

Use of an Innovative Technology Enabled Care Service (TECS) “Florence” To Empower Patients and Enhance Adherence to Treatments in Diabetes

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Background

In Sandwell and West Birmingham Hospitals NHS Trust, diabetes prevalence is high with a large ethnic minority population. Social deprivation is significant and compliance is a major stumbling block in the achievement of diabetes and Blood Pressure (BP) targets. Our aims were to improve **adherence to BP treatment** via engaging patients in their own health through text reminders and regular encouragement, and **determine the clinical and cost effectiveness** of this simple, yet unique method of virtual clinic consultation through FLORENCE (Flo).

Method

The protocols used concentrated on:

- BP reminders (once weekly, once monthly) in CKD and diabetes patients,
- High initial BP readings for diagnosis.
- Poorly controlled hypertension.
- Medication compliance.

We provided some sphygmomanometers to lend to patients (hypertension protocols) but most patients bought their own BP machines after explaining to them the importance of this minimal health investment.

Other clinical protocols offered and used by our team include (individual teams can also devise their own protocols): weight management, blood glucose testing reminders, managing mood & anxiety.

Results

Since April 2014

- 100 patients have enrolled for BP monitoring.
- 26 for blood glucose and insulin reminder.
- Medications have been adjusted (added new agent or increased dose) in 27/100 (27%).
- 46/100 (46%) patients have been discharged with good BP control preventing 107 outpatient appointments (saving £11,663 vs. £2,329 Flo associated costs).
- Total savings £9,334.
- High patient satisfaction.
- Improved utilization of manpower resources and healthcare professional time – thus clinically and cost effective model of care delivery recognizing the importance of supporting patients outside of face-to-face care to improve outcomes.

Flo’s use continues to grow in our Trust. This simple Telehealth technology can be easily replicated in any NHS Trust or CCG, as has been shown within our own Trust.

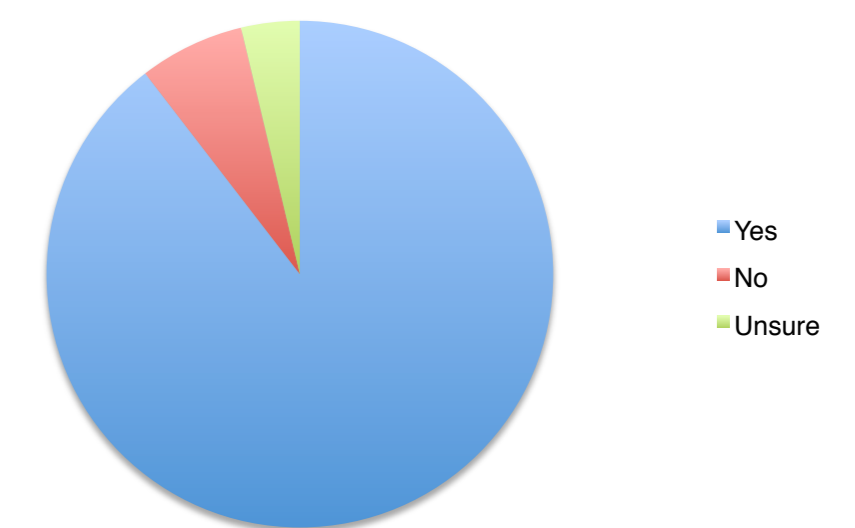
“Flo messages for Blood Pressure were very motivational and helped me increase my activity levels and improve my diet”.

“I have used Flo which has allowed me to send in both BP & BG readings without having to attend so many clinics – I have difficulty taking time off work and have found this service extremely useful”.

Patient Satisfaction Evaluation

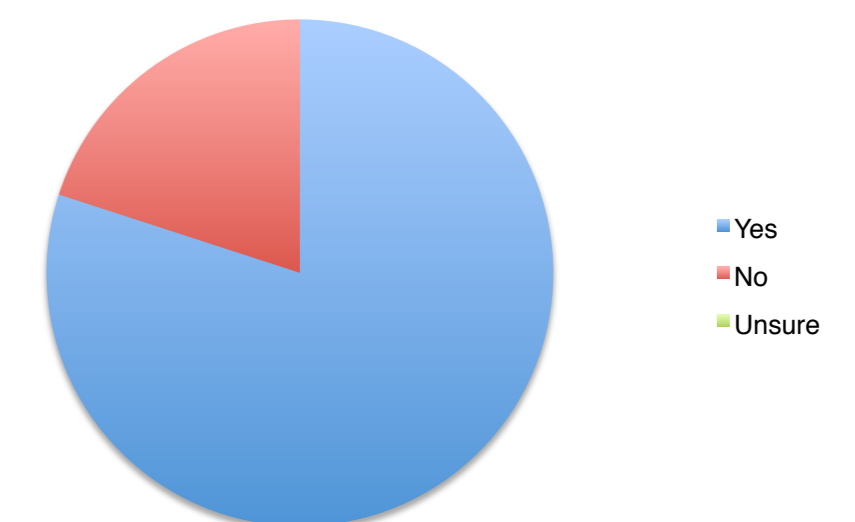
Are you confident about taking your blood pressure at home?

YES- 90%
No – 7%
UNSURE – 3%



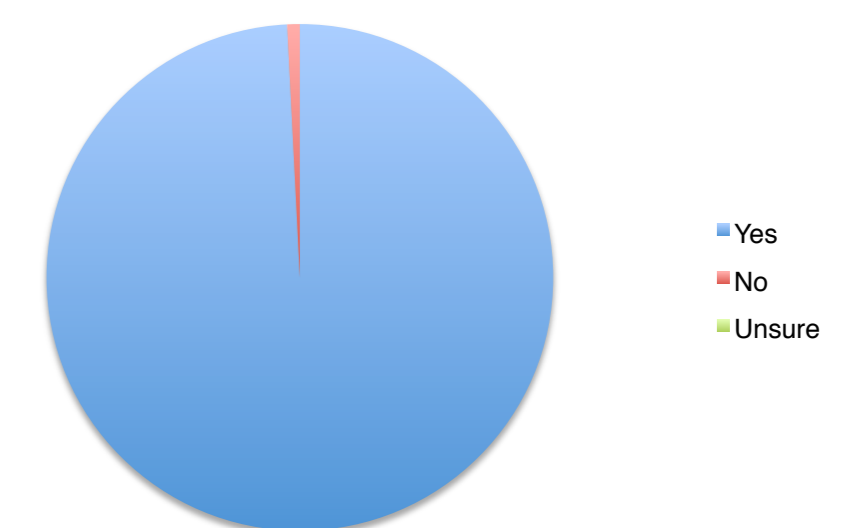
Does Flo help you to remember to take your tablets regularly?

Yes- 80%
No – 20%



Do you prefer to text readings your readings to Flo?

Yes- 99%
No – 1%



“Using Flo on my tablet is so easy & convenient; I am partially sighted and can enlarge the text. I use Flo for BP and periodic BG testing which I have found very helpful recently changing from basal insulin”

Conclusions

Although the diabetes team has been using Flo since 2014-15, there has recently been an increase in local clinical engagement with Flo within our Trust & CCG. As a result uptake in SWBH is continuing to grow, with new user accounts already set up for the following new teams - Pharmacy, Respiratory, Paediatric Diabetes, Haematology and Occupational Therapy.

We expect that our patient numbers will likely increase significantly in the coming months. Given the momentum now gaining pace in our Trust, we plan to involve the acute sector as well, to achieve faster clinical outcomes, improve team productivity and release non-urgent capacity.

Recognition of Flo

In October 2015, we won the joint best initiative for prevention and early detection of diabetes and complications - Quality in Care (QiC) national award, Flo played a big part in the nurse led diabetes renal clinic BP assessments.

We have presented our Flo project findings in London for the 7th World Healthcare and Technology summit congress on 26th Sep 2016

Our pilot Flo project findings have also been shared with RCP London as part of Future Hospitals Project.