Nottingham West Primary Care Network Cardiovascular disease prevention

1. Introduction:

There is a growing awareness amongst health care professionals that too many people are still living with undetected, high-risk conditions such as high blood pressure, raised cholesterol, and atrial fibrillation.

In England, there are around 5.5 million people with undiagnosed hypertension [1].

Hypertension is the second largest known global risk factor for disease and disability, after poor diet, and accounts for approximately half of all strokes and ischemic heart disease events globally. [2]

Lowering blood pressure and reducing cardiovascular risk is one of the most effective ways of preventing heart attacks, strokes, and premature death. We also know that inequalities in high blood pressure exist, with those in deprived areas being 30% more likely to have high blood pressure [3].

2. Method:

The PCN employed a small team of two prescribing pharmacist and one pharmacy technician from May 2022, to work with patients across all twelve GP practices. The team identified patients with a BP reading on record of **140/90mmHg** or higher, who were not already being investigated for, or diagnosed as hypertensive. They **risk-stratified patients in line with NICE guidance** [4] before inviting all suitable patients to opt in.

Patients could be referred to their **local community pharmacies** for ambulatory BP monitoring, or to complete seven days of **home blood pressure monitoring**. Results were sent directly to the PCN team, all average BP (home and ambulatory) readings of **under 135/85mmHg** were recorded and coded into the patient record and diet and lifestyle advice is given. All patients with a reading of **135/85mmHg or above but below 180/120mmHg** were offered further diagnostic investigations such as **bloods, ECG, and urinalysis**. **QRisk** [5] were completed for each patient. Where appropriate, a diagnosis of hypertension was made, and treatment discussed / commenced.

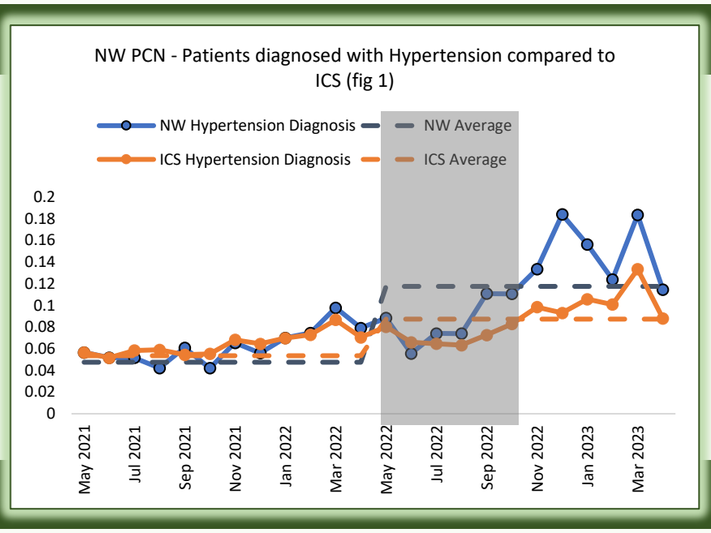
Shared decision-making for both hypertension and statin therapy plays an important role within this intervention. Medication is **prescribed and titrated** until the patient is stable, at which point the patient is placed back in the care of their GP. For patients identified as requiring additional input from **secondary care**, referrals are made at the point of hypertension diagnosis, the team continue to support the patient throughout this journey.

3. Results:

In the first twelve months of data collection (by End April 2023), **3,250+** patient records were reviewed. **81%** of patients were suitable

50% opted in. Of these, 92% opted for home blood pressure monitoring with 8% being referred to community pharmacies for ambulatory blood pressure monitoring.

This service is **achieving a 25% hypertension diagnosis rate,** demonstrating significantly increasing detection in comparison to Nottinghamshire ICS (Fig 1).



We have so far diagnosed and **additional 312 people** with hypertension, freeing up more than 3,100 General Practice appointments.

In line with UCL patterns predictions for well controlled hypertension across a population (fig 2), this equates to **prevention** of **1.9 heart attacks** (£16521) and **2.8 strokes** (£41,176) over the next three years.

If this were to be **adopted nationally**, we estimate the NHS could prevent: **1174 Heart attacks and 1735 Strokes, saving the NHS £35.5M (£35,550,145) and freeing up almost 2million (1,911,921) GP appointments.**

Patient rated this service highly, with **90%** of patients stating they **would recommend** this service to others

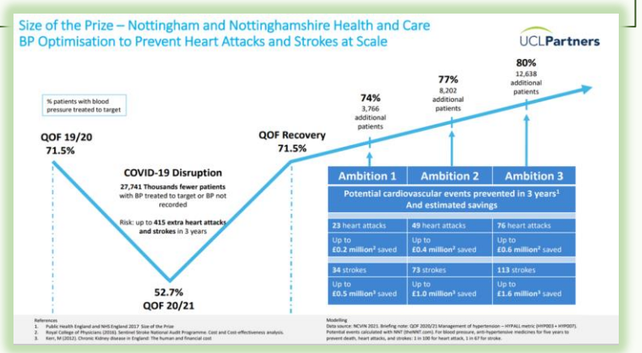
4. Discussion / Future:

Working at scale to tackle hypertension is **achievable**, provides **good care** for patients and **supports** general practices.

Sustainability is being achieved long term by taking on the management of **all newly identified** hypertensive patients as well as identifying and understanding the needs of groups of patients **overrepresented** within case finding data, supporting them to engage with services in a way that is accessible to them in line with Core20PLUS5 priorities [6]

This project is easily **replicable**, to date two other PCNs and the ICB pharmacy team are actively using this learning to develop their own models.

Further **expansion** of the service includes piloting partnership-working with high street opticians, further lipid management and anticoagulation of patients with atrial fibrillation at scale.



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