Midlands and Lancashire Commissioning Support Unit

Putting patients first

Stoke-on-Trent Clinical Commissioning Group

Using simple telehealth to diagnose hypertension: a service evaluation

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Background

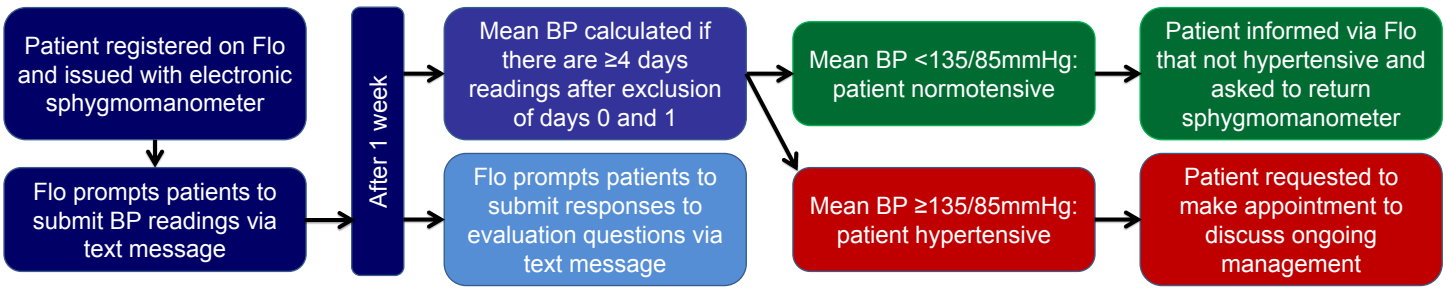
- Following a successful local use of a simple telehealth intervention for the diagnosis and management of hypertension (1,2), the Advice & Interactive Messaging (AIM) for Health programme was launched across England in March 2013
- The AIM01 protocol was developed to confirm or refute a diagnosis of hypertension among patients who were found to have elevated blood pressure (BP) in surgery (≥140/90mmHg) (3)

Aim

To undertake a service evaluation to establish the role and acceptability of a mobile phone-based, simple telehealth intervention in the diagnosis of hypertension among a national primary care population

Methods

Diagrammatic representation of the AIM01 protocol for primary care patients with raised BP in surgery (≥140/90mmHg)



- Patients were sent up to 3 evaluation questions. Questions 2 and 3 were sent on receipt of answer 1 and 2, respectively
- BP readings and responses to patient evaluation questions were extracted from Flo using automatic data processing methods
- Feedback relating to AIM01 was extracted from results of an electronic survey, sent to professional users in Summer 2013 and Spring 2014, requesting information on their experiences of taking part in the AIM programme

Results

Clinical outcomes for patients registered on AIM01

1468 patients registered on AIM01 between 1st March 2013 to 31st January 2014

Mean BP could be calculated for 1166 (79%) registered patients

740 (64%) patients hypertensive

Up to 426 appointments saved by remotely managing normotensive patients

Patient responses to evaluative texts (1169 patients sent first evaluation question)

96%	• 886/923 respondents agreed that they would recommend the service to their family and friends
97%	• 793/814 respondents felt confident about taking their BP
94%	• 733/779 respondents agreed with the statement 'I prefer to send my readings to my practice via Flo rather than go in person'

Professional user feedback

Positive feedback

- Saves patients' time and resources
- Reduces waiting lists for ambulatory BP monitoring (ABPM)
- All readings on record
- More acceptable to patients than ABPM
- Simple

Negative feedback

- 'Chasing' patients who don't return equipment
- Some patients struggled to take BP
- Adds complexity if good pre-existing systems (e.g. pen and paper, ABPM)
- Responses not automatically integrated into patient records

Implications for the future

- Compared with more traditional methods, this type of service delivery may result in one appointment being saved for up to one third of patients who are found to have raised BP readings in surgery as they do not require face-to-face follow-up
- Overall satisfaction with the service across a national patient and professional population was positive, provided patients were carefully selected and the need for an alternative method of service delivery was identified by users
- This service evaluation of real use of the AIM programme across England suggests that simple telehealth can be an acceptable and valuable tool for diagnosing hypertension in a primary care population, particularly if ABPM is not possible or is declined

References:. 1) Cottrell E, et al. BMJ Open 2012;2:e001391 doi:10.1136/bmjopen-2012-001391; 2) Cottrell E, et al. BMJ Open 2012;2:e001392.doi:10.1136/bmjopen-2012-001392; 3) NICE. CG127. London: 2011

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