

Technology Enabled Care (TEC) Home & Mobile Health Monitoring (HMHM) Pan-Ayrshire: Florence Blood Pressure Monitoring for Hypertension

Aim:

To remotely monitor blood pressure using simple text messaging technology (Florence), to contribute towards improved access to General Practice services by reducing the number of face-to-face appointments for blood pressure checks as well as improving clinical decision making by providing regular, accurate, blood pressure readings directly to GPs.

Method:

Engagement with GPs, practice managers and other representatives from practices via short lunchtime workshops led by TEC Clinical Lead, providing demo, information and supporting documentation as well as evaluation data requirements. Practices wishing to participate were supplied with BP cuffs at the end of the workshop.

Initially 15 practices signed up to the test of change. BP readings data texted by patients to the Florence system was collected via two protocols:

Protocol 1 – Diagnosis: average of BP readings over 7 days monitoring period (in accordance with NICE guidelines)

Protocol 2 - Medication Titration: average of twice weekly readings over 4 week cycles (repeated as necessary)

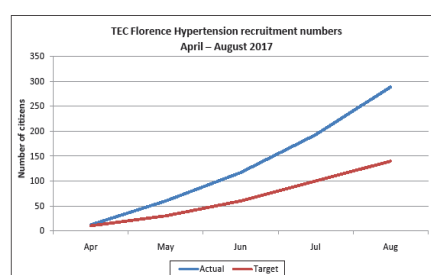
Automated results reports were provided back to GPs directly into the practice clinical mailbox providing average BP results per patient, to inform diagnosis and medication decision making.

Outcomes:

- Initially 15 practices commenced, that is 27% of all Ayrshire GP practices, followed by a further 6, hence almost 40% of Ayrshire practices using the service within the first 6 months;
- 60 referrals from 10 practices in first 6 week (test of change), 250+ referrals from a total of 21 practices within the first 6 months;
- early indication of reduced waiting time for ambulatory BP monitoring referrals;
- 53% of patients monitored on protocol 1 during test of change had BP results indicating they were hypertensive;
- on average, 2 contacts avoided per patient - 70 avoided contacts reported as being saved (information was available for 35 patients);
- clinicians found that Florence BP monitoring was an aid to decision making;
- patients found Florence easy to use, helpful to manage their condition and would use it again if needed in the future; and
- saved travel time and cost for patients.

Next Steps

- Further workshops to roll out to remaining GP Practices and scale up.
- Further develop results reporting – automated transfer to Docman.
- Expand to accept referrals from acute pathway.



Staff Experience:

Julie Grant is Practice Manager at Station Road Medical Practice in Prestwick, one of the first practices to sign up to using FLO.

Before we started using FLO, it could sometimes take a few months to find out if someone had high Blood Pressure. Using FLO has definitely saved a lot of appointments and it gives a much faster diagnosis which allows the patient to be treated much quicker. We haven't had any problems from patients who all seem really happy with the service.

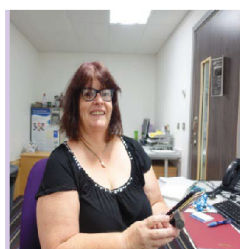
Julie quoted "FLO is a perfect example of technology enabled care being used as an outreach tool to assist GPs with diagnosis".



Patient Story:

Lorna Thomson attended a keep fit class at Ayr United Football Grounds where her Blood Pressure (BP) was shown to be slightly high. Having been advised to go to her doctor to have it checked, she was delighted when she was offered FLO to determine if she was Hypertensive (High BP). Lorna was provided with a BP machine and cuff and asked to send in BP readings by text. After analysis it was discovered that Lorna was indeed Hypertensive (High BP), and she was able to be put on medication straight away.

Lorna says "because I work full time it was great that I didn't have to keep going to the practice all the time, it was so simple and straight forward to use. I think of FLO as a person and have to remind myself she is not a real person although she is every bit as helpful".



Results Reports

Flo ITN Protocol 1: BP Diagnosis Results Report

Practice: **GP11**
 Date: **04/08/2017**
 BP Average: **142 / 89**

ID	Date of Test	Indiv.	Result
11-00000001	03/08/2017	001	00
11-00000002	03/08/2017	002	00
11-00000003	03/08/2017	003	00
11-00000004	03/08/2017	004	00
11-00000005	03/08/2017	005	00
11-00000006	03/08/2017	006	00
11-00000007	03/08/2017	007	00
11-00000008	03/08/2017	008	00
11-00000009	03/08/2017	009	00
11-00000010	03/08/2017	010	00
11-00000011	03/08/2017	011	00
11-00000012	03/08/2017	012	00
11-00000013	03/08/2017	013	00
11-00000014	03/08/2017	014	00
11-00000015	03/08/2017	015	00
11-00000016	03/08/2017	016	00
11-00000017	03/08/2017	017	00
11-00000018	03/08/2017	018	00
11-00000019	03/08/2017	019	00
11-00000020	03/08/2017	020	00

Flo ITN Protocol 2: BP Medication Titration Results Report

Practice: **GP11**
 Date: **04/08/2017**
 BP Average: **142 / 89**

Notes: Each patient is given medication

Indiv.	Medication	Date	Result
001	001	03/08/2017	00
002	002	03/08/2017	00
003	003	03/08/2017	00
004	004	03/08/2017	00
005	005	03/08/2017	00
006	006	03/08/2017	00
007	007	03/08/2017	00
008	008	03/08/2017	00
009	009	03/08/2017	00
010	010	03/08/2017	00
011	011	03/08/2017	00
012	012	03/08/2017	00
013	013	03/08/2017	00
014	014	03/08/2017	00
015	015	03/08/2017	00
016	016	03/08/2017	00
017	017	03/08/2017	00
018	018	03/08/2017	00
019	019	03/08/2017	00
020	020	03/08/2017	00

Notes: ITN Average results for previous 6 months (01/07/2017 - 01/07/2017)
 Monitoring: **001** **002** **003** **004** **005** **006** **007** **008** **009** **010** **011** **012** **013** **014** **015** **016** **017** **018** **019** **020**

Pathways

