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**CONFERENCE ABSTRACT****NHS Western Isles - Involving our Patients: Faster Access to Treatment for Hypertension in Primary Care**17<sup>th</sup> International Conference on Integrated Care, Dublin, 08-10 May 2017Iain Trayner<sup>2</sup>, Lisa Joanne Taylor<sup>1</sup>

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**Introduction:** Hypertension is the single most common risk factor for both cardiovascular and overall disease burden and mortality worldwide, medical treatment of hypertension mitigates this risk.<sup>1</sup> Around 7 million people in the UK have undiagnosed hypertension and therefore do not know that they are at risk.<sup>2</sup> Timely and accurate diagnosis of hypertension can improve clinical outcomes; patients waiting over a month and a half post high reading demonstrate progressively worse outcomes than those treated more promptly.<sup>3</sup>

NICE recommends ambulatory blood pressure monitoring (ABPM) to confirm or exclude a diagnosis of hypertension.<sup>4</sup> However acknowledging that some patients find ABPM uncomfortable, home blood pressure monitoring is recommended as a suitable alternative<sup>4</sup> which patients generally find a positive experience.<sup>5</sup>

**Case for Change:** Some NHS Western Isles patients are referred to secondary care for ABPM and in concordance nationally, delays were encountered and subsequently time to treatment initiation was prolonged with an increased number of patient contacts both clinically and administratively. The time between identifying a raised blood pressure and treatment leaves the patient unmanaged and vulnerable to exacerbation before treatment has commenced. Patients also had to make several journeys both to the practice and hospital with the communication process largely being paper led.

In parallel, many (but not all) people wish to be more informed and involved with their own care, challenging the traditional divide between patients and professionals, and offering opportunities for better health through increased prevention and supported self-care.<sup>6</sup> It is also recognised that by improving patients' access to home monitoring, patients increase their interaction with, and understanding of their condition.<sup>7,8</sup>

This created an opportunity for NHS Western Isles to combine patient willingness to become more involved in their health with the benefits of supported home monitoring to provide their patients with the opportunity to play a key role in improving their own health outcomes.

Based on previous evidence<sup>8</sup> Florence<sup>9</sup> was identified as the NHS owned clinically driven interactive self management tool that could enable a safe and effective transition to a 7 day

home blood pressure monitoring pathway. Following clinical approval locally, home monitoring via Florence was offered to patients attending the pilot practice demonstrating a raised blood pressure.

**Impact:** The redesigned pathway is now complete in 7 days from identification to treatment initiation and maximises opportunities for home monitoring to improve patient safety and engagement over the period; both patient and clinician experience has been positive.

Thorough evaluation has taken place with the initial cohort of 13 patients (aged 26-73) years saving:

19 follow-up appointments (primary care)

71 patient contacts

44 patient journeys

Identifying 4 cases of white coat hypertension

Outcomes Demonstrated

**Patient:** Faster diagnosis or exclusion of hypertension reduced patient uncertainty

Confidence and ability to self-manage improved with convenient reminders to take readings and clinically approved advice once blood pressure readings submitted.

Engagement in condition and/or symptoms improved

Improved patient acceptance of new or increased medication

A safe, supported alternative to ABPM providing patient choice in treatment planning

Reduction in patient travel

**Clinician:**

Immediate initiation, faster access to diagnostic data to initiate treatment

Real time access to accessible and exportable data to expedite and evidence treatment decisions.

Improved patient safety during diagnostic process

AF screening increased via monitors provided by the practice

Supports development of a nurse-led service

**System:**

Reduced handoffs improved patient flow

Reduction in patient contacts

More cost effective pathway

Reduction in administrative processes improves productivity

Opportunity to support the delivery of person centred care when treatment planning

**Comments:** The outcomes from the initial cohort confirmed that redesigned pathway provides sustainable and scalable learning for further adoption across primary care adding significant benefits to traditional ABPM or non-supported home monitoring practice. With a small proportion of the clinical time released reallocated to diagnostic result analysis, the application could also be extended to support diagnosis or monitoring of other conditions where patients can be supported to submit readings or symptoms from home.

This was the first model within Scotland reviewing hypertension diagnosis pathways with Florence which formed the basis for a large scale implementation in NHS Lanarkshire. NHS Western Isles are collaborating with Scottish Centre for Telehealth and Telecare and NHS24 on a national pathway based on this methodology which has been adopted as part of a national evaluation model.

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