

A Social Prescription Programme Collaboration between the Eden Project and St Austell Health Care

**A Qualitative Evaluation of the Eden Project Diabetes Walking Group**

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A Qualitative Evaluation of the Eden Project Diabetes Walking Group

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# A Diabetes Walking Group at the Eden Project

# 1. 0: Aims

This report outlines the key findings from a qualitative evaluation of a walking group for people with diabetes and at a high risk of diabetes (this group is part of a social prescription program run collaboratively by St Austell Health Care and the Eden Project). The main research questions focus on the participants’ experiences of the group, the changes they have made relating to managing their diabetes and any changes to the status of their diabetes (as well as their wellbeing in a general sense). The research questions are as follows:

* *How ‘disruptive’ was undertaking the social prescription to their lifestyle before the horticulture group?*
* *Has the group resulted in any other changes to their daily life – including how they manage their diabetes?*
* *How has taking part in the group impacted the status of their diabetes?*
* *What are the main challenges based on maintaining their commitment to the group*
* *Why do they maintain their commitment?*
* *Were they aware of social prescription being a treatment option for diabetes before they started participating in the walking group?*
* *How has their perspective of the group’s benefits and drawbacks changed during their time with the group?*
* *How have the social relationships they have built shaped their experience?*
* *How does the location of the walks impact their experiences?*

In addition to these participant specific insights this evaluation draws upon the perspectives of an ethnographic research approach. The lead researcher participated in the group’s activities during 12 walks (over 12 weeks). Moreover the volunteers that facilitate the walking the sessions (as walk leaders) provided the evaluation with their perspectives on how the group impacts their daily life, how the social relationships they have built shape their experiences and the opportunities and challenges associated with volunteering to help facilitate the group.

Finally, anonymised data relating to the walking group participants’ blood sugar levels, Body-Mass Index (BMI) measurements and diabetes related medication was provided by St Austell Healthcare. This data was formed of 23 participants with Type 2 diabetes and four pre-diabetics. This data provided the evaluation with quantitative insights into how the measures listed above have changed since participants joining the walking group. Any changes to the participants’ medication in this period can be considered as an economic indicator for the healthcare services; these are documented in the findings.

# 2.0: Background

The Eden Project Diabetes Walking Group is part of St Austell Health Care’s social prescription programme which started in June 2016. St Austell Health Care serves as a General Practice (GP) surgery for St Austell, a town in mid-Cornwall (UK) with an estimated population of 20,955 (the population is around 36,000 when the surrounding parishes are taken into account)1. St Austell Health Care is the merger of four surgeries and is now the largest GP surgery in Cornwall. St Austell Health Care offer walks at Eden as a prescription option to patients with diabetes or at a high risk of diabetes. These patients are able to bring friends and or members of their family to the walk if they feel uncomfortable in participating on their own. Overall the group has 100 members (as of August 2018) including the non-diabetic walkers that accompany the social prescription users.

The group comes together weekly at the Eden Project (on a Wednesday at 10am) and participants meet in the Eden Project Café before embarking on walks around the Eden Project biomes and outdoor paths. The routes of the walks vary each week, depending on the route planned by the walk leaders (volunteers) for that week, and are conducted in three groups. The three groups are referred to as the ‘Fast’, ‘Medium’ and ‘Slow’ groups. These speed labels relate to the pace the respective walks take around the site but the groups are self-elective. Each group has three or four walk leaders situated at the front of the group, around the middle of the group and one walk leader is positioned as a ‘back marker’. This ensures participants that elect to try a speed of walking but find the particular speed too demanding can complete the walk with the guidance of a walk leader and take rest stops without losing the group. Overall the walks are usually around 35 minutes in duration and the distance walked depends on which group a participant elected into. These distances vary between 1 mile and 1.6 miles.

# 3.0: Methods

The evaluation approach undertaken in this study spanned 12 weeks (May-July 2018) with the lead researcher taking part in 12 walking sessions during this period. All of the participants and the walk leaders, including the Lead Walk Leader, were made aware that the researcher was part of a study. They were informed that the study was based on evaluating how the group operates (logistically), the social and personal experiences that emerge from being part of such a group and the influence the group has had on their diabetes. Importantly, the volunteers and participants were made aware that if they felt the researcher impacted the group / group’s activities negatively the researcher would not continue to take part in the sessions. These approaches are fundamentally dependent on the rapport a researcher is able to build with individuals in the group. As such, findings emerge conversationally as the researcher becomes part of the group and key insights arise from the experiences individuals share, and encounter together2. All research activities were conducted under a confidentiality agreement made with the participants and approved by the Lead Walk Leader. Hence, all research notes made by the researcher working with the group were anonymised. Each participant was assigned a random pseudo-name for this report to maintain their confidentiality.

The research questions in *Section 1.* formed a basis for conversations between the researcher and participants The walking sessions provided a relaxed environment to hold such conversations in a ‘go-along’ approach and topics of conversation tended to veer towards the evaluation aims organically. After each session extensive field notes were made on the group dynamics, conversations, experiences and any one-to-one interactions that took place. These field notes included the key points from the reflective discussions that took place after each session with the walk leaders. The walk leader perspectives were elicited in more detail (relating to the aims set out in *Section 1.*) during an hour-long focus group held with eight of the walk leaders who were able to attend. Furthermore, 7 (individual) in-depth semi-structured interviews (45 minutes) were held and recorded with walkers with diabetes. All of the transcripts from these interviews were anonymised and the findings documented in this report refer to participants with a pseudo-name. An additional group interview was conducted with 6 walkers who preferred to be interviewed as a group. This interview had a duration of one hour but was not recorded due to the logistics of the chosen venue. However, extensive notes were made as a field diary entry and each participant was assigned a pseudo-name for reporting.

Finally, data obtained from St Austell Health Care was processed to demonstrate the changes a sample of 27 walkers (23 with Type 2 diabetes and four pre-diabetics) have produced relating to their blood-sugar levels, BMI and diabetes related medication. Unit prices, as paid by the National Health Service (NHS), for the medication recorded were used to calculate the economic implications of any changes. It should be noted that the sample of 27 individuals was determined by the availability of anonymised data.

# 4.0: Findings

The qualitative evaluation over 12 weeks formed in-depth interactions with 24 walking group members in total. The frequency of go-along conversations and whether the participant took part in an individual interview or group interview can be seen in *Table 1.*

|  |  |  |  |
| --- | --- | --- | --- |
| **Age Bracket / Sex** | **Number of go-along conversations** | **Individual interview** | **Group interview** |
| 75+ / F | 6 | Yes | No |
| 75+ / M | 4 | Yes | No |
| 75+ / M | 4 | No | No |
| 75+ / M | 4 | No | No |
| 75+ / M | 4 | No | No |
| 66-75 / F | 4 | No | Yes |
| 66-75 / M | 3 | No | Yes |
| 66-75 / F | 4 | No | Yes |
| 66-75 / F | 2 | No | Yes |
| 66-75 / M | 1 | No | Yes |
| 66-75 / F | 2 | No | Yes |
| 66-75 / M | 2 | Yes | No |
| 66-75 / M | 3 | Yes | No |
| 66-75 / M | 3 | No | No |
| 56-65 / F | 2 | No | No |
| 56-65 / F | 2 | No | No |
| 56-65 / M | 2 | No | No |
| 56-65 / M | 2 | No | No |
| 56-65 / F | 2 | Yes | No |
| 56-65 / F | 1 | Yes | No |
| 46-55 / F | 2 | No | No |
| 36-45/ M | 2 | Yes | No |
| 26-35/ F | 1 | No | No |
| 18-26/ F | 2 | No | No |

*Table 1. Participant Interactions*

*Table 1.* does not include participant pseudo-names. This is to protect the confidentiality agreement signed with the participant (in small samples it may be possible to identify an individual by their pseudo-name).

# 4.1: Disruption relating to taking part in the group and changes to lifestyle and management of diabetes

All types of medication, even taking a single tablet weekly, brings a form of disruption to an individual’s daily life3. In this sense the term disruption refers to a change to an individual’s weekly routine and can manifest to be negative or positive depending on a complex set of influences. Hence, the prescription of a weekly walk at a specific location can potentially bring with it a variety of challenges for an individual to maintain such a prescription. Negative disruptions could potentially include tensions with an individual’s employment situation and or other roles and responsibilities. On the whole this did not apply to the Eden Project Diabetes Walking Group. The majority of participants were retired or not in employment. Those who had domestic responsibilities were able to bring their family members and or friends with them. This certainly aided in reducing such tensions.

The changes of lifestyle individuals reported were focussed on their diabetes. A positive culture around sharing ‘diabetes-friendly’ recipes and speaking about other forms of exercise which helped individuals (these included swimming, water aerobics and weights sessions) was evident during all weeks. Events such as food testing at the end of a walk and meetings, including the Social Prescription Facilitator, Eden Project Social Prescription Co-ordinator, walk leaders and walkers, helped consolidate this culture and generate new ideas to engage walkers with dealing with diabetes beyond the group. Once again positive disruptions were experienced by the participants as they incorporated the walks into their weekly routines. A key support mechanism to this positivity was the proactive action taken by the Social Prescription Facilitator, Walking Group Co-ordinator and walk leaders to engage participants with such activities, and discussions. The wider network of health and wellbeing services participants were channelled towards by St Austell Health Care, such as nutrition and diet sessions and other physical activity sessions (including other local walks), engaged participants further in ways they could pursue a healthier lifestyle.

Overall, a spectrum of lifestyle transitions were apparent in the group. Many participants viewed the group itself as a radical change as they had previously not engaged with any physical activity before. There was an acute awareness that physical activity would be beneficial for their Type 2 diabetes (independent of the walking group) but the social prescription was in many cases documented as a key step. The social prescription gave these participants a space and group to carry out physical activity in, in a way rendering the prospect of physical activity a more tangible action. The response from an interview participant below eludes to the difference receiving such a prescription made.

**Researcher: “**Sure. And how was it that you got involved with the group and made aware of it?”

**Vernon: “**When I was first diagnosed I joined a diabetic group in mid Cornwall and it was a group of people much older than me and they sat down and discussed their latest ailments and whether they’d had a leg amputated or something and it was awful, so I did nothing. I was prescribed medication, so I took the medication. They also [asked me to] take more exercise, eat five portions of fruit and veg a day and that was [something] they didn’t follow up, that was my problem, and eventually a new diabetic nurse came in and said, “Look, we’ve got this group and we know…you are told to do more exercise, we are calling [the group] Social Prescribing, would you like to do it?” and it fulfilled a prescription that I was given … I didn’t have to go and make my own tablets but I had to go and make my own food decisions and walk. This brought it [exercise] on me and I think that is brilliant.”

The quote above highlights another core action which enabled participants to become active members of the group. The ‘nurse’ Vernon mentioned in the quote referred to the Social Prescription Facilitator. The enthusiasm shown for the group as well as the encouragement individuals received from the Social Prescription Facilitator was a strong theme throughout this evaluation. Ultimately the group led to varied levels of change for individuals. While the interview extract above was concerned with the group forming a major step for Vernon some individuals made changes at a larger scale. Such participants were able to completely transform their approach to eating and the hobbies they pursued. One such case is shown below.

**Researcher**: “But if we go back to when you started, how did you hear about it? You said you were newly diagnosed.”

**Tina**: “I actually went into the doctor’s surgery for a blood test and on the screen in the doctor’s surgery it suddenly flashed up about a diabetic walk at Eden and there was a [scrolling] telephone number there and [but] it was gone again. So after my appointment, I sat back in the waiting room, waiting on the rolling programme for the advert to come up so I could get the number, which was [the Social Prescription Facilitator]’s number. Best contact I ever made.”

**Researcher**: “Brilliant.”

**Tina**: “Yes. Turned up first of all on the wrong day. How I got that in my head, I don’t know. I was convinced it was a Monday.”

**Researcher**: “Oh no.”

**Tina:** “But anyway, then turned up on the right day, so took it from there really. So sort of self-put myself on that bit but then the support from [the Social Prescription Facilitator] and the social prescribing team was brilliant, I’ve really felt that I’ve had like a friend on board. It just gives you that confidence… yes, someone that’s looking out for you and actually cares about your diabetes, because doctors, with the best will in the world, they’ve got limited time, someone who goes in there who needs medication, they can do that, but they haven’t really got time to alter your lifestyle. Now, when I went and was diagnosed, I was off the tablets. I made a very conscious decision at that moment that there was no way that I was going to go on what people class as diabetic tablets. I knew that it was a lifestyle change that was needed. It was the lifestyle that got me into it and a lifestyle was going to get me back out of it. So never ever went on medication. I decided right from the start that I was going to take charge of it, thus the walking. Joined lots of different walks, started doing the Over 55’s short circuit training, went to the healthy eating courses. Everything. Anything that came along that I thought yes this is going to help, I was on it. Bought books off the internet, Michael Mosley is a favourite and I’ve done the 8-week blood sugar diet on several occasions. My thing is because I’ve actually taken myself back out of a diabetic range and back to a normal range I have to stop myself becoming complacent, because if I become complacent I can slide back into it again.”

The interview extract shows how the social prescription was again a key point of change but instigated a wider impact on the individual’s lifestyle choices. In this instance the group has become a major part of the participant’s identity; forming the basis for the majority of their daily actions. Both the cases used as exemplars show a positive change made by individuals as the group has clearly become an activity they enjoy and have experienced benefits from. These benefits can be construed to be a result of all of the actions they have taken. However, it can be seen that becoming a member of the group enabled individuals to make these important changes. It would be an extremely reductionist approach to assign precedence to a particular action in terms of the benefits they have brought to an individual. Hence, the actions operate as a system of change.

**4.2: Changes to status of Type 2 diabetes**

The evaluation revealed a range of changes relating to the status of Type 2 diabetes individuals possessed. This is not surprising given that the lifestyle changes made by the individuals varied. Essentially, the walking sessions were only part of a wider set of actions individuals could take to improve the status of their diabetes. Yet, individuals frequently mentioned reductions in their blood sugar level measurements (HBA1c measure), BMI and the reduced levels of diabetes-related drugs (including drugs relating to managing weight and cholesterol) they were prescribed. In some members these changes form a sense of achievement and link closely to their commitment to the walks (this will be further discussed in *Section 4.3.*). The quote below highlights such case:

**Ray:** “…because the fallacy has always been that doctors and medical professionals have said, “No, you’ve got it, you’ve got it. Next rise for you is some insulin.” Which is what… that was my head up, because they said to me, “Insulin,” and I said, “On your bike.” Lost two stone, didn’t need insulin. I’m now only one point into diabetic.”

**Researcher:** And has that changed the medication you take as well?

**Ray**: “Oh, drastically. I’ve gone from eight tablets a day down to two.”

**Researcher:** Wow!

**Ray**: All I have now is Metformin. One tablet, twice a day.

As the quote above suggests the individuals that experience such changes are enthused to continue with actions to improve their diabetic status. They have been able to make changes that are measurable and acknowledged by the healthcare practitioners they interact with. Hence, forming tangible goals for the individuals which act as an added motivation. Additionally, the medication reductions made can be considered as an economic saving for the healthcare system. The unit price of Metformin (500mg tablets – as was the case above), commonly used for Type 2 diabetes patients, is 0.90p per 28 tablets (this is the rate as paid by the National Health Service4). The individual above went from taking 2920 tablets a year (8 per day) to 730 (2 per day). Using the unit prices as a guide this would equate to a £70.39 cost reduction relating to Ray’s medication. This is only one case and further reductions could be possible if Ray’s status of diabetes continued to improve.

Medication reductions were observed in 5 of the 27 random participants St Austell Health Care provided data for. The other 22 members retained their original medication amounts with no cases of increased medication documented. Using the same approach as above the potential cost savings from the reduced medication levels are as follows:

**Case 1.** Reduction of 500mg Metformin tablet by 1 tablet a day. Yearly cost saving to NHS using NHS indicative price (£0.90 per 28 tablets)4 = £11.73

**Case 2.** Reduction of 500mg Metformin tablet by 2 tablet a day. Yearly cost saving to NHS using NHS indicative price (£0.90 per 28 tablets)4 = £23.46

**Case 3.** Reduction of 45mg Pioglitazone by 1 tablet a day. Yearly cost saving to NHS using NHS indicative price (£39.55 per 28 tablets)4 = £515.56

**Case 4.** Reduction of 10mg Ezetimibe (a cholesterol reducing drug) by 1 tablet. Yearly cost saving to NHS using NHS indicative price (£26.31 per 28 tablets)4 = £342.97

**Case 5.** Reduction of 2 units of insulin. Yearly cost saving to NHS using NHS indicative price (£7.48 per 100 units – as 1 vial)4 = £54.60

In *Case 4.* and *Case 5.* the reductions meant that the patients were completely free of diabetes-related medication. Relief and self-achievement related to ‘becoming medication-free’ was a theme participants regularly spoke about during the go-along conversations and interviews. This certainly can be regarded as a positive change for an individual’s self-perceived wellbeing beyond their diabetes. Overall, the 5 cases above document savings influenced by medication reduction but the patients with constant levels of medication also bring economic savings to the NHS. Type 2 diabetes can deteriorate rapidly bringing with it a constant need for increased medication levels. This was not the case for any of the individuals, therefore, future costs associated with increased medication are not applicable to this sample.

Further population characteristics demonstrated by the sample of 27 included:

* 69% of the sample had a reduction in their HBA1c measures.
* A further 3.8% maintained their HBA1c levels. Hence, 72.8% of the sample maintained a stable level or had a reduction in their HBA1c measures.
* 84.6% of the sample reduced their BMI.
* A further 3.8% maintained their BMI. Hence, 88.4% of the sample maintained a stable level or had a reduction in their BMI.

The changes include individuals that have participated in the group’s walks across varying time periods. Hence, it must be appreciated that changes occur at different rates for different individuals. An individual’s original status of diabetes adds to the complexity of unravelling a lateral indicator and timeframe for positive change but the high levels of positive change demonstrated by the sample cannot be dismissed.

Additionally, the qualitative responses from the participants frequently mentioned that positive changes were interrupted if they were not able to attend the walks for a period. Such interruptions usually occurred due to bouts of ill-health relating to other conditions. In many participants this resulted in a period where individuals were not able to undertake other actions that were part of their system of change. Hence, acting as another indicator that the group’s benefits operate best when incorporated with other positive lifestyle changes. The field diary below is indicative of such a period of time for an individual.

**25th July 2018**

A participant (Jenny) was on the same bus as me as I went from the Eden Project to the train station (St Austell). They mentioned that it was only their second week back as they sprained their ankle around 6 weeks ago. They mentioned that they were looking forward to getting ‘back into it’ as they had out on the weight they had previously lost (over 8 months of walking). I could sense the frustration in Jenny’s voice as she was looking forward to a course she was going to start in September, and she just wanted to get back in to being active again. She looked out of the bus window (reflectively) and pointed out Gribbin Head on the coast saying, “I really want to walk there again”.

This highlights how important it is to consider an individual’s health holistically and at times a patient’s participation with such a group may not be possible. This may be due to personal circumstances (for example, employment, economic situation and changes in transport options). These are key periods for individuals as the positive changes made could potentially be reversed, as in the case above.

# 4.3: Commitment to the group and awareness of social prescription

As discussed in *Section 4.1.* the experience of positive change acts as a key motivation for individuals to continue their participation with the group. The individuals arrive at the group with a shared characteristic in terms of their diabetes but for some participants the identity they form as part of the group goes beyond just being a diabetic patient. *Section 4.5* will cover the impact of social relationships in more detail as these relationships are a strong mechanism for individuals attending the group weekly. In addition to social relationships the logistic set-up of the group can act as a motivation for commitment. Participants can choose to progress to a faster speed of walking and or become a walk leader. Becoming a walk leader has meant such individuals feel more responsibility and their presence in the group enables others to experience the positive results they experienced themselves. The extract below captures this added responsibility.

**Researcher: “**And also, just broadly about the group as well. I mean, what aspects of the group do you find most enjoyable?”

**Vernon**: “Well I think when I first started I went out with a group and I was asked would I be a leader and I said, “What’s it involve?” and they said, “a one-day course,” so I said, “Yes I’ll do that”. I think the feeling I got from that was if I was just a member of a group I could say, “Oh I won’t turn up today”. As a leader… you had to turn up, so I got enjoyment out of the fact that I was giving something back. I was getting something but I was giving back. And without that it would have been difficult perhaps to continue. It’s an issue inside your head.”

**Researcher:** “Sure. And were there any other motivations to do that walk leading course for a day?”

**Vernon**: “No. I enjoy doing anything that’s group wise and I’m probably a bit of a natural leader. I felt this works for me. If I hadn’t been asked, I’d still have been walking I think but it would be a different reason inside my head. I mean, the real reason is for health, obviously, but if I can assist other people improve their health, even if it doesn’t give mine the big kick that I need, that’s fine, I get the kick out of helping other people, that does something for me as much as the physical side.”

The interview extract above shows how people that are used to responsibility in other parts of their life can be given the opportunity to take on responsibilities within the walking group. Hence, individuals that are motivated by responsibility can consolidate their participation in this way.

Other medical conditions can act as a detrimental mechanism to a participant’s commitment to the group. Unfortunately, these interruptions to the walking sessions are not always under the control of the participants and the frustration felt through this can act as a further disadvantage to someone’s wellbeing5.Conversely, cases do occur when other medical conditions can act as a positive feature relating to an individual maintaining their commitment. This is partly influenced by the safe walking environment the Eden Project provides and the safe network of people provided by those involved in organising the walks (particularly the volunteers). A particular walker, Helen, has learning difficulties and the carer she attends the walks with on many occasions referred to Helen recognising the yellow vests of the walk leaders. Hence, feeling safe and wanting to come back to the group to see ‘familiar faces’.

The environment at Eden allows for walkers to participate in the walks without causing anxiety for their friends and family. The case documented in the short field diary entry below refers to an individual dealing with epilepsy as well as diabetes.

**25th July**

After his interview Rupert mentioned how he generally likes walking but Eden has lots of people in it and the walk leaders are there to help. This puts his wife’s mind at ease as he has had extremely bad episodes of epilepsy before. I noticed he wears a wrist band (he later showed his wristband to me) to make others aware that he does have epilepsy and at Eden there would be more people to help in in an emergency – compared to say if he was walking a stretch of the coast path.

Additionally, Rupert resonated the views of many participants when he referred to social prescription in his interview. All of the participants in this evaluation were not aware of social prescription as an added treatment for diabetes before they started walking at the Eden Project. However, since joining the group they feel that more people should be made aware of social prescribing and given the opportunity to take part in such activities. The quote from Rupert’s interview captures this perspective.

**Researcher:** “I guess. I mean, that’s all that I have to ask but do you have any questions for me to answer?”

**Rupert:** “I’m quite pleased to talk to someone about it really because someone needs to know that social prescribing, as I believe you call it now, is definitely a worthwhile thing, definitely. Almost, I would put [the Social Prescription Facilitator] at level with the doctors. Even in this situation, I would put her before the doctors because she’s done me more good than any doctor in there. The doctors just get me so frustrated and angry at times, and the blood pressure goes up so when you go in there, they say, “Your blood pressure is high.” Well, is it any wonder? I’ve been sitting in the surgery for about two hours and it took me five days to get an appointment, so is it any wonder I’ve got high blood pressure? But then you’ve got a total different attitude, very worthwhile.”

Rupert’s quote also demonstrates how medicalising issues and treating conditions in siloes can lead to frustration and loss of confidence in the healthcare system. Groups such as the Eden Project Diabetes Walking Group not only enables patients to be treated holistically but can improve their relationship and rapport with the healthcare system.

# 4.4: Changes to experiences and perception of the group through participation

An interesting case that the evaluation was able to document was the experiences of a new starter. Their case was further nuanced by having Type 1 diabetes and this provided a unique insight into what they found challenging and rewarding about the group. The participant stated that they wanted to try the group as meeting new people and having discussions on everyday life with people from different backgrounds would give them a fresh perspective. In turn channelling new ideas and or experiences to try. As the field diary entry below suggests the individual had recently stopped working and was seeking opportunities that were more fulfilling beyond exclusively providing economic benefit.

**11th July 2018**

A new member (Graham) joined and participated in the fast group today. It was intriguing hearing his different perspective and raised my awareness of the daily challenges of Type 1 diabetes - mainly balancing insulin levels depending on what you eat and when you eat it throughout the day and how sometimes it’s a guessing game. It’s definitely something I would feel on edge about but Graham seemed extremely calm and worked through how he approaches balancing his insulin levels methodically (surprising that processed foods are actually in this case better as he knows exactly the amount of insulin he would need according to the marked sugar levels). Interestingly, Graham stopped working about a month ago and is looking for a new venture (ideas and experiences) and was keen to meet and talk to people, including myself. He showed a lot of interest in the research I have previously carried out.

Overall, this highlights how presenting individuals with opportunities to interact socially and carry out physical activity in a social space goes beyond their medical condition. In this case Graham was presented with an opportunity to seek new perspectives and interact with more people from his local community. This dynamic is a well-documented aspect of an individual’s improved wellbeing (both in medical psychology and sociological studies).2 Over time the ideas and experiences shared can develop and lead to actions outside of the group. These actions influence an individual’s roles and responsibilities in their local community, with their family and friends and work / recreational life. Graham was at the beginning of this process and the group provided him with a platform to seek the changes mentioned above.

A key change demonstrated by the participants that had been part of the group since its inception was a sense of belonging to the group. This sense of belonging makes the group a significant part of an individual’s life outside of the group. Their social interactions outside in their daily life contain frequent references to ‘stories’ from the group and many see such interactions as an opportunity to promote the group.

**Researcher**: Do you talk about the walks outside of the walks? To family and friends?

**Jeremy**: I do yes, oh yes. The way I got into it was Walking for Health. So basically you’ve got to have some sort of a disability or some sort of health problem in order to qualify for it. And obviously a lot of the people that I know [outside of the group] are going [saying], “Oh, in that case I can’t go,” and that sort of stuff, which is a pity. I think everybody would benefit from just getting out and about even if you’ve got nothing wrong with you. I know it’s Walking for Health but I mean… you can be a healthy person but it’s still useful to walk. So I don’t know; can you come if you haven’t actually got a physical complaint? Are you aware?

Jeremy’s response shows a desire to get others involved and reflects a societal view, which is significantly influenced by culture (as documented by academic literature in geographies of health6) i.e. sharing opportunities such as this group would provide positive outcomes for wellbeing generally.

Besides the desire to actively promote the walking group participants express strong social bonds, which is a core principal that guides the benefits and positive dynamics within the group (see *Section 4.5.*). However, these relationships can produce challenges. Tensions may occur, but are usually brief, when individuals elect into a group where they struggle with the pace of walking. The reason behind their self-election into a faster group is usually led by a participant wanting to walk with another member they have developed strong social bonds with. These tensions are best managed when walk leaders become aware of this dynamic. In such cases the walk leaders have intervened and walked around with the struggling walkers. Tensions are usually diffused through engaging in conversations and stories relating to both the walk leaders’ and participants’ friends and families, and interesting experiences they have had either in the near past and distant past.

Older participants chose to talk about the distant past more frequently with stories shared around trips abroad and or during their time in employment (many of the walkers have links with the British Army, Navy or Royal Airforce). These stories act as mechanisms of change during a walker’s time with the group. Individuals tend to cluster in groups with similar interests or to find out more about a particular story another walker was telling during a previous walk. Such individuals also tend to seek the same clusters of people to continue telling their own specific stories.

# 4.5: The influence of social relationships

As *Section 4.4* outlines stories and social relationships form a significant part of the participants’ commitment to the group. This is particularly important in a rural location where isolation, especially for the elderly, is a common issue. Many of the older members in the group, i.e. 75+, did cluster together to retell their stories and share memories. One pertinent case was of Ivan’s; he me two other walkers when he started with the group (just over a year ago). The field diary entry below captures a conversation I was part of with the three walkers mentioned above (including Ivan).

**13th June 2018**

Ivan was one of the first people that arrived at the café this morning. We were able to have a conversation about his time with the group. He mentioned that he worked outside of St Austell and did not make any friends in the area. His wife passed away around 5 years ago and since that period he suffered bouts of ‘feeling low’ as he called it. The group has given him a place to come to and talk to people with similar interests. He texts another walker (Alvin) regarding football matches that are on terrestrial TV, and they would exchange moments of humour as they supported rival teams. His relationship with Tony is less about football but they talk about the flowers they have in their garden and joke about how they wished they looked like the ones at Eden (they are both particularly fond of sweet peas).

The relationship highlighted in the extract above depicts how otherwise lonely individuals can look forward to sharing stories each week. Such social bonds are extremely commonplace between other individuals too. However, it should not be misconstrued that age acts as a determinant to the clusters of social relationships that form. Many of the participants stated that they also enjoyed the opportunity to speak to people from different backgrounds and generations. Other common conversations related to sharing stories and updating other walkers on the current situation of specific friends and family members. Interestingly these social bonds go beyond the group with walkers participating in other walking groups they have organised themselves. In fact three other walks have started in the local area as a result of links formed at the Eden Project. These walks provide an additional moment in the week for people who perceive the walking group as a positive disruption to look forward to. The interview extract below outlines this positive disruption:

**Jane**: “…[referring to group] I think the kids used to think I could take time off because it was their birthday, and I said, ‘No, even my birthday, I have to go to work.’ It’s the same thing [here]. So, I always keep these days free, and Pine Lodge.”

**Researcher**: Right. I’ll be at the Pine Lodge one this Friday, I think, myself.

**Jane**: Yes. And also, Treverbyn I have started. It’s just nice to see everyone and walk more often when I can.

# 4.6: The influence of the Eden Project as a location

The Eden Project produced moments of interaction with wildlife and plants throughout this 12 week evaluation. Individuals expressed varying levels of intrigue. However, the constant changing displays and plants at the Eden Project provided a common topic of conversation. These interactions led to moments of humour at times. Some participants would share jokes relating to plants, for example, the tropical trees being in their gardens at home and or not being able to compete with the size of the flowers in bloom. Other participants expressed a ‘less involved’ engagement with the plants but still mentioned an appreciation and interest in their conversations.

**Researcher**: “And what have been some of the things that you’ve found interesting in conversations?”

**Graham**: “Well mainly, being Eden, it’s a bit about the botany and the different plants, and the way that the project’s been put together. That sort of thing has been quite a bit of it because, with the location, it’s difficult not to comment on things that you’re seeing around you. Or lots of other things really, I suppose, whatever the topic du jour is. I feel like I can offer an opinion on almost anything or a considered response. It might not be accurate, especially about the plants, but it will be a considered response.”

The extract above shows that even if an individual does not possess a deep-seated interest in botany the changing nature of the displays at Eden can become a topic of conversation. These conversations produce narratives that are in the moment and are another mechanism for walkers to consolidate their social bonds.

Unfortunately, the Eden Project suffers from a common challenge for Cornwall as a region. Most of the participants that attend the walks use their own personal transport. Public transport services are infrequent and expensive. Hence, a local governance issue plays out as barrier relating to this group. This barrier is to some extent mitigated by the social bonds that have been built; some participants car share and offer others transport options when the need arises.

Reducing people’s exposure to road traffic pollution is a current national (UK) debate the Eden Project fits into as a location for walking. The ease of access around its paths and being away from traffic were themes discussed during 10 of the 12 evaluation sessions. Consequently forming a key perspective amongst the walkers relating to the benefits of the Eden Project as a location.

# 4.7: Volunteer perspectives – the walk leaders

The volunteers are a key part of the logistical operation of the walking group. In addition to their facilitation roles the volunteers are a strong part of the social relationships that have developed. During each of the 12 evaluation sessions the volunteers engaged in conversations and ‘story-telling’ very much like the walkers themselves. In fact, as previously documented, some of the volunteer walk leaders started the group through the social prescription scheme. This has changed the way these individuals interact with the group on a logistical level as they feel more responsible but their social relationships remain unchanged. However, the amount of time they were able to spend with specific individuals was reduced somewhat. The field diary entry below is from the focus group held with the walk leaders and captures this theme.

**6th June**

When asked what had changed for those that began as walkers and chose to train as walk leaders (this was 3 of the 8 walk leaders that attended) two of them agreed that they just spent less time with members in the group. However, Phil went on to say that, that did not matter as they were still friends and could catch up after the walk with a cup of tea or head back into town together. The whole group agreed that they were motivated by helping people. Felix told a harrowing story of how he helped a neighbour get to the hospital because they were drinking heavily and had multiple health conditions anyway. All Felix wanted to do was help him and said it was amazing to see the recovery he had made – it was this ethos that inspired Felix to continue helping the group.

The extract above additionally outlines how the volunteers experience a sense of achievement from helping others. This sense of self-achievement and confidence building dynamic provides the volunteers with a positive outlook on being part of the group, and how they fit into their wider community. At times their sense of belonging and achievement is extended to a wider community than just the walking group.

Challenges the volunteers mentioned focussed on running the walking routes during busy periods but the number of walk leaders available helps them share responsibilities. This is seen as a crucial aspect of ensuring the group’s safety and comfort during a busy period. Another interesting challenge that the evaluation highlighted resulted from the evaluation’s timing. The Data Act had been changed which led to a change in the information walk leaders were permitted to gain from an individual’s enrolment form. The main concern was around other medical conditions walkers may have. Hence, if a walk leader was not aware of this condition they may not be able to fully cater for a specific participant’s needs. This finding highlights the need to better communicate changes in policy even in extremely specific settings. This is not a criticism targeted uniquely at the Eden Project as the changes to the UK’s Data Act caused similar confusion in many sectors and organisations. Ultimately, a need for better bespoke governance surrounding such issues is evident.

# 5.0: Conclusions

The key messages of this study focus around the social relationships built by the walkers and how the group can enable a system of positive changes. Positive changes are evident when individuals are able to make sustainable lifestyle changes. This is in no way a ground-breaking finding as lifestyle choices greatly influence a person’s wellbeing and capacity to better manage their health and wellbeing7. However, *Section 4.1.* and *Section 4.2* clearly demonstrate how the walking group can be used to instigate such positive changes and provide a motivation to maintain them. The social relationships made and desire to help others are key mechanisms for such changes to occur. Further, the quantitative reductions in BMI measurements, blood-sugar level measurements and reduced medication are strong indicators of how successful holistic approaches to managing diabetes are. These positive changes further resonate with the sense of achievement expressed by the volunteers. The volunteers are a fundamental component to the group’s success; harbouring a comfortable and enriching environment for the walkers. Humour is a large part of this enriching environment and particularly important for new starters that have to overcome nerves and a lack of confidence before they fully commit to the group. The volunteers are part of team (including the Social Prescription Facilitator, Group Co-ordinator and Lead Walk Leader) that provide a space for the walking group to take place in. The activity becomes more tangible to individuals as there is a time and place, and other individuals they can associate to. Providing a space and time for an activity is an important part of facilitation and increases the feasibility of a lifestyle change. This dynamic has been well-documented in other academic studies, particularly relating to changes relating to weight loss8.

The medication reductions documented by the individuals during go-along conversations and interviews are consistent with the reductions (and stable levels) shown by the sample of 27 random records (provided by St Austell Health Care). Therefore the economic benefits estimated in *Section 4.2.* highlight the potential of such groups in reducing not only time constraints on healthcare systems but their expenditure relating to diabetic patients. Constant levels of medication provide an economic saving for the NHS too; costs associated with increased medication are avoided.

Finally, the findings presented in this evaluation are bound by a qualitative approach. Essentially meaning they are constructed by the researcher and the participants, and volunteers involved. Such evidence is currently referred to as a statistically weak indicator in health research. However, in this circumstance a qualitative approach has provided this study with the ability to document rich insights. Additionally, these insights emerged from a complex network of influences. The statistical generalisability of these findings are essentially irrelevant as the findings form a set of principles developed by the group. The core principles which are commonly shared can provide valuable understandings for similar programmes. Additionally the place-based and individualised (specific) principles demonstrate how this specific group has uniquely developed. In turn, meeting the needs of its participants as well as highlighting areas for improvement.

The core principles and specific principles that emerged from this study are listed below:

# 6.0: Core Principles:

* The social prescription activity must fit into a suite of lifestyle changes (as a positive system) to produce beneficial results relating to an individual’s status of diabetes.
* Access to the group, i.e. public transport, is an important consideration.
* Access to services can be facilitated more effectively through a dynamic Social Prescription Facilitator and the Social Prescription Co-ordinator (and other facilitative roles) that can actively enthuse participants.
* Measurable and experienced benefits (i.e. participants are able to document how their diabetic status has improved) consolidate an individual’s commitment and can improve an individual’s rapport with the healthcare services.
* The building of social relationships between participants compliment the commitment shown by an individual and the positive lifestyle changes they make.
* A group where the volunteers are part of these social relationships further consolidates commitment and sustainable lifestyle changes.
* The group can act as a resource of knowledge for individuals relating to their diabetes management but some individuals may choose to interact solely on a social level during the groups. Providing an environment that accommodates for these differences is extremely important.
* Governance around logistical and or policy changes need to be communicated specifically in relation to the group.
* Social relationships are fundamental to all of the principles and benefits of the group. An environment where social relationships can thrive will impact all of the above positively.

# 6.1: Specific Principles

* Although providing opportunities for social interaction is a core principle unique cultures can develop around these opportunities. In this case the interactions formed around local stories and connections to the British Army, Navy and Royal Airforce.
* The close proximity of the participants to the Eden Project provides an opportunity to socialise outside of the group.
* The location of the Eden Project, away from road traffic, enables road hazard-free walking as well as reduced exposures to air pollution.
* The individuals at the walking group possess a set of medical conditions, asides from diabetes, unique to the group. The benefits of the group to these other conditions manifest in a bespoke manner but provide unique challenges to participation and commitment.
* The Eden Project’s changing displays, especially the plants, provide an additional topic of conversation and instigates intrigue. In turn this acts as a positive mechanism to commitment.
* Social relationships play out uniquely depending on the individuals involved, how the Eden Project’s displays have changed (i.e. place-based changes) and external influences (past and present) individuals construct their ideas, stories and general conversations with.

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