Health Innovation Wessex

Independent Evaluation of Hampshire and Isle of Wight Integrated Care System's Innovation for Healthcare Inequalities Programme (InHIP)

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DISCLAIMER

This report presents the findings of an independent evaluation of InHIP Hampshire and Isle of Wight. The findings of this independent evaluation are those of the authors and do not necessarily represent the views of the InHIP HIOW project team.

DECLARATION OF CONFLICT INTEREST STATEMENT

According to the University Hospital Southampton's definition of Conflict of Interest, we have none to declare.

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The fieldwork and analysis were undertaken by Amanda Lees, Rebecca Player, Amanda Glenn, Richard Finley and Vivi Yao.

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EXECUTIVE SUMMARY

Background and Introduction

NHS England's Innovation for Healthcare Inequalities Programme (InHIP) aims to address healthcare inequalities experienced by under-served populations. This national project is characterised by project teams working with their local communities to improve access to health technologies and medicines, aligned with the five Core20PLUS5[1] clinical areas of priority. Within Hampshire and Isle of Wight (HIOW), the local focus of InHIP was to increase hypertension (HTN) and atrial fibrillation (AF) clinical checks for people living in the most deprived areas of the region. The objective was to increase access to services through outreach and engagement of local at-risk populations at community-based cardiovascular disease (CVD) testing events. Five Primary Care Networks (PCNs) located in the most deprived areas of Southampton and Portsmouth participated in the project and ran community-based events. These were Southampton Central PCN, Portsdown Practice Group, Woolston and Townhill PCN, Living Well PCN, and Strawberry Health PCN. PCNS were identified by the Index of Multiple Deprivation in the first instance, followed by further scoping to ascertain their capability and capacity to engage with the project.

The programme also supported Integrated Care Systems (ICSs) to generate evidence on their pilot approaches via evaluation. The HIOW evaluation aimed to understand the outcomes of the InHIP approach from a variety of perspectives, including those of members of the public attending community testing events, the perspectives of healthcare staff and trusted community leaders involved in the delivery and co-design of InHIP, as well as outcomes on access to testing, diagnosis and associated clinical pathways. The evaluation was designed with a view to informing future commissioning decisions in HIOW ICS.

The evaluation was designed as a mixed methods approach which combined observations, short semi-structured interviews, and qualitative surveys with the collection of demographic survey data and analysis of routinely collected healthcare metrics. Rapid analysis was employed for all forms of qualitative data, which facilitated timely analysis in line with the evaluation's timescales. Limitations with routinely collected metrics data meant that analysis of these could not be conducted as planned. Descriptive statistics were produced from quantitative survey data.

Description of community-based CVD testing events

The five participating PCNs each took slightly differing approaches to running their events, as summarised below.

- Portsdown Practice Group PCN's event took the form of a one-off Blood Pressure (BP) Check Open Day.
- Southampton Woolston and Townhill PCN ran a Community Wellbeing Day in conjunction with a range of voluntary, community and social enterprise organisations, at the Woolston Lodge Surgery.
- Living Well PCN offered BP testing in the context of a pre-existing Wellbeing café at Thornhill Baptist Church.

[1] NHS England » Core20PLUS5 (adults) – an approach to reducing healthcare inequalities

- Strawberry Health PCN installed a Surgery Pod[2] into the Horizon Wellbeing Hub, based within the Meridian Shopping Centre in Havant, which transfers BP readings directly to patient records.
- Southampton Central PCN ran two BP testing events. The first event was held at the Meeting Place, St Mary's Church, where BP testing was offered alongside a pre-existing community café. The second event, BP Check and Wellbeing Chat, provided the option for BP testing offered as part of a pre-existing drop-in event at Northam Community Centre.

Each PCN developed their own standard operating procedure (SOP) which specified the process for taking BP readings at events, and the necessary actions and advice in the case of low, normal, raised, or high readings. At this initial stage, most PCNs concentrated on detection of hypertension rather than atrial fibrillation.

At all events (except Horizon Wellbeing Hub – due to wi-fi issues), participants were initially offered a BP prediction via a device for measuring cardiopulmonary vital signs called Lifelight (manufactured by xim Ltd.). This was followed by a manual cuff to measure BP. Lifelight uses a smart device with camera (at events this was always an iPad) to measure pulse and respiration rate and applies an algorithm to predict BP. The software holds medical device Class 1 registration, allowing it to be used for screening where actionable results are confirmed using an independent Class 2 diagnostic device.

Demographics and characteristics of those attending community events

We received a total of 287 survey returns, with the distribution of returns indicative of the differing attendance across events. Highest numbers of responses were from the two larger-scale one-off events i.e. BP Check Open Day (n=97) and Community Wellbeing Day (n=93), followed by 52 returns from two visits to Thornhill Wellbeing Café, 13 from Horizon Hub, 17 from St Mary's Meeting Place and 15 from Northam Community Centre.

In terms of gender, there was a fairly even spread between males and females across events, with certain events exhibiting a marginally higher male representation (e.g. BP Check Open Day, where males were one of the target groups and St Mary's Meeting Place). An exception was the Thornhill Wellbeing Café, which featured a significantly larger female contingent (86% females).

40% of respondents were aged 65 and above. This trend was particularly prominent at the Community Wellbeing Day (71% of respondents aged 65+) and the Thornhill Wellbeing Café (45% of respondents aged 65+). Respondents tended to be younger at the other events, with both St Mary's Meeting Place and the BP Check Open Day yielding responses from those in the youngest age group (18-24 years). At the Horizon Hub most respondents were aged between 45-54 years. The widest representation of age groups was achieved by the BP Check Open Day.

The prominent ethnicity amongst respondents was White British. This was not unexpected due to the profile of the communities within which these events were situated, and in keeping (in the case of the BP Check Open Day) with the target profile for attendees. A notable exception was the St Mary's Meeting Place, where a more diverse mix of attendees from various ethnic backgrounds was

[2] SurgeryPod - Telemonitoring | Microtech Group (microtech-group.co.uk)

evident - predominantly Asian or Asian British (35%), which again was reflective of the community within which the event took place.

A relatively high proportion (63%) of survey respondents overall stated that they had received a blood pressure reading within the last year. This was an unanticipated finding, given the events' emphasis on gathering BP readings from those who may not otherwise have come forward for testing. This figure varied across events and was especially high at the Community Wellbeing Day (85%) – which may suggest that those with an interest in health and wellbeing (and perhaps a propensity for monitoring their BP) may have been most attracted to this kind of event. The BP Open Day and the Horizon Hub returns suggested a higher proportion of those with older BP readings, which may indicate the success of targeted text message invites employed by these two events. It is, however, also important to note that as the answers were self-reported, some respondents may have under-estimated or over-estimated the time since their last BP reading.

Almost half of survey respondents (44%) stated that they had been advised to take some form of follow-up action following the reading they received at the event, which may have included further monitoring or advice to see a GP more urgently. This signals the potential usefulness of community events in identifying, and instigating follow-up for, potential issues.

Perceptions of community-based CVD testing events (attendees and organisers)

Whatever form the event took, attendees were overwhelmingly positive in their view of community BP testing, across all PCNs and events. The main theme to emerge in relation to attendees' and organisers' views on the model of community-based testing was that a community-based approach offered increased 'accessibility and inclusivity'. Four identified sub themes revealed that these events were also considered 'convenient and easy to get to', 'places where people feel comfortable', 'providing opportunistic and proactive care' and 'part of a broader model of primary care'.

Views on Lifelight also emerged as an important theme. Key benefits identified were its comfort and ease of use (compared to a traditional BP cuff) and (for a smaller subset of respondents) its benefits as a piece of health technology. There were, however, some reservations expressed. These related to some fear of new technology, and difficulties with measurements/predictions (stemming from the device's sensitivity to lighting conditions, skin tone and apparent disparity between Lifelight and cuff readings). Some staff commented on the disparity between Lifelight and cuff readings and it is therefore advisable that organisers are aware of the perceived inconsistencies reported here and consider if cuff readings should be taken as a backup.

Participants identified four effects (or outcomes) that they felt were already evident or could potentially result from InHIP's community-based events. These were 'Reaching people that would not otherwise have had a BP reading, or who had a reading a long time ago', 'Early identification' (of potential problems), 'Attendees intention to take positive follow-up action' and 'Raising awareness and facilitation of BP monitoring'. Organisers also identified 'Inter-agency collaboration' as an important outcome of the InHIP process.

In terms of the co-design element of the project, qualitative data revealed that it was 'complex and multi-layered', taking place across various forums and project meetings and carrying through into the events themselves. Participants appreciated the opportunity for collaboration and learning from others, although also highlighted the time commitment involved which could be a challenge.

The ‘complexity of clinical and information governance’ related to setting up community-based CVD testing events was also recognised by those involved as challenging and time consuming.

‘Sustainability’ was a theme of importance to those involved in co-design and delivery, with two locations continuing to offer BP testing on a regular basis. For the organisers of the larger scale (one-off) events, sustainability was more difficult to guarantee because of the resource required to run them, and the question over whether the outcomes in terms of CVD diagnosis justify the resources required. It was recognised that collaboration with other agencies and community groups would be crucial elements in ensuring sustainability.

Discussion

Findings indicated that InHIP events were highly appreciated by attendees and organisers for their accessible and inclusive approach, and that there was an appetite to incorporate this into a broader model of primary care.

The inclusion of Lifelight within events generated enthusiasm, interest and was seen as encouraging participation from those who would be deterred by a cuff. A small number of respondents highlighted the need for further development to ensure that readings/predictions could accurately be taken from everyone, especially those with darker skin tone.

Whilst we were unable to interrogate metrics data as planned, qualitative findings suggested existing or potential outcomes of these events could be:

- Reaching people who would not otherwise come forward for BP testing (and who had not had a reading recently). This suggestion was partially supported by the demographic survey, which also showed a strong attendance from those with more recent BP readings.
- Early identification of potential issues and opportunity for earlier intervention (which is reinforced by our finding that attendees intended to take positive action following their BP reading). This was supported by the demographic survey which indicated that 44% of people were advised to take follow-up action (e.g. further monitoring) following their BP reading at the event.
- Raising awareness of the importance of BP monitoring, and the facilitation of how this takes place.

These are encouraging findings, which highlight the potential of continued community-based initiatives (with optimised processes for feeding back into primary care) to successfully form part of a broader model of primary care, facilitating early identification of potential issues and providing opportunity as necessary for earlier intervention.

Our discussion concludes with a suggested categorisation of the different models of event employed (clinical focus, hybrid or social model) in terms of their associated characteristics, strengths and challenges, particularly around sustainability, follow-up, and ability to engage with under-served groups. The categories are somewhat rudimentary at this point but could be refined and improved with future projects/evaluations and the consideration of more approaches to community-based CVD testing.

Conclusions

The evaluation showed very positive responses to the community-based CVD testing events from both attendees and organisers. A set of potential, positive outcomes from ongoing community-based testing were identified in qualitative data. It is not yet possible to state the quantitative effects of community-based CVD testing on access, diagnosis, and health outcomes. Whilst we have acknowledged issues with quantitative data capture in the report (*Limitations*), we would undoubtedly be more likely to be able to evidence effects with quantitative data over the longer term as community-based testing embeds and more people participate. This was a point noted by organisers of events in this project, as well as within the national InHIP evaluation community of practice. Defining processes to ensure effective, ongoing quantitative data capture and reporting will therefore require further thought beyond the lifetime of this evaluation.

Recommendations

The evaluation team make the following recommendations:

- Based on positive response from attendees and organisers, continuation of a community outreach approach to CVD testing is recommended.
- For those running future events, consideration of the relative merits of larger scale one off events, versus offering recurrent, smaller scale opportunities is recommended based on findings here.
- For events using a 'social model' i.e. offering BP testing within existing community events, special attention to ensuring readings are effectively shared with primary care is recommended.
- Careful matching of target population, to event location and invitation method is recommended. Without this, events may be most likely to attract those who would attend anyway (i.e. an opportunistic sample - which may be acceptable), or those who are already proactively engaged in monitoring their health.
- Resources and learning (e.g. standard operating procedures) from this stage of the project should be shared, re-used, or adapted as far as possible to capitalise on gains so far.
- For future evaluations: Thought should be given as to how to optimise event-based quantitative data collection (i.e. demographic surveys and categories/numbers of readings taken).
- Ahead of any future evaluation, we recommend 'evaluability assessment'[3] to determine feasible and reliable routes for evidencing changes to patient outcomes over time.

[3] An evaluability assessment is undertaken ahead of data collection to determine whether it is possible to robustly carry out an evaluation. This takes into consideration the source, accessibility, quality, completeness, and volume of data.

BACKGROUND AND OVERVIEW

NHS England's Innovation for Healthcare Inequalities Programme (InHIP) aims to address healthcare inequalities experienced by under-served populations. This national project is characterised by project teams working with their local communities to improve access to health technologies and medicines, aligned with the five Core20PLUS5[4] clinical areas of priority.

Within Hampshire and Isle of Wight (HIOW), hypertension (HTN) and atrial fibrillation (AF) are identified clinical priority areas. In HIOW, the Innovation for Heath Care Inequalities Programme (InHIP) aimed to increase HTN and AF clinical checks for people in the most deprived Primary Care Networks (PCNs) of the region. The objective was to increase access to services through outreach and engagement of local at-risk populations.

The main aims of InHIP Hampshire and Isle of Wight were to:

- Run community-based CVD testing events, located in key areas of need, embedding opportunistic health promotion and CVD testing, employing innovative technology (Lifelight) and a PCN-community partnership approach.
- Engage with trusted community voices, community leaders and link to pre-existing community groups.
- Develop pathways into local PCNs using co-production methodology.

Five PCNs located in the most deprived areas of Southampton and Portsmouth participated in the project, these were: Southampton Central PCN, Portsdown Practice Group, Woolston and Townhill PCN, Living Well PCN and Strawberry Health PCN.

The programme also supported ICSs to generate evidence on their pilot approaches via evaluation. NHS Hampshire and Isle of Wight Integrated Care Board commissioned Health Innovation Wessex to evaluate the project between March 2023 and March 2024.

EVALUATION QUESTIONS

The evaluation aimed to understand the outcomes of the InHIP approach from a variety of perspectives, including those of members of the public attending community testing events, the perspectives of healthcare staff and trusted community leaders involved in the delivery and co-design of InHIP, as well as outcomes on access to testing, diagnosis and associated clinical pathways.

The overarching questions were:

1. What effects, if any, does InHIP's community-based CVD testing and referral pathway have on access (and equity of access) to CVD testing, HTN, and AF diagnosis (and associated health outcomes)?
2. What are people's reactions to InHIP's community-based CVD testing and referral pathway, and what are any perceived or anticipated effects on knowledge, awareness and health/health seeking behaviours?

[4] NHS England » Core20PLUS5 (adults) – an approach to reducing healthcare inequalities

3. How have those involved experienced the process of co-designing and delivering InHIP's community-based CVD testing and referral pathway? What are any barriers and facilitators/pre-requisites? What are the perceived and anticipated effects of InHIP?

Out of scope: For the purposes of this evaluation, we were not able to seek patients' views of diagnosis and treatments once they had been referred to primary care from a community event. We did not evaluate patient specific clinical outcomes. We did not seek to compare the different approaches taken by PCNs to running their community-based CVD testing events.

EVALUATION METHODS

The evaluation employed a mixed methods approach combining qualitative observations, interviews, and surveys with the collection of quantitative demographic survey data and analysis of routinely collected healthcare metrics. More detail about each of the methods employed is provided below.

OBSERVATIONS

The evaluation team carried out two strands of observation:

1) Observations of seven community-based CVD testing events – to observe the operation of the events as they took place and people's reactions to them (evaluation Q2).
2) Observations of five project-level meetings with the aim of understanding the experiences of those involved in the co-design and delivery element of the project (evaluation Q3).

The evaluation team used observations guides (see *Appendix: Observation guide community events* and *Appendix: Observation guide meetings)*. We sought written consent from attendees at face-to-face co-production meetings (which included an option to consent to be contacted later to complete the co-design and delivery survey), and we employed opt-out consent for observations at community events and online meetings. A notice was displayed explaining that we were collecting data at community events and that people could notify one of the evaluation team if they did not wish to be included. For online meetings, an evaluator verbally described the purpose of the evaluation at the beginning and asked people to state their consent to be observed (Yes/No) in the meeting chat and, separately, their consent to receiving a co-design and delivery questionnaire. Two evaluators observed six out of the seven community events. One evaluator observed meetings and the other community event.

SHORT SEMI-STRUCTURED INTERVIEWS

Whilst observations allow the evaluator to witness and make interpretations of events as they happen, interviews are important in accessing participants' own interpretations and experiences of these events. We conducted short semi-structured interviews with members of the public attending community-based CVD testing events (Attendees), and those involved in organising/delivering them (Organisers). The interviews followed a topic guide consisting of a small number of open-ended questions relating to participants' perceptions and experiences of attending/organising/delivering the events (*Appendix: Interview guides*)Appendix: Interview guides. On average, interviews lasted five to ten minutes, which whilst intentionally short, yielded useful data and worked well in the context of busy events. We sought written consent from interview respondents and interviews were recorded.

We aimed to interview a mix of attendees in terms of age, gender, and ethnicity. Our target was for up to six interviews (c. four-five attendees and one-two organisers) per event. The breakdown of interviewees is shown in *Interviews.*

CO-DESIGN AND DELIVERY SURVEY

This survey was distributed to those involved in the project steering group and/or those who had attended co-production meetings. (Co-production meetings are described below in the section called *Complex, multi-level layered co-design in the InHIP project.*) It consisted of eight open-ended questions relating to respondents' views and experiences of involvement with InHIP, the community events, and any perceived effects of the project. The survey was administered via Microsoft (MS) Forms, with a link to the survey sent to recipients via their email address (which they provided when they consented to receive a survey). A short consent section was also included at the start of the survey outlining its purpose and how data would be stored and reported. Please see *Appendix: Co-design and delivery survey (Word* version).

DEMOGRAPHIC SURVEY

This survey was designed to collect demographic details, information on the time since any previous BP reading was taken, and whether any follow-up action was recommended following the BP reading. We aimed to invite every event attendee to fill in a survey, which took in the region of three to five minutes to complete. We amended the method of delivering the demographic surveys during fieldwork. We initially used paper-based self-completion surveys, which were posted into a postbox and collected by the evaluators at the end of the event. At the initial Portsdown Practice Group's BP Check Open Day, we ran out of paper surveys due to the unexpectedly high turnout at the event and there was no facility to print off more, meaning that the potential to collect a substantial amount of demographic survey data was unfortunately lost from this event. Following this, we took the decision to swap to electronic data collection re-creating the survey as an electronic version for use on iPads. We subsequently offered both forms of data collection at the Community Wellbeing Day, and then swapped to using iPads exclusively at all remaining events. This proved a more efficient way to collect data. A short consent section was included at the start of the survey outlining its purpose and how data would be stored and reported. Please see *Appendix: Demographic survey* (Word version)

ROUTINELY COLLECTED HEALTHCARE DATA (METRICS)

The quantitative evaluation aimed to analyse several pre-identified metrics to identify changes before and after implementation of the InHIP project. This approach was designed to use CVD Audit and Population Health Management (PHM) datasets as primary and secondary sources of data. However, a closer examination of these datasets uncovered limitations in their usefulness. The primary limitation was due to the lack of availability of CVD Audit data, which at the time of reporting is only available up to September 2023, whereas the events and data collection occurred exclusively from September 2023 onwards. Consequently, the data would not accurately reflect the project's effects on CVD detection in the post-September 2023 period.

Additionally, the PHM data is presented as a cumulative pseudonymised[5]-level dataset, encompassing information related to AF and HTN in individuals over 18 years of age. However, a deficiency in this dataset for evaluation purposes lies in the absence of specific timestamps for data capture, rendering it impractical for the time-sensitive requirements of the project and hindering any meaningful comparisons pre- and post-project.

Given these limitations, we recommend that a further analysis of CVD data is undertaken once the dataset has been updated. As a point of reference, the two charts in *Appendix: Analysis of routinely collected health care data* show up-to-date information on the five participating PCNs, illustrating the percentage of patients who received blood pressure readings for HTN within a 12-month period or underwent anticoagulation drug therapy for AF from December 2022 to September 2023. These charts support an understanding of patient trends before the InHIP project was implemented.

DATA ANALYSIS

We used rapid analysis (Vindrola-Padros et al., 2020) to analyse all forms of qualitative data. This form of analysis was suited to the short extracts of data that we received from the co-design and delivery survey and from the short semi-structured interviews. It also enabled timely analysis in line with the evaluation's timescales. We listened back to audio recordings and created a summary including verbatim quotes for each interview (Rapid Assessment Process). From these we developed Rapid Analysis Process (RAP) sheets (one for attendees and one for event organisers) which summarised key points per question across all interviews. Having read and re-read these sheets the evaluation team met together to discuss main themes. Following this discussion, we created a thematic coding frame which was applied to interview data, observation notes from events and relevant sections of the co-design and delivery survey. We created an additional RAP sheet for observations from co-production workshops and steering group meetings, and for the remainder of the co-design and delivery survey (because these focused on the experience of co-design and co-production), which was read and re-read to create an additional thematic coding frame. We incorporated the two coding frames together to create one set of themes; please see *Appendix: Themes developed and data source*Themes developed.

We exported data derived from the MS Forms demographic survey to MS Excel and generated pivot tables to provide descriptive statistics.

RELEVANT THEORETICAL FRAMEWORKS

FIVE DIMENSIONS OF ACCESSIBILITY (LEVESQUE ET AL., 2013)

The commissioners of the national evaluation (NHS England) highlighted the relevance of Levesque et al.'s (2013) five dimensions of accessibility of services to InHIP. These are designed to allow researchers (and evaluators) to look at the experiences of different social groups in their attempts to access care. It is hoped that the approach taken by InHIP projects should improve accessibility across these dimensions, which are described as:

[5] Pseudonymisation is used to de-identify data by replacing personally identifiable fields with a code or pseudonym. Pseudonymised data could be re-identified with the addition of this data and is therefore not entirely anonymous.

1) Approachability – relates to the fact that people with health needs must be able to identify that a service exists, can be reached, and influence their health. Service approachability depends on the information provided, outreach activities, transparency and so on. Complementary to approachability on the supply side, populations must also be able to perceive the need for care, determined by factors including health literacy and health beliefs.
2) Acceptability – concerns the cultural and social factors that determine the possibility for people to accept a service and see it as appropriate. For example, in some cultures it may be inappropriate for women to seek healthcare from men. Ability to seek care requires personal autonomy, capacity, individual rights, and knowledge about health care options.
3) Availability and accommodation – refers to whether services can be reached physically and in a timely fashion. This relates to location, availability of appointments and for patients, transport, mobility, working hours etc.
4) Affordability – relates to the direct costs of the service, costs to travel there, any associated loss of earnings and so on. It also reflects people's ability to use resource and time to access services.
5) Appropriateness relates to how well services offered match people's needs and the quality and efficacy of the service on offer.

During analysis of qualitative findings, the relevance of the identified themes to these dimensions became apparent. This is flagged within the *Perceptions of* community-based cvd testing events *section* and further explained within the ***Error! Reference source not found.***.

CO-PRODUCTION AND CO-DESIGN

Co-design and co-production were important facets of the project's approach. These two separate but inter-related concepts recognise the central role of those with lived experience in receiving and delivering services, and their expertise in how they should be designed.

Robert et al (2022) give helpful definitions:

'Co-production sees patients as active contributors to their own health and explores how interactions with staff and services can best be supported.' (Robert et al, 2008, p.1)

'Co-design is a related but distinct creative process where patients and staff work in partnership to improve services or develop interventions.' (ibid)

Experience-based co-design (EBCD) is an established method for supporting the co-design process which employs participatory and narrative methods to gain understanding of experiences of care (from the perspective of those delivering and receiving it), followed by a collaborative process to design improvements and implement changes (Dimopoulos-Bick et al, 2019). According to Dimopoulos-Bick et al. (2019), EBCD covers the following stages:

- Engage – during which time a team of people is brought together with experience in delivering/receiving health care and the problem or opportunity is framed.
- Gather – to prepare for the co-design process and gather narratives around experiences.
- Understand – touchpoints and opportunities for improvement are identified and jointly prioritised.
- Improve – improvements are designed, implemented, tested, evaluated, and learned from.

This process informed Health Innovation Wessex's co-design across the project, and the stages are referred to in the qualitative findings (theme: *Complex, multi-level layered co-design in the InHIP project*) and in the ***Error! Reference source not found.***.

DESCRIPTION OF CVD TESTING EVENTS (AND KEY TERMS)

In this section, we briefly describe the CVD testing events run by the participating PCNs. Data provided by PCNs on BP readings taken at events is shown as part of this description. Due to the different nature of the events and the mechanisms for recording, the data is not comparable across PCNs. Some key terms are used in these descriptions which it is useful to explain initially.

Standard operating procedures (SOPs) The lead for each PCN, along with relevant stakeholders, developed a SOP for their community testing events which specified the process for taking BP readings, and the actions to be taken/advice to be given in the case of low, normal, raised, or high readings. There was some sharing of SOPs across PCNs, but it should be noted that each PCN finalised their own approach and that there are some differences between them, both in level of detail and in thresholds set. For example, in the Living Well PCN SOP the cut-off for normal BP is below 140/90 (consistent with National Institute for Clinical Excellence (NICE)[6] for a clinic-based reading) and in the Woolston and Townhill PCN normal is set as being below 135/85 (consistent with NICE for an ambulatory or home BP reading). The SOPs can be viewed in the appendices *Appendix: Portsdown Practice Group SOP and documentation* to *Appendix: Central PCN SOP*.

Blood pressure (BP) information card – Attendees at events were given an information card, which provided a space for their BP reading to be written, along with information on what should be considered as normal, raised, and high BPs, and recommended actions. Different versions were used by PCNs. Versions were shared and adapted as necessary. As an example, *Appendix: Blood pressure card* shows the version developed by Living Well PCN (with Health Innovation Wessex), drawing on pre-existing resources (including resources from the British Heart Foundation and the Community Pharmacy BP check service).

Lifelight prediction – Lifelight is a cardiopulmonary vital signs measurement device manufactured by xim Ltd. It uses a smart device with camera (at events this was always an iPad) to measure pulse and respiration rate and applies an algorithm to predict BP. The software holds medical device Class 1 registration, allowing it to be used for screening where actionable results are confirmed using an independent Class 2 diagnostic device. At events, Lifelight was offered in conjunction with testing via a BP cuff, as detailed below. Lifelight testing was offered either by a representative from xim Ltd, one of the Health Innovation Wessex Innovation Adoption team (IAT), or by a social prescriber.

Table 1 PCN Events

PCN name	Event name	Date
Portsdown Practice Group	BP Check Open Day	Friday 08 September 2023
Southampton Woolston and Townhill PCN	Community Wellbeing Day	Saturday 16 September 2023
Living Well PCN	Wellbeing Café, Thornhill Baptist Church	Launch on 18 September 2023, followed by monthly attendance at Wellbeing Café.

[6] Diagnosis | Diagnosis | Hypertension | CKS | NICE

Strawberry Health PCN	Horizon Wellbeing Hub	Launch on Thursday 16 November 2023. The surgery pod will remain in the Horizon Wellbeing Hub from now on.
Southampton Central PCN	Meeting Place, St Mary's Church	Thursday 23 November 2023
	BP Check and Wellbeing Chat, Northam Community Centre	Monday 04 December 2023

PORTSDOWN PRACTICE GROUP

Portsdown Practice Group delivered a one-off BP Check Open Day within the Paulsgrove Surgery on the morning of Friday 08 September, during which time the surgery was closed to other business. The PCN took a data driven approach[7] to locating the event to maximise attendance by the target demographic, which was white working-class males, living in deprived areas. Invitations were sent via text message (with regular reminders leading up to the event). The event was also publicised on the PCN website, via posters, at the Paulsgrove Carnival and at a local men's group. On arrival, people were offered a BP prediction via Lifelight and/or a reading via the BP cuff. Lifelight predictions were given first if people wished to participate in this. Everyone who received a Lifelight prediction suggesting raised BP went on to have a second reading via a BP cuff. Attendees were given a record of their reading on a BP information card. They were asked to report their reading at reception on exit so that it could be entered into their records (SystmOne) by the receptionist. Those with raised readings were asked to see an attending Health Care Assistant, who recorded details and gave relevant advice for further monitoring, according to the SOP. The turnout for the event was high with Lifelight data reporting that 152 people received a Lifelight BP prediction (this is a higher number than shown in *Table 2* – the difference may be due to the fact that some people may have left without registering their results with reception).

Table 2 Event reported data: Portsdown Practice Group BP Check Open Day

Number of BP readings taken on the day recorded in patient records	108
Number of people with raised BP and advice given	52
Number of people attending with high BP requiring urgent treatment and action taken	*
Number of people with low BP requiring urgent action and action taken	0
Number of people attending but who had not had a BP check in last 12 months	108

*between 1-7, per NHS Digital suppression rules

[7] 'Data driven' is used to describe the process of identifying the population in need (e.g. via surgery clinical data or population health data), then tailoring the event's location, and invitation methods, to reach this group.

SOUTHAMPTON WOOLSTON AND TOWNHILL PCN

Southampton Woolston and Townhill PCN delivered a Community Wellbeing Day at Woolston Lodge Surgery on Saturday 16 September in conjunction with a range of voluntary, community and social enterprise organisations. The event comprised stalls offering wellbeing advice (including the Oasis Community Pantry, Fresh Kitchen Cookery School, Health and Wellbeing Coaches and advice on stopping smoking), with the opportunity for people to also have their BP tested. The event was advertised via text message (AccuRx), social media, PCN website and posters. The PCN's social prescribers also contacted local radio stations and the local paper.

On arrival at the BP testing area, people were offered a Lifelight prediction, followed by a reading from a standard BP machine (that also detects AF). Two readings were taken with the second recorded in clinical notes (via laptop) and sent to the attendee's own GP practice via an agreed template. Attendees were also given a copy of their reading on a BP information card. A condition of having a BP reading taken was that people had to consent to their reading being shared with their own GP practice and added to their clinical record. Those with raised readings were given appropriate advice (as per SOP and BP information sheet, please see *Appendix: Woolston and Townhill PCN SOP* and documentation) and a GP was on hand in case of a high reading that required urgent attention.

Table 3 Event reported data: Southampton Woolston and Townhill PCN Community Wellbeing Day

	Surgery 1**	Surgery 2**
Number of BP readings taken on the day	22	78
Normal BP as recorded on the day		61
New hypertension detected to date	*	*
Number of patients with existing hypertension	10	Not reported
Number of people with raised BP – further monitoring advised	Not reported	16
New cases of AF detected	0	Not reported

*between 1-7, per NHS Digital suppression rules

** Please note that the surgeries have reported differently (using different categories), numbers are shown exactly as reported. At the time of reporting, only two out of the four surgeries had shared their data.

LIVING WELL PARTNERSHIP

Living Well Partnership's approach was informed by an initial multi-agency co-production workshop on 13 June 2023, attended by social prescribers, surgery staff and representatives of the voluntary, community and social enterprise sector. Living Well were aiming to improve the recording and monitoring of blood pressure readings in groups of patients that might not access healthcare settings in the traditional format. A key message from the workshop was the preference for a 'non-medical' model of community-based CVD testing. As a result of this, the Wellbeing Café, at Thornhill Baptist Church was chosen as the venue for hosting community BP testing. This is a pre-existing, café style event, providing an opportunity for social interaction, craft activities, support, and wellbeing advice from a range of agencies (including Mind, Acorn Chaplaincy, Living Well Social Prescribers, Society of St James, Solent Mind, Employment Support and Education Support). In keeping with the size and style of the event, advertising was limited to within the church and at the café itself, via posters and word of mouth.

The initial event was held on the morning of 18 September 2023, and BP testing has subsequently been offered monthly at the café by the Living Well Social Prescribing team. BP testing was set up in one corner of the room that hosts the café. People were first offered a Lifelight prediction and if the prediction suggested a raised reading, a second reading was offered via a manual cuff. Attendees were given their reading on a BP information card. In the case of a raised BP reading, advice was given (in line with the SOP), for further monitoring, e.g. via home monitoring or returning to the café. The blood pressure readings were recorded and for Living Well patients the performance team then captured this data and sent patients follow-up reminders as per usual processes. If attendees were not from a Living Well GP practice, they were advised to contact their own GP to let them know their reading. The data reported below shows a combined total for November and December events, rather than the launch event.

Table 4 Event reported data: Living Well PCN Community, Wellbeing Café Thornhill Baptist Church

Number of BP readings taken	33
Number of people with raised BP – further monitoring advised	22
Number of people attending with high BP requiring urgent treatment and action taken	0

STRAWBERRY HEALTH PCN

Strawberry Health implemented a surgery pod (a machine which has the capacity to take BP readings and transfer them directly into the clinical records of patients registered with participating GP surgeries) into the Horizon Wellbeing Hub, based within the Meridian Shopping Centre in Havant. The Horizon Wellbeing Hub offers exercise classes, wellbeing advice and health checks. The launch event was 16 November 2023. Following this launch, the pod remains in the Hub available for use during opening hours. Initially set up to take BP readings, the intention is to extend the pod's services over the longer term, to include options such as weight management and diabetes checks. The following actions were carried out to publicise the launch event:

- Targeted invite sent via text message to 730 Homewell Surgery patients (for whom there was no record of a BP reading within the last five years) two days in advance of the event.
- Information text messages were sent to the entire Homewell Surgery patient cohort notifying them of the pod as a new option for BP testing.
- Television screens in the window of the Horizon Hub advertised BP testing for passing footfall.
- Plans for further advertising include text messages to patients of other participating surgeries, advertising in partner leisure centres, and within the Meridian Shopping Centre, social media, and notifications to those on Horizon Hub's mailing lists.

Attendees submitted their name, date of birth and GP surgery into the pod. BP readings were taken and automatically transferred to the relevant GP surgery. If someone was not registered with a participating GP surgery, they could have their reading taken and written down, but it would then be their responsibility to contact their GP as necessary. BP readings were recorded for attendees on the BP card. Verbal advice was given for those with normal, raised, high or low BP according to the SOP. At the launch event, a GP was on hand to speak with anyone receiving a very high reading.

Despite the text messaging invites, attendance at the launch event was lower than anticipated (and in comparison to Portsdown Practice Group's BP Check Open Day which also used text messaging), which may be explained by a shorter lead time/fewer text reminders, heavy rain on the day deterring people from shopping in the Meridian Centre, or the fact that this cohort of patients may

be more resistant to BP testing, having been invited to (and not attended) BP testing previously. However, the numbers grew over the subsequent weeks, as indicated in the table below.

Table 5 Event reported data: Strawberry Health PCN Horizon Wellbeing Hub

	Launch event 16 November	Numbers up to 13 February 2024 (including from launch event)
Number of BP readings taken	15	65
Number of people with raised BP and advice given	*	33
Number of people attending with high BP requiring urgent treatment and action taken	*	*
Number of people with low BP requiring urgent action and action taken	*	*

*between 1-7, per NHS Digital suppression rules

SOUTHAMPTON CENTRAL PCN

Southampton Central PCN conducted BP testing in two community venues, the Meeting Place at St Mary's Church (23 November, 2023) and Northam Community Centre (04 December 2023). The Meeting Place is an existing café style event where members of the community can gather for free refreshments, to visit the Market Place (a weekly community pantry type event) and to seek advice from Central PCN's social prescribers and health coaches who attend every other week. Northam Community Centre also hosts a café style event where attendees can eat breakfast and lunch, as well as speak with social prescribers and health coaches who attend the event monthly. At each of these events, the BP testing was included as an additional service to complement social prescribing and health coach advice. The nature and size of these events suited them to advertising within existing networks and local community groups via word-of-mouth and some posters.

In both venues, people were first offered the opportunity to receive a BP prediction from Lifelight followed by a reading by a manual cuff, taken by surgery staff. People were given both their Lifelight predictions and cuff reading on a BP information card. Surgery staff made a written record of readings taken, and input these into clinical records after the event, with the attendee's own GP notified of the reading (and any necessary action) via a task notification (where the surgery was part of Central PCN). In the case where readings were taken from people from other surgeries, they would receive the written reading and verbal advice on how to follow up (if required). Verbal advice was given according to the SOP and BP information card. Central PCN aims to continue to offer BP testing within these venues over the longer term, pending a forthcoming organisational restructuring.

Table 6 Event reported data: Central PCN events

	Meeting Place, St Mary's Church	Northam Community Centre
Number of BP readings taken on the day	14	20
Number of people with raised BP and advice given	*	*
Number of people attending with high BP requiring urgent treatment and action taken	0	0

Number of people with low BP requiring urgent action and action taken	0	0

*between 1-7, per NHS Digital suppression rules

DEMOGRAPHICS AND CHARACTERISTICS OF THOSE ATTENDING COMMUNITY-BASED CVD TESTING EVENTS

In this section, we will describe the results from the demographic survey which was undertaken at each event. A total of 287 surveys were completed. Returns reflect the distribution of attendance at the events. As shown below, the majority came from the BP Check Open Day and the Community Wellbeing Day which were the two one-off events that both achieved high attendance. We collected surveys from two visits to Thornhill Wellbeing Café (which is an ongoing event), and these have been amalgamated together to constitute the overall return of 52 surveys. The smaller returns from Horizon Hub, St Marys Meeting Place and Northam Community Centre reflect a lower attendance on the day we attended. It should be noted that the opportunity to collect BPs from Horizon Hub was also ongoing at the time of writing as discussed above.

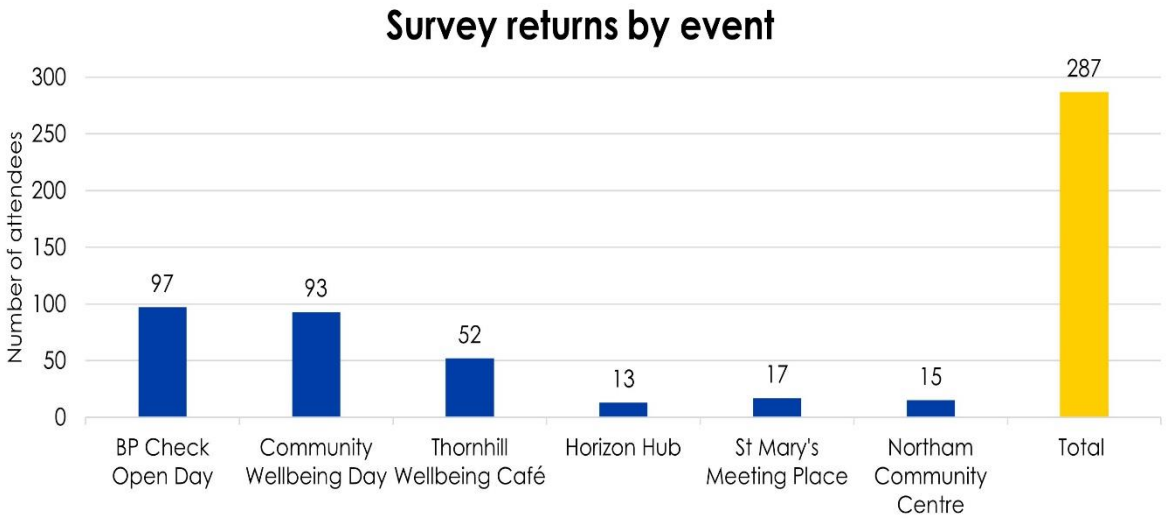

Figure 1 Number of survey returns by event

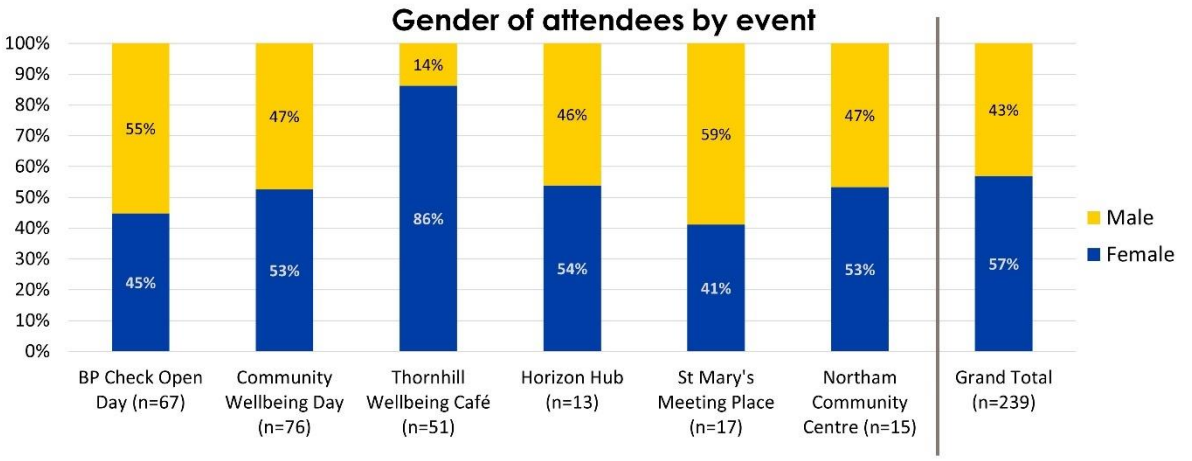

Figure 2: Gender distribution by event

The gender distribution amongst attendees returning surveys is shown in Figure 2 above. Notably, there were variations across different events, with certain events exhibiting a marginally higher male representation (e.g. BP Check Open Day, where males were one of the target groups), while others, such as the Thornhill Wellbeing Café, featured a significantly larger female contingent. There was a total of 44 female respondents from Thornhill Wellbeing Café, a figure approximately six times higher than the number of male participants, significantly contributing to the overall prevalence of females among survey respondents. Please note there is a high percentage of no responses to this question, driven by the BP Open Check Day and the Community Wellbeing Day. We believe that this was due to the formatting of the paper-based survey in use at these events affecting readability.

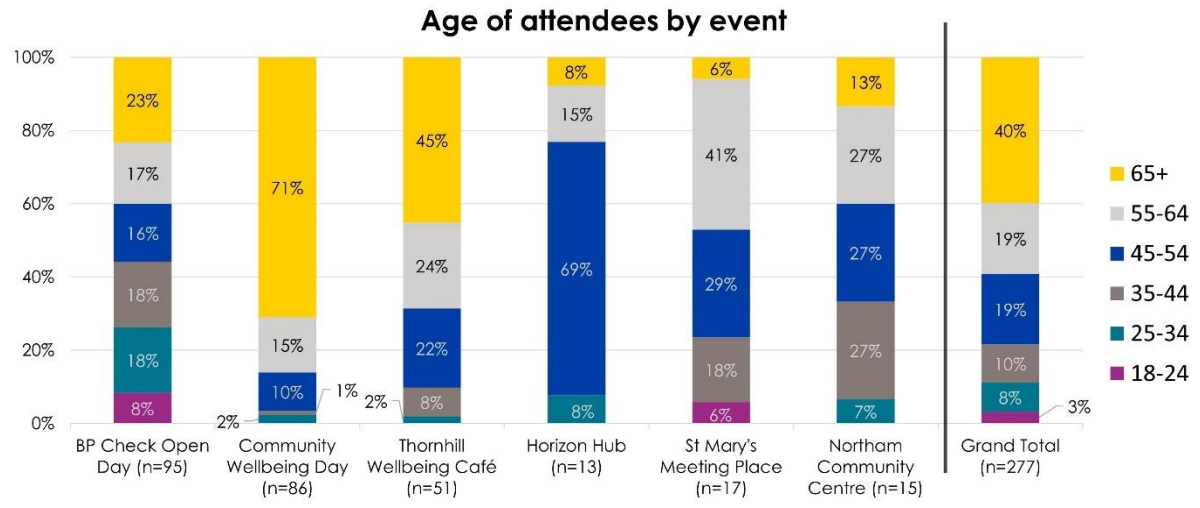

Figure 3: Age distribution

As shown in Figure 3 above, 40% of respondents were aged 65 and above, indicating a notable presence of this demographic. This trend was particularly prominent at the Community Wellbeing Day (71% of respondents aged 65+) and the Thornhill Wellbeing Café (45% of respondents aged 65+). Respondents tended to be younger at the other events, with both St Mary's Meeting Place and the BP Check Open Day yielding responses from those in the youngest age group (18-24 years). At the Horizon Hub most respondents were aged between 45-54 years. The widest representation of age groups was achieved by the BP Check Open Day.

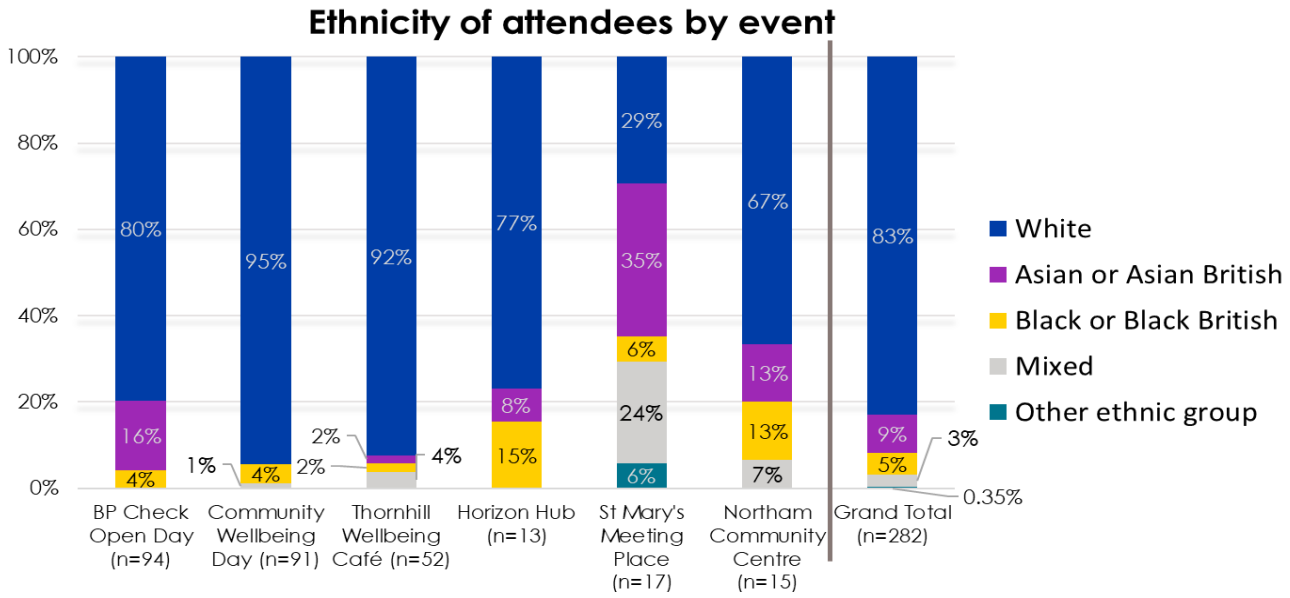

Figure 4: Ethnicity

This ethnicity distribution pattern is consistent across the various events, with the prominent ethnicity amongst respondents being White British. This was not unexpected due to the profile of the communities within which these events were situated, and in keeping (in the case of the BP Check Open Day) with the target profile for attendees. A notable exception was the St Mary's Meeting Place, where a more diverse mix of ethnicities was evident (the highest proportion of returns being from those of Asian or Asian British ethnicity), which again was reflective of the community where the event took place.

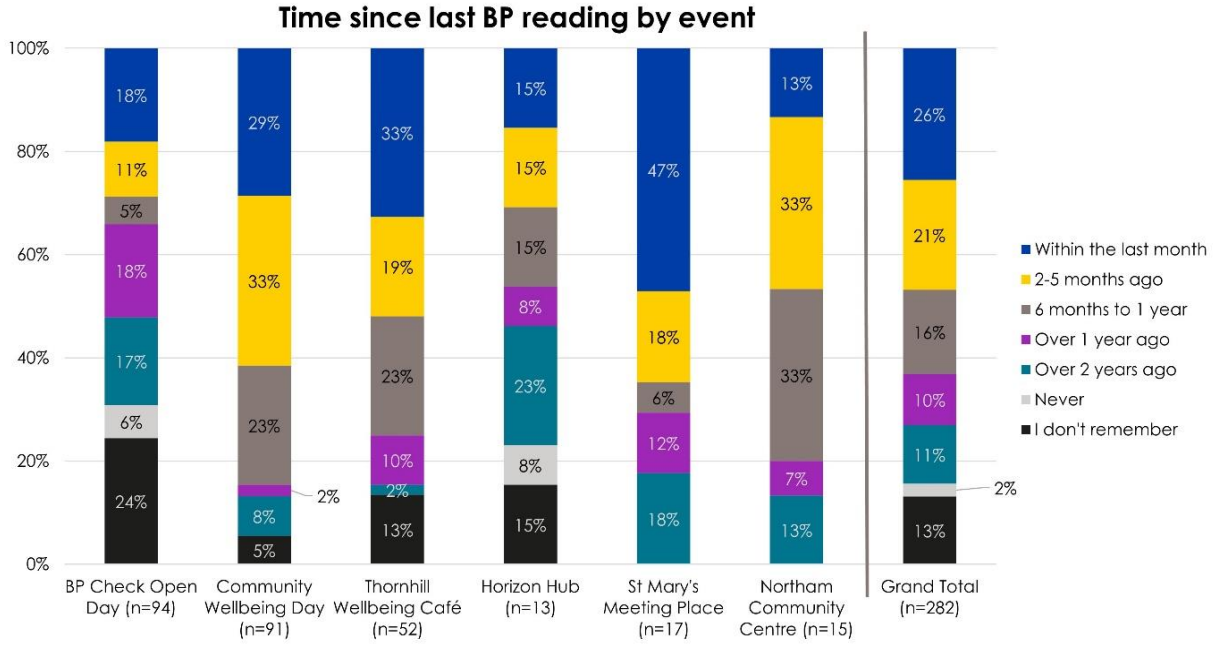

Figure 5: Time since last BP reading

A relatively high proportion of survey respondents (63%) stated that they had received a blood pressure reading within the last year. This was an unanticipated finding, given the events' emphasis on gathering BP readings from those who may not otherwise have come forward for testing. This figure varied across events and was especially high at the Community Wellbeing Day (85%) – which may suggest that those with an interest in health and wellbeing (and propensity for self-care) may have been most attracted to this kind of event. The BP Open Day and the Horizon Hub returns suggested a higher proportion of those with older BP readings, which may indicate the success of targeted text message invites employed by these two events. It is, however, also important to note, that as self-reported answers, some respondents may have under-estimated (or over-estimated) the time since their last BP reading.

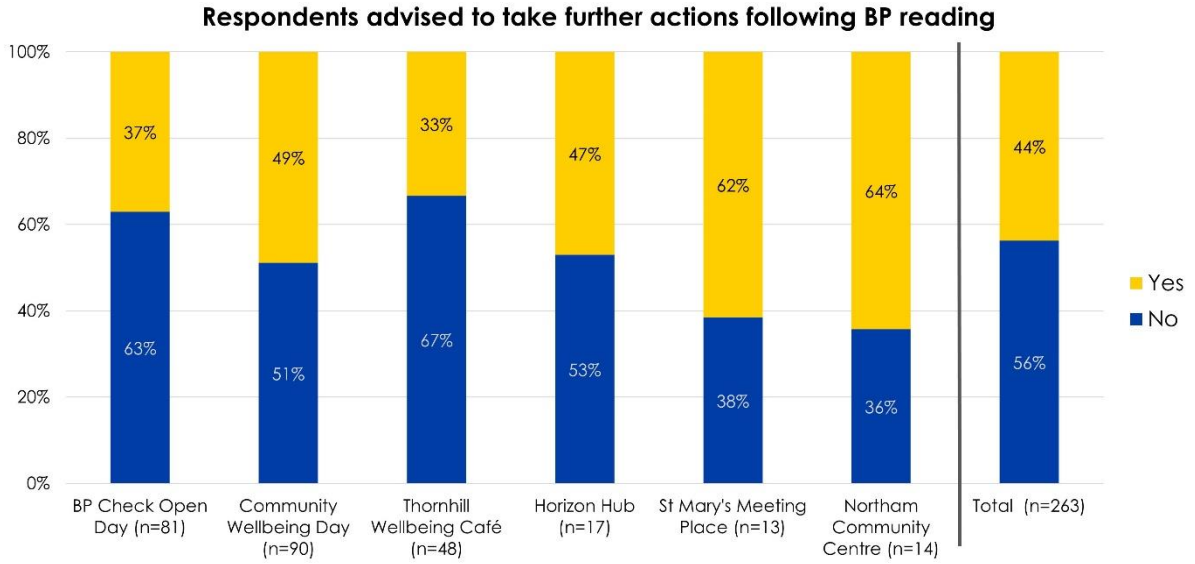

Figure 6: Follow on action advised

Figure 6 shows the (self-reported) percentage of people who were advised to take some form of follow-up action because of their BP reading, which could have included further monitoring or advice to see a GP. A significant proportion of respondents across all events suggested that they had been advised to take follow-up action, signalling the potential importance of community testing events in facilitating the diagnosis of HTN or AF.

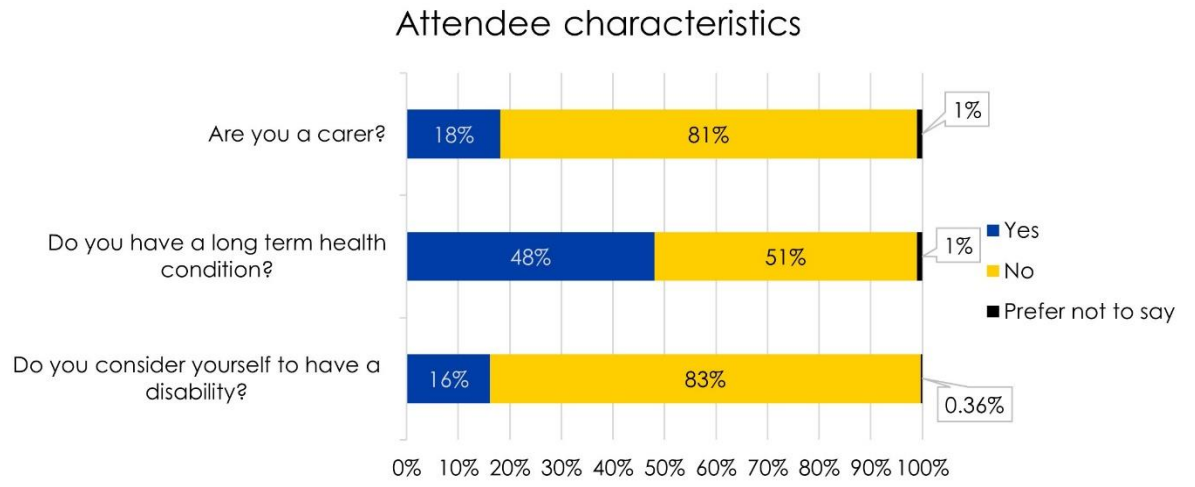

Figure 7: Other characteristics

The survey also collected details on whether attendees had caring responsibilities, a long-term health condition or disability.

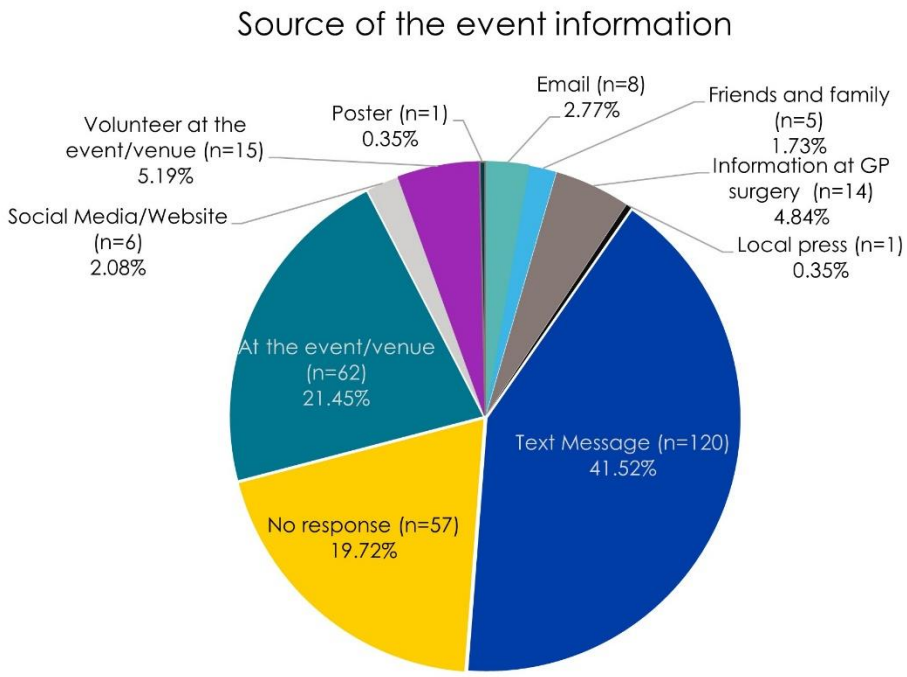

Figure 8: Source of event information

Figure 8 shows how people reported hearing about the day's event. The majority of responses, as reflected in the qualitative findings below, clustered around text messaging or hearing about the event at the venue itself, or through being a volunteer at one of the events. Where deployed, text messaging was an effective way to bring people to events, with 96% of those giving an answer to the question from the BP Check Open Day stating they had heard of the event via text, 69% of those attending the Community Wellbeing Day and 73% of those attending the Horizon Wellbeing Hub. Text messaging was not used to advertise the smaller scale events at Northam, St Mary's or Thornhill. At these events 'hearing about BP testing at the event' was the most important source of information (76% Thornhill, 91% St Marys and 53% Northam) followed by being a 'volunteer at the event' (16% Thornhill, 8% St Marys and 33% Northam).

PERCEPTIONS OF COMMUNITY-BASED CVD TESTING EVENTS (ATTENDEES AND ORGANISERS)

In this section we report findings from our qualitative data collection in relation to people's perceptions and experiences of the community-based CVD testing events. The themes described below were generated using rapid analysis across the range of qualitative data sources as explained in *Data analysis* above. Initially, the sources, and quantity of, qualitative data is explained.

QUALITATIVE DATA COLLECTED

INTERVIEWS

We conducted a total of 27 interviews, involving 29 respondents (two interviews were conducted with couples attending the events together), across five event locations. We did not conduct interviews at Northam Community Centre (observations and demographic surveys were completed) because this was the last of all the scheduled events and we had already completed our proposed interview numbers for Central PCN at St Mary's Meeting Place. Of these interviews, 19 were with event attendees and eight with event organisers, as shown in Table 7 Interviewees by eventTable 7.

Table 7 Interviewees by event

PCN name	Event	Number of attendees interviewed	Number of organisers interviewed	Combined total
Portsdown Practice Group	BP Check Open Day	5	1	6
Southampton Woolston and Townhill PCN	Community Wellbeing Day	4	1	5
Living Well PCN	Thornhill Wellbeing Café	5	1	6
Strawberry Health PCN	Horizon Hub	3	3	6
Southampton Central PCN	St Mary's Meeting Place	4	2	6
Total numbers		21	8	29

In terms of attendee interviews, the following characteristics were represented: 12 of the interviewees were white British, three were of mixed ethnic background, two were black or black British and four were Asian or Asian British. Eight were male and 13 were female. Nine attendees interviewed were 65+, three were aged 55-64, six were 45-55, and two were below the age of 34 (one interviewee did not give their age). Nine stated that the last time they had had their BP taken was over one year ago (four of these were over two years ago), four between a year and six months ago and eight less than six months ago. There was a balance between those who were advised to take follow-up action as result of their BP reading (nine) and those for whom follow-up was not necessary (ten). Two attendees did not answer this question. Event organisers represented those who were integral to setting up and delivering the events, including those in clinical and community-facing roles.

OBSERVATIONS

Observations were conducted as follows.

Community events: one observation session at each of the community events (and two at the Thornhill Wellbeing Café), over the course of the project period), i.e. a total of seven sessions. We conducted two observations at the Thornhill Wellbeing Café because unlike some of the other events it ran regularly over the course of the evaluation period (from September 2023 onwards).

Project meetings: two online steering groups, two in-person co-production meetings (Living Well and Strawberry Health) and one project-specific online co-production meeting.

CO-DESIGN AND DELIVERY SURVEY

We received a total of ten responses to the co-design and delivery survey, out of a target sample of 30 (i.e. steering group members and those attending co-production meetings who had consented to receive a survey), which represented a good response rate of 33%.

THEMES DEVELOPED

A table of the themes and sub themes generated from the combined qualitative data set, with an indication of the data source from which they were generated, is shown in Appendix: Themes developed and data source. These themes are discussed below, illustrated with extracts from different qualitative data sources, depending on the focus of the themes being discussed. Each extract is labelled to identify the respondent (in pseudonymised form) and the source of the data.

The first interview question asked people's views about **BP testing in the community (rather than in a clinical setting)**. The main theme that emerged from responses to this question was 'accessibility and inclusivity' with four sub themes of 'convenient and easy to get to', 'places where people feel comfortable', 'providing opportunistic and proactive care' and 'part of a broader model of primary care'.

ACCESSIBILITY AND INCLUSIVITY

Whatever form the event took, attendees were overwhelmingly positive in their view of community BP testing, across all PCNs and events.

> "I think it's a really good idea especially to have doctors' surgeries collaborating in an event like this and bringing in community people that work within the area, volunteering and running projects, bringing it all together and it all become part of one big community event" Interview EO1F (Organiser, Community Wellbeing Day)

> "It's an excellent idea" Interview P2T2 (Attendee, Thornhill Wellbeing Café)

Interview data showed that the positive views of those attending (and organising the events) were driven by an appreciation for the accessibility and inclusivity of the community outreach model, which emerged as a key theme in respondents' experiences of the InHIP events.

As one of the organisers of the Thornhill Wellbeing Café stated:

> 'It makes wellbeing accessible for people' Interview EOT1 (Organiser, Thornhill Wellbeing Café)

P1SM below explains the accessibility that comes from surgery staff going out to venues where people were already gathering (e.g. café style events at St Mary's Church, Northam Community Centre and Thornhill Baptist Church)

> "As I said, people don't have to go to the places, that place goes to the people, I think that's important" Interview P1SM (Attendee, St Mary's Meeting Place)

CONVENIENT AND EASY TO GET TO

Whilst different models of community outreach event were employed across the PCNs, interview respondents viewed them as offering convenience and ease of access. This theme relates closely to Levesque, Harris and Russell's (2013) dimension of 'Availability and Accommodation' described above *Five dimensions of accessibility (Levesque et al., 2013)*.

Whilst the Portsdown Practice Group used a surgery setting for their BP Check Open Day, the provision of an open time, when no appointments were needed was appreciated by attendees. Positive views were given despite waiting times of up to an hour due to the popularity of the event.

> "It's been a lot easier to have it done, not having to make an appointment and just pop in, which suits me. It's been a good experience for me." Interview P1P (Attendee, BP Check Open Day)

> "It makes it more convenient for people to come, you know, people if they're driving past, they can just nip in. We had quite a few people that had come out of work to do it… I just think some people just find it easier to think, you know what, I've got a bit of time on that day, I'll go down there." Interview EO1P (Organiser, BP Check Open Day)

Attendees of the Horizon Hub event felt that the shopping centre was an accessible venue, with some who came on the day stating that they worked there.

> "You're more likely to be in the shops and yeah it's just nicer" Interview P1H (Attendee, Horizon Hub)

PLACES WHERE PEOPLE FEEL COMFORTABLE

Five out of the six BP testing events were held in community venues outside of a surgery setting. This led respondents to comment that people were likely to feel more at ease in non-clinical environments, and in the case of some of the events, in locations that they already knew and engaged with. Respondents often used the words 'comfortable' and 'relaxed' to describe how people might feel within the venues for community BP testing.

> "It's an excellent idea to have BP tested in the community…They might feel more comfortable coming to an environment like this where they come regularly for support and to meet other people, because obviously it is a wellbeing café. It is a good opportunity to have their BP checked at the same time as enjoying a toastie and a cup of coffee." Interview P2T2 (Attendee, Thornhill Wellbeing Café).

> "Really brilliant idea. A lot of people that we see would never set foot in a GP surgery, they find it quite intimidating but happy to come somewhere like this, somewhere less clinical." Interview EO2H (Organiser, Horizon Wellbeing Hub Surgery Pod Launch)

This sense is re-iterated by an extract from observation notes taken at the Thornhill Wellbeing Café.

> “The atmosphere is very warm, welcoming, and sociable. People appear to be enjoying meeting and talking with friends.” Observation notes, Thornhill Wellbeing Café, 16/10/2023.

The use of settings that are comfortable and known to people may be particularly important for more vulnerable populations, as described below by P4SM, a volunteer at St Mary’s Meeting Place which is attended by many who face economic hardship and have only limited (if any) English language.

> "A lot of people we have here, they struggle with their English quite often, new to the country.... I suppose it’s a more relaxed setting for them, it’s a setting they're used to...to offer it in some other place, a strange place, they probably wouldn't go. I think it makes a big difference." Interview P4SM (Attendee, St Mary’s Meeting Place).

EO2SM linked community-based CVD testing to a concept that became tried and tested in the pandemic for taking vaccines to under-served groups. She suggested that the approach of going somewhere where people feel comfortable, and see as endorsed by people they respect, is a successful formula.

> “I'm 100% behind it... Coming out to the community away from clinical settings is such a good concept. It certainly worked in the pandemic with the COVID vaccinations because we had pop-up clinics in places of worship, in community centres. I think where people feel comfortable, where something is recommended by elders or seniors or professionals who members of the community respect and perhaps look up to and think, ‘well if they're recommending then maybe I should go and try it’." Interview EO2SM (Organiser, St Mary’s Meeting Place).

A couple of people also expressed a preference for using the supportive environment of community events to monitor their BP instead of trying to do this at home.

> “Because it’s more relaxing and more reliable than taking it at home.” Interview P3T2 (Attendee, Thornhill Wellbeing Café)

PROVIDING PROACTIVE AND OPPORTUNISTIC CARE

Another aspect to the accessibility and inclusivity of the community outreach model described by interview respondents was the offer of proactive and opportunistic care, which has the potential to reach a wider group of people than would normally come forward for testing. This concept links closely to Levesque, Harris and Russell’s (2013) domain of ‘Approachability’ *Five dimensions of accessibility (Levesque et al., 2013)*.

Several attendees revealed that whilst they would not normally think about having their BP taken, having the team visit an event they were at, or receiving a text invitation, prompted them to get a check:

> “If I don’t have get the text message, I never, never think about that, ‘oh I come to check my blood pressure’ or things like that… because I got the text message I think

> ‘oh I should go’. I think that’s really good.” Interview P4P (Attendee BP Check Open Day)

> "As someone who is very passionate about fitness, who does all the sports and what not, getting my blood pressure taken is probably the last thing on my mind, because being a man I just think, oh I'll be OK, but when I had the opportunity today, I think ‘absolutely’.” Interview P1SM (Attendee, St Mary’s Meeting Place)

P4 and P5 who were attending the Woolston and Townhill PCN Community Wellbeing Day explained that while they had come to the event to learn about disability-related issues, they felt the opportunity to receive a BP check was a good idea, especially as many people (particularly men) would not otherwise do this:

> “It was a good idea, we came down here for other things… adding a blood pressure thing to it is probably a good idea because a lot of people don’t do it, and a lot of guys don’t get their blood pressure taken to be honest!” Interview P4F and P5F (Attendees Community Wellbeing Day)

EO1 also attending the Woolston and Townhill PCN Community Wellbeing Day explained that the inclusion of the option to have BP taken using the Lifelight device (via an iPad screen) was an additional element in encouraging participation because she normally finds a cuff uncomfortable so she would not otherwise choose to get her BP reading taken.

> “I think the blood pressure thing I mean I ordinarily wouldn’t have come in because I steer away from the cuffs… but because …I saw you had the screen I’m like oh yeah I’m going to give that a go…” Interview EO1F (Organiser, Community Wellbeing Day).

Whilst observing the events, we saw volunteers at the community café style events encouraging people to have their BP tested, enacting EO2SM’s description below of how this opportunistic offer takes place.

> "People who may not even have been considering having a blood pressure check, if they've come for other reasons then they might be more open, they might be more agreeable to trying this out then. Especially if they're waiting to go and speak to somebody else then you've got an ideal opportunity to say...well why you're waiting why don't you come and get your blood pressure checked." Interview EO2SM (Organiser, St Mary’s Meeting Place)

This proactive encouragement was also noted in observation notes from the Northam Community Centre event.

> “I learn from conversations with the volunteers…that (name), the event organiser, has told all the volunteers in advance that BP testing is on so invited them to get their BP tested, and I can hear her telling attendees that the NHS are here today so that you can get your blood pressure tested or ask them about anything you like. I think everyone seemed to have heard about the BP testing from (event organiser) or just through being at the event. I can see that there is a poster up in the hall for the event,

but not sure if anyone noticed it." Observation notes, Northam Community Centre, 4/12/2023.

PART OF A BROADER MODEL OF PRIMARY CARE

Attendees tended to feel that primary care was not the place they would (or should, due to systems pressures) go for regular BP testing, or for a checkup, and that they would only visit the GP if they were experiencing (relatively serious) health problems.

> "For me I wouldn't make an appointment specially to go to the doctors probably unless there was some problem...yeah I would never go for a check-up" Interview P4SM (Attendee, St Mary's Meeting Place).

One respondent (who is on medication for high BP) described dissatisfaction with the expectation of her GP that she should be able to monitor her BP at home (something she described as finding difficult).

> "They won't do it at the doctors anyway now…they just send you on your phone to say your assessment is due for blood pressure, please take seven days morning and evening…and give us the reading when you've done it. Well to me that is passing the buck to be quite honest. …I feel that nobody's really that bothered. They stick you on the tablets and that's it, you know, take your own." Interview P3T2 (Attendee, Thornhill Wellbeing Café)

Respondents also described difficulties with accessing primary care when they do need an appointment. Identified difficulties included getting through to the surgery on the phone, using eConsult and waiting times.

> "Each time I'm contacting them they are telling me to use the eConsult, but by evening we cannot get in there, it's a big issue" Interview P5P (Attendee, BP Check Open Day)

> "Because sometimes you can wait twenty-five years for an appointment to see anybody" Interview P1P (Attendee, BP Check Open Day)

These challenges were acknowledged by those delivering and organising community events, some of whom expressed the desire that community-based testing would act as a 'bridge' (Interview EO2H, Organiser Horizon Hub) or 'stepping stone' (Interview EO1H, Organiser, Horizon Hub) to primary care. In this model, people would be signposted to a range of accessible community venues for BP testing and would be directed back to their GP if their reading indicated further investigation was needed. As such it becomes part of a broader model of primary care.

> "Hopefully people will start seeing it as part of their primary care process". Quotation recorded in observation notes from Strawberry Health Co-production meeting 14/11/2023

Two events organisers suggested that offering community-based events may also have the benefit of improving people's perceptions of primary care and encouraging better relationships with the community.

> "I would like to think it would change the relationship between patient and surgery, because there is something to be said that having that piece of paper that gives someone permission to go see their GP and I would like to see them strengthen their relationships. I had surgeries being run down by people." Interview E01T1 (Organiser, Thornhill Wellbeing Café)

"They would also have secondary benefits around encouraging better relationships between our patients, our clinical staff and the local communities we are all part of." R8, Co-design and delivery survey.

As well as asking people about their views on the 'model' of community-based CVD testing, interviews also sought people's views on the **general process for BP testing at events, and the event's setup**. There were four sub-themes – easy/friendly, waiting times, degree of prominence of BP testing and testing the process and learning (a theme from organisers only).

GENERAL PROCESS AND SETUP COMMENTS

EASE AND FRIENDLINESS

Interview respondents were generally positive about the ease and friendliness of the BP reading process and the opportunity to receive some health advice at the same time. There was no obvious distinction in process comments between attendees at different events where slightly different approaches were taken.

> "The staff...they are so friendly" Interview P5P (Attendee, BP Check Open Day)

> "People telling you about your health and everyone was really nice." Interview P1SM (Attendee, St Mary's Meeting Place)

> "Easy, lovely" Interview P1H (Attendee, Horizon Hub)

WAITING TIMES

One distinction was that a small number of respondents who attended the BP Check Open Day commented on the waiting times that had arisen because of the popularity of the event. This was exacerbated by limited room to wait inside the venue and the heat of the day as people waited outside.

> "I think it's a little bit hot, I'm ok but some elderly I think shouldn't wait in the queue too long...I think more than half an hour." Interview P4P (Attendee, BP Check Open Day)

The effects of the heat and the waiting times were commented on in the observation notes from the event:

> "In the queue people were very much in the main friendly and happy to fill in the surveys. A small number didn't want to fill them in. While I was outside one lady said she had to go as she needed to get back for a delivery, one man had to go – was quite cross, one lady said she felt ill (because of the heat) and so brought her a glass of water". Observation notes, BP Check Open Day, 08/09/2023.

Organisers of the event subsequently discussed and reflected on learning points from the waiting time, which was not possible to anticipate and highlights some unpredictability around how a community will respond to community-based events.

> "So it's one of those double-edged swords… you could be dead and have nobody in, or you could be inundated like we were today. Being inundated is brilliant, but it's difficult to plan for. And there you run the risk of, we were lucky that our queue had kind of settled by the time we were hoping to wind it up, but we could have had a queue round the car park and then you're turning people away and that then causes annoyance". Interview EO1P (organiser, BP Check Open Day).

However, in other venues where attendance was lower, length of time taken to gather readings was viewed positively:

> "It was really quick…which was really good." Interview P2T1 (Attendee, Thornhill Wellbeing Café).

PROMINENCE OF BP TESTING

One attendee suggested that it might be better to offer a more private space for people to receive their readings, but this was contrasted with the views of others who suggested that a more prominent location (and signposting) within the venues would attract more people.

> "Might be better with a quiet space, you've got a lot of people here it might put some people off." Interview P3H (Attendee, Horizon Hub)

> "The more visible is, the more it will intrigue people, people will be drawn to it." Interview EO2SM (Organiser, St Mary's Meeting Place)

TESTING THE PROCESS AND LEARNING (ORGANISERS ONLY)

Organisers described using the events as opportunities for learning, either to tweak the process moving forwards (where there will be ongoing presence in existing venues), or for other PCNs, to apply to future events. These comments reveal the complex and iterative nature of designing and delivering a new model for care, and the continuous learning and adapting that this necessitates.

EO3H explained that the launch event demonstrated that the process of using the surgery pod to take BP readings and transfer them across to the surgeries worked and gave them the opportunity to iron out a few issues related to wi-fi etc. Presence in the Horizon Hub also serves as a pilot for potential wider rollout.

> "This is a big experiment to see how we can make this work best." Interview EO3H (Organiser, Horizon Hub).

Identified areas for ongoing learning and possible improvements differed across PCN and context but included: honing the invitation process (to engage as many as possible, without being overwhelmed); managing follow-up from community BP readings; increasing engagement from other surgeries within the primary care network and considering the size of venue.

> "I know we have a good process for recording BP and follow-up but I'm slightly worried that the readings aren't being captured and fed back into the surgery as we had planned. I think as the doing part is led by the wellbeing team they aren't necessarily so focussed on the data." R7 Co-design and delivery survey

> "From learning points, it was far too hot, people were standing outside for a long amount of time, this surgery is where we needed to do it based on our demographics but it's one of our smallest sites, so we couldn't have a lot of people in the waiting room sitting waiting." Interview EO1 (Organiser, BP Check Open Day)

Observations recorded that event organisers were also learning how to operationalise their SOPs in terms of how BPs are taken, recorded and followed up. At Central PCN some teething issues in recording BPs taken were ironed out early at the first event and the changes noted in the Northam events observations:

"The recording of the results appears to be working well today – it has been refined following the St Mary's first event. They tallied up and had recorded 20 readings in total." Observation notes, Northam Community Centre, 04/12/2023.

We now come on to discuss people's **views on Lifelight**, which emerged as a main theme overall. There were four sub themes relating to 'Comfort and ease of use', 'benefits of health technology', 'fear of technology' and 'difficulties with measurements/predictions. Difficulties with measurements and predictions were described as stemming from 'lighting', 'personal characteristics' and 'perceived differences between Lifelight predictions and cuff readings.'

VIEWS ON LIFELIGHT

In five out of the six community settings, Lifelight technology was offered to attendees before the option to receive a reading via a traditional BP cuff. Whilst Lifelight was part of the general process and setup of events, as a new technology, it resulted in much comment from respondents, such that views on Lifelight is seen as a key (rather than sub-) theme in participants' experiences of community CVD testing. Enthusiasm was recorded in observation notes and reflected in interviewee comments.

> "Lots of 'ohhh that's interesting' when Lifelight explained as a potential alternative to cuff measured BP." Observation notes, Community Wellbeing Day, 16/09/2023.

> "People were generally enthusiastic to try out Lifelight...and were interested in the technology." Observation notes, BP Check Open Day, 08/09/2023

Respondents were mainly positive about the experience of obtaining a BP prediction via the Lifelight technology. Key benefits identified were its comfort and ease of use (compared to a traditional BP cuff) and (for a smaller subset of respondents) its benefits as a piece of health technology.

COMFORT AND EASE OF USE

Over half of attendees interviewed suggested that they preferred using the Lifelight device to the traditional BP cuff, mainly because it was more comfortable as it works without exerting a pressure on the arm. One respondent mentioned that it was not necessary to remove any clothing and a couple that it was a quick and easy process. One of the locations did not use the Lifelight device so this reduces the potential pool of respondents commenting on it.

> "How amazing is that? That's really clever…a lot of people once that cuff goes on, a lot of people their blood pressure goes up, doesn't it? When you're just sat there like a loony looking at yourself, I think you're more relaxed then and get a better reading." Interview P1P (Attendee, BP Check Open Day)

> "Would rather have face recognition than the thing on your arm. It is very hard to relax when they are pumping the cuff up." Interview P1T1 (Attendee, Thornhill Wellbeing Café)

There was recognition that the device may be well suited to those who are larger in size, or the frail elderly, who may find the cuff particularly uncomfortable.

> "I guess if there are people who are sensitive to pain and pressure, especially the ageing people then it is great that you don't have the pressure on your arm." Interview P2T2 (Attendee, Thornhill Wellbeing Café).

A smaller group of respondents were impressed with the technological aspect of Lifelight.

BENEFITS OF HEALTH TECHNOLOGY

One interview respondent could see the potential benefits for individuals of being able to use Lifelight on their own phone or iPad, rather than needing to buy a home BP monitoring machine. He also saw usefulness in its portability – meaning it could be taken into the GP surgery and readings shared directly. Another interview respondent welcomed the chance for more deprived communities to interact with health technology, which they would not normally get the opportunity to do.

> "I thought it was cool. I mean I love technology and…the technology used for health and fitness…this was free, and I got the results straight away and I got told next steps... I think that's good for people especially in this area where people don't necessarily have the resources or finance to pay for a device like that. They don't have the resources to pay for an Apple Watch or a Fitbit." Interview P1SM (Attendee, St Mary's Meeting Place).

There were, however, some reservations expressed about Lifelight. These related to some fear of new technology, and difficulties with measurements/predictions.

FEAR OF TECHNOLOGY

A small number of attendees expressed nervousness around the new technology (two stated in interview, one noted in an observation), perhaps suggesting that further explanations or education may help.

> "My generation doesn't quite trust that kind of technology." Interview P4P (Attendee, BP Check Open Day)

> "If people are suspicious of iPad or equipment…and what else of who is watching, that might potentially put people off." Interview P2T2 (Attendee, Thornhill Wellbeing Café).

DIFFICULTIES WITH MEASUREMENTS/PREDICTIONS

LIGHTING

Sensitivity of the Lifelight device to lighting conditions in the community venues, was noted in both interviews and observations. This appeared to present a challenge to Lifelight's ability to take a measurement and create a prediction. Sometimes this was overcome by re-positioning the device, or adding a light source, other times the problems were more enduring.

"I think once we got the lighting right, it has been perfect." Interview EO1T1 (Organiser, Thornhill Wellbeing Café)

"(Name) has brought a ring light but at times a prediction could not be given (three according to Lifelight data). I can see that (name) is often having to hold the light in different positions to try and get a reading. One person fed back that the light was hot." Observation notes, Northam Community Centre, 07/12/2023

PERSONAL CHARACTERISTICS

A number of personal characteristics also appeared to affect the device's ability to take measurements and make predictions of people's BPs. These characteristics included people with darker skin tone, and those who found it hard to remain still (e.g. with a tremor or who fidgeted).

Lifelight's ability to deal less well with those with darker skin tones was raised by a small number of attendees, event organisers and in observation notes. Whilst this was highlighted as an issue, it was seen as a point for further improvement (necessary to ensure inclusivity), rather than as something that de-valued the technology.

> "It's still in its infancy, and it didn't pick up any readings for me…so how are you going to tweak that to make that bit of it change?" Interview P4F (Attendee, Community Wellbeing Day)

> "I encouraged a man who is African Caribbean to try this out today and he's wondering if his skin tone affected the reading at all, because he said it was really difficult to get a reading and then when he did it was a very different reading to what he would

> expect. So he asked if the product had been tried out on all skin colour types." Interview EO2SM (Organiser, St Mary's Meeting Place)

The same incident was also reported in the observation notes:

> "One gentleman asked me to note (while I was filling in his survey) that he wasn't going to try Lifelight because he knows this kind of thing often doesn't work on darker skin. Then he tried it, and it didn't work well, it also didn't work well for (community worker) who has darker skin as well. He suggested it needs more testing on people with darker skin. This is important when trying to include as many people as possible, especially in a location like this where, in his words, 'we are quite diverse'". Observation notes, St Mary's Meeting Place, 23/11/2023.

Other characteristics including fidgeting and height were mentioned by one respondent each:

> "The machine needs to be looked at for people who fidget a lot, because I found it hard to sit still for the amount of time...there needs to be a bit of flexibility in the technology for movement." Interview P1T1 (Attendee, Thornhill Wellbeing Café)

> "On that note, it may affect people who may be taller, and it did give me quite an incorrect result by quite a bit of a margin compared to the cuff, so maybe it's because it didn't get my height accurately, but that would be just my one thing." Interview P1SM (Attendee, St Mary's Meeting Place).

PERCEIVED DIFFERENCES BETWEEN LIFELIGHT PREDICTIONS AND CUFF READINGS

Observation notes highlighted that clinical staff at some events felt that predictions given by Lifelight appeared different to readings provided by the BP cuff (a few moments later). Please see below an extract from observations taken at Northam Community Centre (the venue that particularly struggled with lighting), which records an incident in which a member of the surgery nursing staff expressed her concerns with the apparent disparity in readings.

> "One of the nursing staff highlighted to me that they have seen discrepancies in the predictions given by Lifelight and the cuff – sometimes Lifelight reading quite a bit lower or higher... She offered to give me anonymised readings so that we could compare the readings given across the two devices" (offer not taken up). Observation notes, Northam Community Centre, 07/12/2023.

A similar note was made in the observations at the BP Check Open Day.

> "There was discrepancy with the Lifelight and BP cuff readings with multiple people. Nurse commented." Observation notes, BP Check Open Day, 08/09/2023.

Please note that differences were not validated, as this was out of scope for the evaluation, but they are noted as part of the qualitative findings.

Having discussed the themes relating to people's reactions to community-based testing events, the next section considers **effects (outcomes) that respondents identified as already, or potentially, stemming from this approach**.

REACHING PEOPLE WHO WOULD NOT OTHERWISE HAVE HAD A BP READING OR WHO HAD A READING A LONG TIME AGO

As discussed above, several attendees explained that if they had not attended a community event, they would have not had their BP tested. This was also acknowledged by event organisers, suggesting that an effect of these events was reaching those who would not otherwise have come forward for BP testing (and those who had not had a reading recently).

"Part of this is trying to get those hard-to-reach people, people who don't come to the practice so giving them the option to come somewhere that's not the practice." EO3H (Organiser, Horizon Hub)

"I feel that this worked well. We managed to get over 100 patients to attend for a BP in our most deprived area, many of which has not had a BP recorded in the last 5 years." R10 Co-design and delivery survey.

This finding was only partially supported by demographic survey findings which will be considered within the discussion.

EARLY IDENTIFICATION AND INTERVENTION

Some of the attendees who were interviewed explained that their reading had been raised, and that they would not expect to have found this out without having attended the event, indicating that attendance had resulted in earlier identification of a possible issue.

> "If I don't get text message, then I wouldn't come, until I feel really, really ill." Interview P4P – raised BP (Attendee, BP Check Open Day)

> "I wouldn't have known, thought I was okay, fine. Just shows, if it had carried on…" Interview P3P – raised BP (Attendee, BP Check Open Day)

> "So off the back of this, which I wasn't expecting to do today, I now have to go and check out myself, for my health." Interview P4F – raised BP (Attendee, Community Wellbeing Day)

Event organisers also highlighted the potential of these events to result, over time, in earlier identification of issues, and thus prevention of more serious problems developing.

> "I think obviously it will take a while, it's one of these situations where it's not a quick fix, it's not something we can see immediate results, but if you're thinking maybe of a period over 18 months I think it would be really true to say that you might well be helping people avoid going so far down the spiral that they end up with a serious health condition. If somebody is just intercepted one day and is surprised by the reading or

> the outcome…it might prompt them to think about their lifestyle as well as being able to give them that reading that says this is where your blood pressure is at the moment." Interview EO2SM (Organiser, St Mary's Meeting Place)

This was also identified as a likely outcome by respondents to the co-design and delivery survey.

> "These events/projects are achieving their goal of engagement with communities/individuals that don't traditionally utilise healthcare services and identification of issues that if untreated could lead to a major event. It's hard to measure effectiveness without outcome data but I can't see any negative impact." R8 Co-design and delivery survey

This finding was also reinforced by the demographic survey which showed that 44% of people overall were advised to take follow-up action because of their BP reading.

ATTENDEES' INTENTION TO TAKE POSITIVE FOLLOW UP ACTION

A necessary condition for preventing more serious problems developing, is the intention of attendees to act on any advice they received at community events, which was evidenced in interview discussions.

P4F and P5F in attendance at the Woolston and Townhill PCN Community Wellbeing Day explained the actions they intended to carry out because of their readings:

> "I think we both have…appointments to see our GPs and in the meantime if we can get hold of a monitor and take a weekly load of readings, daily morning and evening and then bring them in to our meeting with the GP to see if a) do her tablets need adjusting and b) do I need to go on to tablets? To assist with keeping it down." Interview P4&5F (Attendees, Community Wellbeing Day)

P3P explained that he would attend an appointment at a local pharmacy to get a second check next week:

> "She's just given me this…I've got to go to Cosham… and I've got to have another test down there, and I may have to go on tablets or something…" Interview P3P (Attendee, BP Check Open Day)

Others stated that they would return to the same event/location for continued monitoring:

> "I think this is a brilliant idea, that's why we made sure we came this week…yes every time they write down what date they're coming we make sure that that's our week for coming." Interview P3T2 (Attendee, Thornhill Wellbeing Café)

Others stated that they felt prompted to look after their wellbeing and take more regular BP checks:

> "Probably be more like, regular, I'd get it done again, not leave it as long as I did" Interview P3SM (Attendee, St Mary's Meeting Place)

> "Learn to look after myself" Interview P1T1 (Attendee, Thornhill Wellbeing Café)

RAISING AWARENESS, AND FACILITATION OF, BP MONITORING

Respondents expressed the view that continued presence of BP testing at community events would further raise people's awareness of the importance of monitoring their BP and facilitate them to do this.

> "I think the more you can push out about this, the more it raises awareness. I think a routine visit (at the café), it would encourage people to get it checked." Interview P2T2 (Attendee, Thornhill Wellbeing Café).

Awareness could be spread further by word-of-mouth promotion by those who have attended recommending it to those they know.

> "I'd recommend it to other people, and I would come back." Interview P1H (Attendee, Horizon Hub)

> "Hopefully word will spread, more people will get tested in community settings and there will be raised awareness of the importance of knowing your BP and where it can be measured." R9 Co-design and delivery survey.

An organiser from the Horizon Hub also felt that involvement in community BP testing would have the effect of increasing local awareness of their role as an organisation.

> "Having our name to it is helping people realise we are just not a leisure centre, we help the community, having this open is perfect for people to pop in and ask questions..." Interview EO1H (Organiser, Horizon Hub)

One respondent to the co-design and delivery survey explained that work to promote InHIP HIOW events had facilitated discussions, interest, and awareness around CVD testing amongst marginalised communities.

> "The wider CVD testing has enabled me to hold community events with BAME and marginalised groups. It has allowed for communities to talk about BP checks and offer people the opportunity to check. It has raised interest and awareness." R4 Co-design and delivery survey

INTER-AGENCY COLLABORATION (ORGANISERS ONLY)

Working with a range of partners around a common goal was identified as a benefit of involvement in InHIP HIOW by event organisers and those involved in the co-design and delivery of events.

> "It's really nice working with multiple partners that are all after the same vision of creating a happier, healthier community really…It's like working on the prevention a little bit more rather than the cure, which I think is really good, it's the way we can look at saving most money really, I think it's quite forward-thinking from a lot of our health partners." Interview EO2H (Organiser, Horizon Hub)

> "Collaborating on projects such as this is a great opportunity and is a good example of system working. Having representation from a variety of partners meant all angles were thought through and opportunities identified." R5 Co-design and delivery survey

Respondents also felt that collaborative partnerships that had been built through the project would be a good platform on which to build for future work, ensuring sustainability, which is discussed further at *Sustainability.*

We now go on to discuss themes related to the **experiences of those involved in the co-design and delivery of InHIP**. The first theme relates to the form that co-design took in this project (*Complex, multi-level layered co-design in the InHIP* project). Further themes relate to *Complexity of clinical and information governance* and *Sustainability*.

COMPLEX, MULTI-LEVEL LAYERED CO-DESIGN IN THE INHIP PROJECT

A multi-layered approach to co-design took place across the course of the InHIP project, allowing various opportunities to engage, gather, understand, and improve. The key features of co-design were:

Multi-agency co-production workshops, held by two PCNs (Living Well and Strawberry) to identify issues and scope solutions. These meetings were attended by clinicians and representatives from the community, voluntary and social enterprise sectors. These were experienced as important opportunities to understand the views of partners outside of the clinical community.

> "Our co-design workshop was eye-opening; it was so good to hear from the voluntary sector about their ideas and concerns from even the language of hypertension being too complex…we weren't quite able to de-medicalise the process completely but I'm hoping we found a good balance and it certainly made us think differently." R7 Co-design and delivery survey

Another PCN tried to engage patients in a co-production workshop but struggled with engagement, and therefore used a staff survey to inform their project design.

> "Obtaining feedback from patients via an online survey yielded good feedback. We struggled to get any face-to-face engagement from patients." R10 Co-design and delivery survey

Monthly InHIP project steering group meetings were a key feature of project level co-production. These were attended by a range of partners from Hampshire and Isle of Wight Integrated Care Board (ICB), local health inequalities leads, Health Innovation Wessex, Public Health and as the participating PCNs were finalised, representatives of each of these. Features of co-production noted from the steering group observation notes included sharing project ideas and updates, learning from activities that had been undertaken and sharing/adapting developed resources (e.g. BP cards, event protocols, promotional materials, and strategies). As the meetings progressed, they facilitated all elements of Experience Based Co-Design (engage, gather, understand, and improve*)* – please see *Co-production and Co-design*. The exchange of ideas, learning and resources was appreciated by participants.

> "It was surprisingly interesting attending the meetings and hearing about people's different ideas. It was also a great way to share ideas and to brainstorm together, particularly where it came to hurdles to cross." R2 Co-design and delivery survey

In addition to initial multi-agency kick off co-production meetings, as the project progressed, PCNs also held **project-specific co-production meetings** that brought together operational staff in a variety of roles necessary to deliver their events. These provided a forum to develop, hone and test specific approaches clustering around the 'Improve' stage of EBCD.

> "Collaborating on projects such as this is a great opportunity and is a good example of system working. Having representation from a variety of partners meant all angles were thought through and opportunities identified. I hope that this kind of model can be upscaled to similar locations across Hampshire." R5 Co-design and delivery survey

Finally, it is important to note that co-design (and co-production) was enacted within the context of the **community events** themselves with people taking on roles as required, adapting to the context on the day. This was true of all staff involved including Health Innovation Wessex, Lifelight/xim, volunteers, surgery staff, evaluators. This is reflected in observation notes from events.

> "Took a little while to get flow set up. Around 10 am busy in café and Market Place, but not at BP taking. One of the volunteers came to ask what we were doing and then started inviting people across from the café. A partition was moved to make the area more visible." Observation notes, St Mary's Meeting Place, 23/11/2023

COMPLEXITY OF CLINICAL AND INFORMATION GOVERNANCE

Managing clinical risk and ensuring the appropriate transfer of patient information emerged as complex issues to be navigated by the PCNs involved in InHIP HIOW. This included the following activities:

- Development of protocols to guide the process for collection of BP readings from patients on the day (including decisions around whether patients not registered at a surgery within the PCN could have a reading taken),
- Definition of thresholds for low, normal, raised, and high BPs and specification of actions to be taken in the event of each type of reading (also to be agreed by other GP surgeries within the PCN),
- Development of process by which readings would be transferred to patient records (for participating surgeries)
- Development of process by which surgeries would be notified of required actions.

As has been detailed above in *Description of CVD testing events (and* key terms) each PCN developed its own approach with regards to the issues identified in the list above (although with the benefit of shared learning and sharing of developed resources). However, whatever approach was taken, defining these issues was a complex and involved process.

> "…governance around the responsibility and actions from community BP testing has been an issue throughout the project." R3 Co-design and delivery survey

> "Governance was the main obstacle…" R9 Co-design and delivery survey

The time devoted to co-production meetings and activities was described as a challenge by R2, indicating that if such projects are to continue in future the re-use and sharing of developed, exemplar resources such as SOPs and BP cards could save time and resource.

> "Overall, I enjoy collaboration and sharing ideas. Attending all the meetings however was time consuming. It also took time to undertake all the SOPs to ensure clinical safety. However, we do now have these for any future events." R2 Co-design and delivery survey

Despite the necessity to pre-specify SOPs and data sharing processes, there was also the recognition by PCNs that the processes around community events would need to remain iterative and adapt as necessary. The extracts below from Steering Group notes reflect this.

> "Wellbeing team only visit the café once a month at the moment – happy to go more often if required. Playing by ear to see how many people come, whether they want to get their BP done, would rather just have a cup of tea etc." Dialogue recorded in observation notes, Steering Group meeting 07/09/2023

SUSTAINABILITY

Sustainability was a theme of importance to those involved in co-design and delivery.

Organisers of the Wellbeing Hub explained that the installation of the surgery pod in the hub was designed to be a sustainable model, that could also be spread to other areas.

> "I want this to have legs…I wanted it to be a longer-term thing...if we can get that working I think that will be a big achievement, I'm really wanting to move people's health out from primary care." Interview EO3H (Organiser, Horizon Wellbeing Hub, Surgery Pod Launch)

Organisers of BP testing at the Thornhill Wellbeing Café explained that this would continue to run and has already led to rollout amongst other groups.

> "We will continue to carry out CVD testing at [the] community group and have expanded this to other groups that [the] wellbeing team are working with already. We are looking at other ways that we can use the equipment to reach other groups." R7 Co-design and delivery survey

Central PCN also showed enthusiasm for future working in this style, although we do not yet know details of whether or how often BP testing will continue at St Mary's Meeting Place or Northam Community Centre due to an imminent restructuring.

> "I think we could do this more regularly. I think we could make time to do more of this. Not major events but smaller lower-key involvement of say our nursing team alongside our Social Prescribers who already have the "in" with various community groups. Such would also help give more clinical members of our team the opportunity to do something different to their day-to-day clinic job." R8 Co-design and delivery survey.

For the organisers of the larger scale (one-off) events, sustainability was more difficult to guarantee because of the resource required to run them, and the question over whether the outcomes in terms of CVD diagnosis justify this. It was recognised that collaboration with other agencies and community events is one way to mitigate for the extra effort required.

"The longer term effects I am currently unclear of. No doubt we will end up detecting some new HTN and certainly we do have (*) new AF, but given the demographic that attended, I do wonder if the effects will be small in terms of identification…We did tie the day in with overall health and wellbeing and community services, so I do feel this was helpful and again we would look to expand this next time." R2 Co-design and delivery service

"It's lovely to be able to do this, but on the same note it's hard to organise and hard to plan for, because if we didn't have all the help that we've had today that would have been potentially eight members of staff out of our clinics which is difficult to do when you're trying to run the normal kind of GP service. It would be nice to think that this kind of project would be something that is done more in collaboration with other agencies because I think the uptake is really good for it…I think the change that would be positive would be to have more interagency working and more events like this." Interview EO1P (Organiser, BP Check Open Day).

LIMITATIONS

Before we begin the discussion of the evaluation's findings and implications it is important to state its limitations.

- We did not achieve a 100% response rate to the demographic survey, meaning that some attendance data was lost. This was most significant at the Portsdown Practice Group's BP Check Open Day, where we ran out of paper-based surveys before the event finished. However, it happened to a lesser degree at other events if evaluators were engaged with other forms of data collection or unable to intercept all attendees before they left. A small proportion of attendees were unwilling to complete a survey. We also noted that on the paper-based survey there were a high number of 'no replies' to the question about people's gender. We believe that this was due to the formatting of the survey affecting readability. Without a 100% response rate, we did not have a completely accurate way to record numbers in attendance, and their demographics, although our data provides a good indication.
- We did not stipulate a method/proforma for PCNs to record the BP readings taken on the day, and actions taken. This was because we did not wish to burden organisers with completing additional data during busy events or subsequently (which may have been challenging), however, this means that the events-based data is not reported in the same format, reducing possible comparisons.
- Due to the logistical, and ethical complexities involved, we took the decision (along with the evaluation's client) not to 'track' patients following their BP testing, meaning that we only have information about resulting hypertension/AF diagnosis from one PCN. Limited usefulness/availability of anticipated metrics data meant that there was no other way for us to interrogate this (as described at *Routinely collected* healthcare data)
- At this early stage, PCNs tended to focus on BP readings – and diagnosis of potential hypertension – rather than AF. Only Portsdown Practice Group and Woolston and Townhill PCNs produced a SOP for dealing with possible AF.

DISCUSSION

The findings described above have indicated that InHIP HIOW events were highly appreciated by attendees and organisers for their accessible and inclusive approach, and that there was an appetite to incorporate this into a broader model of primary care.

In relation to Levesque's et al. (2013) dimensions of accessibility, qualitative findings suggest that the community testing model increased *approachability* (helping people to understand that a service exists, can be reached and have an effect on their health), *availability* (how easily a service can be reached) and *acceptability* (how willing people are to seek help from a service due to social and cultural factors), in comparison to testing within a clinical setting. It is harder to judge *appropriateness,* which relates to the quality and efficacy of services, at this point in the project until we have access to data to show effects on case findings and diagnosis. However, findings to date clearly reflect people's enthusiasm for the community-based BP testing approach. The inclusion of Lifelight within events generated enthusiasm, interest and was seen as encouraging participation from those who would be deterred by a cuff. A small number of respondents highlighted the need for further development to ensure that readings/predictions could accurately be taken from everyone, especially those with darker skin tone. Some staff commented on the disparity between Lifelight and cuff readings and it is therefore advisable that organisers are aware of the perceived inconsistencies reported here and consider if cuff readings should be taken as a backup in future.

Whilst we were unable to interrogate metrics data as planned, qualitative findings suggested existing or potential outcomes of these events could be:

- Reaching people who would not otherwise come forward for BP testing (and who had not had a reading recently)
- Early identification of potential issues and opportunity for earlier intervention (which is reinforced by our finding that attendees intended to take positive action following their BP reading).
- Raising awareness of the importance of BP monitoring, and the facilitation of this.

In terms of reaching people who would not otherwise come forward for BP testing (and who had not had a reading recently), this finding was only partly supported by results of the demographic survey which showed that overall, 63% of attendees of community events had (self-reportedly) had a blood pressure reading taken in the preceding 12 months. This figure varied across events and was especially high at the Community Wellbeing Day (85%), which may suggest that those with an interest in health and wellbeing (and perhaps a propensity for self-care) may have been most attracted to this kind of event. The BP Open Day and the Horizon Hub returns suggested a higher proportion of those with less recent BP readings, which may indicate the success of targeted text invites employed by these two events. It is, however, important to note, that as self-reported answers, some respondents may have under-estimated (or over-estimated) the time since their last BP reading.

The demographic survey did support the second qualitatively defined outcome, i.e. the potential for early identification of potential issues and opportunity for earlier intervention through the indication that overall, 44% of people were advised to take follow-up action (e.g. further monitoring) following their BP reading at the event. It may also be possible to surmise (as in the case of P4/5F at the

Community Wellbeing Day) that for some, attendance at a community event could offer the opportunity to re-check a recent blood pressure that may have been borderline, or raised, thus offering reinforcement that action should now be taken. For others (as in the case of P3T2 at Thornhill Wellbeing Café) community events may become venues at which to keep an eye on a blood pressure that should be regularly monitored.

These are encouraging findings, which highlight the potential of continued community-based initiatives (with optimised processes for feeding back into primary care) to successfully form part of a broader model of primary care, facilitating early identification of potential issues and providing opportunity as necessary for earlier intervention.

Findings clearly evidenced positive views and experiences of all events from the perspective of both attendees and organisers. It has not been an aim of the evaluation to compare the different approaches. Nevertheless, there are some indications of potential strengths and challenges associated with the different models employed, which may be of interest to those setting up similar projects in future. Broadly speaking the events could be divided into those with a more 'clinical focus', those taking a more 'social model' and one 'hybrid' approach. Table 8 below charts the differences between them in terms of characteristics, strengths, and challenges, particularly around sustainability, follow-up, and ability to engage with under-served groups. The categories are somewhat rudimentary at this point but could be refined and improved with future projects/evaluations and the consideration of more approaches to CVD testing.

Table 8 Broad overview of features, benefits and challenges of approaches adopted.

Model	PCNs adopting	Features	Benefits	Challenges
Clinically focused	Portsdown Practice Group, Woolston and Townhill	• Detailed SOPs entailing clinician responsibilities for follow up. • On-the-day input of readings into patients' clinical records. • Agreed process for sharing results and actions with partner surgeries. • Events within/around surgery setting • Large scale, one-off events (use of text messaging, extensive advertising) • Clinician-led events. • Data-driven invitations - Portsdown Practice Group	• Large attendance • High numbers of BPs taken at events • Likely to ensure that results all reach patient records and that relevant surgeries are notified. • Facilitates monitoring patient journey and follow-up. • Possibility to target attendance via data driven invitation.	• May not be able to record readings from patients of surgeries outside of PCN. • Resource intensive (diverting from normal service delivery if during surgery hours). • Less sustainable.
Hybrid	Strawberry Health	• Detailed SOPs entailing clinician responsibilities for follow-up.	• Sustainable as available daily during Hub opening hours.	• Financial outlay for surgery pod and resource to support people to use it.

		• On-the-day input of readings into patients' clinical records (via the Surgery Pod). • Agreed process for sharing results and actions with partner surgeries. • Within a community-based Wellbeing Hub • Data-driven invitations	• Immediate input into patient records and sharing with partner surgeries. • Facilitates monitoring patient journey and follow-up. • Support from existing Hub staff. • Potential for broadening to other conditions. • Possibility to target attendance via data driven invitation	• May not be an accessible location for most under-served groups.
Social model	Living Well, Central	• Within pre-existing community events • On the day recording of readings but input into patient notes afterwards • Events may be led by Social Prescribers/Wellbeing team	• Lower attendance but sustainable via ongoing events. • Use of existing events' volunteers, infrastructure etc. • Well-placed to reach the most under-served communities. • Not easy/possible to target attendance via data-driven invitation – reliant on existing attendance at events	• More difficult to monitor patient journey and ensure follow-up. • Results may not all be entered into patient records.

CONCLUSIONS

In summary, the evaluation has shown a very positive response to the community-based CVD testing events from both attendees and organisers. A set of potential, positive outcomes from ongoing community-based testing were identified in qualitative data.

It is not yet possible to state the quantitative effects of community-based CVD testing on access, diagnosis, and health outcomes. Whilst we have acknowledged issues with quantitative data capture above (*Limitations*), we would undoubtedly be more likely to be able to evidence effects with quantitative data over the longer term as community-based testing embeds and more people participate. This was a point noted by organisers of events in this project, as well as within the national InHIP evaluation community of practice. Defining processes to ensure effective, ongoing quantitative data capture and reporting will therefore require further thought beyond the lifetime of this evaluation.

RECOMMENDATIONS

The evaluation team make the following recommendations:

- Based on positive response from attendees and organisers, continuation of a community outreach approach to CVD testing is recommended.
- For those running future events, consideration of the relative merits of larger scale one off events, versus offering recurrent, smaller scale opportunities is recommended based on findings here.
- For events using a 'social model' i.e. offering BP testing within existing community events, special attention to ensuring readings are effectively shared with primary care is recommended.
- Careful matching of target population, to event location and invitation method is recommended. Without this, events may be most likely to attract those who would attend the event anyway (i.e. an opportunistic sample - which may be acceptable), or those who are already proactively engaged in monitoring their health.
- Resources and learning (e.g. SOPs, BP cards) from this stage of the project should be shared, re-used, or adapted as far as possible to capitalise on gains so far.
- For future evaluations: Thought should be given as to how to optimise event-based quantitative data collection (i.e. demographic surveys and categories/numbers of readings taken).
- Ahead of any future evaluation, we recommend 'evaluability assessment'[8] to determine feasible and reliable routes for evidencing changes to patient outcomes over time.

[8] An evaluability assessment is undertaken ahead of data collection to determine whether it is possible to robustly carry out an evaluation. This takes into consideration the source, accessibility, quality, completeness, and volume of data.

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APPENDICES

1. APPENDIX: OBSERVATION GUIDE COMMUNITY EVENTS

Question	Notes
Event date, venue, title	
Events happening: BP testing and onward pathways e.g. What is the venue like, what is the event like? How does CVD testing integrate into the event, how are people being invited to have their BP tested? Use of Lifelight? How are any high BPs being handled, pathway in action? Things that are working well? Apparent challenges? Particular demographics represented? Partnership working/agencies working together? Activity of event organisers/facilitators	
Public (and practitioner) reactions. Atmosphere/dynamics at the event – are people receptive, interested, is it busy? Could reflect on how easy or not it is to recruit people to interview here.	
Evaluators thoughts/feelings/reactions How does it feel to be an observer at this event today? What else do you notice?	

2. APPENDIX: OBSERVATION GUIDE MEETINGS

WORKSHOP DATE, VENUE, TITLE	
Attendee list and organisations represented. Apologies	
Agenda items (if appropriate), get a copy. Topics discussed, actions.	
Processes of pathway and referral?	
Infrastructure? (IT systems etc.)	
Challenges highlighted?	
Evidence of co-working?	
Dynamics in the workshop?	
Workload or burdens?	
Training?	
Resources required?	
Tone of meeting, interactions between attendees, behaviours, wording, environment, consensus/feeling within the group etc.	

3. APPENDIX: INTERVIEW GUIDES

EVENT-BASED SHORT INTERVIEW QUESTIONS – members of the public

Could I start off by asking you whether you think it is a good idea to offer blood pressure testing at community events like this one?

a. Could you tell me the reasons for your opinion?

Did you have your blood pressure checked today, and if so how? How did you find the experience?

a. What was good about it?
b. Is there anything that you didn't like about it?
c. How did you find the experience of using Lifelight (on the iPad) compared to the cuff that would normally be used to measure your blood pressure?

Have you had your blood pressure checked recently? If so, where did you get it checked and how did this compare? If no, why would you say that is?

Before today's event, what did you know about high blood pressure and why it matters to our health?

a. Did you know any signs or symptoms of high blood pressure?
b. Have you learned anything about this at today's event?

What (else) have you learned about your health today (if nothing, that's fine)?

Is there anything that you will do as a result of having had your blood pressure taken here today?

(Prompt: use appropriate prompts, dependent on the agreed pathway for community event e.g. have you been asked to go to your GP surgery after having the test? Do you think you will manage to go along?)

EVENT-BASED SHORT INTERVIEW QUESTIONS – Event organisers/people delivering testing

Can I ask what your involvement has been in setting up this event and what your role is today?

How are you finding delivering BP testing at today's event?

- What's working well?
- What's not working so well?

Overall, what are your views about community-based BP testing?

What are any advantages or any disadvantages for the community (of community-based BP testing), and for you?

What do you think might change (if anything) as a result of offering BP testing in the community like this?

What (if anything) are you learning from being involved in community-based BP testing and is there any other support that would help?

4. APPENDIX: CO-DESIGN AND DELIVERY SURVEY (WORD VERSION)

Introduction statement to participants

As you may know, the Insight team at Health Innovation Wessex (HIW) (formerly Wessex AHSN) is undertaking an independent evaluation of the Hampshire and Isle of Wight Innovation for Health Inequalities (InHIP) Project. The evaluation is funded by the Hampshire and Isle of Wight Integrated Care Board (HIOW ICB).

We would like to invite you to complete this questionnaire to understand your experiences of being involved in the co-design and delivery of InHIP's community-based testing and referral pathways in your area. We are approaching you because of your role on the InHIP Steering Group and/or because you have attended one of the co-production meetings.

The questionnaire contains open-ended questions about your role in the co-design and delivery process and is designed to gather your reflections on this. It should take approximately 10 minutes to complete. Please give as much detail as you can.

The Insight team will store your data securely and will destroy it within 12 months of the evaluation ending in accordance with the Data Protection Act (2018) and General Data Protection Regulation (GDPR) 2018. Should the evaluation team wish to use any quotes about anything you tell us in the final report, we will ensure that they do not contain any references to you or identify who you are.

There is no obligation to complete this survey. By completing this survey, you are consenting to Health Innovation Wessex using your responses as outlined above.

If you have any further queries, please contact:

Amanda Lees
Evaluation Programme Manager, Health Innovation Wessex
amanda.lees@hiwessex.net
Telephone: 07990 002 109

If you have any broader questions about the InHIP programme, please contact:

Rob Payne
Innovation Adoption Programme Manager, Health Innovation Wessex
rob.payne@hiwessex.net

Many thanks for your time.

Please state your organisation. [open text box]

Please state your job title. [open text box]

Please describe your role in the **co-design and development** of the community testing event(s) and the associated follow-up processes for dealing with the blood pressure readings taken (e.g. entering results via a surgery pod, verbal recommendation to patients to see GP, etc.).

How did you find the co-design and development process? Please include what you found positive as well as challenges that you experienced.

Please describe your role in **delivering** InHIP's community-based CVD testing event(s). [open text box]

How do you feel the event(s) and associated follow-up processes for dealing with the blood pressure readings taken have worked in your area? Please tell us about what has been working well, as well as areas for development. [open text box]

What would you say have been the effects to date of InHIP's community-based CVD testing (and follow up processes) in your area? [open text box]

What would you anticipate will be the longer-term effects of InHIP's community-based testing (and associated follow up processes for dealing with the readings taken)? [open text box]

5. APPENDIX: DEMOGRAPHIC SURVEY (WORD VERSION)

Event name and location:

Introduction statement to participants

We would like to invite you to take part in an evaluation that is looking at whether people find it useful to have their blood pressure taken at community events like the one you are attending today. The evaluation is being carried out by Wessex Academic Health Science Network, an organisation funded by NHS England to support the spread of innovation in health and care.

It is important that blood pressure testing is available for all different groups of people and that nobody is being left out. To help us check this, this questionnaire asks you about yourself (e.g. your age, gender etc) and the tests that you have had today. **We do not need to know your name or address.** The evaluation team will store your data securely and will destroy it within 12 months of the evaluation ending in accordance with the Data Protection Act (2018).

When you have completed this questionnaire, please put it into the envelope provided and return to the event organiser who will then forward it securely to Wessex AHSN.

If you decide not to fill in this questionnaire, that's fine - you will still be able to have your blood pressure taken if you would like to. **Thank you very much for your help.**

If you have any questions about this survey or the evaluation, please contact:

Amanda Lees Evaluation Programme Manager, Wessex AHSN Amanda.lees@wessexahsn.net Telephone: 07990 002 109	**Lindsay Welch** Innovation Adoption Programme Manager, Wessex AHSN Lindsay.welch@wessexahsn.net Telephone: 07784 236634

I have read the above information and am happy to complete this survey, please tick: ☐

Please tick relevant box	Yes	No
Did you have your blood pressure tested today?		
Was your blood pressure tested using the Lifelight device (using special software on an iPad/iPhone?)		
Did the LifeLight give you a reading today?		
Did you have your pulse checked today?		
Were you advised to take any further action following your blood pressure reading (e.g. follow up blood pressure check, home monitoring)?		

Before today, when did you last have your blood pressure taken?

☐ within the last month ☐ 2 - 5 months ago ☐ 6 months – 1 year ☐ Over 1 year ago

☐ Over 2 years ago ☐ Never ☐ I don't remember

What age group do you belong to?

☐ 18–24 ☐ 25–34 ☐ 35–44 ☐ 45–54 ☐ 56–64 ☐ 65+ ☐ Prefer not to say

What is your gender? ☐ Male ☐ Female ☐ Prefer not to say

☐ Self-identify, please write in ……

What is your ethnic group? Choose one section from A to E, and then tick the appropriate box	
White: Welsh/English/Scottish/Northern Irish/British Irish Gypsy or Irish Traveller Any other White background: please state ……	Mixed: White and Black Caribbean White and Black African White and Asian Any other mixed background: please state ……
Asian or Asian British: Indian Pakistani Bangladeshi Chinese Any other Asian background, please state ……	Black or Black British: Caribbean ……. African…… Any other Black background: please state……
E. Arab Any other ethnic group: please state ……	F. Prefer not to say

What is your religion?

☐ Atheist ☐ Buddhist ☐ Christian ☐ Hindu ☐ Jewish ☐ Muslim ☐ Sikh

☐ Prefer not to say ☐ Other: please state…….

Do you have a disability? ☐ Yes ☐ No ☐ Prefer not to say

Do you have a long-term health condition? ☐ Yes ☐ No ☐ Prefer not to say

(e.g. Physical or mental ill-health/disability, diabetes, arthritis, high blood pressure, epilepsy, asthma etc.)

Are you a carer? ☐ Yes ☐ No ☐ Prefer not to say

(Do you look after someone with a long-term health condition/disability?)

How did you hear about today's event?

☐ Text message ☐ Email ☐ Local press ☐ Friends/family ☐ Information at GP surgery

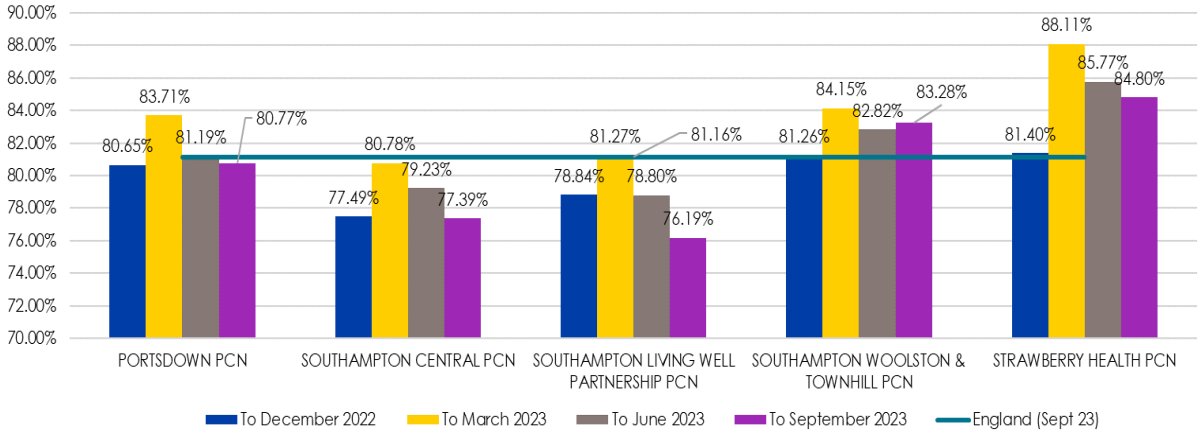
Other (please write in)……..

Thank you for taking the time to complete this questionnaire and for helping us to improve local health services.

6. APPENDIX: ANALYSIS OF ROUTINELY COLLECTED HEALTH CARE DATA

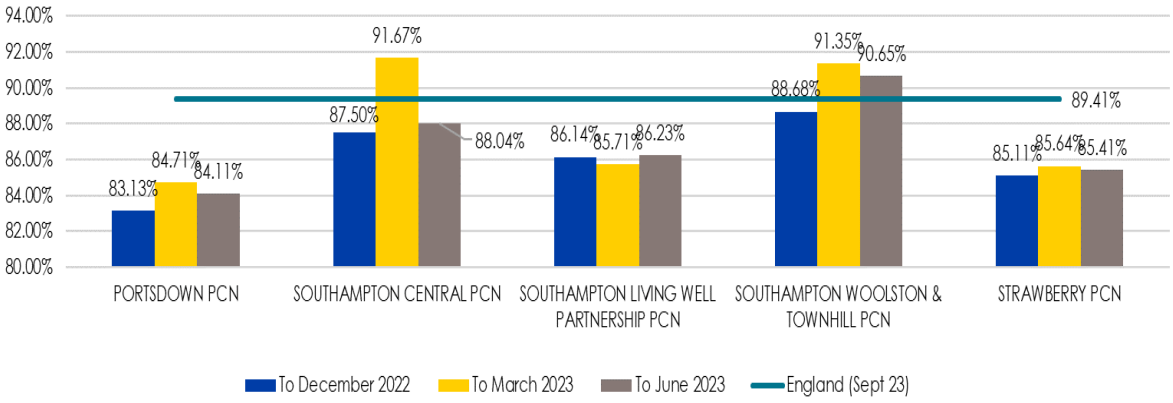
Percentage of patients aged 18 and over with GP recorded hypertension, who have had a blood pressure reading within the preceding 12 months

From Dec 2023 to Sep 2023 | CVD Prevent | Wessex AHSN



Percentage of patients aged 18 and over with GP recorded atrial fibrillation and a record of a CHA2DS2-VASc score of 2 or more, who are currently treated with anticoagulation drug therapy

From Dec 2022 to June 2023| CVD Prevent | Wessex AHSN



7. APPENDIX: THEMES DEVELOPED AND DATA SOURCE

Reactions to community-based CVD testing events (Q2)	Main theme	Sub themes	Data source
	Accessibility and inclusivity of community-based CVD testing	• Convenient and easy to get to • Places where people feel comfortable • Proactive and opportunistic care • Part of a broader model of primary care	• Attendees Interviews • Organiser Interviews • Events observations
	General process and setup of events	Attendees: • Easy/friendly • Waiting times • Degree of prominence	• Attendees Interviews • Organiser Interviews
		Organisers: • Testing the process and learning • Publicity/invitations	• Organiser Interviews • Events observations • Co-design and delivery survey

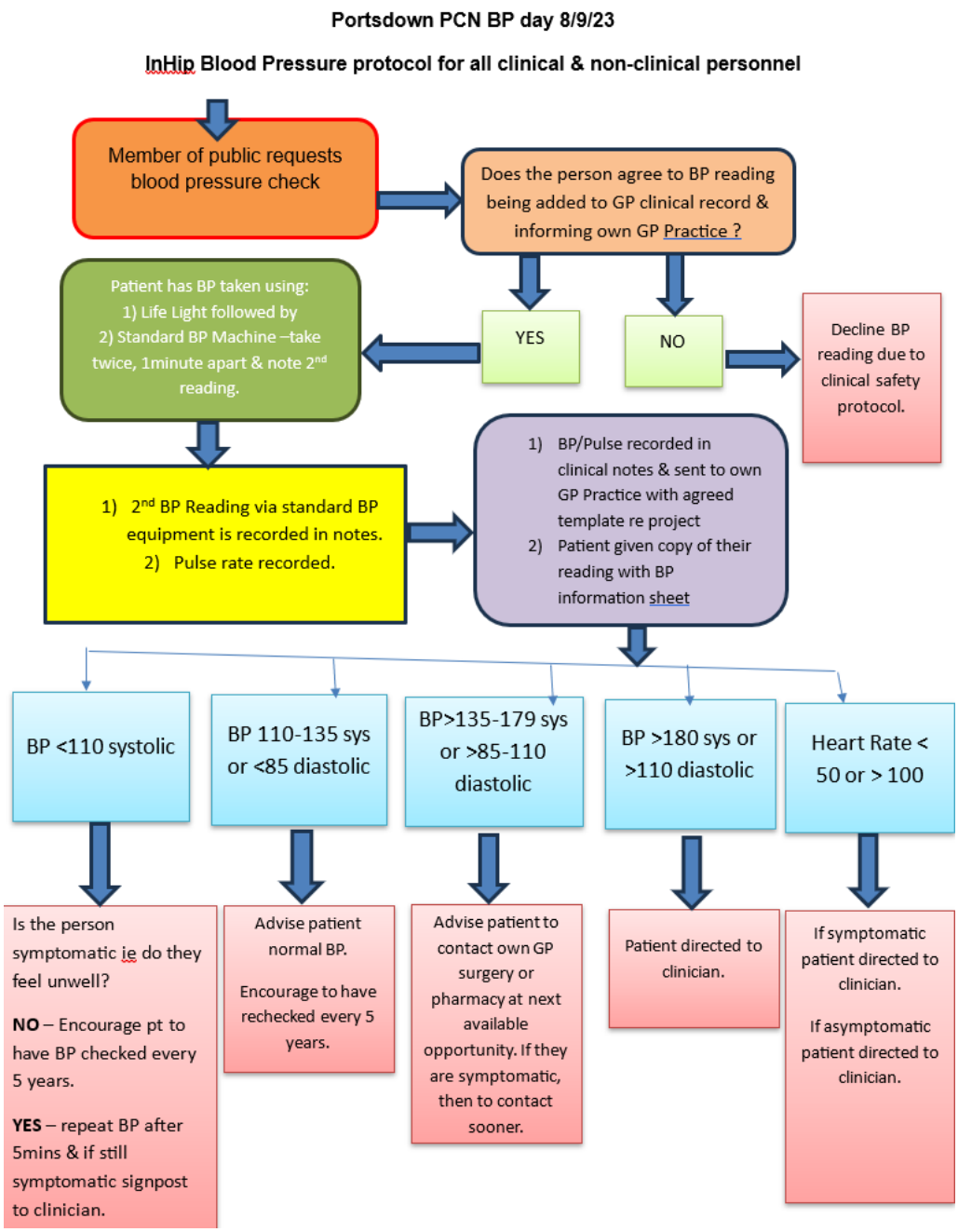
	Views on Lifelight technology	Positive views:
		• Comfort and ease of use
		• Benefits of health technology
		Issues/areas for development:
		• Fears of new technology
		• Difficulties with measurements/predictions
		  ○ Lighting
		  ○ Personal characteristics
		  ○ Difference in Lifelight predictions and cuff readings
			• Attendees Interviews
			• Organiser Interviews
			• Events observations

Outcomes/benefits (perceived and anticipated) of community-based CVD testing (Q2)	Reached people that would not otherwise have had a reading/or who had a reading a long time ago		• Attendee interviews • Organiser interviews • Events observations • Co-design and delivery survey

	Early identification and intervention		• Attendee interviews • Organiser interviews • Events observations • Co-design and delivery survey
	Attendees' intention to take positive follow up action		• Attendee interviews • Organiser interviews
	Raised awareness, and facilitation of, BP monitoring		• Attendee interviews • Organiser interviews • Events observations • Co-design and delivery survey
	Interagency-collaboration (as a platform for sustainability and spread)		• Organiser interviews • Co-design and delivery survey • Steering group and co-production meeting observations
Experiences of co-designing and delivering InHIP's community-based CVD testing and referral pathway (Q3)	Multi-level co-design and co-production	Project level activities: InHIP Steering Group meetings NHSE/Communities of Practice PCN-level activities: Multi-agency kick off meetings Project-specific co-production meetings Events-based co-production	• Steering Group and co-production meeting observations • Co-design and delivery survey • Events observations
	Complexity of clinical and information governance		• Steering Group and co-production meeting observations

			• Co-design and delivery survey
	Sustainability		• Steering Group and co-production meeting observations • Co-design and delivery survey • Organiser interviews

8. APPENDIX: PORTSDOWN PRACTICE GROUP SOP AND DOCUMENTATION



Portsdown InHIP Health & Wellbeing day 08/09/23

InHIP Blood Pressure Finding protocol for clinicians (Please note these are included as provided by PCNs – acronyms have not been expanded).

Description	Blood Pressure Reading	Action	Urgency
Very high BP reading and person is symptomatic *	≥180/120mmHg	Signpost to ED, calling 999 if felt clinically appropriate. Portsdown Group Practice (PGP) patient – repeat on PGP pod and d/w GPC if needed. Non-PGP patient - inform own GP with GP action needed. Discharge summary with actions done/needed to own practice	Immediate
Very high BP reading & person is asymptomatic or minor symptoms	≥180 systolic mmHg ≥120 diastolic mmHg	PGP patient – repeat and d/w GPC if needed. Provide advice/treatment as clinically appropriate ie week of home BP readings/ABP (at PGP or pharmacy) or start medication. Non-PGP patient - inform own GP with GP action needed.	Same Day

		Discharge summary with actions done/needed to own practice.	
High BP reading	BP >135-179mmHg >85-119mmHg	Advise either to undertake a week of home BP readings or ABP (at own surgery or pharmacy). Provide advice sheet. Discharge summary with actions done/needed to own practice.	Person to contact own GP surgery at next available opportunity
Low BP reading & person is symptomatic	<110 systolic	Signpost to ED if appropriate ie unwell with frequent collapsing episodes. Calling 999 if needed. If ED not felt required, provide health advice ie maintaining hydration & advise to contact own GP surgery Discharge summary with actions done/needed to own practice.	Same day Patient to contact surgery at next available opportunity
Irregular Pulse – Possible AF	Pulse <60 or >100	Assess if clinically unwell. If felt required liaise with M<AU at QA or GPC. Advise person to book ECG at own GP surgery. Discharge summary with actions done/needed to own practice.	Same day Patient to contact GP Surgery at next available opportunity

* Symptoms include severe headache, visual disturbance, chest pain, palpitations, signs of heart failure or acute kidney injury (AKI)

Notes:

All patients to receive NHS links either in paper or electronic form (text/email) for:

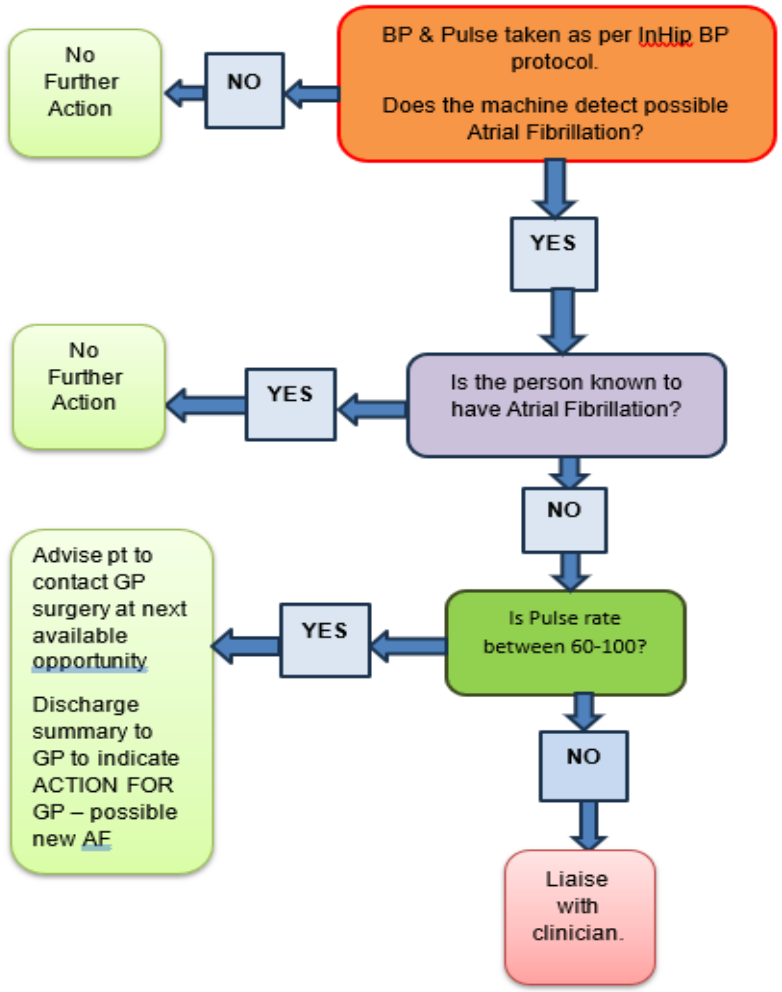
- Hypertension https://www.nhs.uk/conditions/high-blood-pressure-hypertension/
- Cardiovascular disease https://www.nhs.uk/conditions/cardiovascular-disease/
- Cholesterol https://www.nhs.uk/conditions/high-cholesterol/ https://www.nhs.uk/conditions/high-cholesterol/how-to-lower-your-cholesterol/
- Better health https://www.nhs.uk/better-health/

All non-PGP patients to have discharge summary sent to own practice.

9. APPENDIX: WOOLSTON AND TOWNHILL PCN SOP AND DOCUMENTATION

Woolston & Townhill PCN Health & Wellbeing day 16/9/23

InHip – AF Finding Protocol for non-clinical personnel (v1 10/8/23)

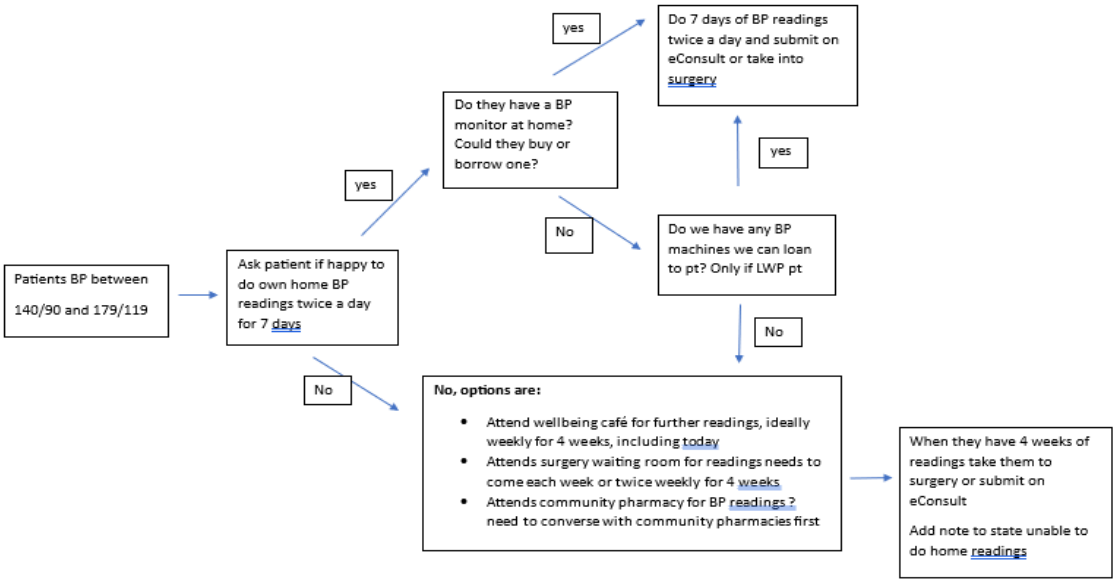


Description	Blood Pressure Reading	Action	Urgency
Very high BP reading and person is symptomatic *	≥180/120mmHg	Signpost to ED, calling 999 if felt clinically appropriate. Record action & inform own GP with GP action needed	Immediate
Very high BP reading & person is asymptomatic or minor symptoms	≥180 systolic mmHg ≥120 diastolic mmHg	Provide advice/treatment as clinically appropriate ie week of home BP readings or start medication. Record action & inform own GP with GP action needed.	Same Day
High BP reading	BP >135-179mmHg >85-119mmHg	Advise if available, to undertake a week of home BP readings. Provide advice sheet & to provide readings to own GP surgery If not able to provide home BP readings, to contact own surgery Discharge summary to indicate advice provided to person & GP action needed	Person to contact own GP surgery at next available opportunity
	<110 systolic	Signpost to ED if appropriate ie unwell with frequent collapsing	Same day

Low BP reading and person is symptomatic		episodes. Calling 999 if needed. If ED not felt required, provide health advice ie maintaining hydration & advise to contact own GP surgery Discharge summary – GP Action required	Patient to contact surgery at next available opportunity
Irregular pulse – possible AF	Pulse <60 or >100	Assess if clinically unwell. If felt required liaise with cardiology team at UHS & act according to advice Advise person to book ECG at own GP surgery Discharge summary to GP with GP action needed	Same day Patient to contact GP Surgery at next available opportunity

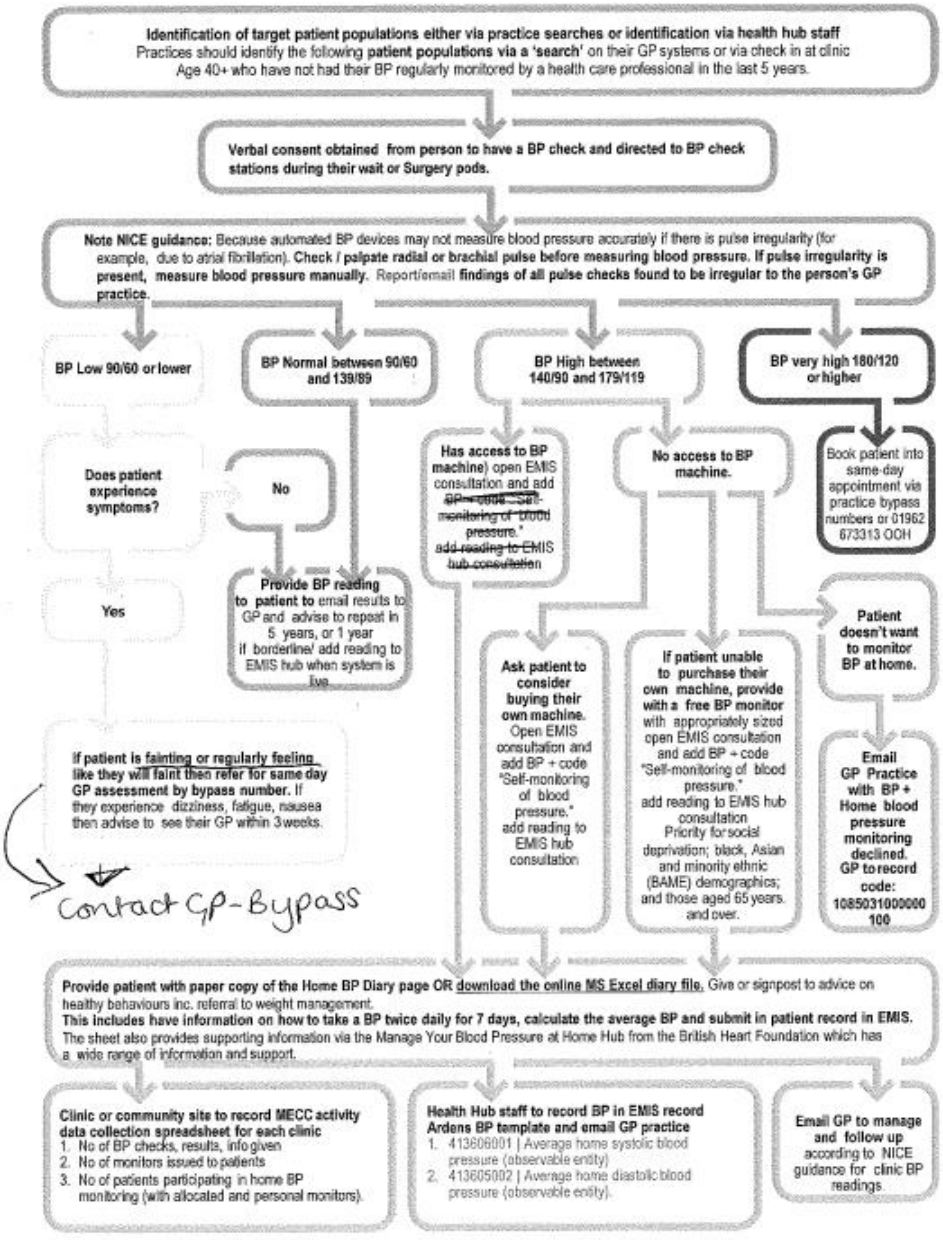
* Symptoms include severe headache, visual disturbance, chest pain, palpitations, signs of heart failure or acute kidney injury (AKI)

10. APPENDIX: LIVING WELL SOP (MODERATE TO HIGH BP READING PROCESS)

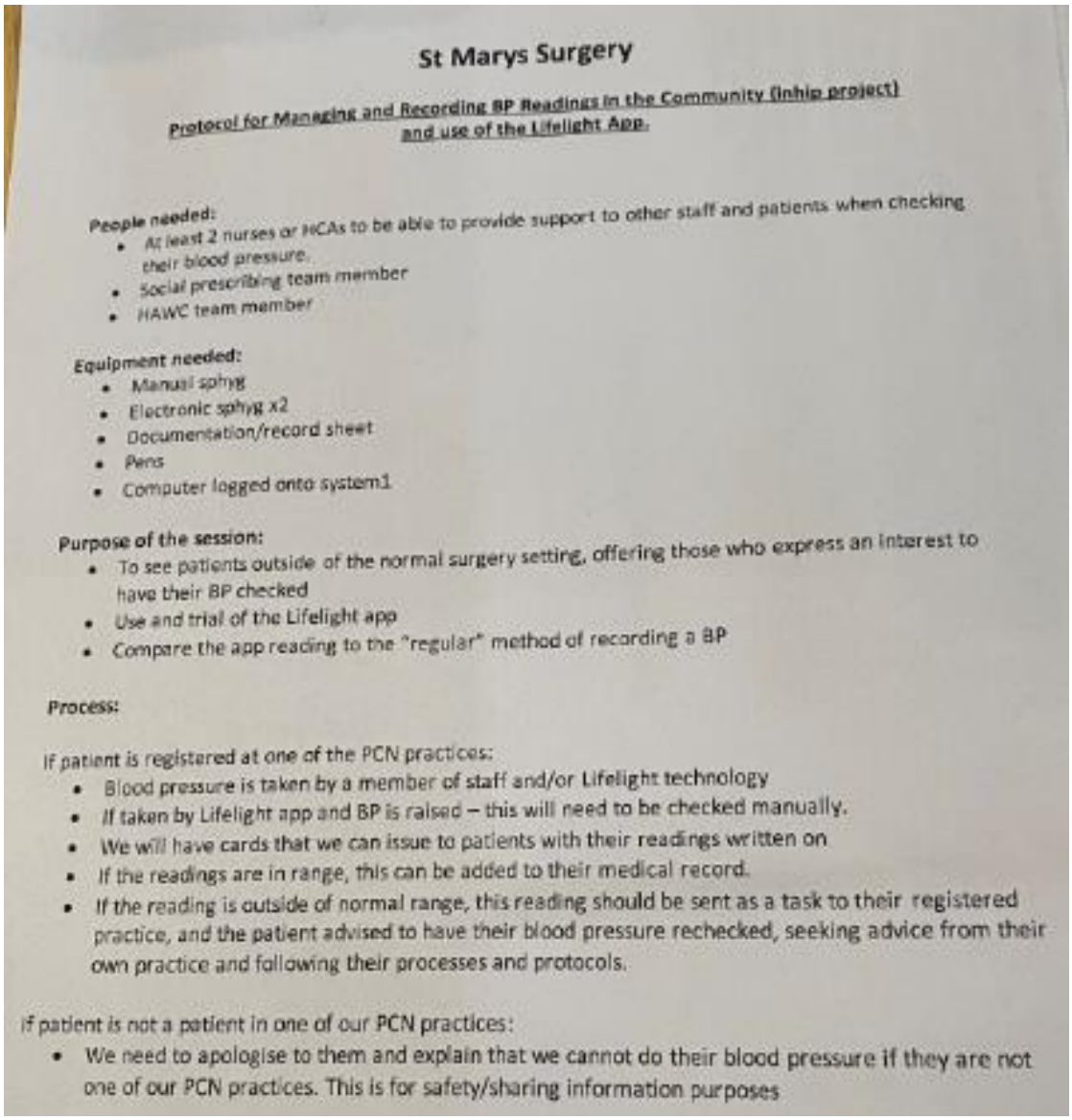


11. APPENDIX: STRAWBERRY HEALTH SOP AND DOCUMENTATION

Blood pressure clinical pathway for Health Hub & Roving sites
North Hampshire PCNs



12. APPENDIX: CENTRAL PCN SOP



St Marys Surgery

Protocol for Managing and Recording BP Readings in the Community (inhip project) and use of the Lifelight App.

People needed:

- At least 2 nurses or HCAs to be able to provide support to other staff and patients when checking their blood pressure.
- Social prescribing team member
- HAWC team member

Equipment needed:

- Manual sphyg
- Electronic sphyg x2
- Documentation/record sheet
- Pens
- Computer logged onto system1

Purpose of the session:

- To see patients outside of the normal surgery setting, offering those who express an interest to have their BP checked
- Use and trial of the Lifelight app
- Compare the app reading to the "regular" method of recording a BP

Process:

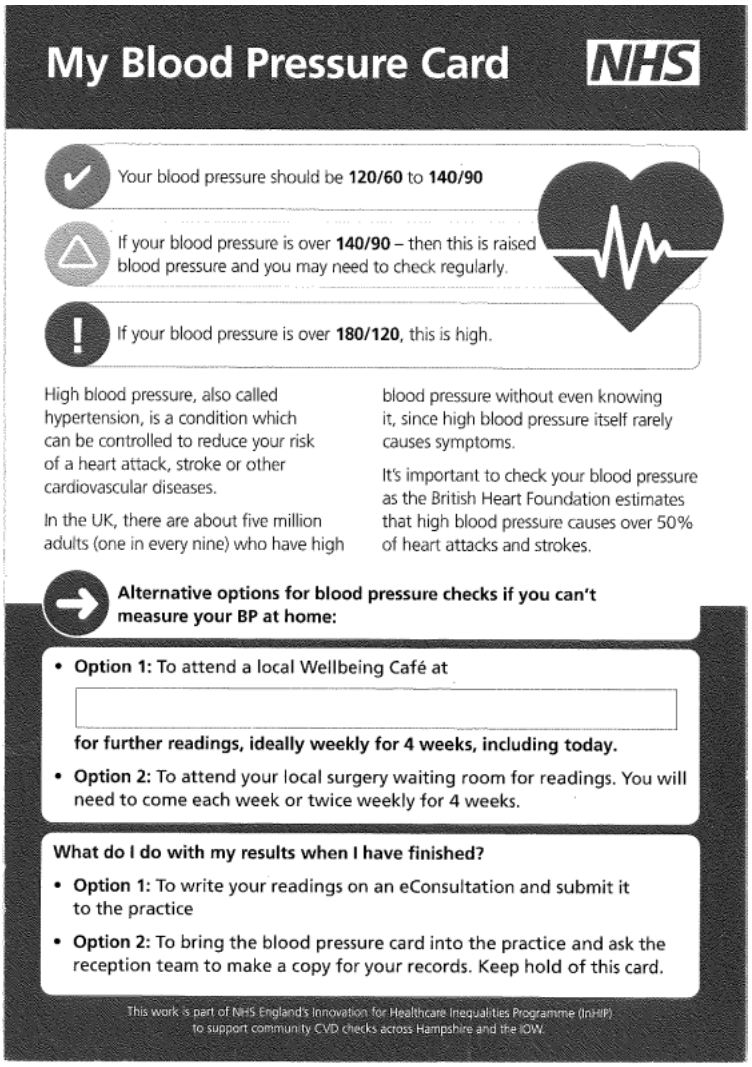
If patient is registered at one of the PCN practices:

- Blood pressure is taken by a member of staff and/or Lifelight technology
- If taken by Lifelight app and BP is raised – this will need to be checked manually.
- We will have cards that we can issue to patients with their readings written on
- If the readings are in range, this can be added to their medical record.
- If the reading is outside of normal range, this reading should be sent as a task to their registered practice, and the patient advised to have their blood pressure rechecked, seeking advice from their own practice and following their processes and protocols.

If patient is not a patient in one of our PCN practices:

- We need to apologise to them and explain that we cannot do their blood pressure if they are not one of our PCN practices. This is for safety/sharing information purposes

13. APPENDIX: BLOOD PRESSURE CARD



My Blood Pressure Card

NHS

Your blood pressure should be **120/60** to **140/90**

If your blood pressure is over **140/90** – then this is raised blood pressure and you may need to check regularly.

If your blood pressure is over **180/120**, this is high.

High blood pressure, also called hypertension, is a condition which can be controlled to reduce your risk of a heart attack, stroke or other cardiovascular diseases.

In the UK, there are about five million adults (one in every nine) who have high blood pressure without even knowing it, since high blood pressure itself rarely causes symptoms.

It's important to check your blood pressure as the British Heart Foundation estimates that high blood pressure causes over 50% of heart attacks and strokes.

Alternative options for blood pressure checks if you can't measure your BP at home:

- **Option 1:** To attend a local Wellbeing Café at

  _____

  for further readings, ideally weekly for 4 weeks, including today.
- **Option 2:** To attend your local surgery waiting room for readings. You will need to come each week or twice weekly for 4 weeks.

What do I do with my results when I have finished?

- **Option 1:** To write your readings on an eConsultation and submit it to the practice
- **Option 2:** To bring the blood pressure card into the practice and ask the reception team to make a copy for your records. Keep hold of this card.

This work is part of NHS England's Innovation for Healthcare Inequalities Programme (InHIP) to support community CVD checks across Hampshire and the IOW.