UCLPartners
Health Innovation

Cholesterol Point of Care Testing Evaluation

Interim report. 03/12/25

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Foreword

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Cardiovascular disease remains one of the leading causes of premature mortality and a major driver of health inequalities across the UK. In North East London, our communities are diverse, young and disproportionately affected by preventable cardiovascular risk. The need for proactive and accessible prevention has never been greater. Through the ELOPE-CVD programme, we have sought to redesign pathways, strengthen integration across sectors and deliver cardiovascular prevention closer to home. As Clinical Lead for the workstream, I have witnessed firsthand the impact that community-based prevention can have on improving access and reducing inequalities.

The cholesterol POCT initiative represents a central achievement within that ambition. The Afinion™ technology used in this programme provides diagnostic-quality lipid results, validated to a standard that enables pharmacy professionals to make clinical decisions and if appropriate initiate treatment without duplicative venous testing. This reduces delays, streamlines patient journeys, and alleviates pressure on primary care and phlebotomy services. By equipping community pharmacists with validated diagnostics – alongside structured education, competency assessment and independent prescribing capability, we are reshaping how and where cardiovascular risk is identified and managed.

This model directly advances the NHS 10 Year Plan ambitions for prevention, early detection and community-based management of long-term conditions. It also demonstrates the evolving role of community pharmacy as a trusted and accessible clinical partner within neighbourhood teams. Importantly, pharmacists are often representative of the diverse communities they serve, sharing languages, cultural understanding and lived experiences. This deepens engagement, enhances culturally sensitive communication, and strengthens the trust that underpins effective behaviour change and risk-reduction conversations. Their ability to identify individuals at high cardiovascular risk, including people who may not routinely access general practice, reinforces the vital contribution of pharmacies to Core20PLUS5 objectives and to addressing entrenched inequalities.

This programme has been made possible through strong collaboration between Barts Health, UCLPartners, Integrated Care Boards, community pharmacies, and our colleagues across the voluntary sector, including HEART UK, whose expertise and patient-facing resources have added real value to consultations and public engagement. These multi-sector partnerships have enabled us to build a safe, scalable and governance-led pathway for real-time risk assessment, personalised advice and treatment initiation. Learning from North East London has already informed expansion into North Central London and is shaping discussions about national adoption.

I would like to express my sincere thanks to the community pharmacists whose dedication has made this service a reality, to the residents who took part, and to our system and voluntary-sector partners for their invaluable support throughout this programme.

I am immensely proud of what this collaboration has achieved. The findings presented in this evaluation demonstrate not only the feasibility and acceptability of this model, but also its significant potential to improve long-term cardiovascular outcomes and reduce inequalities. Most importantly, they provide a strong foundation for sustained scale-up as we progress the ELOPE-CVD strategy and support delivery of the NHS 10-Year Plan's prevention ambitions.

This work is an important step toward a future in which community pharmacy and the voluntary sector are firmly embedded as core partners in preventing heart attacks, strokes and premature mortality across London and beyond.

Executive Summary

Programme design and implementation

International evidence demonstrates that point of care testing (POCT) for high cholesterol and cardiovascular disease (CVD) risk in community pharmacies is a feasible strategy. However, a review of the evidence shows there is a lack of robust evidence in published papers on how to successfully implement such a strategy.

Against this background, and in response to growing system pressure in primary care and persistent health inequalities across North East London (NEL), a pilot has been set up with a focus on addressing health inequalities. This programme aligns with multiple national and local strategies, including the NHS 10 Year Plan, the Core20Plus5 approach from NHS England, and a history of local initiatives in this field.

The demographic profile of NEL make this an appropriate topic to target in this area. The area has high levels of deprivation, measured by the index of multiple deprivation (IMD) as well as a mix of different ethnic groups, some of which are associated with higher than average levels of CVD.

The evidence in this interim report indicates that the programme has been successfully set up and is operating in accordance with its aims. It is designed around a clinical pathway for care and has not been designed as an offer of POCT in isolation. The design and implementation of the programme have taken a considerable time and resource to establish.

Establishing effective governance of the programme has been a key factor in its success. This includes buy-in from a wide range of stakeholders, including the public, NHS organisations and community pharmacies themselves. In addition, the robustness of the testing technology has been vital, eliminating the need for 'confirmatory' tests to be carried out following a POCT result.

The selection of appropriate pharmacies has been carried out carefully, to ensure that the programme aims are addressed. The pharmacies must have the capacity, in relation to premises and staff, to carry out the tests and consultations. The implemented model includes cholesterol POCT, QRISK3 scores (a calculated estimate of a person's risk of cardiovascular events), lifestyle intervention, shared decision-making, independent prescribing where appropriate, and digital communication to primary care records. A substantive training programme was provided for participating pharmacy teams, including technical training on the testing technology and training on carrying out consultations and offering appropriate advice with a competency-based assessment at the end.

There has been a learning and iteration process in place in the first six to nine months of operation. This has facilitated rapid identification and resolution of issues, including provision of technical support.

Evaluation

UCLPartners is carrying out an evaluation of the ELOPE CVD POCT programme. A light touch, mixed methods approach is adopted, with the aims of assessing:

- The operational effectiveness of the programme

- The equity of access
- The clinical effectiveness of the programme, to identify people with high CVD risk and to optimise medication
- To assess staff and patient acceptability
- To understand the wider system impact and potential for scale of the programme.

The wider system impact and potential for scale will be addressed in the full evaluation, to be completed in 2026.

A combination of quantitative and qualitative evidence has been collected from:

- The Afinion cholesterol testing machine and QRISK assessments (through the use of HealthTab digital technology)
- A survey of local residents having the test, supplemented by interviews with a small sample of those residents
- Interviews with participating pharmacists
- Interviews with professional roles involved in designing and implementing the programme.

This interim report provides findings from quantitative and qualitative evidence, in the context of the wider CVD prevention landscape.

Testing activity and outputs

The point of care testing service engaged 556 patients across North East London, between January and October 2025, across 7 pharmacies. Most service users were in their 40s and 50s, reflecting strong engagement from working-age adults.

The cohort was ethnically diverse, with more than half of all patients identifying as Asian, alongside substantial engagement from White, Black and other ethnic groups. A large majority of patients were from areas with high deprivation, in particular IMD levels 2 and 3.

Around one in five individuals had a QRISK score of ≥10% (111 individuals), above the healthy level set in national guidelines. This may reflect the identification of people at elevated cardiovascular risk earlier than may otherwise have been the case. A small number of residents (14 individuals) recorded critically high cholesterol levels. A slightly larger group (27 individuals) showed raised triglycerides, above 4.52 mmol/L, which can be associated with metabolic conditions.

24 participants started statins while others opted for healthy lifestyle modifications. In all cases, the consultations provided an important opportunity to raise awareness, support behaviour change, and, where appropriate, initiate timely treatment.

Patterns in the data showed that cardiovascular risk was shaped by a combination of age, smoking, diabetes and blood pressure. Older adults and heavier smokers were far more likely to fall into the high-risk category. Type 2 diabetes was concentrated among high-risk patients, particularly within Black and Asian groups, echoing broader patterns seen in NEL and nationally. Hypertension was also common, and those with stage 2 hypertension or hypertensive crisis were much more likely to have high QRISK scores.

Most individuals had no or just one identifiable risk factor, although a smaller group had multiple risk factors. Differences across deprivation levels were modest, but patients from more

deprived areas accounted for most follow-up outcomes, including statin discussions and lifestyle support. This is important, as data on the population in NEL show higher stroke and heart attack rates in deprived communities.

Actions following testing varied across ethnic groups. Asian patients were more likely to start statins, White patients more likely to decline medication and choose lifestyle change, and Black patients had higher rates of loss to follow-up. These patterns suggest that cultural preferences, communication needs and levels of trust within the healthcare system may influence effective engagement with treatment pathways.

Experience and perceptions of pharmacists

Seven pharmacies in NEL have been included in the programme and have been offering POCT for around 40 weeks. The pharmacists have given positive feedback on the programme so far. They express appreciation for the level of programme support, including the training and the ongoing support provided by the team at Barts Health. It was noted, however, that the resource intensive nature of the start up could be a limiting factor in the ability of some pharmacies to participate.

The pharmacists have not experienced substantial problems with the technology or with the interpersonal aspects of providing consultations and giving results. The latter includes helping people to think through the consequences of their results and make decisions about what they will do in relation to their risks. They note that there is some resistance to starting statins among residents.

The number of tests carried out has broadly been maintained over the 40 weeks of the programme so far. There have been several notable peaks in activity, the reasons for which are not clear at present. There is no evidence of any drop-off in activity over time, so residents are still taking the test at a reasonable rate. There is, however, wide variation in the number tests carried out per pharmacy and the reasons for this are also unknown at present.

Pharmacists report that they feel this it is a positive service, which is providing benefit for local residents. It is helping residents to become aware of the risks of high cholesterol and CVD and to take some action about it, although it is too soon to know whether the programme is having an impact on longer term health outcomes. There may be positive, short-term effects for pharmacies, in relation to increased footfall in their premises and increased customer loyalty.

Experience and perceptions of patients

Residents who have had the test reported good experiences of the POCT programme in both survey and interview responses. It should be borne in mind that, for both of these data collection tools, the sample is small and may be biased towards people who are able and willing to give an opinion, particularly for the interview component.

Residents mentioned the convenience, speed and quality of having a test in a community pharmacy as positive elements of their experiences. There is a clear preference for testing within a pharmacy rather than having this type of test in a GP surgery. They also appreciated the time taken to explain issues, with clear explanations and recommendations tailored to their personal circumstances. Some participants indicated that they would not have sought a GP appointment for this service, highlighting the programme's capacity to engage underserved groups.

It appears that a substantial proportion of participants were aware of hypertension or other health conditions that they had and which may affect their heart health. In some cases at least, this may have influenced their decision to have this test.

Many residents report a positive impact on their intentions to improve their health behaviours, including diet, exercise, weight management and other issues. Diet, then activity were the most common changes indicated. At present, there is no evidence as to whether these intentions have been translated into actions, but awareness has been raised. Some people acknowledged personal challenges in making lifestyle changes.

Residents indicated that they would welcome cholesterol POCT as a routinely available service in community pharmacies, so that they could continuously monitor their health. They would also like to see community pharmacy testing for other health issues, such as diabetes.

Conclusions and recommendations

Operational effectiveness

The cholesterol POCT programme in North East London (NEL) has successfully established a programme for testing cholesterol levels and calculating QRISK scores in NEL. This has taken considerable time and resource, with buy-in from multiple stakeholders.

Training and robust governance procedures are key elements in the effective implementation of this programme. Governance includes competency assessment for pharmacy teams, internal quality control and external quality assessment for the processes, as well as clear prescribing pathways.

The pharmacies have found the programme positive and have been able to provide tests for around 550 people over 40 weeks, which appears to be maintained over time. There are several peaks in activity, alongside variation between pharmacies.

Equity of access for patients

The programme has successfully engaged residents across a broad range of ethnic and socioeconomic groups, with particularly strong uptake among Asian communities. There is high representation among the people using the service from the lower socioeconomic groups, especially IMD groups 2 and 3. This indicates that the programme is able to reach groups who may benefit from early identification and treatment initiation and who may not be accessing GP-based services. There is high representation among the working-age population.

The results show that while only a small number of patients presented with extremely high cholesterol values, a sizeable proportion of them are found to have an elevated level of cardiovascular risk.

Clinical effectiveness, to identify people with high-risk cardiovascular disease and optimise medication in the community setting

Around one in five patients recorded a QRISK score of 10% or higher. This indicates that a meaningful burden of elevated cardiovascular risk within the population using the service has been identified, which has prompted appropriate interventions.

Positive actions have been taken after testing by many individuals, including starting to take statins and modifying health behaviours. These results indicate that the POCT programme is able to identify heightened CVD risk among people who had not previously been identified and who are from population groups associated with higher risk.

The staff and patient acceptability of the programme

The composition of the local community and the facilities and preparedness of the pharmacies are important elements in the selection of participating sites. The support of the team from Barts Health, as well as external, technical support are consistently praised.

Pharmacy teams unanimously report positive experiences and opinions of this service, believing it benefits local residents. It also fits well with other services the pharmacies provide and is felt to be within their competencies.

At the same time, local residents appreciate it and they value the greater convenience and ease of use compared to having a test in primary care. They report positive experiences of the services, in particular the time taken to explain the process and results, and the culturally appropriate advice given.

Many participants expressed a preference for reducing risk through changing health behaviours and there was a substantive level of resistance to statins. The extent to which residents actually adopted healthier lifestyle practices, is not known at present.

The wider system impact of the programme and potential for scale

An assessment of the wider system impact of the programme will be included in the final evaluation report, due in June/July 2026. A programme has already been established in North Central London (NCL), building on the experience in NEL.

Recommendations

The following recommendations are made:

- The ELOPE CVD POCT team in Barts Health should disseminate lessons learned from this programme, along with training, SLA and other resources to support other areas who wish to implement it.
- Thought should be given to how best to enhance collaboration with primary care, building on current GP engagement and optimising existing communication pathways to ensure seamless integration of the pathway.
- The variation in testing activity over time and between pharmacies should be investigated to understand the drivers of successful implementation.
- Thought should be given as to how to best engage patients in the testing programme. This should include the use promotional materials, outreach, and case finding approaches.
- The final phase of this evaluation should provide estimates of long-term health benefit, based on the number of people identified with high QRISK scores and the proportion who make beneficial changes and/or start taking statins.
- The final phase of this evaluation should also assess the wider system impact of this programme, including the potential impact on primary care, and other healthcare sectors.

Background

Context: the population of North East London

In 2023, the total North East London Integrated Care Board (NEL ICB) resident population was estimated at 2.07 million people across eight boroughs[1]. Within NEL, the Borough of Newham has the largest population (365,000) making up 18% of the total, while the Borough of Barking & Dagenham has the smallest at 226,000. By 2041, the NEL population is projected to grow to exceed 2.33 million – this represents growth of 331,000 people since the 2021 census, or 266,000 from today's population. This is equivalent to adding an additional Borough to NEL.

Age

The age composition of NEL population greatly influences the population health needs and demand for healthcare and related services. Although services are used by people of all ages, there are certain ages which require higher levels of health care involvement.

NEL has a young population relative to the whole of England, due to its relatively greater proportion of people in the working age group and fewer in the older age groups from 50 and over. In 2021, the median age in England was 40.7 years; this compares to a median age of 33 years in NEL. Only the Borough of Havering has a median age approaching that of the England average.

Deprivation

Living in a deprived area is associated with poor health and lower life expectancy; it is negatively associated with almost all health outcomes. Whilst it is an area-based measure, and is not applicable at an individual level, we frequently see patterns at population level showing poorer health outcomes and higher risk factors among individuals from more deprived areas. Throughout the Covid-19 pandemic, many of the inequalities that were already widely associated with deprivation are expected to have worsened.

The NEL inner London places of the Borough of Barking and Dagenham, Hackney and to a slightly lesser extent Newham and Tower Hamlets are some of the most deprived places in England. Barking and Dagenham is ranked 22nd and Hackney 23rd most deprived out of 317 local authority areas in England. Newham is ranked 43rd and Tower Hamlets 50th. Waltham Forest is ranked at 82, within the more deprived half of local authority areas. Redbridge (173) Havering (180) and City of London (212) are in the less deprived half of local authority areas. However, each has within it small areas of high deprivation which may experience worse health outcomes and inequalities associated with deprivation.

The NHS England Core20PLUS5 approach recommends targeted action to the population living in the most deprived 20%, or top two deciles of the index of multiple deprivation (IMD) – i.e. the 'Core20'. Across the whole of NEL, 24% of the population, or approximately 489,000 people, live in areas ranked in the Core20 most deprived in England. This, however, masks a great deal of variation across the places within NEL.

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[1] The data in this sub-section is taken from North East London Health and Care Partnership. NEL Insights Team. Profile of the demography of North East London. Version: 2.0. October 2023

In the Borough of Barking and Dagenham, over half (54%) of the population (114,000 people) live in an area ranked among the most deprived two deciles of the IMD. In the Borough of City and Hackney, 40% of the population (117,000 people) live in those most deprived deciles. Barking and Dagenham is notable in that 99% of their population live in a lower level super output area (LSOA)[2] ranked in the most deprived 50% in England. In the Boroughs of Tower Hamlets and Newham as well, deprivation affects a considerable proportion of the population. In Tower Hamlets 29% (95,000 people) live in LSOAs ranked in the most deprived two deciles, and in Newham 24% (85,000 people) live in LSOAs ranked in the most deprived two deciles.

Ethnicity

The population of NEL is hugely diverse by ethnicity, country of birth and language. Understanding this diversity is important as evidence shows that health and other outcomes can be influenced by these factors. They are also important to consider in relation to work with communities to design, plan and deliver the appropriate services to maintain and improve health in NEL.

More than half (54%) of NEL's population is made up of people of the global majority (defined as all ethnic groups except white British and other white groups), compared with 18% across England overall. Across NEL London as a whole, using aggregated ethnicity groupings, the make-up is 46% White, 30% Asian, 14% Black and 5% each for 'Mixed' and 'Other ethnic groups'. This picture varies significantly by place (a geographical area or neighbourhood within the ICB).

Of all NEL places, Havering has an ethnicity profile closest to the England average with 75% of the population being of a white ethnic group and 25% from the global majority, this compares to 82% and 18% in England. In contrast, Newham is the most ethnically diverse of NEL places and also one of the most diverse in England.

Hypertension, hypercholesterolaemia and point of care testing

Cardiovascular disease

Cardiovascular disease (CVD) is a key priority in the 10 year plan for the NHS in England[3], as it is one of the biggest causes of premature death in the country. There is a strong link between CVD and deprivation, with mortality rates being more than twice as high in the most deprived areas compared with the least deprived in England in 2023[4].

Hypertension case-finding and optimal lipid management is one of the five key areas of focus in the Core20PLUS5 approach from NHS England, designed to inform action to reduce healthcare inequalities at both national and system levels[5]. High blood cholesterol is a significant risk factor

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[2] LSOAs are produced by the Office of National Statistics (ONS) with each Census and are a standard statistical geography used for reporting small area statistics.

[3] Fit For The Future. 10 Year Health Plan for England. Crown copyright 2025 Fit for the future: 10 Year Health Plan for England Accessed 13/11/25

[4] Office for Health Improvement & Disparities. Official Statistics. Cardiovascular disease profiles: short statistical commentary. Published 3 December 2024 Cardiovascular disease profiles: short statistical commentary - GOV.UK Accessed 13/11/25

[5] NHS England » Core20PLUS5 (adults) – an approach to reducing healthcare inequalities Accessed 13/11/25

for developing heart and circulatory diseases. In the UK, it is estimated that around half of adults are living with cholesterol levels above national guidelines[6].

The prevalence of hypertension in North East London (NEL) was 261,397 people in 2023/24. This is equivalent to 10.7% of the population. In addition, a further 7.7% of the adult population in the ICB area are estimated to have undiagnosed hypertension[7].

Innovation in North East London

NEL received funding in 2022 to deliver a multidisciplinary CVD prevention programme to understand inequalities in CVD risk and to develop tailored interventions to optimise blood pressure. This was undertaken as part of the Innovation for Healthcare Inequalities Programme (InHIP) Wave 1.

Following the success of Wave 1, in Wave 2 NEL designed a programme to build on the lessons learned. This includes the implementation of point of care screening testing (POCT) for hypercholesterolaemia (high cholesterol) in community pharmacies, using the Afinion™ 2 Analyzer. This is linked with a digital platform called HealthTab, facilitating CVD risk assessments for primary prevention. The results are automatically uploaded to a patient-accessible digital health dashboard and are also transferred to the NHS patient app with the patient's consent, enabling patient self-management and communication of results with primary care teams.

This programme has been introduced alongside the community pharmacy blood pressure check service already in place. The purpose of this programme is to provide a POCT service, to identify individuals with poor lipid control who may be at high risk of CVD and to develop pathways to optimise medication in the community. It also incorporates the goal of supporting the delivery plan for recovering access to primary care.

The Afinion machine analyses a small sample of blood, taken from a finger prick, in order to produce a full lipid panel. The machine can also provide HbA1c, albumin-to-creatinine ratio (ACR) tests and C-reactive protein (CRP) measures, for diabetes, kidney function and other issues. However, only the lipid panel was included for this project. In addition to the blood sample, the person being tested provides some demographic information (age, sex, ethnic background), information on any health conditions, lifestyle factors and family history. Combined with the test results, this produces a QRISK score which estimates a person's risk of developing cardiovascular events, such as heart attacks or strokes[8]. The current version of this scoring system is QRISK3[9].

The programme identified seven community pharmacies in areas of high depravation in NEL, to offer POCT for cholesterol to local residents. The pharmacy teams were trained in using the machine and in providing consultations, including discussing the results and providing advice to people being tested. Six of these pharmacies are part of the independent prescribing (IP)

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[6] British Heart Foundation. UK Cardiovascular Disease Factsheet. September 2025. BHF UK CVD Factsheet Accessed 17/11/23

[7] Office for Health Improvement & Disparities. Fingertips Public health profiles Cardiovascular Disease - Data | Fingertips | Department of Health and Social Care Accessed 13/11/25

[8] Public Health England. NHS Health Checks: QRISK®3 Explained. August 2021. QRISK3-Explained_August-2021-publication_PDF.pdf Accessed 17/11/25

[9] Public Health England. NHS Health Checks: QRISK®3 Explained August 2021. QRISK3-Explained_August-2021-publication_PDF.pdf Accessed 27/11/25

Pathfinder programme, which means they can prescribe statins for people who have a QRISK3 score of 10% or over, in line with guidelines from the National Institute for Health and Care Excellence (NICE)[10].

The pharmacies are governed by a service level agreement (SLA) with Barts Health NHS Trust (Barts Health) which sets out the specification of the service to be provided. In return for providing the service, pharmacies have remuneration in two parts: a set-up fee and a fee for each patient receiving a cholesterol POCT.

Structure of this report

The next section of this document briefly sets out the framework and methods used in the evaluation, up to this interim report, including data gathering and analysis. Following this the results are set out, starting with a summary of a review of published evidence on cholesterol POCT in community pharmacies which was carried out for the London Million Hearts and Minds campaign. This is followed by the results of an analysis of the data from the testing programme, including the numbers of tests carried out, the demographic characteristics of the people taking the test as well as evidence on the results of the testing.

After this, the perceptions of various stakeholder groups are presented. Firstly the results of interviews with programme roles are reported. These are individuals involved in the design and implementation of the programme and this sub-section provides detail on how the programme was conceived, designed and managed. Following this, the results of interviews with pharmacy teams are described and, finally, the perceptions and experiences of local residents who have taken the tests are presented, based on a survey and online interviews. These latter two sub-sections include direct quotes from interviews, to illustrate the points being made. All quotes are taken verbatim from the interviewees' responses to interview prompts.

The report concludes with conclusions based on the results obtained so far and some recommendations for the final phase of the pilot programme and its evaluation.

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[10] National Institute for Health and Care Excellence. Cardiovascular disease: risk assessment and reduction, including lipid modification. NICE guideline:NG238. 14 December 2023. Recommendations | Cardiovascular disease: risk assessment and reduction, including lipid modification | Guidance | NICE Accessed 17/11/23

Methods

Evaluation framework

UCLPartners' Evaluation and Insights team proposed a mixed methods evaluation for this programme. The aims agreed in the evaluation framework are to:

- Assess the **operational effectiveness** of the programme
- Audit the **equity of access** for patients according to demographic characteristics, deprivation and clinical need
- Assess the **clinical effectiveness** of the programme, to:
  - Identify people with high-risk cardiovascular disease
  - Optimise medication in the community setting
- Assess **staff and patient acceptability** of the programme
- Understand the **wider system impact** of the programme and **potential for scale**

The current phase of the evaluation covers the period from January 2024 up to November 2025, which incorporates the first four of these aims. The question of the potential for scale has been superseded, to some extent, by decisions to scale up the programme in additional areas, starting with North Central London (NCL). However, in line with the original evaluation plan, this phase reports on progress in NEL, incorporating early lessons learned for scale-up. The evaluation of the impact of this programme on the wider system will be addressed in the full evaluation report, expected in 2026. The current time scales for this work are shown in figure 1.
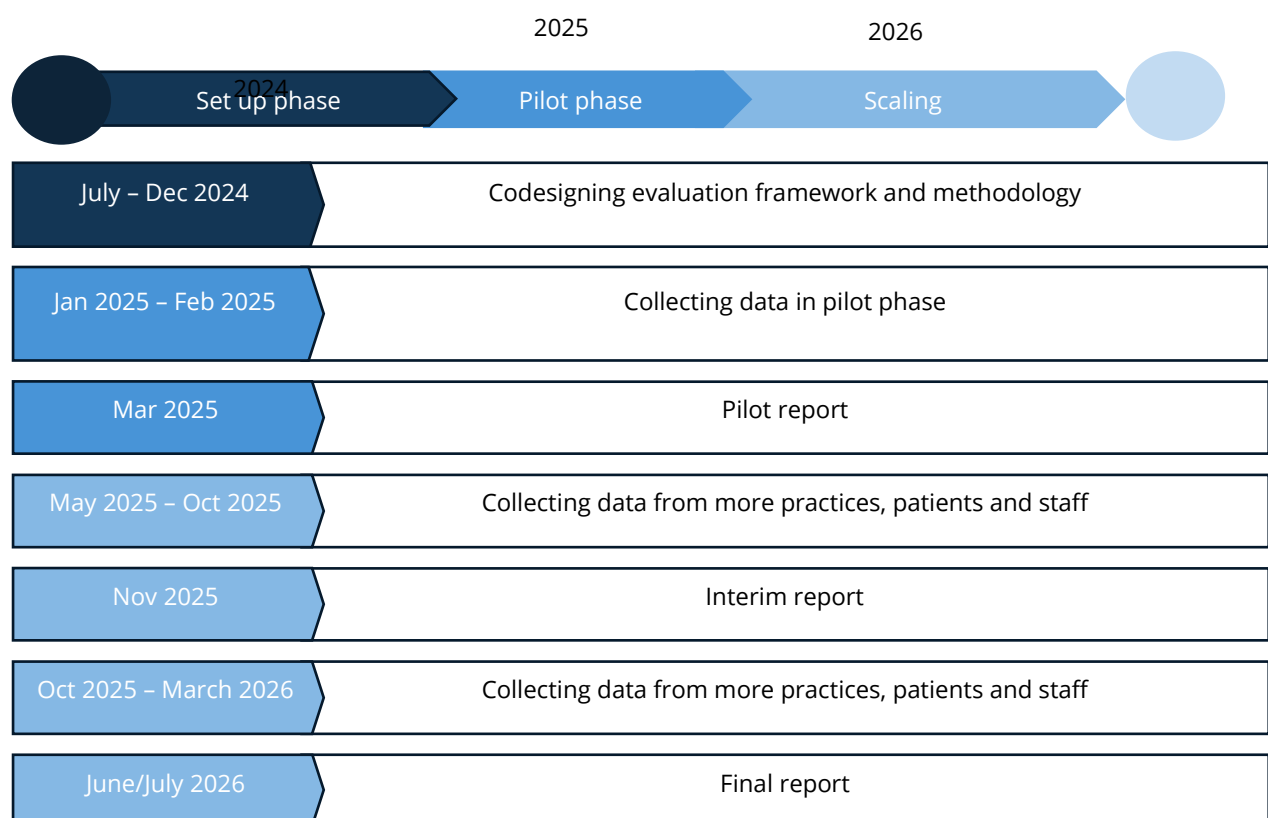
	2025	2026
2024 Set up phase	Pilot phase	Scaling

July – Dec 2024	Codesigning evaluation framework and methodology
Jan 2025 – Feb 2025	Collecting data in pilot phase
Mar 2025	Pilot report
May 2025 – Oct 2025	Collecting data from more practices, patients and staff
Nov 2025	Interim report
Oct 2025 – March 2026	Collecting data from more practices, patients and staff
June/July 2026	Final report

Figure 1. Full evaluation timescale

Evaluation methods

A mixed methods approach was designed, using quantitative and qualitative evidence from a range of sources. These include:

- Data from the Afinion machine and the QRISK assessments.
- A questionnaire survey for local residents provided at the time of testing.
- Follow-up interviews with a small sample of residents about their experiences .
- Interviews with participating pharmacy professionals.
- Interviews with programme roles involved in designing and implementing the programme.

Data from the tests themselves have been analysed to identify the number of people being tested, demographic features of this group, and the results of their cholesterol tests and QRISK assessments.

The patient surveys were completed by consenting patients at the time of their tests. As part of these surveys, respondents could volunteer to be available for later contact for a more in-depth interview. Interviews were conducted by the patient and public involvement and engagement (PPIE) team in UCLPartners. Together these two sources of evidence were analysed to assess the experiences of residents and the acceptability of the service to them.

Interviews were held online with participating pharmacy professionals to ascertain their experiences and opinions. In addition, interviewees were asked to identify how the programme was working and to identify enablers and barriers to successful implementation.

People in roles involved in the design and management of the programme were also interviewed, to gain an in-depth understanding of the process involved in implementing this programme. These roles included: Director of Clinical Services, Consultant Cardiovascular Pharmacist, Independent Prescribing Pathfinder Programme Lead, Cardiovascular Disease Prevention Lead Pharmacist, and Senior Implementation Manager. These interviews are also a means to assess the factors which were enablers and barriers for the programme and to identify lessons learned for the future scale-up of the programme.

Each of these sets of interviews was analysed using a thematic analysis method. In this approach, the interview transcriptions are used as evidence, from which themes of relevance to the evaluation topic are identified and the evidence relating to each theme is assessed to identify relevant inferences.

Declaration: for the local resident and programme role interviews, the Copilot artificial intelligence (AI) assistant was used to support the thematic analysis. Copilot was used to identify and summarise themes in the analysis, with human oversight. All final outputs were reviewed by human analysts.

Results

Evidence review

A rapid review of published evidence on point of care testing (POCT) for cholesterol in community pharmacies was undertaken in October 2025 by the UCLPartners Knowledge Manager, for the London Million Hearts and Minds campaign. This sub-section provides a summary of the findings of that review.

The review addressed the following research questions:

- What is the existing evidence on the feasibility of cholesterol POCT in community pharmacies?
- What is the existing evidence on the equity of cholesterol POCT in community pharmacies?
- What is the existing evidence on patient adherence to treatment initiated based on the cholesterol POCT result?

464 references were retrieved in the search, from which 29 duplicates were removed and 435 were screened. After exclusions, full-text assessments, and supplementary searches, seventeen publications were included in the review. Six of these were systematic reviews and twelve were primary studies that evaluated POCT for cholesterol and cardiovascular disease (CVD) risk screening, primarily in community pharmacy settings.

The systematic reviews took a global perspective, whilst the primary studies were conducted in ten different countries. The target populations were mainly adults without known CVD, although some studies focussed on high-risk groups or socioeconomically disadvantaged populations. The interventions varied, with most studies assessing POCT for cholesterol, either alone or as part of wider CVD screening programmes. The testing was frequently accompanied by patient education and referral pathways. Follow-up, where reported, assessed behavioural change, treatment initiation, adherence, and patient satisfaction.

Nine studies in this review reported on implementation strategies for cholesterol or CVD risk-related POCT initiatives, although details were limited. Reported strategies included: pharmacist training; the use of promotional materials and media; provision of frameworks or flow diagrams; advance notification of GPs; identification of participants through medical history or medication use; and creation of a pharmacy chat group.

A systematic review of implementation strategies for community pharmacy services more broadly found limited use of theories or frameworks, with an average of 6.5 strategies per study. The review recommended applying established taxonomies, reporting guides, and frameworks aligned to service goals. None of the studies included addressed equity in implementation, although a scoping review of healthcare frameworks that was identified through additional targeted searches suggested possible guidance for equity-focused approaches.

Systematic reviews published between 2017–2023 supported the feasibility of pharmacy-based POCT for cholesterol and CVD risk. There was evidence of good analytical performance and satisfactory pharmacist delivery. Primary studies further indicated patient benefit and acceptance but provided little information on barriers, facilitators, or patient experiences. Patient barriers that were reported included low health literacy, poor awareness, and financial

constraints. Pharmacists cited competing demands, limited medical record access, inadequate training, and lack of reimbursement.

Facilitators included collaboration with primary care, medical record access, and clear reimbursement models. Evidence on equity was limited, with some recognition of pharmacies' ability to access underserved populations but there was insufficient detail on addressing disadvantage. One before-and-after study reported 84% adherence to lipid-lowering medication following pharmacist-initiated POCT and management, but no further evidence on adherence was identified.

Recommendations for practice included the development of national policies to regulate and support POCT in pharmacies; structured training and remuneration mechanisms; and closer collaboration with GPs to ensure continuity of care. Future research should adopt rigorous study designs, incorporate economic evaluations, investigate patient experiences, and focus on long term outcomes, sustainability, and approaches tailored for disadvantaged populations.

Evidence gaps

There were key gaps in the literature, including limited research on patient experiences, follow-up outcomes, adherence to treatment, and equity considerations in cholesterol POCT programmes.

Limitations

The review was conducted using a rapid methodology with potential limitations in scope and depth. Due to the scarcity of cholesterol POCT-specific research, broader CVD screening and management studies were included, which may limit the direct applicability of findings.

Conclusion

Evidence from systematic reviews and primary studies indicates that cholesterol POCT, either alone or as part of wider CVD risk screening in community pharmacies, is feasible and enables pharmacists to identify patients with CVD risk factors. However, information on implementation strategies was limited, equity was not considered in primary studies, and evidence on barriers, facilitators, equity in outcomes, and adherence was sparse.

Further research is needed on long term outcomes, patient experiences, cost-effectiveness, and sustainability. The findings of this review should be interpreted in the context of its rapid review methodology.

Results from point of care testing

Demographics of residents tested

The POCT service saw 556 patients between January 2025 and October 2025 across 7 pharmacies in NEL. These pharmacies are: Newmans Pharmacy, Cubitt Town Pharmacy, Lansbury Pharmacy, Nash Chemist, Green Light Pharmacy, Rohpharm Limited, and Hainault Station Pharmacy. Out of 556 patients, 395 (71%) were female and 161 (29%) were male.

Age
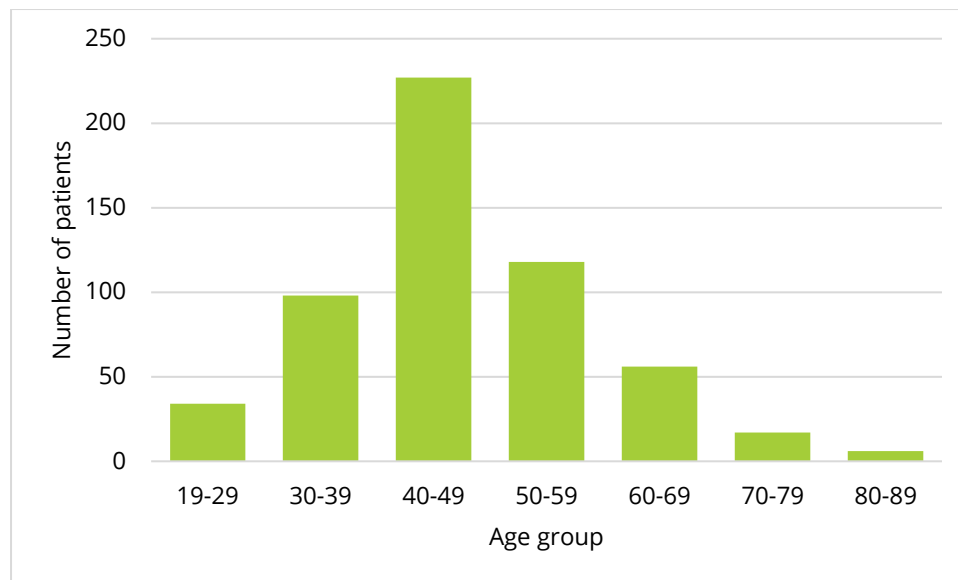
Figure 2. Age group of residents tested

The age pattern of people taking part in pharmacy-based cholesterol testing is very clear. The service is being used most heavily by people in their 40s, who make up 41% of all patients. This group is followed by those in their 30s (18%) and 50s (21%), which together form another substantial share of activity. By comparison, only 6% of patients were in their 20s, and even smaller proportions were in their 70s (3%) or 80s (1%).

This sits within the wider picture of NEL having a younger population overall, with a median age of 33 compared with 40.7 across England. Given this, it is not surprising that the majority of people using the service fall within the working-age group. Encouragingly, the service appears to be reaching people at ages when early cardiovascular risk factors often start to emerge.

The relatively low number of older adults, particularly those 70+, is notable from the figure, as these groups generally carry the highest cardiovascular risk. However, the inclusion criteria for the programme focus on primary prevention, while the exclusion criteria specify that those on a lipid lowering agent and those with established CVD are not eligible for the service. This may explain the low numbers being tested in older age groups.

Overall, the service is clearly being used by the working-age population, especially those in mid-life. It is, however, also picking up some individuals in the very young and very old age groups.
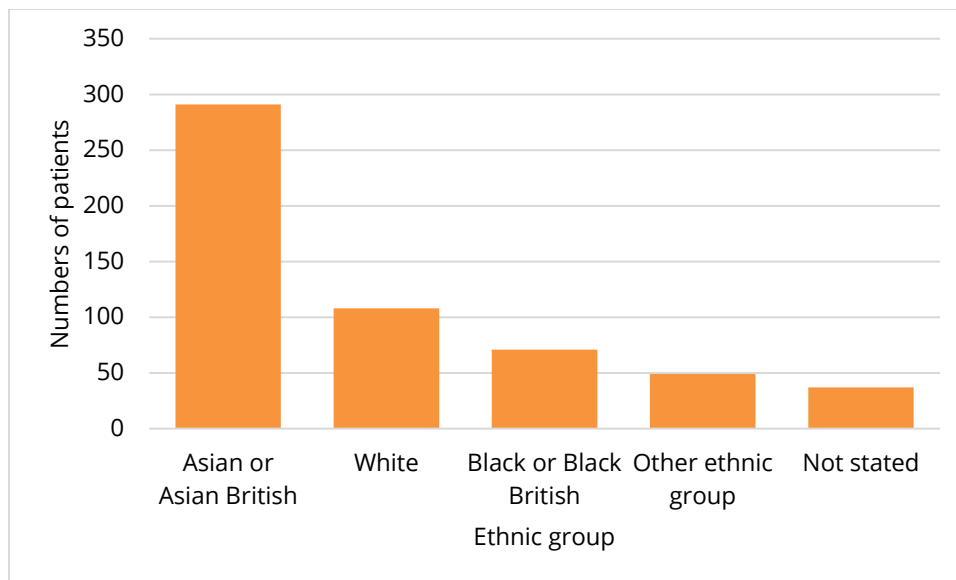
Ethnicity

Figure 3. Ethnicity of residents tested

The ethnicity breakdown of people using the POCT service shows a very strong uptake among Asian or Asian British residents, who make up 52% of all patients. This is followed by White patients at 19%, Black or Black British patients at 13%, and those from other ethnic groups at 9%. A small proportion of patients (7%) did not state their ethnicity.
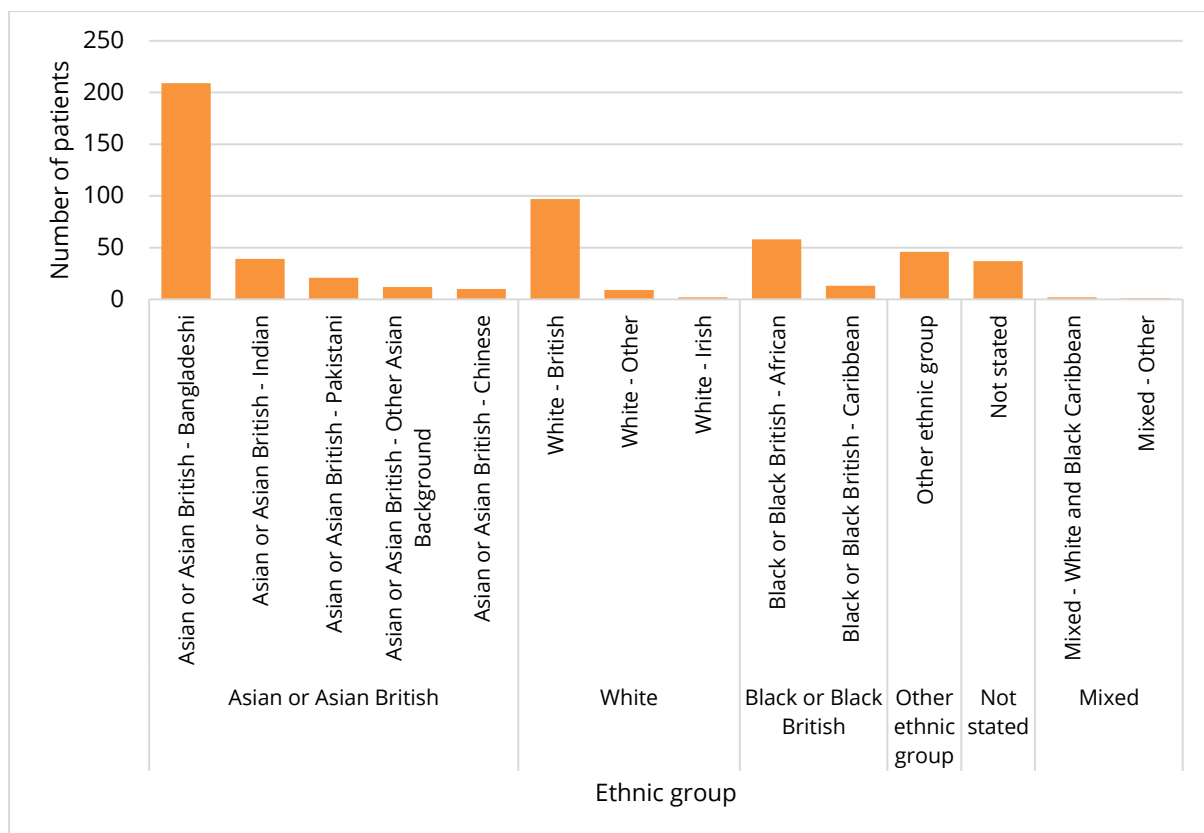

Figure 4. Detailed ethnicity breakdown of patients

A further breakdown of the ethnicity groups shows that 72% of patients recorded as those Asian or Asian British were Bangladeshi. Among White patients, 90% were White British and of those recorded as Black or Black British, 82% were African.

Compared with the wider population of North East London, where 30% of residents are Asian, 14% are Black, 5% are from mixed or other groups, and 46% are White, the service appears to be reaching communities that traditionally experience higher risk of cardiovascular disease. The particularly high representation of Asian patients is notable, especially given the strong South Asian populations in boroughs such as Newham, Redbridge, and Tower Hamlets.

Conversely, the proportion of White patients using the service is lower than the NEL population share. This could reflect both the demographic make-up of the specific pharmacy catchment areas and existing health service engagement patterns. The slightly lower proportion of Black patients relative to the NEL average suggests an opportunity to strengthen awareness and outreach, particularly in boroughs with larger Black populations such as Hackney, Barking and Dagenham, and Waltham Forest.

Overall, the service is clearly reaching a diverse patient group, with particularly strong engagement among Asian communities. Ensuring that outreach, communication, and culturally relevant information continue to be tailored across all major ethnic groups will be important for maintaining equity of access as the service expands.
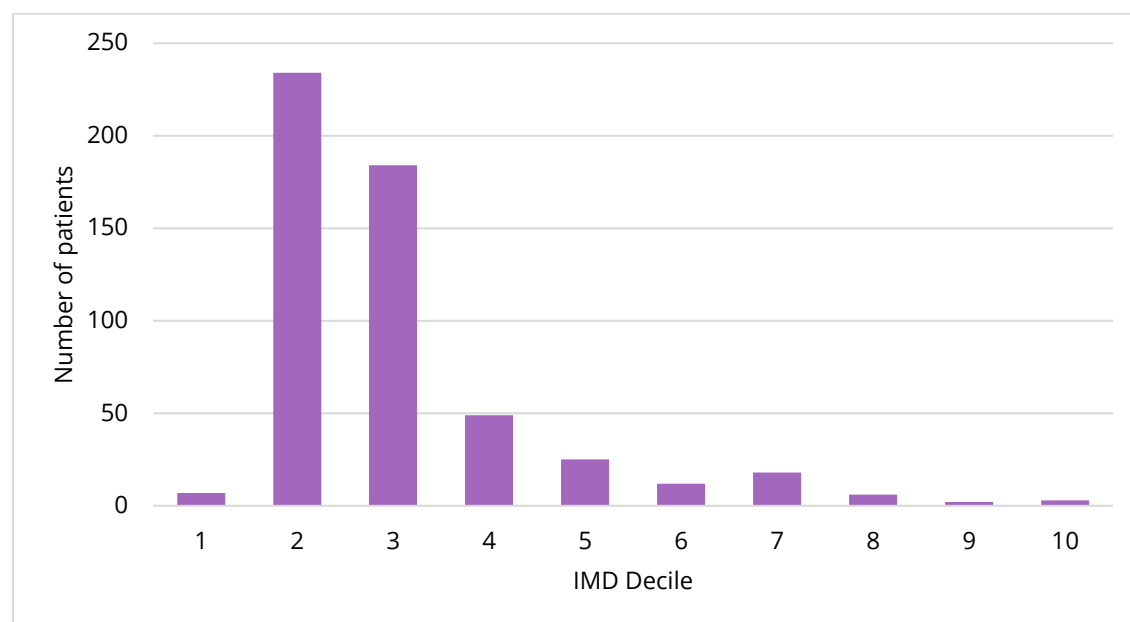
Deprivation

Figure 5. IMD decile of patients

The distribution of patients by deprivation level shows that the POCT service is being used most heavily by people living in the most deprived areas. More than half of all patients come from IMD deciles 1 to 3, which together account for 67% of activity. Decile 2 alone represents a very large share, with 234 patients, followed by 184 patients from decile 3. By contrast, far fewer people came from the least deprived areas, with only 3 patients from decile 10 and 2 from decile 9.

This pattern reflects the wider deprivation landscape across NEL, where many neighbourhoods fall within the most deprived deciles nationally. It is encouraging that the service is reaching residents who often experience the highest burden of cardiovascular risk and face greater barriers to accessing preventive care.

Cholesterol test and QRISK results

Table 1 shows the cholesterol test results and QRISK scores for the residents tested to date (end of October 2025). Note that not all people having the test had a QRISK score calculated, so the total is lower than the total number of tests. Furthermore the first four categories are sub-categories of the last two.

Table 1. Cholesterol test results

Test results	Number of Patients
Lipid panel results	
Total blood cholesterol level* > 7.5 mmol/L	5
LDL cholesterol* > 4.9mmol/L	5
Non-HDL cholesterol* > 5.9 mmol/L	4
Fasting Triglyceride level* > 4.52 mmol/L	27
QRISK scores	
QRISK score >=10%	111
QRISK score < 10%	436

*No QRISK was documented for these patients as per pathway

The cholesterol testing results show that only a small number of residents recorded critically high cholesterol levels: 5 had total cholesterol above 7.5 mmol/L; 5 had LDL cholesterol above 4.9 mmol/L; and 4 had non-HDL cholesterol above 5.9 mmol/L. Although these numbers are low, each of these findings represents individuals at significantly elevated cardiovascular risk who may require urgent follow-up and clinical intervention.

A slightly larger group showed raised triglycerides, with 27 patients recording fasting triglyceride levels above 4.52 mmol/L. Elevated triglycerides can be associated with metabolic conditions, including insulin resistance (which has implications for diabetes diagnosis), making this group important to monitor, particularly in a diverse population like NEL where risk factors cluster differently across communities.

The QRISK results highlight a much more substantial proportion of patients at increased risk. 111 patients, accounting for around 20% of all those tested, had a QRISK score of 10% or higher, placing them in the category where clinical guidelines recommend statin therapy and lifestyle support to reduce heart disease and stroke risk.

Given the relatively young age profile of POCT service users (with the majority aged 30 to 50), the finding that 1 in 5 have a QRISK score above 10% is important. It suggests that the service is successfully identifying people at elevated cardiovascular risk much earlier than may otherwise have been the case. For many of these individuals, the pharmacy setting may be their first point of contact for preventative cardiovascular advice.

QRISK scores and demographic characteristics

The following figures show the percentages of people with raised QRISK scores in relation to demographic characteristics: ethnicity, age and deprivation. In these figures the QRISK scores are grouped into two categories: those showing high scores ('yes' = 10% or more) and those without a raised cholesterol level ('no' = less than 10%). For IMD deciles, 1 indicates the most deprived areas and 10 indicates the least deprived.

Some of these demographic characteristics, in addition to health status, are included in the QRISK scoring system. As a result, there is no explanatory value in demonstrating a correlation in findings between age, for example, and QRISK scores: as age is a variable involved in calculating the score, higher age will give rise to a higher QRISK score. So these results are presented as descriptive evidence on the cohort of people who have been tested only.
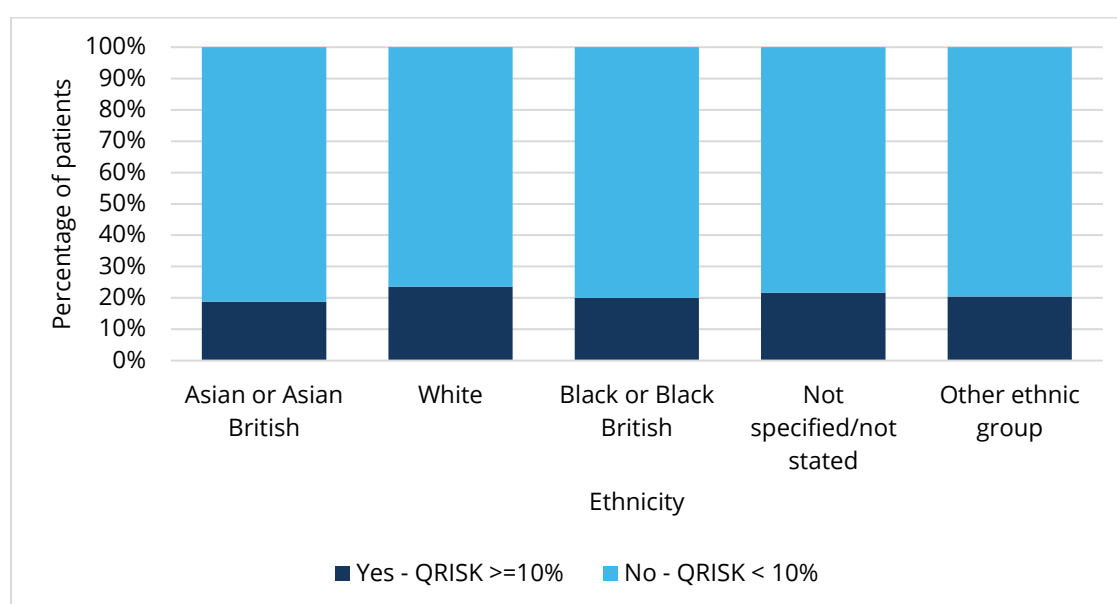
Ethnicity

Figure 6. QRISK score by ethnicity

When looking at QRISK scores across ethnic groups, the pattern is remarkably consistent. In every group, roughly 1 in 5 patients recorded a QRISK of 10% or higher, while the remaining 4 in 5 fell below the 10% threshold. This includes those who did not state their ethnicity.

This even distribution is notable because QRISK incorporates ethnicity as a weighted factor. In North East London, where more than half of residents are from global majority backgrounds, one might expect more variation between groups. Instead, the data shows that risk is relatively evenly spread among those who chose to use the service.

This suggests two important points. First, the service is reaching people with elevated cardiovascular among all ethnic groups. Second, despite Asian communities being the largest user group overall, their proportion with high QRISK is almost identical to other groups. Given that South Asian populations often have higher underlying cardiovascular risk, this finding reinforces the value of reaching these communities early, before risk escalates further.

Overall, the chart shows no major differences in QRISK distribution by ethnicity among those tested. This indicates that the service is capturing early cardiovascular risk across the full breadth of NEL's diverse population, rather than disproportionately identifying high-risk individuals within any single ethnic group.
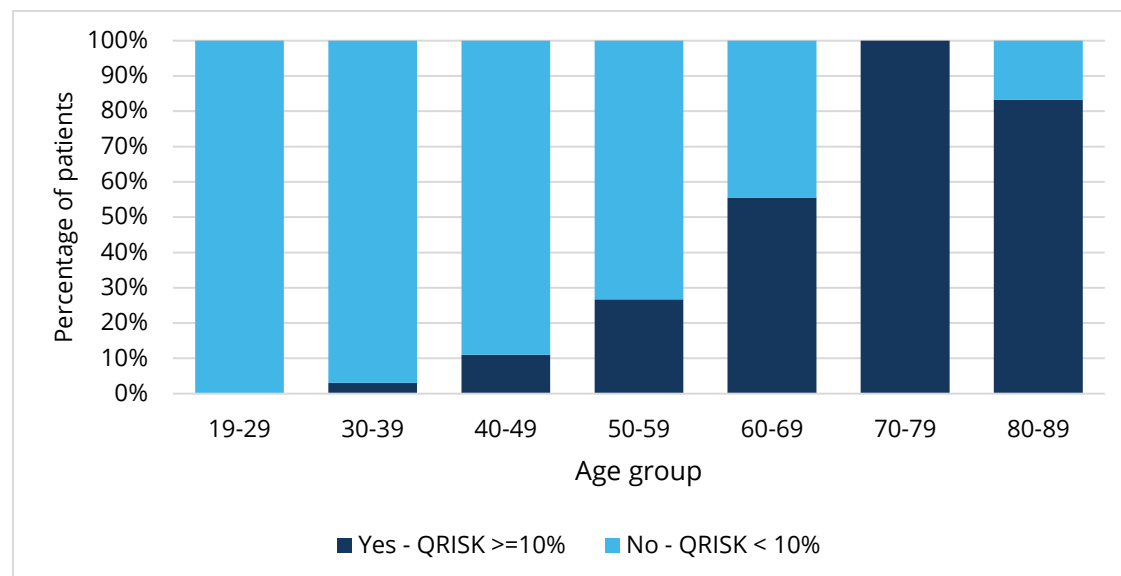
Age

Figure 7. QRISK by age group

The link between age and cardiovascular risk is very apparent in the QRISK results. Across the youngest age groups, almost nobody recorded a QRISK score of 10% or higher. Among residents aged 19-29, the proportion with a high QRISK is effectively 0%, and it remains extremely low in the 30-39 group.

The first noticeable shift appears in people in their 40s, where a small but visible proportion begin to cross the 10% threshold. By the time patients reach their 50s, around one in four have a QRISK score of 10% or more, showing that mid-life is when risk starts to rise more sharply.

The largest increases are seen in older age groups. In patients aged 60-69, just over half have a QRISK score above 10%, making elevated cardiovascular risk the norm rather than the exception. For those aged 70-79, almost all patients fall into the high-risk category. The pattern is similar for the 80-89 group, where the vast majority have high QRISK scores.

This progression highlights the value of the POCT service capturing people in their 40s and 50s, when lifestyle support and early treatment can prevent higher risk in later decades. For older patients, the service provides an important prompt for immediate clinical follow-up and statin eligibility discussions.

Overall, the chart demonstrates a very clear gradient: minimal high-risk scores in younger adults, a steady rise through mid-life, and near-universal high QRISK among older patients. This reinforces both the preventative role of the service and the need to continue encouraging uptake across all age groups, including older adults who were underrepresented in overall service use.
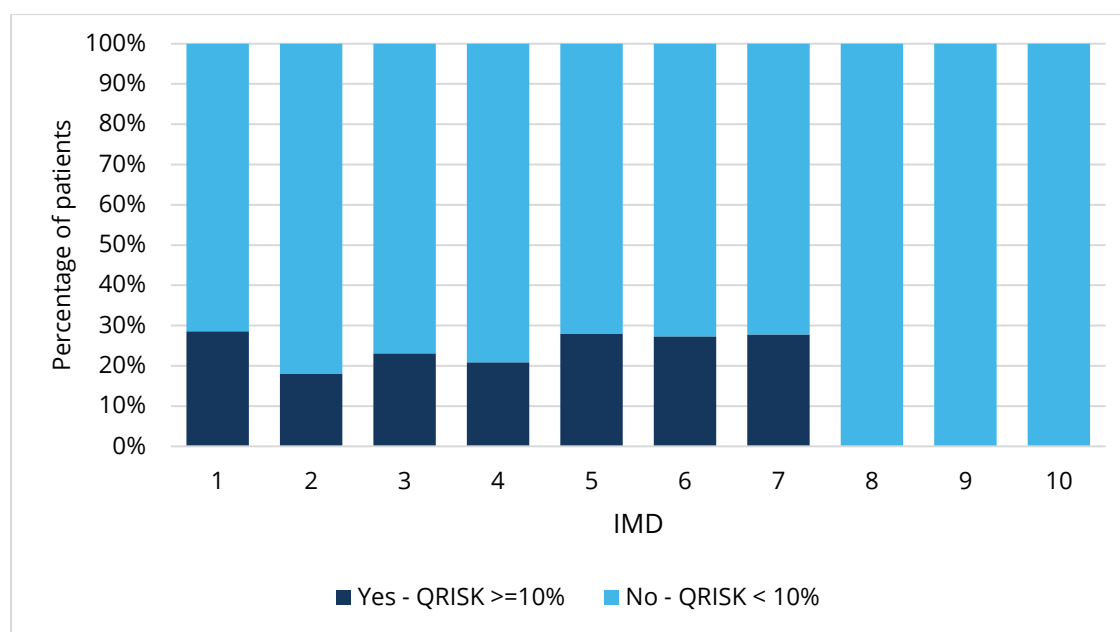
Deprivation

Figure 8. QRISK score by IMD decile

The IMD results become clearer when grouped into broader categories. Among patients living in the most deprived areas (IMD 1-2), around 25-30% had a QRISK score of 10% or higher, which is slightly above the overall average and consistent with the known link between deprivation and cardiovascular risk. In IMD 3-4, the proportion drops to around 20%, showing a small dip but still indicating a meaningful level of risk.

For patients in IMD 5-7, the proportion with a high QRISK rises again to roughly 25-30%, bringing this group closer to the level seen in the most deprived areas. In the least deprived areas (IMD 8-10), no patients in this sample had a QRISK score of 10% or higher. This may reflect a genuine lower burden of cardiovascular risk in less deprived communities, but may also be influenced by the much smaller number of patients from IMD 8-10 who used the service.

Overall, the grouped IMD data shows that cardiovascular risk is relatively evenly distributed across deprivation levels 1 to 7, for people who accessed the service, with modest differences between them. This suggests that the POCT service is identifying higher-risk individuals across the full socioeconomic range, not just those in the most deprived communities.

QRISK scores and co-morbidities

The following figures show the QRISK scores by a range of co-morbidities, including diabetes, high blood pressure, smoking and family history.
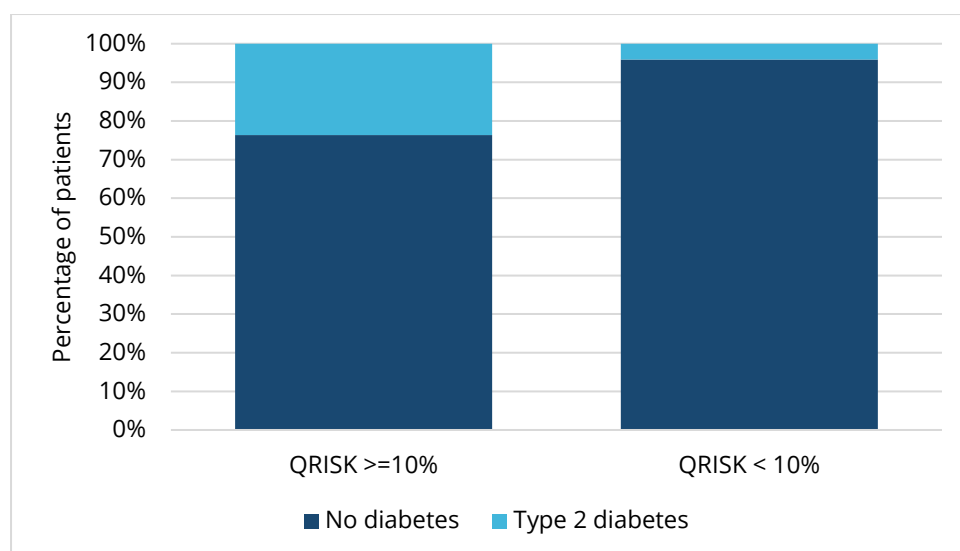
Diabetes

Figure 9. Diabetes diagnosis and QRISK score

A limited number of patients with type 2 diabetes were tested (48 people), however, these individuals are far more likely to fall into the QRISK≥10% category than the QRISK<10% group. Among those with a QRISK score of 10% or higher, around one in four have type 2 diabetes. In contrast, only a very small proportion of patients in the QRISK<10% group have diabetes.

This pattern reflects what would be expected: the QRISK scores heavily weight diabetes as a risk factor, so individuals with type 2 diabetes naturally cluster in the high-risk category. Within this POCT cohort, the presence of diabetes is a strong signal of elevated cardiovascular risk and highlights the importance of early identification and proactive management in this group.
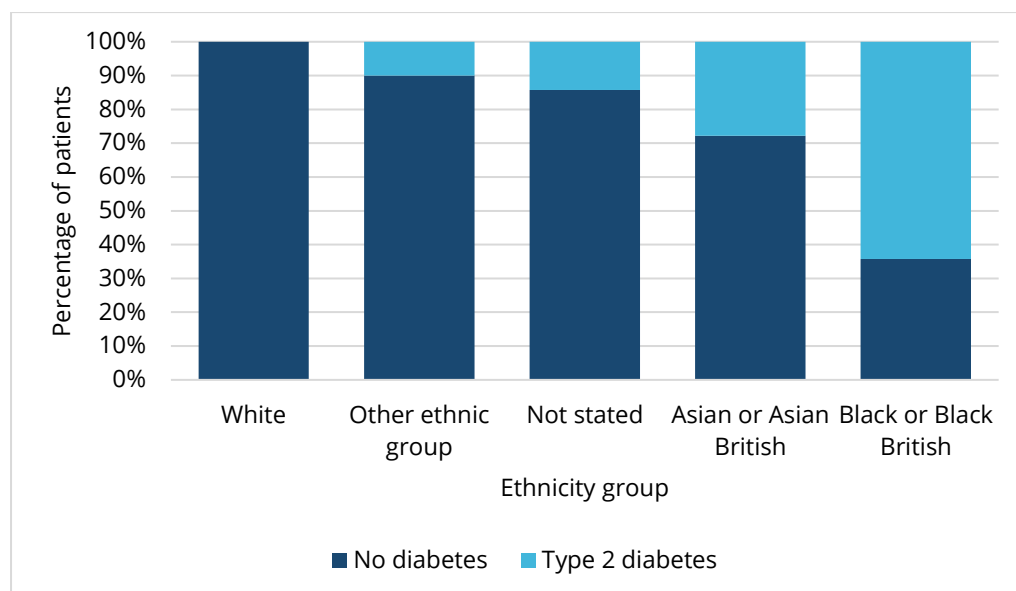

Figure 10. Diabetes diagnosis by ethnic group among patients with QRISK≥10%

Among patients with a QRISK score of 10% or higher, the prevalence of type 2 diabetes varies significantly by ethnicity. The chart shows that Black or Black British patients have the highest

proportion of type 2 diabetes within this high-risk group, with more than half diagnosed. This highlights diabetes as a major contributor to cardiovascular risk among Black patients in the cohort.

Asian or Asian British patients also show a substantial diabetes burden, with roughly one in four in the high-risk category having type 2 diabetes. This aligns with known patterns of higher metabolic and cardiovascular risk in this population, and suggests that diabetes is a key factor driving elevated QRISK scores.

The White group stands in contrast, with almost no high-risk White patients having a diagnosis of diabetes. Patients from other ethnic groups and those with not stated ethnicity fall between these patterns, showing moderate levels of diabetes within the high-risk category.

Overall, the data shows that type 2 diabetes is concentrated in Asian and especially Black populations, suggesting that ethnicity plays a meaningful role in shaping risk profiles. These differences underline the importance of culturally specific prevention and management strategies and highlight the value of POCT in identifying cardiovascular risk early in communities where the burden of diabetes is higher.
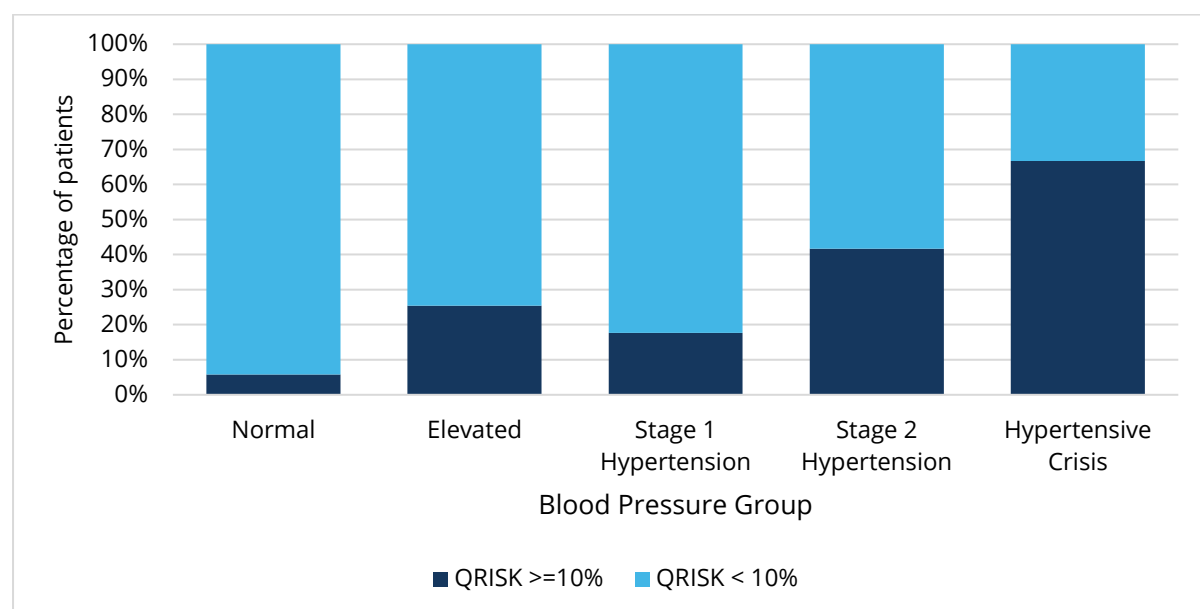
Blood pressure

Figure 11. Blood pressure category by QRISK score

The relationship between blood pressure and QRISK shows a very clear gradient. Among patients with normal blood pressure, only a very small proportion have a QRISK score of 10% or higher, indicating low overall cardiovascular risk in this group. The proportion increases slightly in those with elevated blood pressure, where roughly a quarter have a high QRISK score, showing early signs of risk beginning to accumulate.

For patients with stage 1 hypertension, the share with QRISK ≥10% rises further, reflecting the well-established contribution of raised blood pressure to overall cardiovascular risk. The largest jump appears in stage 2 hypertension, where close to half of all patients fall into the high-risk category.

The strongest impact is seen in the hypertensive crisis category. Here, the majority of patients, around two-thirds, have a QRISK score above 10%. This group represents some of the highest-risk individuals identified through the service.

Taken together, the chart demonstrates a consistent pattern: as blood pressure increases, the likelihood of a high QRISK score rises sharply. This reinforces the value of combining POCT cholesterol testing with blood pressure checks, since together they enable early identification of patients who may otherwise remain unaware of their elevated cardiovascular risk.
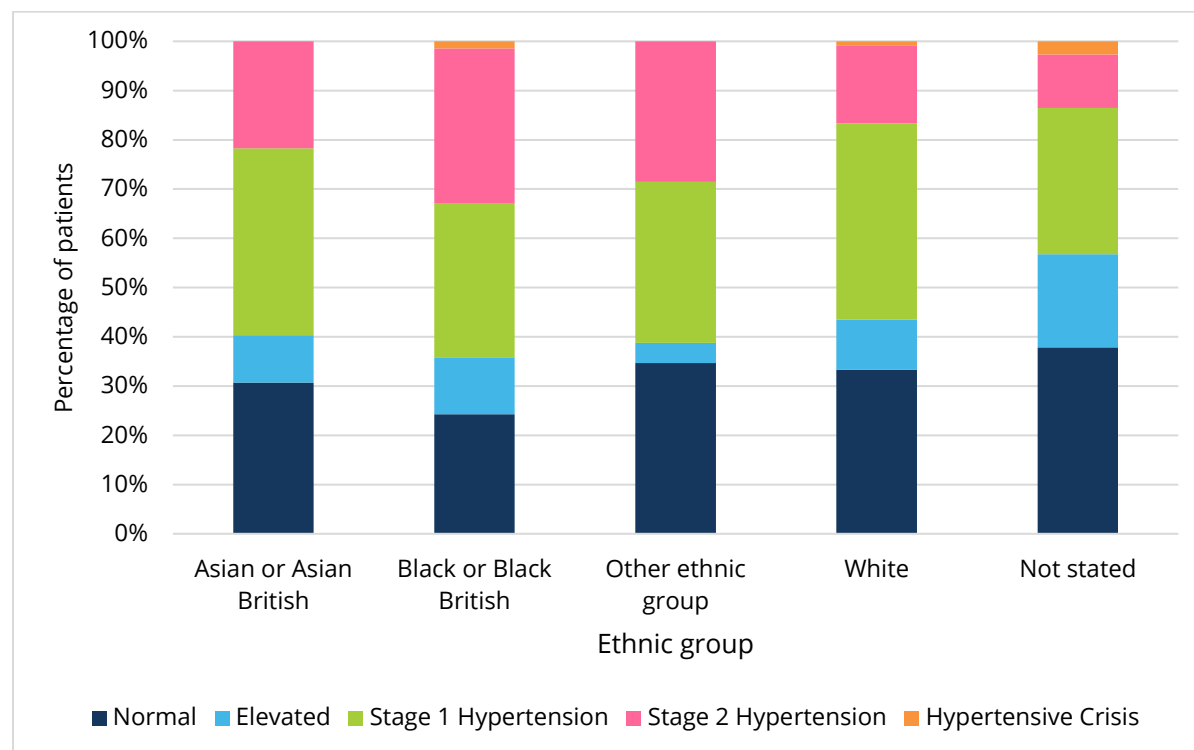
Figure 12. Blood pressure category by ethnic group

Across all ethnic groups, hypertension at some level is common. Stage 1 and stage 2 hypertension make up a substantial proportion of readings. The consistency across groups suggests that high blood pressure is a widespread issue among people accessing the service, not concentrated in any single ethnic population, although stage 2 hypertension is higher among Black ethnic groups. This reinforces the importance of providing easily accessible checks within diverse communities in NEL.

Family history

Figure 13. CVD family history and QRISK score

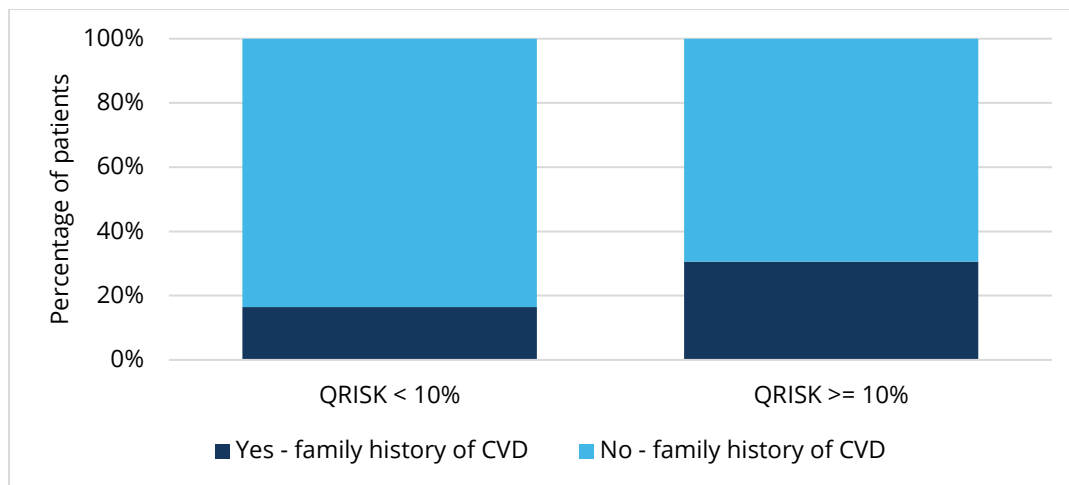This chart shows a clear relationship between QRISK scores and whether patients reported a family history of cardiovascular disease. Among those with a QRISK score below 10%, only around 15% reported a family history of CVD. In contrast, in the group with a QRISK score of 10% or higher, this proportion roughly doubles to around 30%.

This indicates that a family history of cardiovascular disease is notably more common in patients with elevated QRISK scores. While QRISK already incorporates family history into its calculation, the difference here highlights how inherited risk factors remain a prominent driver of higher cardiovascular risk within the population using the service.

At the same time, the majority of patients in both categories reported no family history of CVD. This reinforces that high QRISK scores are not limited to people with known familial risk, and that a substantial number of individuals with elevated cardiovascular risk may not be aware of any family pattern.
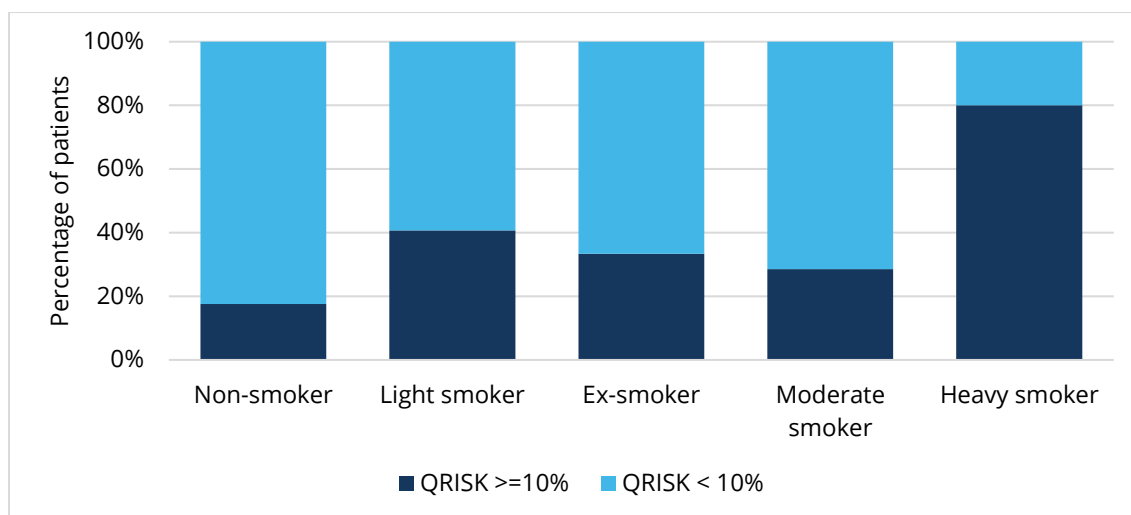
Smoking status

Figure 14. Smoking status and QRISK score

The relationship between smoking status and QRISK shows a strong gradient, as expected. Among non-smokers, only around 15-20% have a QRISK score of 10% or higher. This low proportion provides a useful benchmark for identifying the impact of smoking. In light smokers, the proportion with a high QRISK score rises sharply to around 40%, more than double that of non-smokers, indicating that even relatively low levels of smoking significantly increase overall cardiovascular risk.

Among ex-smokers, around 30-35% have a QRISK score above 10%. Although this is lower than current smokers, it remains noticeably higher than non-smokers. This indicates that previous smoking continues to influence long-term cardiovascular risk, even after people stop. The lower proportion of high QRISK scores among moderate smokers compared with light smokers and ex-smokers is likely due to small sample numbers and differences in age and other risk factors. It should not be read as an indication that moderate smoking is less harmful.

The most striking impact is seen in heavy smokers, where around 80% of patients have a QRISK score of 10% or higher. This makes heavy smokers the group with the highest cardiovascular risk identified through the service. The difference between heavy smokers and all other smoking categories is particularly pronounced.

These results highlight the importance of using POCT as an opportunity to offer smoking cessation advice, including for light and moderate smokers. Embedding smoking cessation conversations directly into POCT appointments strengthens alignment with national prevention ambitions and maximises the role of community pharmacy in reducing health inequalities and making every contact count (MECC).

Numbers of risk factors

The following figures show the numbers of risk factors individuals have, and these numbers in relation to demographic characteristics. Firstly, table 2 sets out the definitions and thresholds of the risk factors considered.

Table 2. Definitions of risk factors

Risk Factor	Threshold / Definition used
Age	Men ≥ 55 years; Women ≥ 65 years
BMI	≥ 30 kg/m²; ≥ 27.5 for S. Asian and other higher-risk ethnic groups
Blood Pressure	Hypertension defined as ≥ 140/90 mmHg in clinic
Smoking	Current smoking (including "moderate" or "heavy")
Chronic kidney disease	Yes
Family history of premature CVD	Yes
Diabetes	Diabetes (type 1 or type 2) or family history of diabetes
AF	Yes
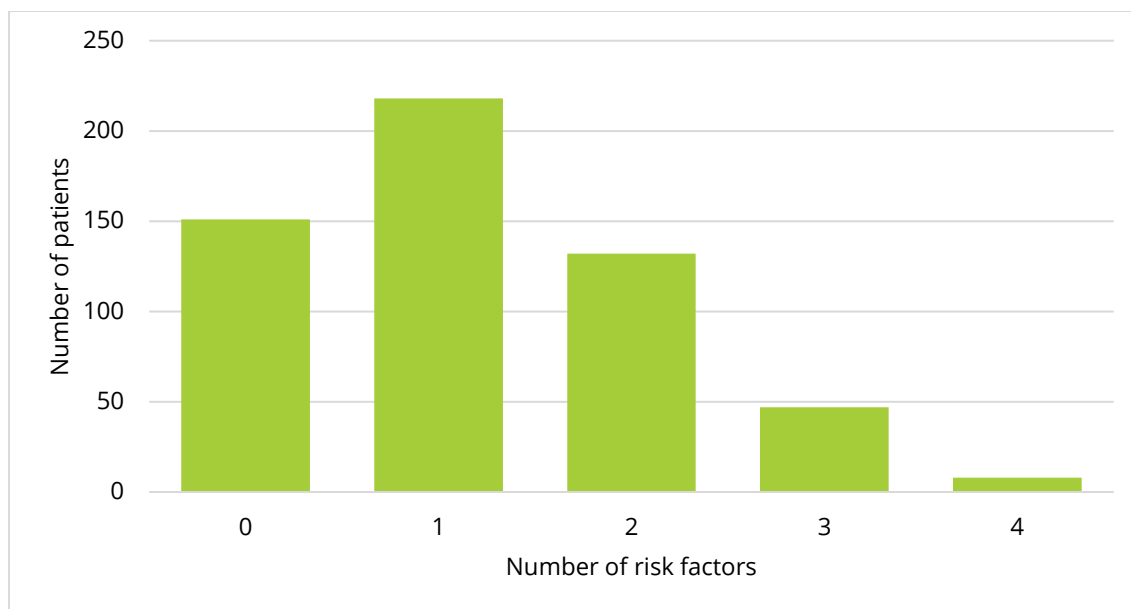
Figure 15. Numbers of risk factors

The distribution of patients by number of CVD risk factors shows that the majority of individuals using the service have none or one risk factor. However, there is as sizeable number with two or more risk factors. The largest group is people with one risk factor, at 218 people, followed by 151 people with no identifiable risk factors.

The number of people with two factors is 132 and a smaller proportion had three risk factors (around 45 patients), and very few patients, fewer than 10, had four risk factors. This creates a clear gradient, where the number of patients decreases steadily as the number of accumulated risk factors increases.

This pattern matches what would typically be expected in a community testing setting, where most people present with early or single risk indicators such as raised blood pressure, elevated cholesterol, smoking, or a family history. The presence of a sizeable group with two or more risk factors is important, as this group is more likely to have higher QRISK scores and would benefit most from early intervention and ongoing monitoring.

Overall, the distribution suggests that the service is capturing a broad spectrum of risk, from individuals with no current clinical risk factors through to a small but important group with multiple risks who may require closer follow-up and targeted support.
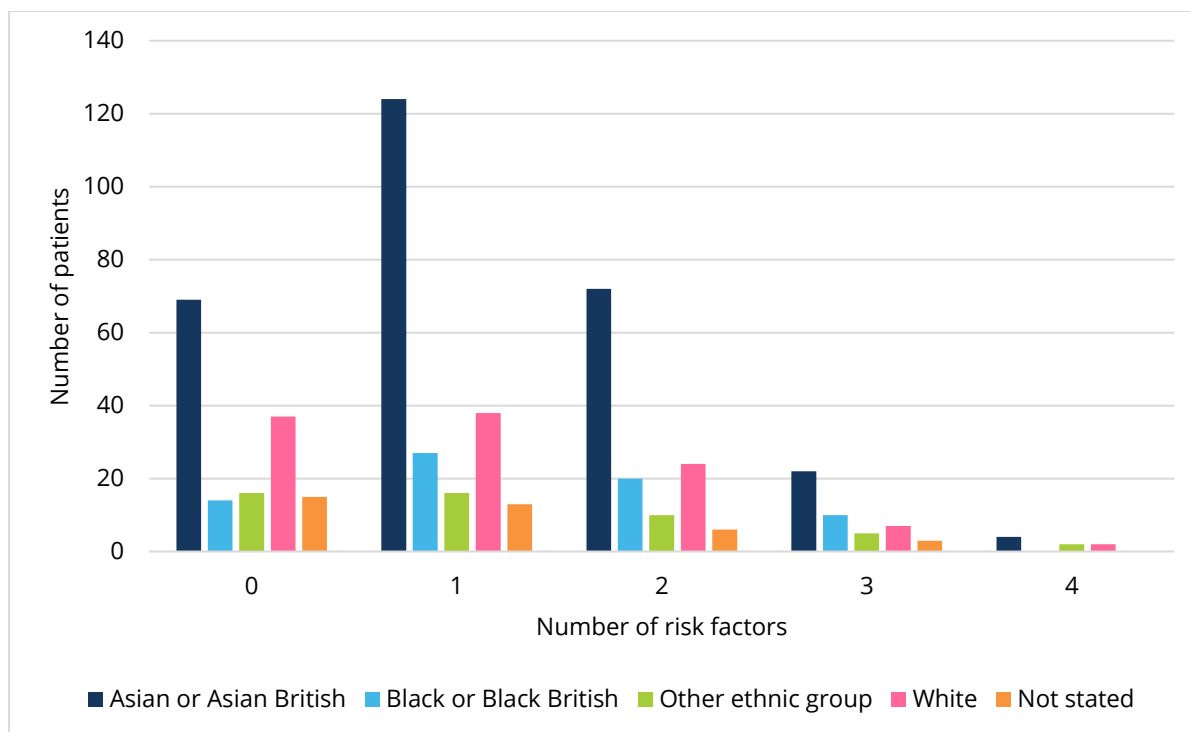
Figure 16. Number of risk factors by ethnicity

The distribution of risk factors across ethnic groups shows that Asian or Asian British patients make up the largest share in every risk factor category. This reflects their high overall representation in the POCT service, rather than indicating disproportionately higher risk. Within this group, the number of patients peaks at one risk factor, with more than 120 people, followed by sizeable numbers with zero and two risk factors.

Among White patients, the pattern follows a similar shape, with most having zero or one risk factor and far fewer in the higher categories. The Black or Black British and other ethnic group categories show a broadly similar spread, though with smaller absolute numbers. In these groups, most individuals also fall within the zero to one risk factor range, with a smaller but noticeable number carrying two risk factors.

Across all ethnicities, very few patients had three or four risk factors. These higher-risk combinations appear in small numbers within each group, suggesting that while multimorbidity is present, it is not concentrated in any specific ethnic population. This reinforces the earlier observation that cardiovascular risk, as captured through this service, is distributed across all ethnic groups rather than being disproportionately driven by one.
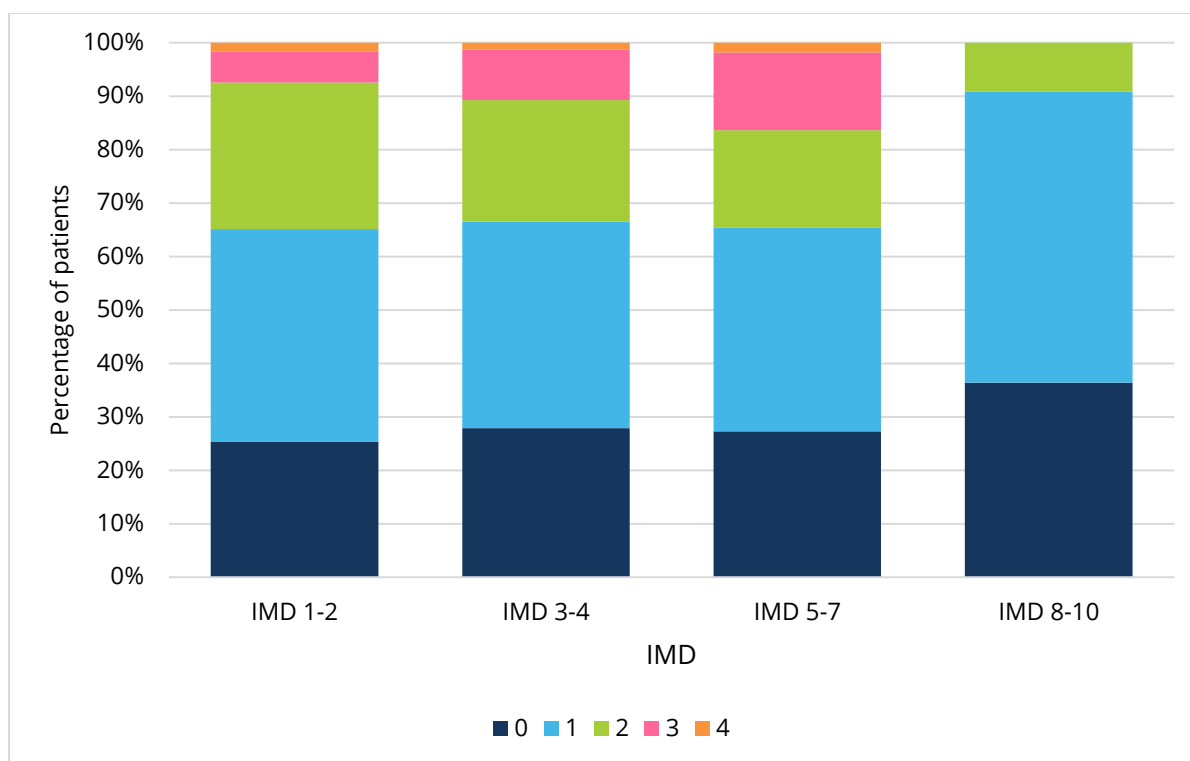
Figure 17. Distribution of Risk Factors by IMD deciles

The distribution of cardiovascular risk factors across IMD groups shows broad similarity, with only modest differences between most deprivation levels. In IMD 1-7, around 65% of patients have zero or one risk factor, and the overall shape of the distribution remains relatively consistent.

The share of patients with two risk factors in IMD 1-2 is slightly higher than in other IMD groups. In IMD 3-4, the pattern remains similar, with a slight reduction in patients with three or more risk factors. The proportions of patients with three or more risk factors increase in IMD 5-7.

The clearest contrast is seen in IMD 8-10, the least deprived group. Here, over 90% of patients have zero or one risk factor, and far fewer have two or more. This suggests a lighter overall burden of cardiovascular risks among residents in less deprived areas. It is important to note that the numbers of people in these groups are very low, as shown in figure 5, above. Overall, the chart shows broad similarity across IMD 1-7, with the main difference being the distinctly lower risk burden in IMD 8-10.

Lipid test outcomes by demographic characteristics

People who had taken the test were followed up to find out what actions, if any, they had taken after receiving their results. This required individuals to provide their contact details and the numbers who did so, and responded to follow-up contact, were small. The following sub-section should be read with this in mind.

A total of 453 patients had an outcome recorded at the time of their test. Over three-quarters of patients (345) needed no further action. 43 patients had 'other' recorded outcomes such as 'too early to review outcomes'. Whilst 65 patients had outcomes recorded as either: statin initiated; statin declined; patient opted for lifestyle changes; lost in follow up, and declined intervention.

Of these, 24 patients were initiated on a statin following their lipid test. 12 patients (50%) started lipid lowering therapy within 14 days of their test result. The remaining 12 patients began treatment between 15 and 66 days after their test. These results are discussed below in relation to deprivation and ethnicity.
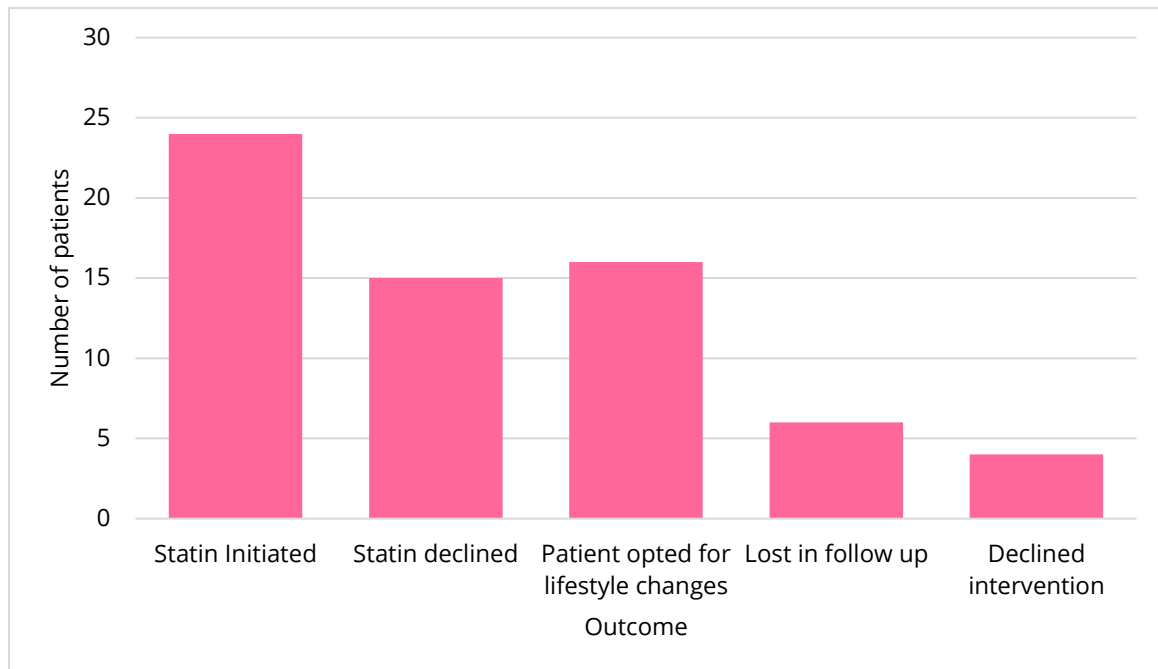

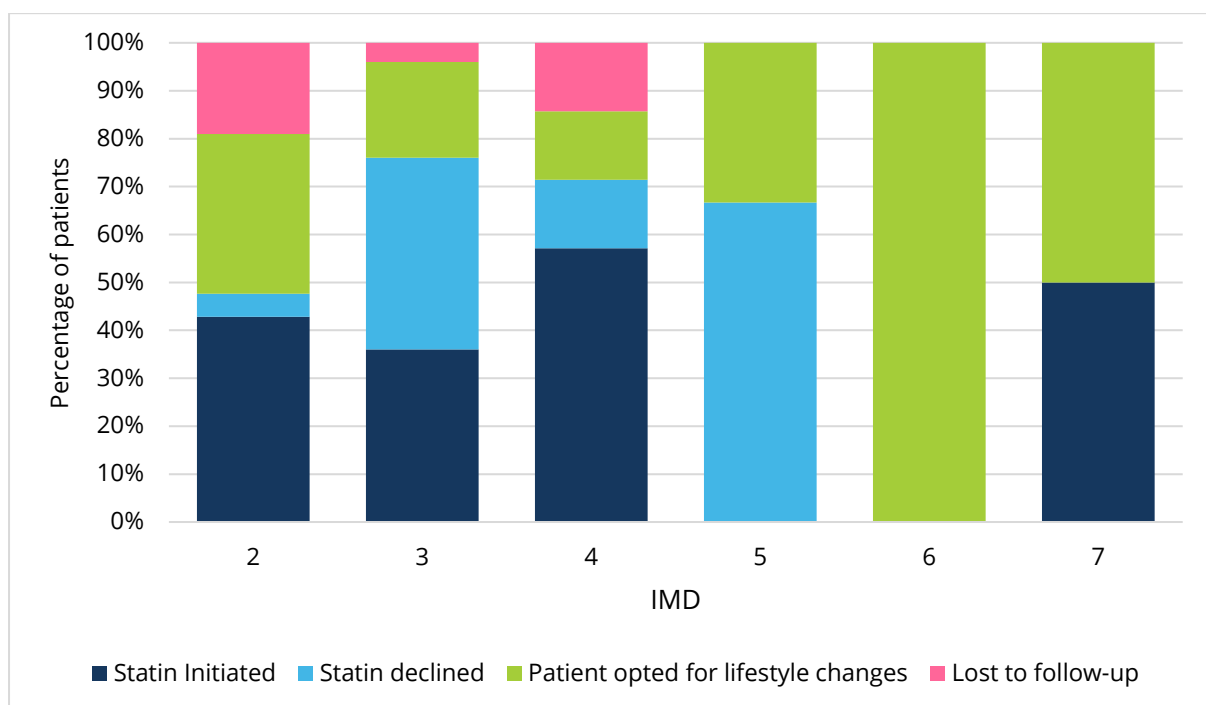*Figure 18. Test results follow-up*

Deprivation

Figure 19. Patient outcomes by IMD decile

The outcomes following POCT referrals show that the highest proportion of statin initiations and follow-up actions occurred among patients living in more deprived areas, particularly IMD 2 and 4. In IMD 2, nine patients started statins, with a further seven choosing lifestyle changes instead. In IMD 3, nine patients initiated statins, but this group includes the highest number of patients declining statins (ten). There were also several choosing lifestyle changes and a small number lost to follow-up.

From IMD 4 onwards, the number of outcomes reported drops sharply. Only a handful of statin initiations or lifestyle-change decisions are recorded in IMD 4 and IMD 5, with very small numbers declining statins or lost to follow-up. In IMD 6 and IMD 7, reported outcomes become minimal, with just one or two patients opting for lifestyle changes or starting statins.

This pattern likely reflects the underlying distribution of high-risk patients across IMD groups rather than differences in uptake or behaviour. Earlier analyses showed that high QRISK scores were more common in IMD 1-3, and fewer high-risk patients were identified in less deprived areas. The outcome chart mirrors this: where there are more high-risk patients, there are more statin decisions and lifestyle-change actions.

Ethnicity

Outcomes following cholesterol testing varied across ethnic groups, although small group sizes mean results should be interpreted with caution. For this reason, a chart is not included here. Among Asian or Asian British patients, more than half initiated a statin, while one quarter declined treatment and only a small proportion were lost to follow up. White patients showed a different pattern, with a low proportion starting a statin and nearly two thirds choosing lifestyle changes instead.

The Black or Black British group showed an even split between lifestyle change and loss to follow up, although the group size was very small. Early programme issues such as incorrect or missing contact details or unanswered calls are likely to have contributed to follow up challenges rather than indicating low engagement. Patients in the 'any other ethnic group' category mostly opted for lifestyle changes, and the not stated group showed a balanced spread across the three main outcomes.

Overall, higher statin uptake among Asian or Asian British patients and a preference for lifestyle changes among White patients were the most consistent patterns observed, though all findings should be viewed in the context of small sample sizes for lipid test outcomes.
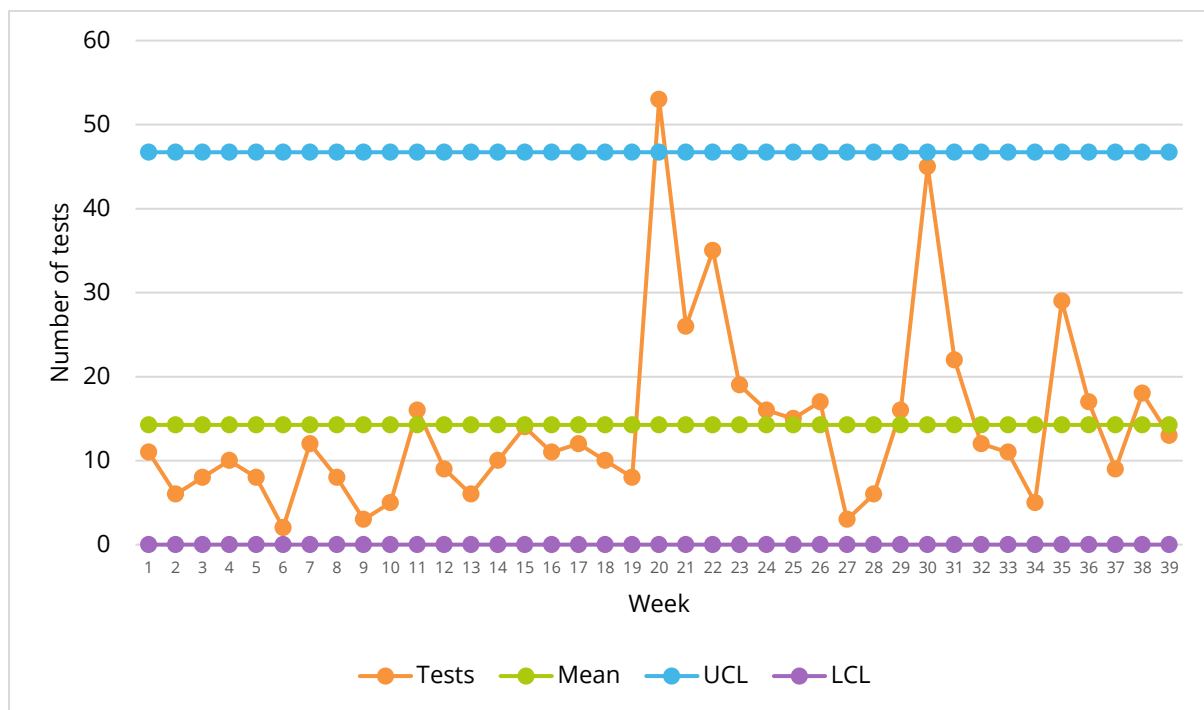
Test numbers and trends

Figure 20. Number of cholesterol tests across all pharmacies, weeks 1 to 40

This chart is a statistical process control (SPC) chart, which is used to monitor how a process changes over time and to distinguish between normal variation and unusual events. SPC charts display data points over time along with a calculated mean and control limits: an upper control limit (UCL) and a lower control limit (LCL). This helps to identify common cause variation (natural fluctuations) versus special cause variation (unexpected changes that may need investigation).

The chart shows the weekly number of cholesterol tests (the orange line), with UCL and LCL limits to highlight unusual activity. It shows that there have been three peaks in test numbers at approximately ten-week intervals, once the programme had become established (weeks 20, 30, and 36). Week 20 exceeds the upper control limit, indicating statistically significant special cause variation, while the peaks at weeks 30 and 36 are notable but remain within the control limits. The reasons for these increases are not clear at present.

There does not appear to be a notable gradient around the start-up phase, suggesting that the pharmacies were well prepared and able to undertake tests from their go-live dates. Similarly, there is no tail-off at the end of this period, once the peaks in activity are taken into account, indicating continued demand for cholesterol POCT in community pharmacies in these areas.

Table 3. Total numbers of tests carried out by pharmacy over 40 weeks

Pharmacy	Number of tests
Pharmacy A	208
Pharmacy B	115
Pharmacy C	96
Pharmacy D	58
Pharmacy E	35
Pharmacy F	22
Pharmacy G	22

Table 3 shows a wide variation in the number of tests carried out per pharmacy. Two of the pharmacies have undertaken five times and ten times the number carried out by the pharmacies that have done the lowest numbers of tests. The reasons for this variation are not known, but there may be limiting factors such as the capacity of the pharmacies or the level of interest among the local population.

The management of the POCT programme

This sub-section presents the views of individuals who were involved in the design and establishment of the POCT programme. They were asked about the process of establishing and running the programme, with an emphasis on lessons that can be learned for future iterations. The evidence is based on five interviews with individuals in programme roles. Four of these are from the original team in NEL where the initial pilot was established. The other provides a view from NCL, where the programme was adopted later.

The main topics that have arisen from this series of interviews are:

- Background and rationale for the programme.
- Stakeholder engagement.
- Programme aims and evolution.
- Programme design and governance.
- Pharmacy recruitment.
- Training and competency development.
- Technology and support.
- Challenges and responses.
- Success factors.
- Key advice for further implementation.

Background and rationale for the programme

The overall goal of the programme has been described as offering a more holistic cardiovascular prevention approach to the local population. This aligns with multiple national and local agendas, including the NHS 10-year plan, with its focus on disease prevention and on moving care out of hospitals into the community. It is also an important response to the NHS England Core20PLUS5 approach to reducing healthcare inequalities. This addresses the 20% most deprived areas of the country (measured by IMD) and population groups such as minority ethnic communities.

In terms of community care, this programme is specifically designed to develop the role of pharmacists in care and to improve their integration in the health care system through demonstrating their value. This also fits with the MECC approach to engaging individuals in conversations about their health during routine interactions.

Locally, the programme fits within the East London Cardiovascular Disease Prevention (ELOPE) strategy for reducing premature cardiovascular disease (CVD) mortality and health inequality in the communities of East London. The ELOPE strategy was developed by Barts Health, but operates across the whole of NEL and works as a connector for anything to do with CVD prevention pathways.

There has also been a fortuitous link with the development of the independent prescribing (IP) Pathfinder sites. These are pharmacists who can prescribe medication for patients with hypertension. They will have access to the primary care system and can initiate statin therapy for high-risk patients, avoiding the need to send patients back to their GPs, which can result in delays and loss to follow up.

Stakeholder engagement

There are multiple stakeholders for this programme and it has been important to engage with them all from the start. A key stakeholder group is patients, who are a central focus for the programme. Their involvement has been facilitated through the UCLPartners patients and public involvement and engagement (PPIE) team. A person with lived experience is a part of the steering group for the programme. In addition, HEART UK, the cholesterol-focussed charity, provide a wider patient perspective due to their national reach.

The early engagement of commissioners in particular is seen as an important element in the programme. This has involved getting the local integrated care boards (ICBs) and NHS England to participate in the steering group. Other local professional groups involved are the local pharmacy committee (LPC), the community pharmacies themselves, specialist hospitals, and pathology services who provide valuable expertise in testing and validation.

Additional organisations that can be considered stakeholders are the company providing the technology, who have been involved in providing support to the pharmacies and the evaluation team from UCLPartners. One stakeholder group that has been more challenging to involve (at least in NCL) is the GPs, but it is considered important to include them in any considerations about clinical pathway.

Programme aims and evolution

The initial aim of this programme, when it was conceived, was to assess the feasibility of POCT for cholesterol in community pharmacy settings. The intention was to test whether it can build on the blood pressure (BP) checks that were already carried out in pharmacies and integrate this testing in a cholesterol care pathway.

However, this aim has evolved over the course of the programme so far. It has become more of a 'cardio-metabolic risk assessment' and a part of the CVD prevention pathway more broadly. This provides a better fit with the prevention focus of the NHS 10-year plan. An important element of the aims from the start was to be able to translate this programme from a pilot in one ICB to a scalable, commissioned service that can be implemented in other areas.

Furthermore, there has been consideration of how this approach might become part of other care pathways. The machine that has been chosen to provide the cholesterol tests – the Afinion™ 2 Analyzer – can also undertake other tests, which opens the possibility of incorporating the POCT programme into diabetes and renal health pathways, in addition to the CVD pathway.

Programme design and governance

This programme has had a long gestation period, from its initial inception in NEL, covering many years. In terms of the design and implementation of the programme itself, that is estimated to have taken between six and eighteen months. This has included a lot of work in establishing appropriate governance; preparing service level agreements (SLAs); involving the relevant stakeholders, including buy-in and approvals from ICBs; plus the development of training materials. By comparison, in NCL it is estimated to have taken three to four months, due to adopting the approaches and materials already developed by NEL. The only substantive change made in NCL was modification to the SLA.

The programme started with just one pilot site in NEL, increasing that to a further six sites in the following months. This enabled a lot of changes to be made following the experiences of the first site. A rapid feedback and iteration cycle has been vital in being able to do this.

The governance of the programme is fundamental and this includes the internal and external quality checks for the testing process itself. Each community pharmacy does a monthly internal quality control (IQC) check on their machine. If for any reason the IQC is not carried out, the pharmacy can be locked out of the machine by the programme team. In addition to this the programme team carry out an external quality assurance (EQA) based on a comparison of the performance of the machines.

It was important to choose a testing technology that is properly validated. This is necessary so that a test carried out in a pharmacy does not have to be repeated by a pathology lab in order to have a robust result. Reference was made to a document provided by NHS England document, and endorsed by the Royal Pharmaceutical Society and the General Pharmaceutical Council (GPhC), which outlines how to select point of care testing, including the necessary validation checks, how to select equipment, and how to train users.

Pharmacy recruitment

The choice of areas in which pharmacies would be recruited for the programme was based on identifying the most deprived areas in NEL, in line with the Core20PLUS5 approach. Then the data on CVD burden was overlaid, to identify target areas.

The recruitment of individual pharmacies within these target areas was done through the LPC, who invited expressions of interest. The LPC and Barts Health know the community pharmacies and were able to assess the suitability of sites. For pharmacies that are IP pathfinders, due diligence has previously been done for that programme and so it was not necessary to repeat it.

The selection criteria were focussed on:

- Being located in areas identified in the Core20PLUS5 approach.
- Having private consultation rooms.
- Having adequate staffing to carry out the programme.
- Having some availability on the weekend, meaning Saturday opening as a minimum.
- Demonstrating willingness to innovate and deliver new services.

There was interest from more pharmacies than planned for in the development of the project. Some of the pharmacies included in the pilot have more than one site, so they were interested in offering the service on their additional sites. This may be an important factor in enlarging the programme within NEL, if that is part of future plans.

In NCL they decided to use the same methodology as NEL, based on areas of deprivation and high activity on the blood pressure monitoring and they were also keen to include IP Pathfinder sites. They had originally wanted to include ten sites, but sites from multiples (retail pharmacy chains) have been slow in signing up, so they began with six.

Training and competency development

The training for pharmacists was extensive and was carried out in person and online. It included the following elements:

- Understanding the purpose of the service including the clinical pathway and health inequalities.
- Demonstration of the Afinion machine and how to interpret results.
- Development of consultation skills and how to talk to patients, based on case studies.
- An on-site competency assessment, observing the pharmacists managing three to five patients in their pharmacies, including technique in drawing blood and consultation skills.

Following this, there has been an ongoing weekly review to see how people are doing. This enables rapid feedback, for example if someone has been tested outside of the inclusion criteria or if a pharmacist has not followed the appropriate pathway.

There is also a 'community of practice' in order to share some of the learning, where the more experienced community pharmacists can share some of the lessons they have learned to their more junior colleagues.

Technology and support

The technical support from the maker of the Afinion machine has been good, as has the support from HealthTab, who provide the data platform. This has been very responsive and has provided same-day responses to queries from the pharmacies and the central team in Barts Health. At the same time, the central team provide prompt support to the pharmacies for any queries that have arisen.

Early on there were some problems with delays in getting the machines delivered and in the delivery of the test cartridges. Some pharmacies were not prepared for how quickly they got through the cartridges and were nearly running out due to the time it took for new deliveries to arrive.

After the start of the programme, tablet computers were provided so that the information requested from patients can be entered directly into the HealthTab programme. This enables immediate calculation of the QRISK scores, which can be shown and explained to patients with a good visual presentation, which helps understanding. Communicating the results to the NHS app enables people to have ownership of their results, so they can show them to any healthcare provider they wish to.

Challenges and responses

Multiple sources have mentioned the time required to do the test as a challenge. The blood test in the machine itself takes around seven minutes. However, the consultation with the patient (including data gathering to calculate the QRISK3 scores), is reported to extend the full test time to between fifteen and twenty minutes.

The training for pharmacists was also time consuming, partly because they were not all available at the same time. So some elements of the training had to be provided more than once which took a lot of time and resource.

There were some initial problems with connectivity between the various digital systems in use. This was resolved with technical solutions, using modems & routers. In addition, some administrative processes have needed to be improved as the programme has progressed.

There have been some issues related to communication between pharmacies and GPs. The team in Barts Health have developed some standardised templates in order to facilitate a consistent approach to this communication.

Success factors

A number of issues have been identified as key factors in the success of this programme. These include having a good alignment with national policies and priorities, as well as local programmes, including the IP Pathfinder and BP check programmes. The IP Pathfinder sites, in particular, have had more exposure to and knowledge of CVD pathways already and they are familiar with the use of QRISK scores. Coupled with this is the wide group of stakeholders. It was stated that each person has provided useful input to support this programme. This has been very helpful, alongside the commitment of the different organisations themselves.

Strong governance processes have been very important. A lot of work was done in the design of the programme to ensure that the systems and processes adopted are in line with good governance. This includes assurances about the validity of the tests and the protection of patient confidentiality.

It is very important to understand the local population for this programme. A key element in the design of the programme has been the identification of pharmacies located in areas of areas of high deprivation (IMD deciles one and two). This has been key for the programme to get engagement with individuals who otherwise might not have interacted with services, including GP services, and otherwise might have 'slipped through the net'.

At the same time, the pharmacies that are offering a lot of opportunistic blood pressure tests are those where it is more likely to have the throughput for the cholesterol tests. Without this, it is unlikely that there would have been much uptake of this programme.

The training to ensure that the sites are competent to deliver the services and offer good feedback and consultations has also been key. With the benefit of this training, the pharmacists are able to provide consultations with cultural sensitivity to their local population and offer patient information tailored to individuals in terms of diet and cultural practices.

Key advice for further implementation

The full process of developing and implementing the programme, including the training and the in-person pharmacy visits, was labour intensive and time consuming. Other areas planning to implement this programme will have to be prepared to allocate this resource for a successful outcome, although the NCL experience shows that it can be partially reduced compared to the full development work undertaken by NEL.

The programme should be designed around clinical pathways, with consideration to where POCT fits within that pathway, as opposed to offering point of care testing on its own. This can lead to the development of new, or modified pathways, an example of which is that some patients are now being referred from hospitals in NEL to have their cholesterol tests done in community pharmacies.

Engaging commissioners and other stakeholders early helps in getting their buy-in for the approach, which supports the sustainability of the programme. In addition, it is vital to ensure that all the governance processes are in place, including internal quality control and external quality assurance.

There is some evidence that the pharmacies are identifying some people with hypertension who are not adhering to their treatment, and also some people with undiagnosed diabetes. Whilst this is not the main aim of this programme, it is nevertheless a positive outcome if it puts people onto, or back onto, appropriate treatment pathways.

One suggestion for potentially modifying the programme is to carry out POCT, using pharmacists, but taking place somewhere other than a pharmacy. This may be a community centre or other place where people congregate, in order to increase the identification of people who are not engaging with any health services.

The experiences and perceptions of pharmacy teams

Semi-structured interviews were carried out with pharmacists involved in the programme. All of the seven pharmacies participating in the programme in NEL were invited and six of them were available for interviews (one interview covered two pharmacies as they are owned by the same person). The interviewees were all pharmacists and included a pharmacy owner and a business director.

The introduction and start up phase

The pharmacies were approached to participate rather than volunteering (see the sub-section above for details). Respondents reported that they felt the programme was a good fit with the types of service they already provide. This includes the IP Pathfinder service, which incorporates prescribing for hypertension patients. In general the pharmacies have been involved in previous programmes of this kind, sometimes being involved in multiple pilots.

> *"As part of the IP Pathfinder service for hypertension we got introduced about the cholesterol point of care testing, which sounds very interesting to us because we can recruit patients while doing the hypertension consultation as well. So it sits in nicely to monitor the cardiovascular risk of patients."*

The start-up process for the pharmacies was viewed positively by respondents. The purpose of the programme was made clear including the inclusion and exclusion criteria for tests and the actions to take in different scenarios. The SLA was also clear and well understood. Positive feedback was given on the support provided by the team at Barts Health and for the training they provided.

It was noted that the whole process of familiarisation, preparation and training was quite long and it takes some time to get started using the machine with patients. Each pharmacy is supervised for the first three to six people they test and, although this was not felt to be inappropriate, it was seen as a rate limiting step in terms of getting the programme running in a pharmacy.

> *"I was very happy with the startup. I had help starting up setting up the machine. Obviously, we then had some shadow sessions, where I was shadowed, conducting the service for some patients within the pharmacy."*

The technology

Some pharmacies reported having issues with the IT systems, including difficulties linking different systems. The HealthTab system in one pharmacy was not importing results to the PharmOutcomes system properly, which meant having to duplicate the data entry. However, early problems were sorted out and respondents were positive about the support they received from the technology providers.

One pharmacy had an early problem with the Afinion machine not working, but a replacement was in place promptly. The only other issue that was mentioned as a challenge was that some participants were unready for how quickly the testing strips were used up. As it takes a while for a new order to arrive, they faced a shortfall early on.

> *"So, even one box, I could get through one box, maybe in like 2 days, whereas it takes seven days for an order to come through, which means I then had to postpone further consultations or appointments."*

Capacity issues

An important issue for pharmacies adopting this programme is the need to have sufficient space for consultations. This means having a 'reasonably sized' consultation room and ensuring that there is not too much competition for this space if the pharmacy offers other services requiring its use. When there are restrictions on access to the consulting space, it effectively limits the extent to which the service can be offered on a walk-in basis. Where this happens, a pharmacy might offer to provide the service on an appointment basis. One pharmacy was considering establishing a second consultation room for this reason.

> *"[The pharmacy has] only got one consultation room and because of that there is a little bit of a fight to get access to the room. For example, if we have other services like scheduled blood pressure checks or IBPMs. Or there are vaccinations booked in."*

Along with the consultation space, respondents acknowledged that it is necessary to have enough staff to provide the service alongside all the other work they do. In addition, the capacity of the fridges is an important consideration, so that the lipid testing cartridges can be properly stored.

Engagement of residents

The pharmacies are suggesting the service to their residents. As the service was still new, at the time of these interviews, residents were not well aware of it and so were not requesting the service or entering the pharmacy specifically for the test. It is, however, believed to be spreading by word of mouth among the local population. This can result in a gradual take up of the service at the start.

> *"Initially it was us, trying to identify people that would be eligible. I would say probably the first couple of weeks or first four weeks, that's what we were doing. But then after that it became a mixture. So like I said, because of the positive word of mouth, there was a lot of people in the local community coming in and asking."*

Pharmacists reported using posters, flyers, leaflets, information on their websites and their in-pharmacy screens to promote the service. At the same time, they are also able to target individuals by searching their records and dispensing history. In general the targeting to date has been opportunistic, by suggesting the test to people who come in for a BP check or to pick up certain types of prescription.

In general, no barriers were identified for types of residents who would have difficulty accessing the service. It was acknowledged that language can be a challenge, however, it was reported that in the pharmacy they can usually find staff who can translate or, in the absence of this, they can use translation services.

> *"Language barriers comes with every service. So again, the majority of my local community, a lot of them English isn't their first language. So language barriers, it's normal with any service. So it's just ways around it."*

People who do not have an email address cannot be sent their results the way others can. One pharmacy reported that the local Orthodox Jewish community, in general, are not comfortable with use of the internet or with any kind of smart devices. There have been requests for tests from people who are already on cholesterol medication, which is outside of the inclusion criteria. Whether a routine, repeat testing service might be appropriate is a question the programme organisers might want to consider in future.

Perceptions of the service for residents

The pharmacists reported that their residents feel that this is a good service and they have received many positive comments on it. Typically these relate to an appreciation for the speed and convenience of having the test and getting the results, compared with the process in general

practice. In addition, residents appreciate the time that the pharmacists take to explain and discuss the results with them. One pharmacist reported that they had people complain that the finger prick to draw blood was painful, so they changed type of needles they are using.

It was felt that this programme is also having a positive effect in raising awareness among local residents and of the importance of cholesterol and the benefits of having it tested. In this way, it is part of raising awareness of CVD prevention more widely. There is a sense that people are becoming more aware of health issues overall and of the lifestyle factors that can have an impact on health.

> *"I think what they appreciate is the time that we took to discuss, interpret the results, what it means, what they can do to try to reduce it and to keep their cholesterol under control and obviously help to reduce their risk of a heart attack or stroke."*

Residents' reactions to test results

Although some residents have been surprised by the results of their tests, the pharmacists report that they have not had any negative responses. The process raises awareness and, in general, people appreciate the chance to talk about their results and are willing to listen in this environment. One respondent referred to doing shared decision making, discussing the results with the residents and helping them decide what to do.

> *"If it's bad or just not as good as it could be, they're more like open to the idea of, "OK, what can I do?" So they're more like willing to listen. So a lot of them, when it's not so good, they generally know or they have doubts already. They already think, yeah, it's probably not going to be that good because XYZ. So then seeing it live and obviously illustrated in the way that they show the green, orange, and red panels of the results, it helps them see that there's room for improvement."*

Pharmacists have been able to provide some useful materials, including materials provided by Barts Health, such as a useful diagram for explaining results. In addition, good leaflets and other information material, developed by HEART UK, have been provided to residents to help them understand their test results. The pharmacists themselves are able to give advice adapted to their local residents, such as dietary advice adapted to South Asian residents.

Respondents report that many people who have had the test agree that they will make some lifestyle changes in order to improve their cholesterol levels and cardiovascular health. However, it is not clear whether these have actually been carried out. The pharmacists have not, for example, seen take up of stop smoking clinics following on from the test.

A mixed response to taking statins was reported. There is a resistance to statins among some people, with individuals often saying that they know someone who experiences bad side effects from taking the medication. In one case, a pharmacist reported about 2 out of five people show resistance to starting statins (40%). In some cases, people say they will try lifestyle changes rather than take statins and reconsider if this does not have an impact.

> *"It's quite mixed. I would say some people would say, can we try lifestyle advice first? Can we try to like change diet, like incorporate more exercise in my daily life before I start on the statins?"*

One pharmacist has adopted an approach of suggesting lifestyle changes if the person's QRISK is 10% or 11%. If it is above 15% they will tell the person that they should start taking statins. One respondent indicated that they would like to be able to prescribe statins other than atorvastatin, which is the particular one that people have negative views of.

Impacts on the pharmacies

There are indications from respondents that this programme can have an impact on the pharmacy and the other services they provide. The participants in this early stage of the programme are generally pharmacies that provide a number of other services, as indicated above.

As with the programme roles, pharmacists noted that, while the test itself takes around seven minutes to perform, the full process for the QRISK score, history taking and reporting results can take around fifteen to twenty minutes. A result of this is that some residents may prefer to book an appointment for the test rather than take it immediately, when they have entered the pharmacy for something else.

> *"Because it takes up the consultation room, obviously, and we've only one consultation room at the moment, so sometimes it does take a bit of time and we try to operate as a walk in service, but obviously if it gets too busy, then it has to be by appointment only"*

A positive impact reported by one of the respondents is that they feel they are getting better recognised by GPs and the primary care network (PCN) as an integral part of the team for patients with cardiovascular health issues. However, they feel that there is an issue with some GP practices not being aware of the programme and what the pharmacy is doing. There may be concern from GPs that they are going to get additional work as a result of the testing programme. To tackle these issues, it was suggested that there could be improved integration of primary care stakeholders in the programme.

Overview

The interview respondents indicate that they would advise other pharmacies to take on this service. It is not considered technically difficult and nor is it a big jump from they kind of work that pharmacies are already doing. Furthermore, it links well with some of the other services that they already provide. There is a sense that the service might increase footfall in the pharmacies, although this is likely to take time to become apparent. However, it is important to consider the capacity of the pharmacy to take on this work, in relation to staff and physical facilities.

> *"In practise it's been good, especially when it's been tied into other consultations, either the IP Pathfinder consultations or other consultations that the patients come in for"*

The respondents report that they have identified quite a few people who have hypertension, but who were not previously aware of it. Whilst this is good in itself, it will take a long time for this to work though into a measurable health benefit. It has, however, resulted in requests from some residents for more services to be provided in pharmacies, such as glucose testing and weight management.

Local residents' experiences and perceptions

Residents taking the cholesterol test were asked to fill in a questionnaire at the time of their test. The questionnaire included an option for respondents to take part in a more in-depth interview. This section reports the results of the survey first, then the results of an analysis of the interviews.

Residents' survey

The purpose of the survey was to gather feedback on pharmacy-based cholesterol POCT and to understand residents' experiences of the service and the support they feel is needed to maintain a healthy lifestyle. A total of 120 individuals had responded to the survey by the end of October 2025 and responses were collected and analysed anonymously. Figures 21 and 22 show the age and ethnicity of survey respondents. Not all respondents gave these details, so these numbers do not total 120.
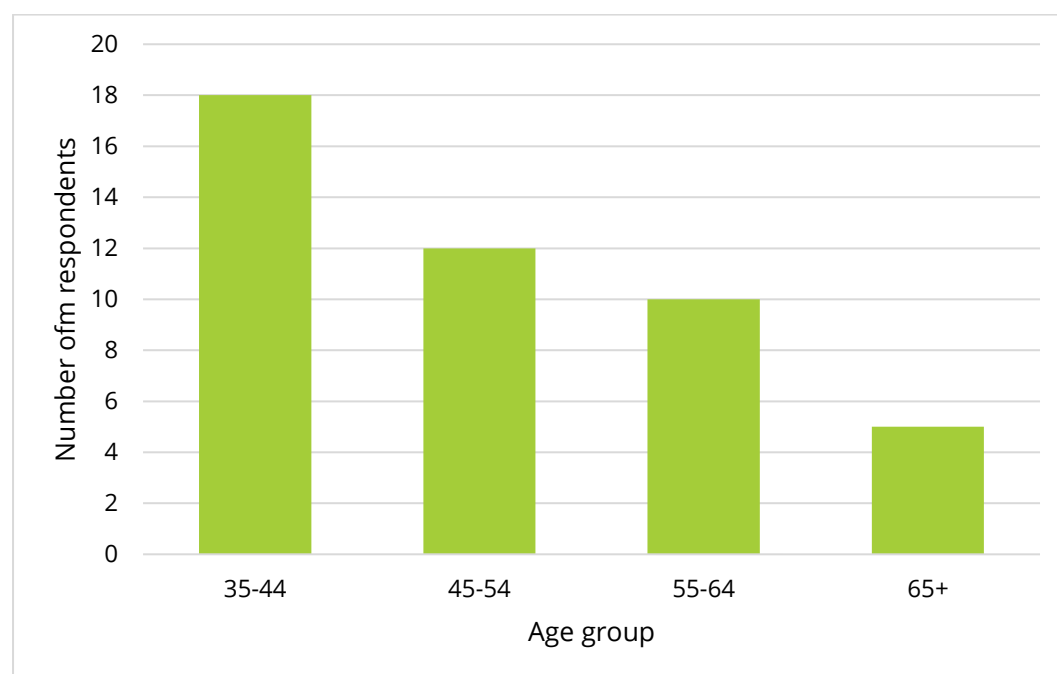

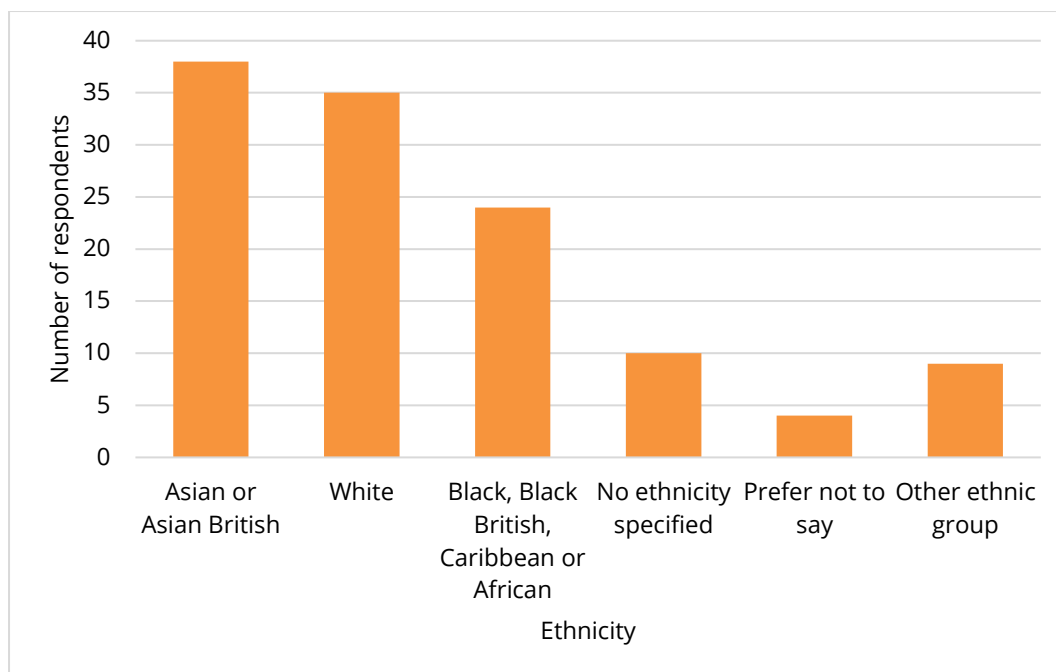*Figure 21. Age group of respondents to the cholesterol testing survey*

Figure 22. Ethnicity of respondents to the cholesterol testing survey

Overall patient experience and access to results

Overall, patient feedback on the pharmacy-based cholesterol testing service was strongly positive. 83% of respondents rated their experience as excellent, while a further 14% described it as good. Only 3% rated the service as fair or very poor.

Access to test results was also well received. 99% of patients reported that it was easy or very easy to obtain their blood test results directly at the pharmacy, with only one patient indicating any difficulty.

Suggestions for improvement

While the majority of patients felt the service was excellent and required no changes, 14 respondents provided suggestions for improvement. Their feedback included requests to expand the service to include diabetes testing, clearer health guidelines, and printouts with diet and exercise recommendations.

Some patients raised concerns about waiting times, noting delays of up to an hour to be seen or to receive results. Others recommended that the service be offered more regularly, such as on an annual basis, and that greater efforts be made to raise awareness through information sharing and advertising.

Impact on lifestyle changes

The cholesterol testing service appears to have had a positive influence on residents' intentions to adopt healthier lifestyles. Following their test, 80% of respondents reported that they plan to make changes to their diet, while 58% intend to increase their level of physical activity. Smaller proportions said they would reduce alcohol intake (8%) or stop smoking (5%). Only 8% of respondents indicated that they do not plan to make any lifestyle changes. Note: some patients selected more than one lifestyle change.

Service value and recommendations

The service was highly valued by patients, with 98% stating that they would recommend the cholesterol test to friends and family. Feedback highlighted the convenience, speed, and quality of care provided by pharmacy-based testing. Many participants viewed the service as an invaluable asset to the local community, noting that it saves time compared to arranging traditional GP appointments.

The one patient who did not recommend the service still provided positive comments elsewhere, describing it as "very good and no improvement," and an "excellent blood test experience."

Residents' interviews

At the time of undertaking the analysis for this interim report, ten residents had been interviewed. The interviews are planned to continue, in order to gather more information as the programme progresses in the next phase.

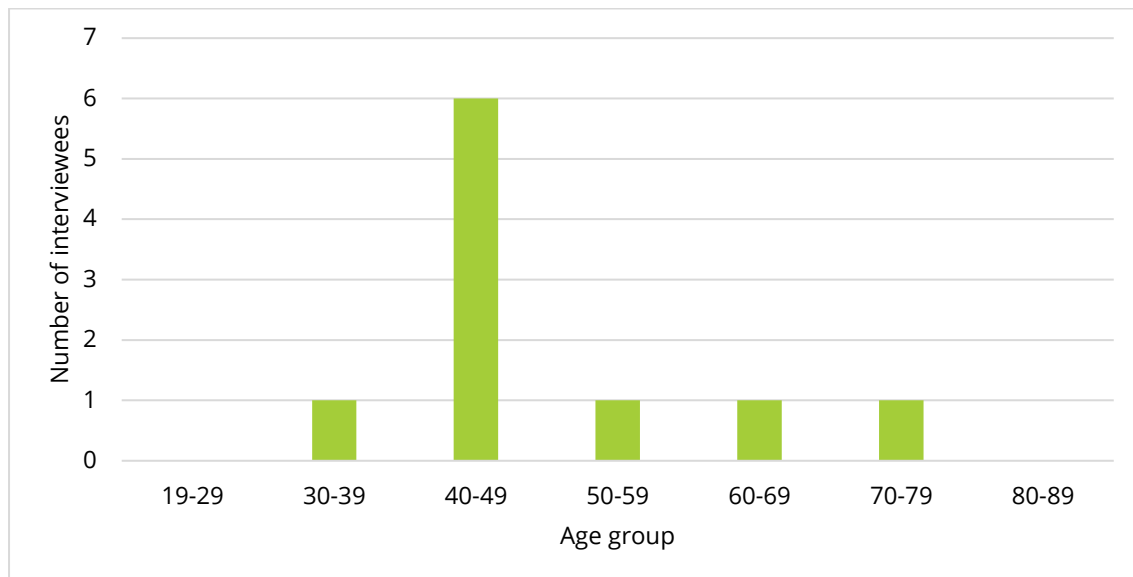Of the ten interviewees, six stated their gender as female and four as male. Their ages are shown in figure 23.

Figure 23. Age group of interviewees

Interviewees were not asked directly if they had any pre-existing conditions, however, three volunteered that they had diabetes, three that they had hypertension, or a family history of heart disease, and three stated that they had no current health conditions (one person made no reference to their health).

Figure 24 shows the IMD decile for the interviewees. Caution should be exercised in using these results as the IMD is based on a population score and does not imply that an individual within that population is necessarily representative of that population.
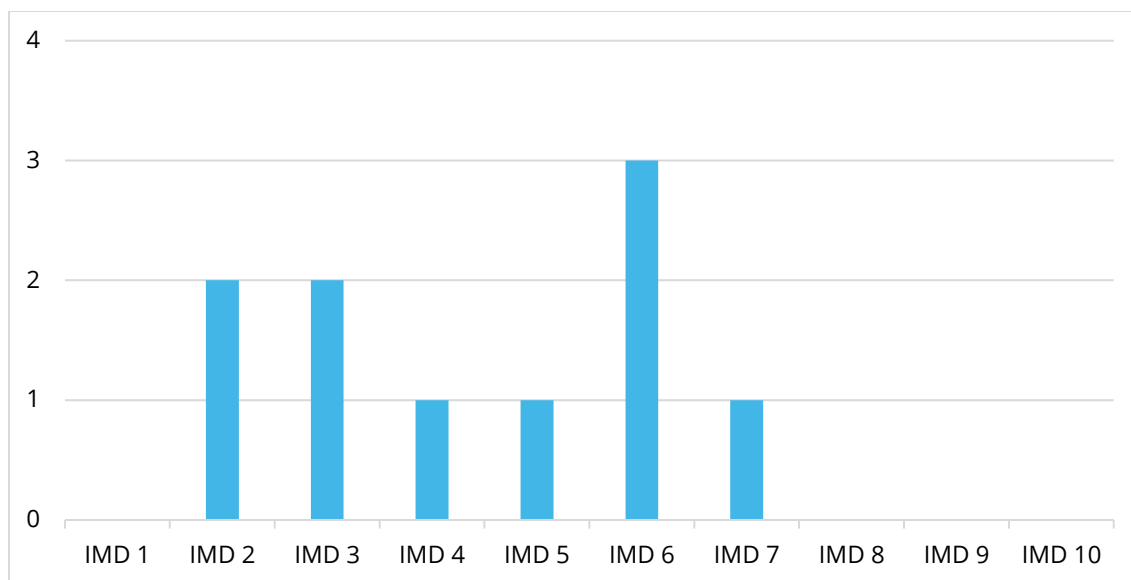
Figure 24. IMD decile of interviewees

The analysis identified the following themes in the interview responses:

- Residents' awareness of and ways of accessing the service.
- Residents' motivations for taking the test.
- The quality of communication and clarity of information from pharmacists.
- Residents' understanding of risks of cardiovascular disease as a result of the test.
- Advice and recommendations on lifestyle factors following the test.
- Any actions that residents decided to take as a result of the test.
- Any barriers that residents had in relation to acting on the advice from pharmacists.
- The perceived benefits of the service.
- A preference for having the test done in a pharmacy rather than a GP appointment.
- Any suggestions for improvement made by the residents.

These are emerging themes at this stage in the evaluation and may be modified as more interviews are completed.

Awareness and access to the service

In general the respondents reported being offered the test by the pharmacy, rather than seeking it out themselves. This may be while in the pharmacy to collect prescriptions, although some were phoned by the pharmacy to offer the test. Some respondents expressed positive surprise that this kind of service was available in a pharmacy.

> *"While I was there, the pharmacist said, oh, we've got a cholesterol machine here since you're above the age of 40. And you've got high risk for XYZ. Would you mind doing a cholesterol test? I said, go ahead."*

Some respondents were aware that they had had their cholesterol checked previously, for example by their GP. Others reported having had blood tests for conditions such as diabetes but again noted that this was the first time they had a test just for cholesterol.

Motivations for taking the Test

Some respondents had existing conditions, such as diabetes or hypertension, which resulted in an interest in monitoring their cholesterol levels. In some cases, these individuals were already getting routine tests, but wanted to take advantage of the convenience of the test offered in the pharmacy. In the same way, some respondents were aware of family history or risk factors and this inspired their interest in getting tested themselves.

> *"A couple of things really, both my mum and dad had, my mum more so, had high cholesterol, so because of being older now, I was like, well, I just want to make sure everything's okay."*

In other cases, respondents reported a more general interest in understanding and maintaining their health status. In all cases, this suggests a desire to be proactive in managing health and the convenience of the test in a pharmacy facilitated this.

> *"Once I hit 40, the doctors said, "Well, it's all downhill from now!" So I started getting regular checks."*

Communication and clarity of information

Several respondents reported that they appreciated the way pharmacists explained the results of their tests clearly. The use of jargon-free explanations was valued by some people.

> *"Everything was explained to me in layman's terms that I could understand - there was no medical terminology."*

The explanations, however, did not lack detail or relevance to the individuals' situations.

> *"So after receiving the results, the pharmacist explained everything to me. Yeah, she said that my heart health is OK - that it is within green range. But obviously without having some lifestyle changes or having some statins or something to help, I could be at risk of vascular disease."*

There were comments from one interviewee about the person doing the test being nervous, when they had someone with her. This may have been during the first, supervised phase of the implementation.

Understanding of cardiovascular risk

The respondents reported having an improved understanding of their risk of cardiovascular disease, as a result of taking the test. Whilst many already had some knowledge, due to their own conditions or that of family members, more detail was provided in this process and it was made specific to their situation.

> *"My cholesterol level was broken down to LDL and HDL. LDL was fine, but HDL was slightly lower than expected. HDL is the good cholesterol. He gave me advice around diet, like eating more fish, to improve that."*

Some respondents were reassured by the fact that their results showed normal levels of cholesterol, others were motivated to take action due to elevated risk scores.

Lifestyle advice and recommendations

The types of advice on healthier lifestyles that were reported by respondents included advice on dietary changes, increasing exercise, and weight management. The advice was mostly provided verbally, but information leaflets were also provided. Respondents were appreciative of advice that was specific and relevant to their situation.

> *"As an Asian, we have lots of butter and lots of oil so just to alternate, they gave a list of things we can eat alternatively to that. For example, Greek yoghurt and stuff like that. So that way it will help the diet."*

Some respondents stated that they were already following many of the appropriate lifestyle behaviours and therefore did not require major changes. However, they were aware that they could still make small adjustments such as switching to wholegrain products or reducing high-fat foods.

Actions taken after the test

Several participants reported having made health changes to their lifestyle following the test. These were principally changes to diet and an increase in exercise, such as walking more. In some cases these were in preference to starting on medication, such as statins. However, at least one person reported having been prescribed statins. In some cases the respondent went to their GP for follow-up. It should be noted that one of the pharmacies was not able to prescribe, so it may be that this respondent had their test at this location.

> *"I take around about half an hour, 40 - minute walk per day in the morning, and around about half hour, 30 - 40 minutes in the evening. I've changed some of my dietary requirements. So instead of having, like, creamy butter - you know, like flour and things like that - I've basically cut it right down."*

Barriers to acting on advice

Most of the respondents reported no barriers to acting on the advice they were given on receiving their test results. However, some mentioned personal challenges in adopting healthier lifestyles, such as difficulties in managing weight loss.

> *"The weight issue is the only barrier at the moment. I can't personally afford to try the weight loss injections, but obviously the GPs are not able to do them on NHS just yet. So I'm stuck, if that makes sense, at the moment."*

Some respondents reported a reluctance to take statins, when these were recommended to them. In some cases this appeared to be a general aversion to taking medications, in others, there was specific reference to having read or heard negative information about statins. There may be an attempt to adopt lifestyle changes specifically in order to avoid taking statins, in some cases.

> *"I don't want to start them if I can avoid it, so I'm trying to manage through diet and exercise. But I'll take them if lifestyle changes don't work. I have a review in three months."*

Perceived benefits of the service

Multiple respondents praised the service for being quick, convenient, and accessible. In particular they found it to be preferable to using GP services for testing cholesterol in terms of convenience of use and the immediacy of getting results.

> *"If this was available at the pharmacy, I'd never go to the GP for it. No need. I'd just pop into the pharmacy- even book it for a Saturday if needed. The results go to the GP anyway, so why go through all the GP hassle?"*

Some respondents reported that they felt better informed about their health and in better control of it. In some cases, this was an important or "life-changing" improvement.

> *"My dad had two heart attacks last October. If we had better access to preventive services like this, maybe some of that could have been avoided."*

Preference for pharmacy over GP test

The most common responses were a preference for getting a cholesterol test in a community pharmacy, rather than going to a GP. Reasons given for this included ease of access and having a shorter waiting time – for the test itself and for the results from a test, as well as not wanting to 'bother' a GP for a simple test when it wasn't an urgent issue.

> *"I think the pharmacists they have like he gave quite a lot of time and in GP you don't get that much of time, you know. I think it's only like 10 minutes that they give you at the GP, but I think he was quite patient and he was explaining, you know, what all the things. I mean, they give you time basically and they listen as well."*

The exception to this was an acknowledgement that a GP can offer tests and provide advice on a wider range of health issues, which may be appropriate in some circumstances.

Suggestions for improvement

Some suggestions were made for how respondents felt the service could be improved. These included promoting the service more effectively, for example simply providing more information about it, but also making materials available in other languages for residents who do not have a good level of English.

> *"Elderly people wouldn't know it [about the test]. Or maybe someone who can't speak English, they wouldn't know it as well. And they didn't know what is this test about or anything? So it would be nice to have different language transcripts as well so they can understand that way"*

It was also suggested that clearer explanations of the purpose and the provenance of the service would be helpful, specifically whether this is an NHS programme or a commercial programme.

In addition, it was suggested that offering this as a repeat testing service would be helpful, so that people could get regular updates on their cholesterol levels. This would be especially helpful for people who may be at high risk of poor health.

> *"For patients who are in their, either who have high cholesterol or anyone over the age of 45 onwards, they should do this test on a regular basis."*

Finally, there were some suggestions that tests in community pharmacies for other health issues, such as diabetes, would be welcome.

Conclusions and recommendations

Conclusions

Whilst this is an interim report of the evaluation of this programme, certain conclusions are drawn from the evidence described in the preceding pages. They are presented here as they relate to the evaluation aims (see page 10).

The operational effectiveness of the programme

The cholesterol POCT programme in North East London (NEL) has successfully established a programme for testing cholesterol levels and calculating QRISK scores among an urban area with multiple ethnic groups and varied deprivation levels.

The process of establishing the programme has taken considerable time and resource and required buy-in from multiple stakeholders. This is important learning for other areas that wish to adopt the programme. The training and robust governance procedures, which are part of that resource intensive process, have been key elements in the effective implementation of the programme. The governance includes competency assessment for pharmacy teams, internal quality control, external quality assessment for the processes, and the establishment of clear prescribing pathways.

The pharmacies have found the programme positive and have been able to provide tests for around 550 people over 40 weeks. There is no obvious gradient over time, indicating no apparent drop-off in the testing rate. There are, however, several marked peaks in activity, the reasons for which are not clear from the data. In addition, there is a very wide range of test numbers carried out between the pharmacies. The reasons for both of these results should be explored in the final phase of the evaluation.

The equity of access for patients according to demographic characteristics, deprivation and clinical need

The programme has successfully engaged residents across a broad range of ethnic and socioeconomic groups. Engagement has been particularly strong among Asian communities. Within this, it has been possible to reach groups who may benefit from early identification and treatment initiation.

The results show the service is able to reach people who may not routinely access traditional GP-based prevention services. There is high participation among people in the working-age population, especially those in mid-life. At the same time, it is also picking up some individuals in the very young and very old age groups.

There has been very high representation from people in the more deprived areas among the people using the POCT service, in particular those from IMD deciles 2 and 3. This demonstrates that the programme is able to provide accessibility to residents in lower income and higher risk communities, who may stand to benefit most from early cholesterol testing.

The clinical effectiveness of the programme, to identify people with high-risk cardiovascular disease and optimise medication in the community setting

Across all tests, around one in five individuals had a QRISK score of ≥10% (111 individuals), which is above the healthy level set in national guidelines. Given the relatively young age profile of POCT service users (with the majority aged 30 to 50), this is important, suggesting that the service is successfully identifying people at elevated cardiovascular risk earlier than may otherwise have been the case.

A small number of residents (14 individuals) recorded critically high cholesterol levels: 5 had total cholesterol above 7.5 mmol/L; 5 had LDL cholesterol above 4.9 mmol/L; and 4 had non-HDL cholesterol above 5.9 mmol/L. A slightly larger group (27 individuals) showed raised triglycerides, above 4.52 mmol/L, which can be associated with metabolic conditions.

Following the test, 24 patients started taking statins. Many residents expressed a preference for lifestyle modification rather than starting statins, but the consultations nonetheless provided an important opportunity to raise awareness, support behaviour change, and, where appropriate, initiate timely treatment through independent prescribing.

The QRISK score incorporates certain demographic characteristics and risk factors, including age, ethnicity, family history, etc. As a result, many of the results in this report – such as the correlation between age and QRISK score –reflect the scoring system and are presented as descriptive statistics about the local population, rather than providing clinical insight. The extent to which this programme may be having an impact on long-term health cannot be assessed with the evidence considered here.

The staff and patient acceptability of the programme

To achieve the implementation of this programme, a careful selection of pharmacies was undertaken. The characteristics of the local community, as well as the facilities and preparedness of the pharmacies themselves are important elements in this selection. This includes having facilities and staff to provide the service, which can be challenging particularly if a walk-in service is offered, as opposed to an appointment-based service.

Pharmacy teams unanimously report positive experiences and opinions of this service, believing it benefits local residents. The support of the team from Barts Health, as well as external support for the technology are consistently praised. There is a strong view that this is a good fit with other services that pharmacies provide and it is within the competencies of pharmacists to provide a relevant service for their local populations.

Local residents also reported positive experiences of the services. The convenience and speed of the service are welcome, particularly when compared to the process in GP surgeries. The time taken to explain the process and results, and the culturally appropriate advice were also identified as positive elements of the service.

Many residents who responded to the survey and interviews for this evaluation were already aware of health issues or risks, such as hypertension. However, taking this test may help to highlight specific risks and identify appropriate actions. Many participants expressed a preference for reducing risk through changing health behaviours, rather than taking statins and there was a substantial level of resistance to statins evident. The extent to which residents actually adopted healthier lifestyle practices, following their intention to do so, is not known.

The wider system impact of the programme and potential for scale

An assessment of the wider system impact of the programme will be fully considered in the final evaluation report, due in June/July 2026. A programme has already been established in North Central London (NCL), building on the proof of concept provided by the experience in NEL.

Recommendations

The ELOPE CVD POCT team in Barts Health should disseminate this programme, along with the lessons learned from its design and implementation. They should consider sharing their training, governance procedures, SLA and other resources to support others and reduce the resource burden of set-up.

Thought should be given to how best to enhance collaboration of primary care with the programme. The opportunity should be grasped to build on current GP engagement and optimise existing communication pathways to ensure seamless integration and shared management of patients identified through the programme.

The variation in pharmacy activity, between sites and over time, should be investigated, to ensure learning by understanding the drivers of successful implementation. This should be used to help refine future selection and ensure resources are directed to areas with the greatest potential impact.

More thought should be given to how patients are engaged in the testing programme. This should include promotional materials, publicity and community outreach. In addition, the approach to case finding through health records and prescriptions should be refined, to maximise the uptake of the tests, in line with the Core20PLUS5 priorities.

Following on from the analysis in this interim report, the final phase of this evaluation should undertake estimates of potential health benefit. This can use data on the number of people identified with high QRISK scores, and the proportion who start taking statins and those who make beneficial lifestyle changes. Making extrapolations from this data can enable estimates to be made of the impact on long-term health.

The final phase of this evaluation should assess the wider system impact of this programme. This should include the actual and potential impact on primary care, and other sectors of the healthcare system.