NHS Health Checks Evaluation

Evaluation of the East Sussex NHS Health Checks programme across General Practices and One You East Sussex

Strategic Summary and Key Findings

Contents

Purpose and Scope

This report provides a summary of the most significant findings and recommendations from the East Sussex NHS Health Checks Evaluation. It highlights areas of strong performance, meaningful variation, and system-level implications that are of strategic interest to commissioners, system leaders, and delivery partners.

The scope of this report covers:

- Programme effectiveness in identifying clinical and behavioural cardiovascular risk factors
- Equity and targeted delivery to higher-risk populations
- Progression through follow-up and clinical pathways
- Economic value and return on investment
- Provider experience where this has implications for quality, consistency, or system improvement

This document is not intended to reproduce the full evaluation. Detailed methodology, comprehensive results, literature review, and supporting data are contained within the main evaluation report.

This document is designed to surface *'what matters'* for system assurance and decision-making. It prioritises findings with implications for commissioning, delivery models, and future service development, rather than presenting technical detail.

The full NHS Health Checks Evaluation should be referred to alongside this report for detailed analysis, data interpretation, and methodological assurance.

NHS Health Checks Local Context

Cardiovascular disease (CVD) remains a major contributor to premature mortality in East Sussex and continues to generate substantial, and largely avoidable, demand on health and care services. While clinical treatment has improved outcomes for many, population-level reductions in CVD are increasingly dependent on earlier identification of risk and sustained prevention rather than downstream intervention alone.

CVD risk and outcomes are unevenly distributed across the county. Higher levels of risk are observed among people living in more deprived areas, individuals with severe mental illness or learning disabilities, certain ethnic minority groups, and older age cohorts. These patterns reflect wider social and structural determinants

of health, many of which sit beyond the direct control of health services. As a result, the extent to which prevention programmes can influence outcomes depends not only on reach, but on whether they are designed and delivered in ways that mitigate, rather than reproduce, existing inequalities.

The NHS 10-Year Health Plan signals a strategic shift towards prevention, early diagnosis, and population health management. Within this context, NHS Health Checks function less as a standalone intervention and more as a test of whether national prevention ambitions can be operationalised locally. Their value lies in their ability to systematically identify undiagnosed risk, prompt timely clinical follow-up, and support behaviour change among people who may have limited engagement with primary care.

However, the contribution of NHS Health Checks to these objectives is not automatic. Impact depends on consistent identification of risk, effective progression through follow-up pathways, and alignment with wider system action on the social determinants of health. For East Sussex, understanding where the programme is delivering meaningful prevention, and where its influence is constrained, is therefore essential to determining its role within a prevention-led and equitable health system.

Behavioural and Clinical Risk Overview

Between 2018–19 and 2022–24, a total of 27,846 NHS Health Checks were delivered in East Sussex, with 25,198 delivered by GP practices and 2,648 delivered by One You East Sussex (OYES). OYES delivery was split approximately evenly between community settings (such as workplaces) and delivery on behalf of GP practices. This mixed delivery model provides an opportunity to assess both consistency of risk identification and variation in follow-up across settings.

Behavioural risk identification

Due to coding and data transfer issues between OYES and GP systems, behavioural risk analysis is restricted to GP-delivered NHS Health Checks. As a result, comparisons between delivery models are not possible for behavioural outcomes.

Behavioural risk factors remain highly prevalent. Nearly 60% of attendees were recorded as having a BMI ≥25, with 24.2% classified as obese, and 19.3% recorded as physically inactive, indicating a large cohort who could benefit from weight management and physical activity support. Smoking prevalence among Health Check attendees (10.8%) mirrors the England average, with higher prevalence observed in Hastings (15.9%), reinforcing the need for continued cessation support.

Alcohol risk identification appears lower than expected when set against national context. National survey data suggests 11% of adults drink at increasing risk levels,

whereas locally only 6.4% of NHS Health Check attendees were recorded as increasing-risk drinkers (AUDIT 8–15), with <1% recorded in higher-risk categories. While direct comparison is not possible, this discrepancy suggests likely under-recording or variation in screening and coding practice, rather than true absence of risk.

Overall, overweight, obesity, and physical inactivity emerge as the dominant behavioural risks, with alcohol risk identification representing a notable gap in recorded prevention activity.

Clinical risk identification and follow-up

Clinical risk identification was found to be consistent across delivery models, with high blood pressure and moderate cardiovascular risk (QRISK 10–20) the most frequently identified outcomes. Nearly 1 in 4 people (24.4%) attending an NHS Health Check were identified with high blood pressure, and approximately 23% were identified with a QRISK score of 10–20%, highlighting the scale of early risk detection.

Diabetes risk (HbA1c)

HbA1c pathways show strong consistency across GP and OYES delivery models. Raised HbA1c was identified in 4.9% of GP checks and 4.0% of OYES checks, with similar prevalence of very high HbA1c, non-diabetic hyperglycaemia (NDH), and diabetes. Follow-up outcomes were also consistent: around one-third of individuals with raised HbA1c were diagnosed with NDH, and approximately two-thirds of those with very high HbA1c progressed to a diagnosis of diabetes. This suggests a relatively robust pathway from identification to diagnosis for diabetes risk.

Hypertension

Hypertension pathways showed greater variation. Individuals identified with high blood pressure through OYES-delivered Health Checks were more likely to receive a follow-up blood pressure appointment (68.1%) compared with those identified through GP-delivered Health Checks (49.5%). Those identified via OYES were also more likely to receive a hypertension diagnosis at follow-up.

Despite higher follow-up rates, OYES-identified individuals were less likely to receive antihypertensive prescribing, a pattern that persists at second follow-up. This likely reflects differences in pathway design and clinical context rather than inappropriate care. OYES delivery focuses on prevention and behaviour change and does not include prescribing, while GPs have access to full medical histories and can make prescribing decisions at the point of care. These differences highlight the importance of understanding handover, patient readiness, and clinical decision-making across pathways.

Atrial fibrillation

Atrial fibrillation (AF) was identified infrequently but with high clinical significance. 0.5% of attendees had an irregular pulse and 0.2% were diagnosed with AF. Among those diagnosed, 68.3% were prescribed anticoagulation, indicating appropriate action where AF is detected. Although numbers are small, this represents high-impact prevention in terms of stroke risk reduction.

QRISK and statin prescribing

For individuals with QRISK 10–20%, prevalence and outcomes were similar across delivery models. Around 25% had a recorded statin outcome (prescribed or declined). This should not be interpreted as low offer rates, but rather as a recording limitation, as lifestyle-only discussions and shared decision-making are not consistently coded.

For individuals with QRISK ≥20%, statistically significant variation was observed. 33.7% of individuals identified through GP-delivered Health Checks were prescribed statins, compared with 22.0% of those identified through OYES. OYES-identified individuals were also more likely to decline statins when offered. Similar patterns were observed for high cholesterol. These differences are best understood as reflecting consultation context, prescribing authority, patient readiness, and coding practice, rather than systematic under-treatment.

Chronic kidney disease (CKD)

CKD represents one of the most significant gaps in the pathway. While national prevalence is estimated at 10–15%, only 0.2% of NHS Health Check attendees were coded with CKD locally. Although 44.3% of all attendees had serum creatinine measured, only 51.9% of those with high blood pressure received renal function testing, and just 0.4% of those with high blood pressure were subsequently diagnosed with CKD. Once identified, monitoring appears robust, with 94.2% of diagnosed cases having serum creatinine recorded. This pattern strongly suggests under-identification or under-recording, particularly among higher-risk individuals.

Summary

Taken together, the findings show that NHS Health Checks in East Sussex are effective at identifying clinical risk at scale, with particularly strong performance in diabetes risk and atrial fibrillation detection. However, variation emerges after risk identification, with differences in follow-up, prescribing, and recording by delivery model and condition. Behavioural risk identification is less consistent across the programme, reflecting both variation in delivery and known limitations in the extraction of behavioural risk data for OYES-delivered Health Checks via GPPASS. In contrast, chronic kidney disease appears to be substantially under-identified across delivery models. The greatest opportunity for strengthening

impact lies not in expanding delivery volume, but in improving pathway alignment, follow-up consistency, and data visibility, particularly for conditions and populations with the highest burden of risk.

Equity Audit Overview

Targeted cohorts were introduced in 2021 for GP delivery (IMD1, smoker, ethnic minority, SMI, learning disability). Between 2022–24, GP practices issued 71,000 invitations. The overall uplift was primarily driven by increases in targeted invitations, while non-target invitations fell.

Cohort	Invitations 2018-20	Invitations 2022-24	% change
Non-target	52,058	49,206	−5.5%
Ethnic Minority (EM)	2,612	4,424	+69.4%
IMD1 (most deprived)	9,881	14,312	+44.8%
Severe Mental Illness (SMI)	953	1,184	+24.2%
Learning Disability (LD)	283	285	+0.7%

Financial incentives appear to have shifted invitation behaviour towards priority cohorts (especially EM, IMD1 and SMI).

Completed checks fell overall between 2018–20 and 2022–24, but some targeted cohorts saw increases in checks attended (EM, IMD1, SMI). The key equity issue is that uptake (attendance among those invited) declined, more sharply for targeted cohorts.

Cohort	Checks 2018-20	Checks 2022-24	% change
Overall	30,866	27,727	−10.2%
Non-target	22,814	19,759	−13.4%
Ethnic Minority (EM)	1,369	1,771	+29.4%
IMD1	3,705	3,999	+7.9%
Severe Mental Illness (SMI)	169	244	+44.4%

Targeting improved *reach* (% invited), but engagement/uptake fell, and the fall was steeper in targeted groups.

Metric	Targeted 2018-20	Targeted 2022-24	Non-target 2018-20	Non-target 2022-24
Eligible population (TEP)	52,251	58,749	255,965	256,128
Invites	16,462	21,788	52,058	49,206
% invited	31.5%	37.1%	20.3%	19.2%
Checks	8,052	7,968	22,814	19,759
% uptake (invited to attended)	48.9%	36.6%	43.8%	40.2%
% of TEP attending	15.4%	13.6%	8.9%	7.7%

Targeted cohorts often show higher burden of risk than non-target groups, but patterns differ by cohort. Importantly, most targeted groups also show lower attendance (except the “smoker” cohort).

Group	BMI>30 %	Smoker %	HTN %	NDH %	DM %	CKD %	Attended %
Non-target	21.9	11.6	3.07	1.5	0.5	0.21	40.2
Ethnic Minority	21.7	9.5	3.0	3.7	1.2	0.11	40.0
IMD1	27.2	22.5	3.05	2.18	1.1	0.13	27.9
Learning Disability	33.0	11.4	0.0	2.3	0.0	1.14	30.9
SMI	29.5	29.5	3.7	1.2	0.4	0.0	20.6
Smoker cohort	20.7	100.0	3.3	2.19	0.7	0.18	68.3

Higher-risk groups (IMD1, SMI, LD; and EM for NDH/DM) often have lower attendance, risking inequity in downstream benefit.

Behavioural gradients

- Smoking shows a steep deprivation gradient (IMD1 27.2% vs IMD10 5.7%).
- Obesity shows a clear deprivation gradient (IMD1 31.4% vs IMD10 18.4%).
- BMI≥25 is high across all groups (63.6% IMD1 vs 54.0% IMD10), implying both universal and targeted needs.
- Sex patterning: smoking higher in men (15.2% vs 11.1%), inactivity higher in women (21.5% vs 16.3%), and BMI≥25 higher in men (66.7% vs 55.0%).
- Age patterning: smoking falls with age (17.1%: 40–44 to 6.1%: 70–74); inactivity rises with age (15.7%: 40–44 to 30.0%: 65–69); obesity peaks mid-life.

Clinical equity

- Statins after high cholesterol: men more likely to accept/be prescribed (40.6%) than women (33.2%); women more likely to decline prescription (11.5% vs 5.6%).
- High HbA1c by ethnicity: markedly higher prevalence in Black (16.4%) and Asian (11.2%) groups vs White (6.9%).
- High BP by sex: higher in men (30.5%) than women (20.0%).
- Follow-up is a consistent weakness in some pathways: follow-up after abnormal HbA1c is only 39–43%, meaning most people with raised HbA1c have no timely recorded review.

Summary

- Targeting worked upstream: invitations increased substantially for EM (+69%) and IMD1 (+45%).
- Engagement is the bottleneck: uptake fell for everyone, but more sharply for targeted cohorts (48.9% to 36.6%).
- Risk is patterned: deprivation, sex, age and ethnicity shape risk burden (notably smoking/obesity gradients and HbA1c differences by ethnicity).
- Equity weakens along the pathway: gains in targeted invitation are not consistently translating into equitable attendance, follow-up, and treatment outcomes.

Economic Overview

The economic effectiveness of the NHS Health Check programme in East Sussex was assessed using the NHS Health Check Ready Reckoner, a nationally standardised modelling tool developed by the Office for Health Improvement and Disparities (OHID). The model estimates downstream health benefits, service impacts, and cost savings arising from NHS Health Check activity, based on evidence-informed national assumptions applied to local population data.

For this evaluation, the Ready Reckoner was populated using East Sussex-specific activity data from 2022/23, with locally derived staffing and laboratory costs incorporated to improve accuracy and relevance for commissioning decisions. While the Ready Reckoner provides a robust and consistent framework, it is important to note that the current version was developed in 2014 and therefore represents a conservative estimate that may not fully reflect contemporary pathways, costs, or wider system benefits.

Local costing assumptions

To reflect real-world delivery in East Sussex, national default costs were replaced with local staffing rates, appointment durations, and laboratory prices, aligned with local payment agreements , PSSRU unit costs, and local pathology tariffs. This ensures the analysis reflects actual resource use within GP-delivered NHS Health Checks rather than relying on national averages.

Estimated health and service outcomes

Based on 2022/23 delivery levels, the Ready Reckoner estimates that NHS Health Checks in East Sussex generate measurable downstream benefits each year across prevention, diagnosis, and treatment pathways.

Outcome	Estimated additional people per year
Complete weight management programme	1,079
Increase physical activity	243
Quit smoking	10
Taking statins	536

Taking antihypertensive medication	433
Diagnosed with diabetes	128
Compliant with impaired glucose regulation lifestyle support	240
Diagnosed with chronic kidney disease	380

These outcomes underpin both the projected health gains and longer-term financial savings modelled in the economic analysis.

Cost-effectiveness (cost per QALY)

The programme is estimated to generate approximately 1,772 quality-adjusted life years (QALYs) over the lifetime of individuals receiving an NHS Health Check.

The cost per QALY is estimated at: £2,114 per QALY

This is substantially below the NICE cost-effectiveness threshold of £20,000-£30,000 per QALY, indicating that NHS Health Checks represent highly cost-effective prevention.

The programme delivers additional years of healthy life at a fraction of the cost that NICE considers acceptable for NHS investment, placing it among the most efficient population health interventions.

Return on investment and financial trajectory

The Ready Reckoner models costs and savings over a 20-year horizon. As expected for prevention, costs outweigh savings in the early years, with net savings emerging as avoided events and improved disease management over time.

Time point	Costs incurred	Savings	Net savings
Year 1	£742,751	£124,102	-£618,650
Year 5	£1,537,924	£830,307	-£707,618
Year 10	£1,841,530	£1,714,301	-£127,229
Year 15	£2,228,066	£2,319,245	£91,179

Year 20	£2,524,173	£2,761,897	£237,724

Given that the East Sussex programme is now in its 16th year, the modelling suggests the programme has entered a net-saving phase, with savings continuing to increase over time.

Benefit–Cost Ratio (BCR)

Using 20-year projections:

- Total costs: £2,524,173
- Total savings: £2,761,897

This gives a Benefit–Cost Ratio (BCR) of 1.09

Interpretation: for every £1 invested, the programme returns approximately £1.09 in direct healthcare savings by year 20.

This estimate:

- includes direct NHS savings only (e.g. avoided admissions, reduced prescribing and GP activity),
- excludes wider societal benefits such as productivity, reduced informal care, and wellbeing gains.

As a result, the BCR should be viewed as conservative.

Uptake and future value

The BCR above is based on 45% uptake in 2022/23. By 2024/25, uptake had increased to approximately 50%.

If uptake is sustained at 50%, projected net savings by year 20 rise to £264,137, with a corresponding increase in the BCR. Higher uptake, particularly among higher-risk groups, amplifies population-level impact and accelerates the realisation of both health and financial benefits.

Summary

- NHS Health Checks in East Sussex are highly cost-effective (£2,114 per QALY).
- The programme has entered a net-saving phase, with savings increasing over time.
- The BCR of 1.09 is conservative and likely understates true value.

- Improving uptake, especially in higher-risk groups, offers the greatest leverage to increase return on investment.
- Use of local cost data strengthens confidence in value-for-money conclusions and commissioning decisions.

Conclusion

Across all elements of the evaluation, the NHS Health Check programme in East Sussex demonstrates substantial value as a preventive health intervention, while also highlighting areas requiring further development to maximise its impact. The programme reliably identifies behavioural and clinical cardiovascular risk factors and supports early detection of conditions such as high blood pressure, diabetes, and hypercholesterolaemia. However, the degree to which identified risks translate into clinical follow-up, diagnosis, and treatment varies across delivery models, with hypertension, CKD, and QRISK management representing key opportunities for improving consistency and clinical action.

Differences between GP-led and OYES-led delivery show that the two models serve complementary functions. GP-led checks typically support stronger continuity of care and more reliable progression into clinical management, while OYES-led checks expand access to populations who face barriers to engaging with GP practices. Strengthening the interface between delivery models, particularly around digital interoperability, information transfer, and responsibility for follow-up, will be essential in ensuring that identified risks lead to equitable clinical outcomes.

Economic analysis strongly supports the cost-effectiveness of the programme. The cost per QALY is far below NICE thresholds, and projected long-term savings reinforce the programme's value for money. Increasing uptake, particularly among high-risk and underserved groups, would further enhance both health and economic outcomes.

Provider experiences confirm that the programme is valued and that the workforce (who participated in the survey) are confident in delivering preventive conversations; however, survey responses also highlighted time pressures, training needs, and inconsistency in follow-up processes. These provider-level insights, combined with system-wide findings, show that sustainability depends on continued investment in training, digital infrastructure, consistent clinical pathways, and aligned preventive policy.

In summary, NHS Health Checks in East Sussex deliver meaningful clinical, behavioural, and economic benefits. Addressing the identified system, workforce, and pathway challenges will be crucial to strengthening delivery, maximising

preventive impact, and ensuring that the programme remains aligned with both local needs and national public health priorities.

Recommendations

Section	Finding	Responsible Authority	Recommendation
3	Data across third-party NHS Health Checks was not separable i.e. OYES and Pharmacy delivered.	Public Health One You East Sussex	Should there be multiple providers of third-party health checks, a mechanism to enable analysis of NHS Health Checks delivered by different third-party providers should be explored.
3.2.4	No cross-tabulation of characteristics (e.g., sex & age) was performed in the Health Equity Audit.	Public Health	Future analyses could explore interactions between characteristics to provide a more nuanced understanding of programme uptake and outcomes.
4.5	Lack of research on the effectiveness of different invitation methods for various ethnicities and genders. Current methods appear less effective among targeted cohorts.	Public Health GP Practices One You East Sussex	Explore opportunities to pilot different invitation methods (e.g., telephone calls), as well as messaging informed by behavioural insights/national segmentation tools.
6	This evaluation did not track behavioural outcomes (e.g., referrals to OYES and intervention outcomes).	Public Health One You East Sussex	Track behavioural risk factor outcomes for individuals referred into OYES following an OYES-delivered NHS Health Checks. Explore feasibility of tracking behavioural risk factor outcomes for individuals referred to OYES following a GP-delivered NHS Health Check.
6	Follow-up of clinical risk factors identified by OYES varied across risk types and delivery	Public Health GP Practices One You East Sussex	Explore how Public Health might support GP Practices to consistently

	models. Unknown whether variation reflects GP follow-up or OYES emphasis.		follow up clinical risks identified by OYES.
6.1	Percentage of BMI, smoking and alcohol data recorded in GP-delivered NHS Health Checks was low. Possible under-reporting or template issues.	Public Health	Investigate whether low recording levels for smoking and alcohol are representative or reflect under-reporting or technical issues in data transfer.
6.1	Variation in recording may reflect inconsistent use of templates or incomplete data fields in GPPASS.	Public Health GP Practices	Provide refresher guidance on correct template use and core mandatory fields to improve completeness of behavioural data.
6.1	Data transfer and coding inconsistencies between OYES and GP practices led to incomplete or unusable behavioural risk factor data, limiting the ability to compare outcomes across delivery models and affecting the reliability of recorded follow-up data.	Public Health GP Practices One You East Sussex	Improve the standardisation and interoperability of behavioural risk factor data captured through OYES-delivered NHS Health Checks to ensure key fields such as BMI and AUDIT-C are consistently transferred into GP clinical systems in a format that is extractable for monitoring and evaluation purposes.
6.2.2	Individuals seen by OYES with high BP were more likely to get follow-up but less likely to be prescribed antihypertensives.	Public Health	Explore reasons for higher follow-up but lower prescription rates and ensure opportunities for treatment are not being missed.
6.2.4	Three-quarters of individuals with QRISK 10–20 had no recorded statin decision.	Public Health Integrated Care Board GP Practices	Investigate consistency of statin offers and decision documentation across practices.
6.2.7	CKD prevalence significantly lower than expected despite high rates of	Public Health Integrated Care Board	Review coding and recording processes for CKD and explore mechanisms for ensuring

	creatinine testing. Possible missed diagnoses and coding issues.		appropriate follow-up of abnormal kidney function results.
6.2.7	Variation in CKD detection may reflect inconsistent interpretation of eGFR results.	Public Health GP Practices	Provide targeted training or guidance on CKD staging, diagnostic thresholds, and coding.
7.1	Ready Reckoner requires updating with new figures & local data.	Department of Health & Social Care	Update or create a new ready reckoner that is adaptable to local data and modern costings.
7.5	Smoking and obesity follow a social gradient; overweight and inactivity are widespread across all groups.	Public Health Integrated Care Board	Embed universal prevention messages across GP practices, pharmacies, workplaces, and communities. Tailor approaches by life stage and target males who are overweight and females living with obesity with appropriate interventions.
7.6.2	Individuals who had an OYES NHS Health Check with QRISK ≥20 were significantly less likely to be prescribed a statin.	Public Health Integrated Care Board	Investigate statin prescribing differences across delivery models to ensure no opportunities for treatment are missed.
7.6.3	Statin uptake in QRISK ≥20 increases with age; uptake low in IMD1 & IMD10.	GP Practices	Increase uptake among younger high-risk adults. Tailor strategies for IMD1 (access & support) and IMD10 (shared decision-making & risk framing).
7.6.3	Individuals with high cholesterol identified by OYES delivered NHS Health Checks are more likely to decline statins.	Public Health	Investigate differences across delivery models for high cholesterol to ensure treatment opportunities are not missed.
8.1	OYES was not included in economic modelling due to data incompatibility.	Public Health One You East Sussex	Develop cost-capture processes for OYES (e.g., activity-based costing) to allow future full economic modelling.

8.3	Economic evaluation indicates a £238k return on investment by year 20.	Public Health Department of Health & Social Care	Evidence shows that investment in NHS Health Checks generates healthcare savings and should inform future public health spending decisions.
9.3	Gaps in refresher NHS Health Check training attendance.	One You East Sussex Public Health	Increase promotion and strengthen PHLSA to ensure practitioners remain up to date.
9.3	Review existing OYES reference materials and, where appropriate, develop a consolidated NHS Health Check reference pack or ESCC-hosted webpage that brings together key guidance, pathways, and resources in one place.	One You East Sussex	GP practices to collaborate with OYES to review training offers and set up biannual community of practice sessions led by OYES & Public Health.
9.3	Lower confidence in behaviour change conversations regarding smoking and weight loss.	One You East Sussex	Strengthen training on smoking and weight loss conversations within the NHS Health Check training offer.
9.3	Low GP participation in provider survey.	Public Health	Improve survey promotion and consider alternative communication channels for future surveys (or different engagement mechanisms).
9.3	Patients often request additional tests beyond NHS Health Check scope.	Public Health Integrated Care Board	Conduct communications to clarify the purpose and remit of the NHS Health Check.
11	Evaluation did not analyse cost-effectiveness between GP & OYES delivery.	Public Health One You East Sussex	Establish cost per NHS Health Check delivered by OYES.