NIHR | Public Health Intervention Responsive Studies Teams

Reducing inequalities in exercise participation: Evaluation of the novel ‘Bracknell Forest Health and Well-Being Physical Activity Service (BFHWBPAS)’

Findings March 2024

PHIRST South Bank

- PHIRST South Bank is one of six Public Health evaluation centres funded by National Institute for Health and Care Research (NIHR).
- The aim of these Centres is to provide timely and robust evaluations of locally-led interventions to both inform future local decision-making and contribute to an evidence base that is useful to the wider public health community.
- PHIRST South Bank is led by staff at London South Bank University (LSBU) and brings together an interdisciplinary team that have a wealth of experience of working with local authorities across a wide range of public health priorities.
- The Centre is based on a principle of co-production with local stakeholders and it is intended that the joint working between local authorities and our academic team will result in greater mutual understanding, learning of new skills and will ensure evaluations are relevant and useful.
- Patient and public involvement is central to the Centre's approach and lay representation is embedded throughout the infrastructure and delivery of our work.

Approvals & declarations

- Ethical approval was secured from the School of Health and Social Care Ethics Panel and the School of Business Ethics Panel at London South Bank University (References: ETH22230072 and ETH2223-0234).
- The authors declare that they do not have any commercial or financial relationships that may result in a conflict of interest.
- The views expressed represent those of the authors and not necessarily those of affiliated organisations.

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Abbreviations

- PHIRST – Public Health Intervention Responsive Studies Team.
- NIHR – National Institute for Health and Care Research.
- LSBU – London South Bank University.
- BFHWBPAS – The Bracknell Forest Health and Well-Being Physical Activity Service.
- BF – Bracknell Forest.
- PA – Physical Activity.
- ERS – Exercise Referral Scheme: GP either (1) prescribing exercise or providing exercise advice to an individual, or (2) referring them to a third-party service.
- NICE – The National Institute for Health and Care Excellence.
- WHO – World Health Organization.
- PPIE – Patient and Public Involvement and Engagement.
- GP – General Practice.

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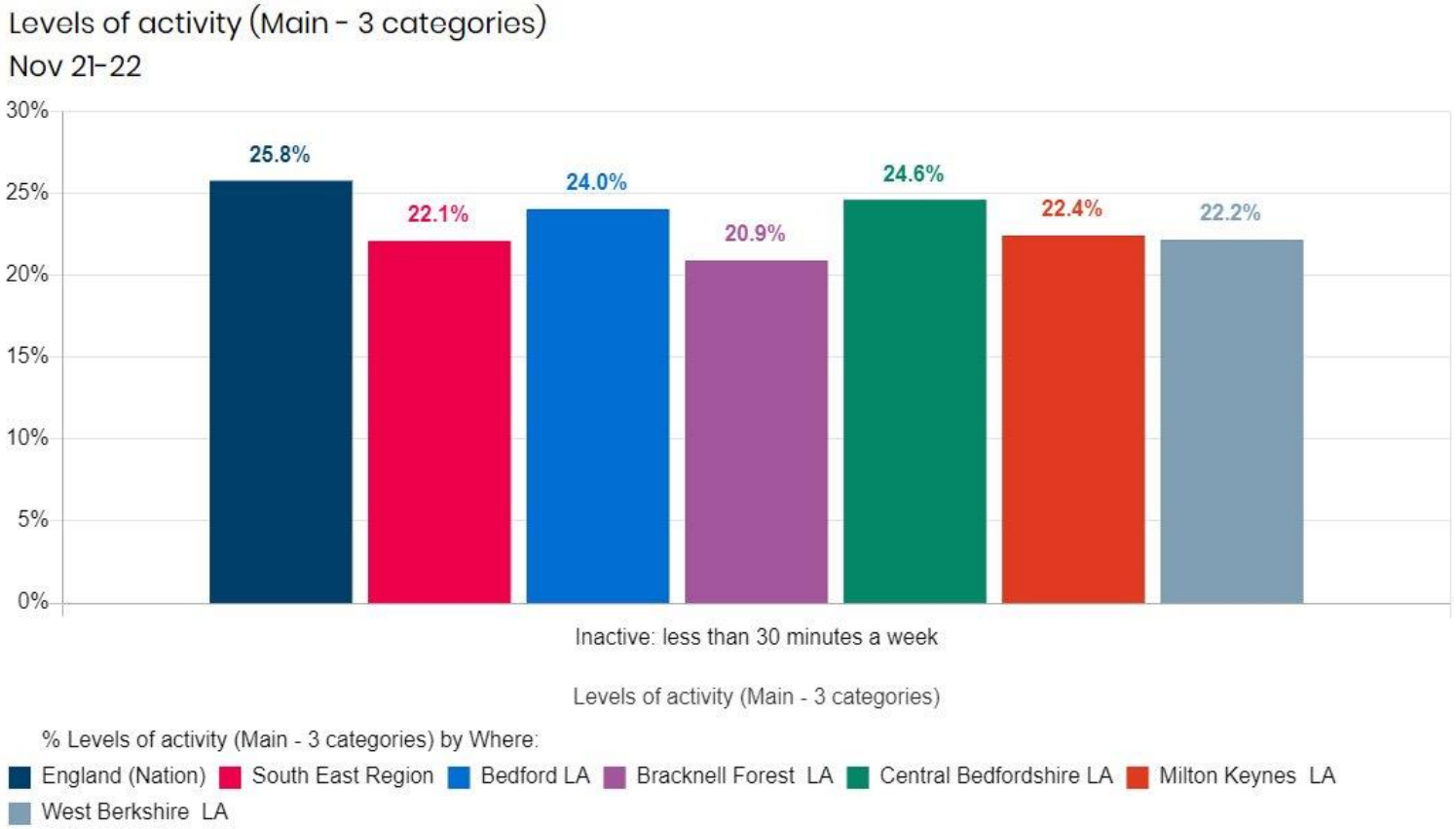
Thank you to all Bracknell Forest residents who took part in our evaluation

Background

Bracknell Forest context

Fewer residents in BF are inactive compared to neighbouring areas but there are inequalities in the levels of physical inactivity



Inequalities in the inactivity levels in Bracknell Forest

Inactive population in most deprived compared to least deprived wards:

- 49.5% versus 30.7% with a disability or a long-term health condition;
- 39% versus 20% females;
- 38% versus 20% males.

Higher levels of inactivity:

- 45% of those with a disability or limiting long-term health condition;
- 32% of 16-34 years old;
- 13% physical activity (PA) decline in the age group of 55-74 versus 35-54 years old compared to 6% decline in similar authorities.

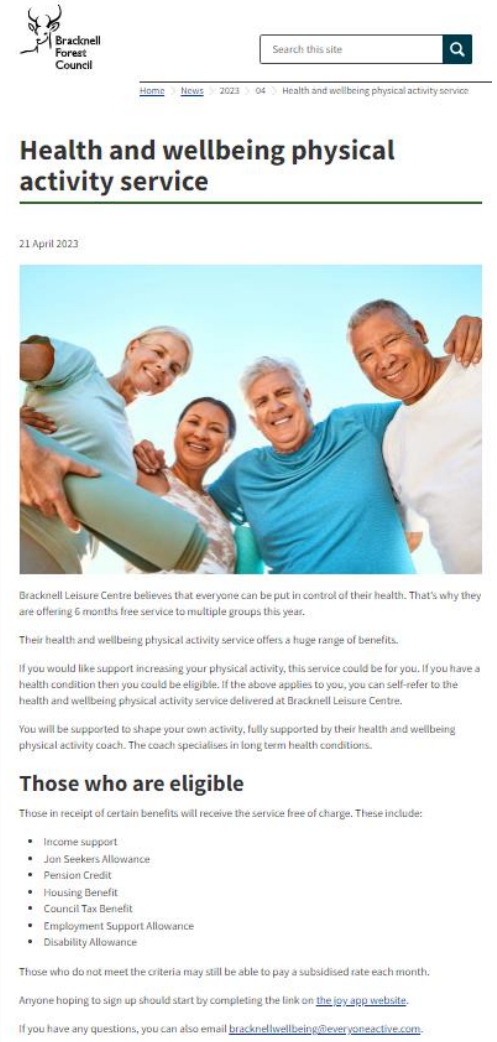
(Sport England, Active Lives survey, 2020)

https://activelives.sportengland.org/Result?queryId=114375

The Bracknell Forest Health and Well-Being Physical Activity Service (BFHWBPAS)

BFHWBPAS is:

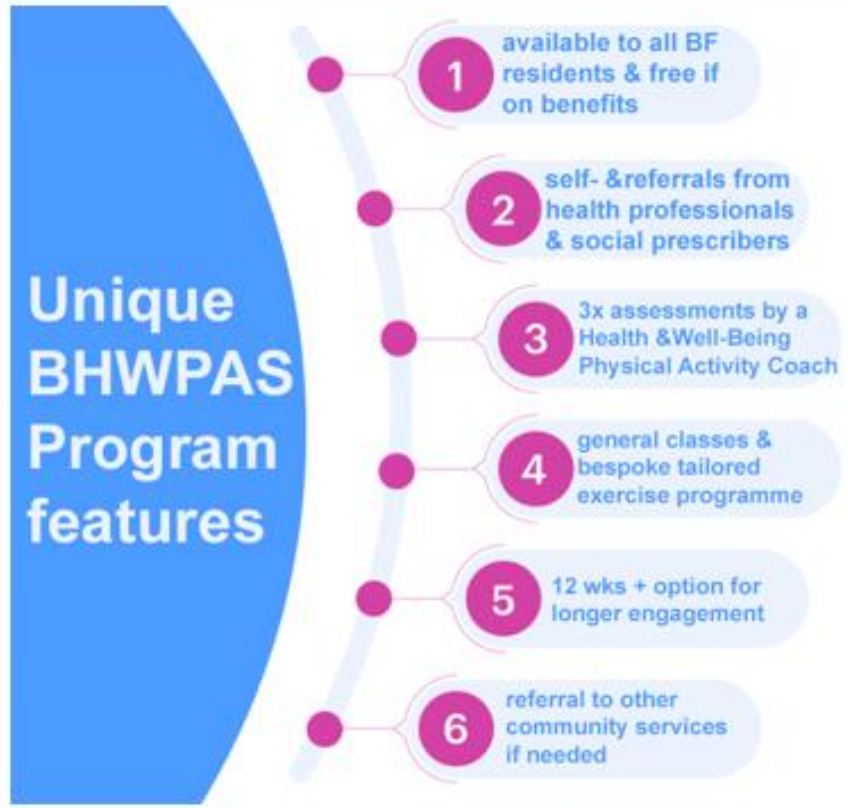
- Commissioned by the Public Health Department at Bracknell Forest Council in September 2022 and delivered by Everyone Active since 1st November 2022.
- Based on an established Exercise Referral Scheme (ERS) model, the service utilizes PA to improve health outcomes and quality of life for local residents.
- Incorporates several novel features that distinguish it from the traditional exercise referral schemes.



The BFHWBPAS – the novel features

- The service is based on the principle of proportionate universalism and is **available to all** (with very few exclusion criteria).
- The service is made **free of charge to those in receipt of benefits** and targets people from socially disadvantaged communities and those with protected characteristics.
- Referrals are made from **health professionals** but also from **social prescribers**, voluntary sector and via **self-referral**.
- Following an initial assessment with a **Health and Well-Being Physical Activity Coach**, users will receive a **bespoke tailored exercise programme** that may not be gym-based but which may include one-to-one or small group work and activities based in community settings.
- The service will **last 6 months** (longer than the usual 12 weeks).
- Health and Well-Being Coaches will also refer to other community services where needs related to health are identified and addressed, e.g., housing, debt, loneliness.

Acceptable and accessible service to those with long term conditions AND those least likely to be active



ERS: what we already know from the literature –
uptake and adherence

'**Exercise referral schemes**' (Hanson et al., 2020) encompass all schemes that
(1) have the primary aim of increasing PA;
(2) have a formalised referral process; and
(3) are provided for individuals who are inactive/sedentary, and/or have or are at risk of a health condition.

Specific examples include entry routes via self-referral or from other professionals (e.g., health trainers) and group-based needs assessments (Hanson et al., 2020).

There is a substantial body of qualitative data highlighting **psychosocial factors influencing uptake and adherence** including intrinsic motivation, psychological need satisfaction, self-efficacy, and lower expectations for change (Eynon et al., 2019).

There has been a **sustained growth** of ERS since they were first formally introduced in the 1990s. Today around 600 ERS exist across the UK (Morgan et al., 2020).

In 2014, NICE recommended that ERS should be provided only to individuals **who are inactive and have existing health conditions or risk factors** and not for those who are otherwise healthy (Campbell et al., 2015).

There is a large evidence base exploring patterns of uptake, adherence, and outcomes. It is predominantly descriptive and focused on single schemes (e.g., Kelly 2017).

Increased **uptake** is associated with being female and older (Hanson et al., 2013; Oliver et al., 2021; Pavey et al, 2011; Tobi et al., 2017) and **adherence** with being male and with a physical rather than a mental health referral pathway (Tobi et al., 2017).

ERS: what we already know from the literature – referrals and inequalities

The evidence on whether ERS can help to reduce inequalities in physical activity is equivocal:

- Increasing deprivation is associated with greater adherence in one large scheme (Hanson et al., 2013).
- Another study of over 300 General Practice (GP) surgeries found no relationship between deprivation and uptake or adherence although GPs within areas of deprivation were more likely to refer patients (Sowden et al., 2008).
- An analysis of referral, uptake and adherence (2008–2017) found that those in more deprived areas had lower uptake, with a decrease over time in referrals and uptake rates compared to those in the least deprived group (Morgan et al., 2020).

ERS: what we already know from the literature – engagement and inequalities

- Factors that heighten engagement with ERS in **older adults** include (1) embedding social support facilitators, (2) training instructors in effective and supportive communication, (3) use of incentives/rewards (particularly for 'new starters'), (4) accessible locations and (5) affordable prices (Szekeres, 2022).
- ERS for **older adults** should also (1) make them feel safe, (2) provide a sense of social connectedness, (3) be enjoyable and (4) be accessible in terms of cost and ability (Ioannou et al., 2023).
- Key factors to facilitate engagement in **socioeconomically deprived communities** include also (1) provision of free or subsidised classes, (2) incorporating individualised assessment, follow-up and support (Garner-Purkis et al., 2020).
- Multidisciplinary teams need to work together to **promote a shared vision** and smooth **connection between services** (Birtwistle et al., 2018).

ERS: what we already know from the literature –
the role of local partnerships

> *In contrast to previous interpretations of schemes, our data demonstrate the potential for exercise referral to **positively impact health inequalities**, in terms of schemes' ability to engage those with poorer health or living in areas of deprivation.*
>
> *Local partnerships working to identify and **promote access** for targeted groups can strengthen this approach.*

> *Conversely, **untargeted referrals pressurize scheme resources** and undermine the ability of schemes to support patients with more complex needs (e.g., a mental health referral, higher obesity, living in a more deprived area) to complete, risking exacerbating inequalities.*
>
> *Important questions are therefore raised concerning the overall purpose of schemes and **how best to target provision.***

Sources: Oliver et al, 2021 p.16; National ReferAll Database, comprising 23,782 individuals across 14 referral schemes: https://www.ukactive.com/news/ukactive-and-referall-publish-new-data-from-uks-first-open-access-database-for-exercise-referral-schemes/

ERS: what we already know from the literature –
recommended actions to address inequalities

Successful interventions for increased PA participation:

- Consist of practitioners which **foster social and psychological support** in addition to any physical activity.
- Consider the wider contextual issues within the population group – including the **social context** of people's lives, their communities and peers.
- Offer opportunities for **role models** and **peer-to-peer influencing** to foster autonomy and empowerment for all communities.
- Bring a **sense of achievement** since success can **foster sustainability of behaviour**.
- Associate the PA participation gains with **social belonging, friendship, fun and feeling safe**.
- Are **fluid and flexible** to meet practical, environmental, social, and psychological individual needs.
- Offer a range of **accessible communication tools** to enable **understandings of opportunities**.
- Engage **all sectors** that have a responsibility to promote physical activity.

(OHID, 2022)

Evaluation Development

The BFHWBPAS – planning the evaluation

- An **introductory meeting** with the whole team took place, followed by three structured online workshops facilitated by PHIRST South Bank.
- Each **workshop** lasted 2.5–3 hours and was attended by the PHIRST South Bank research team, key stakeholders from the local intervention and PPIE representation, working towards a shared understanding of:
  - The aims and processes of the intervention.
  - The **logic model** underpinning the intervention (see upcoming slide).
  - The existing evidence and gaps in knowledge.
  - The evaluation question, which should be feasible and useful to both the local intervention and the wider public health community.
  - An appropriate evaluation design plan.
- Joint decision making continued following this formal process around specific aspects of the protocol.

The BFHWBPAS – rationale and relevance

This evaluation will address the knowledge gap relating to:

- **How best to set up ERS.**

  BFHWBPAS aims to incorporate those factors identified in previous reviews of ERS to facilitate recruitment and retention of participants, namely good support and supervision from staff (the Health and Wellbeing Coaches) and greater accessibility including low cost.

- **How to reduce inequalities in PA.**

  BFHWBPAS seeks also to address the wider drivers of behaviour and social inequity barriers by engaging directly with those who would not normally access the service.

- **How to build a sustainable wider system for PA.**

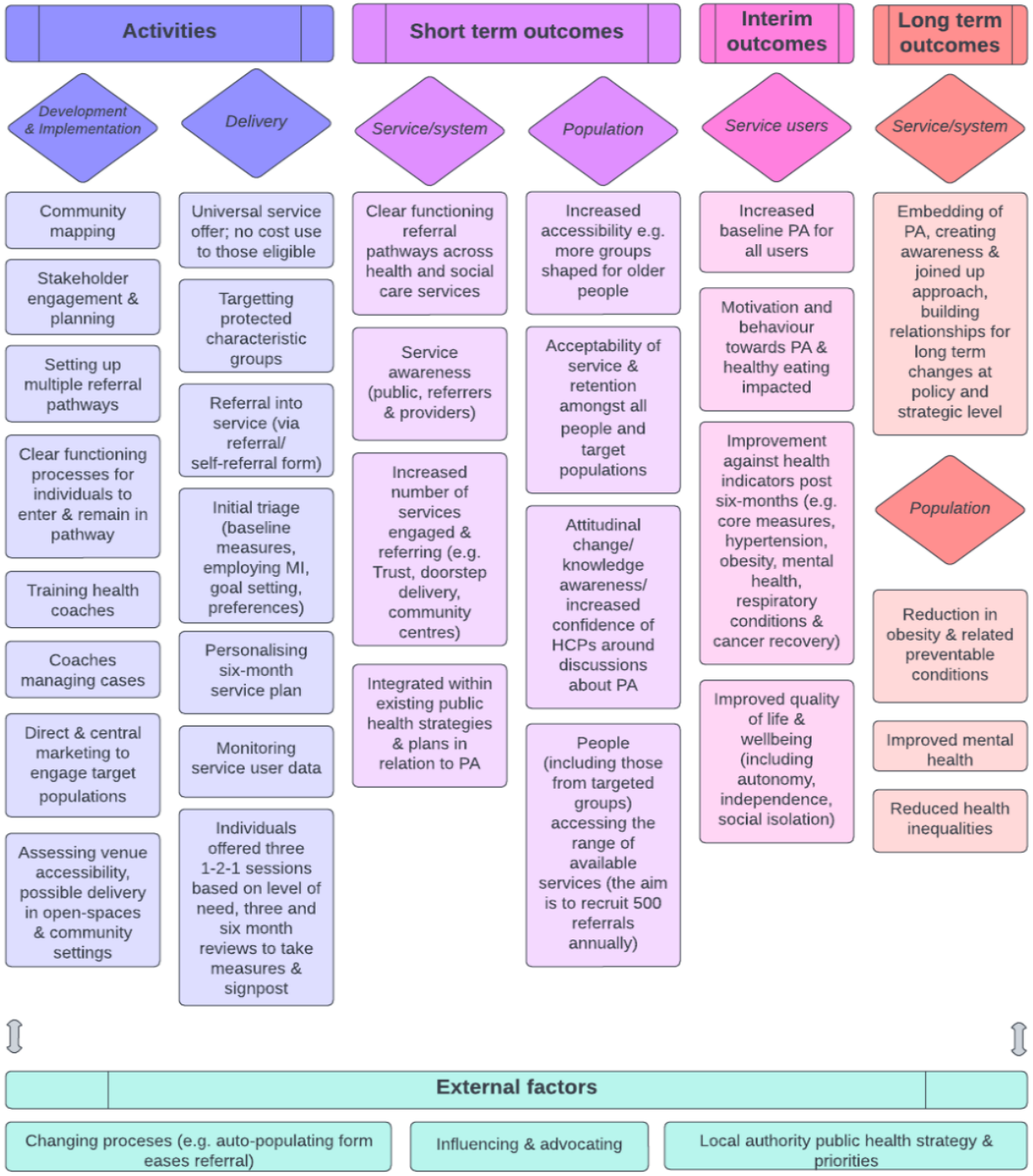
  BFHWBPAS intends to actively engage the local structures for social prescribing alongside the traditional GP referrals.

The BFHWBPAS evaluation –
the co-produced logic model

The logic model:

- Is underpinned by *The Theory of Change.*
- Illustrates inputs, mechanisms and anticipated outcomes of the BFHWBPAS intervention.
- Assumes that **IF** the novel features are implemented **THEN** the intervention will tackle successfully the identified PA inequalities.

The logic model guided the early stages of the evaluation including the formulation of the research aim and objectives/questions and the selection of the data collection tools.



The BFHWBPAS – the research aims and objectives

Primary research questions:

- What is the level and process of engagement of agencies and structures in the local health and social care system with the BFHWBPAS?
- How do the specific characteristics of the BFHWBPAS (e.g., cost, length, referral routes, personalised programme) influence uptake, engagement, acceptability and impact on users and target populations?

Objectives:

1. To identify the elements of the health and social care system that have the potential to support and promote engagement in PA via exercise referrals.
2. To explore the views, experiences, interactions and perceived impact of agents across the health and social care system of the BFHWBPAS and establish the implications for uptake, engagement, impact and delivery.
3. To explore the experience, acceptability and health impact on different categories of participants in the BFHWBPAS- referred and attended; referred and did not attend; referred, attended and subsequently dropped out.
4. To understand the factors that act as perceived barriers and enablers to uptake in the BFHWBPAS amongst members of the target groups from the socially disadvantaged areas not currently accessing the service.
5. To identify the cost of delivering the service.

The BFHWBPAS – evaluation design

A mixed methods approach was deployed with four work packages designed to meet the research objectives:

Work package 1 – Systems mapping

Through Actor Mapping, the initial phase of this evaluation identifies the key organisations, individuals and factors influencing PA in the local area, operating across multiple levels in accordance with a Whole Systems Mapping Approach. Data are collected through workshops with local stakeholder and interviews with referring agents.

Work package 2 – Service evaluation from user perspective

This work package follows a prospective approach comprising serial qualitative interviews with BFHWBPAS participants and a statistical analysis of service data (routine outcome data collected by the partner).

Work package 3 – Service evaluation from non-users in disadvantaged areas

A cross-sectional street intercept face-to-face survey undertaken in the location of the target groups.

Work package 4 – Cost analysis of the service

A small-scale descriptive cost analysis of the service delivery.

Evaluation Findings

Findings:

Work package 1 – Systems mapping

Data collection approach

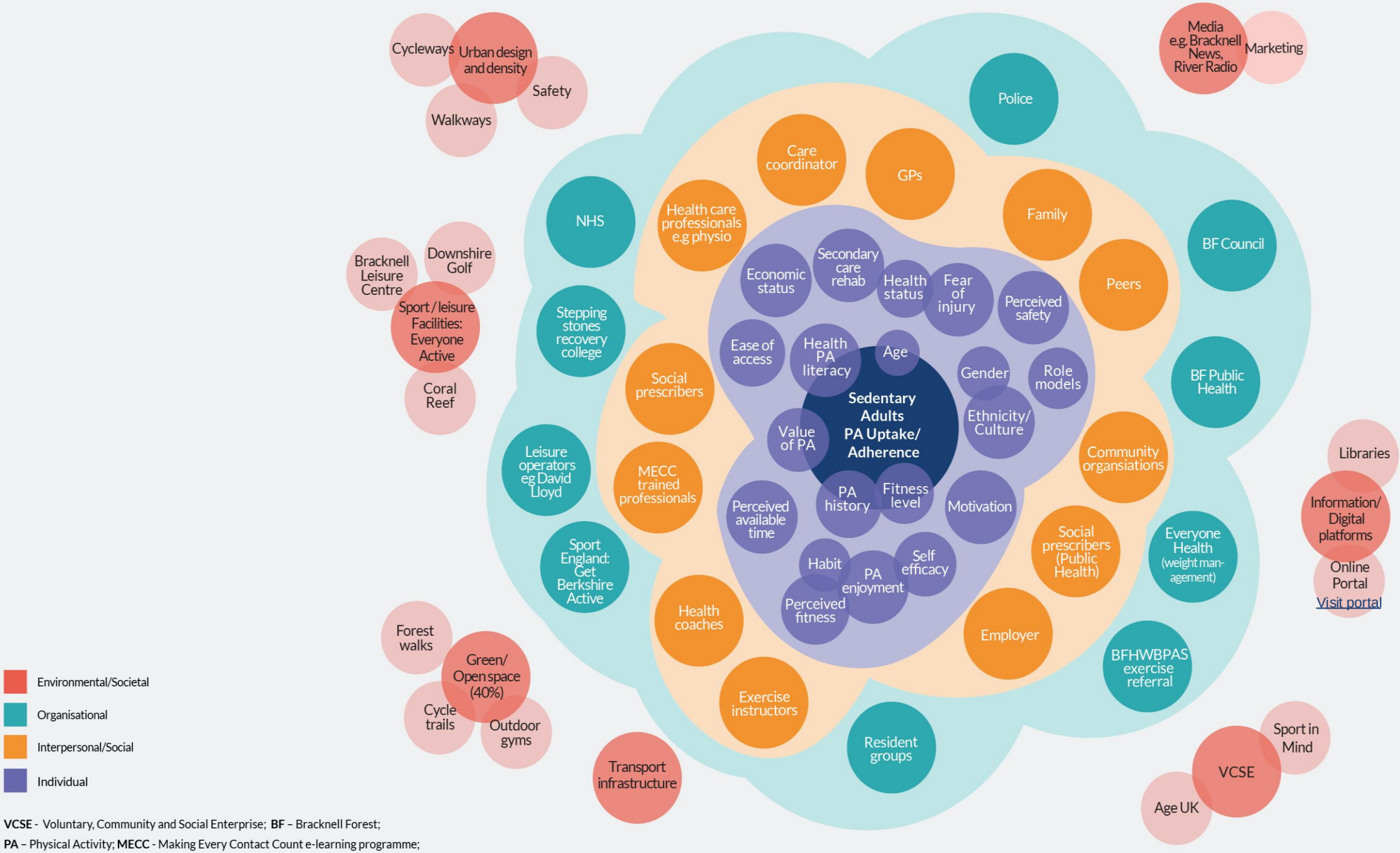
A systems framework to support the World Health Organisation Global Action Plan on Physical Activity (GAPPA; WHO, 2018) identifies the key determinants of physical activity behaviour: transport and environmental factors, societal factors such as the car culture, socio-political factors such as employment status, individual factors, and biological factors.

Identifying the system and its interacting elements through mapping is one of the first steps in providing a “nuanced depiction of the multisectoral and complex nature of a problem“ (Rutter et al., 2019 p 162) by showing how factors and agents interact and how there may be opportunities in a system to influence or improve processes.

In the initial phase, this evaluation employed **desk-based research** to identify the key organisations, individuals and factors influencing PA in the local area. An **Actor Map** was then constructed to visually depict the multiple levels across which they operate.

Further data related to the stakeholders' views about the elements in the system, the physical activity and the actions to be taken was collected through **2 local stakeholder workshops** and **interviews** with referring agents.

These data were summarised and used to refine the local **Actor Map** in relation to PA (see the next slides).



VCSE - Voluntary, Community and Social Enterprise; **BF** – Bracknell Forest;
PA – Physical Activity; **MECC** - Making Every Contact Count e-learning programme;
BFHWBPAS – Bracknell Forest Health and Well-Being Physical Activity Service

Stakeholder workshops – views about the system

Element in the system	Views about physical activity	Views about actions to be taken
Inactive individuals	- Need to have the knowledge, skills and motivation to be more active - Have opportunities to be more active - Have the income and access to opportunities - Be aware of the opportunities	- Communication media and better information including print - Low-cost access for those not on benefits - Awareness raising for acute care sector
Community	- People who support in the community need to be aware of benefits of exercise - Link with other community actions e.g. reading, gardening, keeping warm	- Training of social prescribers about PA and benefits/risks - Feedback to referring agents from the service
Organisations	- Awareness in workplaces of PA	- Use healthy workplace charter scheme
Environment	- Awareness in housing and transport directorates of importance of PA - Awareness in transport of the centralisation of opportunities and impact on access	- Public health as repository of evidence and commissioner and to scrutinise commissioned services
Policy and strategy	- The links between PA, obesity, sport and leisure strategies - Interventions such as ERS and weight management can change behaviour	- Overall strategic plan needed - PA as part of mental health strategy and interventions

The physical activity system – themes arising

- **Complexity of the issue** and dominance of a behavioural lens to promote physical activity seeing it as about motivation – the sedentary population have numerous health and mental health issues and social inequalities, but the service is focused predominately to physical health issues.

- **Interconnectedness** in the system and relationships between local authority directorates, NHS and social prescribers – the ‘actors’ do not interact between themselves and with the individual users.

- **System loops and individual feedback –** the system ‘actors’ did not monitor the scheme delivery and the users' engagement.

Findings:

Work package 2 – Service evaluation from users' perspective

Part A – statistical analysis of service data

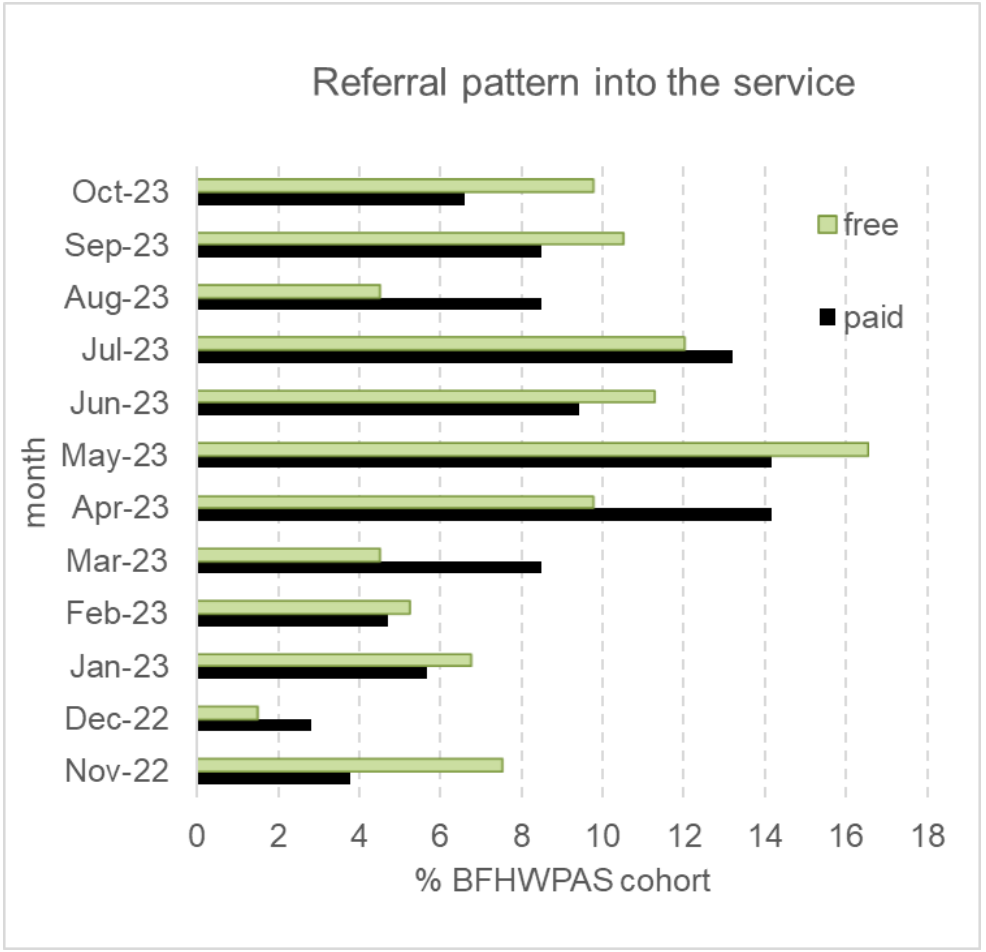
Data collection strategy – quantitative data

The following methods approach was deployed to meet the research objectives:

- Anonymised monitoring data were collected by the service delivery partners via the JOY and MRM systems for all individuals referred to the service from 1st November 2022 to 31st October 2023.
- Data were descriptively analysed to explore impact of the novel service features on service uptake and adherence by deprivation level, age, ethnicity, health status.
- The changes in health indicators between the entry and the latest measurement points were statistically compared.

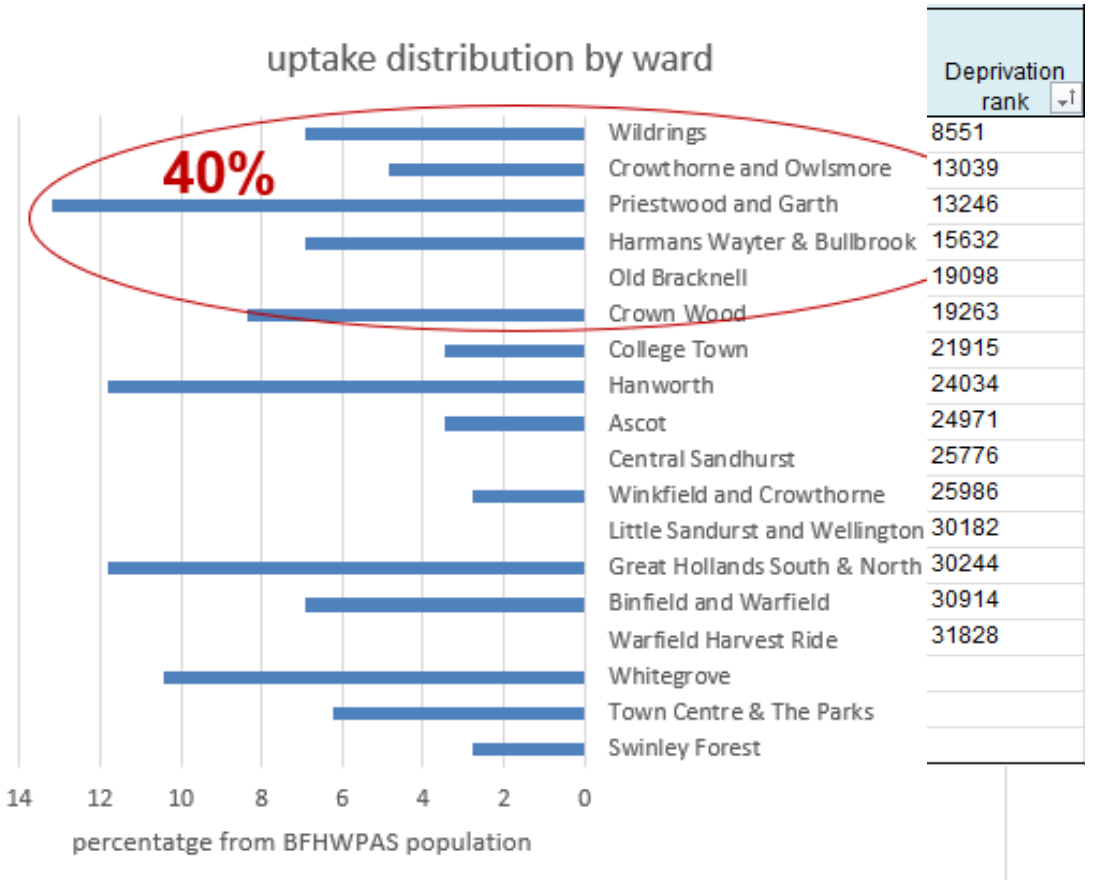
The BFHWPAS – service enrolment

- In the first 4 months of the service delivery only about a quarter of the referrals were made (25% of the free- and 26% of the paid-memberships).
- Prevailing proportion of the referrals and start of engagement (59%) took place in spring and summer season, like other ERS (62%; Portman et al., 2023).



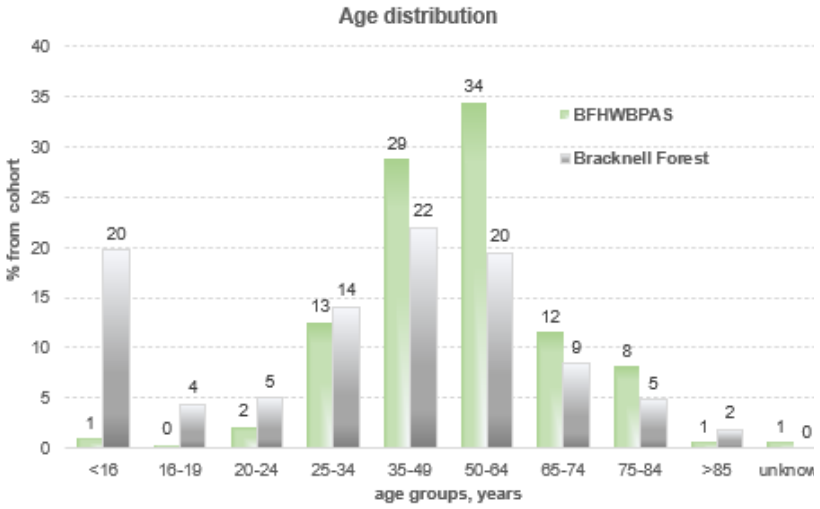
The BFHWPAS – socioeconomic patterns

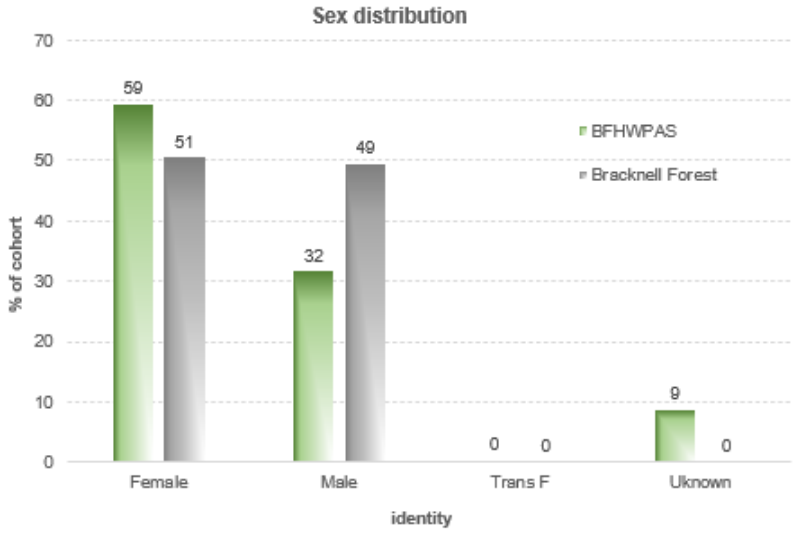
- 320 individuals had been referred to the service in the year between 1st Nov 2022 and 31 Oct 2023.
- The referred individuals were offered either a **'free'** or a **'paid'** gym membership for 6 months:
- **Of the referred individuals:**
  - 40% were from the 5 most deprived wards housing 43% of the BF population.
  - 42% were deemed eligible for the free service use; 30% received discounted membership and 28% remained undefined (did not take the health assessment).
  - This compares with the BF population where 10% are low-income households (Bracknell Forest Council 2023)
  - The eligibility status for a 'free membership' remained undefined due to 28% of the referred individuals declining the service or lack of engagement.

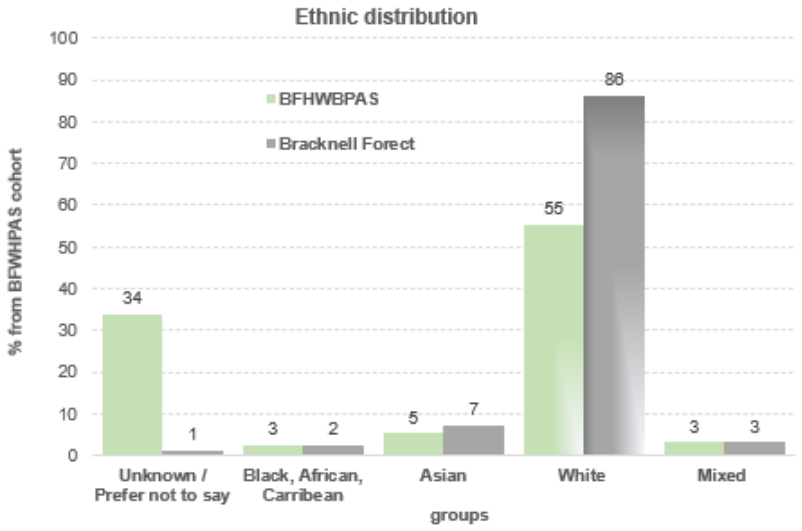


The BFHWPAS – demographic profiles of the users

- **Sex:** Participants in the service were predominantly women (59% females versus 32% males; 9% unregistered).
- **Age:** The average age of the cohort was 51 years. The referral of 16 to 34 years old (15% versus 23% in Bracknell Forest) and below 16 years old (only 2 residents) was disproportionately low. In contrast, the service recruited higher proportion of residents between 35-64 years old (63% versus 42%) and older than 65 years (20% versus 16%).
- **Ethnicity:** The distribution of the users by ethnicity represented well the overall profile of Bracknell Forest residents. The ethnic group for a large proportion of the users was not recorded (33%).







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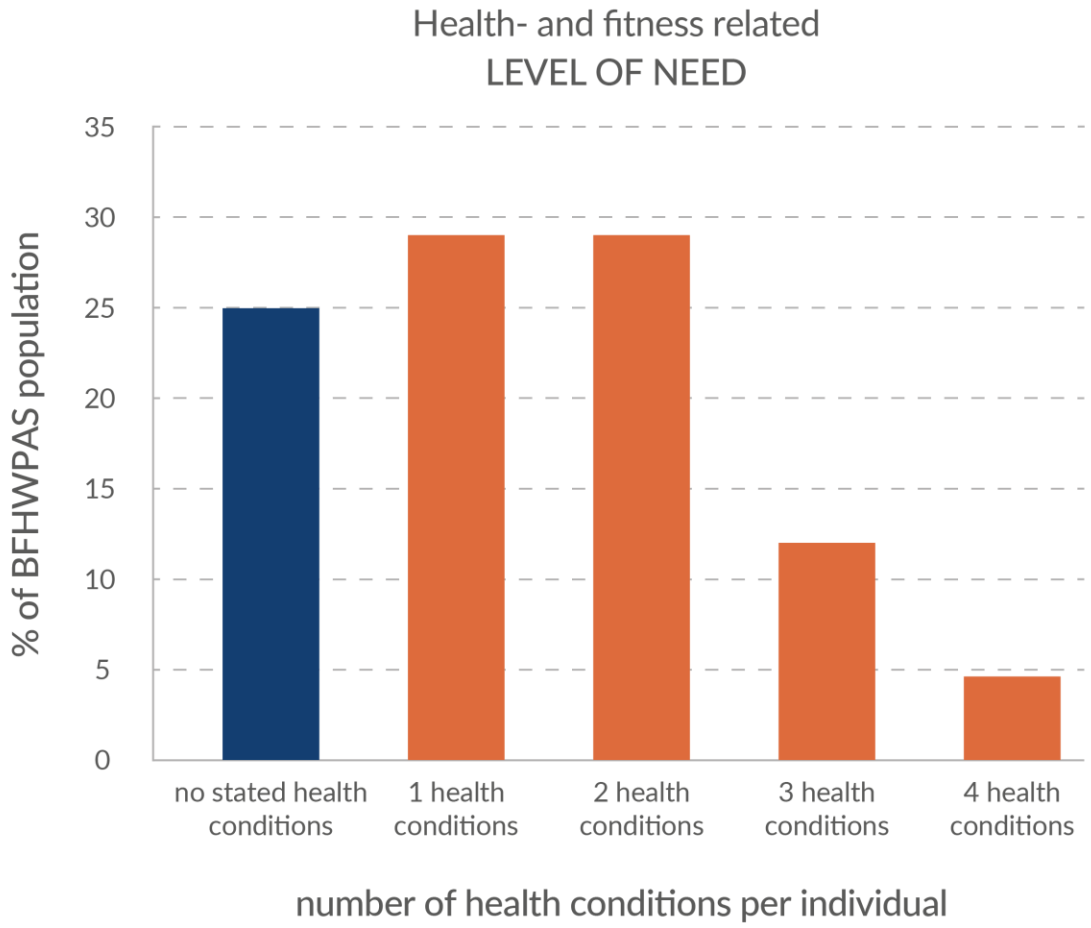
Source: Office for National Statistics – 2011 Census and 2021 Census; https://www.ons.gov.uk/visualisations/censusareachanges/E06000036/

The BFHWPAS – level of need of the users

Of the 320 individuals registered with the service:

- Only 25% had no recorded ‘health-related need’ for the referral.
- 29% were registered with 1 health condition only.
- 7% were referred for being physically inactive only (sedentary lifestyle).
- 39% had at least one long-term health condition (e.g., respiratory, cardiovascular, cancer, diabetes, lung and other non-communicable diseases).
- 32% were referred for obesity or weight management.
- 31% had a mental health problem (incl. autism).
- 18% had a musculoskeletal illness, including injury, arthritis, disability or frailty.



The BFHWPAS – referring agents

Of the 320 individuals registered with the service:

- The majority (54%) were identified from the records as referred by a social prescriber.
- 31% were referred by a health practitioner (e.g., GP, mental health nurse, etc.)
- 15% were self-referred.
- 85% had been referred from a GP, of which there are 25 in the area.
- Referring agents from were identified from 17 GPs.
- It is possible that a GP or another healthcare professional was involved in the referral and the social prescriber simply completed the associated paperwork.

word	count
forest health group	113
ringmead medical practice	65
birch hill	49
practice-birch	49
social prescriber	28
waterfield practice	25
crown wood medical centre	8
great hollands practice	7
green meadows surgery	6
easthampstead surgery	6

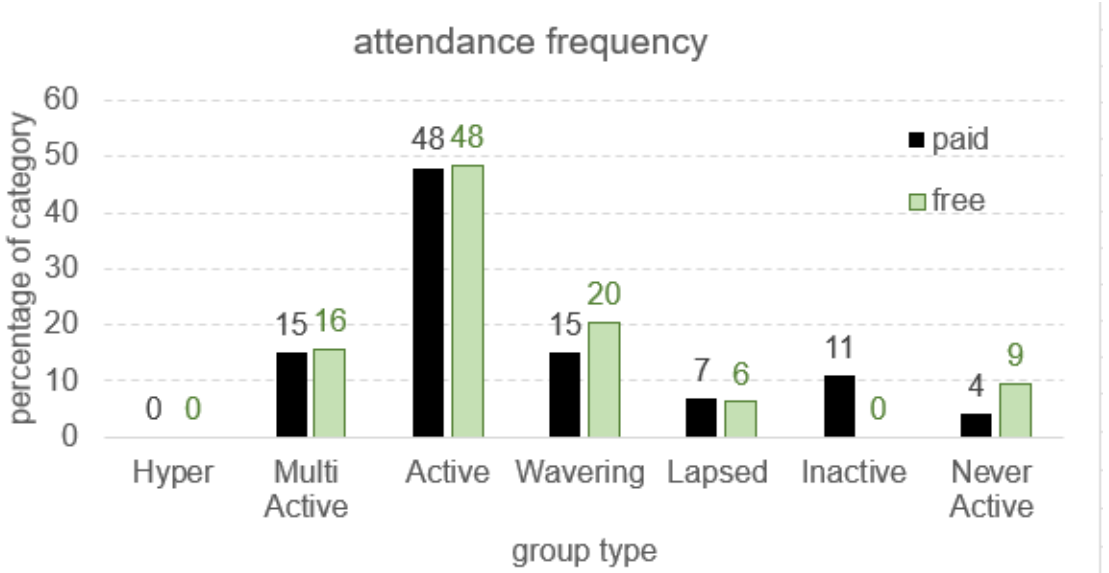
The BFHWPAS – service uptake

- Of the total 320 referred individuals, the service had an **80% uptake rate** (n = 256) in line with similar ERS (78%; Portman et al., 2023) .

- For the purposes of the service evaluation the 320 referred individuals were grouped into 3 categories:
  - **'referred engaged' –** 53% of all referred individuals were engaged with the service and only 6% of them completed the full 6-month schedule within the 1st year of the service. The remaining 47% are still listed as 'active' on the system since majority of them (65%) were enrolled less than 6-months ago.
  - **'referred and left early'** – 4% were discharged due to lack of engagement with the Health coach and not showing for the 3-month assessments.
  - **'referred not engaged**' – for this reason 33% of the referred individuals were discharged from the service. They consisted of individuals who have declined the service (11%) or have not come to their initial (9%) or follow-up (13%) assessment assessments.
  - **'waiting list**' – 10% have asked for a delayed start or are awaiting triage.

The BFHWPAS – service engagement patterns

- The attendance frequency was not monitored specifically.
- For the purposes of this evaluation engagement was evaluated on a record of about 138 referred individuals from both membership categories (64 ‘free’ and 74 ‘paid’).
- The ’paid’ and ‘free’ members showed comparable level of engagement with the service.
- Only ~1 in 6 (15% ‘paid’ & 16% ‘free’) individuals achieved the recommended attendance frequency of ≥2 per week for 6 months.
- 48% from each category were classified as active and visited the gym between 1 and 7 times in a month.
- The duration of the visits (active time) and the type and intensity of undertaken activity/ies were not recorded.



group type description: **sample sizes: (paid=74; free=64)**
Hyper – Attended 8+ times in every month for the last 6 months
Multi Active – Attended 8+ times in the month
Active – Attended 1-7 times in the month
Wavering – No attendance in the month but attended in either of the previous months
Lapsed – No attendance in the last 3 months but have in the last 6 months
Inactive – No attendance in the last 6 months
Never Active – No record of any attendance

The BFHWPAS – the health outcomes

- The health impact from engagement with the service was evaluated from the data for 53% (n=168) of the cohort from the 'referred engaged' category, for the majority of whom at least 2 assessments (baseline and follow-up) were recorded. The JOY system shows only one (the latest) of the 2 possible follow-up measurements (at 3-month or 6-month).
- The 19 individuals who completed the full 6-month service showed improved wellbeing (26%), physical and mental (68%) health across all adopted measures and scales (percentage difference highlighted in red font).
- Data from the continuing (active) members show inconsistent change, most likely due to low number of follow-up measurements.

Health measure	active (n=149)			discharged successful (n=19)		
	baseline	follow-up	% change	baseline	follow-up	% change
Patient Health Quationnaire (PHQ_9 Depression)	**16.8** (7.8; 17)	**12.4** (5.2; 7)	-25.8	**14.0** (0; 2)	**4.5** (3.5; 2)	-67.9
Resting heart rate, bpm	**80.3** (11.6; 140)	**81.5** (13.2; 76)	1.5	**83.3** (14.5; 19)	**79.8** (14.8; 19)	-4.2
Body weight, kg	**101.2** (21.6; 112)	**103.3** (20.2; 44)	2.1	**96.4** (30.7; 14)	**94.9** (29.9; 14)	-1.5
Body mass index, kg/cm^2	**36.7** (8.1; 102)	**36.8** (6.5; 41)	0.3	**35.3** (8.5; 14)	**34.8** (8.3; 14)	-1.4
Systolic blood pressure, mmHg	**133.7** (21.3; 143)	**133.4** (19.6; 78)	-0.2	**133.0** (21.5; 19)	**125.8** (20.4; 19)	-5.4
TheShort Warwick-Edinburgh Mental Wellbeing Scale, score	**54.8** (17.8; 62)	**62.2** (26.2; 21)	13.5	**51.1** (20.3; 10)	**64.3** (19.1;10)	25.9
Waist circumference, cm	**113.0** (14.7; 100)	**114.2** (15.0; 39)	1.0	**113.1** (18.7; 9)	**109.8** (17.6; 9)	-2.9
LEGEND:						
PHQ-9: Depression severity: *None* (0-4); *Mild* (5-9); *Moderate* (10-14); *Moderately/Severe* (15-19); *Severe* (20-27)						
Resting HR: cardiorespiratory fitness - above ~70-average and below						
BMI: >25 - overweight and obese						
The Short Warwick-Edinburgh Mental Wellbeing Scale: between 7 and 35 - higher score higher positive wellbeing						

Findings:

Work package 2 – Service evaluation from users' perspective

Part B – qualitative interviews with service users

Data collection strategy – qualitative data

The following approach was deployed to meet the research objectives:

- Three semi-structured interviews were conducted per volunteer – at the beginning, middle and end of their 6-month participation in the scheme.

- Interviews were designed to explore:
    - Barriers and facilitators to the service.
    - Value of the novel features.

Who we interviewed

- 67 users of the service were referred to us and 29 people agreed to participate in the interviews.
- 13 completed all three interviews; 8 completed interviews 1 and 2; 2 completed interviews 1 and 3; 6 completed interview 1 only.
- 2 were referred to the service but did not continue with the offer.
- 13 people were still involved in the service after 6 months although degree of engagement varied.
- 14 either stopped participating mid-way through or dropped out of the interview process.

Exploring motivations – complex lives

- Participants typically had a combination of health conditions some of which were not fully diagnosed. Some had hospital stays or complex schedule of appointments to attend while in the service.

> *Because it just had been at the wrong time and I just couldn't throw myself into it. Because, obviously, COVID; I was ill as well, moving house, my step-dad, my head, my therapy: everything's just happening at once and, on a day-to-day, I just struggle to even, bloody, get seen through the day.* (Part 23 Int 3)

- Participants often had mental health and well-being issues alongside physical health conditions.
- Participants often had very complex lives with multiple caring responsibilities or complex work arrangements. Several experienced challenging life events while in the service.

> *The problem that I have at the moment is, my partner … Obviously, after surgery and that, I'm kind of like thinking to myself, 'Can I leave him next week?* (Part 16 Int 2)

> *but I missed it this week because I had to take my mother-in-law to the eye hospital, so I missed that one. With the in laws at the moment I haven't been able to do a lot, nothing at all really because they take up all my time.* (Part 15 Int 3)

Participant characteristics –
exercise for physical and mental health, social connection and weight management

- To increase and routinise physical activity.

> *Definitely, I want to get to a point where I am enjoying it and finding myself craving it, kind of thing. I want to be thinking, oh I really like it now, I've got my routine and I can't wait to go to the gym tomorrow*. (Part 2 Int 1)

- To improve physical health and fitness, including a reduction of medication and reduced pain.

> *I just want to feel healthier as well, in terms of hoping that it cannot reverse health conditions but maybe can help them and make me just feel healthier, not in pain or in less pain shall we say.* (Part 22 Int 1)

- To improve mental health, including a reduction in social isolation and improved well-being.

> *One of the hopes that I had that I would meet people there because it's a place to meet people and chat as you are doing stuff or have a coffee afterwards or before and make the whole thing a social thing.* (Part 5 Int 1)

- To achieve weight loss

> *One would hope, I lose weight, I become more active, more able to move, that it won't be so painful to move and do things. By losing that weight, I'll be able to breath better because that's a big thing for me.* (Part 21 Int 1)

Getting to the service – experiences of the referral process

- Wider referral routes were valued but there was very little awareness of this. It was not seen as well-understood or publicised.
- Most were referred by GP. Some self-referred or were referred by a social prescriber.
- Most were referred because of a health condition, weight or mental health.
- For some the referral process was straightforward and quick but many reported problems, particularly with primary care.
- For some there was a lack of clarity in the service offer or a mismatch in the service described vs the service they received.

> *I think on the referral side of things having more information about the scheme to start off with would be helpful, so you're not walking into something that when you're feeling shit, them saying are you claiming a benefit or a disability allowance from the government, if you're feeling low as it is to then be berated by that as your first question is really off-putting, so having that information up front would be really helpful and quite key because I guess that a lot of people probably wouldn't sign up to the scheme if the information is laid out up front.* (Part 29 Int 1)

Participation patterns –
balancing life and health constraints in exercise routines

- Level of reported participation varied, with many reporting interruptions due to complex life and health conditions.

> *I was going twice a week. I found three times a week too much because I had to have space for my diaphragm to cool down, so to speak. I always had a bad day or so after going.* (Part 21 Int 3)

> *Well, I've only been out of hospital since Saturday and I was at my mum's so I haven't been since I came out but I was before. For a week before I wasn't feeling so good so I think I've only been about twice since the last time I spoke to you.* (Part 17 Int 3)

- For a minority, attendance was regular and frequent

> *Well, at the moment, probably about two/three times a week. In the summer, less so, but that doesn't mean I'm not doing anything because I'm doing it in the garage.* (Part 26 Int 3)

- The majority used either the gym or swam

> *Definite, yes because the gym is great, but sometimes you don't feel well enough or strong enough to be able to do that, where the pool, I just walk across sometimes, just that bit of movement and resistance. And even if I don't feel great, it doesn't matter if I fall over.* (Part 17 Int 2)

Self reported impact –

subtle but important shifts in health, well-being and lifestyle

- Improved mental health and well-being, including feeling happier, increased confidence, resilience and reduced social isolation.

> *I always thought medicine was the route everyone takes and they do because it's easy, but to be honest I found exercise is like a hidden medicine that no one really knows, so for me it was like a medicine and I found that it changed the chemical structure of my brain and made me think more positive.* (Part 6 Int 3)

- Improvement in physical health and fitness were reported although for some these were quite small.

> *I've noticed, now, when I take the dog for a walk, I'm not struggling as much as I was before. I would get out of breath really quickly.* (Part 16 Int 3)

> *Oh yes, I can do a bit more walking, but before, when I just walked down the shops it only used to take me five minutes and it still takes me ten minutes, but I don't get as hot as I used to.* (Part 15 Int 2)

- There were limited reports of weight loss but also changes in eating habits.

> *And I haven't been as light as I am now since…I've got one of them Fitbit scales and that only goes back to 2014 and I'm lighter than I was: I'm about seven pound lighter than at any other point in time since 2014.* (Part 26 Int 3)

Self reported impact –
subtle but important shifts in health, well-being and lifestyle

- There were reports of exercise becoming routinised and more exercise being undertaken in parallel to the service.

> *I've got into the habit, at the same time, practically every day, that I will go to the garage and now I will go to the gym – particularly recently. So that's like, it's in my routine.* (Part 26 Int 3)

> *I'm definitely walking more than what I was.* (Part 16 Int 2)

- Some expressed frustration at not achieving more from the service, occasionally attributing it to themselves rather than the service.

> *I was hoping as part of it that I'd lose weight as well because I know I was quite on the heavier side and I was hoping that I have a fixed thing in my head, this is what I will roughly lose weight by and that hasn't happened, and then I start thinking is it my fault, should I have pushed myself that bit more, that sort of thing.* (Part 3 Int 3)

Self reported impact –
subtle but important shifts in health, well-being and lifestyle continued

- There was a few reports of negative impact from the service due to exercise that exacerbated a health condition.

> *The reason I haven't been going is that the very first time I went the trainer that I was with – and I actually hate the cross trainer, and the first machine he showed me was the cross trainer, and I think I did a ten minute stint on a cross trainer and when I came off I could barely stand. And from there I went to a cycling machine and it was another ten minutes and then onto the rowing machine. Two days later I couldn't leave my flat because my knees were absolutely shot, I was in an awful lot of pain and it took me nearly three weeks to recover from that first session.* (Part 5 Int 1)

Sustainability – post-service commitments

- Most who completed the service intended to continue some form of exercise routine both in and outside the gym.

> *Continue with walking and maybe now that I'm not going to the gym trying to do more walking, and hopefully I'll get more sessions with my personal trainer to give me some of the exercises I can do at home, so do more of those.* (Part 4 Int 3)

- Some intended to try and increase further the amount of physical activity they do.

> *And maybe do a challenge, maybe a 5K I don't know, so something like that which I would never have thought of doing before.* (Part 6 Int 3)

- Many expressed a motivation to build on what the programme had begun.

> *A mate of mine, he's going to take me on one of these park runs. He does a lot of running and triathlon and all sorts of stuff. And he said, 'Oh, I'll take you on a park run.' So, yes, I'll have a go outside. But it's not something I'm particularly keen on but, as I say, my wife wants to do the half marathon and, because I want to support her doing that, then I want to carry on.* (Part 26 Int 3)

- Some had concrete plans of how they would do this, including outside of the leisure centre, e.g. running.

Obstacles to participation – practical, personal, and environmental barriers

- **Practical** challenges – These included the distance required to travel to the leisure centre, digital exclusion or practical challenges booking and cancelling sessions as well as difficulties scheduling sessions.
- Some reported very complex **life situations** with difficult personal situations which got in the way. Sometimes this was practical like responsibilities for collecting children and caring responsibilities in some case it was lack of support from a partner.
- **Internal/emotional/locus of control** – embarrassment and fear and lack of confidence.
- **Physical and health condition** – either pain, fatigue or issues associated with mental health conditions created barriers.
- **Environmental issues** – this included issues associated with the leisure centre environment including not seeing people like them, there being too many people and issues with the facilities.

> *I think having to book before you go is a bit confusing because sometimes I forget to book until I'm actually there.* (Part 22 Int 3)

> *I won't go on my own. I've actually got a friend that's doing it as well. But she started employment so wasn't able to go during the day and going at night's too busy for me.* (Part 23 Int 3)

> *He'd be telling me what to do and that but like for me, in my head I'm thinking, oh he's looking at me. I used to go on bike rides with my girlfriend and literally I got so embarrassed, I said please don't look at me. How horrible is that? When you pass other people I have to quickly turn my head so they can't see how red I am. I hate it, I've always, always, always hated it, it's a really big confidence issue.* (Part 2 Int 2)

> *well, minimum hygiene frankly. I never see anybody cleaning anything or the bathrooms, it's a disaster and I wonder if I can wait until I get home.* (Part 7 Int 2)

> *You can walk in a room and you've got the majority of people are very young and the majority of people are very slim or whatever else, then, whichever way you look at it, you're still going to feel a little bit inferior in any situation.* (Part 25 Int 2)

Novel Feature: free and subsidised offer –
a strong motivator but affordability concerns remain

- Free sessions and subsidised sessions seen as strong motivator.
- Some saw subsidy as still too expensive.
- There were a minority who didn't see it as a motivator and who felt that health should be main motivator.
- Some felt subsidy should continue after 6 months.
- Some felt they would not continue once they had to pay full price. Challenges in the light of the cost of living were discussed.
- Some highlighted other costs such as travel which created a barrier.
- One participant did not take up the referral because of cost.

Novel Feature: extended time frame of service –
a catalyst for participation

- Seen as encouraging participation and important for change in lifestyle.
- Recognised that time was needed to see change.
- Also highlighted that health conditions created barriers for participation so the longer time period was needed to allow for that with examples of stays in hospital and flair up of conditions requiring a pause in participation.
- Increasingly saw the longer time period as an opportunity needed to change habits.

> *I think six months is a better option because by then you should theoretically, and then you'll notice the difference if you're out of that routine.* (Part 3 Int 3)

> *So, you need a length of time for you to start to feel better from the hard work, because it is hard work to start. You need a longer time period for people like myself for it to go from being a real arduous task to a pleasure to go there and feel good about yourself and six weeks is far too short, or it was for me anyway.* (Part 21 Int 3)

Novel Feature: bespoke service –
an important motivator but limited to leisure centre services

- Some tailoring was described and also examples given of going back to the coach midway for an adaptation to the service. But tailoring was largely limited to personal targets and gym preferences or health conditions. No referrals were made to out-of-leisure-centre facilities.
- Some felt they didn't need much targeting as the service progressed and were happy to be left to their own devices.
- Some felt they had only just learnt all of the activities available to them by the end of their participation.
- Walking group was mentioned and seen as a positive addition. They liked the opportunity it gave to talk to the coach as they walked.
- Some examples of people feeling their health conditions weren't fully understood or were given advice counter to their condition.

> *Yes, I think it was because he gave me different things to go on and to help me with my shoulder and my walking and everything, and one to strengthen my legs, but there was one I couldn't do because I can't raise my arm up that much so we had to bypass that one, but he could find out what I could do and what I couldn't do and I think it was alright. He said I'd done okay, he said I'd done well.* (Part 15 Int 1)

> *"It was great that it was six months but I still really appreciate the fact that he took me round the gym the first time and he sort of found out what my illnesses were, what my pains were and tailored it for me and went round with me and showed me everything and without that I probably wouldn't have been confident to get on some of the equipment or even go up to ask, but I felt comfortable then because he came round with me in the gym.*
> (Part 17 Int 3)

> *Absolutely not. It was not for somebody that has osteoporosis and was menopausal and was 54.*
>
> (Part 7 Int 2)

Novel Feature: the role of the coach – a crucial enabler

- This role is crucial as an enabler.
- Importance of the role as a source of information and encouragement.
- Important characteristics included being a good and regular communicator, friendly and having an awareness of the health condition.
- Regular communication, which could just be occasional check-ins, were seen as important but there were mixed experiences of receiving this with some examples of abrupt or disjointed communication.
- Most felt they had a good relationship with the coach, but a minority felt the coach added minimal value, lacked knowledge about their condition or had misguided motivation.
- Those still participating at the six-month point were very positive about their relationship with the coach.

Service user suggestions for service improvement and development:

- Wider advertising.
- Being able to pause the service during hospital stays, etc.
- Better liaison with GP.
- Free bus pass.
- Continuing financial support beyond 6 months.
- Coffee mornings to enhance the social aspect or bringing people who have been referred together or form part of a cohort with a network or through social media groups or WhatsApp groups. Linking people with similar goals. Have social media spin offs that are free.
- Opportunity to be re-referred.
- Use volunteers to add capacity and provide buddies.

Service user suggestions for service improvement: continued

- Membership for one activity, e.g. swimming in order to reduce cost.
- Have a Slimming World group at the sports centre or access to a nutritionist.
- Life coaching classes, first aid.
- Sports massage.
- A well-being mental health programme.
- Charitable support with the cost of travelling.
- Women-only sessions.
- A fast track to physiotherapy services. For other leisure centre facilities to be included in the offer, e.g. sauna and squash.
- Groups for specific age groups.

Findings:

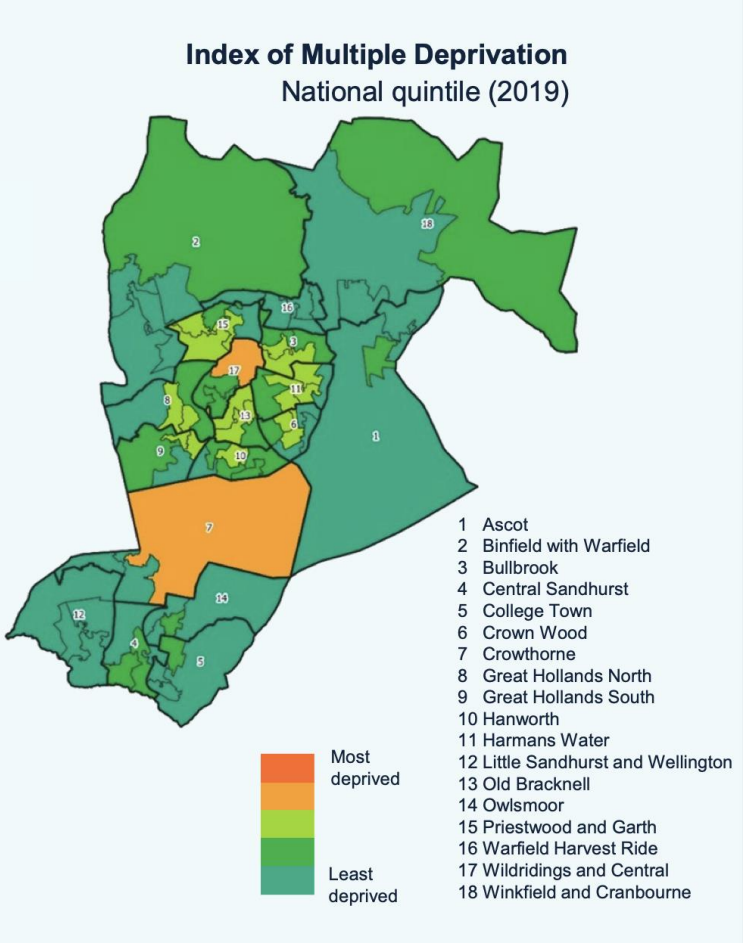
Work package 3 – Service evaluation from non-users in disadvantaged areas

Physical inactivity and areas of deprivation

The level of deprivation is relatively low across the borough with just under half of neighbourhoods in the least deprived 20% of the country.

However, 16% of Bracknell Forest neighbourhoods are considered more deprived than the national average. Deprivation links to a number of wider issues including health, education, employment and physical activity.

The four most deprived wards are: Crowthorne, Priestwood and Garth, Old Bracknell and Bullbrook (2019 ward names)



https://www.bracknell-forest.gov.uk/sites/default/files/2023-02/community-analysis-2022.pdf

Who we interviewed – non-users of the service in deprived wards

(Location images of Rectory Row, Priestwood Square and Bullbrook Row from Google Maps),

Participants were screened as being ward residents, >18, inactive (IPAC), and non-members of BFHWBPAS.

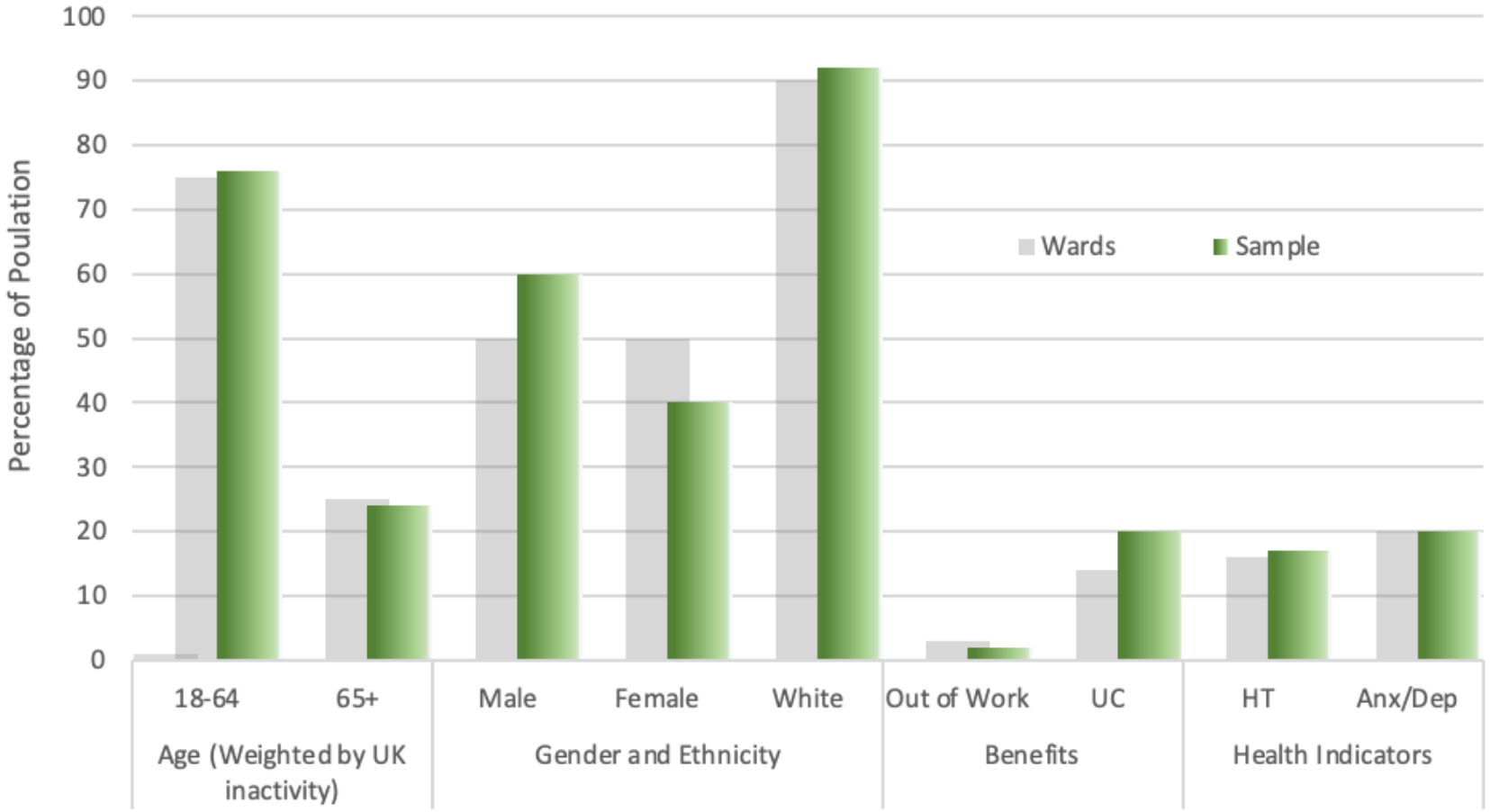
The approach was to interview face-to-face from Monday to Saturday in the four most socially deprived wards (Bracknell Forest Physical Activity Needs Assessment, 2021), intercepting inactive non-user residents in four local retail locations*:* Crowthorne High Street; Priestwood Square; Rectory Row & Bullbrook Row.

The timing (October/November 2023) allowed awareness of the scheme to have diffused across the target population.

The survey instrument explored awareness of BFHWBPAS; understanding of the benefits from physical activity; knowledge of local opportunities for exercising in principle; and engagement with the BFHWBPAS specifically.

Research participants were given a £10.00 voucher on completion.

Research participants – sociodemographic profiles



229 usable survey responses were collected.

The characteristics of the sample matched those of the population in that area weighted for inactivity and reported[1,2] age, ethnicity, benefits and health status of the target population, although somewhat skewed by gender.

Population Data Sources:
Bracknell Forest Physical Activity Needs Assessment 2021 (BFPH)[1]

Bracknell Forest Berkshire Area Observatory Custom Area Reporter[2]

Perceived Enablers – knowledge and experience

The service's target population is knowledgeable and experienced about PA.

- **73%** claimed to have been active in the past.
- Of which **82%** enjoyed non-team exercise (Q2).

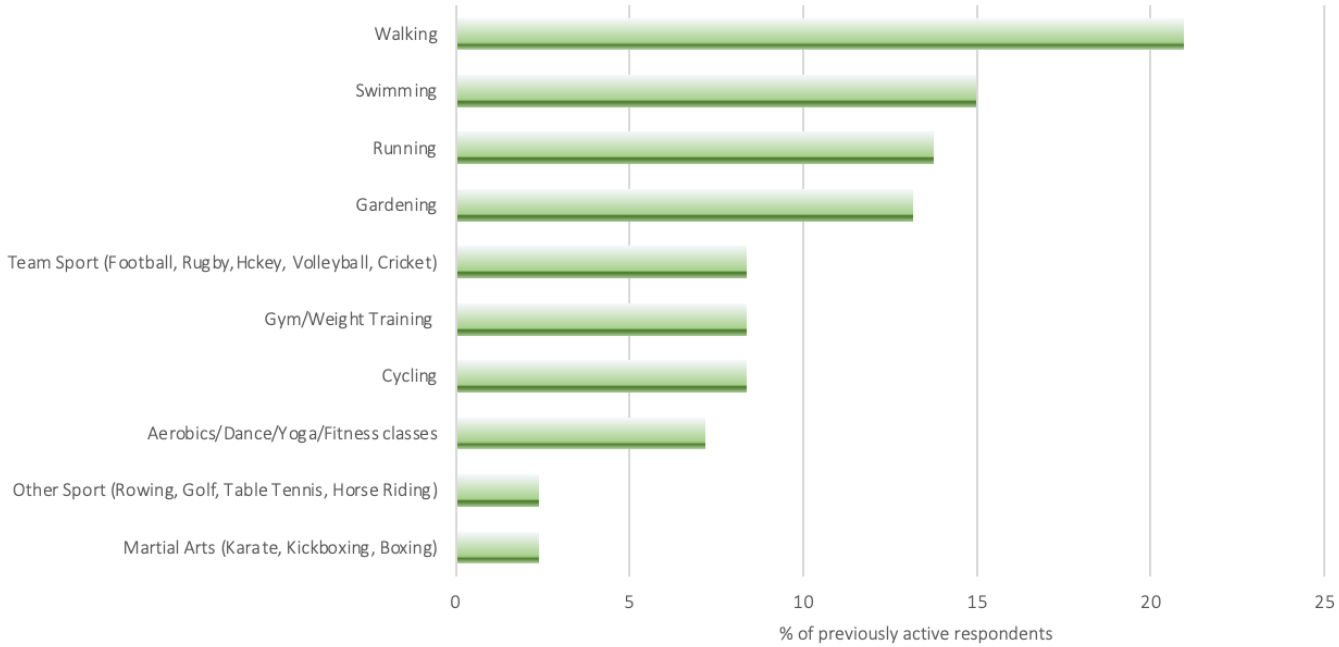
On average, respondents named (Q12 &14):
- **3.2 benefits** of undertaking PA; and
- **3.3 local facilities** where they could exercise.

Q12 What benefits do you feel people would get by being more active?

	%
Improved health	**78**
Lower weight	**61**
Lower stress	**56**
Living an active life longer/ageing well	**49**
Being more social	**35**
Being outside in nature more	**34**
Other	**4**

Average participant named 3.2 benefits

Q2. What was your favourite physical activity?



*Base: 167 physically inactive residents of Bracknell Forest who **claimed to have been active previously.***

Perceived Enablers – the right offer

Q13 Which of the following might encourage you to be a bit more active?	%
Having a health scare	39
Wanting to lose weight	34
Having an exercise buddy	31
A personal fitness guide or coach	22
Free introductory physical activity sessions at the leisure centre	20
Exercise with a social tea or coffee afterwards	8
Access to more activities that I like	6
Having more time	5
Nothing. (e.g. I am OK being inactive)	4
Being healthier	2
If activities were more affordable	0

Other activities named included swimming, family activities and organised sport.
"Other" category responses recoded thematically.

The service appears well-aligned with the needs and wants expressed by the targeted non-users

The two biggest motivators:

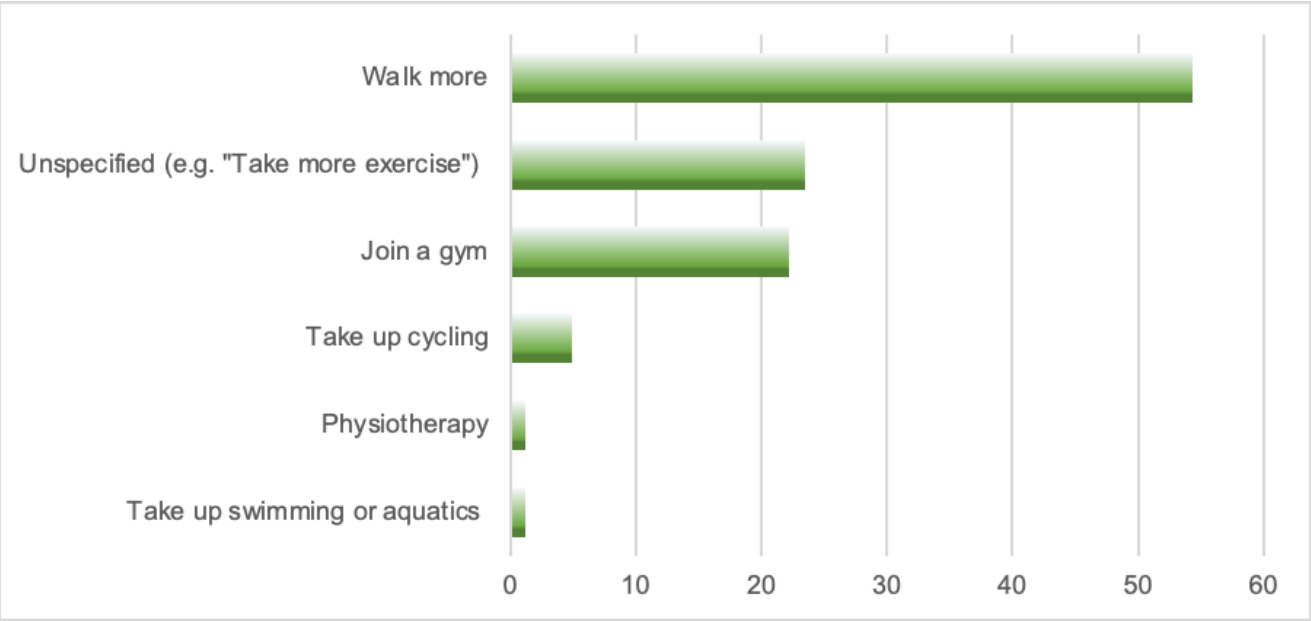
- Four in ten would be motivated to exercise after
- **a health scare**.
- Three in ten would be motivated by a need to **lose weight**.

And the highlighted five drivers in rank order are each facets of the **BFHWBPAS offer**.

Perceived Enablers – existing influences on the inactive

Of those advised to be more active by a medical professional:

Q7. Can you tell me what they advised?



% of 81 respondents advised by a medical professional

Advice for some targeted non-users to become more active.

42% of the sample had been advised by someone to be more physically active

83% by a medical professional
(i.e. a third of the sample had been advised professionally)
9% by a family member
2% by a friend
1% by another professional
1% by a manager

The exercise mostly recommended by medical professionals was to walk more (54%).
22% of the sub-sample had been recommended to join a gym, although ***not via the service.***

Perceived Enablers – opportunity and price

More opportunity to refer

The non-users targeted by the service appear quite highly engaged with health services, and therefore there is further potential for referral and social prescription.

59% had seen a GP in the previous six months.

35% had been advised to become more active, but not yet referred to BFHWBPAS.

The price is right for non-users

51% said yes, when asked:

> *"If you were offered three free 1-2-1 sessions to start, would you then pay to continue to use the Leisure Centre for swimming, the gym or further fitness sessions?"*

59% said yes, when asked:

> *"If you are on benefits, would you be interested in a programme that gave you free gym membership for six months?"*

Perceived Barriers – response to the service

Q17. Tell me some of the reasons why you would not be interested *(as many as apply)*	
	%
No time	43
I have children or parents that I care for	23
I hate exercising	10
The Leisure Centre is hard to get to	6
Other (unprompted)	
Age and a medical condition*	10
Too expensive*	8
Don't like the gym/that gym*	7
I am interested/ no response*	5
I'm not on benefits*	4

**Open ended responses recoded from thematic analysis*

Lack of time and competing commitments

Responses to this question from the non-users support findings from WP2 from the service users. There are many pressing demands on time that mitigate against taking up a regular exercise activity.

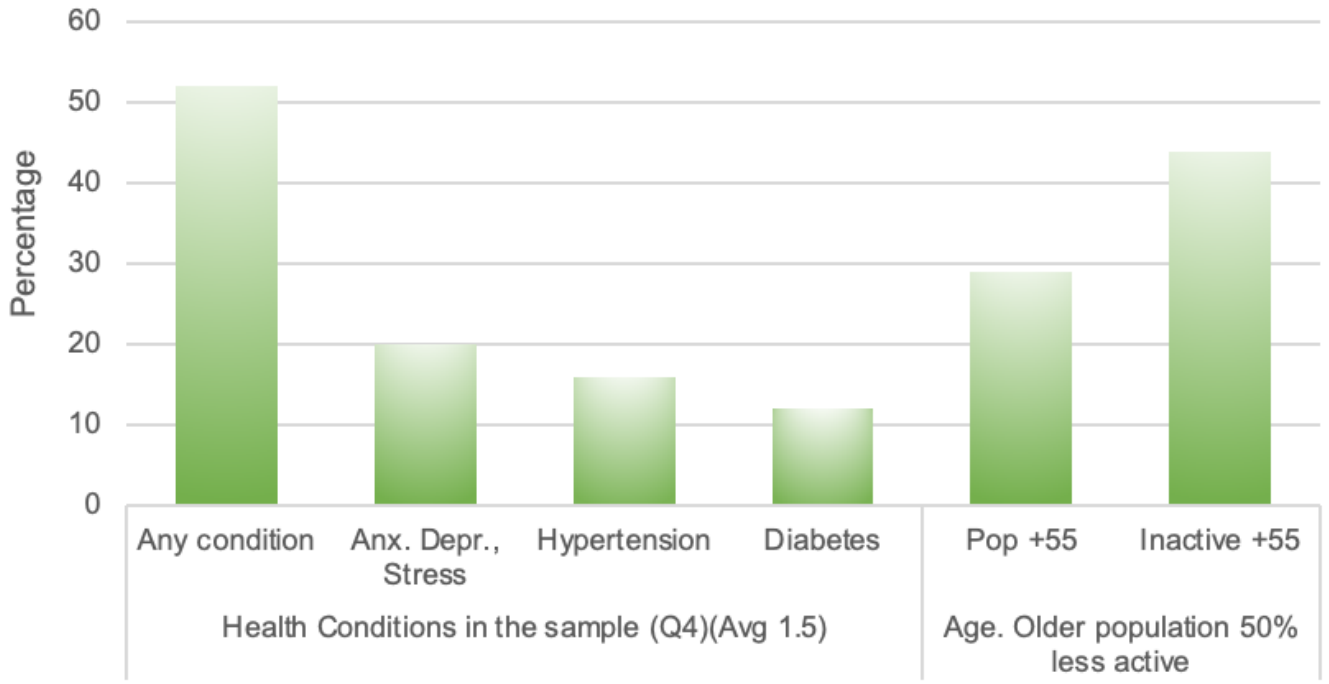
Few named more than one barrier.

Inaccessibility, expense and dislike of physical activity do not seem to be major obstacles.

Age and medical condition, and a dislike of gym-based activities are not widespread but may link to the characteristics of this population.

Perceived Barriers – characteristics of non-users

Q4 & 21. Health and age of targeted non-users



The inactive population is less well and older than the population in general

The chart shows that 52% of non-user respondents had at least one health condition.

20% suffered anxiety, depression or stress
15% hypertension, and 11% diabetes.

In addition, the inactive group in the four wards has 50% more over 55s than the general population of BF.

These characteristics may serve to highlight **the importance of the non-gym-based provisions** in the BFHWBPAS.

Perceived Barriers – awareness

Scheme awareness is relatively low

After a year in operation, low awareness is restricting opportunities for non-users to ask for a referral, or to self-refer.

77% had not heard of social prescribing

97% had not had a social prescription

... many of the target inactive population *are not* engaged with the health services

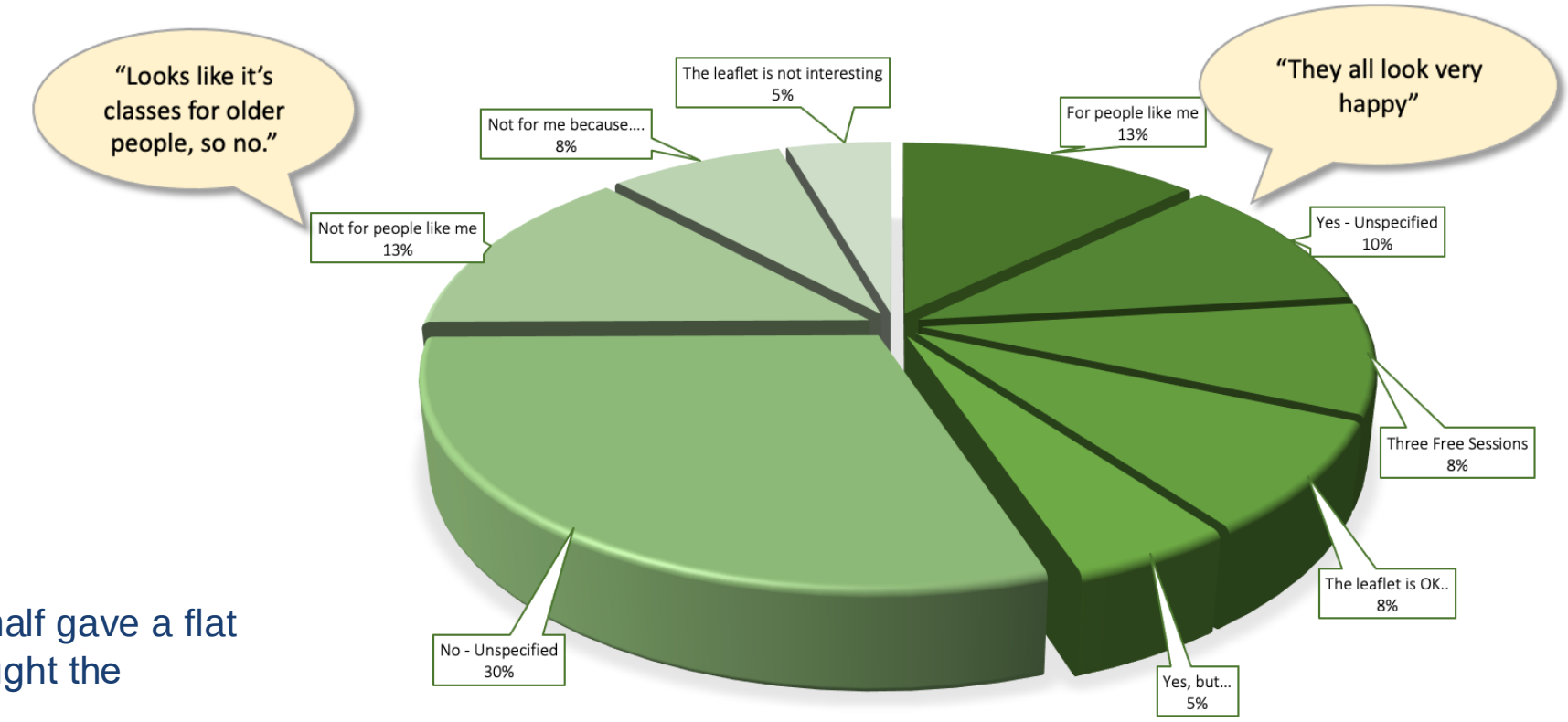
41% had *not* seen a GP in the prior six months

65% *had not* been told by a GP to become more physically active

And while this group could therefore largely only become informed by BFHWBPAS publicity

78% did not recognise the service leaflet when prompted

Perceived Barriers – over targeted messaging



... and a divided response

- **55% negative**, of which over half gave a flat "No" and almost a quarter thought the service was not for them.
- **45% positive,** of which over a quarter said the service was "for them" & almost a fifth liked the deal.

Does anything said here make you want to join the service?

Q20. Thematic analysis of 203 open-ended responses from a sample of 229 physically inactive residents of Bracknell Forest when prompted with the service leaflet (11% non-response).

Findings:

Work package 4 – Cost analysis of the service

What we did - costing methodology

A review of the costs associated with delivering the intervention was undertaken with BF leisure centre and service leads.

The review included budgetary information, staff time (i.e. all staff involved, their hourly rates and total number of hours involved in the project), the total budget allocated to the service and the cost of the actual intervention.

Further costs included additional training costs, any additional building rental, office space or equipment cost as well as additional IT and travel costs.

Physical and mental wellbeing outcome data were collected before and after completion of the service and included:

- PHQ9 and WEMWBS (measures of mental wellbeing).
- Resting heart rate.
- Body weight.
- Body mass index (BMI).
- Systolic blood pressure.
- Waist circumference.

What we did - costing methodology Continued

Analysis of user level costs and effects based on the above variables were calculated for each service user. This allowed for the calculation of an overall average cost per change in improvement for the intervention (where this occurred) for each variable of interest.

Analysis was based on Complete Case Analysis with sensitivity analyses performed on missing data.

Further analyses were performed to identify whether:

- The referral source (i.e., health professional or self-referral) affected the cost and effect outcomes.
- The gym membership payment by the local authority or out of pocket (individuals paying for themselves) affected the cost and effect outcomes.

Health outcome and cost of service – cost per unit change

Analysis of the cost per unit of improvement change between baseline and follow up measurement

	PHQ9 change	Resting heart rate change	Weight in kg change	BMI change	Blood pressure change	Short Warwick Edinburgh change *	Waist circumference change
Change score	-6.00	-0.91	-1.17	-0.59	-5.30	8.77 *	-0.63
Cost per participant	£172.40	£172.40	£172.40	£172.40	£172.40	£172.40	£172.40
Cost per unit change	-£28.73	-£188.73	-£147.29	-£294.34	-£32.52	£19.67	-£274.76

Health measure (reduced score represents an improved outcome)	**Number of complete cases** (pre and post programme measures)
PHQ9	9
Resting heart rate	104
Weight in kg	61
BMI	56
Blood pressure (systolic)	103
WEMWBS *	33
Waist circumference	51

* higher WEMWBS scores indicate greater positive mental wellbeing

Cost per unit outcomes – when referred by a health professional

Data analysis based on individuals paying for the service

	PHQ9 change n=1	Resting heart rate change n=29	Weight in KGs change n=21	BMI change n= 21	Blood pressure change n= 30	Short Warwick Edinburgh change n= 7	Waist circumference change n=17
Change score	-7.00	-2.62	-2.31	-0.78	-6.57	13.78	-1.65
Cost per participant	£172.40	£172.40	£172.40	£172.40	£172.40	£172.40	£172.40
Cost per unit change	-£24.63	-£65.78	-£74.65	-£220.75	-£26.25	£12.51	-£104.67

Data analysis based on individuals having been provided with a free service

	PHQ9 change n=6	Resting heart rate change n=48	Weight in KGs change n=23	BMI change n=18	Blood pressure change n=45	Short Warwick Edinburgh change n=12	Waist circumference change n=19
Change score	-6.83	-0.46	-0.18	-0.51	-2.49	1.49	0.89
Cost per participant	£172.40	£172.40	£172.40	£172.40	£172.40	£172.40	£172.40
Cost per unit change	-£25.23	-£376.14	-£967.10	-£341.00	-£69.27	£115.85	£192.68* N/A due worse outcome higher cost – cost per case not meaningful to calculate

Findings:

- Service users who were offered a free service had generally poorer health outcomes when compared to those who paid for the service.
- This led to a higher cost per unit of improvement for all outcomes for service users who were offered a free service when referred by a health care professional.
- This analysis is limited by a smaller sample available to evaluate referral source data.

Cost per unit outcomes – when self-referred

Data analysis based on individuals paying for the service

	Resting heart rate change n= 6	Weight in KGs change n= 3	BMI change n= 3	Blood pressure change n= 6	Short Warwick Edinburgh change n=1	Waist circumference change n=3
Change score	-0.83	0.10	0.07	-14.33	14.29	-2.67
Cost per participant	£172.40	£172.40	£172.40	£172.40	£172.40	£172.40
Cost per unit change	-£206.88	£1,723.97*	£2,585.95*	-£12.03	£12.07	-£64.65

*Cost per improvement n/a due to worse outcome

Data analysis based on individuals having provided with a free service

	PHQ9 change n=2	Resting heart rate change n=15	Weight in KGs change n=10	BMI change n=10	Blood pressure change n=16	Short Warwick Edinburgh change n=9	Waist circumference change n=9
Change score	-3.00	0.00	-1.83	-0.68	-8.50	12.70	-0.33
Cost per participant	£172.40	£172.40	£172.40	£172.40	£172.40	£172.40	£172.40
Cost per unit change	-£57.47	N/A insufficient data	-£94.21	-£253.52	-£20.28	£13.58	-£517.19

Findings:

- Service users who were offered the free service had generally poorer health outcomes when compared to service users who paid for the service.
- Again, this led to a higher cost per unit of improvement for all outcomes for service users who were offered a free service when they had referred themselves.

Conclusions and Recommendations

Conclusions

The Wider System:

- The system in which BFHWBPAS sits, and which seeks to increase physical activity levels, is complex. Approaches across the system are dominated by an individual behaviour change focus and Actors within the system often act independently without linking. This is despite the evidence stressing the need for multidisciplinary and partnership working (Birtwistle et al., 2018; OHID, 2022; Oliver et al., 2021).
- The relationship between BFHWBPAS and the wider system is largely one-directional and based on the referral system into the service.

Conclusions continued

Referrals:

- Referrals come primarily from GPs and social prescribers. The ambition that referrals would come from a wide range of agencies across the physical activity system and through self-referral has not been fully realized. There are low levels of awareness of the service amongst the targeted non-users and the advertising material was not seen as relatable to the target users.
- Data shows that some GP surgeries and social prescribers are very engaged as referrers but there are several practices who are not engaging.
- In some cases, the participants were not clear about the service they were being referred into.
- There was no evidence of communication with referrers after the point of referral and this could have been helpful in creating a better understanding of the service offer and ensuring an integrated service for users.

Conclusions continued

Service uptake:

- The service was set up based on the principle of proportionate universalism – a universal offer with very few referral exclusions but targeted at the physically inactive and those of lower socio-economic status. The profile of service user uptake hits the target for population groups for sex, age, health conditions and socio-economic status. Uptake is greatest among women and the 30-54 age group in line with existing evidence ((Hanson et al., 2013; Oliver et al., 2021; Pavey et al., 2011; Tobi et al., 2017). The scheme is less successful in targeting ethnic minority communities and sedentary groups.
- The target inactive population is older (over 65 years old) and less healthy than the general population in BF. They attend health services frequently and yet awareness of the service in the target wards was very low. A gym-based offer alone may be too narrow to fulfil the aim of proportionate universalism.
- Those who are referred into the service had complex lives with multiple caring responsibilities and complex work arrangements. They often had a combination of physical and mental health conditions for which they were receiving treatment. This created multiple barriers to people attending the service.

Conclusions continued

Service engagement and adherence

- Uptake of the service is high and in line with evidence from other services (Portman et al., 2023). However, very few users met the recommended frequency for attendance. A significant proportion of those referred did not fully engage or left early. The complex nature of people's lives and health conditions along with practical factors such as distance, and lack of time were important barriers to engagement.
- The targeted non-users had a deep knowledge of the benefits of physical activity and prior experience of exercise and sport, but awareness of the service is low and although their engagement with health care professionals is frequent, they were infrequently referred to the service.
- Service users are motivated by improving their mental health and wellbeing as well as by improving their physical health and reducing weight. There are opportunities to reduce social isolation through the service that could be encouraged.

Conclusions continued

Service Impact	• Despite there being only a few service users who completed the full 6-month service within the evaluation period, those who did demonstrated discrete but measurable benefits across both physical and mental indicators of health. There was an ambition among those completing the service that they would continue to maintain physical activity, but barriers were also identified in doing this.
Service costs	• An analysis of health outcomes at baseline and follow up for service users demonstrated that those who were offered a free service had generally poorer health outcomes when compared to service users who paid for the service whether they were referred by a health care professional or self-referred.

Conclusions continued

Personalised programme as a novel feature

- The service was set up with the intention that users will receive a tailored exercise programme that may not be gym-based, but which may include one-to-one or small-group work and activities based in community settings including through referral from BFHWPAS to other voluntary and statutory services according to their needs. Tailoring is undertaken within the leisure centre itself with users directed to different physical activity opportunities within the centre (primarily gym and swimming), but referral to external settings does not take place. Location and travel to the gym was seen as a barrier by both users and non-users both because of transport issues and cost. The further pursuit of the original intention for activities to take place outside of the gym and in community settings might increase uptake of the target groups. The need identified for more social connectedness through the service is also supported in the evidence (Szekeres, 2022; Ioannou et al., 2023) and could be facilitated by this service.
- The tailoring of a service within the leisure centre setting was highly valued by service users although some felt the limited time with the coach made this difficult to achieve beyond the initial assessment.

Conclusions continued

Extended time frame as an enabling novel feature

- The extended 6-month timeframe of the service was highly valued by those participating within it. The complexity of their lives, as well as the need to manage complex health conditions, which often involved treatment, meant there was often a need for people to pause their involvement. There was also a recognition of the length of time needed to see real change, which the extended time frame was seen to facilitate.

The role of the Health Coach as an enabling novel feature

- The role of a Health Coach is a crucial enabler to the service requiring a sophisticated skills set and understanding of the complex barriers and health and well-being conditions facing the target groups. The reliance on one coach is likely to impact on their ability to offer a personalized and bespoke service and reduces the opportunity for multidisciplinary input, which is shown in the existing evidence to be important (Birtwistle et al., 2018).

Conclusions continued

Subsidies as a novel feature

- The free and subsidised offer included in this service was seen as a key enabler by both those who took up the service and those who were targeted but hadn't been referred. This is in line with other evidence (Szekeres, 2022; Garner-Purkis et al., 2020) although it did not appear to stimulate engagement for 1:3 referred individuals. The cost beyond the 6 months presented a barrier to continuation for some. Whether or not a payment was made did not appear to impact engagement and adherence.
- Cost was found to be a relatively lower obstacle to uptake of physical activity than time, although discounts offered were attractive.

Recommendations for the evaluated service

1	The Health and Well-Being Physical Activity Service should continue to be offered in BF as one part of a wider system designed to increase physical activity.
2	The free and subsidised offer and the six-month timeline should continue as integral parts of the service.
3	Work should be done across the wider system, including with the public in areas of deprivation, to create a better awareness of the service and ensure more targeted and smoother referrals. A feedback loop with social prescribers and primary care should be considered to encourage greater adherence.
4	The original service ambition of creating a bespoke service that refers externally to voluntary and statutory services should be revisited. This would help reduce practical barriers to access and ensure that wider psycho-social needs to the service users can be better met.
5	The service should consider how it can align both the physical and mental health needs of the users. Implementing opportunities to build social connectedness and peer support across service users as part of the offer may reduce the barriers that some face.
6	The Health Coach is a crucial enabler, but reliance on a single individual reduces the opportunity for diversity of skills and characteristics that are important to different users.
7	The commissioned service provider runs a gym-based programme, which does not meet the needs of the target inactive population, who are less well and older than the population in general and who would benefit from a wider range of physical activities.

Recommendations for exercise or physical activity referral schemes

The service offer that aims to address inequalities in physical activity needs to be:

Accessible to those with limited access to transport.

Flexible exercise programme with diverse opportunities.

Free or subsidised, as this acts as a motivator.

Using social prescribers as supporters and part of the offer, not just as navigators.

Providing opportunities for individuals to connect.

Recommendations for exercise or physical activity referral schemes continued

Commissioners need to:

- Ensure physical activity promotion is coordinated with other strategies and policy plans for health improvement including obesity, mental health and inequalities. Service offers can then be linked together creating better public awareness, access to opportunities and supportive active environments.
- Prepare and scrutinise a detailed specification for service providers that includes the nature of the service offer, not simply targets, and employs effective user- and data-monitoring systems.
- Use the principles of “Making Every Contact Count” that any public-facing service can raise awareness about the importance of physical activity and engage other services in the service, e.g. benefits office, housing, social care.
- Implement robust data collection instruments and systems to build a good-quality evidence base.

Limitations of the evaluation

- The service had a delayed start meaning that only a small number of service users completed the full 6-month service during our data collection window so reducing the sample size and the power of the analysis.
- The social prescribing software used for service data collection (JOY) was not customised for the service and did not allow full data export for evaluation purposes. JOY also proved incompatible with the systems routinely built by the service delivery agents.

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