

Empowering pregnant women to “go with Flo” and monitor their blood pressure at home using Telehealth technology

Background

Pregnancy induced hypertension (PIH) is a condition characterised by high blood pressure during pregnancy. It affects about 6-8% of pregnant women and can lead to serious consequences such as pre-eclampsia, intrauterine growth restriction, placental abruption and intrauterine fetal death.

PIH is managed in a number of ways, including an increase in pre-natal check-ups, which represents a significant workload for NHS maternity staff.

NICE guidance advises twice weekly monitoring of blood pressure (BP) for women diagnosed with PIH. Almost 20% of Day Assessment Unit (DAU) patients present just for BP monitoring.

The Go Flo project trialled the use of the Simple Health ‘Florence’ system (Flo), a home-based patient monitoring system, to test improvements to maternity services for monitoring of PIH.

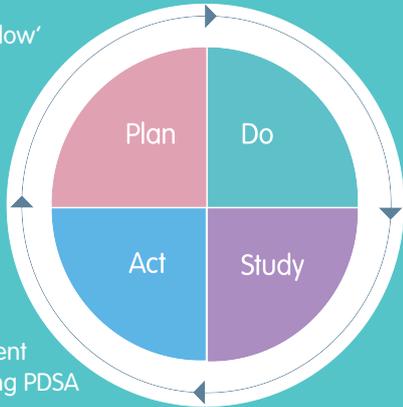
Results (July 17 to April 18)

- 57 women recruited including patients with mild PIH and moderate PIH on medication
- Go Flo replaced 572 routine face-to-face BP monitoring appointments (ten per patient on average)
- No adverse incidents
- 100% (n=16) of surveyed women in the project would recommend Go Flo
- Excellent multi-disciplinary staff engagement within the maternity unit and joint stakeholder working



Method

- Phased recruitment of ‘very low’ to ‘low’ risk women to prove concept and system safety
- Women text in BP reading on Fridays via Flo
- Safety prioritised through manual checks of Flo logs
- Continual quality improvement approach within project using PDSA improvement cycles



Conclusion and next steps

- Secured funding for a second year of Flo licences from Great Western Hospitals NHS Foundation Trust
- Formal evaluation due in June 2018
- Plan to share experience and evaluation to explore use of Flo in other specialities with high rates of routine monitoring in clinics, such as diabetes

“Go Flo Friday gives pregnant women control and an interest in their own health, this can have future health benefits encouraging self-monitoring of their own BP in later life.” Midwife

Aims

Primary drivers

Secondary drivers

- Reduce the number of visits to health care facilities for BP monitoring of eligible women by 10% in six months
- Reduce post-natal ward readmissions for BP monitoring by 10% in six months
- Enable safe patient participation within pathways of care for women with PIH
- Improve patient experience by avoiding extra hospital appointments and ‘white coat’ hypertension

Remote monitoring using Flo technology

Process for patient selection

Reliable process for patient management

Patient information, education and support

Staff engagement, education and support

- BP monitoring equipment
- Flo software/text bundles

Standard operating procedure/protocol for patient selection with eligibility criteria from DAU, community and post-natal ward

- Standard operating procedure/management plan
- Dedicated time/personnel for checking results

- Patient training with consistent content
- Information leaflets
- Designated support telephone line

- Staff training
- Launch event
- Engage team for change ideas, understanding barriers to change

“I would like everybody in my situation to have...this opportunity as I believe a lot of people are over medicated whose BP is just high in that hospital environment. It also frees a bed in DAU for somebody who genuinely needs it.” Patient

“It will help to improve patient satisfaction with the medical care provided as it acts by improving health through objective measurement and personalised monitoring, besides supporting their independence and wellbeing.” Clinician

How we measure the change

- Process measure: Number of patients signed up to Go Flo
- Outcome measures: Reduction in routine face to face DAU and community BP monitoring appointments
- Balancing measures: Number of patients dropped/requiring more frequent monitoring
- Financial measures: The cost of the project compared to the total cost of health care visits