

Evaluation of the implementation of Florence Hypertension home-monitoring programme at Staploe Medical Centre

COMMISSIONED BY ELY NORTH & SOUTH PRIMARY CARE NETWORK

WORK COMPLETED BY HEALTH INNOVATION EAST



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Executive Summary

Ely North and South Primary Care Network (PCN) requested Health Innovation East to evaluate the implementation of Florence, a Generated Health product, within Staploe Medical Centre to inform spread and adoption across the PCN. The evaluation used a mixed method approach to assess the outcomes of the pilot and gain insights into how the process has worked for patients and professionals. This report presents evaluation findings from the implementation of Florence between June and December 2023. Within this evaluation we have not been able to compare Florence to alternative blood pressure management, diagnoses, and treatment due to limited data on other pathways. However, we report on uptake and adherence, as well as patient and staff feedback on use of Florence.

Data shows that 3009 patients were invited to join Florence, and 478 patients have been active on the platform. Opt-in rates varied non-linearly from 8% in June to 100% in December, highlighting lessons learnt on taking a more considered and clearly communicated approach to engaging patients. Florence was most often used for Hypertension diagnosis (n=428, 74%) among patients, as opposed to follow-up monitoring (n=89, 15%) and annual review (n=64, 11%). Patients had a response rate of 50% to Florence messages and 367 (77%) of all active patients completed a protocol between June and December. 86% of all blood pressure readings submitted to Florence were normal or low, highlighting the benefits of Florence as a preventative screening tool in addition to the diagnostic qualities.

Staff positively reflected on Florence with reported benefits and enablers including time saved, ease of use and more efficient intervention for patients. Staff also reported feeling positively supported by Staploe and Generated Health colleagues, with the pharmacy team cited as making a big difference to the implementation. Adapting to a new system and the technology was seen as a challenge by staff, as well as the need for time to explain Florence to patients. A basic cost-benefit analysis showed savings in admin and clinical staff time compared to paper-diary-based blood pressure monitoring.

Patients reflected positively on Florence stating they preferred it to either text or in-person monitoring (n=43, 73%). Patients generally felt able to use the system overall (n=77, 90%) and stated that it helped them remember to track and report their blood pressure (n=56, 91%). Within the staff interviews advantages of Florence that benefit patients emerged as opportunity for earlier intervention, as well as positive reflections on patient engagement and activation in their own care.

However, staff recognised reasons that may prevent some patients from not engaging with Florence, these included older age, lack of resources such as a phone, preference for a paper and pen, and uncertainty over the system itself.

Recommendations for service implementation across Ely North and South PCN include:

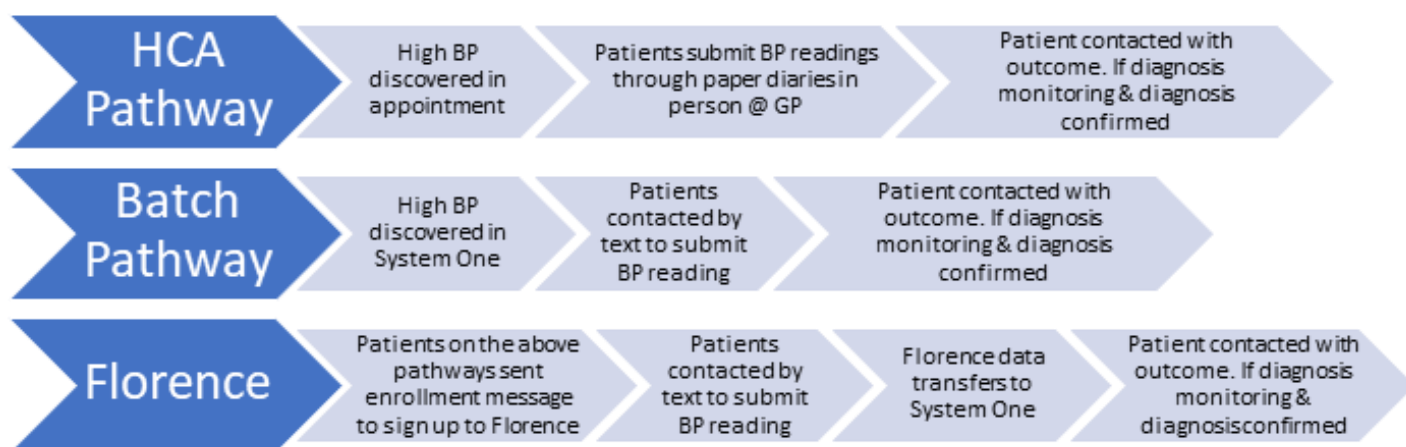
- Development and sharing of educational materials such as information booklets for both patients and staff;
- Measured and clear engagement strategies to onboard patients;
- Considerations of required resources such as staff time to onboard, blood pressure (BP) machines for patients and software support;
- Support for staff to feel able and comfortable promoting the platform.

Introduction

This report considers the implementation of the Florence Hypertension home-monitoring program at Staploe Medical Centre. The evaluation has been undertaken at the request of Ely North and South PCNs and has been funded by Health Innovation East. This report focuses on the first six months of implementation, June – December 2023. The pilot aimed to create a new way of diagnosing, treating, and managing hypertensive patients. The NHS England Long Term Plan (1) has highlighted the need to increase the identification of hypertensive patients and has set an ambition to reduce heart attacks by identifying 80% of all people with hypertension against the number expected and to treat that 80% by 2029. Staploe Medical Centre calculated that the current process for detecting, monitoring, and titrating patients with hypertension is predominantly manual and creates around 800 hours of additional work annually for the practice team. Moreover, the process has minimal engagement from the patient as it offers little feedback or guidance. Therefore, there is a need for new, automated processes for identifying hypertension in patients.

Florence is a health text messaging system that uses short messages with patients to nudge, prompt, remind, and motivate them to self-manage their long-term condition. The platform has been implemented across conditions such as diabetes, Chronic Obstructive Pulmonary Disease (COPD), and maternal glucose and blood pressure. Florence, in its broader sense of a home-monitoring program, has previously been considered a 'hugely successful example of innovation' by the Health Innovation Network (2). In this case, Staploe Medical Centre focused on using Florence for blood pressure monitoring. For patients with hypertension, the application provides reminders to take blood pressure readings at home using a portable monitor, avoiding the need to come into surgery and ensuring more accurate readings. The patient's average blood pressure is reviewed on Florence by pharmacy technicians, and the patient is automatically messaged via text with the outcome, via the Florence system. The patient is then advised either to make a follow-up appointment or that no further action is required. The practice administration contacts patients to confirm hypertension and arrange for a follow-up appointment with the clinician/pharmacy team to discuss the next steps. Figure 1 shows the three hypertension pathways delivered at Staploe Medical Centre throughout the pilot. A more detailed understanding of the pathways can be found in Appendix 2.

Figure 1: Staploe patient pathways for diagnosing, treating, and managing hypertension.



Relevant Literature

A service evaluation of Florence over ten GP practices concluded that the tool is acceptable and effective in reducing BP (3). In particular, the greatest BP reductions were among hypertensive intervention patients without Chronic Kidney Disease stages 3–5 (3). Further research from the same ten practices found that Florence was met with high levels of patient satisfaction and feelings of control and support (4). The study recommended that the system be considered for widespread implementation for clinical management of hypertension and other long-term conditions involving monitoring of patients' bodily measurements and symptoms. The ability to obtain a large number of meaningful readings from numerous patients in a prompt, efficient, interactive, and acceptable way was highlighted..

Furthermore, a qualitative study into the experiences of patients and staff using Florence discovered that the system is trusted by both patients and staff in the care setting and that patients are more likely to engage in the management of their condition when using the system (5). On the other hand, it was also discovered that telemetry and increased patient engagement can increase professional workloads which may require the realignment of roles and responsibilities (5). Other studies suggest a reduction in the length of appointments over time in people with hypertension in telemonitoring (6,7). A perceived drawback of the intervention for staff was the inability to integrate the data with electronic patient records (5). Overall, although some limitations would need to be considered in services, evidence shows clear benefits from using systems such as Florence. A policy and guidance document has been developed to consolidate learning gathered from a range of telehealth implementations, including Florence, in healthcare nationally (8). Based on evidence and case studies (8), nine key success and best practice criteria are identified: business requirements, business readiness, training and development, communication, stakeholder engagement, resources, information governance and safety, governance, and evaluation.

Aim

This evaluation intends to provide a local understanding of the acceptability and usability of the system as well as an opportunity to gather lessons learned and recommendations for wider, successful, delivery of the service within Ely North & South PCNs. This will inform the implementation of the most effective and efficient process for detecting, monitoring, and titrating patients with hypertension within the local PCN context with potential spread regionally.

The evaluation aimed to explore the impact of the Florence diagnosis pathway at Staploe Medical Centre on patient BP self-management and monitoring, patient satisfaction, and staff satisfaction.

The headline evaluation questions informing this report are as follows:

1. How does uptake and adherence to BP monitoring and reporting differ between the three pathways?
2. What are the quantitative outcomes related to patient numbers being diagnosed and managed, clinician time and costs of managing hypertensive patients that may help inform future adoption and spread of Florence by the PCN?
3. What does staff feedback tell us about the acceptability, usability, impacts on staff time, and any challenges or benefits of implementation?

4. What does patient feedback tell us about the acceptability, usability, and patient experience of using Florence for Home Blood Pressure Monitoring?

A list of sub-evaluation questions that feed into the above is available in Appendix 4.

Method

The research questions for this evaluation required a mixed-methods approach. The data collection period for both methods was concurrent, between June 2023 and December 2023.

Quantitative

To address evaluation questions 1 and 2, quantitative data related to patient uptake measures has been automatically collected via the Florence platform. There are different dashboards, and filter options, within the superset (Florence) back-end platform that allow you to pull statistics from, which are used within the report. The filter options, for example by protocol or team, are based on tags used by the practice team when patients are initially invited. The data collected and analysed included Staploe Medical Centre patients who had been asked to use Florence for different blood pressure monitoring purposes. The protocols patients enrolled in were: Annual Reviews, Follow-up monitoring, and Hypertension diagnosis.

The practice manager supported gathering data on the paper-diary pathway from patients who had rejected Florence using an Excel spreadsheet over three weeks. Data about other pathways, or general hypertension figures were provided by Staploe Medical Centre following a SystemOne search. The Florence system does not record demographic information for patients and so patient demographics were not consistently gathered for all data sets. However, some demographic information is available from data collected through BP diary users.

Contextual information about some of the differing patient engagement strategies throughout the pilot period was gathered via a stakeholder discussion with the lead pharmacist specifically, as well as via email from the Generated Health project lead.

To address evaluation question 4, Generated Health programmed Florence to send evaluation questions via text once a patient had completed their protocol. Net Promoter Score (NPS) is a standard measure of customer satisfaction and loyalty which is calculated by asking patients one question: "On a scale of 0 - 10 how likely would you be to recommend Flo to family & friends?" The responses are scored on a zero to ten (11 point) scale, and customers are categorized as promoters (those who responded with a 9 or 10), passives (7 or 8), or detractors (0 to 6). The overall NPS score is calculated by subtracting detractors (%) from promoters (%). All data gathered by Florence was exported from the Generated Health platform into Excel for analysis.

Qualitative

To address evaluation questions 2 and 3, interviews were conducted to draw out staff experiences of Florence as well as any perceived patient experience from a staff member's perspective. Staff interviews took place three months into the pilot. These conversations were conducted with ten staff from Staploe Medical Centre, selected by the Staploe project group

based on their roles in patient blood pressure management and measurement and involvement with Florence. Staff roles covered both non-clinical and clinical colleagues:

- Clinical
 - General Practice Assistant x 1
 - Health Care Assistants (HCA) x 4
- Non-clinical
 - Pharmacy technicians x 3
 - Administration manager x 1
 - Patient services manager x 1

Staff conversations were organised based on staff availability throughout a three-week period. Participants were then provided with participant information sheets and consent forms by Health Innovation East and asked to sign the consent forms before they participated in the interview, alternatively, consent was taken verbally on the calls. Thirty minutes were set aside for each conversation, which was conducted via video call on Microsoft Teams. All interviews were recorded and transcribed afterward for analysis. Transcripts were uploaded to NVivo software and a deductive approach to thematic analysis was undertaken. Initial coding was conducted by two reviewers, and a further round of coding was conducted to compile final themes and reviewed by a third reviewer. Themes were also considered across the two staff groups within the analysis using framework analysis.

Findings

Quantitative

Evaluation Question 1: Uptake and adherence

Patient Uptake

The Florence dashboard data has been used to describe the patient engagement with Florence over the June – December 2023 pilot period. Definitions for the terms used within this section can be found in Appendix 5.

Within the pilot period, 3009 patients had been invited to Florence, and from this, 488 (16%) accepted the invite (Table 1). Of those who accepted the invitation, 478 (98%) patients actively engaged with the platform, and 367 (77%) had completed the protocol at the end of December 2023. Conversely, 62 (13%) chose to stop using Florence, and 9 (2%) patients were discharged. The total cumulative number of active patients is 478. When considering the data it should be noted that the number of patients invited doesn't differentiate between unique patients and could therefore include a patient who has been invited more than once. Additionally, patients can be added to more than one protocol.

Table 1: Florence patient onboarding

Patients Invited (n)	3009
Patients not opted in (n)	1694
Patients Invite Accepted (n)	488

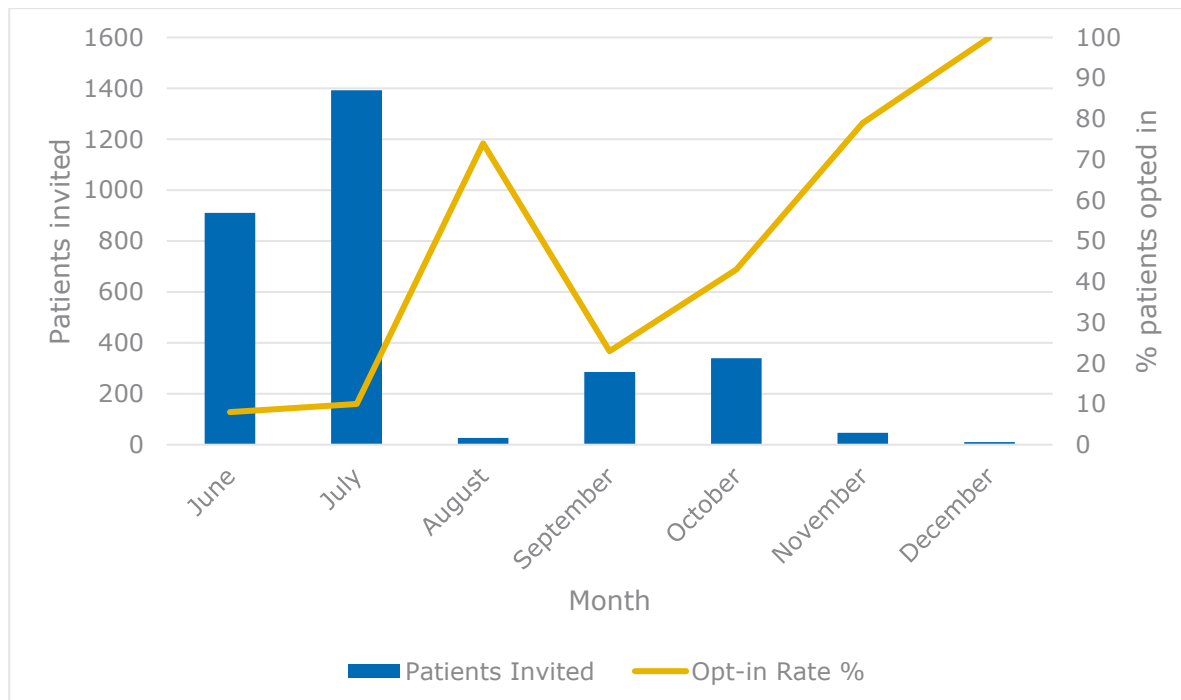
Patients Active (n)	478
Patients completed protocol (n)	367
Patients Stopped (n)	6
Patients Discharged (n)	9

The data shows that there is a large variation in the number of patients invited across months, with the largest difference between 1392 invited in July and 10 in December (Table 2, Figure 2). The opt-in rate generally shows improvement over time with 8% and 10% opt-in rates in June and July respectively, increasing to 72% in November and 100% in December. However, the number of patients invited in the initial two months is far greater than those invited in later months.

Table 2: Patient engagement in Florence over the pilot period

	June	July	August	Sept	Oct	November	December
Invited (n)	911	1392	27	286	340	32	10
Opted in (%)	8	10	74	23	43	72	100
Newly enrolled (n)	68	139	28	66	176	53	25
Protocol finished(n)	0	109	76	32	40	83	53

Figure 2: Patients invited and opt-in rate by month.



Contextual information

As seen in Table 2 and Figure 2 the engagement in Florence from patients was seen to fluctuate throughout the three-to-four-month initial implementation period. We spoke to key stakeholders from both Staploe Medical Centre and Generated Health to show the iteration of protocols and communication throughout this period, which is perhaps indicative of these varying enrolment rates.

A stakeholder conversation with the lead pharmacist sought to explain the potential changes in opt-in rates:

- June and July strategy for engagement was bulk uploads of patients to Florence. A lot of questions came back from patients and the staff were still finding their feet.
- August engagement strategy was more personal from the surgery team, who had one-on-one discussions with patients before sending the initial text from Florence.
- September saw a mixed approach from the surgery team that was driven by the consideration of the reception team being able to deal with queries from patients.
- In October patients who were already diagnosed with hypertension were uploaded to the system. It is thought that the positive opt-in rate is down to the patients' previous experience of blood pressure monitoring, including the knowledge and capability to do so.

Additionally, the Generated Health project lead provided the following updates regarding the strategies implemented to combat low uptake:

- August was the month where Generated Health implemented 'lessons learned' from July, which is expected to have contributed to the higher opt-in rates.
- New strategies were employed to engage with patients such as: dividing the cohort into smaller numbers (invited in regular intervals), sending a heads-up message to patients a few days before the bulk upload, and adjusting the Welcome message to be more impactful.
- Staploe had flagged that the reinvoke process was laborious, so the Florence team has developed a new and improved way of reinviting patients from within the platform.

Uptake and adherence to Florence by protocol

Table 3 shows that patients are typically active in a protocol for hypertension diagnosis, although there are groups of patients who are recording blood pressure for follow-up monitoring (n=89) and for annual reviews (n=64).

Table 3: Number of patients enrolled in Florence by protocol.

	Patients active	Patients completed	Patients stopped
Hypertension Diagnosis (Bulk Upload) (n)	356	290	46
Hypertension Diagnosis (Ad Hoc) (n)	72	47	8
<80 years - Follow-up Home Blood Pressure Monitoring (n)	84	62	2

80+ years - Follow-up Home Blood Pressure Monitoring (n)	5	4	0
Hypertension Annual Review (n)	64	0	6

Table 4 shows the interactions patients had with Florence via message dependent on the protocol they are on. The response rate varied depending on the protocol the patient was enrolled on, for example 72% rate was seen in those under 80 years of age on the follow-up monitoring, whereas 80+ years on the same protocol had just a 54% return rate. Those on the ad hoc hypertension diagnosis had the lowest response rate of 43%. The nudges required for all groups were negatively correlated with response rates. Although the response rate was highest in those <80 years on the follow-up monitoring protocol, Florence was more likely to misunderstand their responses (26%). The misunderstanding rate is calculated as responses Florence did not understand ÷ response Florence did understand. Those on the hypertension annual review had the second highest response rate (66%) and the lowest misunderstanding rate (9%). This may tie into the statement made by the stakeholder postulating that those already diagnosed with hypertension have previous experience of blood pressure monitoring, including the knowledge and capability to take and record results.

Table 4: Patient interactions with Florence by protocol

	Response rate	Follow up rate	Misunderstanding rate
<80 years - Follow-up Home Blood Pressure Monitoring	72%	34%	26%
80+ years - Follow-up Home Blood Pressure Monitoring	54%	41%	15%
Hypertension Annual Review	66%	44%	9%
Hypertension Diagnosis (Ad Hoc)	43%	82%	10%
Hypertension Diagnosis (Bulk Upload)	47%	62%	13%
Total Average	50%	59%	13%

Healthcare Assistant (HCA)/ Paper diaries

The surgery gathered data relating to patients who were using paper diaries as opposed to Florence. Data was captured for 30 patients, 24 (80%) of whom were male, the average age of the 30 patients was 72 years old. Of these 30 patients, five had not yet been contacted to engage in Florence, whilst 25. Data showed that 25 of these patients had been contacted for Florence of whom the majority (n=20, 80%) declined to use it and 5 (2%) tried it and subsequently stopped. The qualitative section of this report reflects some of the potential barriers patients may have faced engaging in Florence.

Evaluation Question 2: Clinical outcomes

Patient numbers being diagnosed and managed.

Staploe Medical Centre ran a SystmOne search for data that shows those using Florence to diagnose Hypertension compared to those who were diagnosed by another means between June and December. Table 5 shows that 36% (n=56) of hypertension diagnoses were made using Florence, as opposed to the other available pathways (n=100, 64%), such as paper diaries or in-clinic measurements. The lead GP at Staploe Medical Centre has suggested that Florence could have facilitated up to 50 other individual diagnoses through the bulk action in June, which may have led them to seek blood pressure checks through other means.

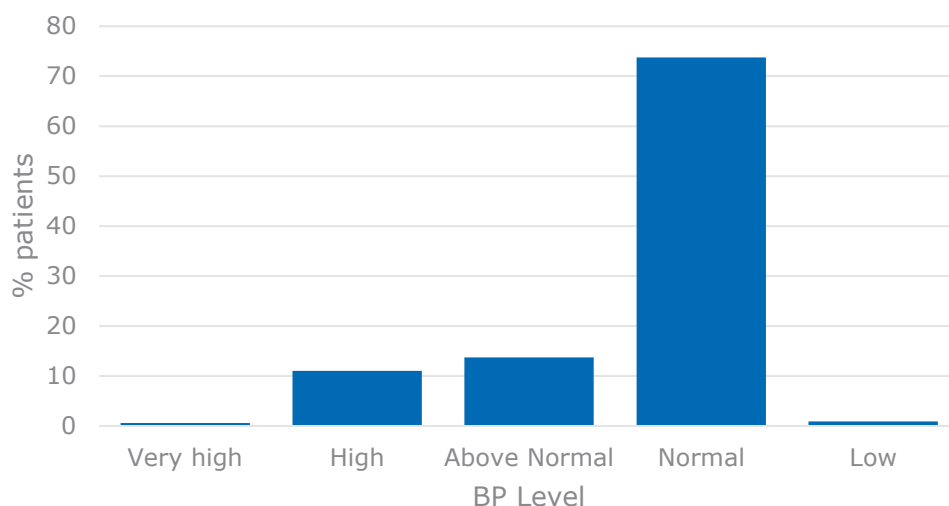
Table 5: Hypertension diagnosis rates by pathway

	June	July	August	September	October	November	December
Florence (n)	12	5	13	13	8	2	3
Other (n)	50	9	9	2	12	10	8

Other; diagnosed either by accurx, paper diaries, ABPM by community pharmacy or by repeated in clinic measurements

Most patients monitoring their blood pressure with Florence recorded readings of a normal level (n =3691, 74%), whilst 686 (14%) readings were above normal, 552 (11%) high and 31 (1%) very high. Meanwhile, 46 (1%) patients had low blood pressure (Figure 3). These categories are defined in Appendix 3 and associated reading categorisation is dependent upon the protocol.

Figure 3: Blood pressure levels amongst patients using Florence



Data shows that most of the 'very high' and 'high' readings were submitted by those on follow-up monitoring, whilst those 'above normal' were entirely annual reviews (Table 6). Meanwhile, the majority of 'normal' readings were submitted by those within a hypertension diagnosis pathway.

Table 6: Blood pressure recording levels by protocol.

Very high N	29
<80 years - Follow-up Home Blood Pressure Monitoring N (%)	13 (45%)
Hypertension Annual Review N (%)	11 (38%)
Hypertension Diagnosis (Ad Hoc) N (%)	2 (7%)
Hypertension Diagnosis (Bulk Upload) N (%)	3 (10%)
High N	552
<80 years - Follow-up Home Blood Pressure Monitoring N (%)	335 (61%)
80+ years - Follow-up Home Blood Pressure Monitoring N (%)	15 (3%)
Hypertension Annual Review N (%)	105 (19%)
Hypertension Diagnosis (Ad Hoc) N (%)	38 (7%)
Hypertension Diagnosis (Bulk Upload) N (%)	59 (11%)
Above normal N	686
Hypertension Annual Review N (%)	686 (100%)
Normal N	3691
<80 years - Follow-up Home Blood Pressure Monitoring N (%)	100 (3%)
80+ years - Follow-up Home Blood Pressure Monitoring N (%)	11 (0%)
Hypertension Annual Review N (%)	216 (6%)
Hypertension Diagnosis (Ad Hoc) N (%)	814 (22%)
Hypertension Diagnosis (Bulk Upload) N (%)	255 (69%)
Low N	46
<80 years - Follow-up Home Blood Pressure Monitoring N (%)	31 (67%)
Hypertension Annual Review N (%)	15 (33%)

Clinician time and costs of managing hypertensive patients.

The total actual cost of implementing Florence at Staploe Medical Centre is calculated as £23,320, as broken down in Table 7.

Table 7: Florence implementation costs to Staploe

Cost of the platform	£22,440.
<i>Cost per patient</i>	£8.50 (+VAT)
Staff training costs; total expense (hourly rate)	Practice Manager £120 (£30)
	GP £400 (£100)

Pharmacist	£120 (£30)
Pharmacy tech/HCA x4	£240 (£15)
Total actual cost	£23,320

Table 8 shows the staff time required to manage a patient’s blood pressure who is monitoring it with a paper diary, as well as the number of appointments. The administration time reflects the amount of time required on average to calculate the patients’ average BP scores and upload this information to the relevant system as well as the customer service elements of handing these out and taking them back in. Clinician time reflects the time that is spent explaining that Staploe need readings recorded, how to record them, how to obtain an average reading, and printing off a weekly paper BP diary. Both administrative time and clinician time required in these instances would not be required for patients using Florence. Onboarding time is equivalent across all blood pressure monitoring pathways as all pathways will require an initial onboarding appointment for the chosen method.

Table 8: Staff resources for those using paper diaries.

Staff time per paper diary	Onboarding time	10
Mean minutes (Range, SD)	Administration time	13 (25-10, 5)
	Clinician time	15 (25-10, 5)
Mean patient appointments		2, 3-1

Table 8 shows that an average of 13 minutes was spent on administration of paper diaries. This time has been eliminated by Florence. It has been assumed that for each person completing a Florence Protocol 13 minutes of administration staff time, at £12 per hour, was saved. Between June and December, 404 patients completed a protocol (Table 3). The average cost savings in administration staff time for these patients is £1050 in total, or £2.60 per patient (Table 9). The savings have also been forecasted based on the intended patient engagement in Florence in the first year, outlined by Staploe Medical Centre in the business case as 2200 patients. The forecasted total savings of using Florence instead of paper diaries is £12,870, or £5.85 per patient.

A list of assumptions for these calculations is below:

- all those patients who have completed a protocol on Florence were previously submitting paper diaries.
- the data Staploe captured on 30 BP diary users is reflective of the wider user population mean.
- clinician time calculated is specifically for those using paper diaries as explained above and therefore doesn’t consider clinician time for Florence users.
- Staploe Medical Centre will achieve its target of 2200 patient users who have completed a protocol in 9 months.

Table 9: Cost of time saved by Florence.

	Current 6-month real figure	Forecasted 12- month figure*
Administration team		
Total time saved (hrs)	88	477
Total cost savings (£12/hr)	£ 1,050	£ 5,720
Cost savings per patient	£ 2.60	£ 2.60
Clinical team		
Total time saved (hrs)	101	550
Total cost savings (£13/hr)	£ 1,212	£ 7,150
Cost savings per patient	£ 3.25	£ 3.25
Combined Totals		
Total time saved (hrs)	189	1,027
Total cost savings	£ 2,262	£ 12,870
Cost savings per patient	£ 5.85	£ 5.85

*The forecasted figure is based on expected patient engagement in the first-year of 2200 patient users

Some additional benefits to using Florence that haven't been calculated within this evaluation but should be considered are:

- Reduced travel time for patients leading to:
 - reduced petrol or transport fees
 - reduced CO2 emissions from patients attending Staploe Medical Centre.
- Reduced number of appointments
- Automation via the system:
 - reduced staff time required for creating and booking appointments or protocols e.g. annual reviews
- Improved clinical outcomes for patients:
 - faster optimisation of BP medication
 - reduced CVD development and complications
 - reduced presentation in secondary care
 - prevention of CVD

Evaluation Question 4: Patient experience

The Net Promoter Score for all protocols is 36; it is 47 for those on the hypertension review and 32 for those on the hypertension diagnosis pathway. The majority of patients are promoters (n=85, 52%) who selected 9 or 10 concerning the likelihood of recommending the platform (Figure 4). Additionally, 31% (n=51) of respondents are passives and 17% (n=27) are detractors and are unlikely to recommend Florence. A margin of error test was conducted to understand whether our sample of 163 patients who completed the NPS score question is representative of all those using Florence. The total NPS Margin of Error is 11.7% points, meaning the true population score could be between 24.3 and 47.7. This Margin of Error can become smaller with a higher number of completed NPS scores.

Figure 4: Categorised NPS scores by protocol

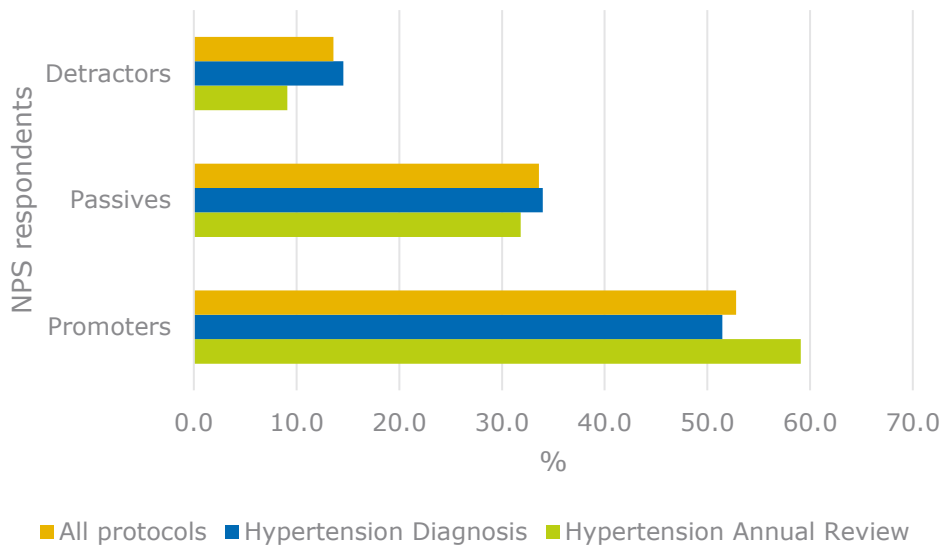
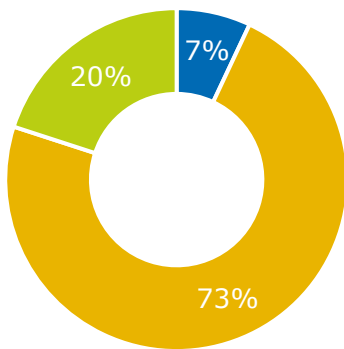


Figure 5 reflects the patient experience of using Florence; 73% (n=43) of patients would prefer to use Florence to share blood pressure readings with Staploe Medical Centre, as opposed to by text (n=12, 20%) or in person at the practice itself (n=4, 7%). Additionally, 90% (n=77) of patients felt capable of taking their bp at home, whilst 7% (n=6) felt unable.

Figure 5: Responses to survey questions for patients

Please let me know how you prefer to share your BP readings with your GP practice

■ Practice ■ Florence ■ Text



Do you feel able to take your blood pressure at home?

■ Able ■ Unable ■ Unsure

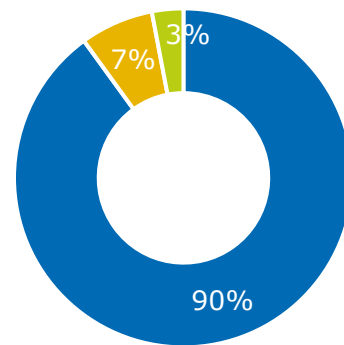
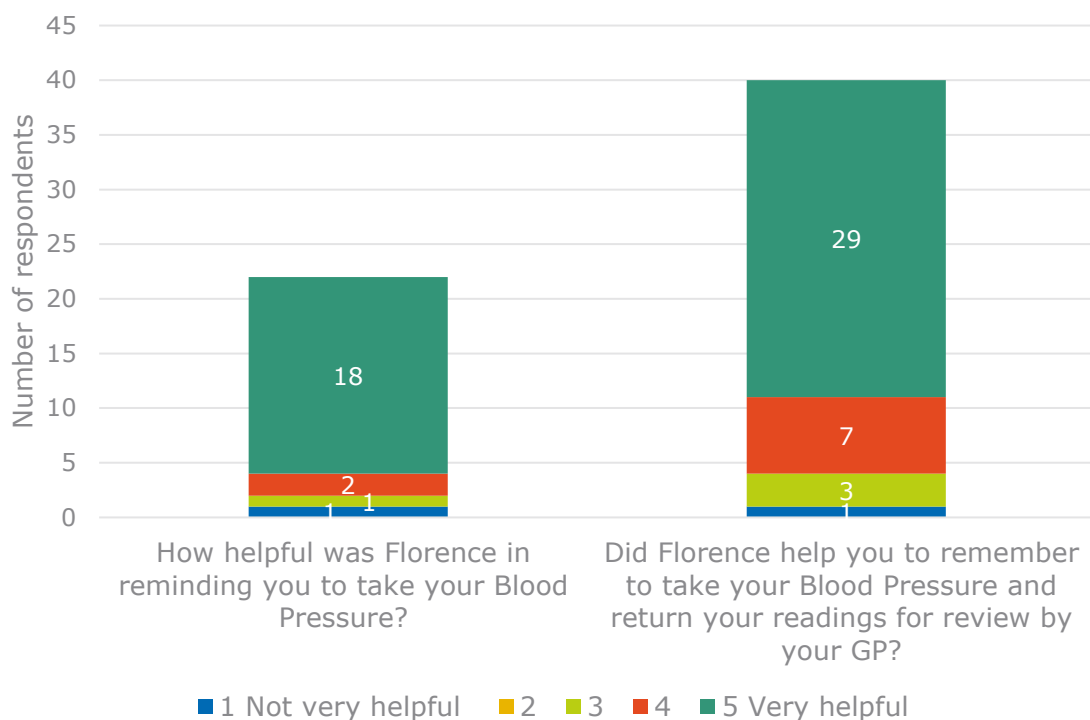


Figure 6 shows that the specific prompts sent by Florence to patients were considered either helpful (n=9) or very helpful (n=47) by 91% (n=56) all patients.

Figure 6: Responses to survey question about the helpfulness of Florence for reminding patients to take BP



Qualitative

Evaluation Question 3 & 4: Staff and patient experiences

The five key themes that emerge build a picture of the experiences of staff as well as patients over the first four months of the implementation of Florence at Staploe Medical Centre. These themes are summarised in Table 10 and described in more detail below. These were appropriate to the results of a framework analysis carried out to identify any influence the job role may have had on the results.

Table 10: Overview of the themes and subthemes

Theme	Subtheme
1. Implementation Enablers	Patients find it easy to use
2. Barriers to Implementation	Professional support
	Adapting to something new
	Lack of clarity
	Software Challenges
3. Barriers to patient engagement	Staff consultation challenges
	Age
4. Advantages of Florence	Lack of resources
	Notifications
	Preference for paper-based methods
	Technology
	Uncertainty over the Florence system
	Lack of usability
	Benefits to patients
Benefits to staff	

5. Future considerations	Florence developments Staff acceptance Patient resources Staff training resources
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Theme 1. Implementation enablers

One of the enablers identified from the staff feedback was around the sub-theme of usability. Participants said that they found the system easy to use, which was reflected by both staff and patient perspectives.

"You can see in the notes you know when their readings and that have come through and they say it's, you know, it's really easy" (P2)

Professional support was also reflected on as an enabler to the implementation; staff expressed their gratitude for the support received by Generated Health.

"The resources page generated health..... when we got access to that, that was a big help.....But yeah, I did find it very helpful because you can click through the slides and see what's what." (P7)

Additionally, the Staploe Medical Centre team were noted to provide valuable support:

"we've had loads of support and my manager had to get me on to Florence 'cause I'm rubbish at doing that as well." (P5)

The influential role of the pharmacist within the implementation emerged, particularly when speaking to clinical colleagues.

"I feel that it's a good tool because I feel that it goes straight to the pharmacist. The pharmacist can deal with it" (P9)

Clinical and non-clinical staff provided reflections on the subthemes relating to the enablers of implementation (Appendix 6).

Theme 2. Barriers to implementation

Staff also discussed barriers to implementation with lack of clarity consistently featuring in conversations. This included uncertainty as to whether they were utilising or understanding the system correctly.

"I had HCA this morning say I'm not too sure if I've done it right. Have I done it right? But she had, that was fine." (p8)

Lack of clarity also emerged as not knowing the wider team's role with Florence.

"I don't know if they're saying do you know about Florence as an alternative to this? I'm not sure if that's happening because I don't see that because we work behind the scenes." (P4)

Staff also reflected on having to adapt to something new. Sometimes staff found it difficult to remember to engage with the platform.

"I just I find that I forget. I'm like, oh, I haven't checked Florence because I'm focusing on like SystemOne or ask my GP or Acurx and then it's just, yeah, there's just a lot of places to look at the moment." (P10)

While other staff were still getting used to the system when using it.

"I think it's just people getting used to the system. I think people are very unused to it, like for example, the healthcare assistants, we only found out the other day that they haven't been assigning the protocols." (P10)

The software was also cited as a challenge to some colleagues.

"with Florence you have to set up the protocols and then unassign and it's all a little bit confusing" (P8)

Consultation challenges emerged from the clinical staff (Appendix 6), particularly concerning the time available to introduce patients to Florence.

"it is very, very rare that. We can sit and go through our patients and say 'oh we could introduce Florence', but it's literally in, you know in and out." (P2)

Theme 3. Barriers to patient engagement

Clinical and non-clinical staff (Appendix 6) also shared some perceptions about the patient experience of Florence, with barriers a key topic. A variety of factors were identified as barriers to patient engagement in the Florence system.

Many staff reflected on the role age plays in patients accessing the system.

"when I fed back to (redacted) she said we're still receiving the paper copies of the blood pressure [...] and I guarantee they're all people of, you know, above the age of 60." (P1)

Patients' lack of resources also emerged as a sub-theme, often citing lack of phones or lack of blood pressure machines.

"One person that wasn't willing to buy a phone they couldn't hook up to it, so that was just a person that couldn't access it." (P5).

"at the beginning it's it has slowed it down a little bit because we've been sort of setting up people with loans of blood pressure machines because they want to use Florence and they don't have access to machines." (P8)

Technology was a common theme amongst emerging barriers to patients utilising the messaging system.

"some people are...Very wary if they're not very good or technically, you know, minded" (P5)

Aligned to this staff cited a preference for paper as a reason that patients may not want to use Florence.

"They much prefer a piece of paper and a pen and they want to write it down" (P1)

Patients' uncertainty as to what Florence is was referred to by staff, with apprehension particularly recognised in the initial few weeks of implementation.

"Like I say initially it was just those initial phone calls when it was first being implemented and patients didn't know what Florence was and is this a scam or is it genuine? And when we go to them; No, no, it's absolutely genuine. You're safe to click on the link. It was just that reassurance we were giving the patients really." (P6)

Other apprehensions came in the form of uncertainty over whether they would be charged.

"Some people were worried about the charges, first of all, which we had to get sorted out and confirm that they weren't going to get charged." (P8)

Theme 4. Advantages of Florence

Staff shared several advantages to both staff and patients of using the Florence system, which was shared across both clinical and non-clinical staff (Appendix 6). They found for patients it had the potential to lead to a flexible, earlier intervention that not only could reduce human error but provided a safety net in their work.

"Yeah, because you can just quickly look and see and also if it's not with the other system, it sends you a message at the end of the week to say they haven't done it or they haven't done it where this one, if they've missed it for a few days, you can then go in and say give them a phone call or whatever and just say have you got a problem? Are you OK? So you can intervene at an earlier stage." (P10)

Staff also commented on the perceived benefit of patients having more ownership of their condition, including increased control and education.

"it gives them a little bit more control over their own health because it's not just bringing them back constantly, they're they're doing it for themselves." (P3)

When discussing benefits to the staff using the system comments focussed on the reduction to their workload, including less paperwork and reducing the amount of administration tasks per patient.

"I feel that that frees up the GP bit more and it frees up us a bit more as well because then if they can do that like on a regular basis, then it's saving appointments as well." (P9)

Theme 5. Future considerations

There were several points raised to consider in the future development of Florence. Specific pragmatic developments for Florence included potentially adding in the ability for the BP results to be emailed, for heart rate measures to be included, and for patients to respond to messages.

"I think maybe like implementing like where the patient can actually respond because you can send a message on Florence to the patient, but they can't respond." (P10)

Regarding the next steps for Florence there was also the wider consideration that currently, there are several different methods staff are using to collect and utilise BP readings in patient care.

"I think at the moment there's just. It feels like there's a lot of places to look for blood pressure readings coming in because you've got the home Diaries, you've got Accurx, you've got Florence, you've got Ask my GP, so I think." (P10)

There were also comments about the importance of staff acceptance, and enthusiasm, in helping to increase the likelihood of acceptance by patients.

"Probably as well how we pass and convey that information to our patient about Florence." (P5)

Staff also spoke about the need to consider the availability of patient resources, such as BP machines for use in their homes. They also spoke about the need for further development of materials and education to patients, such as perhaps an outreach group for those less confident in using such systems.

"Outreach groups for people that are not confident in using it. I'm not sure if they could do that sort of get some, you know, patients that are not so confident, get them together and like show them how to use it." (P4)

They also suggested more information for patients to help increase their confidence and understanding, which may in turn improve the future uptake and perceived ease of use.

"some people might sit here and you explain it to him and they really haven't understood what you're all about. But where, if you can give them the leaflet, they can go at their own leisure. They can sit and, you know, read it and see what they say, see what they think." (P2)

Non-clinical staff (Appendix 6) also pointed out the need for further staff training resources in future developments. They identified the need for further instruction on using Florence and materials to increase staff's awareness.

"Maybe if there was like some posters in the room, like, just like little reminders or something like that. So they could be like, oh, your blood pressure's high. Let's, let's sign you up to Florence." (P10)

Strengths and Limitations

Key strengths of this evaluation include:

- The mixed-method approach allowed for the quantitative results to be supported by the experiences of staff using the system.
- Multiple sources of quantitative data were used to answer the evaluation questions and allow for a richer understanding.
- Staff from different job roles were included to allow for a wider investigation of their clinical experiences using Florence and therefore a more in-depth understanding of how it can improve services at different levels.

Limitations of this evaluation include:

- Evaluation question 1 was only partially answered due to some of the required data not being available within surgery information systems. Unavailable data related to comparisons across pathways:
 - how many people are on individual hypertension pathways.
 - hypertension rates across pathways.

The calculations for the cost-benefit analysis are based on limited data that was collected and provided by Staploe Medical Centre, more robust data collection in future is needed to facilitate a more comprehensive cost analysis.

Summary of Findings

1. How does uptake and adherence to BP monitoring and reporting differ between the three pathways?
 - 478 patients have actively used Florence (June – December)

- Adherence to BP monitoring on Florence is high, with 367 (77% of all active patients) completing a protocol and 13% asking to stop.
 - Patients had an average response rate of 50%
 - Patient uptake of Florence has improved as the pilot implementation has progressed.
2. What are the quantitative outcomes related to patient numbers being diagnosed and managed, clinician time, and costs of managing hypertensive patients that may help inform future adoption and spread of Florence by the PCN?
 - 86% of all blood pressure readings submitted to Florence were normal or low
 - Florence accounted for 37% of all patient hypertension diagnoses when compared to all other methods.
 - 189 hours of staff time was calculated as saved by using Florence compared to paper diaries for the patients who had completed protocols June – December
 - £5.85 saved per patient who had completed a protocol.
 3. What does staff feedback tell us about the acceptability, usability, impacts on staff time, and any challenges or benefits of implementation?
 - Staff reported advantages to Florence including time saved, more rapid intervention for patients and increased patient involvement in their own diagnosis, management and treatment.
 - Staff found Florence easy to use and benefited from support from both the Staploe and the Generated Health team.
 - Staff perceived some barriers to patients using Florence, including age, resources such as phones and BP machines, and a preference for pen and paper.
 - Staff reflected some barriers to implementation of Florence including general uncertainty in their knowledge and capability with the system, time to discuss the new system with patients, and the general adaptation to something new.
 4. What does patient feedback tell us about the acceptability, usability, and patient experience of using Florence for Home Blood Pressure Monitoring?
 - 73% of users prefer Florence to record blood pressure in comparison to text or in-person.
 - 73% of users reported that Florence helped them remember to record and return their BP readings.
 - NPS score is 39. 53% of users selected 9 or 10 when asked how likely they would be to recommend Florence on a scale of 0 (unlikely) to 10 (likely).

Implications

It is clear from the findings that the uptake and adherence rates of Florence is positive. The team have developed strategies in real-time to overcome barriers to patients engaging in the service. This understanding provides a strong platform for both Staploe and relevant practices within the PCN to successfully engage patients in a meaningful way. The qualitative findings around barriers and enablers provide an additional layer of insight to support effective adoption and spread that is acceptable to both patients and staff.

As it stands, Florence accounts for 37% of all patient hypertension diagnoses when compared to all other methods. This understanding provides an opportunity for Staploe Medical Centre to

focus on engaging patients that are currently on more capacity draining pathways, such as blood pressure diaries. Themes emerged from the stakeholder discussions for future implementation around patient education resources, which may support this endeavour.

86% of all blood pressure readings submitted to Florence were normal or low. Overall this finding is positive for the surgery in relation to patient health and subsequent needs and support required. This understanding is beneficial as it provides an opportunity to support patients to maintain healthy levels and prevent hypertension development, it also allows resources to be efficiently allocated to hypertensive patients.

The evaluation also captured staff reported advantages of Florence including time saved, more rapid intervention for patients and increased patient involvement in their own diagnosis, management and treatment. It is anticipated that earlier intervention comes with the potential benefits of more rapid optimisation of care, whilst increased patient involvement in the management of their condition will perhaps support them to advocate for themselves and allow informed decision-making and engagement in their care. This is also a potential benefit to those recording low and normal readings as well, empowering them to remain healthy.

The staff reflections on patient activation and involvement are important due to the implications that this activation will likely support patients to stay well and manage their condition better in the long-run. Furthermore, in relation to this, a patient survey found that 73% of those using Florence preferred the method in comparison to at the surgery or via text. Importantly these patients also felt that they could take their blood pressure at home, and staff discussed patients had said they found the app easy to use. These indicate a level of motivation and ability to self-manage their condition which can support improved patient experience and outcomes.

A basic cost analysis found that 189 hours of staff time was saved by using Florence compared to paper diaries for the patients who had completed protocols June – December. Moreover, £5.85 saved per patient who had completed a protocol. These staff savings on their own don't offset the cost of Florence but benefits beyond the considered elements of staff time, such as clinical patient outcomes may change this. It is anticipated that savings will increase in future as a result of the automative qualities of Florence to re-assign protocols to patients, such as annual reviews, not requiring staff intervention as well as the introduction of additional protocols such as blood pressure optimisation, which were implemented after this report was informed.

Recommendations

The evaluation has identified clear benefits in the implementation of Florence. Additionally, it has highlighted the following recommendations to help inform the continued implementation of Florence across Ely North and South PCN:

- The PCN need to consider the additional time required in appointments to introduce Florence to patients and ensure they have a strong enough understanding to use within their homes.
- The PCN should ensure patients and staff have access to the appropriate resources, such as BP machines.
- PCN should continue to take a considered approach to invite patients to Florence, including communicating with patients as to the purpose and how to engage with it.
- A more comprehensive cost-benefit analysis should be developed incorporating information such as clinical outcomes and automation of future protocols for a more rounded indication of long-term economic benefits of the platform.

and the PCN should continue to regularly address software challenges for both staff and patients.

- Generated Health and the PCN should allow for additional staff and patient training materials, to provide a clear understanding of the process and appropriate implementation of Florence with patients.
- Generated Health should consider adding options to email results, including heart rate measurements, and for patients to respond to their clinician's messages.
- There is an opportunity to provide feedback and information to patients reporting low or normal blood pressure readings to support them maintain healthy levels and prevent cardiovascular disease development.

For Staploe Medical Centre broader blood pressure pathways:

- Monitor the number of patients on each pathway and diagnosis across them to understand relative Florence uptake.
- Develop a measure for staff time spent across pathways to understand where reductions and increases might occur.

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Appendices

Appendix 1: References

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Appendix 2: Staploe Medical Centre Hypertension pathways

These pathway processes have been provided by Generated Health

Current process (Pathway 1)	Proposed process (Pathway 1)
<ol style="list-style-type: none"> 1. How are eligible patients currently identified? <ul style="list-style-type: none"> • Approximately 50% of patients are currently identified on an ad-hoc basis when their medications become due for review or by system reporting after 1 year without a BP reading • The other 50% of patients are expected to attend in the month of their birth for their annual review. 2. How are they given instructions on how to take and record their BP readings? <ul style="list-style-type: none"> • Patients are issued with paper diaries and a BP machine and sent away to conduct home monitoring. • Those who cannot, have readings done by HCAs in practice 3. How are these readings sent back to the practice? <ul style="list-style-type: none"> • They return these paper diaries to the practice, or photograph them and send them in via AskmyGP. 4. How are readings analysed and transferred into the EPR <ul style="list-style-type: none"> • An average HBPM reading is then calculated manually and entered into the notes. A SystmOne task is sent to the pharmacist. 5. What happens if the readings are high, low or normal? <ul style="list-style-type: none"> • Normal - medication is reauthorised and other checks completed/reminders sent • Low - patient contacted to check for symptoms then clinical decision made • High - clinical plan proposed & discussed with the patient then checked with a prescriber for medication changes 6. Which members of the clinical team are used for annual review, clinical assessment and medication titration? <ul style="list-style-type: none"> • Annual review - HCA with reference to duty doctor for changes to plan • HBPM returned - clinical pharmacist/pharmacy technician with reference to GP if needed for changes to plan • Medication titration - clinical pharmacist/pharmacy technician with reference to GP if needed for changes to plan <p>All this normally takes 15 minutes per step - which adds up to approximately 4000 hours a year</p>	<ol style="list-style-type: none"> 1. How are eligible patients going to be identified? <ul style="list-style-type: none"> • Clinical system search using a pre-existing SystmOne report developed by Ardens • Patients who attend their annual review and have raised BP will be advised by the clinician to self-enrol by texting a keyword to a designated phone number 2. How will patients be given instructions on how to take and record their BP readings? <ul style="list-style-type: none"> • Eligible patients will be given a paper care plan document created by Florence which explains how the system will work and how to use the BP machine. Advice can also be included in the message content. • Patients who are not eligible will still have readings done by HCA's in the practice 3. How will readings be sent back to the practice? <ul style="list-style-type: none"> • Florence will message the patients automatically at set times twice a day for a maximum of 14 days. Average BP will be automatically calculated in Florence once sufficient readings have been collected, and this reading can be then sent into the EPR as SNOMED coded structured data (this can be automated or reviewed by the ARRS Pharmacy team in Florence first) • Florence notifies ARRS Pharmacy that the readings are available for averaging • GP / ARRS Pharmacist reviews patient reading and makes decision on ongoing requirement medication review appt/no further action • Clinician/Administrator contacts patients by SMS from the Florence platform to advise outcome/provide further instruction. Appt booking/return of equipment etc. • Florence prompts the patient to book the next annual review 2 weeks prior to the next due date and the patient is asked for a BP reading, current BMI and smoking status. Where BP is raised Florence will repeat 14 day monitoring to obtain a new averaged BP reading. 4. What happens if the readings are high, low or normal? <ul style="list-style-type: none"> • Florence will automatically signpost patients to a standardised care plan containing any action they need to take. Care plans should still be made available to ensure standardisation of advice for all patients regardless of whether they are engaged with Florence or not • Advice could also be included in the message content as an alternative.
<p>This new approach should take no longer than 15 minutes end to end, saving approximately 1000 hours a year.</p> <p>Additional benefits include:</p> <ul style="list-style-type: none"> • Patients are much more likely to submit the readings as required as they will be prompted by Florence • Patients will be given instant feedback and advice based on the readings, rather than having to wait for the readings to be sent to clinic and analysed • The average reading will be calculated automatically once the readings have been selected and sent into the EPR system reducing the risk of human error • Patients are put on a treatment plan faster if required 	

- A large reduction in clinician time to review readings and decide on next steps and communicate the decision to patients

Appendix 3: Florence Protocols

<p>1) Hypertension Diagnosis 2) (Bulk Upload)</p>		<p>3) Patients take blood pressure readings twice daily for 10 to 14 days, totalling at least 20 readings. Readings exceeding 180/110 mmHg prompt a retest after 30 minutes and potential GP contact. The protocol ends with a Day 15 feedback survey.</p>
<p>4) Hypertension Diagnosis 5) (Ad Hoc)</p>		<p>6) Patients take blood pressure readings twice daily for 10 to 14 days, totalling at least 20 readings. Readings exceeding 180/110 mmHg prompt a retest after 30 minutes and potential GP contact. The protocol ends with a Day 15 feedback survey.</p>
<p>7) Hypertension Annual Review</p>		<p>8) The Hypertension Annual Review protocol requires daily blood pressure readings for 10 to 14 days, with an emphasis on ongoing hypertension management, including health assessments like BMI. Readings over 180/110 mmHg may lead to GP contact. It concludes with a detailed feedback survey on Day 15.</p>
<p>9) <80 years - Follow-up Home Blood Pressure Monitoring - 14 Readings</p>		<p>10) The protocol requires 14 readings in total. Readings are categorized as low, normal, high, or very high, with instructions for each category. Very high readings (diastolic 120-150mmHg/systolic 180-250mmHg) prompt immediate contact with healthcare providers. The process includes reminders for missed readings and concludes with an average blood pressure calculation, recorded in the patient's Electronic Patient Record.</p>
<p>11) 80+ years - Follow-up Home Blood Pressure Monitoring - 14 Readings</p>		<p>12) For patients over 80 years old, the follow-up blood pressure monitoring protocol is similar to the under 80 protocol but with tailored guidance. Both involve 7 days of twice-daily readings at 8 am and 6 pm, totalling 14 readings. However, the over 80 protocol has adjusted blood pressure categories: very low (diastolic 40-59mmHg/systolic 70-89mmHg), normal (diastolic 60-84mmHg/systolic 90-144mmHg), high (diastolic 85-119mmHg/systolic 145-179mmHg), and very high (diastolic 120-150mmHg/systolic 180-250mmHg). Very high readings require immediate medical contact. The protocol concludes with an average blood pressure calculation and recording in the Electronic Patient Record, emphasizing tailored care for older patients.</p>

Appendix 4: Evaluation Questions

- 1) How does uptake and adherence to BP monitoring and reporting differ between the three pathways?
 - Is there an improvement in uptake and adherence to BP self-monitoring and reporting using Florence?
 - Is there a difference in uptake and/or adherence in patients between Florence and the current pathways?
 - Is there a difference in uptake and/or adherence in patients being onboarded to Florence from different referral pathways?
- 2) What are the quantitative outcomes related to patient numbers being diagnosed and managed, clinician time and costs of managing hypertensive patients that may help inform future adoption and spread of Florence by the PCN?
 - Is there an increase in diagnosis of hypertensive patients?
 - Is there a difference in length of appointment times for initial onboarding?
 - What has been the cost benefits of implementing Florence?
- 3) What does staff feedback tell us about the acceptability, usability, impacts on staff time, and any challenges or benefits of implementation?
 - How do staff perceive the implementation of Florence has impacted clinician and administrative staff time for managing patients with hypertension?
 - What do staff identify as benefits to staff and to patients of using Florence?
 - What, if any, have been the key enablers and barriers to implementation?
 - Do staff report any perceived improvement in patient's confidence in self-monitoring, reporting and management of BP?
- 4) What does patient feedback tell us about the acceptability, usability, and patient experience of using Florence for Home Blood Pressure Monitoring?
 - How satisfied are patients with the intervention?
 - What insights can we gather in relation to whether the persona-based nature of the system is a key ingredient to success?
 - What factors may be influencing why some patients do not engage with using Florence when offered?
 - Do patients report a perceived improvement in their confidence in self-monitoring, managing, and reporting BP?

Appendix 5: Generated Health data definitions

Patients Active: Patients are considered active on a protocol when the care plan or profile associated with the protocol has started and the start date is within or before the selected date range selected. This is not considering any message sent or received in that duration. Please Note: for auto-response protocols, a patient is considered active even without patient sending any message to Flo

Patients Added: Patients added to a protocol and their care plan or profile associated with the protocol starts in the selected date range

Patients Assigned: Patients assigned to a protocol in the date range selected. Whether the protocol has started or not

New patients assigned first time: New patients that are assigned to their first protocol, in the date range selected. Whether the protocol has started or not

Patients Unassigned: Patients unassigned by their clinician while being active on the protocol

Patients Invited: Patients invited to join Florence by a clinician

Patients Invite accepted: Patients that have accepted the invitation to join Flo

Patients not opted in: Patients who have not accepted the invitation to join Flo or whose invitation has expired

Patients Completed Protocol: Patients complete their assigned protocol without any interruptions (Stopped, Discharged, Unassigned etc)

Patients Discharged: Patients discharged by their clinician

Patients Deceased: Patients marked as deceased by their clinician

Patients stopped: Patients sent 'STOP' message

Patients Deleted: Patients deleted by their clinician

Opt-in Rate %: New patients that have accepted the invite as a percentage of patients invited

New Patients Accepted: Patients that have accepted the invitation to join Flo

Newly Enrolled Patients: Patients assigned to a protocol in the date range selected. Whether the

Response rate: replies received ÷ replies expected

Follow up rate: nudges sent ÷ replies received

Misunderstanding rate: responses Florence did not understand ÷ response Florence did understand

Appendix 6: Framework analysis of staff interviews

Framework analysis of theme 1.

Subtheme	Clinical staff					Non-clinical staff				
	P1	P2	P3	P5	P9	P4	P6	P7	P8	P10
Patients find it easy to use	Y	Y	Y	Y		Y		Y		
Professional Support					Y		Y	Y		Y

Framework analysis of theme 2.

Subtheme	Clinical staff					Non-clinical staff				
	P1	P2	P3	P5	P9	P4	P6	P7	P8	P10
Adapting to something new		Y		Y		Y		Y	Y	Y
Lack of clarity	Y	Y		Y		Y	Y	Y	Y	Y
Software challenges	Y					Y			Y	Y
Staff consultation challenges	Y	Y								

Framework analysis of theme 3

Subtheme	Clinical staff					Non-clinical staff				
	P1	P2	P3	P5	P9	P4	P6	P7	P8	P10
Age	Y	Y			Y				Y	Y
Lack of resources	Y			Y	Y		Y	Y	Y	Y
Notifications		Y						Y		
Preference for paper-based resources	Y	Y						Y	Y	

Technology	Y			Y	Y	Y		Y	Y	Y
Uncertainty over the Florence system	Y				Y	Y	Y	Y	Y	Y
Lack of usability	Y				Y				Y	

Framework analysis of theme 4.

Subtheme	Clinical staff					Non-clinical staff				
	P1	P2	P3	P5	P9	P4	P6	P7	P8	P10
Benefits to patients	Y	Y	Y	Y		Y		Y	Y	Y
Benefits to staff	Y		Y	Y	Y	Y		Y		

Framework analysis of theme 5.

Subtheme	Clinical staff					Non-clinical staff				
	P1	P2	P3	P5	P9	P4	P6	P7	P8	P10
Florence developments					y					y
Importance of staff enthusiasm	Y			y						
Patients resources	y	y		Y		y		Y	Y	Y
Staff training resources								y	y	y