

Addressing complexity in healthcare with AI to advance prevention, treatment and equity

May 2024



### Practical, actionable tools to support CVD high impact interventions



### Use case for AI in primary care to advance prevention, treatment and equity - case study

Dr Shona Schofield

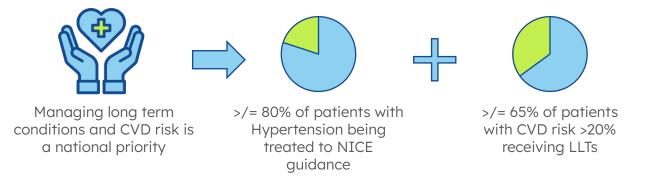
May 2024

## Getting More Patients Treated to Target: BP, CHOL, CVD Prevention

### **Practice Challenge:**

Managing secondary prevention of hypertension population more efficiently, and more effectively

If you have a multi-disciplinary team providing care for this population, the Metadvice-AI technology can help



"We're able to identify particular cohorts at risk in secondary prevention, those that may be suboptimally treated or not treated at all and prioritise who we're contacting.

It makes it easier to manage the workload and means patients can see the right person to help them."



Dr Shona Schofield GP Partner & PCN Clinical Director Ball Tree Surgery, Lancing PCN

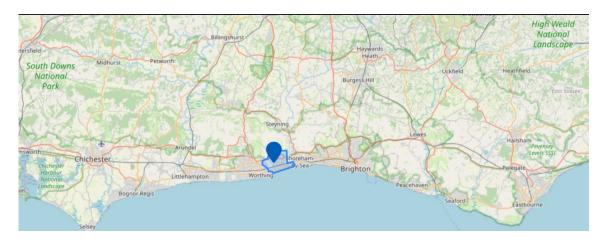
## About Ball Tree Surgery, Lancing and Sompting

# Lancing - a large coastal village in West Sussex, with areas of high deprivation.

- GP practice with 2 sites
- 4 GP partners, and a multi-disciplinary team of 30
- Including 2 pharmacists, 2 pharmacist technicians, 3 ANPs
- 14,300 registered patients
- Top 10% for cardiovascular disease
- Above average hypertension prevalence
- Higher than average age 60+







## Starting point

### Why did we need to consider change?

- Above average Hypertension prevalence (3052: 21%) BUT below average % control
- Top 10% for CVD (699: 5%)
- Below average number of people taking statins.
- Below average Lipid control
- GPs over-stretched with the daily demand, let alone the preventative needs
- Changing workforce needing rationalisation of workstreams
- New QOF indicators Chol 001 & Chol 002



## Project overview - the opportunity to test a new operating model

### Improving prioritisation of care, improving access, maximising capacity and personalising treatment plans to meet the needs of patients.

- Increase in case-finding activity for hypertension and high cholesterol
- Many already-identified patients needing optimal treatment offer
- Prescribing pharmacist to run lipid management pathway
- Prioritise contacting the patients who will benefit most from a change in their medication
- More complex patients need to be reviewed by GP or our specialist Pharmacist

Our strategy is to **methodically improve the management of long term conditions**, to **maximise the potential of the diverse clinical workforce**, and to case find and target people who would **benefit most from preventative care**.



## **Practical implementation with Metadvice-Al**

The Prescribing Pharmacist runs the lipid management pathway that also includes hypertension and some elements of CVD reviews.



These are the patients who will benefit the most for secondary prevention.

Can be further segmented by age, gender, current therapy.

### Personalised treatment plan

AI and NICE guidelines determine the recommended treatment plan.

Group patients by treatment next steps.

## Improve clinical workflows

Identify which clinician should see which patient.

Frees up GP time & capacity, increases efficiency, supports workforce diversification.

## Effective clinical decisions

All relevant data and information in one place.

Presented in a single screen, increasing efficiency and clinical effectiveness during consultation.

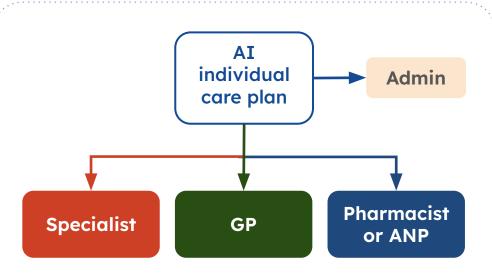
## Freeing up GP capacity and avoiding unnecessary appointments

### Workforce Sustainability: Right Patient, Right Clinician, Right Time

## We segmented workload by recommended treatment next actions

#### **CVD Secondary Prevention** Caseload and activity segmentation Refer to consultant Check statin with renal 51.5% Add PCSK9i or Inclisiran Agree meds with renal specialist Add bempedoic acid Add ezetimibe Consder restarting Start atorvastatin 20 Start atorvastatin 80 25.2% Increase statin Blood test or Continue current treatment 9.3% 9.0% 5.0% Specialist **GP / Senior Pharmacist** Pharmacist / ANP Pharmacist / Technician Admin book HCA appt

## And allocated to the most appropriate member of the team



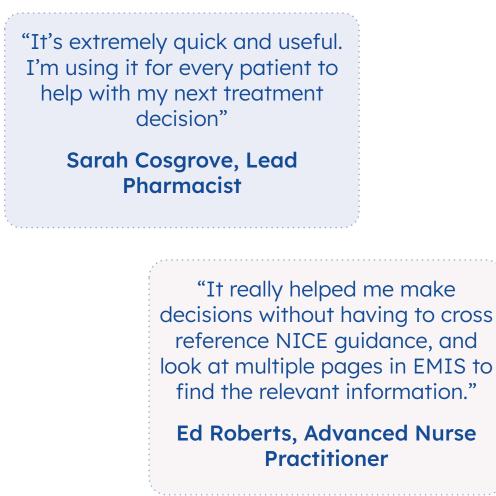
The practice can now **plan to provide** the **appropriate number of slots** for GPs, Pharmacists, ANPs, HCAs.

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## Provide Clinicians with a Simple, Single view

### More Time to Focus on the Patient, and Shared Decision Making

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ACTIVE CONDITIONS	2023									2024			
Hypertension	_					_			_		_		
Lipids						_	_				-		
Obesity						_			_	_	_		
Renal	-					_			_		-		
Type 2 diabetes						_			_				
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## In clinic use of Metadvice tool

### The advantages we found

- One click to page that summarises patients CVD risk and care
  - Current state of play for CVD risk factors
  - Q-risk
  - What treatments previously tried •
  - Current medication •
- Clearly visible to **share with patient**, and demonstrate risk and treatment suggestions
- **ANP**s and **Pharmacists** use to support decision making for lipid and BP treatment options, in line with NICE guidance
- GPs use at time of reviewing lipid results, assisted with directing to appropriate clinician (e.g. just needing statin increase, vs BP treatment and lipid new medication), plus **Q-risk**



## Population health impact: CVD Prevent indicators

### **CVD Treated to Target Improvements**

#### September 2022

with GP recorded most recent blood preceding 12 mon 2.5mmol/l or LDL- Proportion %	Percentage of patients CVD (narrow definition cholesterol level (mea ths) is non-HDL choles cholesterol less than 1	n), in whom the asured in the sterol less than	with GP recorded ( most recent blood preceding 12 mont 2.5mmol/l or LDL-( Proportion %) IE Quality Improvement Dat	ercentage of patients CVD (narrow definition cholesterol level (mea ths) is non-HDL chole cholesterol less than 1	n), in whom the asured in the sterol less than
All Persons Data			All Persons Data		
<b>14.09%</b> Area value	27.23% System median	24.98% National value	<b>23.32%</b> Area value	<b>31.88%</b> System median	<b>30.93%</b> National value

CVDPREVENT data shows a 9.23 point improvement over 12m\*, outperforming both system (ICS) and national

\* Updated Feb 2024 - this is now 29%

September 2023

## **User Experience**

"We're able to identify particular cohorts at risk in secondary prevention, those that may be suboptimally treated or not treated at all, and prioritise who we're contacting.

It makes it easier to manage the workload, and means patients can see the right person to help them.

Really helped the team, giving confidence that they were looking at the latest NICE guidance, and allowing those professionals to take a wider view - be much more proactive, spend more time with the patient, and understand what's most important to them."



Dr Shona Schofield - GP Partner & PCN Clinical Director Copyright © Metadvice 2024

## Ball Tree Case Study: 12m Results

#### Improvement in population health:

- Clinically significant improvement in Blood Pressure and non-HDL Cholesterol in patients at high risk of cardiovascular events.
- 76% of patients who received a LIPID medication change reduced their non-HDL cholesterol
- The average non-HDL reduction 18.9%

### Freeing up GP capacity, and increasing practice efficiency:

- Pharmacist reviewed 908 patients, who would previously have been reviewed by the GP
- Similar number identified as requiring no change to treatment, so no appointment required
- Overall primary care workforce efficiency equivalent to £25,825

### Supporting diversification of primary care workforce:

- Data from Metadvice user shows over a ten-week period, 650 individual patient recommendations loaded, with between 88% and 92% of that usage per week by Pharmacists.
- "...Our pharmacists are now upskilled in the broader treatment of lipids alongside hypertension".

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## metadvice

# Contacts for more information on assurance, commissioning, implementation & commercial.

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