



International Conference
on Integrated Care

8-10th May 2017 | Dublin, Ireland

In association with WCIC5
5th World Congress on Integrated Care



NHS Western Isles - Involving our Patients: Faster Access to Treatment for Hypertension in Primary Care

Evidence based impact

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NHS
Eileanan Siar
Western Isles

Simple
• CARE • PEOPLE

Florence

Florence

Context: The Hypertension Challenge

- 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**¹
- Around 7 million people in the UK have undiagnosed hypertension and therefore **do not know that they are at risk**²
- **Patients waiting over a month and a half post high reading demonstrate progressively worse outcomes than those treated more promptly**³
- **NICE recommends ambulatory blood pressure monitoring (ABPM) to confirm or exclude a diagnosis of hypertension**⁴
- Acknowledging that some patients find ABPM uncomfortable, **home blood pressure monitoring is recommended as a suitable alternative**⁴ which patients generally find a positive experience⁵

¹ Lim SS, Vos T, Flaxman AD, Danaei G, Shibuya K, Adair-Rohani H, et al. A comparative risk assessment of burden of disease and injury attributable to 67 risk factors and risk factor clusters in 21 regions, 1990-2010: a systematic analysis for the Global Burden of Disease Study 2010. *Lancet* 2012;380:2224-60.

² British Heart Foundation. High blood pressure risk factors (Internet). (Nov 2016; cited 2016 Nov 22). Available from: <https://www.bhf.org.uk/heart-health/risk-factors/high-blood-pressure>

³ Xu W, Goldberg S, Shubina M, Turchin A (2015). Optimal systolic blood pressure target, time to intensification, and time to follow-up in treatment of hypertension: population based retrospective cohort study (Internet). *BMJ Open*. (2015 Feb; cited 2016 Nov 22). Available from: <http://dx.doi.org/10.1136/bmj.h158>

⁴ National Institute for Health and Care Excellence. Hypertension in adults: diagnosis and management (Internet). (Updated 2016 Nov; cited 2016 Nov 21) Available from: <https://www.nice.org.uk/guidance/cg127>

⁵ Hanley J, Ure J, Pagliari C, Sheikh A, McKinstry B (2013) Experiences of patients and professionals participating in the HITS home blood pressure telemonitoring trial: a qualitative study (Internet). *BMJ Open*. (2013 May 23; cited 2016 Nov 19). Available from: <http://bmjopen.bmj.com/content/3/5/e002671.full>

The Case for Change

- Some patients in the Western Isles are referred to ABPM with a waiting list of several weeks, resulting in delays to treatment and a high number of 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 have to make several journeys both to the practice and hospital with the communication process largely being paper led.
- Feedback from GP's in Scotland suggests that in addition to ABPM at least 3 appointments are required to diagnose hypertension.

⁶ NHS England, Care Quality Commission, Health Education England, Monitor, Public Health England, Trust Development Authority (2014). NHS five year forward view. London: NHS England. (2014 Oct; cited 2016 Nov 23). Available from: <https://www.england.nhs.uk/wp-content/uploads/2014/10/5yfv-web.pdf>

⁷ National Institute for Health and Care Excellence. Interactive simple telehealth for the management of blood pressure (Internet). (2012 Nov; cited 2016 Nov 23). Available from: <https://www.nice.org.uk/sharedlearning/interactive-simple-telehealth-for-the-management-of-blood-pressure>

⁸ Cottrell E, Chambers R, O'Connell R (2012) Using simple telehealth in primary care to reduce blood pressure: a service evaluation. *BMJ Open* 2: e001391.doi:10.1136/bmjopen-2012-001391

Pathway Redesign

- Based on previous evidence⁸ Florence⁹ was identified as the 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.

⁹Simple Shared Healthcare (2016). About us (Internet). (2016 Jan; cited 2016 Nov 27). Available from: <http://www.simple.uk.net/home/about-us>

The Clinical Decision

[Edit patient](#) or [add a protocol](#)

[Send text mess](#)

Messages

[All Messages](#)

[Reminders](#)

Protocol

[Anticoagulation
Confirmation](#)

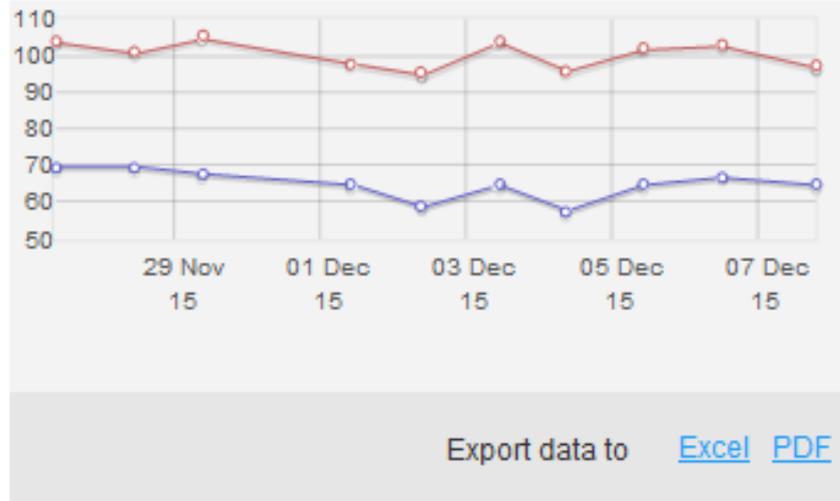
[Daily Blood Pressure,
Readings only](#)

Services

[Blood Pressure](#)

[Medication](#)

Finished +



Filter data

Quick look:

Choose a set date range

Custom range:

Start date:

End date:

Readings	Messages
Date	Reading
7 th Dec 2015 19:20	97 65

Impact

- The redesigned pathway is now complete in 8 days from identification to treatment initiation . Both patient and clinician experience has been positive.
- Thorough evaluation with the initial cohort of 13 patients (aged 26-73) resulted in:

19 follow-up appointments (primary care) avoided

CAPACITY

71 patient contacts avoided

ADMINISTRATION

44 patient journeys avoided

TRAVEL / ENVIRONMENTAL

Identified 4 cases of white coat hypertension (30%)

CAPACITY

Reported Outcomes

The Patient

- **Faster diagnosis** or exclusion of hypertension
- **Reduced** patient **uncertainty**
- **Confidence** and ability to **self-manage** improved
- **Improved Understanding** of hypertension and associated complications
- **Improved patient acceptance** of new or increased medication

Reported Outcomes

The Clinician

- **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 with in built detection

Reported Outcomes

The System

- Improved **patient flow**
- Reduction in **patient contacts**
- More **cost effective** pathway
- Generates **Capacity**
- Opportunity to support the delivery of **person centred care** when treatment planning

Conclusion

- Sustainable at Scale: low cost, low tech, ease of use.



Blood Pressure &
Weight



Heart Rate & Blood Oxygen



Blood Glucose



Exercise Tracking



Medication Compliance



Symptom Management

Conclusion

- Generates capacity within the system
- 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 on a national pathway based on this methodology which has been adopted as part of a national evaluation model.



THANK
YOU!