Local Government Association

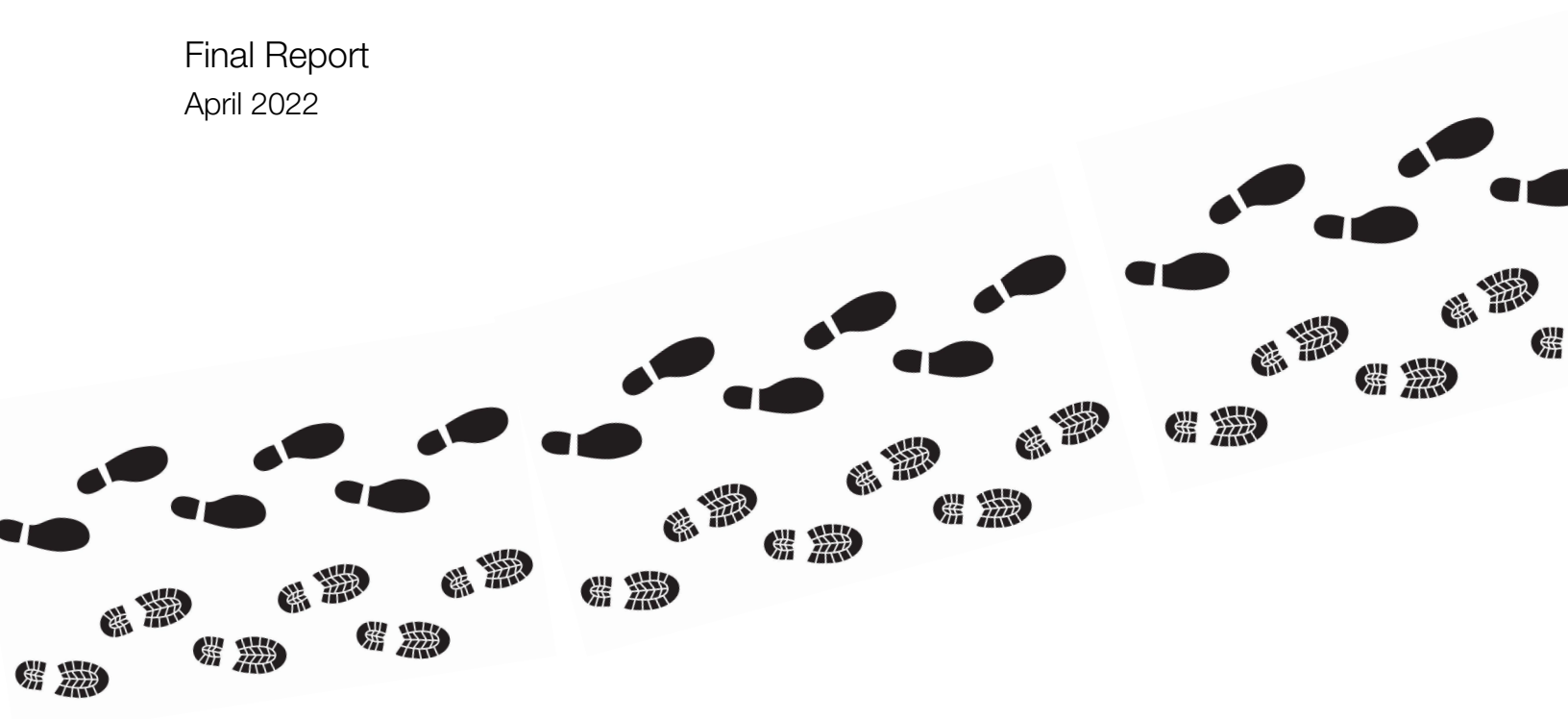# WV Gets Active

Using Behavioural Science To Increase Inactive Wolverhampton Residents' Physical Activity Levels.

Final Report
April 2022

the behaviouralist

CITY OF WOLVERHAMPTON COUNCIL

Active Black Country

Acknowledgements

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1. Executive Summary

In response to the high level of physical inactivity in Wolverhampton, the WV Gets Active programme was developed with the goal of increasing physical activity levels among low socioeconomic and inactive residents. This programme was delivered during the COVID-19 pandemic; as a result the programme had to cater for social distancing measures and travel restrictions.

Drawing from two behaviour change models (the COM-B model and the B=MAP model), a literature review, and stakeholder interviews, several drivers and barriers to exercising were identified and used to inform the design of the programme. A 6-week walking programme was developed and delivered virtually via the MoveSpring app to support inactive participants in building a walking exercise habit. Based on behavioural science concepts such as goal setting, commitment, social comparison, and feedback, the programme was designed to feature daily and weekly step count targets, local Wolverhampton walks and content, motivational messages; performance feedback, a chat function and technical support.

Evaluations using a mixed-method approach were conducted and the programme was found to be effective in encouraging physical activity for individuals who were self-motivated and committed to their fitness goals, but not for inactive participants who did not display such traits.

There are several key takeaways for other councils or from this programme. First, targeted Facebook ads are an effective recruitment strategy. This approach was especially effective in recruiting inactive residents and provides a cost effective route to reach and engage large numbers of participants. This strategy is therefore most relevant for large scale programmes that require extensive reach.

Second, the type of smartphone and fitness tracker participants used is important for engagement and habit formation. In general, participants who had to enter their step count data manually dropped out from the programme quickly as it required additional effort on a daily basis. In contrast, participants who used a fitness tracker to sync with the MoveSpring app displayed higher engagement and performance.

Third, maintaining participants' motivation was the biggest challenge throughout the programme. Reduced motivation and barriers to exercise resulted in high drop out both before the start of the programme and during the 6 week programme. While different behavioural techniques were used in the programme to motivate participants in building a walking habit, additional support and interventions are required to motivate inactive residents, especially those who have long been inactive, to become physically active.

1.1 Background

WV Gets Active, a pilot physical activity programme, was scoped, designed, launched and run between February and October 2021. This project was delivered in partnership between The City of Wolverhampton Council (CWC), Active Black Country (ABC) and The Behaviouralist (TB), and was partly funded by the Local Government Association (LGA) as part of their Behavioural Insights Programme 2020-21.

The Challenge

Wolverhampton has some of the highest levels of physical inactivity in the country (City of Wolverhampton Council, 2019); this was exacerbated during the COVID-19 pandemic, during which inactive people were shown to exercise less (Wider Impacts of COVID-19 on Health monitoring tool, 2021). This project was developed in response to these challenges, with the primary goal of: 'To increase physical activity levels in Wolverhampton through a sustainable behaviour change intervention to at least 30 minutes a week for low socio-economic and inactive residents across the city'.

At the start of the project, a scoping phase enabled the project team to research and better understand the context, map the resources available, and establish what was feasible to deliver. The project was delivered during the COVID-19 pandemic as lockdown was eased. This significantly shaped the scope of the project. For example, the need for the programme being delivered remotely, while ensuring exercise options were local and with low barriers to entry.

The Intervention

After exploring several approaches, the team decided to use an existing fitness app, MoveSpring, to deliver a 6-week walking programme with the goal of supporting inactive participants to start building a walking exercise habit using local resources.

MoveSpring is a fitness app that syncs with smartphones or wearable devices and tracks step counts and physical activity levels. It is highly customisable, enabling the team to design and deliver a programme that featured: daily and weekly step count targets; local Wolverhampton walks and content; motivational messages; performance feedback; a chat function and technical support. The app was also branded with WV Gets Active and partners logos.

The structure and content of WV Gets Active was developed drawing on behavioural change theories (COM-B, B=MAP) as well as previous studies on physical activity. BJ Fogg's B=MAP framework prompted the use of a daily exercise target that incrementally increased over time; with the goal of building a walking habit. The COM-B model informed the decision to focus on local

walking opportunities; this ensured all participants had the Capability and Opportunity to complete exercise with the programme providing the Motivation. The theoretical approach was combined with what was practically feasible to deliver using the app platform and within the project scope and constraints.

Figure 1: The timeline, participant groups, when they were recruited and the version of WV Gets Active they experienced.
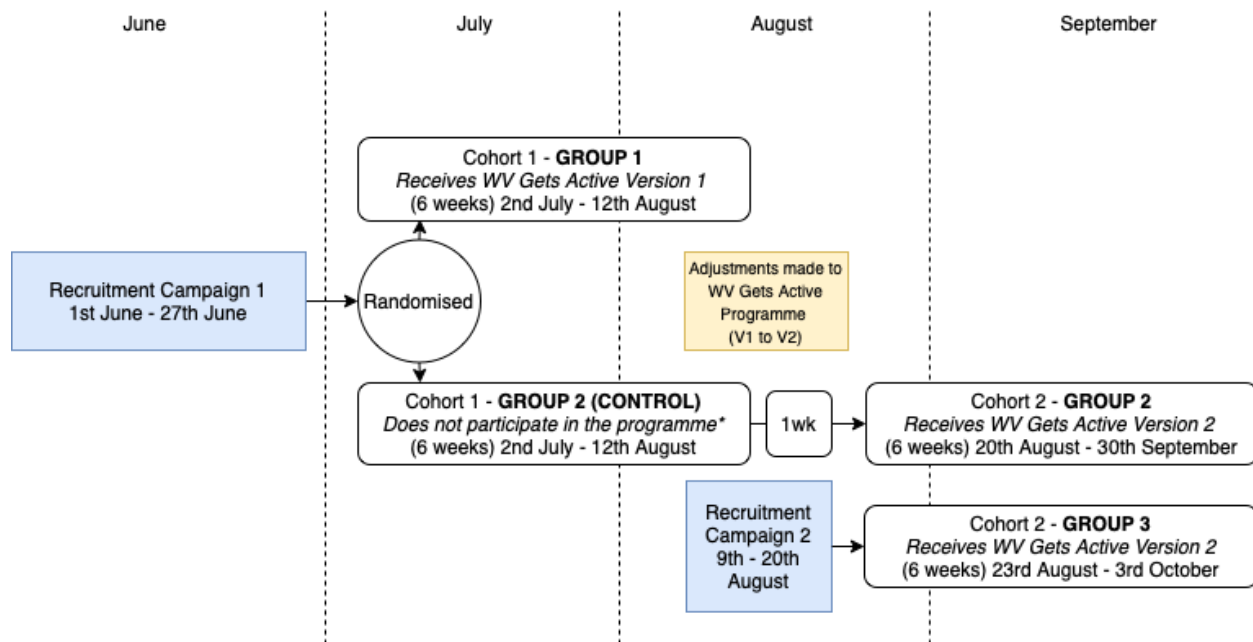
Notes: For Cohort 1 - Group 2 (Control), participants had access to the Movespring app (so that their physical activity data can be tracked) but did not receive any programme content such as the step challenges and messages.

Across the lifetime of the project two recruitment campaigns were run. The first campaign in June 2021 recruited participants who were randomly assigned to either Group 1 or Group 2 (Control). For the remainder of this report, participants in Group 1 and Group 2 (Control) are referred to as Cohort 1. Group 1 started the programme immediately while Group 2 (Control) functioned as a control during this period. For Group 2 (Control), they were asked to download the app, enabling the team to capture their physical activity levels, but were not given access to the programme content. This approach (i.e., the use of a control condition) was adopted to allow for an evaluation of the impact of WV Gets Active using a Randomised Controlled Trial (RCT) design.

Unfortunately, due to high participant dropout the team could not robustly evaluate the impact of the programme using the proposed RCT design. Nevertheless, significant insights and learnings were gained from the programme. This prompted the team to launch a second iteration of the programme (i.e., WV Gets Active Version 2). Before the start of the iterated programme, the team

made adjustments to the recruitment and onboarding process as well as the programme content based on learnings from Cohort 1 participants.

A second recruitment campaign was run in August 2021. Participants were recruited into Group 3. In addition, participants who were previously recruited and assigned to Group 2 (Control) in Cohort 1 were invited to participate in the iterated programme, along with the newly recruited Group 3. For the remainder of this report, participants from these two groups are referred to as Cohort 2. The iterated programme was evaluated using a mixed methods approach.

1.2 Findings

Here we summarise the main project findings and learnings:

1. The recruitment campaigns successfully recruited inactive residents.

Recruitment marketing materials were developed and promoted across several communication channels including: social media, local radio, the community champions network and the carer's bulletin.

Over 500 Wolverhampton residents signed up to register for WV Gets Active across two recruitment campaigns. After screening out participants who were not from Wolverhampton or who reported high levels of exercise 412 participants were invited to participate in the programme.

Targeted Facebook campaigns were especially effective at engaging residents from disadvantaged wards. For both campaigns, over 70% of participants were recruited through this route. The campaigns recruited a heavy skew of female participants (over 85%) with the majority being in the 35-54 year old age bracket (~60%). This is noteworthy as this is a priority group to target for reducing inactivity levels by Sport England and is a focus for campaigns such as This Girl Can.

2. WV Gets Active supported a small number of participants in building a walking habit.

For a small group of previously inactive residents, WV Gets Active supported them to make significant changes and to build a walking habit. This group reached their daily step target and increased their daily step count from 3,000-4,000 to over 7,000-8,000 by the end of the programme. This group is represented in light blue in Graphs 1 and 2 below. Based on qualitative insights, the profile of those who completed the programme appear to be self-motivated participants who mainly engaged with the daily feedback and stuck to their goal of completing the programme.

Graph 1. Cohort 1, Participant Drop Out, Engagement and Target Completion Rates
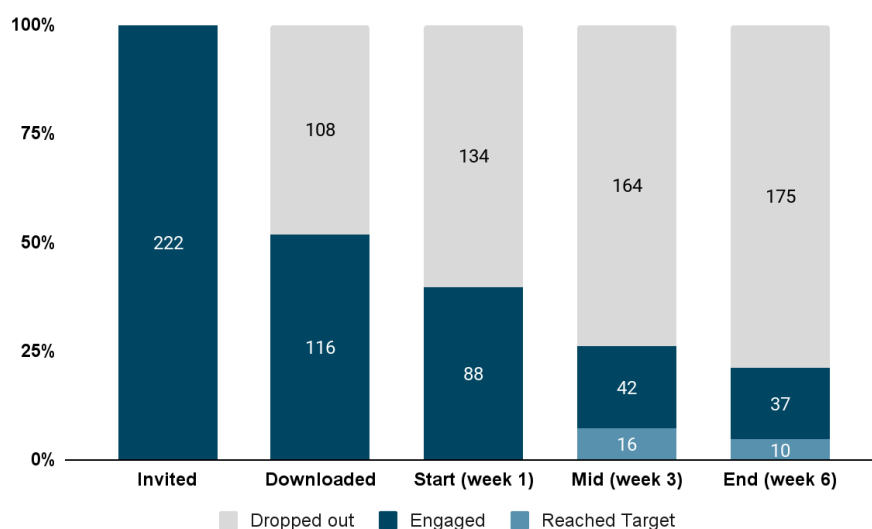
Graph 2. Cohort 2 Participant Drop Out, Engagement and Target Completion Rates
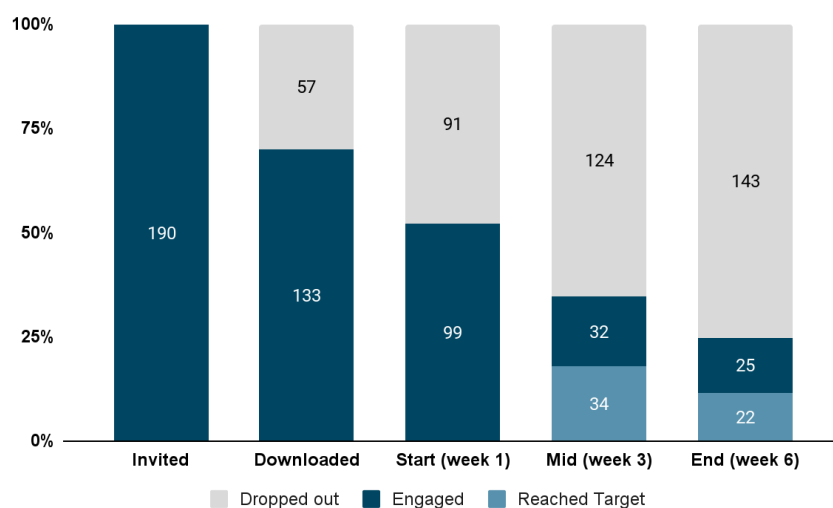
3. The programme experienced high participant drop-out.

The majority of participants dropped out or disengaged before the end of the programme. A total of 78.8% of the participants from cohort 1 (175 out of 222) and 75.2% from cohort 2 (143 out of 190) dropped out before finishing[1].

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[1] The high participant drop-out meant TB could not robustly evaluate the impact of the programme using the proposed Randomised Controlled Trial approach. The study was statistically under-powered. All of the reported results are observations based on the data collected; further research with larger sample sizes would be required to confirm these observations.

The highest drop-out occurred after the sign-up process and before the start of the programme. Qualitative insights drawn from surveys and the chat function suggest there were multiple reasons for drop out. These included the loss of motivation while waiting for the start of the programme, technical barriers in downloading and setting up the app, as well as negative first impressions of the app or the challenge itself. After week 3 of the programme, the reasons for dropping out primarily concern the repetitiveness of the daily task, the lack of a new challenge and the perceived lack of support. When participants dropped out, they tended to disengage entirely from the programme.

4. WV Gets Active V2 was an improvement on WV Gets Active V1.

Following WV Gets Active V1 TB adjusted the delivery of the WV Gets Active V2 programme. Changes included: changing the group structure; providing more personalised feedback at week five; placing more emphasis on commitment devices (the personal contract) at the start of the programme; as well as providing more content.

For the cohort 1 participants (Group 1) who took part in the WV Gets Active V1 programme, the average increase in step count was small, in the region of 1,000 steps daily. This small shift was not sustained in the two weeks after the programme as most participants reverted to previous exercise levels. For participants on WV Gets Active V2 who persisted with the programme, the improvement in step count was larger (+2,000 steps daily) and the change in physical activity levels appears to be more sustained over the 2 weeks after the end of the programme.

For those who completed the programme WV Gets Active V2 was more successful than V1 at increasing exercise levels and building a walking habit. However, it is important to note that the drop-out rate for the iterated programme was slightly higher. Nevertheless, the results suggest that applying behavioural insights (i.e., nudges through push notifications) to improve programme delivery was effective in improving overall outcomes.

5. There were no noticeable differences in outcomes based on where participants lived.

WV Gets Active focused on recruiting participants from wards with high levels of social deprivation, namely Ettingshall, Heath Town, Bushbury South and Low Hill, St Peter's and Bilston East. There were no observed differences in terms of engagement or drop-out between participants who were recruited from these wards and those from other areas. This may, however, be in part due to small sample sizes and further research exploring this would be recommended.

6. The type of smartphone and fitness tracker participants used was important to engage and form habits.

Participants could sync the MoveSpring app to a range of fitness trackers through a smartphone or alternatively enter their step count data manually. The type and whether participants used a fitness tracker was important in terms of engagement, programme completion and step count level.

Those who manually entered their data dropped out quickly. This is unsurprising as the manual entry, despite prompts, required additional effort on a daily basis. In addition, it was observed that certain types of smartphones (e.g., Huawei) prevented participants from taking part in the programme as they were unable to sync with the MoveSpring app.

Conversely, participants who synced using a fitness device (Garmin, Fitbit or Withings) showed higher engagement, fewer dropouts and also a higher level of daily step count. This could be attributed to two things: firstly, fitness devices are often worn on the wrist and so pick up all steps across the day automatically, as opposed to smartphones that need to be carried to pick up step counts. Secondly, owning a fitness device could indicate a higher level of commitment to exercise or more progressed 'stage of change' for participants. Further research to understand the relationship between ownership of fitness devices, motivation and physical activity could be a fruitful future research avenue to explore.

7. Self-reported levels of physical activity were not accurate for low physical activity levels.

The data captured through MoveSpring enabled us to compare participants' step count prior to the start of the programme with their stated levels of exercise (using the Single Item Physical Activity Question). For Cohort 1, those who stated they had exercised for zero days in the previous week had a higher step than those who reported one day of exercise. This is the inverse of what was expected and raises questions about the accuracy of stated levels of exercise, especially for inactive populations and with regards to walking data. Although the validity of this measure has been established for levels of moderate to high exercise, there could be value in further research about the accuracy of stated levels of exercise for inactive populations. It is important to emphasise that this programme had a small sample size and further research would be needed to draw conclusions.

1.3 Implications

A number of implications were identified through the learnings and challenges provided by the programme. These implications would be suitable for local authorities or organisations who wish to consider an app-based physical activity behaviour change intervention.

1. Recruiting inactive residents

Reaching and engaging inactive residents can be challenging. When developing recruitment strategies, future programmes can build upon our finding that targeted Facebook campaigns are especially effective at recruiting inactive residents. This approach provides a cost effective route to reach and engage large numbers of participants and is therefore most relevant for large scale programmes that require extensive reach.

In addition, future programmes should consider other supplementary channels for recruitment. Specifically, recruiting in collaboration with community partners and using social prescribing methods are potential approaches to explore. The benefits of recruiting using these approaches could be twofold. Firstly, it could enable councils to reach a broader demographic and to target under-represented groups. By partnering with faith groups or community-based groups that have strong ties with the community, future programmes can leverage existing social bonds or connections, thus increasing the reach of the programme. Secondly, recruiting via these routes could increase the level of commitment to the programme, helping to reduce both drop-out rates and the intention-action gap. Social prescribing methods could also increase the commitment or engagement via the 'messenger' effect. Anecdotally, programmes run by Active Black Country using social prescribing recruitment methods during the same period had very low drop out levels.

2. Bridging the intention-action gap

When people sign up to a physical activity programme, they usually have the intent to exercise at that moment. Converting this intent to action is a challenge, whether it is getting people to actually start the programme or motivating them to follow through and complete the programme.

This intention-action gap is observed in WV Gets Active and supported by the Physical Activity (PA) literature. A meta-analysis showed that 46% of participants did not complete their exercise regime despite their intent to do so (Rhodes & De Bruijn 2013). It is conceivable that this intention-action gap is even greater for an inactive population who had not exercised in a long time, therefore requiring more efforts in bridging the gap.

For future programmes, it is important to draw on behavioural science literature to address the intention-action gap. There are multiple approaches that could be taken to address this gap. For example, drawing on the COM-B model (which states that Capability, Opportunity and Motivation need to be present for a Behaviour to happen), our finding that the waiting period from sign-up to starting the WV Gets Active programme was de-motivating and resulted in high drop-out suggests that it is important to keep participants engaged and prompt actions while the motivation is present. The motivation can be supported by providing access to the app or the programme as soon as they sign up, or setting an immediate task to engage participants. The use of rewards or

incentives could also be explored to motivate people to sign up and complete the programme. Incentives could be a promising strategy to increase participant engagement, especially in lower socio-economic groups (Gormley et. al., 2019). The same review also identified a number of commitment devices that could also be explored, such as a contract with oneself or with family to increase the likelihood of committing to the programme. Both commitment devices and incentives can be used to support participants' motivation.

When joining a programme or initiative, participants are usually also looking for external motivation to help them exercise. To help participants turn their intent into action, future programmes need to ensure the motivation to start exercising outweighs the barriers experienced by participants. Further research on early dropouts can help us better understand participants' barriers to exercise, social networks, influencers, motivations and goals. This can help ensure that participants' capability and opportunity, both physically and psychologically, are enabled and supported, thus allowing teams to better design programmes to help overcome barriers and encourage behaviour change. While engaging early dropouts may be challenging, this group potentially represents the biggest 'win' in terms of changing behaviour across the city.

3. The use of fitness apps – opportunities and challenges

The use of digital technology supported by upgraded infrastructure means more residents now have access to the digital world. For physical activity programmes, this shift was accelerated through the Covid-19 pandemic when face-to-face programmes and gyms/leisure centres were shut (Ang, 2020). Learning how to deliver programmes through apps is crucial for councils and partners. Some of the specific challenges and opportunities linked with the downloading and use of an app include:

Challenges:
- Digital exclusion. During conversations with project stakeholders it was highlighted that for many, the use of a smartphone, or the cost of access to data could stop participation due to cost. This was identified, and accepted, as a shortcoming during the scoping phase of the project.
- Downloading an app is a barrier to sign up to the programme. There are significant steps to downloading and syncing an exercise app. This includes:
    - Technical barriers - participants may not have downloaded an app before or not be familiar with smartphones.
    - Psychological barriers - some participants may be wary and opt against giving apps access to personal data or push notifications.
- Retaining users on an app-only programme is challenging. Across the programme there was relatively high drop-out. This is consistent with other app based programmes; 80% of users only access an app once and do not reopen it (Statista, 2020). This can be due to the user experience, the content or design of the programme or app itself.

- Engagement can be short term. After participants disengage from an app, it is difficult to re-engage with them again. For WV Gets Active, we tried to re-engage participants after they disengaged using push notifications as well as emails. However, there was no success in communicating with this group. This could suggest that digital interactions are more temporary than face-to-face programmes. Nevertheless, to better meet users' needs and preferences, mixed methods and in-depth qualitative research can be conducted to iterate and improve an app-based intervention (Yardley et. al., 2016).
- User experience needs to be well thought out as it is paramount to retaining participants. Any barrier, additional step or experience of resistance can cause drop out; this is common in digital settings. For instance, well-documented features and user-friendly interfaces have been found to be important to users of physical activity apps (Rabin & Bock, 2011). It is therefore recommended that future programmes work closely with app developers and experts in digital marketing for app-based programmes.

Opportunities:
- Apps have a strong potential to reinforce habit formation as part of changing behaviour. They are always present and can provide immediate feedback on exercise. A recent study found significant increases in step count amongst inactive individuals who used a commercial physical activity app (Mitchell et. al., 2020).
- An app-based programme can be easily tested and iterated to ensure strong user experience and interface.
- The use and access to objective data, such as step counts, for research, as well as providing feedback is a very rich research opportunity.

4. There is no 'one size fits all' solution for exercise programmes and changing behaviour

One single approach will not work for everyone. Individuals have different preferences for: the type of programme; the level of support; how challenging it is; how it is delivered (remotely vs in person) as well as other factors. This is consistent with research on other behaviour change issues where it has been shown different programmes work for different people (Jackson et. al., 2019).

WV Gets Active or a similar app-only based programme could be an effective option for some residents. Findings from the qualitative research would suggest that WV Gets Active was effective for self-disciplined participants who thrived off of the daily step feedback. For other residents, other programme structures would be more effective.

For future programmes, it would be valuable to understand if there was a diagnostic or 'triage' questionnaire or service that could help to match residents to find appropriate and engaging projects. This matching could be done on several levels:

1. Based on programme type and support structures; e.g. mixed exercises versus walking

only programmes; the presence of a coach or remote versus face-to-face. Following this programme the team believe that for the majority of inactive residents high levels of support at an individual level are important.

2. Based on the lifestyle needs of participants. For example, if the prime barrier is time to exercise, or childcare, there can be programmes that meet those needs. Materials tailored to a particular group, e.g. Mums with toddlers, could help address specific barriers and provide more relevant information.

3. Based on participants' motivational needs or at what 'stage of change' within a theory of change. Asking a battery of questions that relate to the types of motivation participants need could be used to signpost participants to different programmes or exercises. [The Transtheoretical model of Behaviour Change (TTM)](#) could be a useful model to explore as the framework is relatively straightforward and is used by Sport England (Sport England Towards an Active Nation, Strategy 2016-21).

5. Benchmarking the programme against other projects

It was difficult to conduct a more comprehensive cost-benefit analysis of WV Gets Active and benchmark the programme against other projects. The primary challenge was the lack of comparable metrics. We would recommend:

1. Capturing key metrics from other programmes going forward to enable benchmarking (e.g., drop-out data and where possible objective, or self-reported, data on exercise levels).
2. Conducting a return-on-investment calculation on the overall programme.

1.4 Infographics

On the following pages we provide infographics. They include:

1. **Participant barriers to completion and opportunities to improve** - We have plotted the key barriers participants faced across the programme, highlighting the points where there was high drop out. We have also added key insights and opportunities that could be used to improve this or future programmes. This references the COM-B behaviour change model in the diagram. The COM-B model provides a framework (taxonomy) to classify the types of challenges and opportunities faced across the programme.
2. **Participant profiles** - Profiles providing several relatively typical participant profiles and experiences of the programme. This has been developed for illustrative purposes.
3. **Participant Quotes and Case Studies** - provided as promotional material following the programme by ABC and CWC.

1. WV Gets Active: Participant barriers to completion and opportunities to improve
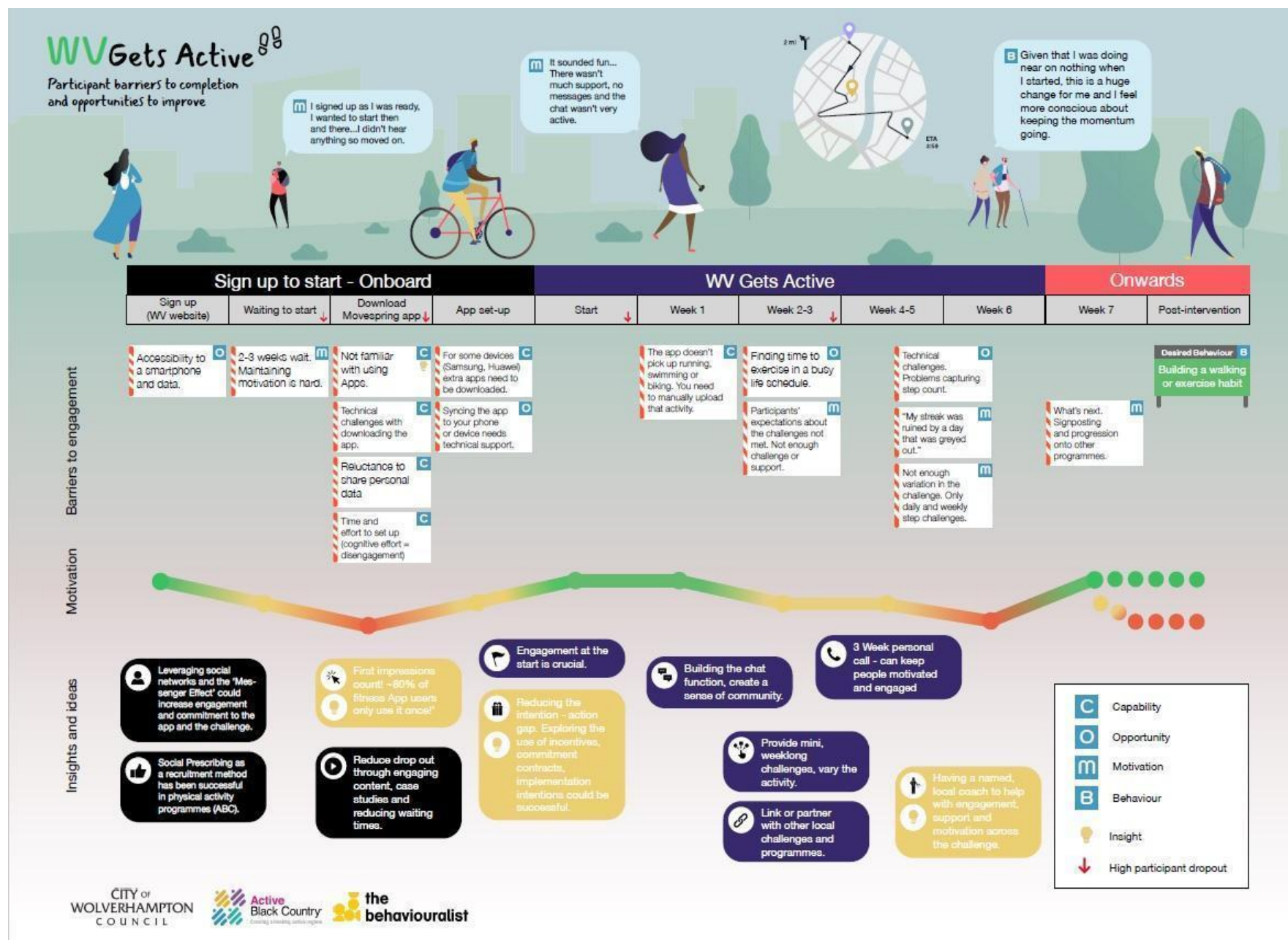
2. Participant profiles and experience

WVGets Active

Participant profiles

Group 1
47% ▸ **Dropped out before the start.**

The majority of the participants signed up through Facebook and social media. But then dropped out before the syncing and onboarding phased. Engagement and commitment was lost before the start. No step count data was captured from this group. ❓ We'd like to understand more about this group.

Group 2
25% ▸ **Downloaded the app, but not motivated by the challenge.**

This was the second biggest group of participants - those who downloaded the app, looked at the app but did not actively take part in the challenge. They did not use their phone to track their exercise and rarely opened the app. For the days when step counts were captured they tended to be below 1000 steps.

Group 3
14% ▸ **Motivated at the start but disengaged by week 3.**

They were motivated and ready at the start, daily step counts for this group were good at the beginning. But by week 3 they were not motivated, they were looking for more or varied challenges and didn't felt supported.

Group 4
9% ▸ **Making it through the challenge.**

This group followed the daily step challenge and weekly step challenge and felt supported in part by the chat function. Across the programme, however, they found it quite monotonous and wanted more support from the App. There was varying motivation–and there were a number of highly engaged days. Their daily step counts ranged from 4000 to 7000 most of the time, often just falling short of the target.

Group 5
5% ▸ **High performers, health-conscious participants.**

This group was active pre-covid and often synced the app with a fitness tracker (Garmin, Fitbit, or Withings). They were looking for WV Gets Active to provide a challenge to kick-start their activity. The daily step target and the leaderboard motivated them to keep going along with one or two other participants who motivated and pushed them on. But they thought there could have been more support provided. Once they started they were determined to finish. Their daily step counts were the highest among all participants, regularly exceeding 10,000 steps.

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3. Case studies highlighting the positive outcomes experienced by participants

> 66
>
> Whilst I didn't hit the target every day, I managed to get and do a good amount of steps most days. Given that I was doing near on nothing when I started, this is a huge change for me and I feel more conscious about keeping the momentum going 99

Charlotte, WV Gets Active Participant

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> 66
>
> I've managed to get more active. I am more aware of how important the physical activities are and I got the exercise bug. Overall this made me feel more happy and I even lost a bit of weight. 99

Isobel, WV Gets Active Participant

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"

I work from home so don't get chance to go out for walk. Since starting this challenge I have started to go for long walks and volunteered for walk leader training & Nordic walking

"

Pav, WV Gets Active Participant

"

The WV Gets Active Challenge helped me into a walking habit

Now I feel so much better and have more energy and will to try new things

I achieved the step count every day. After the third week I started to feel good about myself

"

Val, WV Gets Active Participant

2. Introduction

2.1 Context and project background

The City of Wolverhampton (CWC) has one of the highest levels of inactivity in the country; 35.8% of residents do less than 30 minutes of exercise per week, compared to the national average of 27.1% (Public Health Annual Report 2018-2019).

For vulnerable populations and those with a higher body mass index (BMI) the COVID-19 pandemic increased levels of inactivity. These groups have been doing less exercise or leaving their house less, despite the lockdown encouraging residents to exercise for at least 1 hour per day (Wider Impacts of COVID-19 on Health (WICH) monitoring tool).

The UK national recommendation is that people should be exercising at least 150 minutes (for moderate intensity activity) or 75 minutes (for vigorous intensity activity) per week. The benefits of starting to exercise for inactive individuals are well documented. In fact, getting 'inactive' people to start to exercise delivers the biggest change in health outcomes. Evidence shows that active people are 40% less likely to develop type 2 diabetes, 35% less likely to develop cardiovascular disease (CVD) and more likely to maintain a healthy weight. In addition to health benefits, exercise has been shown to have a positive spillover effect into mental, social and financial wellbeing (Langhammer et. al., 2018; Sharma et. al., 2006).

For CWC, addressing inactivity within the city is a priority. In addition to benefiting individuals, it also benefits the council as there is a reduced demand on front line health services as well as other secondary services. Active Black Country (ABC) and their work directly addresses inactivity across the region. ABC are experts in developing and delivering physical activity programmes and have worked on multiple exercise initiatives addressing inactivity (Love Exploring App , Get Out Get Active).

This context provided the motivation for CWC to partner with ABC to apply for the Local Government Association (LGA) Behavioural Insights Programme. The 20/21 cohort was focused on addressing challenges and responses to COVID-19 that councils faced across the country.

The importance of engaging inactive people in exercise programmes is a priority for national and local organisations including Sport England. Research has shown walking can provide the easiest point of entry for inactive people. The importance of using a structured approach, using behaviour change frameworks and adopting evidence-based evaluations can help capture learnings from work and also enable practitioners to contribute to and learn from best practice.

2.2 Behaviour Change Models

WV Gets Active drew on two core models to design the programme. The two key theories of change were the COM-B model and the B=MAP model.

COM-B Model (Michie, Van Stralen & West 2011)

The COM-B model provides a framework (taxonomy) to classify the types of challenges and opportunities faced across the programme. The COM-B model states that in order for a <u>B</u>ehaviour to change individuals need sufficient <u>C</u>apability, <u>O</u>pportunity and <u>M</u>otivation. As well as diagnosing the barriers, the COM-B approach can also suggest solutions or interventions to address each challenge.

Table 1: WV Gets Active component classification using the COM-B model components and examples (page 63, [Behaviour Change Wheel Book]).

Component	Example	Commentary
Physical Capability	Physical skill, strength & stamina	WV Gets Active was a walking programme to ensure access was maximised by participants. There was a need to build up the physical capabilities of inactive residents by incrementally building up the walking targets across the duration of the programme.
Psychological Capability	Knowledge or psychological ability to engage in the necessary mental processes.	WV Gets Active looked for participants to build their confidence in having agency and control over their situation.
Physical Opportunity	Opportunity afforded by the environment involving time, resources, locations, cues.	Walking, especially during lockdown, was accessible to most. This was one of the reasons this exercise was chosen. During the focus group some of the participants raised the issue that as a single woman they did not feel safe walking in some areas alone. This is something to

		consider for future programmes.
Social Opportunity	Opportunity afforded by interpersonal influences, social cues and cultural norms	The app tried to build a community of like-minded participants, this was primarily through the leaderboard and the chat function.
Reflective Motivation	Reflective processes involving plans (self-conscious intentions) and evaluations	Planning to exercise and setting targets for the week were a part of the reflective motivation.
Automatic Motivation	Automatic processes involving emotional reactions, desires (wants needs)	Some of the feedback provided through the app was designed to reinforce the behaviour by providing recognition when participants achieved a step target. This, coupled with daily step targets, was a way of building habits and is how the programme looked to build automatic motivation.

B=MAP (Fogg, 2019)

The B=MAP model, developed by BJ Fogg also suggests three elements must be in place for a behaviour to take place, These include Motivation, Ability and Prompt.

A core part of applying this behavioural change model is the principle of tiny habits building towards larger and more sustained habit formation. Small steps, built on behavioural loops that consist of a prompt - triggering a behaviour - being reinforced through reward is central to habit formation.

It is worth noting the team did not adopt a singular behaviour change model for the programme. Instead the team drew on a number of behaviour change theories as well as previous literature to address specific challenges identified during the programme design.

2.3 Project timeline

	Notes	Dec 20	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec 21
Project Commissioned	LGA approve project	🟥												
Project out to tender	TB awarded the project contract			🟥										
Scoping Phase	Research, feasibility, design				🟥	🟩								
Delivery Phase	The remainder of the project					🟥	🟩	🟩	🟩	🟩	🟩	🟩		
Project Management set up	GDPR, ethics, research						🟩	🟩						
Design Programme	Branding, Marketing, Project Designed							🟩	🟩					
Recruitment Cohort 1	June 1st - June 27th							🟩						
Cohort 1 Randomisation	June 28th (Split into Group 1 or 2)							🟩						
Group 1 WV Gets Active (V1)	July 2nd - Aug 12th (6 wk programme)								🟥	🟩				
Group 2 (Control)	Download MoveSpring (no content)								🟩	🟩				
Focus Group	Aug - for Cohort 1 participants									🟩				
Adjust programme design	Based on learnings from V1									🟩				
Recruitment Cohort 2	Aug 9th - Aug 20th									🟩				
Group 2 WV Gets Active (V2)	Aug 20th - Sep 30th (6 wk programme)									🟩	🟩			
Group 3 WV Gets Active (V2)	Aug 23rd - Oct 3rd (6 wk programme)									🟩	🟩	🟩		
Focus Group	Oct - for Cohort 2 participants											🟩		
Evaluation and Write up	Ongoing - Final Report Apr 2022												🟩	🟩

🟥 = Project milestone 🟩 = Project delivery

3. Method

In this section we provide an account of our approach and the method used to design and deliver WV Gets Active. We have outlined the work completed in a chronological sequence.

3.1 Project scoping

At the start of the project, a scoping phase was completed to ensure the feasibility of the project. This phase was used to conduct interviews with project stakeholders, complete a brief literature review on previous research and explore different routes to deliver against the project aims given the constraints and context. The scoping report is available on the LGA Behavioural Insights webpage.

The aims of the original proposal submitted by CWC and ABC to the LGA were:

> 1.   To increase physical activity levels to at least 30 minutes a week for low socio-economic residents across the city.
>
> 2.   Develop and implement a physical activity programme including creating resources whilst drawing on evidence from behaviour change theory and insights.
>
> 3.   Adopt a quantitative approach to measuring physical activity levels.

The project team spent time understanding how the project could meet these aims whilst operating within the constraints of the project and the COVID-19 pandemic. We developed a programme definition which defined what we were looking to deliver and the features we needed to include. We have shared this in the appendix and have highlighted the key features below:

1) The programme would be a walking programme – ensuring it was accessible to all residents. It would integrate existing local resources and materials that had been developed to promote walking and exercise to Wolverhampton residents (e.g. the Love Exploring app).
2) The programme would draw on behaviour change theories and principles.
3) The programme needed to be delivered remotely – reflecting the requirement for social distancing and the changing situation regarding lockdown restrictions. This was to cater for all eventualities.
4) It needed to be scalable at a low cost – if the programme was successful it needed to be expanded across the city. To meet this requirement, we looked to minimise the staff time

required for the delivery and administration of the project.

5) The evaluation of the project would use an evidence-based approach – the preference was to use a Randomised Controlled Trial as an evaluation approach.
6) The programme needed to be live by the summer holidays – this acted as an opportunity to engage residents due to the ease of lockdown restrictions.

To deliver against the project aims multiple routes were explored. The use of an existing exercise app provided the most promising and cost-effective route forward. The pros and cons of using an app were considered. The major drawback that was acknowledged was, of digital exclusion and potentially some of our target audience not being familiar with apps. This would limit access from some of our target population.

After researching different apps, MoveSpring, a 3rd party fitness app, was selected for the programme. The primary reasons for this included:

- the strong usability and user experience.
- the ability to sync with a range of fitness trackers and capture objective step count data.
- the ability to customise the content and structure of the challenge, enabling us to design the challenge and intervention through localised marketing.
- the ability and flexibility to deliver content (videos, articles, websites, push notifications) through the app.
- the content could be pre-scheduled across the programme, ensuring that it was delivered consistently to participants and could potentially be replicated easily if it was to be scaled.
- the interface could be branded with our logos and designs.
- the presence of a chat function
- competitive pricing based on a per user license.

TB also explored several fallback options if the above route was not feasible. At the conclusion of the scoping phase, the project was approved and the delivery phase began.

3.2 Project delivery

At the start of the delivery phase, several pieces of work were completed including:

- GDPR and research governance approvals were obtained - this was completed quickly and efficiently through CWC.
- Further research was completed with stakeholders into the barriers and enablers of exercise in our target group. This took the form of conversations with stakeholders.
- The branding and marketing materials of the programme were developed and produced.

WV Gets Active was selected as a name based on the City's leisure centres (WV Active) and the logo and branding were designed.

- The recruitment materials and strategy were finalised.
- The WV Gets Active programme was designed and developed.

We expand on these elements below.

3.2.1 Participant recruitment

Target Participant

During the scoping phase we defined our target participant as:

"Any Wolverhampton resident who exercises less than 30 mins a week, with a focus on areas of socio-economic deprivation within the city."

The focus of recruitment was on wards of lower socio-economic output as defined by the Indices of Multiple Deprivation (English indices of deprivation, 2019). These wards included Ettingshall, Heath Town, Bushbury South and Low Hill, St Peter's and Bilston East. These were prioritised as they were wards that were close to the city centre and West Park. These wards also aligned with Active Black Country's priority areas in which they had focused capacity in recent years.

Recruitment & Marketing Materials

Recruitment materials were designed to promote the programme. These were developed drawing on research in the scoping phase that identified the key barriers to participation in physical activity (e.g., a lack of time, motivation, or due to the effects of COVID). The materials included: an A5 flyer, press releases, social media posts and posters. A sample of these are provided in the appendix.

Make time for YOU to feel good and get healthy!

» Do you live in Wolverhampton?
» Do you struggle to find the time to exercise?
» Do you want to exercise more?

WV Gets Active is a new App which will challenge and support you to meet your exercise goals. It's tailored for you and has local activities and offers for Wolverhampton residents.

This is a FREE 6 week programme with limited spaces.
Sign up closes on the 27th June.
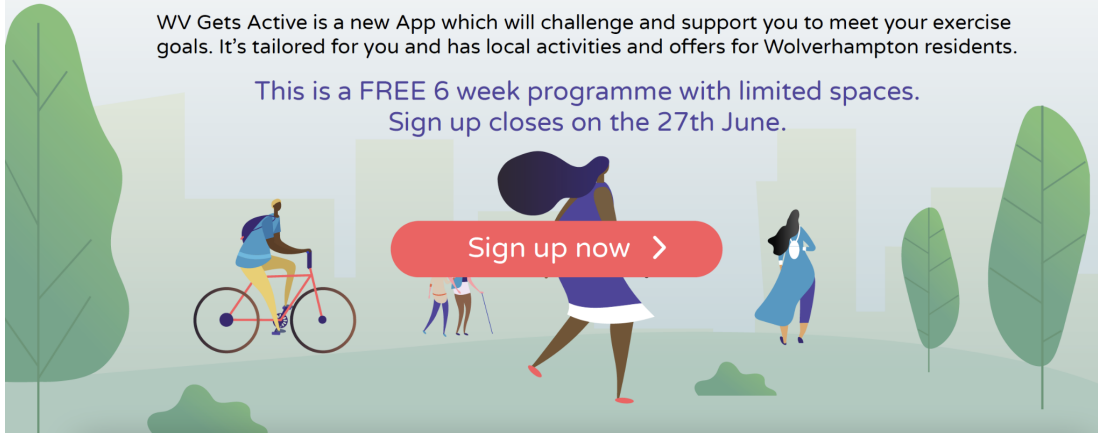
Sign up now ›

Sign up now ›

This is a 6 week programme only available for Wolverhampton residents.

We're launching across the city but are focused on residents in Ettingshall, Heath town, Bushbury South and Low Hill, St Peter's and Bilston East.

The programme is delivered through an App you will download onto your phone and will give you weekly plans tailored to your own fitness level.

We'll share local activities, ideas and challenges for you, friends and families to complete.

It will help you to build exercise into your routine – working around your schedule.

There are limited spaces for this programme so sign up now*.
*Sign up closes by the 27th June.

This is supported by The City of Wolverhampton Council and Active Black Country Partnership.

The A5 digital and print flyer used to promote the programme.

The programme was promoted across social media (CWC Facebook page, Instagram, Twitter), The Community Champions Network, The WV Carers Bulletin, Local Press, Radio, faith groups and Foodbanks.

Participant sign up

Participants were directed to sign up to the [WV Gets Active](#) website, a subdomain of the Wolverhampton.gov.uk website. At sign up we captured: participants' names; their postcodes; email address and consent to use their data. Participants were also asked about their exercise levels using the Single-Item Physical Activity Measure Question:

"In the past week, on how many days have you done a total of 30 minutes or more of physical activity, which was enough to raise your breathing rate?"

Responses options are from 0 - 7 days.

The Single Item Measure was chosen as it has been shown to have predictive validity of exercise levels (Milton et. al., 2010). After signing up participants received a welcome email from CWC. This included information about the programme and next steps to take.

Screening out participants based on location and exercise levels

After the recruitment period closed, participants were screened to ensure they met the target profile. All non-Wolverhampton residents were removed, this was based on the postcode they provided. Participants were also excluded based on their response to the Single Item Measure Question. If participants stated they had exercised more than 1 day in the previous week they were removed. Following the screening out process there were 222 participants remaining.

3.2.2 Participant group and team set up

Cohort 1 - Participant randomisation into groups

Participants recruited during the first recruitment campaign were randomly assigned into either Group 1 (i.e., the treatment group who started the programme on July 2nd) or Group 2 (i.e. the control group who started on August 20th). As part of the randomisation, we controlled for levels of exercise, ensuring there was an even distribution of those who stated they had exercised one day or zero days in the previous week.

Participants were assigned into the treatment and control groups with a 2:1 ratio (i.e., the number of treatment participants is twice that of control participants). This was because we wanted to

maximise the number of participants who were active and taking part in the first programme, whilst maintaining the statistical power for the evaluation of the programme (Torgerson, 2008).

Participants in Group 2 (control group) were informed that there was limited space on the first programme and that they had been assigned to a second programme running in August.[2] They were asked to download the MoveSpring app and were told that this would help the project team understand the impact of the programme. This approach enabled us to collect objective step count data for those not participating in the programme.

For those assigned to Group 1 (treatment group), we formed 6 teams of approximately 25 participants. Participants were randomly assigned to teams but were matched on the level of exercise they said they had completed in the previous week. Those who had stated they had done no exercise were matched in teams; those who stated they had done one day of exercise were also matched in teams. We wanted to match individuals based on their exercise levels and did not want participants to feel intimidated by high levels of exercise, especially those with long term health issues, who were sedentary or who informed us that they could not exercise for long periods. Also, we wanted to leverage social networks and the positive social elements of exercise (Nyer & Dellande, 2010). Our goal is to encourage interaction between participants by creating a sense of support and also competition through the leaderboard.

Table 2. Cohort 1 Teams

Treatment / Control	Team name	Stated No. Active Days	# Assigned Participants
Group 1 (Treatment)	Tangerine	1	25
	Orange	1	25
	Blue	0	25
	Red	0	25
	Green	0	25
	Sky	0	25
Group 2 (Control)	August	1	24
		0	48
Total			222

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[2] The control group 6-week programme was launched after the end of the first WV Gets Active programme, running from August 20th to September 30th.

3.2.3 Participant onboarding

Three days before starting the programme, participants were
'onboarded' to the programme and introduced to the app. They
were sent a welcome email that contained a hyperlink that enabled
them to download MoveSpring and instructed them on how to
'sync' the app to their smartphone and/or fitness tracker.

Participants were able to sync a smartphone and/or a fitness
tracker (such as a fitbit) or had the option of entering their data
manually. The team stressed the benefits of syncing a fitness
tracker versus manually entering the data such as the higher
reliability in step tracking and the convenience once the fitness
tracker is synced.

During the onboarding process introductory content was added to
the dashboard daily and sent through push notifications. This
included a short survey, several articles about preparing for the
programme and other technical support materials. They were also
invited to introduce themselves and contribute to the group chat.
The goal was for participants to familiarise themselves with the app and the structure of the
programme.

For those assigned to Group 2 (control group), we sent an email asking them to download the app.
This enabled them to access the app and sync their smartphone and/or fitness tracker but not to
access the content of the 6-week programme. The core functions of step count and the chat
function were enabled - but no other contents (i.e., challenges) were provided.

3.2.4 WV Gets Active Programme

The WV Gets Active programme structure and content was developed by first drawing on
behaviour change theories that were relevant to habit formation. These included the COM-B and
B=MAP theories of behaviour change. These are briefly outlined in section 2.2.

The team then explored how learnings from these theories could be applied given the constraints
of the project and the limitations of MoveSpring. The major features of the WV Gets Active
programme included:
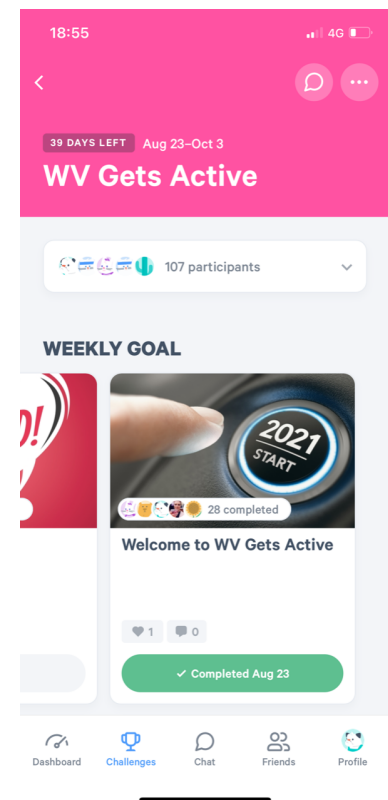
- The programme structure
- The MoveSpring challenge
- Step Count targets
- Group composition
- Weekly Motivating Content
- Performance Based Feedback - utilising behavioural framed messaging
- Local Resources and information
- Chat function

In the section below we briefly expand on the key features below and reference the behavioural principles applied across the WV Gets Active programme.

The programme structure:

The project team opted to deliver a 6-week programme with the goal of building an exercise habit. The goal was for participants to walk as many days consecutively as possible and to incrementally build their step count by the end of the 6-week programme.

In making these decisions the team drew on research on habit formation; specifically BJ Fogg's B=MAP model or 'Tiny Habits' that suggests that to build a habit a behaviour has to be repeated consistently over a period of time to become ingrained. There is varied research on the length of time required to build a PA habit ranging from 6 weeks (Kaushal and Rhodes, 2015) to 28 weeks (Fournier et al., 2016). The team opted for a 6 week programme because it had been shown to be sufficient in building a habit as well as the programme timelines that dictated we needed to get into the field quickly. We also applied adaptive (progressive) targets, building up the daily target as these have been shown to be more effective than static targets (Adams et. al., 2013).

WV Gets Active Challenge Structure:

MoveSpring has a series of pre-programmed, but customisable, 'challenges' that form the foundation of the participant experience. The features were different based on the challenge participants took part in.

Stick to it!

Participants earn stickers for every day they meet a daily step, active minutes, or distance goal. As your meet more goals, you gradually fill in a big, 'ol sticker sheet. Go over the total requirement? You earn bonus stickers!
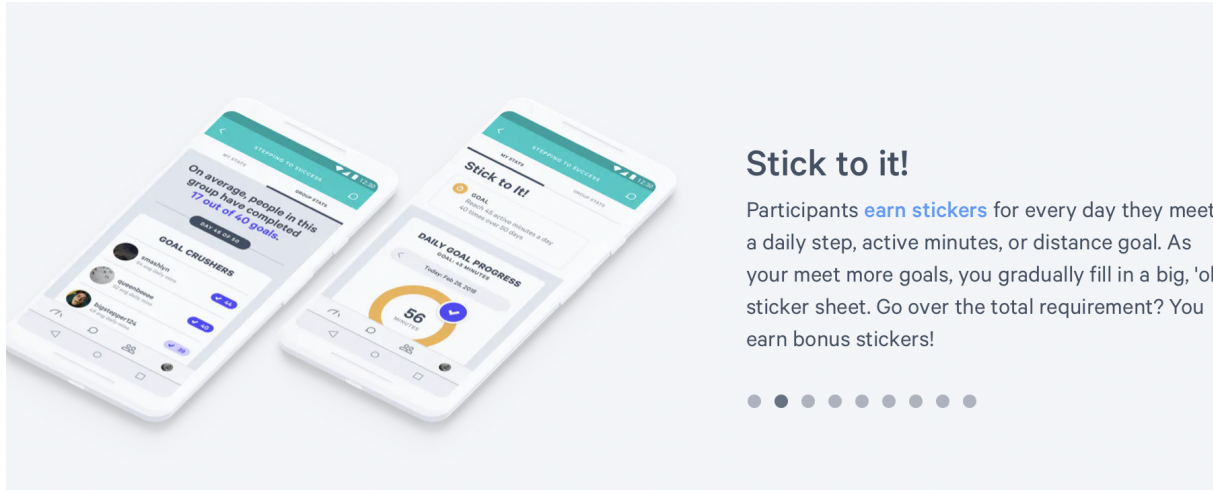
The team chose the **Stick to it** challenge, designed to help build exercise habits.This was selected as it was a challenge for the individual participant that set daily step targets and encouraged daily exercise. This is also one of the simplest challenges with a clean design; the team did not want an app that had complex features within it. Participants were challenged to meet their daily step challenge for 30 days out of the 42 days of the challenge; this equates to 5 days each week for 6 weeks. We also increased the daily step target incrementally over the 6-week programme.

Step Count Target

To complete the challenge participants had two different targets to meet:

- The daily step target - the number of steps participants were challenged to reach daily.
- The weekly step count target - we provided a target of reaching the step count between 4 and 5 times each week.

The step target acts as an anchor to reach daily.

For the daily step target we looked to increase the step count as the programme progressed. For cohort 1 we split the participants into high or low exercise groups based on their stated levels of exercise as captured through the Single-Item Physical Activity Measure Question. For the lower group their daily step target was 4000 steps for weeks 1-3, this increased to 7000 for weeks 4-6.
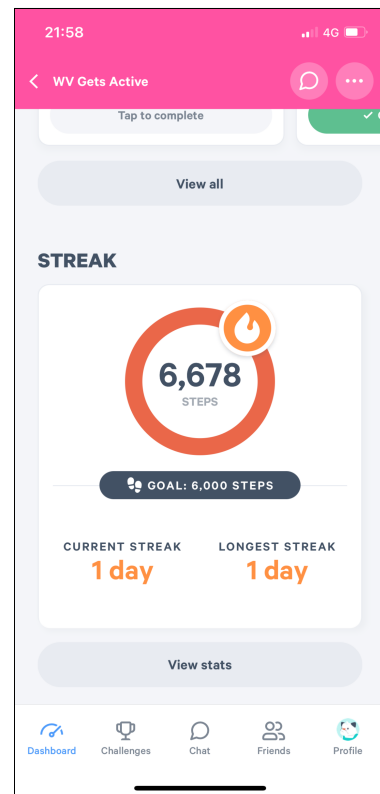
For the higher exercise group they started on 5000 steps for weeks 1-3, this increased to 8000 for weeks 4-6. Calibrating the levels of both of these targets to be challenging yet achievable for inactive participants was important.

The tables below show the step target for each group in each cohort.

Table 3. Step count target for cohort 1

Groups	Baseline day of exercise per week	Daily Step Target (Week 1 - 3)	Daily Step Target (Week 4 - 6)
Group 1 (Blue)	0	4,000	7,000
Group 1 (Red)	0	4,000	7,000
Group 1 (Green)	0	4,000	7,000
Group 1 (Sky)	0	4,000	7,000
Group 1 (Orange)	1	5,000	8,000
Group 1 (Tangerine)	1	5,000	8,000
Group 2 (Control)	0/1	-	-

Table 4. Step count target for cohort 2

Groups	Daily Step Target (Week 1 - 2)	Daily Step Target (Week 3 - 4)	Daily Step Target (Week 5 - 6)
Group 3 (Olive)	6,000	4,000	4,000
Group 3 (Purple)	6,000	7,000	8,000
Group 3 (Navy)	6,000 (1st week)	-	-
Group 2	6,000	7,000	8,000

Motivating Message - Provided weekly

Weekly messages supporting and encouraging participants were developed. These include: promoting the health benefits of exercise, vicarious positive experiences (case studies), facilitating social comparison and implementation intentions. These were developed based on two systematic reviews of physical activity interventions (Olander et al., 2013; Williams et al., 2011). In these

reviews, four techniques were found to be associated with an increase in physical activity in both those living with and without obesity: 'provide information on consequences of behaviour in general', 'prompt rewards contingent on effort or progress towards behaviour', 'provide instruction on how to perform the behaviour' and 'facilitate social comparison'. The table below shows the examples of the motivating messages.

Table 5. Motivating message examples

Message Frame	Example
Consequences of the behaviour	You're done with the first week, congratulations! Did you know that you increased your cardiovascular (lungs) and pulmonary (heart) fitness by just walking 30m a day and reduced the risk of heart disease and stroke?[3] Keep walking!
Instructions on how to perform the behaviour	The challenge starts tomorrow! Remember to (1) Define a specific time for your walk by for instance, getting off public transport one stop earlier and walk to work or home, walk to the local shops, walk the dog or prepare a longer commute after dropping the kids at school (2) Prepare comfortable shoes and clothes according to the weather forecast and (3) enjoy your time outdoors!
Facilitate social comparison	It's been two weeks, and we couldn't be happier. Here are some numbers based on what you all have achieved: During these two weeks, among the x participants, you have walked a total of x steps, the equivalent of walking from Wolverhampton to xxx! Remember, if you need any help, the chat is always there for inspiration and motivation!
Prompt rewards	Reward yourself! Getting up and getting moving can be tough. Especially if you haven't been exercising for a while. It's important to recognise this and reward yourself for keeping going. If it's been a rainy day or you weren't feeling great then promise yourself a treat or something special if you stick to it. It's also great to celebrate these small wins with friends or family as well. You're doing great! Happy Stepping!

Performance feedback - Provided weekly

Feedback was provided to participants every Sunday based on their performance in the previous week, where possible leveraging social norms. To do this the team categorised participants into different performance levels (depending on the number of times they had reached their daily step

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[3] https://www.betterhealth.vic.gov.au/health/healthyliving/walking-for-good-health#health-benefits-of-walking

target) and sent customised messages. For participants who were disengaged with the app, we sent push notifications and emails to re-engage them. The table below gives examples:

Table 6. Feedback message examples

Category	Definition	Behavioural Principles	Criteria	Messages (example from week 1)
Top performers	Exceeding the challenge goals	Reinforcing top performers - social recognition is also shown in the leaderboard.	Over 5 days of hitting target in the week	You were one of our top steppers last week. You did more than the target of 5 days. Make sure you keep ahead of the pack this week as well! If you've got any tips on what your secrets or tips are do share them with the group on the chat!
Mid performers	Mid - above average - hitting the goals	Reward and reinforcement.	5 days - hitting goals	Well done! you got to the target of 5 days of your step count last week. Great work, you should pat yourself on the back! Let's aim at the same this week as well.
Mid below	Mid - below average - just below average	Social norms - applied to increase performance for below average performers.	3-4 days hitting goals	You hit your daily step goal three times last week. On average across WV Gets Active our participants hit their target four times in the week. Next week push yourself for 4, even better 5!
Low performers	Low performers this week.	Social norms referenced as well as setting small achievable goals to reset the challenge.	2-1 days hitting goals	Good start to the 1st week. It can be tough to get going but keep getting out there and keep stepping. On average across WV Gets Active participants got to their step count 4 times in the week. It's a great target for next week!
Health issues	There are steps but they remain low	Engaging participants to provide support. Asking them to reflect about step targets. Understanding if the	0 days but there are steps	How's it going! We've seen you're keeping stepping. Don't forget to keep getting out. Let us know how it's going - either on the chat or at WVGetsActive@wolverhampton.gov. uk If the step count feels a bit high let

		target is too high?		us know as well!
Disengaged	Targeted message understanding what's going on. Not based on performance.	Salience / prompts to engage.		*Those who are disengaged were sent an email and or push notifications.

Local WV Resources

A core aspect of the programme was ensuring it was a local resource for Wolverhampton residents–providing tips and recommendations specific to the city. The team developed a [website](#) as a repository and provided content and push notifications promoting local activities with a focus on walking routes. The resources were also shared as push notifications and articles highlighting the Love Exploring app, local walks or other initiatives.

Chat function

Within each group there was a chat function for participants to communicate and support one another. The team looked to seed and support the chat function, especially at the start of the programme. We decided against providing dedicated support through the chat function, maintaining the requirement to keep the administration and staff time low.
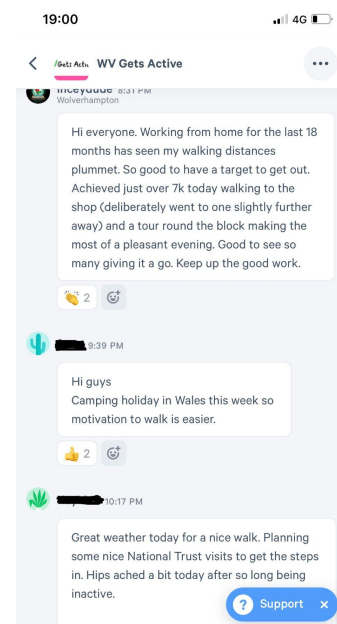
SMART Goals and Commitment Device

At the start of the programme we provided articles that outlined how participants could use SMART goals to help them achieve their exercise goals. As part of the onboarding process we asked participants to write a commitment contract to themselves at the start of the programme. This evolved between the 1st and the 2nd cohort. For the 2nd cohort, we emphasised the use of a commitment contract as a tool to increase motivation, and templates were provided to support them with this.

3.2.5 Decision to launch Cohort 2 and extend the project

During the delivery of the first WV Gets Active V1 (July), it became clear we were facing multiple challenges in both delivering and evaluating the programme.
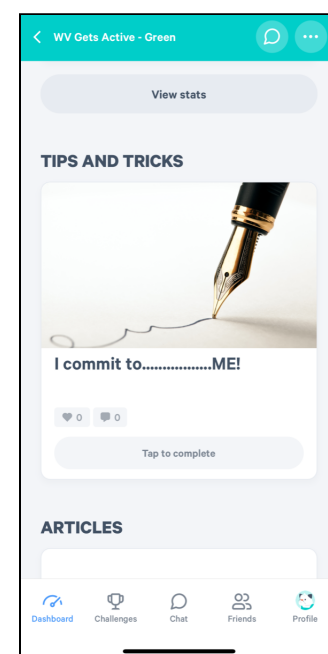
The key challenge, expanded on in the results section 3.2, was the high drop out of participants throughout the registration process and the programme. Due to drop out of participants it was not possible to evaluate the programme using our proposed randomised controlled trial methodology. Our sample size was greatly reduced leading to a statistically underpowered study. Despite this, the project team was gaining valuable learnings and insights from practically delivering the programme. The project management team considered three options:

1. Finish the programme and write up the results from cohort 1.
2. Recruit again, replicating the RCT and delivering the programme in an identical format as for cohort 1. This would enable us to build up the statistical power and evaluate the impact of the programme robustly.
3. Recruit again but iterate the design of the programme, applying learnings from cohort 1 to deliver a more impactful programme. The implication would be not evaluating the programme using an RCT approach; instead adopting a mixed methods evaluation.

We opted for the 3rd option to recruit a second cohort and to iterate on the programme, enabling us to develop WV Gets Active (V2).

3.2.6 Adjustments made between WV Gets Active (V1) to (V2).

Between cohort 1 and cohort 2 there were several changes made to the recruitment and onboarding processes. These changes were made drawing on: insight from the MoveSpring data; responses from the surveys completed by the participants and through the feedback received through the chat function. In addition, the project team ran a focus group for participants who had dropped out. Engaging this group was difficult and only we managed to recruit three participants onto a call to obtain feedback.

The table below illustrates the major changes made between the two cohorts.

Table 7. Adjustments made to the recruiting and programmes

Changes made	Cohort 1 / WV Gets Active V1	Cohort 2 / WV Gets Active V2
Recruitment channel	More (posters, press releases, social media, flyers)	Less (primarily through social media and press releases)
Recruitment materials	Standard	Include materials to increase the awareness that the project was delivered through an app

Inclusion criteria	Up to 1 day of exercise in the past week	Up to 3 days of exercise in the past week
Waiting time between recruitment and onboarding	3 weeks	2 weeks
Contact via email during waiting period	One email sent to acknowledge registration.	In addition emails sent to keep participants engaged and to encourage them to prepare.
Support in device syncing	Specific support provided when participants reached out for help.	The team used non-syncing as a prompt to proactively reach out to participants with help and support.
Group composition	Assigned to groups of 25 participants matched on stated levels of exercise	Week 1 all participants were in one group. Following week 1 they were assigned to groups based on levels of exercise and engagement.
Daily Step Count Targets	Two levels of step count for low and high exercise groups.	Higher levels of step counts for the engaged group. Captured in tables 3 & 4.
Commitment Device	As part of the sign up a commitment contract was suggested to be beneficial to completing exercise programmes.	In addition to an article a template was provided for participants to use as a commitment contract, this was sent as a push notification and an article in the App.
Feedback	Weekly feedback on performance.	In addition to weekly feedback on performance we included a 5-week personalised update on performance.
Chat function	This was seeded at the start of the programme.	Additional attention was spent seeding and tracking the chat at the start of the programme.
Content and articles	Regular weekly articles were sent.	Articles addressing more specific challenges and barriers to exercise were included. For example, exercising with toddlers.

3.3 Project evaluation

In this section we outline how we evaluated WV Gets Active.

3.3.1 Cohort 1 - Randomised Controlled Trial evaluation

Behavioural science uses an evidence-based approach to evaluate the impact of behaviour change projects or interventions. This enables practitioners to: learn from their work; iterating and improving; scale successful programmes with confidence and apply robust insight in different contexts.

During the scoping phase we designed an evaluation using a randomised controlled trial (RCT) that randomly assigned participants into a treatment (Group 1) or control condition (Group 2 - Control). We proposed using the objective step count data captured through MoveSpring to evaluate the impact of the 6-week programme on participant exercise levels using a repeated measure Analysis of Variance (ANOVA).

Power calculations show we would need a sample size of at least 144, splitting the participants between Group 1 (94) and Group 2 - Control (50). This sample size calculation is based on the assumption that the expected effect size is small (Cohen's d of 0.2). To compensate for participant attrition, we aimed for 130 participants in Group 1 and 70 in Group 2 - Control.

Figure 2. Cohort 1, RCT diagram of evaluation design.
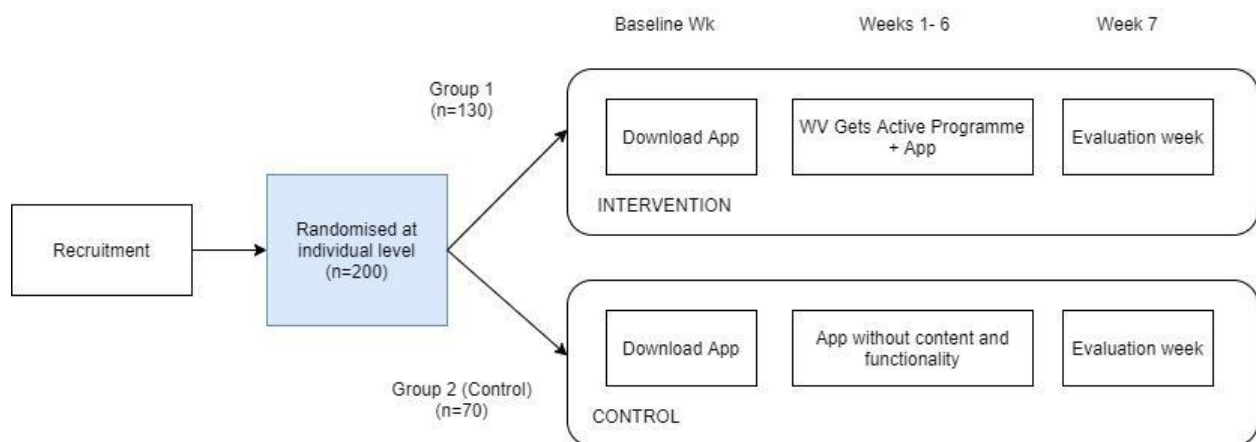
3.3.2 Cohorts 1 & 2 - A mixed method approach

To supplement the RCT approach we included additional data sources and qualitative methods to gain a deeper understanding of the participant experience. These sources included:

MoveSpring data - objective exercise data including:
- step count
- distance travelled
- levels of raised heart rate exercise
- Drop out or attrition

The team could also track 'engagement' with the app, as registered through the number of times participants opened the app and could monitor the chat function.

Surveys - Short surveys were administered at the start, end and after 6 weeks after the programme. These were sent via email and linked through the app to Qualtrics (a survey platform). It was not mandatory for the surveys to be completed. Questions included within each survey included:

1) At the start survey - living situation, main reason for taking part, barriers to exercise to date.
2) End survey - reflections on improving the programme (learnings and improvements).
3) + 6 weeks survey - reporting on changes to exercise habits and exercise patterns, reflections on the programme.

All three surveys included the Short Warwick-Edinburgh Mental Wellbeing Scale (SWEMWBS) questions to track the impact of the programme on participants' subjective wellbeing across the programme.

The surveys can be made available on request and are reported in the results section.

Focus Groups - As the project developed, TB also added the use of focus groups to understand more about participants' barriers to exercise or reasons for dropping out. We looked to recruit participants at two points in the programme.

- Focus group 1 - Disengaged participants from cohort 1.
  We sent participants who had disengaged from the programme before the end of the programme an email inviting them to participate in focus groups to investigate why they disengaged.
- Focus group 2 - All participants from cohort 2 and the control (active) participants.
  We sent participants an email inviting them to participate in a focus group to investigate the barriers to exercise and for those who dropped out, why they disengaged.

4. Results

In this section we first describe the data sources. Secondly, we present the key results focusing initially on the recruitment and onboarding and then subsequently on how the programme performed. Finally, we share some of the key insights from each individual data source. We synthesise these results and discuss their implications and limitations in the subsequent discussion section.

4.1 Data collection

Below is a summary table of the data sources and their response rates.

Table 8. Data sources, information captured and response rates

Data source	Information captured	Cohort 1		Cohort 2		Overall	
		No.	%	No.	%	No.	%
Sign up (WV Gets Active website)	Name, email, age, gender, stated level of exercise, long term health issues, recruitment channel	222	100.0	190	100.0	412	100.0
MoveSpring data (wk 1)	Device type, step counts, average minutes of exercise, average distance exercised, engagement, drop out.	116	52.3	133	70.0	249	60.4
Survey Start (Qualtrics survey)	Living situation, motivations, exercise goals, barriers, SWEMWBS, whether signed up with someone else	60	27.0	45	23.7	105	25.5
MoveSpring data (wk 6)	Device type, step counts, average minutes of exercise, average distance exercised, engagement, drop out.	47	21.2	47	24.7	94	22.8
Survey End (Qualtrics survey)	Exercise routine, whether started another programme, challenges, feedback on WV Gets Active, SWEMWBS	18	8.1	20	10.5	38	9.2

Survey, 6 week follow up (Qualtrics survey)	Exercise routine, whether started another programme, challenges, feedback on WV Gets Active, SWEMWBS	5	2.3	9	4.7	14	3.4
Focus Group x 2 (Via email invite)	Exploring the programme experience.	3	1.4	2	1.1	5	1.2

The completion rates for qualitative data sources were relatively low. We completed 3 surveys at the start, the end and 6 weeks after the programme. Overall, the response rates of the surveys were also low, thus limiting our ability to conduct rigorous analysis.

Those who responded to the surveys and focus groups are likely to be self-selecting – participants who have engaged or completed the programme. Therefore, these responses may not be representative of all participants' experiences. Copies of the survey responses or materials can be made available on request.

4.2 Recruitment and onboarding

4.2.1 Recruitment channels

Across the two recruitment campaigns (cohort 1 & cohort 2) a total of 593 participants signed up via the WV Gets Active website; 384 in cohort 1 and 209 in cohort 2. After the sign-up period closed, we screened out participants who did not live in Wolverhampton (based on postcode) and their physical activity levels.

For cohort 1, we screened out those who stated they exercised more than 1 day a week using the Single Item Measure. For cohort 2, we screened out participants who stated they had exercised more than 3 days in the previous week.

For cohort 1, this qualified 222 participants who were randomly assigned to either the control or treatment group. For cohort 2 after screening out there were 190 participants.

Table 9. Where did you hear about the programme?

	Cohort 1		Cohort 2	
	Number of participants	%	Number of participants	%
Social Media	156	70.3	164	86.3
Carers' Bulletin	9	7.4	0	0

Poster	7	3.2	0	0
School (CC)	6	2.7	0	0
Email	6	2.7	1	0.5
Newspaper	4	1.8	1	0.5
Council Website	1	0.5	2	1.1
Other	7	3.2	18	9.5
Blank	26	11.7	4	2.1
Total	222	100.0	190	100.0

Social media was the most effective channel of recruitment. Most of the participants were recruited through social media from both cohort 1 (70.3%) and cohort 2 (88.2%). The social media posts were targeted to individuals from deprived wards via Facebook. For cohort 1, the Facebook ads reached 5134 people, among which 228 engaged; for cohort 2, they reached 4604 people and 222 engaged. As shown in the figures below, for both cohorts there are more women than men who saw the ads and people aged between 25 to 34 constituted the majority of those reached.

Cohort 1 - 5134 people reached
58.0% women; 42.0% men
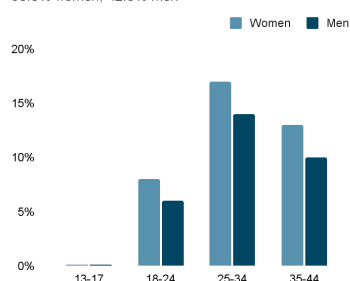
Cohort 2 - 4604 people reached
55.1% women; 44.9% men
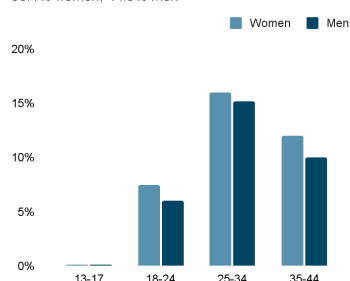
4.2.2 Recruitment timeline and programme version

Table 10: The recruitment timeline and programme versions by cohorts and groups.

Recruitment Campaign	Cohort	Group Name	Programme Dates	Programme Version
Campaign 1 (1st - 27th June)	Cohort 1	Group 1	2nd July - 12th Aug	WV Gets Active V1
		Group 2	2nd July - 12th Aug	Control (MoveSpring

		(Control)		only)
	Cohort 2	Group 2	20th Aug - 30th Sept	WV Gets Active V2
Campaign 2 (9th - 20th Aug)		Group 3	23rd Aug - 3rd Oct	WV Gets Active V2

4.2.3 Recruitment demographics

The demographics of the participants who downloaded MoveSpring for cohort 1 are as follows:

- There was a heavy female skew (87.9% for cohort 1 and 85% for cohort 2).
- The largest age group of participants was in the 35 - 54 age range (60.3% for cohort 1 and 57.9% for cohort 2) and the majority of participants were white (84.5% for cohort 1 and 77.4% for cohort 2).
- 22.7% had a long term health issue with the majority reported having mental health issues (18.4%), asthma (16.3%) or arthritis (14.3%).

It is worth noting that women of this age group have traditionally been underrepresented in physical activity and have been identified as a priority group to target by Sport England. Noting the success, especially of Facebook and social media in reaching this group, is of use and relevance for future projects.

There were no major differences in the demographic composition between cohort 1 and cohort 2. Summary tables of demographics of the participants captured at sign-up and by syncing and drop-out status can be found below.

Table 11. Participant demographics

	Cohort 1			Cohort 2		
	Total on Movespring	**Total who Synced**	**Never Dropped Out**	**Total on Movespring**	**Total who Synced**	**Never Dropped Out**
Age						
18-24	6	5	2	3	3	2
25-34	18	13	6	19	15	5
35-44	44	33	14	42	32	17
45-54	26	20	12	35	27	12
55-64	14	12	8	29	18	8
Over 65	8	5	5	5	4	3
Gender						

Female	102	79	41	113	87	41
Male	14	9	6	20	12	6
Device						
apple	37	36	19	41	40	15
fitbit	11	11	10	24	24	19
garmin	4	4	4	4	4	4
google	26	22	12	19	16	3
manual	19	14	1	20	14	5
none	18	0	0	24	0	0
withings	1	1	1	1	1	1
Ethnicity						
Asian	11	8	5	18	14	8
Black	6	6	2	11	5	2
White	98	74	40	103	79	37
Prefer not to say	1	0	0	1	1	0
Total	**116**	**88**	**47**	**133**	**99**	**47**

4.2.3 Sign up and onboarding process

Graph 4. Participant retention (drop-out) across sign-up and onboarding process
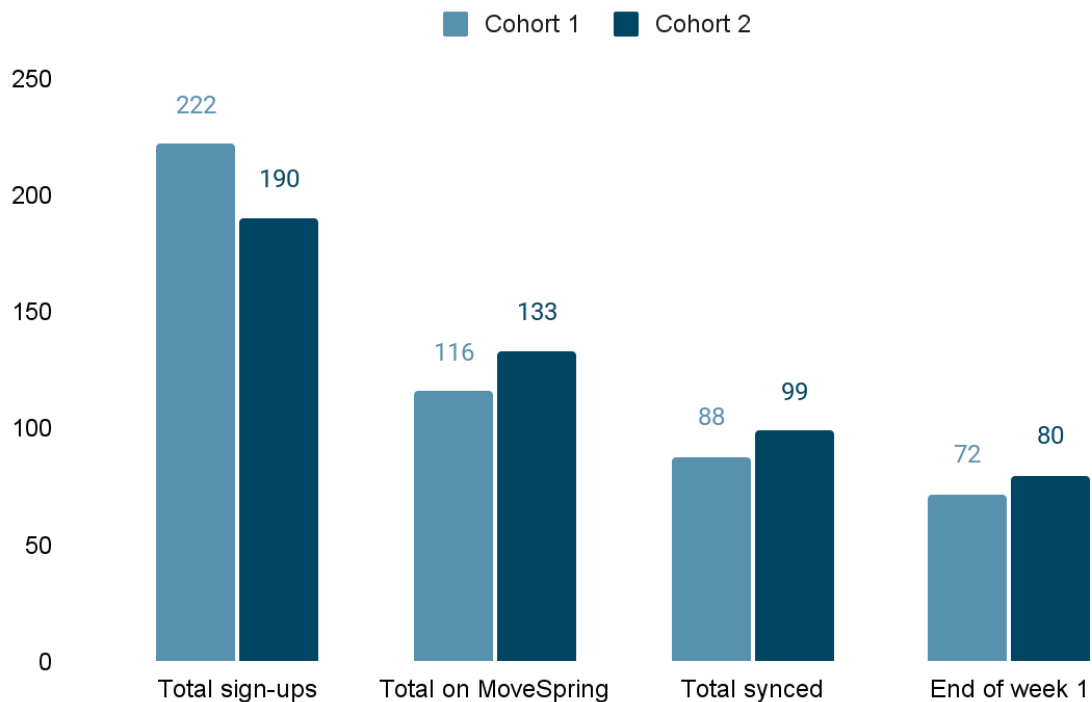
As illustrated above, participant drop-out was high at every step. During the onboarding process, every action or effort represents a small or large barrier or point of friction, leading to participants dropping out. The key steps are outlined below:

- From Sign up to downloading MoveSpring: This was the highest drop-out; this covered the waiting period and the onboarding email (47.7% for cohort 1, 30% for cohort 2).
- Syncing the device to MoveSpring: MoveSpring needed to be synced to a device (e.g., smartphone, smart watch etc.) to access exercise data. For some devices (Huawei & Samsung phones) this required downloading an additional app to enable syncing. For these devices, though we provided additional support, the drop out rates at this point were also high.

From reviewing the data, drawing on the survey responses and focus groups the primary reasons for participants' drop-out are:

- The delay in timing from sign up to start - this could have been up to 3 weeks for participants in cohort 1 and even longer for those who signed up and were assigned to the control group in cohort 1 as they did not start the programme until 6 weeks later.
- A drop in motivation and engagement from those who signed up. Their motivation had dropped before the start of the programme.
- Lack of support or engagement from the programme organisers.
- Bad first impressions of the app - people disliked the app experience.
- Disliking the content or structure of the programme. They were not interested in a walking only programme.
- Technical or physical barriers creating drop out.

Between cohort 1 and cohort 2, we changed a number of elements in the recruitment and onboarding processes (Table 7). This included: adjusting the recruitment materials; shortening the waiting time; increasing contact with participants and increasing the technical support provided during onboarding. These adjustments appeared to slightly reduce drop out. For cohort 1, the overall participant retention rate from sign up to syncing was 39.6%; for cohort 2 this figure was improved to 52.1%. The biggest impact was in reducing the drop-out from the sign-up to downloading MoveSpring.

4.3 WV Gets Active programme

The key metrics we used to evaluate the performance of WV Gets Active programme are:

1) The participant retention (drop-out) rate across the programme
2) Physical activity levels (step count), captured through MoveSpring

### 4.3.1 Participant Retention Rate (Drop-out rate)

Drop-out was defined as when participants stopped using the MoveSpring app. By using the MoveSpring app, exercise data was synced and uploaded; therefore when participants stopped providing data (opening the app) they were defined as having dropped out.[4]

Graph 5 shows the dropout rates by week for both cohorts. For cohort 1 the overall retention rate for those that started the programme was 53.4%. 88 participants synced their device at the start of the programme; 47 participants remained by the end. The dropout rate was relatively consistent across each week with the largest drop outs occurring in weeks 1 and 3.

For cohort 2 the overall retention rate was lower, 47.5% across the 6 weeks. 99 participants synced their device at the start with 47 participants remaining by the end. The largest drop out was again before the end of week 1.

Graph 5. Cohort 1 and 2 participant retention rates

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[4] We only defined those who stopped using the MoveSpring app and never returned (i.e., when no data was provided after they first stopped using the app) as drop-outs. Participants who have gaps in their exercise data (e.g., those who stopped syncing for a few days but re-synced after) are considered active users as long as they re-synced and completed the 6-week programme.

Participant retention by week
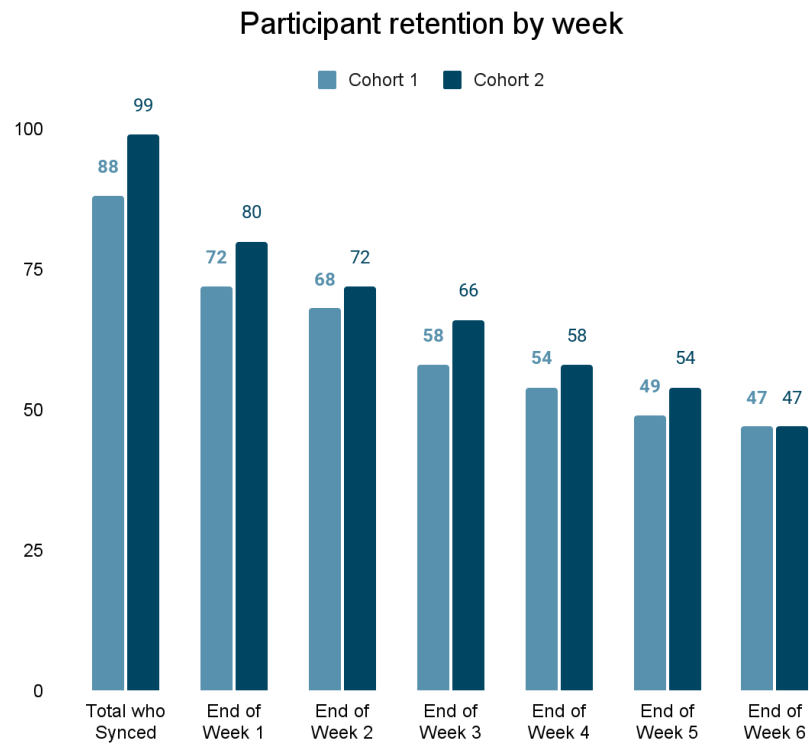
Graph 6. Cohort 1: Weekly drop out split between Group 1 and Group 2 (Control)

Participant retention rate (Cohort 1)
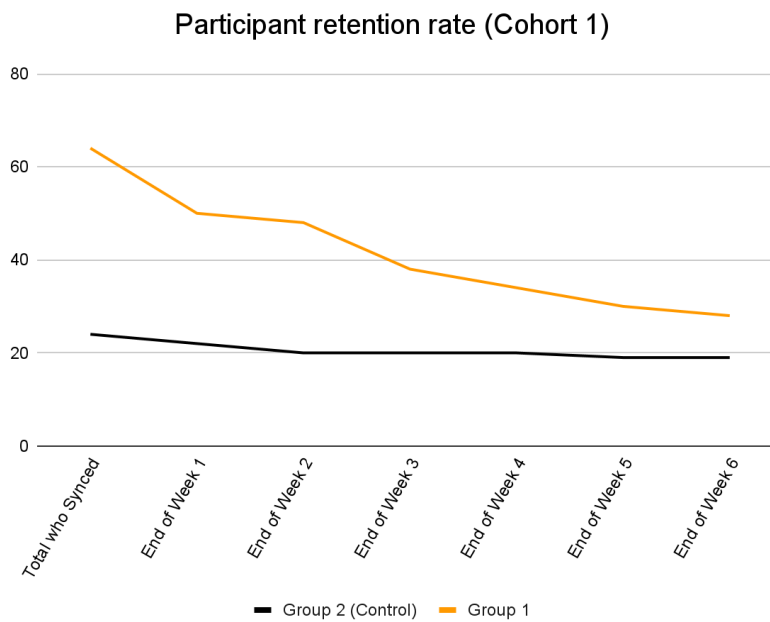
Graph 6 suggests that the drop out of participants happened regularly over the duration of the programme.

Another important finding is that Group 2 (the control group) experienced lower drop out than Group 1, especially after week 2. This suggests that most control participants followed the instructions provided to them in terms of syncing their smartphones and/or fitness trackers and leaving them running in the background.

There were no noticeable differences between those who are from lower socio-economic areas and those who are not.

WV Gets Active had a particular focus on recruiting participants from five deprived wards of the city: Ettingshall, Heath Town, Bushbury South and Low Hill, St Peter's and Bilston East. For cohort 1, 49 out of 222 individuals who signed up to the programme live in these areas.

We found that participants who live in these areas have comparable engagement levels to participants who are not from deprived wards. Out of the 49 who signed up, only 21 (42.9%) successfully downloaded the app and synced their devices, and only 11 (22.4%) were still engaged by the end of the programme. The drop out rates of those who live in the five deprived areas from signing up to the start of the programme to the end of the programme are similar to those who are not from deprived areas.

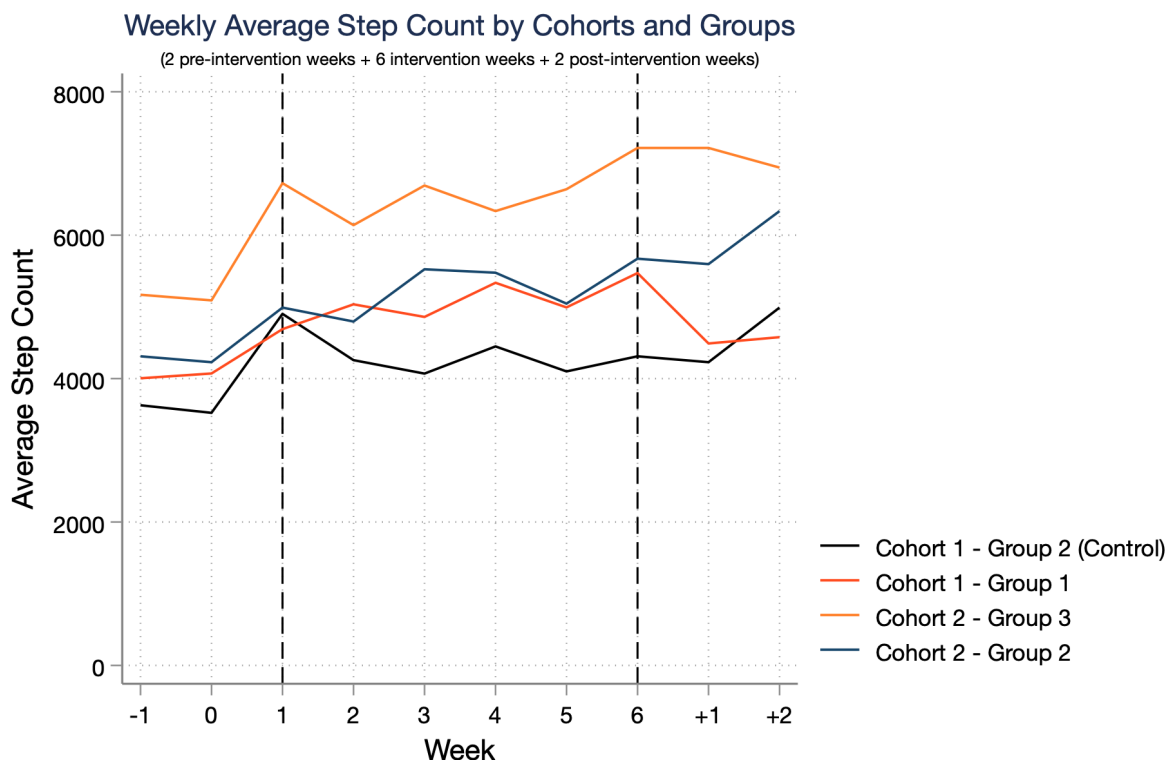### 4.3.2 Physical Activity Levels (Step Count)

MoveSpring enabled us to capture objective exercise data from participants (step count, distance travelled and exercise levels). For Group 1 participants (the treatment group in Cohort 1), there were small, time-limited gains in step count across the programme (+1,300 steps per day). These were not sustained in the weeks afterwards (i.e., one and two weeks after the programme).

For participants in Cohort 2, the data shows a larger increase in step count (+2,000 steps) per day. Importantly the step count remains high for the subsequent weeks (i.e., one and two weeks after the programme) showing signs that a habit may have been formed.

All groups show an increase in step counts at the start of the programme - including Group 2 (Control). We interpret this as a reflection of high motivation and engagement at the start of the programme. There was also an increase in activity during week 4 when the daily step target was increased as well as a spike towards the end of the programme.

Group 2 (Control) appears to have followed the instruction provided to them and therefore functioned as a valid control that allows for comparison with the other groups that participated in the programme. After the first week there was relatively low drop out across the programme, suggesting that control participants have had the app running in the background.

Graph 7. Average participant step counts (weekly) split by cohorts and groups

Weekly Average Step Count by Cohorts and Groups
(2 pre-intervention weeks + 6 intervention weeks + 2 post-intervention weeks)

Legend:
- Cohort 1 - Group 2 (Control)
- Cohort 1 - Group 1
- Cohort 2 - Group 3
- Cohort 2 - Group 2

Notes:
The graph only shows the step count data for those who synced their devices - those who dropped out and did not provide data are not included in the weekly average. The graph maps all four of the WV Gets Active groups' step count from two weeks before to two weeks after the 6-week programme. The data has been overlaid in this graph to enable comparison; however the programmes were run at different times. The programme for Cohort 1 was run from July 2nd - Aug 12th. Cohort 2 (Group 2) was run from Aug 20th - Sep 30th and lastly the Cohort 2 (Group 3) was run from August 23rd - October 3rd.

Group 1 participants were further assigned to different groups that have either a high or a low step target. Graph 8 shows average daily step count for the higher step target groups, the lower step target groups and Group 2 (Control). We increased the daily step target for both groups from week 4. For the low step target group, the daily target was increased from 4000 to 7000 per day, and for the high step target group from 5000 to 8000. We also provided weekly feedback to participants on whether and if they hit their step count over the week. For example, for those who achieved their targets for more than 5 days in a week, we sent the following message: *"You were one of our top steppers last week. You did more than the target of 5 days. Make sure you keep ahead of the pack this week as well! If you've got any tips on what your secrets or tips are, do share them with the group on the chat!"*

Graph 8: Cohort 1 Average Daily Step Count - (high step target vs low step target vs control)

Weekly Average Step Count (Cohort 1)
High step target vs Low step target vs Control
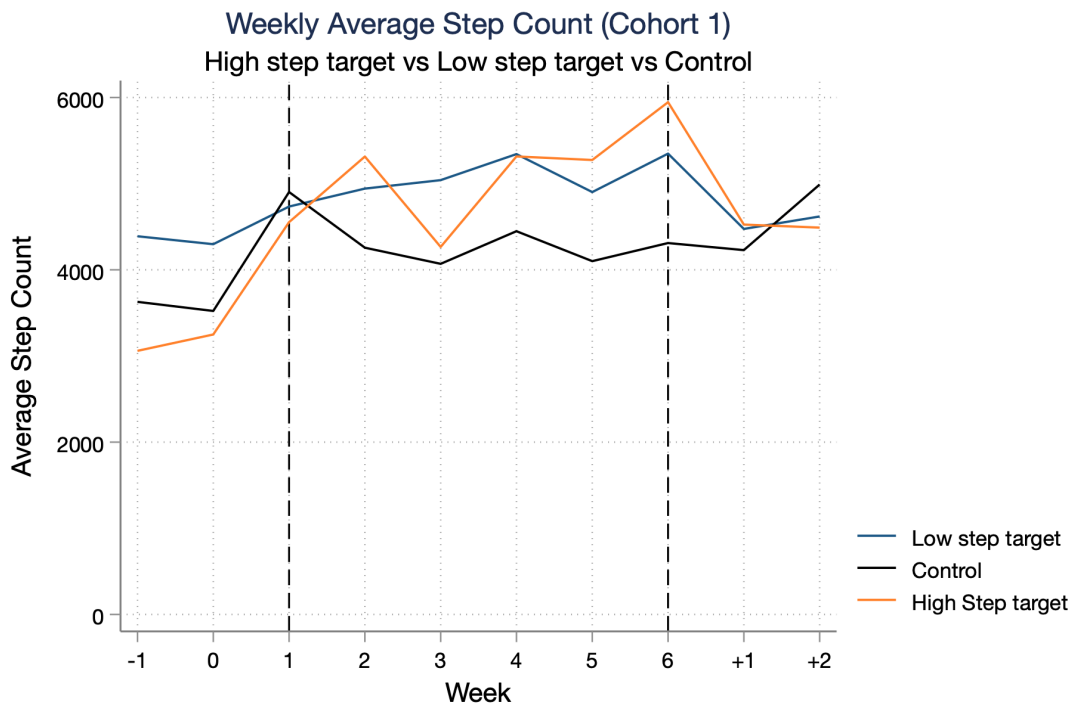
It appears that there was a spike at week 4, corresponding to the lift in the daily step count target. It also appears that the group with the higher step target may have responded to the higher step count target. This would suggest that the daily step count acts as a strong anchor and confirms the importance of carefully calibrating the step count targets to ensure they are challenging but not disheartening.

There was also qualitative evidence that the daily step target was an important feature. When the step count target shifted so did people's steps.

"Being able to visually see my progress; if I could see I hadn't achieved, it gave me the drive to succeed the following day" - Participant 687809 (Female, White, 35-44)

"Seeing the tick signs when I achieved my daily goal" - Participant 687766 (Female, White, 45-54)

"Seeing how many days I could do, my daily average number increasing and just reporting to somewhere/someone makes you more motivated to do" - Participant 688991 (Female, White, 55-64)

This helped participants achieve their goals and prompted some to comment on their positive experience.

> *"Walked more so got fitter, feels good that I could finish the course" - Participant 687878 (Female, White, 45-54)*

> *"I've managed to get more active. I am more aware of how important the physical activities are and I got the exercise bug. Overall this made me feel more happy and I even lost a bit of weight." - Participant 687766 (Female, White, 45-54)*

> *"Achieved 30 out of 30 targets. Invigorated" - Participant 690231 (Female, White, 65 and over)*

> *"The app helped to log steps and motivated me to keep going" - Participant 715845 (Female, Asian, 45-54)*

Another observation from graph 8 was that the stated levels of exercise, captured in the Single Item Measure, were not reflected in the step count data captured through Movespring (Milton et. al., 2010). In the week before the start of the programme, those who stated they exercised zero days in the last week actually had higher step counts than those who said they exercised 1 day in the previous week. This is the inverse of what was expected and calls into question the validity of using self-reported measures to capture physical activity levels. This could be a separate line of research going forward to understand the validity of the Single Item Measure in inactive groups.

4.3.3 Qualitative survey findings

We sent out 3 surveys at the start, the end and 6 weeks after the programme. Overall the response rates of the surveys were low, thus limiting our ability to conduct rigorous analysis. We therefore provide a snapshot of some of the insights from each survey below.

For the survey conducted at the start of the programme, we received 104 responses. The survey focused on participants' living situation, reasons for joining and barriers to exercise. Most of the respondents live with their family (79%). In terms of the reasons for joining the programme, many cited health-related reasons such as losing weight and becoming more active. In addition, we noted that the barriers to exercise were consistent with research carried out in the scoping phase. The four most cited barriers to exercise were: the lack of motivation and time, changes in routine due to COVID restrictions and health-related issues.

We received 38 responses for the survey conducted at the end of the programme. The survey focused on participants' feedback on the programme, including whether they achieved their goals, their engagement levels and issues they encountered with the app. Most participants who took the survey reported that they achieved what they were hoping to by the end of the programme (71%).

There was mixed feedback when respondents were asked whether the programme helped them overcome their barriers to exercise: 47% said yes while 33% said no and 19% weren't sure. Those that completed the programme and did not drop out were much more likely to complete the survey; therefore these responses are only reflective of those who finished the programme.

Graph 9. The percentage of participants who overcame their barriers to exercise
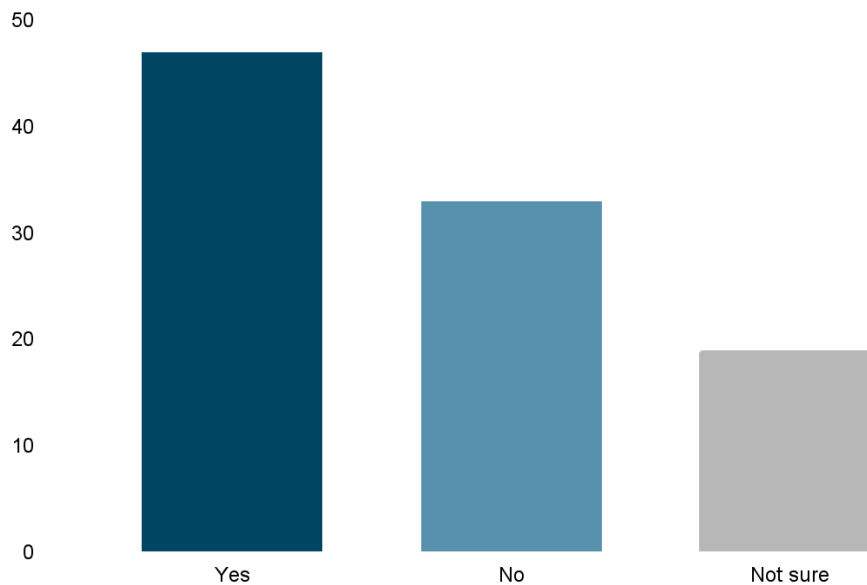
In terms of the features that respondents found most engaging, the ability to track one's progress and compare exercise levels with peers were frequently cited.

About 39% of respondents reported issues with the app, including having challenges during the set-up and syncing process and difficulty in navigating the app.

We received a very low number of responses for the survey conducted 6 weeks after the programme, with only 14 participants completing it. This survey focused on tracking participants' exercise levels after the programme had concluded and collecting feedback on potential future programmes.

64% of respondents reported that they have continued to walk or exercise regularly since the end of the programme and most of them did so without joining another programme. When asked what type of exercise class or programme would interest them and get them to sign up, a variety of responses was provided, with swimming and cardio exercises (e.g., zumba and spinning) being the most popular.

In all three self-reported surveys, respondents were asked the same set of SWEMWBS questions to shed light on how participants' feelings and thoughts change throughout the programme (Short Warwick Edinburgh Mental Wellbeing Scale (SWEMWBS)). In each of the surveys, participants

were asked to pick an assessment that best describes their experiences of each of the SWEMWBS measures. Respondents have 5 choices to choose from for each of the questions: none of the time, rarely, some of the time, often, and all of the time.

Table 11. Average score for each of the 7 SWEMWBS measures over different periods

	n	Feeling Optimistic	Feeling Useful	Feeling Relaxed	Problem Solving	Thinking Clearly	Feeling close to people	Decisive
Pre-programme	74	2.99	3.07	2.64	3.11	3.18	2.96	3.64
Post-programme	30	3.20	3.37	3.17	3.47	3.67	3.33	3.83
6 weeks +	13	3.54	3.77	3.92	3.77	4.23	4.08	4.38

Notes: Each measure is on a 5-point scale coded as follows: None of the time = 1; Rarely = 2; Some of the time = 3; Often = 4; All of the time = 5.

Because of low response rates in the surveys, it is important to note that any findings based on the surveys are unlikely to be representative of the population of interest due to small sample sizes and may only be representative of a self-selecting group of respondents. It is likely that those who responded were also those who were most engaged and most likely to have completed the programme.

The table above shows the average score for each of the SWEMWBS measures recorded over three different time periods. Across all 7 components of the SWEMWBS measures, there is a clear increasing trend amongst participants who took the survey, suggesting that participants had more positive feelings and thoughts as the programme progressed. Encouragingly, such effects were observed to persist (and even improve over time) for the few participants who took the survey 6 weeks after the programme had ended.

4.4 Variation in participant experience

The data captured through MoveSpring showed there were large variations in participant engagement, step count and performance.

Every day of the programme there was a daily step target to be met. WV Gets Active challenged participants to reach this target for 5 days each week of the programme–this equates to 30 days out of the total 42 days of the programme.

Graph 10. Participant performance - How many days did participants hit their target step count (% of total participants)

Overall performance - Number of days the user hit the step count target
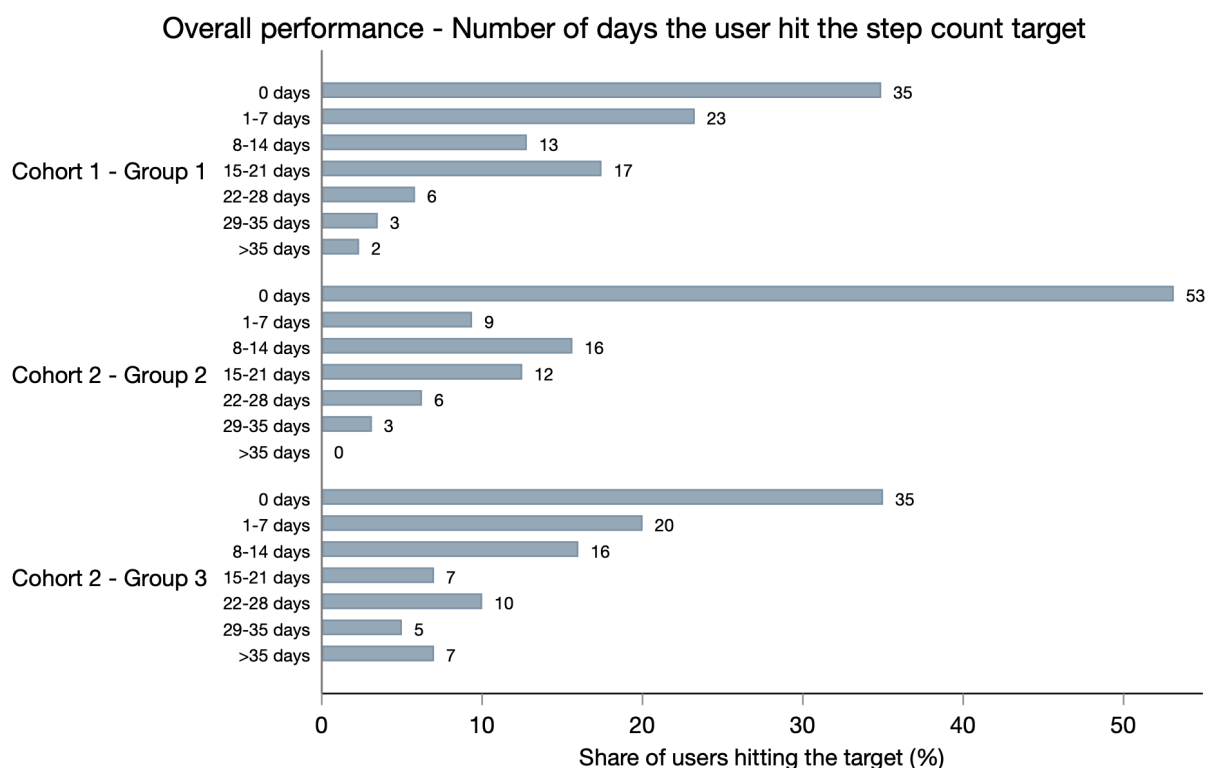
Note:
The bar chart above includes data from all participants who synced their device at the start of the programme, and so it includes those who dropped out of the programme.

A minority of WV Gets Active participants displayed a high level of engagement and motivation. This group met their step count target for over 29 days of the 42 days. For Cohort 1 (Group 1) participants this represented 5%, for Cohort 2 (Group 2) this was 3% and for Cohort 2 (Group 3) this was 12% of participants. For this group of highly active participants, they managed to increase their daily step count to about 9500 by the end of week 6 despite having a high baseline step count of about 7000 before the start of the programme.

A smaller group was engaged and met the daily step target between 15 and 28 days but below the target of 30 days. For Cohort 1 (Group 1) this was 23%, for Cohort 2 (Group 2) this was 18% and for Cohort 2 (Group 3) this was 17%.

As outlined previously the data shows that the majority of participants were disengaged from the programme and did not meet the step target once. This reflects the high early drop-out rates discussed earlier. For Cohort 2 (Group 2) this represented 53%, whilst for Cohort 1 (Group 1) and Cohort 2 (Group 3) this was 35% of participants.

The second largest groups were those who reached their target between 1 and 14 target days. For Cohort 1 (Group 1) and Cohort 2 (Group 3) this represented over a third of the participants (36%), whilst for Cohort 2 (Group 2) this was a quarter (25%) of participants.

4.5 Drop out rate and reasons for disengagement

To better understand the reasons for participant drop out and disengagement, linear regressions were conducted to assess if there were any demographic or other factors that influenced drop out. There were no significant findings to note. Due to the small sample size, any real effects were unlikely to be detected.

4.5.1 Survey responses

By reviewing information from the survey responses and focus groups, we identified a number of factors that may have possibly influenced participants dropping out.

The programme did not provide enough motivation
For some residents, the app did not appear to motivate them, thus leading to them dropping out. For example, some participants found the app to lack engaging elements and features.

> *"I could have done this on my own; the whole point was to gain motivation, company and have people to interact with." - Participant 687747 (Female, White, 35-44)*

> *"Nothing about the app was engaging. It was dull, clunky and didn't entice me to engage." - Participant 715328 (Female, White, 45-54)*

The challenge wasn't varied enough
A number of participants were expecting more from the programme, both in terms of variation in the challenges and the level of interaction with peers.

> *"The monotony of the challenge… I thought it would be more. I thought there would be different challenges, some interaction, touch points, it was flat from start to end and most people didn't bother after the first few days" - Participant 687747 (Female, White, 35-44)*

> *"I don't really know what I was expecting, but walking challenges and an app wasn't it. I didn't find anything in the programme to inspire me to exercise more." - Participant 691014 (Female, White, 35-44)*

"This programme did not challenge me enough, there wasn't enough interaction with others or encouragement from the app. It simply did not do anything more than set goals which I already do with my fitbit. It was totally lacking" -
Participant 715328 (Female, White, 45-54)

"I was hoping to get fitter and stronger. 6 weeks of having to walk wasn't what I thought I was signing up for." - Participant 716329 (Female, White, 55-64)

Technical issues or friction in using the app results in disengagement
Some participants reported an issue with the app: when the step count increased it didn't automatically record previous targets that had been reached.

*"The app pushed me to achieve my goal and I had a 30+ day streak going. You then changed the step goal and this backdated to a day I hadn't achieved the new goal. I felt cheated as I had achieved it on the day I needed but not achieved the new goal because I didn't know what the new goal was going to be. This made my motivation plummet. The final few days of the app I lost all motivation." -
Anonymous*

The app did not cater for multiple activities (e.g., swimming and or running or yoga).
While WV Gets Active was designed to target walking and increasing step count for inactive individuals, some individuals mentioned that they would like to be able to do other physical activities while still participating in the programme, such as riding and swimming.

"Having to go online to convert other activities was frustrating. It would be better to have it in the app." - Anonymous

4.5.2 Profile of participants

We also reviewed the data to understand if there were any interesting observations on the profile of participants who dropped out.

Graph 11. Retention rate and age profile of drop outs
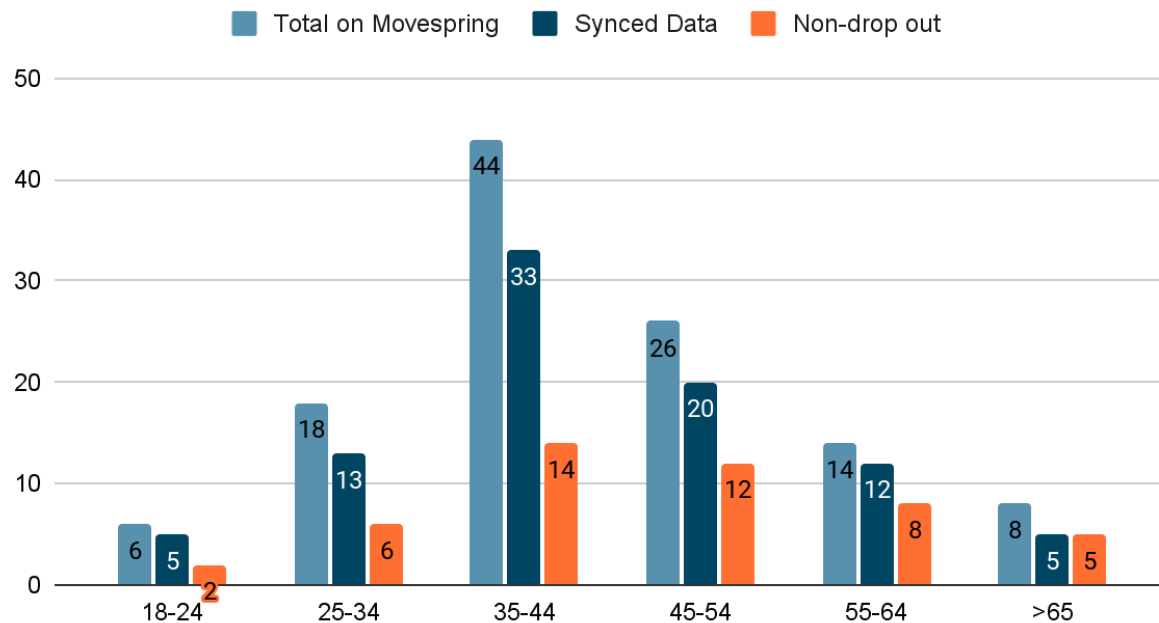
Although the sample sizes are too small to draw conclusions, it would appear that participants who were older (i.e., 65 years old and above), after they had synced, were more likely to persist with the programme. A caveat, however, is that we have less participants from the older groups overall and our observation is thus limited by the small sample size.

We also explored other factors which could underpin or relate to drop out. There were no other observations based on gender, ethnicity or other factors that merit comment. In part this could be explained by the low participant numbers.

4.6 Synced device and engagement

Participants who synced 'fitness devices' were more likely to complete the programme, as shown in the table below. We define 'fitness devices' as any device whose prime function is linked with health and fitness tracking (e.g., Garmin, Fitbit and Withings). Participants with fitness devices also registered higher average step counts across the programme. The graphs below show the weekly step count of participants who take part in the programme split by the type of device they used. There is a marked difference between those with a fitness device versus other devices.
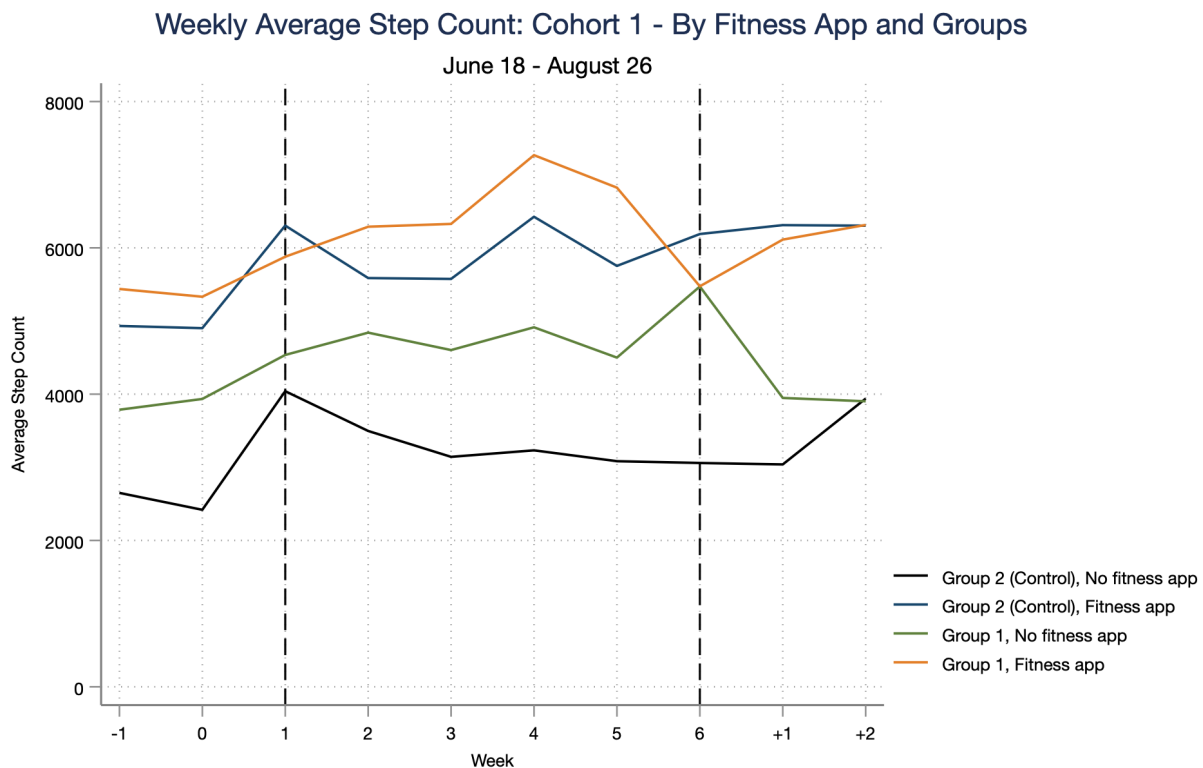
These observations make intuitive sense for three reasons. Firstly, many of the fitness devices are wearables or watches, meaning that once they are being worn they will pick up step counts across the entire day. This is different from smartphones that need to be carried whilst exercising. Secondly, MoveSpring is primarily a step counting app, therefore syncing is relatively

straightforward for many of the fitness devices as those users will likely already have downloaded a fitness app to begin with. Thirdly, and perhaps most importantly, a participant who already has a 'fitness device' likely has a higher level of commitment to healthy behaviours and greater motivation and willingness to work toward the programme targets than their counterparts who did not have any fitness devices.

Table 12. Cohort 1 - Retention rates by device

| Device type | Number of participants | | | | Drop out by week | | | | | |
	On Movespring	Synced	Completed programme	% Retained	End of Week 1	End of Week 2	End of Week 3	End of Week 4	End of Week 5	End of Week 6
apple	37	36	19	51.4%	4	2	6	2	3	0
fitbit	11	11	10	90.9%	0	0	0	0	0	1
garmin	4	4	4	100%	0	0	0	0	0	0
google	26	22	12	46.2%	2	1	3	2	2	0
manual	19	14	1	5.3%	10	1	1	0	0	1
none	18	0	0	0%	0	0	0	0	0	0
withings	1	1	1	100%	0	0	0	0	0	0
Total	116	88	47	40.5%	16	4	10	4	5	2

Graph 12. Cohort 1 - Average weekly step count split by fitness versus non-fitness devices

Weekly Average Step Count: Cohort 1 - By Fitness App and Groups
June 18 - August 26

Group 2 (Control), No fitness app
Group 2 (Control), Fitness app
Group 1, No fitness app
Group 1, Fitness app

Graph 13. Cohort 2 - Average weekly step count split by fitness versus non-fitness devices

Weekly Average Step Count: Cohort 2 - By Fitness App and Groups
August 20 - October 14 for Group 2; August 23 - October 17 for Group 3
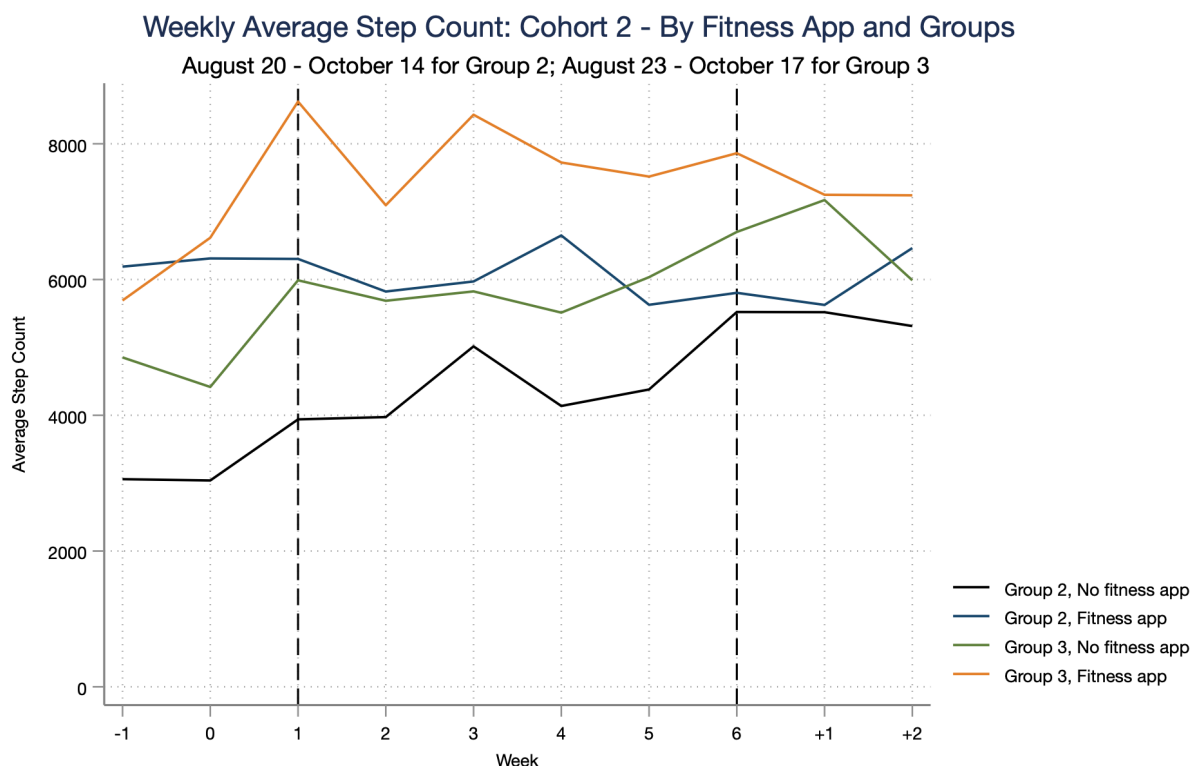
4.7 Specific features of the programme

There were several features of the WV Gets Active Programme that were included to try to increase engagement and commitment. While the team are unable to evaluate these features robustly, some findings that could point towards future research are highlighted below.

4.7.1 Group Formation and Composition

Table 2 shows the assignment of participants to different teams for cohort 1. Due to high drop out we had groups ranging in size from 7 to 15 participants at the start of the programme.

There was qualitative evidence that suggests the important role of the group in motivating participants:

> *[In response to the question, "What motivated you?"]*

"Looking at the group as a whole and aiming to inspire others" - Participant 687853 (Female, Black, 55-64)

"Seeing how many days I could do, my daily average number increasing and just reporting to somewhere/someone makes you more motivated to do" - Participant 689977 (Female, White, 55-64)

"Seeing other people complete their steps [Motivated me]" - Anonymous

For Cohort 1, there was a large variation in the average daily step count for the different teams. As an observation the teams with the most active chat functions were the Sky and Orange teams. These were also the two with the highest average step counts at the start of the programme, with about 5000 daily steps on average.

However, there was a high drop out after week 4 for the Sky and Orange teams. One potential reason is that the social support provided engagement for the first three weeks and not beyond. After week 4, there was a noticeable drop off in the use of the chat function. This shows the importance of the group support and that this should be encouraged across the full six-week programme. This could point to the benefit of having a dedicated coach who could provide this support.

Between Cohort 1 and Cohort 2 we changed how the groups were constructed:

For cohort 2:

1) We assigned participants to groups after 1 week in the programme. For the first week all of the participants were in one collective group. This enabled us to collect data for all participants for 1 week of the programme.
2) After this week we assigned participants to one of 3 groups based on their engagement with the programme and also on their step count. The three groups we constructed were:
    a) Purple Group - Engaged and meeting the step count
    b) Olive Group - Syncing data but not meeting the step count
    c) Navy Group - Disengaged - entering their data manually. For this group we changed the way the programme was measured, shifting from step count to self-reporting that they had completed the exercise.

There was a steady drop out of participants across the 6-week programme for all three groups in cohort 2. The key lesson to take from this group was that once the participants have dropped out, it is extremely challenging to get them reengaged.

4.7.2 Chat function in the app

We tried to initiate conversations using the chat function at the start of the programme and intermittently made comments on the chat. The hope was that this chat function would grow organically and provide support and encouragement for participants. There were variable levels of chat across the different teams.

For the teams with higher numbers of participants using the chat function, chat frequency peaked near the start and tended to fade or reduce towards the end of the programme.

"I was on my own. Only a handful of people even used the chat and it wasn't any help"
- Participant 716329 (Female, White, 55-64)

There was however some indicative data showing that the chat function may be linked with increased engagement and increased average step counts. Overall, the chat function is a powerful tool but it needs to be monitored and maintained well to ensure it provides the motivation and support that is needed for this group.
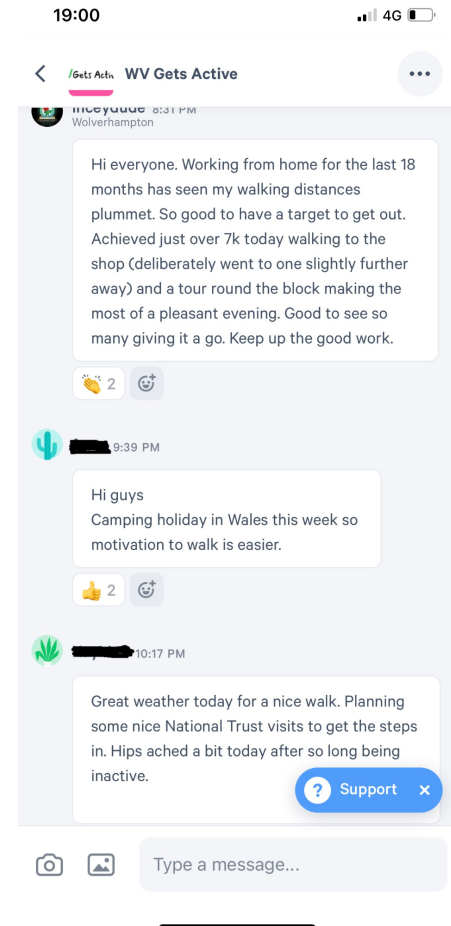
5. Discussion

In this section, we discuss the implications for future work for CWC, ABC and other councils who work in the physical activity sector. We also highlight the limitations of the results due to low participant numbers in section 5.2. Finally we provide a summary table of the recommendations in section 5.3.

5.1 Implications

5.1.1 Programme recruitment

The recruitment process is crucial for the success of any programme. The first challenge the project team faced was in recruiting inactive residents in the city. Social media and, more specifically, targeted Facebook campaigns, were shown to be effective at reaching high numbers of our target population. This recruited participants with a strong skew towards women, mainly in the 35-54 age bracket and predominantly white. This is useful to know, as inactive women of this age are traditionally underrepresented in sport and have been highlighted as a priority group by Sport England (Sport England, 2016).

In addition to the use of social media, which provides a low-cost, high-reach approach, recruitment could also be supplemented by other channels and methods. As other programmes may look to engage different profiles of participants, having an understanding of some of the pros and cons of each recruitment method channel can be useful moving forward.

Social prescribing as a recruitment strategy would be an approach to explore further.[5] This approach could reach a different participant profile and also potentially improve participants' engagement with the programme. For instance, Active Black Country have been delivering physical activity projects during the COVID-19 pandemic and participant retention rates have been very high (close to 100%) for programmes such as Get Out Get Active that uses a social prescribing model. As a programme targeting inactive participants, it also works with faith leaders as trusted sources in the community to deliver advice about becoming active to members of their congregation.

The Use of the Single Item Measure

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[5] During the scoping phase of this project, we specifically ruled out the use of social prescribing recruitment strategies. The reasons for this were twofold. Firstly, the network we were working with was public health practitioners whose burden we did not want to add to during the COVID pandemic. Secondly, we preferred a recruitment approach that would not require additional staff time to administer. The reason for this was if the programme turned out to be successful, we wanted to be able to scale the approach citywide.

During the recruitment process, the Single Item Measure was used to screen out ineligible participants as it had been shown to have predictive validity of participant exercise levels (Milton et. al., 2010). For cohort 1 the stated levels of physical activity captured through this measure did not reflect the objective physical activity levels (step count) we captured. Our data showed that inactive participants (i.e., participants who stated they had done no exercise) had a higher step count than those who stated they had done 1 day of exercise.

This suggests that people do not always accurately recall or report their levels of exercise, or potentially understand the definition of physical activity, especially when the exercise levels are low. We would recommend further research focusing on whether the Single Item Measure is valid specifically for an inactive population, or for one that does very low levels of exercise.

5.1.2 Participant drop out before the start of the programme

The biggest participant drop out happened after the sign up and before the start of the programme. Understanding this group and how they can be engaged is a big challenge. The project team looked to speak with this group through focus groups and the end of project surveys; however got no engagement.

This group is almost certainly not homogenous; and may face multiple barriers and challenges to starting the programme. We would see the value in researching and understanding the period of sign up to starting a programme in more granular detail.

Additional effort, resources and research should be devoted to bridge the intention-action gap between sign-up and starting the programme. Taking the first step or converting intent, even when fleeting, is a big step in terms of behavioural change. In section 5.2 below, we provide recommendations that draw on the learnings from the project.

It would also be of value to better understand the barriers to engagement for this group and conduct further research on how best to convert sign-ups to starting the programme. For example, shortening the waiting period between signing up and starting the programme, increasing contact (via emails) during the waiting period to maintain participants' interest, and providing increased technical support helped reduce drop-out between the two cohorts in this programme.

5.1.3 Programme drop out (after the start):

When reviewing the performance of WV Gets Active, it is informative to consider the drop-out rates of other similar programmes. Based on the mobile app user retention rate published by Statista in 2021, retaining participants on fitness apps is notoriously challenging. Retention rates for standalone fitness apps worldwide are extremely low: only 20% of sign ups are retained after day 1; 8.5% by the end of the first week and a mere 4% after the first 30 days (Statista, 2021). These

figures suggest that the challenge in maintaining engagement is commonly experienced by fitness apps in general.

While studies show that more specialised health apps enjoy higher retention, having a more well-defined and specific target population likely contributed to higher retention rates observed in these programmes. A meta-analysis of smartphone health apps found retention rates ranging from 29% - 100% with an average 79% retention for app-based behaviour change interventions. Importantly, the majority of these programmes were projects addressing specific health conditions and recruited from a patient population using social prescribing models.

Referencing the performance of WV Gets Active in these contexts is potentially encouraging; the retention rate across the programme was higher than app only programmes; whilst lower than apps targeting specific health conditions.

5.1.4 Changes to the WV Gets Active programme design

For a minority of participants, WV Gets Active succeeded in building an exercise habit. From a cursory review this group appeared to be relatively self-motivated and persevered through the programme, benefiting from the daily feedback provided through the app.

This observation suggests a future line of research to understand the profile of those who dropped out versus those that persisted with the programme. It would be intuitive that those who dropped out may typically have lower levels of self-discipline, lower self-efficacy and lower attention spans. If this assumption was true this would be an important consideration for future programme design for this target group. It would suggest that programmes targeting inactive participants would need to maximise the support provided through a programme. It is therefore likely that app-only programmes may not be sufficient on their own to create meaningful change. If we were running WV Gets Active again, we would recommend a number of changes to increase support. These have been developed in response to feedback in from the surveys and chat function and include:
- Having a dedicated coach to deliver the programme. The coach's role would be to provide motivation, engagement and support for participants. This would ideally be someone with an expertise in coaching physical activity and have local knowledge. The coach would be publicly facing and be present on the chat and across the app platform.
  - If there was capacity, we would encourage personal communication at the start of the programme as well as at week 3 or 4.
- Provide more variability in the challenge(s).
  - We would look to vary the exercise targets more, potentially mixing walking with cycling, yoga or swimming.
  - Having micro-challenges within the programme that are introduced at key points (e.g., week 3 or 4 when motivation dips).

5.1.5 Variable participants' performance

One of the primary outcome measures was the overall impact of WV Gets Active on participants exercise levels. To do this we averaged the change in step counts for participants in cohorts 1 and 2. However, it is potentially more important to recognise and understand the large variation in participant engagement, exercise levels and experience. In other words, there was no single uniform participant experience. This finding suggests a number of future recommendations.

Firstly, future programmes could explore having more specific or tailored content to address challenges faced by the participants. For WV Gets Active V1, a lot of the content provided was generalisable to all participants. For example, content on how to build a routine to incorporate exercise into your day. In a focus group one of the participants flagged the specific challenges of trying to include a walking exercise as a mother with a toddler or young child. How it was hard to walk with a small child; and how this could take hours instead of minutes. Another example of a challenge was the perceived safety for single women walking alone in some areas. For WV Gets Active V2 we provided more materials that addressed specific barriers to exercise. We would see benefit in both providing a bank of more specific materials and if possible to target this material to meet the needs of each individual participant.

Secondly, it's important that different programmes may suit different participants. There is no 'one size fits all' solution. This is consistent with other fields of behaviour change (e.g., smoking cessation). There could be benefit in Councils, Sports bodies or other organisations to provide more of a signposting or triage service that identifies the practical and psychological needs of participants and then matches them to a programme that is likely to meet their needs.

Finally, another interesting observation from the results was that there was a marked difference in engagement and step count levels for participants who owned and used a fitness device (e.g., Garmin, Fitbit and Withings) for the programme. This could be a rich vein of research to explore further. There are several interpretations that could be explored further in future programmes.

One interpretation is that fitness devices tend to be wearable, such as a watch or a bracelet. This would mean that more steps are captured as the device is worn all day. In contrast a smartphone would need to be carried to capture steps; therefore, there will naturally be a higher step count in fitness devices.

Another interpretation would be that owners of fitness devices or trackers are more familiar with the use of apps and this type of technology. As a result, they are more likely to download and use the app.

From a behavioural change perspective there are also other interpretations that could be interesting to explore. The first is understanding if the ownership of a fitness device is correlational or is causal

to increasing physical activity. The purchase of a fitness device could indicate greater commitment to health goals as the individual has the intention to change their behaviour. However, the commitment is both financial as well as psychological; as the ownership of a fitness device indicates that you are tracking your fitness and that is the sole purpose of the purchase.

This interpretation also would fit well into a theory of change. There are several theories of change that could be used. One example is the Transtheoretical Model of Change, that has been adopted by Sport England (Sport England Towards an Active Nation, Strategy 2016-21). This suggests that there are 5 stages to behaviour change that participants can move between. These five stages are 'pre-contemplation' 'contemplation' 'preparation' 'action' and 'maintenance'. The purchase of a fitness device would suggest participants are either at a 'preparation' stage or an 'action' stage as a minimum.

It would also be interesting to understand if providing a fitness device to a participant can be causal in increasing the commitment to exercise. If this was the case, reviewing the cost / benefit of providing a fitness device could outweigh the costs of treating / changing residents in health settings or due to other secondary outcomes from poor health and fitness. These research questions could be explored more fully by randomly providing fitness devices as part of a programme for individuals, especially those with lower motivation or low levels of activity.

5.1.6 Evaluating the project

Central to a behavioural science approach is using an evidence-based approach in evaluating the impact of interventions. This, however, can be challenging. WV Gets Active looked to evaluate the impact of the programme through a randomised controlled trial (RCT) as an evidence-based approach. The programme was underpowered due to high participant drop out.

This was frustrating as large amounts of effort were expended designing, constructing and implementing RCT trials, especially in setting up and communicating with both a treatment (Group 1) and control group (Group 2).

With hindsight adopting a blended evaluation methodology from the start of the project may have been more appropriate. This would entail combining qualitative and quantitative approaches to capture learnings and insight. The reason to adopt this approach is because new approaches and methodologies were trialled for the first time. This includes the use of an app, alongside collecting objective physical activity data and recognising the dynamic and challenging context of delivering the project during COVID-19. Given these circumstances, it may have been ambitious to try this type of evaluation given the multiple major challenges the project needed to overcome. Trialling new approaches and methods brings risks and new challenges. With a high number of new or unknown processes, running a rigorous RCT could be seen as an additional risk requiring high management time. Ensuring the evaluation fits the scope of the project is important.

5.1.7 The use of objective exercise data

Many community sport programmes evaluate the impact of programmes through readily available metrics. For example, for face-to-face programmes this can be attendance rates, performance at an event, and in some cases, self-reported exercise levels and subjective wellbeing.

WV Gets Active used objective physical activity levels (step counts captured through the MoveSpring app), enabling the team to track relative changes in physical activity. A significant problem the project experienced is that unless participants were already tracking their step count data there was a challenge in getting participants to download, sync an app and then share the data.

For future work, when looking to use objective step count data we would suggest the following:
1) Working with a population who already have fitness devices, or who already have an app installed that tracks physical activity data. The challenge with this is it will be quite a self-selecting group; participants that are already engaged with physical activity programmes. This does not work with the target inactive population we were working with for this project.
2) Providing a fitness tracker or wearable as part of the programme. This will also go some way to incentivise participants to track their data (Ruohoniemi, 2019).
3) Incentivising participants to take part and providing additional motivation to engage and capture data (Gormley et. al., 2019).

5.1.8 Limitations

Due to participant drop out across the recruitment, onboarding and the 6-week programme, we could not robustly evaluate cohort 1 data using our proposed Randomised Controlled Trial design. To analyse the results we required 144 participants to complete the programme and to provide MoveSpring data (daily step count). For cohort 1, we recruited 222 participants onto the project but only 88 participants went on to sync their data; of those 88, 44 went on to complete the 6-week programme.

To evaluate, we have therefore taken a blended approach, combining the objective data captured through MoveSpring and qualitative data collected through surveys and focus group discussions. As this programme was underpowered due to high drop-out and consequently a low sample size, our findings should be interpreted with caution. Further research is required to draw conclusive findings from this data.

5.1.9 Implications for CWV and ABC

There are several learnings for CWC and ABC to take away from this project. CWC and ABC have a long standing working relationship and were able to partner up to deliver this programme. During the height of the COVID-19 pandemic, the partnership approach delivered by both organisations was welcomed. This was particularly ideal with leaning on the partnership at a time when resources and capacity were targeted to the COVID-19 recovery and response. Both CWC and ABC have a unique perspective of the project as they have oversight and input into a range of programmes across the region.

1) The importance of having benchmarking to be able to meaningfully evaluate and benchmark the programme.
2) The opportunity to provide a triage service / questionnaire to guide or direct participants to programmes that will match or suit their needs.

5.1.10 Next steps for CWC

The City of Wolverhampton Council is building on the work of this project by focusing on supporting physical activity across resident life courses, with a particular focus on older adults. Workstreams will also consist of promoting low intensity activities such as gardening and household activities to demonstrate how residents can embed physical activity within their daily routine. Wolverhampton is also a part of a Health Incentives pilot study from the Office of Health, Improvement, and disparities (OHID) which consists of residents increasing their physical activity and increased healthy eating using an app and receiving rewards.

5.1.11 Next steps for ABC

Active Black Country will continue to build on the learnings from this project and are leading a Black Country partner approach to enable a legacy of activity from the forthcoming 2022 Commonwealth Games in the West Midlands.

5.2 Recommendations

These recommendations are based on the experience of the team delivering the WV Gets Active programme. Further research should be conducted to further develop these recommendations.

Theme	Overall Recommendation	Details
Recruitment	Continue to use social media as the main recruitment tool with other supplementary recruitment strategies - although limitations due to digital literacy should be acknowledged.	This could be especially useful in attracting and engaging different participant profiles. Strategies to explore include: ● Recruiting with community partner organisations and using social prescribing recruitment methods could help to reach a different participant profile. ● Research to understand how social prescribing impacts participant retention. The social ties and social commitment will help participants to feel a commitment and sense of belonging to the programme. ● The use of incentives, at both an individual participant level, and delivering incentives to community partners (Gormley et. al., 2019). Active Black Country has experience of using recruitment incentive programmes, where both the organisation has been incentivised as well as individual participants. Recent examples include Roll and Stroll and Get Out Get Active whereby participants were provided funding to purchase items that would support them to be active as an incentive to engage with the programmes.
	Reduce sign up friction / barriers to sign up.	For any project reducing the onboarding friction and ensuring a positive user experience is paramount. All efforts should be made to minimise the friction and shorten the sign-up process as much as possible. For MoveSpring there are some issues with syncing with Huawei & Samsung phones. Specifically, to be able to sync with these phones, participants had to first download an additional app (Apple Health or Google Fit).
	Engage sign-ups immediately to maintain motivation and	The initial stage is where the highest drop-out is. When participants sign up, the programme should look to engage them immediately.

	engagement	- Personalised or immediate feedback should be provided to ensure / start engagement with the process. - The use of incentives should be explored both at sign up and to pull people through the programme. There is evidence that this could be a fruitful avenue to explore for participants from lower socio-economic groups (Gormley et. al., 2019).
	Improve the design and user experience of recruitment materials and the app	Materials and the first experience of the app need to be persuasive, engaging and 'hook' the participant immediately. They should not over-sell the programme as it would simply increase engagement early and increase early disengagement.
	Partner with agencies that have expertise on Conversion Rate Optimisation (CRO)	Recruiting participants to sign up to a programme and then to download an app is analogous in some ways to converting a sale. Conversion Rate Optimisation is the discipline of converting online sales. Valuable learnings could be gained to address this specific challenge. We would recommend partnering with specialists and drawing on their expertise if an app-based approach is used.
Maintaining engagement	Capitalise on the surge in engagement and motivation at the start of a programme	Across all groups there was an increase in step count at the start of the programme. This needs to be sustained and taken advantage of. Equally there seemed to be a drop in motivation and engagement around week 3. Understanding more around the drop in engagement across a programme could help inform the design or when to introduce new challenges, content, or motivation.
	Consider using an app as a support tool, rather than as the primary intervention channel	An app-based programme could potentially work more effectively as a support mechanism for a face-to-face or other programme. This is particularly useful when the app provides ongoing coaching to the user in between face-to-face sessions.
Defining and designing the programme	Tailor the programme to different needs	Different participants are suited to different types of programmes. There could be benefit in providing a suite of programmes for participants to select from. These could vary in terms of structure (exercise type and level, time and availability) and key characteristics such as: group size and support, having a dedicated leader present, having face-to-face versus other content as well.
	Provide a 'triage' or diagnostic service at the start of any engagement	This could feature a number of short questions, used to establish where participants are in terms of a stage of behaviour change. A candidate theory could be the Transtheoretical Model of Behaviour Change. This could help direct participants onto projects that match their needs and interests. This

	for residents	information could also be used to dictate what type of messaging participants received. The two areas we would recommend to explore include: • Understanding the resident lifestyle and current barriers to exercise. This could enable programme managers to provide more targeted content and to potentially group participants into cohorts facing similar challenges that could provide more support. • Understanding their motivational profile and / or where they are in a stage of change. Several behaviour change theories have short questionnaires that could be adapted and administered before the start of the programme.
Programme Evaluation	Adopting an evidence based evaluation such as an RCT	Ensure the type of evaluation matches the scale and reach of the project. Sufficient sample size should be ensured before proceeding with this approach. Also partners should consider the nature of the project, how well known are the risks and challenges that the team are taking on. For a project with multiple unknown risks, or new methods, it could be unwise to try and adopt a rigorous randomised controlled trial approach. Potentially identifying the project as pilot and looking to gain practical learnings on the delivery of the programme would be more appropriate.
	Using objective exercise measures (step counts)	Work with a population who already have fitness devices, or who already have an app installed that tracks physical activity data. Also consider providing a fitness tracker or wearable as part of the programme. This will go some way to incentivise participants to track their data and provide additional motivation to engage. It is important to acknowledge that some inactive residents may not be able to do walking programmes, or load bearing activities. If possible, including or converting other exercises such as swimming would be important to ensure these groups are included.
	Ensuring programmes can be benchmarked against one another.	When trying to understand the true return on investment (r.o.i) of a programme using consistent metrics to compare programmes is important. For many physical activity programmes capturing objective exercise measures is new; other metrics (attendance / retention rates and self report) are collected more regularly.

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7. Appendix

Appendix Content:

7.1 Marketing and recruitment materials

Media releases:

CITY OF WOLVERHAMPTON COUNCIL

OUR SERVICES   A TO Z   IN YOUR AREA   NEWS   MY ACCOUNT

Council receives funding to boost physical activity levels

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The City of Wolverhampton Council has successfully secured grant funding from the Local Government Association (LGA) to boost physical activity levels among local residents.

Research shows that, on average, adults in Wolverhampton do less than 30 minutes of physical activity per week – and that has only been exacerbated by the Covid-19 pandemic, particularly among the most vulnerable who have had to shield over recent months.

The LGA invited councils to bid for funding for projects aimed at changing or sustaining behaviour which has arisen in communities as a result of the pandemic, such as reduced fitness levels.

The council secured £20,000 and, in partnership with Active Black Country, has commissioned behavioural insights organisation The Behaviouralist to deliver a 6 week programme of physical activity online. The programme, which will be open to residents who wish to become more active, is currently in development and more details will be released shortly.

Councillor Jasbir Jaspal, the City of Wolverhampton Council's Cabinet Member for Public Health and Wellbeing, said: "Low physical activity levels put people at greater risk of being overweight and developing type 2 diabetes and cardiovascular disease.

"Although leaving the house during lockdown was permitted for exercise, Covid-19 has made it hard for many people to maintain their physical activity levels, particularly those who are vulnerable and have been shielding.

"This physical intervention programme will use behavioural science to change behaviours which have developed during the pandemic."

Ian Carey, Director of Active Black Country, added: "We are delighted to be working in partnership with the City of Wolverhampton Council to deliver a programme that genuinely supports residents in positively adapting their behaviour towards physical activity.

"Our aim, through Active Black Country, is quite simply to encourage people to be active and we hope through this approach to develop a programme in Wolverhampton that is scalable across the Black Country, reaching the most inactive residents.

"If we can change the way people think about and approach physical activity we will begin to see increased activity and wellbeing levels for all communities."

For more information about the project, which forms part of the LGA's Behavioural Insights programme, please email shanara.abdin@wolverhampton.gov.uk .

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LAST UPDATED

18 March 2021

Free healthy summer activity programme to get Wolverhampton active
Released: Tuesday 9 June 2021

A new scheme is being launched, aimed at getting people more active as we move out of Covid-19 lockdown restrictions.

WV Gets Active is a free six-week exercise programme, delivered in collaboration between City of Wolverhampton Council and Active Black Country Partnership. It works on a mobile phone app and challenges users to build up their exercise, at a pace that suits them, to feel fitter and healthier.

Before the Covid-19 pandemic struck, activity levels in Wolverhampton were below the national average, with more than a third of the adult population of the city doing less than thirty minutes of physical activity a week. Lockdowns and reduced access to sports facilities has meant that getting regular exercise has been even more difficult for some people.

This new programme aims to encourage more people to get active. It is completely free and tailored to individual fitness and activity levels. It challenges users to increase their exercise, promoting lifestyle change and making regular exercise a part of everyday routine. The programme enables participants to track their progress over 6 weeks with the goal of reaching 30 minutes of exercise each day.

It includes local walks, activities and ideas to motivate and encourage users and no special equipment is needed, other than a smart phone and comfortable shoes to walk in.

Anyone over 18 living in Wolverhampton and currently not doing 30 minutes of physical activity a week can apply for the programme, although places are limited. After registering users will be sent a link to download the app. There will be two programmes running one starting in July and one in August. There are limited spaces on both.

Councillor Jasbir Jaspal, City of Wolverhampton Council's Cabinet Member for Health and Public Wellbeing, said: "Many people have struggled to find the time to exercise during the Covid-19 pandemic and after long periods of lockdown we could all use some encouragement to get back into healthier habits like regular exercise.

"This new free activity programme is suitable for individuals who are not physical active but want to increase their activity levels. The programme focuses around walking, so you just need a bit of time and some comfy shoes.

"Exercise doesn't have to be done alone, so why not make exercise fun and challenge a friend and get them to register too."

Active Black Country Director, Ian Carey, said: "Our aim, through Active Black Country, is quite simply to encourage people to be more active and we are delighted to be working alongside the City of Wolverhampton Council to deliver a free programme that will support everyone – whatever their ability – to increase their activity levels.

"Tailored to the individual, the programme encourages people to make exercise part of their daily routine and for many of us that could be just taking advantage of the nice weather to get outside and walk more regularly. "

To find out more, and apply for the free WV Gets Active programme, visit www.wolverhampton.gov.uk/wvgetsactive The closing date to apply is Sunday 27 June, with the first programme starting on Friday 2nd July.

ENDS

Notes to Editors
The WV Gets Active programme is being delivered in partnership between City of Wolverhampton Council and Active Black Country Partnership, with joint funding provided by the Local Government Association. The programme and app have been developed by The Behaviouralist.

About Active Black Country
Active Black Country is a small committed partnership, operating as the strategic lead for Sport and Physical Activity across the Black Country region. They have a passionate belief that physical activity and sport can improve people's lives and that it is every resident's right to be physically active and play sport.

The partnership aims to create a healthy active region and get our 300,000 inactive residents active, keep them active and promote the Black Country region as a great place to live, work, learn and play.

The partnership's core purpose is to understand the regions communities and residents, connect and collaborate to align strategic priorities and influence policy and investment to get more residents active and realising the benefits of an active lifestyle.

For more information visit www.activeblackcountry.co.uk or follow on twitter @BCBeActive

About The Behaviouralist
The Behaviouralist is a behavioural science consultancy specialising in behavioural change projects and evidence-based policy design. They are based in London and work on projects across local government, transport and utilities as well as other sectors.

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Email sent to disengaged participants

Hello [Name],

Thank you for signing up for WV Gets Active!

The first week of the programme is now over (yay you did it!) and we hope you enjoyed it. We are looking forward to helping you to build up your exercise routine.

We noticed that you do not have a device linked and/or have been unable to manually enter your steps on Move Spring. We understand that sometimes life gets in the way and would like to check in with you and see how you are doing!

At this point, we'd like to encourage you to engage with the programme and Move Spring app by either:
(1) Linking a device to the app so your steps can be automatically uploaded or,
(2) Setting a weekly reminder to manually enter your steps on the app.

We'd be happy to guide you through the process of setting either of these up.

Here's a link to syncing your data.

If you have any questions, queries or would just like to have a chat about the programme, please do not hesitate to reach out to us.

Also if you feel like the target is too high or you're finding something hard to do we'd also like to hear from you.

Happy Friday,

WV Gets Active Admin team

7.2 Scoping phase programme definition

During the scoping phase, we further defined the key features of the programme or resource we wish to develop. They include:

- The programme will be a local, Wolverhampton based programme including resources for residents to complete or engage with.
- We are looking to develop a 6-week programme.
- It will be a self-contained resource and relatively 'light touch' to deliver and administer. This is a requirement to be able to scale the programme or learnings across the city.
- We would like to pilot the programme at the start of June. The hope is to launch a resource as COVID-19 lockdown is eased. This also would enable us to scale or expand the programme in time for school summer holidays.
- It can be delivered remotely, recognising the challenges of delivering face-to-face during COVID-19.
- The resource will be an online resource, supported by downloadable and physical resources.
- It will incorporate existing local resources which have been developed to support residents PA.
- The physical activities will be accessible, with low entry barriers, such as walking and light exercise that participants can complete at home and free to access.
- The programme will draw on behaviour change theories and principles with a view to maximise engagement and build lasting PA habits. This will include messaging, support materials and activities.
- Either the pilot, or learnings from the pilot, can be scaled across the city and potentially beyond.
- The branding and name of the programme(s) are still to be determined. This will be finalised during the delivery phase with the support of the City of Wolverhampton Council's Communications and web team.