the college to get my hair done helps me out in here, 'cause you need to look smart. The cinema helps me chill out and unwind. The swimming helps with my scar.”

Organisations have seen volunteers develop a more active lifestyle. This is in part through the volunteering activities and in part through access to new activities by spending Time Credits.

“We have one volunteer who uses his Time Credits to go swimming with his son and that has made him a lot fitter, and another volunteer who uses her Time Credits to go to the gym, which she would not otherwise be able to afford.”

4.2.3 Improvements in mental health

The combined effect of the benefits resulting from earning and spending Time Credits can be an improvement in mental health.

“Since I’ve been working here, my depression has been a lot better and I’ve got a lot more confidence to talk to people... I’m more confident and upbeat, and I get up at a reasonable time.”

This results from improvements in confidence and self-worth, and taking part in enjoyable activities.

“I wanted to get myself back into something I enjoy. I see the children and the progress they make in reading and I love it. It is refreshing. I come out and I feel like ‘wow’, I’ve got my energy back.”

It also results from having greater social contact.

“It gives me something to do instead of sitting in the flat all day. I’m more chilled when I’m here... I feel more happier with myself cause I always have a smile on my face. And I feel more aware about everything around me... And me and my partner can have some time apart so we are not in each other’s necks all the time - he goes off to do his own thing, and I come here.”

Organisations where people earn Time Credits noted positive changes amongst volunteers.

“She is always in a happy mood when she is here, she always has a smile on her face. It doesn’t faze her when we are busy. She enjoys what she is doing.”

The improvement in mood can simply be as a result of being busy and active.

“It gets them up and moving. It is a bonus for some people just to get up. It is good to be on their feet all day. [Time Credits volunteer] said that she is too busy when she is here to go out for a fag except on her break and so she has really cut down a lot on smoking. She is more confident. People at the beginning say “I won’t be able to take order, I can’t talk to customers, I’m too shy”. Then after a while they start saying “I’ll do that”. But they decide to take these next steps. [Time Credits volunteer] now answers the phone and has no problem talking to the public. You see a lot of change when people volunteer.”

4.2.4 Reduced loneliness and social exclusion

Earning Time Credits can help people to feel less lonely, which is significant because loneliness is a known key determinant of poor health. Existing research has linked social isolation and loneliness to various health conditions and mental health problems, including depression and suicide, cognitive decline, weakened immune function, increased risk of risk of mortality and reduced quality of life (Hawkley and Cacioppo, 2010; Holt-Lunstad, 2010; Farquhar, 1995; Public Health England, 2015).

“I was getting lonely. I thought what am I going to do with myself? I was feeling better in myself so I approached the school and asked what can I do? I had never heard of Time Credits. They got me straight in. I love it”.

People can suffer from social exclusion and earning Time Credits is a way to get engaged with the local community and meet people.

“There are other days if I want to pop over if I get bored. Even just to get out of the house is nice.”

Earning Time Credits has helped some people to develop new social networks which make them feel more positive.

Case study – ‘Alice’

Alice had previously had a career working with children, but poor health had kept her from working for nearly a decade. Time Credits made it possible to return to working with children at the Orchards School, something she loves doing. After a period of volunteering, the school gave her a formal paid job. Volunteering gave her an opportunity to share her skills and to make use of her previous experience and training. Most importantly, she became a valued member of a community:

“When I went to the first Time Credits meeting, at that point, I never ever had anybody come visit me... the only people I spoke to were my neighbours. I always worried, because I am diabetic, if I’m ill that nobody would find me. Now, I go to that school every day, I may go in sad but I come out with a smile on my face... I finally got somebody, who, if I don’t turn up at school, they will come looking to see if I’m alright”.

4.2.5 Improved self-confidence

Earning Time Credits has boosted some volunteers’ confidence with knock on effects on improving their mental health.

“I feel more confident in myself...I feel more aware about everything around me, which I never used to be... With my depression I never used to work out how to remember things that well. But now, I don’t need to be asked to do things, I just get on with it. I’ve got myself into a routine and I don’t need people all the time telling me to do this and that... I keep going and keep on top of things.”

Volunteering gives people a routine and a purpose.

“Before Time Credits, it was mostly TV and computer games. But now it’s more work, work, work, work. I’m more out of the house, I do something I like doing now. It’s made me happier that I can come out and do something for someone else.”

“I get up at 8am and don’t see my bed until 11 o’clock at night for three days. Before that, I used to sleep until the afternoon, but now I have a reason to get out of bed”.

Earning Time Credits has had a beneficial impact on the way in which some volunteers view themselves.

“It has made me feel that I’m a person again. I feel appreciated. I’m not just a person at home doing housework.”

4.2.6 Making a positive contribution

Volunteering has given some people a sense of achievement.

“It’s brought me to life. Since September, I feel like I’m useful again. I feel that I am doing something to help somebody, and that’s what I enjoy doing... It’s a big achievement for me.”

Some feel differently about themselves and viewed themselves more positively as a result of volunteering.

“I need a job. It’s not for the money. It’s for my self-belief. And it’s a role model for my kids. I don’t want my kids to think that ‘oh mommy just sits at home all day’. I don’t feel that’s a good role model for them.”

Earning Time Credits can make volunteers feeling needed and appreciated.

“I love it. It’s like being a mum again. Mine are all grown up and working”.

It leads to people feeling useful and that they are making a contribution to their community.

“It is a nice feeling, like ‘yes we have helped here’, and it’s nice to do. I enjoy being with the younger children. It fits around my children. I am a stay at home mum. And I hope it makes a difference to the school”.

“I think it’s wonderful. I enjoy it. It’s something that I love doing, and I am putting something into the community.”

4.2.7 Skills development

Earning Time Credits has helped some people to develop their skills and learning.

“It is easy to lose touch. It gives me the confidence to do something, getting me out to do something. It makes me get up in the mornings. I’m only 54. No one wants to employ disabled people. I’m learning myself about what I can do.”

It has given some volunteers useful work related experience and a sense of personal satisfaction.

“Experience, lots of experience. More experience than I hoped to get. More knowledge. Satisfaction that I can do something well. And I enjoy doing it.”

4.2.8 Work experience

For some people, volunteering is a way to learn the culture of working, which they are not used to, and helps them to get ready for paid employment.

“They have to learn about work patterns, that you have to start on time, not take cigarette breaks whenever you like. They found this very difficult. Even what to wear is hard to learn. These are skills we take for granted. They would turn up for gardening in a boob tube with love bites. I have to coach them discretely. I want it to be positive. It is a challenge for me to have to talk to people about these things.”

Organisations said that some volunteers treat it as a job.

“[Time Credits volunteers] treat it more like a job. It is what works for them. Sometimes [Time Credits volunteer] comes in and says that someone stopped to chat to her on the way and she tells them “I’ve got to go to work”. She comes in from across town now. It is like a work routine. She sets an alarm and gets up, gets a shower and dressed and comes to work.”

“He treats it like a job. He is in most days for a full day...We have to encourage them to have days off to spend them.”

4.2.9 Routes into employment

Volunteering has led to the identifying, developing and strengthening of skills. This has a positive impact on volunteers, boosting their confidence and helping to improve their employability.

“Volunteering keeps her skills. [Time Credits volunteer] has applied for jobs and is actively looking for a job. It increases their prospects, especially if it is a job in an area where they volunteer. The process shows they want to go to work, shows willing, that they can keep to a routine. Employers take them more seriously.”

This provides new opportunities on both sides, volunteers gain skills and improved employability, but organisations can also identify suitable employees and in some cases have supported volunteers into paid employment.

“[Time Credits volunteer] now also has a job here. I really had to persuade her to apply as she was worried her English wasn’t good enough. People often have skills they didn’t know they could use. It makes them feel valued as a person”.

Organisations see clear benefits for the volunteers who enter paid employment.

“Some volunteers are now employed. They have never been taught the etiquette of working. I hope they are financially better off but the greater thing is that they feel better about themselves and thank you for the opportunity. Most can’t believe they are in.”

4.2.10 Strengthened family and wider relationships

For some people, spending Time Credits has had a positive impact on families and children. It gives families the opportunity and impetus to do activities together.

“Now I’m doing it mostly for her.... Before this we couldn’t really go to the cinema, it’s so expensive, but now it’s just two hours of my time.”

“I’m earning more Time Credits, a lot of it goes now to my little girl to spend on movies, trips. My wife goes to the college to get her hair done. I’m using the Time Credits more for them than it is for me.”

Doing these activities together as a family can strengthen the family unit.

Case study – ‘Peter’

Peter was living in a hostel halfway house and had begun volunteering in the Ferry Project kitchen after his release from prison. Now he volunteers most days and treats it like a job. Peter described how he had learnt new skills and found a new passion. He feels like he’s giving something back to the community. He enjoys the voluntary work and it gives him a sense of achievement, and hopefully a route into paid employment. Spending Time Credits has enabled him to rebuild his relationship with his wife and daughter:

“We are on benefits and the money only stretches so far ... using the Time Credits, it gives me enjoyment to take my little girl to the movies with what I have earned. If it wasn’t for the Time Credits, we wouldn’t be doing that many things with her. And because we go out more, we are closer as a family.”

Some volunteers share Time Credits to use with other people, helping to benefit others but also maintaining social networks.

“When it comes to spending I save them up. I have some friend’s children come to stay. There are two girls, 6 and 9. One has Down’s Syndrome.... They come up in the holidays. They are like my extended grandchildren. We go swimming in Whittlesey and to the pictures at the Light Cinema in Wisbech”.

Organisations see benefits to volunteers in spending their Time Credits. Families do activities together and for some children spending Time Credits is the only time they do anything outside the house as a family.

“They do it as a family, they don’t want to spend individually. These are things they would not do otherwise. It is especially important when the kids don’t go out otherwise, some families will not even go up town together, they only do things with

Time Credits.... One lady, her kids never left the house but she will use Time Credits to take them out in the holidays.”

4.2.11 Access to activities

Time Credits give people access to activities that they might not otherwise be able to afford or would not have tried.

“It does really help as with so many children we wouldn’t do it otherwise as you have to pay and with four kids it would be expensive. We would probably not do it without Time Credits as it’s too expensive”.

“But there are some things that I couldn’t justify spending money on, but now I can go cause I’m earning it.”

Being able to access activities that are otherwise too expensive helps to keep people active.

“I don’t get a lot of money. And these days, the cost of cinema tickets and swimming are really high... With Time Credits, it doesn’t interfere with your benefits, it’s not money but it’s credit, so you can use it whenever you wanna use it... we find stuff to do during the day when we are not working, it’s like, on my day off, I can go to the cinema instead of sitting in the flat all day”.

These spend opportunities have positive impacts on their health and activity levels.

“People have very little money and Time Credits spending gives them access to things that help their health and wellbeing such as going to the gym or swimming. It is a motivation to get out and about and not to just hang about in their room or communal areas.”

4.3 Outcomes for organisations

This section reflects on the positive outcomes for the local organisations (n=22) that are part of the Wisbech Time Credits network.

4.3.1 Increasing capacity

The research suggests that being able to offer Time Credits has enabled organisations to increase the number of volunteers they are able to recruit and retain.

“It has helped us as an organisation when we have been short staffed...The regular customers are used to the volunteers. It helps to build a whole picture of who we help and why. The customers are all for it.”

As the organisations have increased the number of volunteers, it has also increased the organisation’s capacity and in some cases the services they can make available, despite funding cuts.

“Some do reading with children which is invaluable. It is one of the most important things. Parents don’t read with their children. Teaching Assistants are too busy these days and the teachers have no time to sit and read.”

This increase in capacity and what organisations are able to offer has a positive knock on effect on the wider community. For example, with more volunteers at a school who are able to offer one-to-one reading sessions, children from the local community benefit.

“For the children they just don’t read at home and it has furthered their experience of reading. But also about life, for example, many of the EAL (English as an Additional Language) children don’t know what things like a BBQ are and it opens up their life experiences.”

4.3.2 Skills awareness

There has been an increase in the awareness of the skills that people possess.

“There is a volunteer at the moment and she’s the next one I’ve got my eye on for getting into a job. You have to identify their skills and steer them. It is all informal. There is no filling in forms. You have to build up relationships and get to know them. Trust is so important in this area. People have to trust you.”

This has both been a realisation on the part of staff within organisations, that local people have skills to offer, and also on the part of the volunteers themselves who only became aware of their own skills and potential through volunteering and the encouragement of the organisation.

“Getting Time Credits as a reward can help people to broaden their horizons and discover things they might enjoy doing or are good at. Getting a reward makes them more likely to try something they are not sure about without risking losing anything....”

This may also help them broaden their horizons in terms of the kinds of jobs they might look for and hence improve their employment prospects”.

“I consider what skills people can offer to us or what we can offer to them – it’s important to look at things from the both sides”.

4.3.3 Pride and satisfaction

Organisations are pleased to be able to offer these opportunities.

“Some people wouldn’t have been given a chance somewhere else. It puts barriers up. They have nothing to worry about here. It gives people the chance they need. That’s what people appreciate.”

Those managing Time Credits feel a sense of pride in what has been achieved.

“When I walk past and see they are enjoying it; it is worth it. I feel like I have mothered them all, they are like my children. They need nurturing too.”

Offering Time Credits creates a sense of reciprocity and equality.

“It feels more rewarding. Instead of someone volunteering and just saying thank you, you can give them something in return. I try to get them talking about spending and they enjoy it.... They know they will get something at the end and feel more appreciated as they get something back for it.”

The initial aims of the organisation when deciding to offer Time Credits may not be the only benefits they see as volunteering develops. There have been wider, unexpected benefits. For example, they may have decided to offer Time Credits in order to engage with the community, but have gone on to see the greatest benefit of offering Time Credits being the route it offers some local people into paid employment.

“But what I am most proud of is getting people into jobs. These people would not apply for jobs and now they have paid jobs.”

4.3.4 Spending Time Credits

For the organisations where people spend Time Credits, the research found that it increases their footfall and can generate additional sales or repeat business.

“It gives us greater footfall through the door. It increases our clientele..... We encourage students to sell, so it is retail, rebook and recommend. It means we get new people in and can sell”.

The organisations where people are able to spend Time Credits find it to be positive for their local Image and brand.

“They [customers] are more inclined to think well of us and not see us as a big corporate machine”.

Offering the ability to pay for activities with Time Credits can be part of the organisation's ethos of engaging with and supporting the local community.

"We have a community focus and want to get involved with the local community.....People who earn Time Credits do a great job volunteering and it is good to be able to give a bit back and give them a nice time.... It gives the staff a nice feeling, being able to reward people for volunteering".

4.4 Outcomes for the local community

There is some evidence that earning Time Credits has helped to bring diverse people together, fostering the development of social capital and stronger community resources. For some organisations, engaging with different people from the local community has led to new ways of perceiving people and has challenged stereotypes.

"It has also changed staff attitudes. Some staff thought that 'these people' volunteering would be a hindrance not a help. Then they realised that they have skills. The staff started to see them in a different way. It has opened up views of some families. In terms of life experiences it has been a big thing. It has been a success in engaging diverse groups. Now we get the EAL (English as an Additional Language) families. They did not think they would be welcome but now they feel they can participate. Understandings have changed."

It has been effective in bringing diverse people and communities together, breaking down barriers, and allowing people whose lives are quite different to share knowledge and skills.

4.5 Outcomes for co-production

4.5.1 Reciprocity

Whilst no organisations used or necessarily understood the actual term 'co-production', for some organisations the research suggests that new co-productive relationships are developing and becoming embedded within organisations. Being able to offer Time Credits where an organisation already had active volunteers has enabled the development of a more reciprocal relationship and organisations are pleased to be able to "give something back" to volunteers.

"It makes the volunteers feel rewarded. They already know we appreciate them but it is nice to be able to give them something. It makes them feel valued and it is good to feel we are giving them something."

"When people have nothing it's nice to be able to offer them something in return for their efforts."

For some organisations there is evidence that recruiting and retaining volunteers has enabled services to be maintained in spite of funding cuts, however, there is little evidence of involvement in service design or service improvement in Wisbech.

5 Challenges and limitations

The research identified a number of challenges and limitations in securing positive health outcomes through volunteering with Time Credits.

5.1 Lack of evidence

There are some pathways to positive health outcomes through earning and spending Time Credits, shown in Figure 1, that the research was not able to identify strong evidence for. These include:

- Improved awareness of medical and social support services
- Reduction in substance misuse
- Improved physical health
- Improved services, client needs are better understood and addressed
- Reduction in anti-social behaviour and crime
- Reduction in wealth inequalities
- Environments that facilitate a more active lifestyle
- More cohesive, resilient and safer communities

This section discusses some of the challenges that may preclude the clear achievement of these outcomes.

5.2 Hoarding Time Credits

Some people hoard their Time Credits rather than spend them which means they are missing out on the benefits that comes from spending Time Credits.

“I save them. I have a huge ‘wodge’ at the moment”.

Gifting Time Credits is encouraged within the model and Spice networks allow their members to donate unused Time Credits to a friend, neighbour or a family member. Some of the volunteers interviewed have given Time Credits to family or friends.

5.3 Issues around value

A challenge is the recognition that volunteers place a clear value on the time they have spent volunteering and want to see this value reflected in the spend activities. Volunteers do not necessarily want to spend their Time Credits on low cost activities, such as after school clubs that cost £1 or discos and events with a £2 entry fee, when they can spend them on higher cost activities such as the cinema which might otherwise be prohibitively expensive.

“We can’t charge two Time Credits and only £2 as that is two hours of time for people who have earned them.”

Some organisations have offered spend opportunities, which take time and resources to organise, and had no volunteers want to participate. In some cases, this has been because volunteers felt they could get 'better value' on other spend opportunities.

"They are always thinking about getting their value. Value is a big thing. And being able to go together. People understand value. They don't want to spend their Credits if it is not good value. Some will say "it is below minimum wage if I work for an hour and spend it on that". When we did bingo, no one took it up because it was only £2. After school clubs are only £1. When [two Time Credits volunteers] took their kids to the cinema they walked a mile and a half to the cinema and made it into a whole day out, they went to McDonalds afterwards. It was the only thing their children did in the holidays."

There is also a potential problem relating to the development of a black market for Time Credits, where people sell Credits on at a low value, which devalues the currency but also raises the problem of people using the cash to spend on unhealthy behaviours, such as drinking alcohol.

5.4 Lack of spend activities

Volunteers in Wisbech only use a small range of spend activities. At the moment, most volunteers spend their Time Credits on going to the cinema, going swimming, and on hair and beauty treatments, with some also spent on social events. These are very valued. However, it does mean that the Wisbech network is very reliant on three external organisations being willing to continue to accept Time Credits.

In addition, the majority of interviewees felt that there was a lack of local spend opportunities in the area.

"Spend is limited because of our geographical area."

This is partly because Wisbech is relatively isolated and because many volunteers cannot afford transport.

"But it is hard to spend them here as none of the volunteers can afford transport. It would be ideal if they could spend them on transport, like get on the bus. But you can't spend them on things like that. So spend is difficult. That's the trouble, there are lots of rules.... So there are only two main options to spend them on. There is not much else in Wisbech. And none have transport. There just isn't much local spend."

Spice are constantly working to grow and diversify the corporate spend offer within local and national networks. Network days and targeted training aim to facilitate member organisations to access the wider spend network through spend trips in order to encourage spend outside the Wisbech area and negate the challenge of poor rural transport infrastructure.

5.5 Challenges in developing internal spend opportunities

One of the key challenges identified by organisations in working with Time Credits has been developing spend opportunities that are internal or community based. 'Community spend' aims to provide local and accessible activities so people don't have to travel to find ways to spend their Time Credits. Organisations face a number of constraints in developing their own spend options. One is staff time and resources available. Some staff are already over-stretched and trying to offer spend opportunities outside of their working hours, or the opening hours of their organisation, is too difficult.

Sometimes there has been no take up because people are nervous about doing things that feel out of their usual comfort zone and immediate circle of acquaintances.

"We tried day trips to the sea and joined with [Time Credits organisation] but no one came as they did not want to go on the bus with other people they did not know".

Organisations also said that people prefer to spend Time Credits on something they can do as a family, often also with other families, and will not spend on more individualised activities.

One challenge for organisations has been negotiating how to offer Time Credits when they also use volunteers for fundraising activities. Some organisations have taken the view that their staff have always volunteered for certain fundraising activities, that too many Credits would be accrued, and that it is not appropriate when relatively large amounts of money are being raised. This has created some tension within organisations.

"We won't pay Time Credits for an event earning over £500. And if the staff are happy doing things anyway, like the disco, they don't need to earn Time Credits. It was very difficult. Some people did not speak to me for a while."

Other organisations have also not offered certain activities as spend opportunities as they charge for these as part of the organisation's fundraising and need the income.

"Spending opportunities are hard and budgets are so tight. We would like to say use the Time Credits for the school disco but it is money making for fundraising so it would take funds away from the school. We have a summer fair but it is for fundraising. We don't rent out rooms much but we need what we get and can't rent them out for free".

Some felt that they could not charge Time Credits for certain activities as they would have to charge actual cash to other organisation members and thought this would create tension and was against their ethos.

"We could offer something here but if we charge Time Credits we would have to charge money to other people and they would complain. They already pay rent so people would see it as a problem if we charged them for things here."

Organisations are aware of the rationale to develop internal and community spend opportunities, and of the expectation to deliver a community spend offer, but felt they were doing what they could within the constraints they face.

“We can’t come up with it given the circumstances. I am only paid 9 to 3 in term time and I have my own pressures outside of work and my own family. But if I thought it would work I would give up the time. We offered it and no one took it up. No one took up the after school clubs. They don’t think it is good value.”

“Every organisation has a different ethos. You have to make it work for you and it has to be managed by you. It is a fine line. You couldn’t tell another organisation how to make it work for you.”

Community spend is a vital part of the Time Credits model, and is a way to measure how well it is working as a tool for co-production and community and user-led transformation. In Wisbech, community spend aims to provide local and accessible activities so people don’t have to travel to find ways to spend their Time Credits. Spice supports partner organisations to innovate their community spend offer within their existing resource, making best use of the assets in the local community.

5.6 Pressures on staff

Generally, managing Time Credits within an organisation does take up staff time, most said that it took up more time than they had expected, but that it was not unmanageable.

“I am so short of time. It is overwhelming sometimes. Things like the data input spreadsheet could easily slip so as soon as I get half an hour I start.”

“What is challenging is me having the time. It takes up a lot of time, more than I thought it would.”

Monitoring and data input is time consuming but people manage, although they stressed that they could not cope with any more than the existing monitoring.

“The admin part is ok if you keep on top of it. It is more time consuming than I expected but it is manageable. I wouldn’t want it to be any more.”

Some organisations have found that offering Time Credits can incur organisational costs, for example, when paid staff have to oversee earning opportunities and so other paid staff are needed to cover their normal duties. However, it is worth recognising that these additional costs are offset by a reduction in the cost of garden maintenance, for example.

“One of the difficulties with Time Credits is that although they can be earned through activities such as tending to the garden, it often requires a paid staff member to also be there, overseeing the earning activity. As a result, enabling the residents to earn Time Credits comes at a cost as more paid staff are required to cover the time other paid members of staff are spending supervising the Time Credit earners.”

Spice encourages organisations to build on the skills of their volunteers to support the administration and delivery of Time Credit initiatives. This upskilling also supports a key priority of Cambridgeshire Time Credits. Basic monitoring data is essential to monitor the growth and progress of the Time Credits network, and to ensure Spice are engaging a wide range of people in Wisbech.

5.7 The network

Wisbech has a fairly well developed partner network and they come together quarterly at the network meeting. Those who attend find the meetings useful in part, mainly because they like to hear what others are doing and check that they are doing ok. However, communication between partners is limited to the meetings and the same people tend to go to the meetings every time. Some staff said that they do not have time to attend.

“We don’t have much contact with the other Wisbech partners except at the network meetings. They are sometimes useful but it is often the same issues mentioned and the same people who go.”

Organisations are encouraged to identify how network meetings will best serve the development of their Time Credits initiative, to take a lead in shaping future meetings and to suggest and deliver content.

5.8 Challenges in offering Time Credits

There have been internal problems at some organisations unrelated to Time Credits that have made maintaining a volunteering system difficult. There are also a small number of organisations that are keen to join the Time Credits network but have struggled to find the best way to offer Time Credits. This is the case for a couple of organisations that already have volunteer schemes in place, and so have been trying to think of slightly different ways for people to volunteer and earn Time Credits. There can also be an issue of equity, where it is deemed inequitable to offer Time Credits to the volunteers in one local organisation when there is another branch of the organisation whose volunteers would not be able to earn Time Credits because they are out of the project catchment area.

5.9 Outcomes for priority areas

The Time Credits project has a range of target outcomes. Although the focus in the evaluation is on health, the research suggests that there has been more progress in the priority areas of strengthening families and skills and employment than on engaging or having an impact on older people, particularly the ‘older old’.

5.10 Existing volunteers

The qualitative research identified evidence of positive outcomes for volunteers. However, the strongest benefits may be concentrated on a core of regular non-traditional volunteers. For the people who were already volunteering, but had subsequently been offered Time

Credits, they were a nice thing to have, but they were not critical in motivating them to volunteer and there had been little change in their circumstances.

“I first came into contact with the school when my daughter started but I started volunteering about four years ago when my son went to pre-school. When Time Credits started I was already volunteering and I would do it without them”.

An example is a volunteer who was in employment and was already volunteering before being offered Time Credits.

“I have children at the school. I have a teaching degree. I have been a dental nurse for eight years but I miss teaching....I wanted to do something for me. I enjoy my job but I like being with children....I would volunteer without Time Credits but it is a bonus. I help groups, reading, with music classes. I prefer to volunteer rather than to increase my hours at work. Even if I increased my hours I would still volunteer”.

The volunteering is very important to them, but they were already regular volunteers and there is little evidence that there are additional health related benefits generated by earning Time Credits for the activities. There are potential benefits accrued from spending Time Credits, although some of this group had not explored opportunities to spend their Time Credits. The research suggests that earning Time Credits is potentially transformative for some volunteers but is not a profound experience for others.

5.11 Structural context

It is important to be realistic about what offering Time Credits can achieve. In a place where there are fundamental structural issues of poverty, deprivation, unemployment, low levels of education, poor health and poor lifestyle choices, one community project cannot be expected to ‘fix’ these problems, particularly in a context of reduced funding for local services.

6 Gaps in evidence

6.1 Quantification

The biggest remaining gap in evidence is that of quantification. The research has found evidence of positive outcomes for some volunteers, but it has not been possible to quantify the degree of change.

There are several reasons for this. In order to measure change in people's health, wellbeing and circumstances, a baseline is needed of these measurements before people begin volunteering, and then after a period of time to capture any change. However, the Wisbech project was quite well established by the time the evaluation began and the sample of people who joined as new volunteers during the research was not large enough to collect a robust sample of measurements. For attempts to measure and quantify change to be successful, they need to be built into a project to collect data from the beginning, rather than retrospectively. There is also a need to establish a meaningful comparator of similar people who did not join the Time Credits scheme.

There was also a degree of research fatigue amongst the study population, because Wisbech was the pilot for Time Credits in Cambridgeshire, volunteers had already been surveyed about their views of the project. There was also a reluctance to participate in some forms of data collection, such as surveys, possibly reflecting confidence and literacy levels, people preferred to share their experiences in dialogue through interviews.

6.2 Savings to health and adult social care

Without being able to quantify any degree of positive change, it is not possible to demonstrate measureable savings to health and adult social care, which is the ultimate goal of the Council's investment in the programme. The research has identified potential pathways to better health, but there is a lack of quantifiable evidence.

This does also in part reflect the circumstances of the particular group of volunteers active in Wisbech. Few had immediate or high level health needs, so any benefits are likely to only be realised over the long term. There are few older people who volunteer who are in receipt, or likely to be in receipt in the near future, of direct support from adult social care services. There is no direct evidence of any reduction in service use in the short term.

Benefits in terms of any reductions in the use of public services are likely to be long term. It would therefore be difficult to measure them over these time periods and to attribute them to participation in volunteering. As mentioned, there is also a general context of poverty and poor lifestyles that weighs against the immediate benefits of volunteering. Time Credits are also a diffuse intervention so establishing cause and effect between earning and spending Time Credits and the specific outcomes is difficult, particularly when there may be other types of engagement with volunteers through other means.

There is strong qualitative evidence of positive change as a result of earning and spending Time Credits, particularly amongst 'non-traditional volunteers', but any direct health changes

have not been proven beyond the qualitative evidence. The evidence is also of positive changes in the known determinants of health, rather than in actual measurable health improvements. For example, there is evidence of improvements in social isolation, and therefore an implied potential improvement in health because loneliness is a known and proven determinant of poor health, but actual health improvement has not been evidenced. There was no direct evidence of a reduction in health-related services and this was not mentioned in interviews.

6.3 Future research

Additional research would benefit from focusing on the issue of quantifying positive/negative change, attributing positive/negative change to the project, and establishing any direct and indirect savings to public services as a result. This could mean a longitudinal study tracking people over the longer term and specifically monitoring their use of services over this time. It would also require mapping additional support and influences on participants. This would probably also require a comparator group of similar people to track who did not volunteer. The study would need to consider using measures other than self-reported health, which is notoriously inaccurate and correlations between self-reported health and direct measures are generally only low-to-moderate. A further piece of research would be to test whether the findings from the study in Wisbech are similar in different geographical areas and socio-economic contexts.

7 Conclusion

There is a need for further research to build on this study in order to quantify the evidence of benefits to individuals, and to meet the need for quantified, measurable proof of financial savings to public budgets. Evidencing the outcomes of prevention interventions in public health is very difficult. Cause and effect can be difficult to clearly establish as there are multiple influences on peoples' lives. The benefits may only be evident over long time scales, but research tends to be short term. Alternatives to self-reported health, and to self-recall about service use, need to be used to develop robust measures of change.

The qualitative evidence from this research showed that earning Time Credits can have both direct and indirect health benefits for individuals. People gained a sense of purpose and felt that they were making a positive contribution which increased their life satisfaction and improved their mental health. They became more physically active and more socially connected. There is also evidence of increased confidence and development of skills and work experience to support moving into paid employment.

Spending Time Credits gave members resources to access activities and services that they would not otherwise be able to afford. Time Credits were spent on activities which lead to a more active lifestyle, such as swimming, with potential health benefits. They were also spent on family activities which may lead indirectly to positive health outcomes by improving social capital, social participation and overall wellbeing.

Time Credits are a relatively simple concept, but they are a complex community intervention with numerous interconnected outcomes and multiple pathways to positive change. They provide the opportunity to be active citizens, to share experiences and skills and make positive contributions that foster a sense of inclusiveness. The research suggests that they are a way to engage local people to develop more inclusive, cohesive and resilient communities.

Appendices

Outputs

The research has led to several publications. All of the outputs from the evaluation can be downloaded from the CCHPR website at:

<http://www.cchpr.landecon.cam.ac.uk/Projects/Start-Year/2015/Evaluating-Public-Health-Outcomes-Cambridgeshire-Time-Credits-Project>

Working papers

Durrant, D. and Burgess, G. (2016) Using Ethnographic Methodologies to Evaluate Time Credits. Cambridge: Cambridge Centre for Housing and Planning Research.

Durrant, D. and Burgess, G. (2016) Time Credits in Wisbech. Cambridge: Cambridge Centre for Housing and Planning Research.

Markkanen, S. and Burgess, G. (2016) The potential for Time Credits to generate public health outcomes – a conceptual model. Cambridge: Cambridge Centre for Housing and Planning Research.

Markkanen, S. and Burgess, G. (2015) Introduction to co-production in research: summary report. Cambridge: Cambridge Centre for Housing and Planning Research.

Markkanen, S. and Burgess, G. (2015) Introduction to co-production in services: summary report. Cambridge: Cambridge Centre for Housing and Planning Research.

Markkanen, S. and Burgess, G. (2015) Introduction to time banking and Time Credits. Cambridge: Cambridge Centre for Housing and Planning Research.

Conference presentations

Burgess, G. (2016) Public health outcomes of complex community interventions: volunteering and Time Credits in the UK. July 2016. International Public Health Conference

Burgess, G. (2016). Health outcomes of place based approaches to building community cohesion: Time Credits in England. Presented at Association of American Geographers and International Society of Urban Health Conference April 2016.

Burgess, G. and Lafortune, L. (2016) Evaluating the Public Health Outcomes of the Cambridgeshire Time Credits Project – Presented at SPHR Conference March 2016.

Emerging findings papers

Burgess, G. (2016) Evaluating the Public Health Outcomes of the Cambridgeshire Time Credits Project: Interim Report. Cambridge: Cambridge Centre for Housing and Planning Research.

Burgess, G. (2016) Wisbech Time Credits – partner organisation case studies. Cambridge: Cambridge Centre for Housing and Planning Research.

Burgess, G. and Markkanen, S. (2016) Wisbech Time Credits – individual member case studies. Cambridge: Cambridge Centre for Housing and Planning Research.

Public and practitioner engagement

Policy seminar to local public health practitioners August 3rd 2016, Cambridgeshire County Council.

Burgess, G. (2016) Time Currencies in Cambridgeshire: Exchanging Time, Connecting Communities - Public health outcomes in Wisbech. Festival of Ideas, October 26th 2016.

Lafortune, L. (2017) The Time Credit Programme in Wisbech, Cambridgeshire: assessing impacts on health and social wellbeing. Sharing our learning from the Public Health Practice Evaluation Scheme (PHPES), SchARR, Sheffield, 25 January 2017.

Short films

Of particular interest to public health practitioners or those responsible for commissioning or delivering public services, Dr Gemma Burgess presents a summary of the project findings:

<https://www.youtube.com/watch?v=YXlw-dVeQss>

Staff and volunteers from a local primary school talk about their experiences and the positive benefits of Time Credits for both the school community and individuals in this case study:

<https://www.youtube.com/watch?v=wulsKngZIs8>

An accessible insight into the benefits of involvement in a Time Credits scheme, the story of a typical volunteer is told in an animated film:

<https://www.youtube.com/watch?v=t84UQ9PqsQU>

Blogs

<http://www.justaddspice.org/blog/evaluating-public-health-outcomes-cambridgeshire-time-credits-wisbech>

<http://www.justaddspice.org/blog>

<http://www.justaddspice.org/blog/cambridge-centre-housing-planning-research-launch-reports>

<http://www.justaddspice.org/blog/cambridge-report-in>

<http://www.justaddspice.org/blog/connecting-communities-cambridge-festival-ideas>

References

- Beebeejaun, Y., Durose, C., Rees, J., Richardson, J. and Richardson, L. (2015) 'Public harm or public value? Towards coproduction in research with communities', *Environment and Planning C* 33(3), pp. 552 – 565.
- Boyle, D. (2003) *The Co-Production Principle and Time Dollars*, <http://timebanks.org/wp-content/uploads/2014/01/Co-ProductionPrinciple.pdf> (last accessed 14/10/2015).
- Boyle, D., Clark, S. and Burns, S. (2006) *Co-Production by People Outside Paid Employment*. York and London: Joseph Rowntree Foundation and the New Economics Foundation.
- Boyle, D. and Harris, M. (2009) *The Challenge of Co-production: How equal partnership between professionals and the public are crucial to improving public services*. London: NESTA.
- Boyle, D. and Bird, S. (2014) *Give and Take: How timebanking is transforming healthcare*. Gloucester: Timebanking UK.
- Brudney, J.L. and England, R.E. (1983) 'Toward a definition of the coproduction concept', *Public Administration Review* 43(1), pp. 59 – 65.
- Cahn, E. (2004) *No More Throw-away People: The Co-Production Imperative* (2nd edition). Washington DC: Essential Books.
- Cambridgeshire JSNA: Summary Report 2014/15. Cambridgeshire County Council and Cambridge and Peterborough Clinical Commissioning Group.
- Elliott, E., Watson, A. and Harries, U. (2002) 'Harnessing expertise: involving peer interviewers in qualitative research with hard-to-reach populations', *Health Expectations* 5(2), pp. 172 – 178.
- Haffenden, F., O'Neill, R. & Dunling-Hall, S, (2015) *The Migrant Population Across Cambridge & Peterborough: Data, views and issues*. A presentation to the PCC Eastern European Economic Migrants JSNA and CCC Migrant Populations JSNA Stakeholder Scoping Workshop - 14 October 2015 <http://www.slideshare.net/CambridgeshireInsight/pcc-eastern-european-economic-migrants-jsna-and-ccc-migrant-populations-jsna-stakeholder-scoping-workshop-14-october-2015>
- Hawe, P. and Shiell, A. (2000) 'Social capital and health promotion: a review', *Social Science & Medicine* 52 (2000), pp. 871 – 885.
- Hawkey, L.C., Thisted, C.M. and Cacioppo, J.T., 2010. Loneliness predicts increased blood pressure: 5-year cross lagged analyses in middle-aged and older adults. *Psychology and Aging*, 25 (1), pp.132-141.

Holt-Lunstad, J., Smith, J.T. and Layton, B.J., 2010, Social Relationships and Mortality Risk: A Meta-analytic Review. *PLOS Medicine*, 7 (7), pp.1-20

Granger, P. (2013) *Valuing People and pooling resources to alleviate poverty through time banking*. London: Rushey Green Time Bank.

Gregory, L. (2012) Time and punishment: a comparison of UK and US time bank use in criminal justice systems, *Journal of Comparative Social Welfare*, 28(3), pp. 195-208.

Gregory, L. (2014) 'Resilience or Resistance? Time Banking in the Age of Austerity', *Journal of Contemporary European Studies*, 22(2), pp. 171-183.

Krausova, A. & Vargas-Silva, C. (2013) *East of England: Census Profile*. The Migration Observatory at the University of Oxford
http://www.migrationobservatory.ox.ac.uk/sites/files/migobs/Briefing%20-%20East%20of%20England%20Census%20profile_0.pdf

Markkanen, S. & Burgess, G. (2016) *Evaluating the Public Health Outcomes of the Cambridgeshire Time Credits Project. The potential for Time Credits to generate public health outcomes – a conceptual model*. Working paper 4. Cambridge Centre for Housing & Planning Research.

Needham, C. and Carr, S. (2009) *Co-production: An emerging evidence base for adult social care transformation*. SCIE Research Briefing 31. London: Social Care Institute for Excellence.

NICE – National Institute for Health and Care Excellence (2012) *Health inequalities and population health*. NICE local government briefing. Available online at <https://www.nice.org.uk/advice/lgb4/chapter/introduction> (last accessed 20/10/2016).

O'Mara-Eves, A., Brunton, G., McDaid, D., Oliver, S., Kavanagh, J., Jamal, F., et al. 'Community engagement to reduce inequalities in health: a systematic review, meta-analysis and economic analysis', *Public Health Research* 1(4).

Pestoff, V. (2006) "Citizens and Co-Production of Welfare Services: Childcare in Eight European Countries", *Public Management Review* 8(4): 503–19.

Public Health England (2015) *A Guide to community-centred approaches for health and wellbeing*. London: Public Health England.

Quinn, N. and Knifton, L. (2012) 'Positive mental attitudes: how community development principles have shaped a ten-year mental health inequalities programme in Scotland', *Community Development Journal* 47(4), pp. 588 – 603.

Scottish Government (2011) *Evaluation of Local Housing Strategies Co-Production Pilots with Disabled People*. Scottish Government Social Research, available online at <http://www.gov.scot/resource/doc/365083/0124090.pdf> (last visited 05/01/2016).

Seyfang, G. (2003) 'With little help from my friends.' Evaluating time banks as a tool for community self-help, *Local Economy*, 18(3), pp. 257-264.

Seyfang, G. (2004) 'Time banks: rewarding community self-help in the inner city, *Community Development Journal*, 39(1), pp. 62-71.

Verschuere, B., T. Brandsen, and V. Pestoff (2012), "Co-production: The State of the Art in Research and the Future Agenda", *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, pp. 1-19.

Weaver, P., Dumitru, A., and Lema Blanco, I. (2015) Transformative Social Innovation Narrative: Timebanking, TRANSIT: EU SSH.2013.3.2-1 Grant agreement no: 613169, 31st March 2015.

Wisbech 2020 (2014) Connecting North: Connecting North Cambridgeshire
<http://www.wisbech2020vision.co.uk/CHttpHandler.ashx?id=10966&p=0>