NHS
Barts Health
NHS Trust

Lipid Optimisation Programme: Redbridge, North-East London

August 2023

ELPE
East London Cardiovascular Disease Prevention Group

NHS
North East London
Integrated Care Board

UCLPartners

ceg
Clinical Effectiveness Group

Introduction

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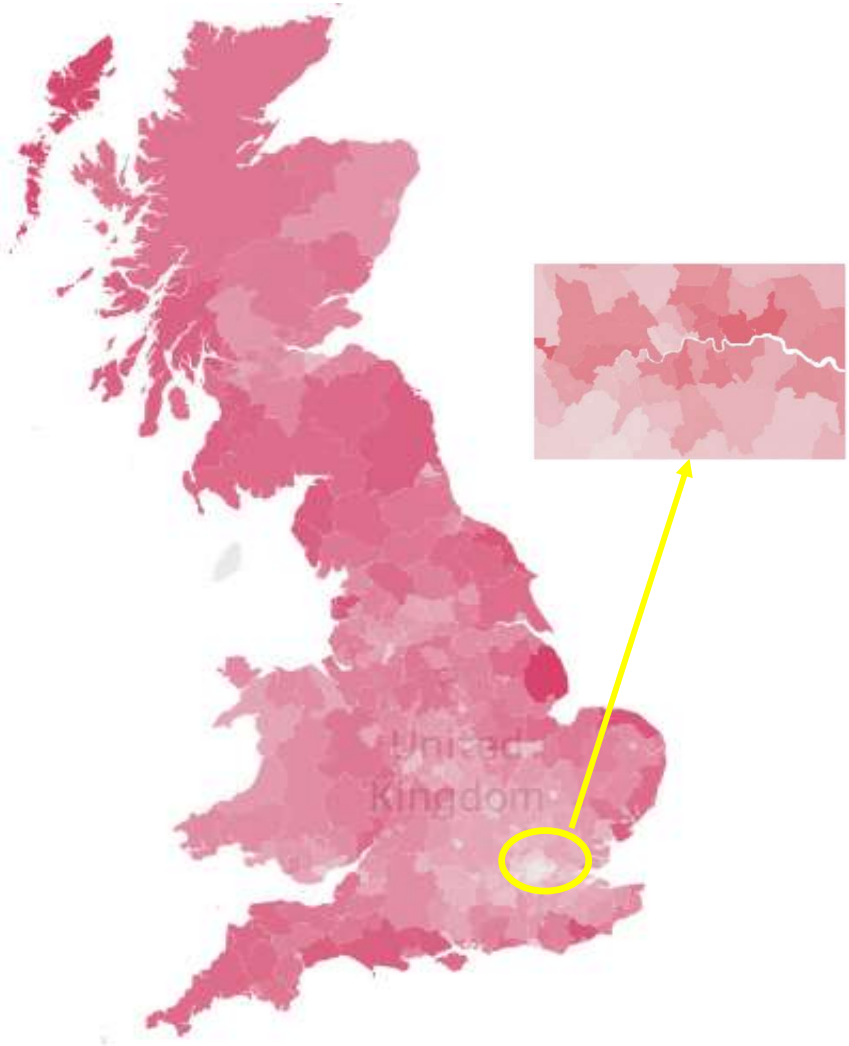
Atherosclerotic cardiovascular disease (ASCVD) is a leading cause of mortality worldwide and claims around 136,000 lives across England each year. The relationship between hypercholesterolaemia and ASCVD is well established. The reduction of low-density lipoprotein (LDL) with lipid modification treatments has been shown to reduce the risk of ASCVD events and mortality. For every 1 mmol/L reduction in LDL, there is a reduction in annual ASCVD risk of up to 22%, regardless of the intervention.

North East London (NEL) has a high prevalence of cardiovascular disease (CVD) and some of the most ethnically diverse and deprived populations in England. Most recent data suggest there are 130,000 people living with CVD in NEL with 220 deaths recorded each month due to heart and circulatory diseases.

NEL Integrated Care Board focuses on working together in partnership with integrated services across primary and secondary care to address our community's health inequalities, reducing premature CVD mortality and delivering consistent high-quality services. Patients with established CVD requiring lipid lowering therapy optimisation were prioritised.



British Heart Foundation (undated). 'Heart statistics publications'. British Heart Foundation website. Available at: Heart statistics - Heart and Circulatory Diseases in the UK - BHF
O'Keefe JH, Cordain L, Harris WH, Moe RM, Voegel R. (2004) Optimal low-density lipoprotein is 50 to 70 mg/dl: Lower is better and physiologically normal. J Am Coll Cardiol. 43(11) 2142:2146

CVD Prevention at Barts & NEL

Barts Health NHS Trust has prioritised CVD prevention across NEL. The Barts Heart Centre hosts a novel CVD prevention department bringing together expertise in advanced risk factor management. The department also hosts the outward facing “East London Cardiovascular Disease Prevention” (ELoPE) programme, which leads on designing and delivering CVD prevention across NEL, in partnership with local partners and the integrated care system.

CVD Prevention Department @ Barts

- CVD Risk & Lipids
- Hypertension
- Cardiac Rehab
- Community Nurses
- Pharmacy Led Prevention

ELOPE VISION
‘A secondary care led initiative to deliver an ambitious strategy for reducing premature CVD mortality and health inequality in East London working with primary care and public health’

ELoPE
East London CVD PrEvention

Core Aims

1. Develop and deliver CVD prevention services within the Barts Heart Centre and partner hospitals across NEL
2. Primary-Secondary care joint working to steer and deliver on the CVD prevention agenda for the NEL ICS
3. Leverage NHS and academic expertise with key partners to drive CVD prevention efforts in and with our communities

Multi-organisational collaboration

The Pathway Transformation Fund, from NHS England was approved for 2021/22. The ELoPE and pharmacy team working with primary care leads in Redbridge, developed a new clinical pathway initiative (CPI) for lipid optimisation in everyday practice. The focus was to optimise lipid lowering in high risk patients, and integrate innovative technologies (high intensity statins, ezetimibe and PCSK9 inhibitors) into primary care. A multi-organisational collaborative approach was used to address the national cardiovascular disease (CVD) prevention agenda and unmet need of the local population of NEL.

The following organisations were involved:

Barts Health NHS Trust
A tertiary cardiovascular centre provided specialist pharmacists to identify high risk CVD patients, and access to the CVD risk and lipids multidisciplinary team meeting and clinic.

East London Cardiovascular Disease Prevention (ELoPE)
The CVD prevention team at Barts Health, who provided leadership, project management and engagement with primary care and system partners.

Redbridge Clinical Commissioning Group:
Patients reviewed across 42 general practices within 6 Primary Care Networks (PCNs).

Clinical Effectiveness Group (Queen Mary University of London):
CEG built the search for the UCLP proactive care stratification tools, and provided monthly practice and locality data to demonstrate trends and impact on population health.

UCLPartners (Academic Health Science Network (AHSN)):
Developed the proactive care frameworks for lipid management, searches and risk stratification tools with resources for clinicians and patients

Burden of CVD in Redbridge

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In September 2021, Redbridge had 11,233 high risk people with CVD that were listed in the coronary artery disease (CAD), stroke and peripheral artery disease (PAD)) registers of 42 general practitioners (GP) practices.

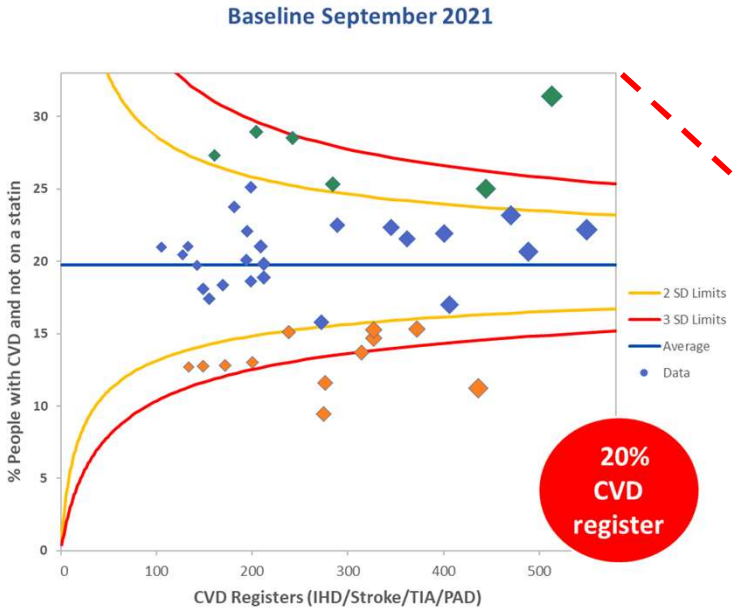
Using UCLP proactive care framework tools, approximately 90% of people with established CVD would benefit from optimising their lipid lowering therapy treatment.

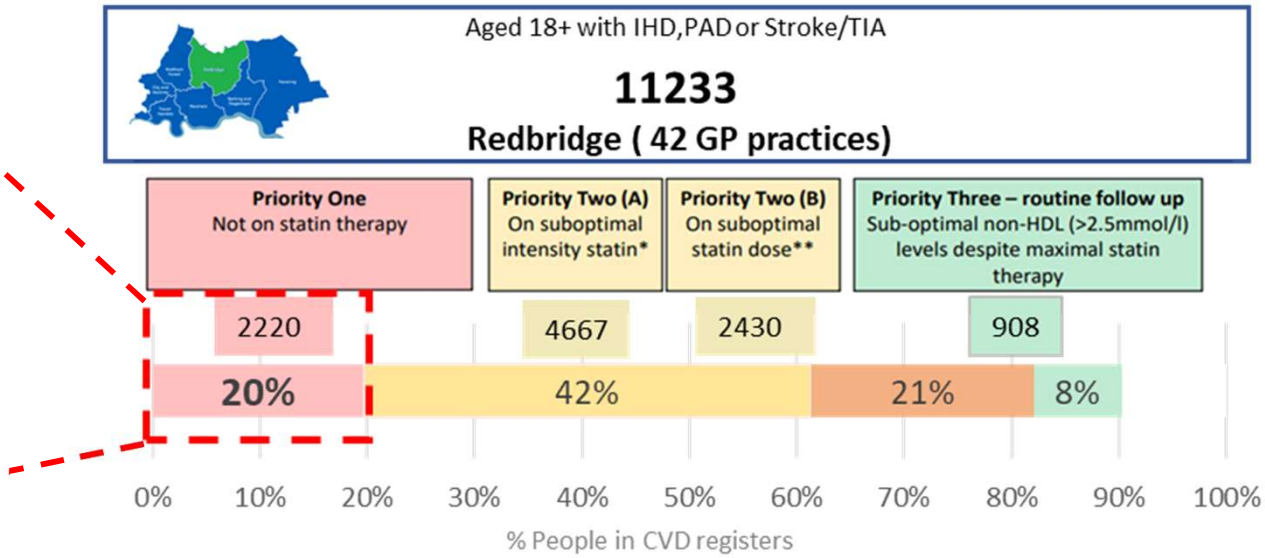
High risk people with established CVD and not taking a statin were prioritised which is reflective of 20% of the CVD register (n=2220).

Heart and circulatory diseases kill more than 1 in 4 people in Redbridge

Heart and circulatory diseases cause **40 deaths** each month in Redbridge

90% of ~ 11,000 people living with CVD have **sub-optimal lipid management in Redbridge**





UCLPartners. Updated July 2022. Proactive Care Framework. Lipid Management including Familial Hypercholesterollaemia. Available at UCLP Proactive Care Framework.

Clinical Pathway Initiative (CPI)

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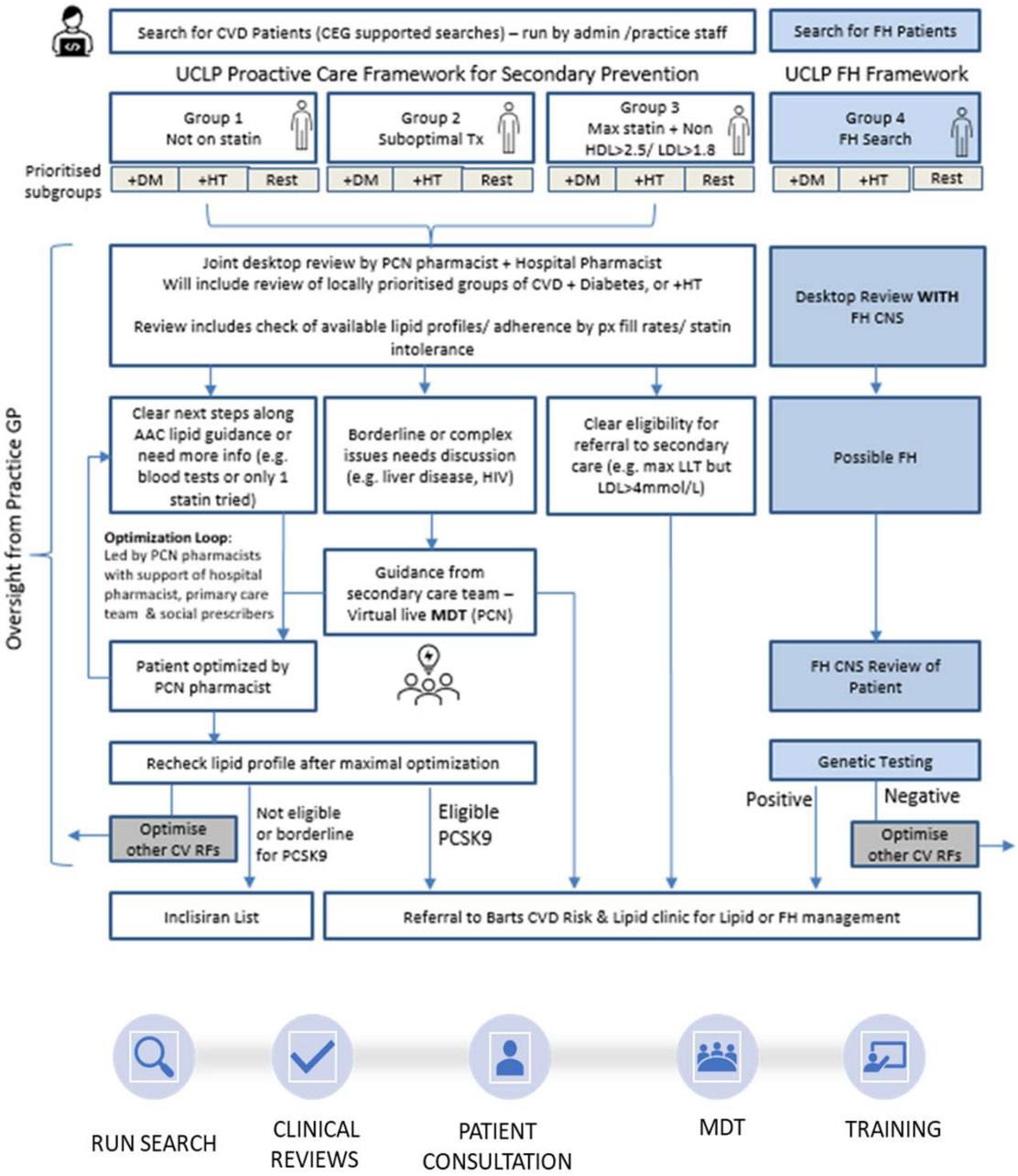


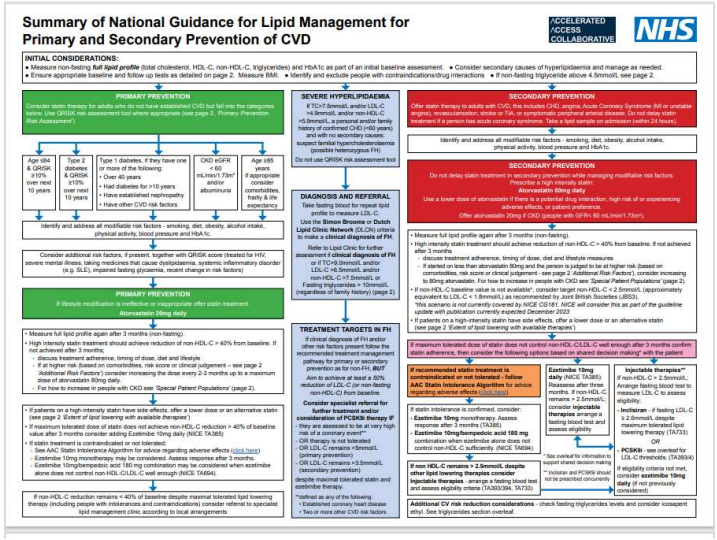
The new CPI involved specialist input from a multidisciplinary team where specialist hospital pharmacists worked directly with primary care teams, general practitioners (GPs), primary care network pharmacists and hospital consultants across the integrated care system to;

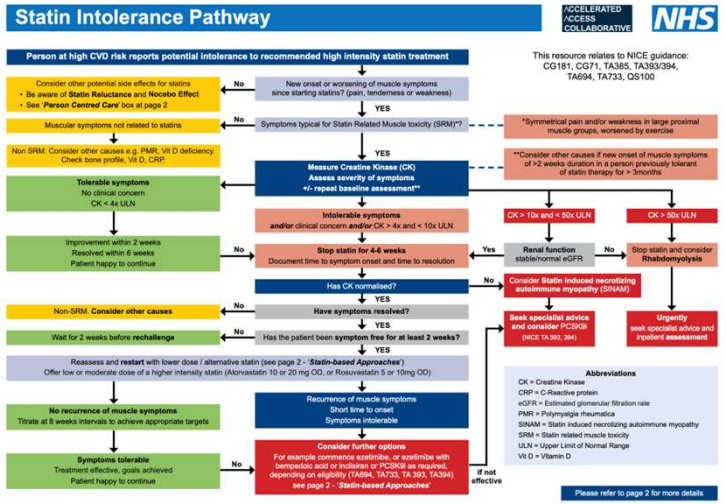
- Identify people with or at risk of CVD;
- Optimise preventative medication usage and improve access to new therapies;
- Treat patients closer to home without the need for onward referral to hospital;
- Reduce health inequalities and premature CVD deaths.

Regular working group meetings were also set up to monitor progress, lessons learnt and review challenges with the programme.

Resources

Lipid management guidelines produced by the NHS Accelerated Access Collaborative (AAC), UCLP proactive care frameworks and local services were used to deliver evidence based, innovative sustainable local services for its communities while reducing the incidence of heart attacks and strokes.





Local & specialist services:

- New Medicine Service (NMS) to support adherence,
- Language line,
- Social prescribing,
- Smoking cessation programme,
- Health coaches/dietician or online weight management programmes, gym on prescription to support lifestyle intervention,
- Health checks were integrated in the programme,
- CVD risk and lipids clinic,
- Tier 3 specialist weight management service.

UCLPartners. Updated July 2022. Proactive Care Framework. Lipid Management including Familial Hypercholesterollaemia. Available at UCLP Proactive Care Framework.

NHS England. Summary of National Guidance for Lipid Management for Primary and Secondary Prevention of CVD. Nov 2022 Available at: https://www.england.nhs.uk/aac/wp-content/uploads/sites/50/2020/04/lipid-management-pathway-v6.pdf

NHS England. Statin Intolerance Pathway. Available at: https://www.england.nhs.uk/aac/wp-content/uploads/sites/50/2020/04/statin-intolerance-pathway-v2.pdf

Educational Training to Support Pharmacists working in GP Practices managing Lipid Management

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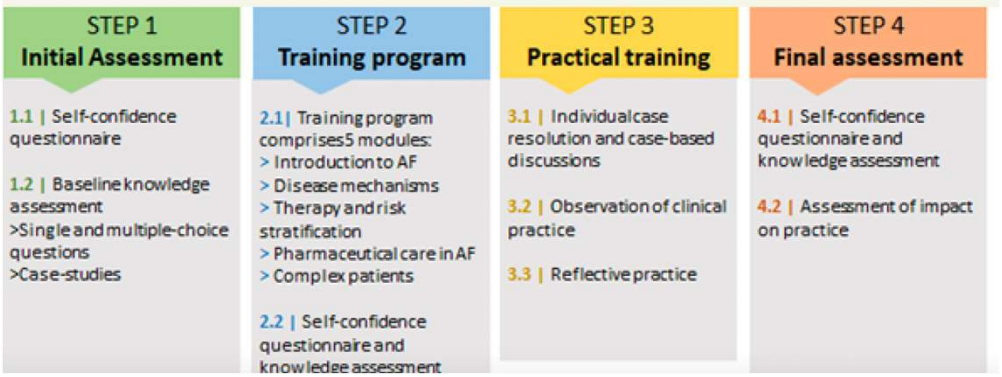
A specialist pharmacist developed an education and training programme for the PCN and practice based pharmacists to support the lipid management of patients with CVD and to optimise prevention holistically. PCN pharmacist training integrated a focus on soft skills that included shared decision making and motivational interviewing techniques for improved consultations.

This was based on Miller's pyramid and the steps highlighted in the diagram below. Specialist pharmacists from Barts Heart Centre, were supporting joint targeted reviews with PCN pharmacists for people with CVD who were not on a statin. Consultation with individual patients were scheduled with focus on CVD secondary prevention lipid lowering therapy optimisation.

To support reviews of complex patients, biweekly CVD risk and lipids MDT meetings (included lipid specialist consultants, endocrine and cardiology consultants and registrars, familial hypercholesterolemia (FH) specialist nurse and specialist pharmacist) were held, with outcomes documented in the patient's practice notes and with referrals where appropriate. All these interventions aligned with the training programme.



Improvement:

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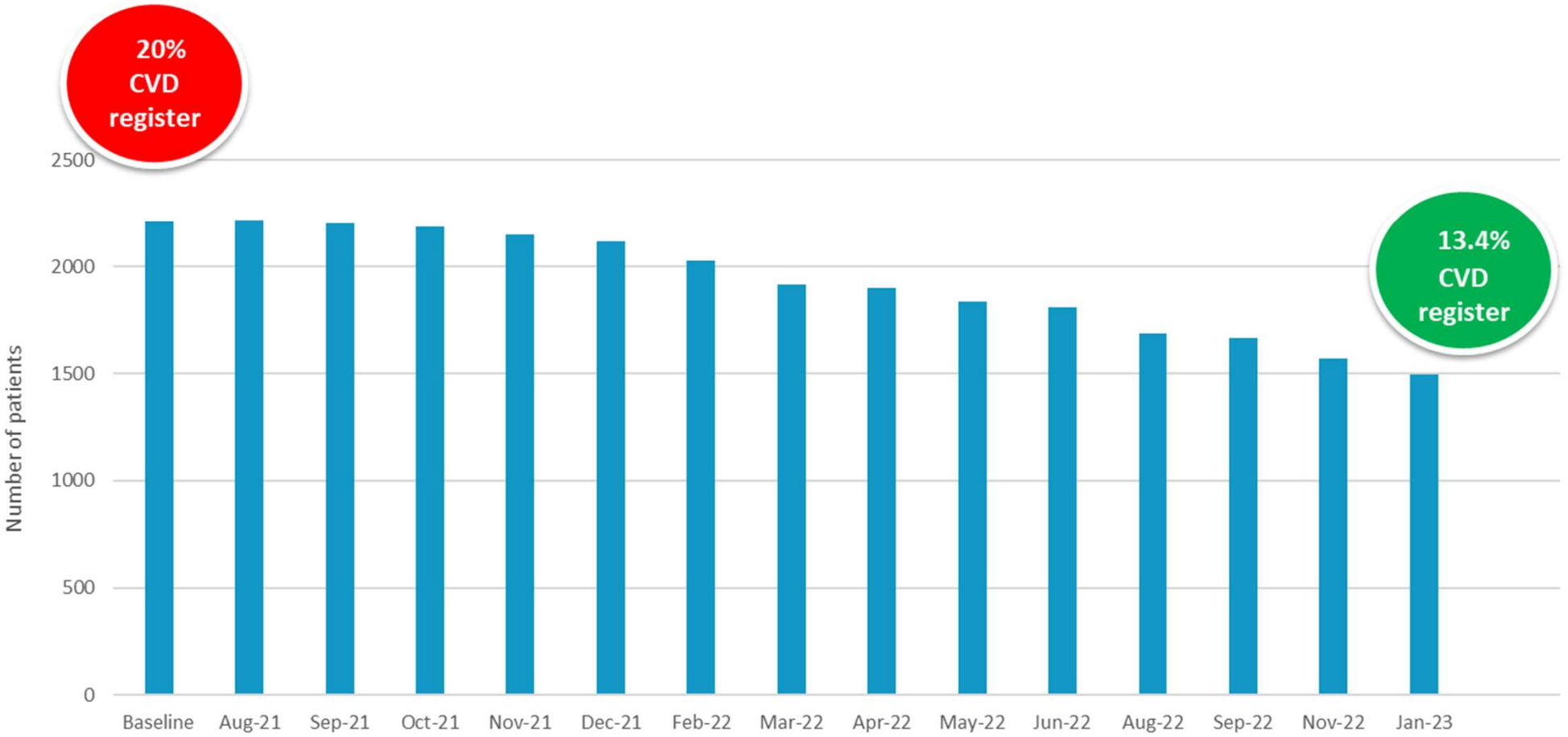
Redbridge Practices number of people with CVD and not on a statin over 12 month pilot programme



CEG data April 2021 to January 2023

Improvement:
Uptake of lipid therapies

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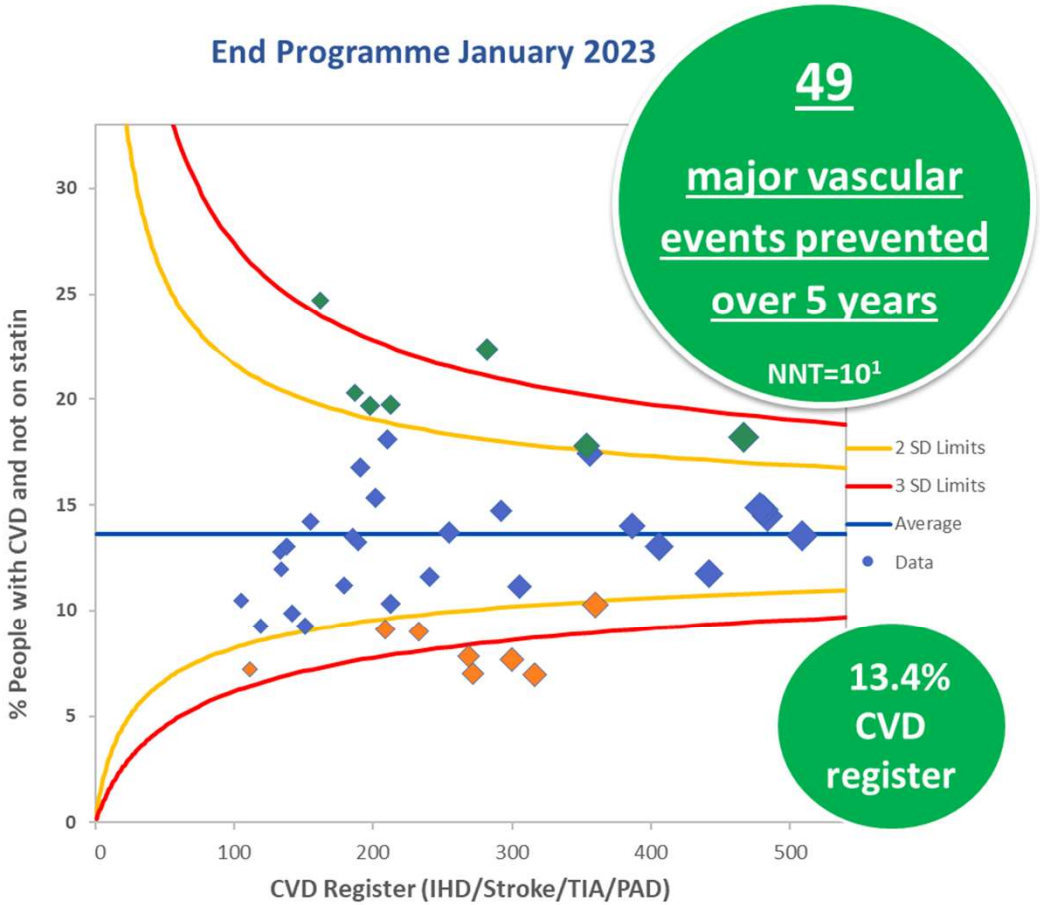
Lipid Lowering Therapy (LLT)

22% (495/2,220) Statin

2% (52/2,220) Non-statin LLT

- 29 Ezetimibe
- 5 Bempedoic acid
- 7 Inclisiran
- 6 Alirocumab
- 5 Evolocumab



A positive unintended consequence of the programme offered statin to 186 patients stratified as requiring primary prevention, which were initially identified as having CVD but incorrectly coded with CVD or having non-atherosclerotic cardiovascular disease (NACVD).

Sixteen patients were referred for Familial Hypercholesterolemia (FH) assessment.

1. Colin R et al. Interpretation of the evidence for the efficacy and safety of statin therapy. Lancet 2016; 388: 2532 – 2561. [Online] Available at: https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(16)31357-5/fulltext

Key findings

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- 60% of people with CVD who were not on a statin and were not naive to treatment, therefore patients required longer consultations including motivational interviewing techniques, including educating the patient on lipid lowering therapies.
- 7% of people with CVD and not on statin coded as statin-intolerant and were eligible for non-statin lipid lowering therapy.
- 10% of people with CVD clinical coding required removal from the CVD registers.
- 10% of people were coded with personalised care adjustments for NACVD or risk outweighed benefit.
- 5% of people declined lipid lowering therapy.
- PCN pharmacists were more comfortable with optimising lipid lowering therapy to target rather than reviewing diagnosis and/ or discussing statin rechallenge with individuals, as part of routine reviews. Specialist pharmacists focused on completing targeted reviews for people at high CVD risk, not on a statin, while PCN pharmacists were encouraged to complete opportunistic reviews in optimising lipid lowering therapy as part of their medication reviews.

Key drivers

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- Using primary care protected learning events (PLE), practice lunchtime learning sessions, newsletters as well as providing PCN and GP Federation updates and individual practice updates supported education and training.

- Nominating PCN CVD Champions at the practices, creating a community of practice for CVD prevention to promote best practice. Scheduling introductory meetings with provision of resources including AAC lipid management and statin intolerance guidelines.

- This CPI continued during the COVID-19 pandemic period with introduction of remote access to patient records and consulting patients via telephone which has also reduced the need for multiple hospital appointments.

- Integrating non-clinical staff and pharmacy technicians to utilise the wider workforce for productivity and efficiencies, with workflow tasks i.e. referrals, repeat bloods, recall, etc.

- North East London (NEL) education and training programme was mapped to the pharmacist advance practice.

- Coordinated digital integration standardising data entry and outputs supported by CEG.

Successes

- This partnership provided patients with access to cutting-edge innovations that continues to help deliver excellent care - 25% improvement of lipid lowering therapies for optimal CVD secondary prevention.
- The vision for delivering an integrated approach in primary care was executed as per Fullers Stocktake report recommendations for access, personalised care and prevention. The CPI integrated specialist pharmacists & virtual specialist MDT reviews into primary care services. The programme has enhanced relationships between the primary and secondary care teams.
- Digital integration and engagement with primary care teams is essential to ensure standardised data entry templates and standardised reporting of outcomes using enterprise-wide reporting from GP electronic records systems – both EMIS and SystmOne – provided by CEG across NEL.
- A personalised care approach was taken by providing a shared decision-making consultation to include language line, involving family members, patient information leaflets (e.g. Heart UK), face to face consultations where required especially for those that have hearing challenges. This enabled tackling health inequalities.
- The development of an education and training programme has gone on to be utilised by the wider workforce and for programmes such as the Salaried Portfolio Innovation (SPIN) scheme for PCN pharmacists. PCN pharmacists were encouraged to undertake lipid optimisation Quality Improvement projects.
- Replication and expansion of the programme across other places in NEL including Waltham Forest, Newham and Barking & Dagenham have begun.
- CPI is transferable to other long term conditions.

Fuller, C. Next Steps for nitrating primary care: Fuller Stocktake report. [online] Available at: https://www.england.nhs.uk/wp-content/uploads/2022/05/next-steps-for-integrating-primary-care-fuller-stocktake-report.pdf. May 2022.

Primary Care Network team feedback

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*'The pilot was a **rewarding experience with a timely intervention given that CVD is the leading cause death in our time**'*

GP

'I appreciate the call and the explanation of the importance of my tablets. I don't remember this being explained to me and as I felt no different with them had stopped. Now I understand, will restart my statin and clopidogrel'

Patient

I enjoyed to find the reasons why patients were on the register and removing them, it appealed to my investigative nature

Practice Manager

*We have **built strong relations with the specialist team** and **feel more confident in prescribing statins and rationalising with patients who do not tolerate statins**'*

PCN Pharmacist

Meet the team

NHS Barts Health NHS Trust

Welcoming | Engaging | Collaborative | Accountable | Respectful | Equitable

Working Together across NEL ICB with patients at the heart of our service

NHS Barts Health NHS Trust

NHS Redbridge Clinical Commissioning Group

UCLPartners

ceg Clinical Effectiveness Group

ELPE East London Cardiovascular Disease Prevention Group

Acknowledgement

- **Steering group**

Co-Chairs: Dr S. Ali, Professor R. Patel

Members: Dr C. Carvalho**,** H. Albert, S. Antoniou, R. Clements, N. Hamedi, I. Khan, Dr B. Krishek, I. Obianwa, J. Robson; S. Waite; J Chahal; P. Wright

- **CVD risk & lipid clinic multidisciplinary team**

Dr J. Abishek, Dr F. Choudhury C. Guerreiro, S. Fhadil, Dr A. Lakhdar, Professor R. Patel, Dr A. Siddiqi

- **All Redbridge Primary Care Network (PCN) Clinical Director Leads; Supervisors and Pharmacist**
- **All Redbridge Practice Clinical Leads, Practice Managers and practice staff**
- **Redbridge Medicine Management Team**
- **East London Cardiovascular Disease Prevention Group (ELOPE)**
- **Barking Havering Redbridge Community Education Provider Network (BHR CEPN)**
- **North East London (NEL) Clinical Advisory Group**
- **NE London Clinical Effectiveness Group**
- **NEL Cardiac Clinical Network**
- **Long Term Condition Transformation Board for BHR ICP**
- **UCLPartners**