

**Cardiovascular Disease Prevention
Intelligence for Health Innovation North East and North Cumbria**

September 2024

	Indicator ID	Indicator	Time period	Latest period NENC	Latest period England	NENC Deprivation	National Programme Target
Case finding and Prevalence	CVDP005HYP	Percentage of patients aged 18 and over, whose latest blood pressure value is in the at risk range for hypertension with no GP recorded hypertension	up to March 2024	2.3%	2.0%	-	
	CVDP002CKD	Percentage of GP registered patients aged 18 and over, with 2 low eGFRs with no GP recorded CKD (G3a to G5)	up to March 2024	0.58%	0.56%	-	
	CVDP003CKD	Percentage of GP registered patients aged 18 and over, where the latest eGFR reading is low with no GP recorded CKD (G3a to G5)	up to March 2024	1.22%	1.17%	-	
	CVDP001CKD	Prevalence of GP recorded CKD (G3a to G5) in patients aged 18 and over	up to March 2024	4.7%	4.0%	-	Increase prevalence towards expected prevalence of 6.05%
	CVDP004FH	Percentage of GP registered patients of all ages whose cholesterol values are in the at risk range for FH, with no GP record of FH diagnosis or investigation	up to March 2024	0.20%	0.15%	-	
	CVDP002FH	Prevalence of GP recorded possible, probable or confirmed familial hypercholesterolaemia, all ages	up to March 2024	2.47 per 1,000	2.01 per 1,000	-	
	FH Genetic Testing	Percentage of familial hypercholesterolemia patients identified	1 April 2024 – 31 August 2024	13.5%	-	-	Increase genetically confirmed heterozygous FH to 25% by 2026
Condition management and treatment Cholesterol	HIST	The number of high intensity statin items prescribed as a percentage of all statins prescribed	June 2019 - May 2024	79.0%	74.2%	-	80% of statins to be HIST by 2026
	CVDP006CHOL	Percentage of patients aged 18 and over with no GP recorded CVD and a GP recorded QRISK score of 10% or more, on lipid lowering therapy	up to March 2024	56.8%	53.0%	BETTER in more deprived areas	
	CVDP003CHOL	Percentage of patients aged 18 and over with no GP recorded CVD and a GP recorded QRISK score of 20% or more, on lipid lowering therapy	up to March 2024	64.7%	62.1%	BETTER in more deprived areas	
	CVDP008CHOL	Percentage of patients aged 18 and over, with no GP recorded CVD and a GP recorded QRISK score of 10% or more, CKD (G3a to G5), T1 diabetes (aged 40 and over) or T2 diabetes aged 60 and over, who are currently treated with lipid lowering therapy	up to March 2024	58.3%	54.6%	BETTER in more deprived areas	
	CVDP009CHOL	Percentage of patients aged 18 and over with GP recorded CVD (narrow definition), who are currently treated with lipid lowering therapy	up to March 2024	87.8%	85.1%	BETTER (slightly) in more deprived areas	95% of those with CVD on LLT by 2026
	CVDP007CHOL	Percentage of patients aged 18 and over, with GP recorded CVD (narrow definition), in whom the most recent blood cholesterol level (measured in the preceding 12 months) is non-HDL cholesterol less than 2.5mmol/l or LDL-cholesterol less than 1.8mmol/l	up to March 2024	39.9%	36.9%	WORSE in more deprived areas	
	Ezetimibe	Absolute prescription items for Ezetimibe and Ezetrol	June 2019 - May 2024	33,125	358,278	-	
	Inclisiran	Absolute prescription items of Inclisiran and Leqvio	June 2019 - May 2024	269	3,021	-	
	Bempedoic acid/ezetimibe	Absolute prescription items for Bempedoic acid/ezetimibe	June 2019 - May 2024	1,357	16,319	-	
	Icosapent ethyl	Absolute prescription items for Icosapent ethyl and Vazkepa	June 2019 - May 2024	222	1,959	-	

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	Indicator ID	Indicator	Time period	Latest period NENC	Latest period England	NENC Deprivation	National Programme Target
Condition management and treatment Hypertension	CVDP004HYP	Percentage of patients aged 18 and over with GP recorded hypertension, who have had a blood pressure reading within the preceding 12 months	up to March 2024	90.2%	88.6%	WORSE (slightly) in more deprived areas	
	CVDP007HYP	Percentage of patients aged 18 and over, with GP recorded hypertension, in whom the last blood pressure reading (measured in the preceding 12 months) is below the age appropriate treatment threshold	up to March 2024	73.1%	70.9%	WORSE in more deprived areas	80% of patients with hypertension treated to NICE guidance
	CVDP002HYP	Percentage of patients aged 18 to 79 years with GP recorded hypertension, in whom the last blood pressure reading within the preceding 12 months is equal to 140/90 mmHg or less	up to March 2024	71.2%	68.5%	WORSE in more deprived areas	
	CVDP003HYP	Percentage of patients aged 80 years or over with GP recorded hypertension, in whom the last blood pressure reading within the preceding 12 months is 150/90 mmHg or less	up to March 2024	81.3%	80.3%	-	
	CVDP009HYP	Percentage of patients aged 18 and over, with GP recorded hypertension, with a record of a urine albumin:creatinine ratio (ACR) test in the preceding 12 months	up to March 2024	36.2%	28.6%	-	
CVDP007CKD	Percentage of patients aged 18 and over with GP recorded CKD (G3a to G5) with an ACR of less than 70 mg/mmol, in whom the last blood pressure reading (measured in the preceding 12 months) is less than 140/90 mmHg	up to March 2024	74.4%	71.7%	-		
Condition management and treatment CKD	CVDP006CKD	Percentage of patients aged 18 and over with GP recorded CKD (G3a to G5), with a record of an eGFR test in the preceding 12 months	up to March 2024	92.8%	89.9%	-	
	CVDP004CKD	Percentage of patients aged 18 and over with GP recorded CKD (G3a to G5), with a record of a urine albumin:creatinine ratio (or protein:creatinine ratio) test in the preceding 12 months	up to March 2024	55.2%	44.6%	-	
	CVDP005CKD	Percentage of patients aged 18 and over with GP recorded CKD (G3a to G5), hypertension and proteinuria, currently treated with renin-angiotensin system antagonists	up to March 2024	70.6%	71.0%	-	
	Dapagliflozin	Absolute prescription items for Dapagliflozin and Forxiga	June 2019 - May 2024	41,568	663,916	-	
	Empagliflozin	Absolute prescription items for Empagliflozin and Jardiance	June 2019 - May 2024	19,766	341,562	-	
	Finerenone	Absolute prescription items for Finerenone and Kerendia	June 2019 - May 2024	97	776	-	

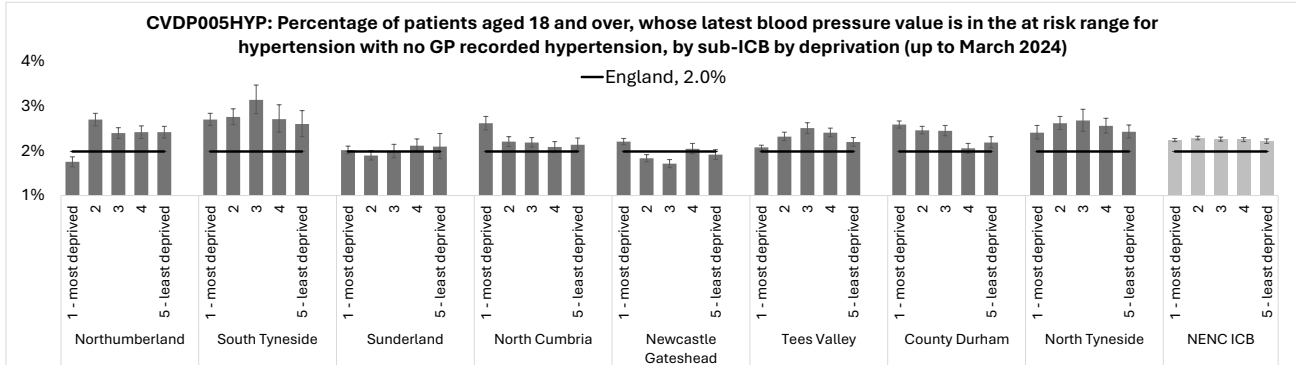
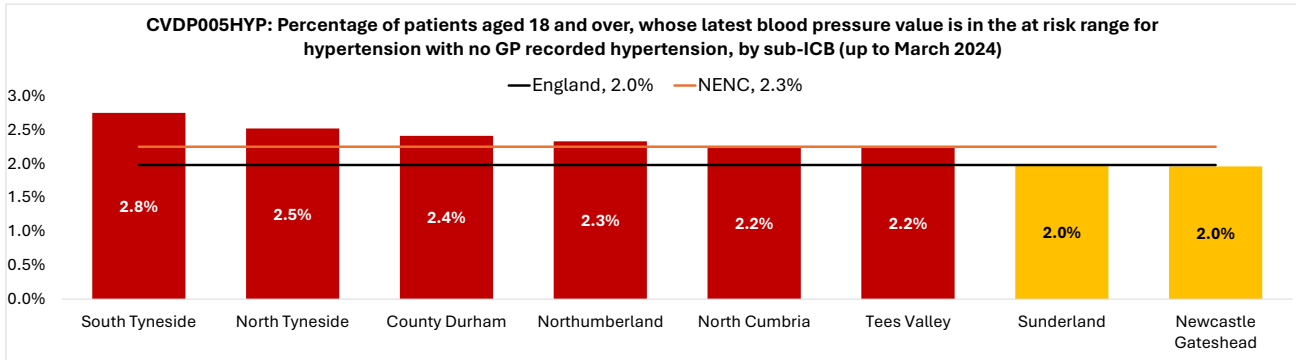
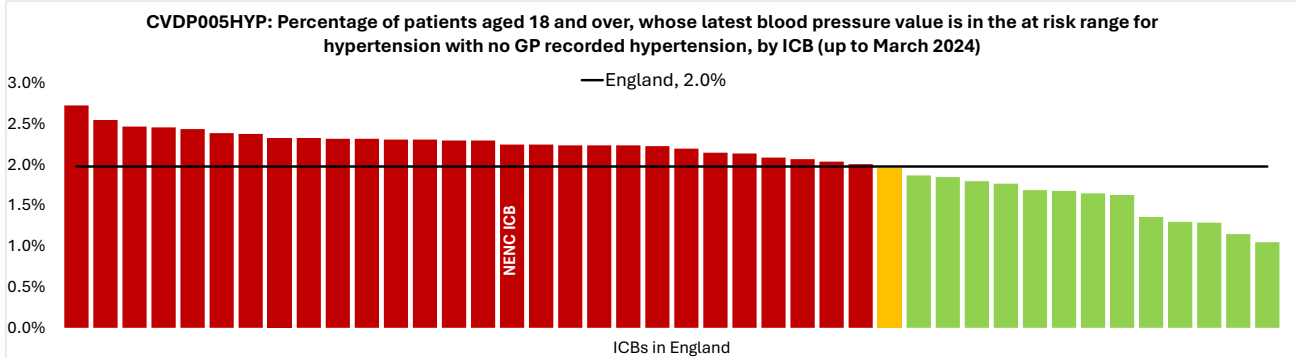
Compared with England

	Significantly Better		Similar		Significantly Worse
	Significantly Higher		Similar		Significantly Lower

Case finding and Prevalence Hypertension

Percentage of patients aged 18 and over, whose latest blood pressure value is in the at risk range for hypertension with no GP recorded hypertension
CVDP005HYP

Compared with England: **NENC** 2.3% England 2.0% National programme ambition: *Prioritised case finding in areas with highest inequalities*



Data source: Cardiovascular Disease Prevention Audit (CVDPREVENT), Data & Improvement Tool 2024, <https://www.cvdprevent.nhs.uk/>

Definitions / Notes
The percentage of GP registered patients aged 18 and over whose last recorded blood pressure (BP) was systolic ≥ 140 mmHg and diastolic ≥ 90 mmHg but with no record of hypertension diagnosis in the GP record. The single high blood pressure reading is recorded between 15 and 3 months prior to the audit end date. The data source for this indicator is from the CVDPREVENT Audit and NHS Digital - Patients registered at a GP practice. Patients included in this indicators are from Cohort 1 (high risk conditions cohort), Cohort 2 (CVD cohort) and Cohort 3 (Case finder cohort). This indicator relates to the identification of patients with hypertension.

A single high blood pressure reading may require further investigation as it can be an indication of hypertension and require further testing to establish if hypertension is present. The NICE guidelines for hypertension suggests that if a clinic BP reading is 140/90 mmHg or above it should be repeated and the lower value recorded. If clinic blood pressure is between 140/90 mmHg and 180/120 mmHg, offer ambulatory blood pressure monitoring (ABPM) to confirm/refute the diagnosis of hypertension [1].

What is the data telling us?
For this indicator, higher percentages indicate that there could be opportunities to improve hypertension case finding in patients deemed at high risk of having high blood pressure. The percentage of patients in NENC who have a high risk BP reading with no hypertension diagnosis is 2.3%, significantly worse than the England average of 2.0%.
Within the NENC ICB, most sub-ICBs have a significantly worse percentage for this indicator compared to England, with the variation ranging from 2.8% in South Tyneside to 2.0% in Newcastle Gateshead. When taking in account the relative proportion of people in each deprivation quintile of NENC, there was no clear relationship between deprivation and performance of this indicator.

Case finding and Prevalence Chronic Kidney Disease (CKD)

Percentage of GP registered patients aged 18 and over, with 2 low eGFRs with no GP recorded CKD (G3a to G5)
CVDP002CKD

NENC

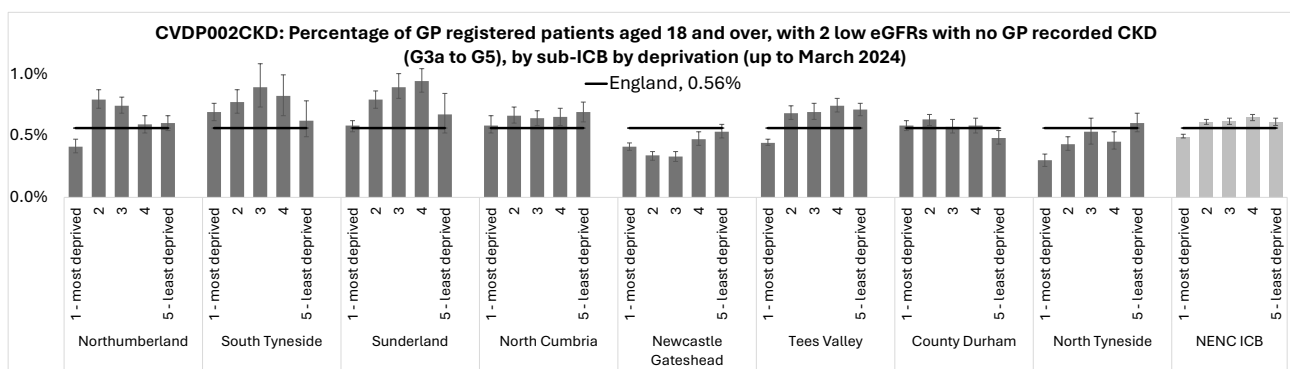
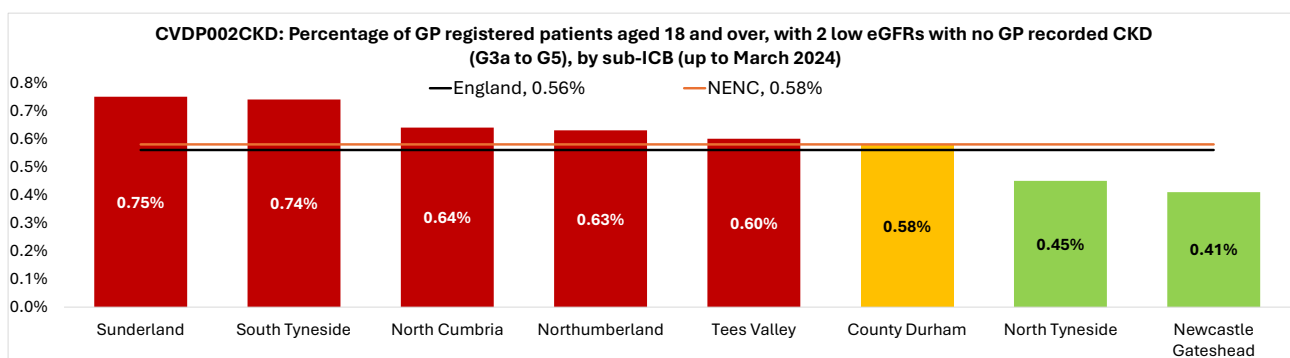
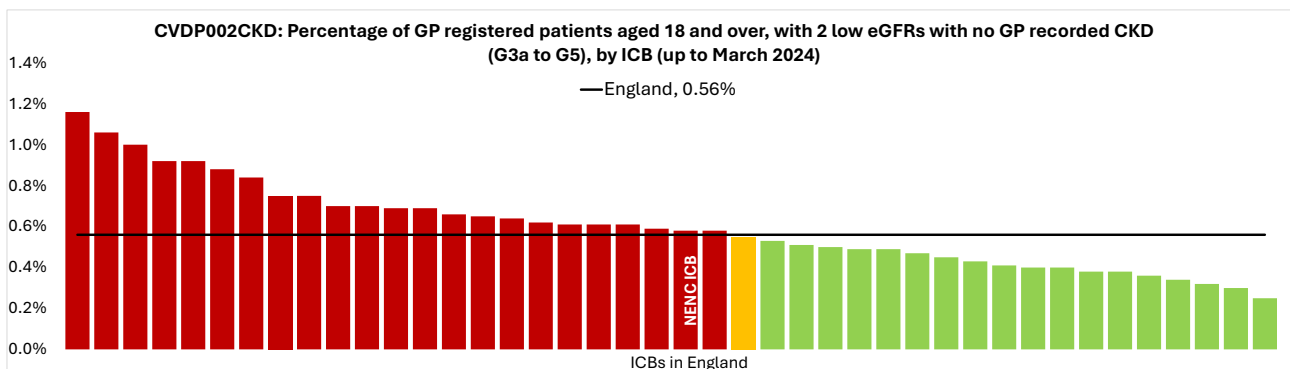
England

Compared with England:

0.58%

0.56%

National programme ambition: Prioritised case finding in areas with highest inequalities



Data source: Cardiovascular Disease Prevention Audit (CVDPREVENT), Data & Improvement Tool 2024, <https://www.cvdprevent.nhs.uk/>

Definitions / Notes

The percentage of GP registered patients aged 18 and over with two estimated glomerular filtration rates (eGFRs) $<60\text{ml/min/1.73m}^2$ more than 3 months apart, indicating possible missed diagnosis of CKD categories G3a to G5 (previously stage 3 to 5), but with no record of CKD categories G3a to G5 diagnosis in the GP record. All eGFR readings are 3 or more months prior to the audit end date. The data source for this indicator is from the CVDPREVENT Audit (numerator) and NHS Digital (denominator). Patients included in this indicators are from Cohort 1 (high risk conditions cohort), Cohort 2 (CVD cohort) and Cohort 3 (ca se finder cohort). This indicator relates to the identification of CKD.

CKD is defined as the presence of kidney damage or an eGFR of less than $60\text{ml/min per }1.73\text{m}^2$, persisting for 3 or more months [2]. The presence of two low eGFR values more than three months apart in the GP record, with no recorded CKD diagnosis may suggest a missed opportunity to diagnose CKD. Diagnosis and recording on GP registers increases the probability of management according to the NICE guidelines [3].

What is the data telling us?

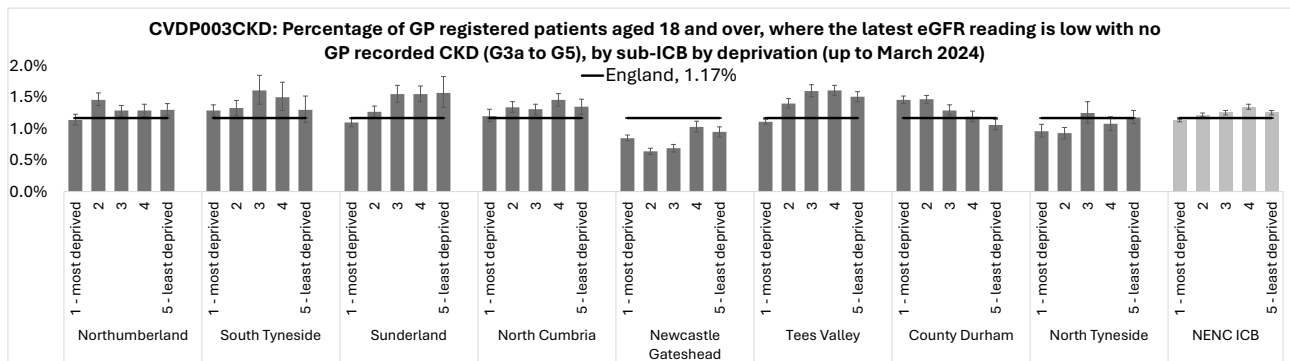
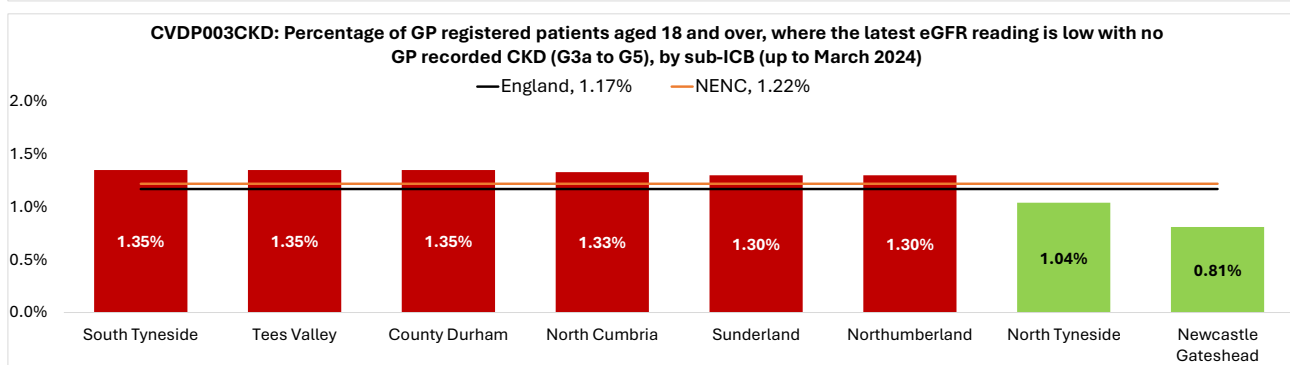
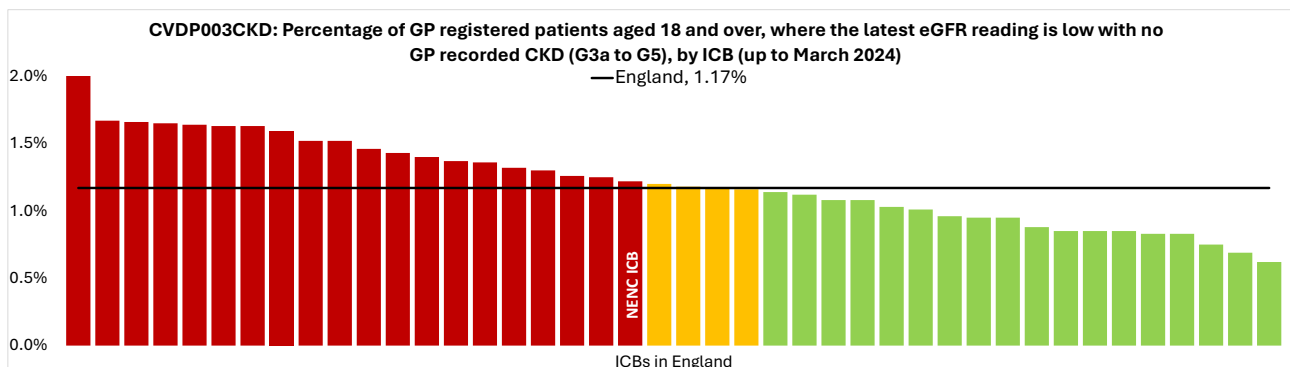
This indicator identifies where the opportunity to diagnose CKD was possibly missed, thus highlighting where additional opportunities are for improving CKD case finding based on eGFR recordings. The NENC ICB (0.58%) was significantly worse than the national average (0.56%) for the percentage of patients with two eGFRs suggestive of CKD without a recorded CKD diagnosis.

Across the NENC, only two sub-ICBs had a significantly better percentage of patients who had two eGFRs that suggest possible CKD with no recorded CKD (North Tyneside, and Newcastle Gateshead). Sunderland sub-ICB had the highest percentage of patients with two low eGFRs but no recorded CKD. When taking in account the relative proportion of people in each deprivation quintile of NENC, there was no clear relationship between deprivation and performance of this indicator.

Case finding and Prevalence Chronic Kidney Disease (CKD)

Percentage of GP registered patients aged 18 and over, where the latest eGFR reading is low with no GP recorded CKD (G3a to G5)
CVDP003CKD

Compared with England: **NENC 1.22%** England **1.17%** National programme ambition: Prioritised case finding in areas with highest inequalities



Data source: Cardiovascular Disease Prevention Audit (CVDPREVENT), Data & Improvement Tool 2024, <https://www.cvdprevent.nhs.uk/>

Definitions / Notes

The percentage of GP registered patients aged 18 and over with a latest single estimated glomerular filtration rate (eGFR) $<60\text{ml/min}/1.73\text{m}^2$ (indicating increased risk of CKD categories G3a to G5 previously stage 3 to 5), but with no record of CKD categories G3a to G5 diagnosis in the GP record. The single eGFR reading is 3 or more months prior to the audit end date. Please note this indicator includes people with a latest single low eGFR only. So patients in this indicator are not included in indicator CVDP002CKD. The data source for this indicator is from the CVDPREVENT Audit (numerator) and NHS Digital (denominator). Patients included in this indicators are from Cohort 1 (high risk conditions cohort), Cohort 2 (CVD cohort) and Cohort 3 (case finder cohort). This indicator relates to the monitoring of patients with CKD. Chronic Kidney disease (CKD) is a condition where there is a gradual loss of kidney function over time, it is classified as stages G1 to G5 (G5 being the most severe). The condition can be asymptomatic but early identification and management can reduce the risk of developing end stage kidney disease or developing cardiovascular disease. As defined in the KGIGO guidelines, the presence of one low eGFR value in the GP record may be an indication of kidney disease [4]. NICE recommends that the eGFR should be repeated within 2 weeks if the initial value is below $60\text{ml/min}/1.73\text{m}^2$ [3].

For this indicator, higher values may indicate where there were missed opportunities to identify patients with CKD.

What is the data telling us?

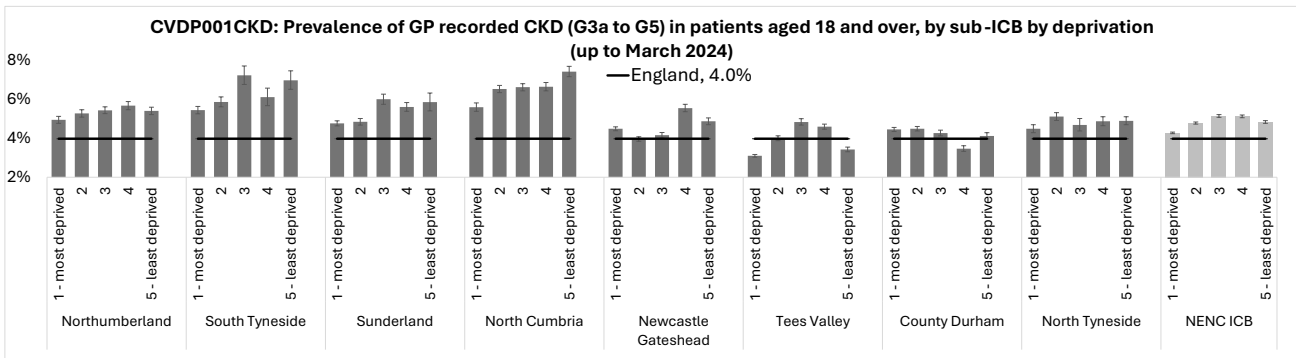
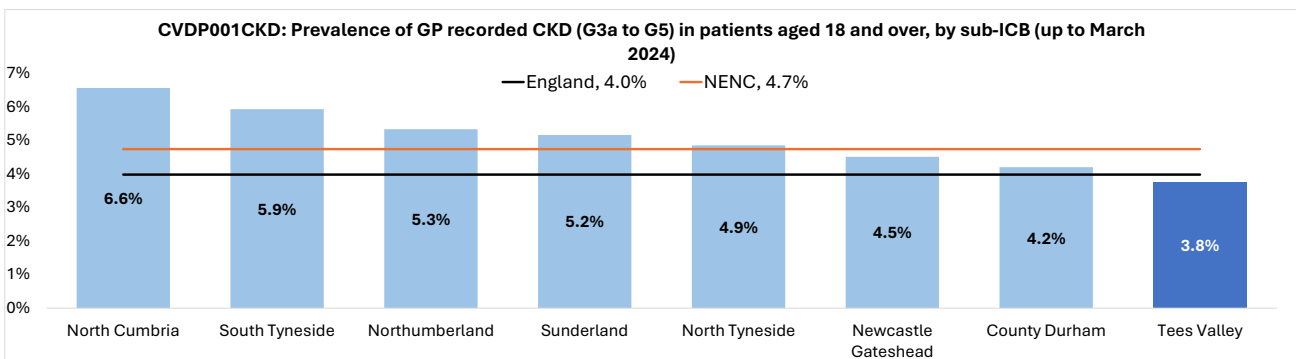
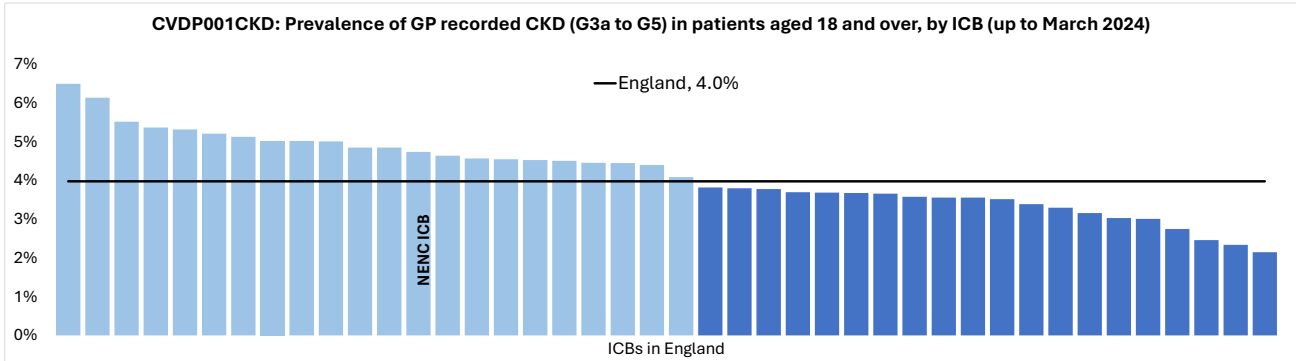
The percentage of patients whose latest eGFR reading was low with no recorded CKD diagnosis was 1.22% in NENC, significantly worse than the national average (1.17%). Across the NENC, only two sub-ICBs that had a performance of this indicator better than the national average. The percentage of patients whose latest eGFR reading was low with no recorded CKD diagnosis ranged from 1.35% in South Tyneside to 0.81% in Newcastle Gateshead. When taking in account the relative proportion of people in each deprivation quintile of NENC, there was no clear relationship between deprivation and performance of this indicator.

Case finding and Prevalence Chronic Kidney Disease (CKD)

Prevalence of GP recorded CKD (G3a to G5) in patients aged 18 and over CVDP001CKD

Compared with England: **NENC 4.7%** **England 4.0%**

National programme ambition: Address the difference between observed prevalence and expected prevalence of **6.05%**



Data source: Cardiovascular Disease Prevention Audit (CVDPREVENT), Data & Improvement Tool 2024, <https://www.cvdprevent.nhs.uk/>

Definitions / Notes

Prevalence of GP recorded Chronic Kidney Disease with classification of categories G3a to G5 (previously stage 3 to 5) in patients aged 18 and over. The data source for this indicator is from the CVDPREVENT Audit (numerator) and NHS Digital (denominator). Patients included in this indicators are from Cohort 1 (high risk conditions cohort) and Cohort 2 (CVD cohort). This indicator relates to the diagnosis of CKD.

Chronic Kidney disease (CKD) is a condition where there is a gradual loss of kidney function over time, it is classified as stages 1 to 5 (5 being the most severe). The condition can be asymptomatic but early identification and management can reduce the risk of developing end stage kidney disease or developing cardiovascular disease [5]. Diagnosis and recording on GP registers increases the probability of management according to the NICE guidelines [3]. Variation in recorded prevalence may indicate differences in case ascertainment or alternatively differences in population structure as the prevalence of CKD increases with age. CKD is an archetypal disease of inequality, with prevalence more common in those living in deprivation, as are faster rates of disease progression and premature mortality [6].

What is the data telling us?

The prevalence of CKD (G3a to G5) in NENC was 4.7%, significantly higher than the England average of 4.0%. Across the NENC ICB, CKD prevalence ranged from 3.8% in Tees Valley to 6.6% in North Cumbria, showing the variation in case finding of CKD, or differences in population structures across the region. When taking in account the relative proportion of people in each deprivation quintile of NENC, there was no clear relationship between deprivation and performance of this indicator.

Case finding and Prevalence Familial hypercholesterolemia (FH)

Percentage of GP registered patients of all ages whose cholesterol values are in the at risk range for FH, with no GP record of FH diagnosis or investigation

CVDP004FH

NENC

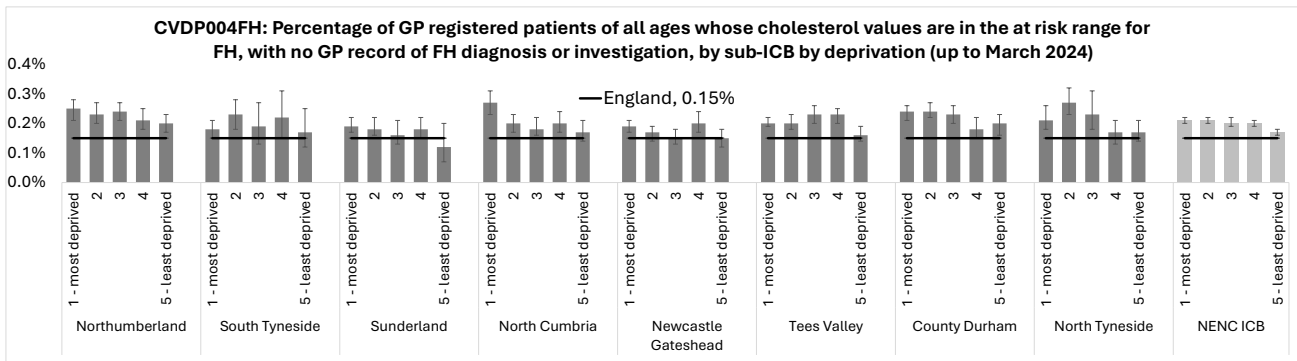
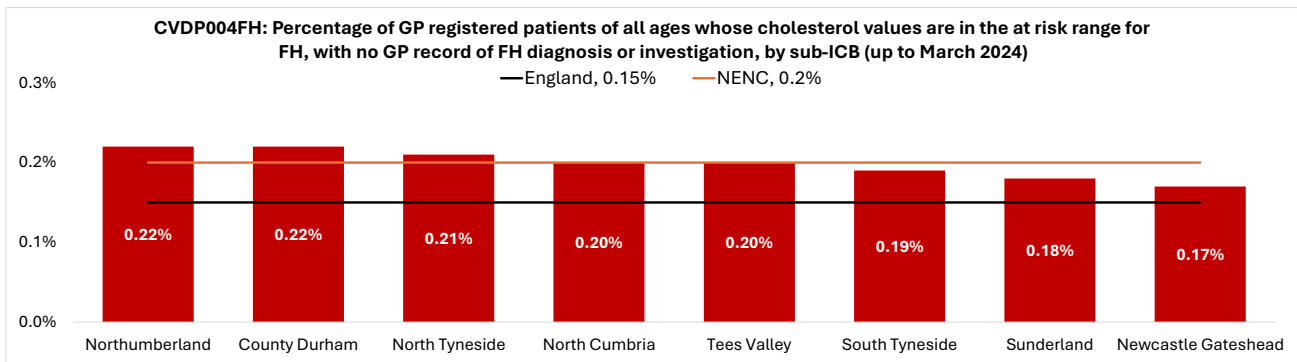
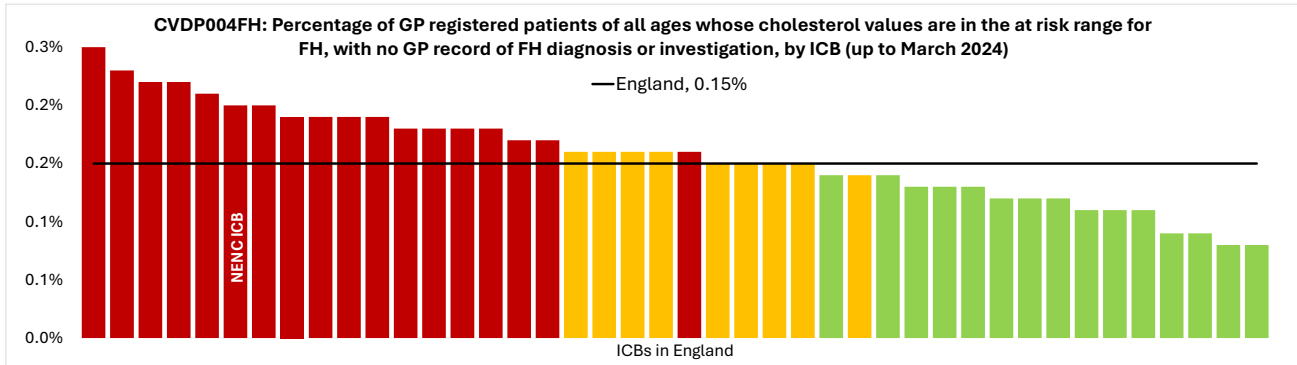
England

Compared with England:

0.20%

0.15%

National programme ambition: Prioritised case finding in areas with highest levels of inequalities



Data source: Cardiovascular Disease Prevention Audit (CVDPREVENT), Data & Improvement Tool 2024, <https://www.cvdprevent.nhs.uk/>

Definitions / Notes

The percentage of GP registered patients whose cholesterol values are in the at-risk range (total cholesterol ≥ 7.5 mmol/l aged 29 and under or total cholesterol value ≥ 9.0 mmol/l aged 30 and over) for FH, with no GP record of FH diagnosis or investigation. The data source for this indicator is from the CVDPREVENT Audit and NHS Digital - Patients registered at a GP practice. Patients included in this indicators are from Cohort 1 (high risk conditions cohort), Cohort 2 (CVD cohort) and Cohort 3 (Case finder cohort). This indicator relates to the identification of FH.

Many people with FH are undiagnosed and untreated. Because untreated FH carries a very high risk of cardiovascular disease, it is important that every opportunity is taken to identify people with FH and offer them treatment. Considering a clinical diagnosis of FH in people with high cholesterol will result in greater identification of FH and support cascade testing of their relatives. This will lead to more treatment to reduce cholesterol levels and prevention of coronary events among people with FH [7].

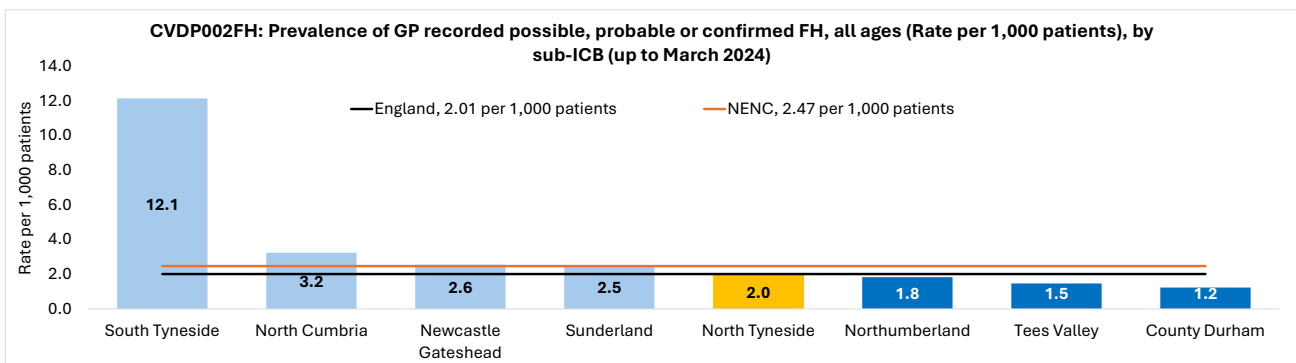
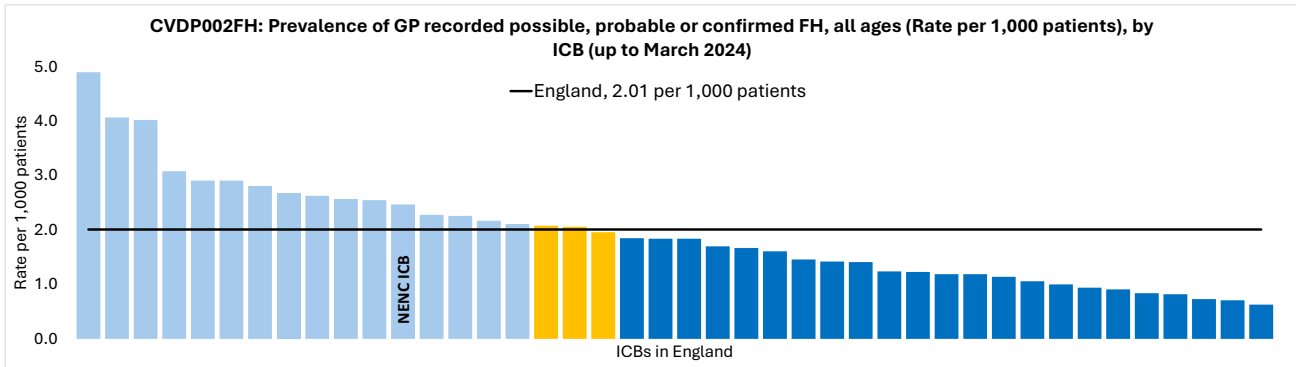
What is the data telling us?

The percentage of patients who have cholesterol levels in the at risk range of FH, with no FH diagnosis or investigation in the NENC was 0.2%, significantly worse than the England average of 0.15%. All sub-ICBs in the NENC also had a significantly worse percentage of patients who have cholesterol levels in the at risk range of FH, with no FH diagnosis or investigation compared to the national average, and ranged from 0.17% in Newcastle Gateshead, to 0.22% in Northumberland. When taking in account the relative proportion of people in each deprivation quintile of NENC, there was no clear relationship between deprivation and performance of this indicator.

Case finding and Prevalence Familial hypercholesterolemia (FH)

**Prevalence of GP recorded possible, probable or confirmed familial hypercholesterolaemia, all ages
CVDP002FH**

	NENC	England
Compared with England:	2.47 per 1,000	2.01 per 1,000



Data source: Cardiovascular Disease Prevention Audit (CVDPREVENT), Data & Improvement Tool 2024, <https://www.cvdprevent.nhs.uk/>

Definitions / Notes

This indicator is defined as the prevalence of GP recorded possible, probable and confirmed familial hypercholesterolaemia (FH) all ages. The data source for this indicator is from the CVDPREVENT Audit and NHS Digital - Patients registered at a GP practice. Patients included in this indicator are from Cohort 1 (high risk conditions cohort) and Cohort 2 (CVD cohort). This indicator relates to the diagnosis of FH.

FH is an inherited condition which can lead to high cholesterol levels and can increase the risk of developing CVD. Early identification and management can reduce the progression to cardiovascular disease [8]. Diagnosis and recording on GP registers increases the probability of management according to the NICE guidelines. Variation in recorded prevalence may indicate differences in case ascertainment or alternatively differences in population structure as the prevalence of FH varies with age [9].

What is the data telling us?

The prevalence of possible, probable or confirmed FH in the NENC was 2.47 per 1,000 patients (of all ages), significantly higher than the England average of 2.01 per 1,000 patients.

At sub-ICB level across the NENC, the prevalence of possible, probable or confirmed FH in South Tyneside (12.1 per 1,000 patients) was far higher than the other sub-ICBs. Further exploration to understand what interventions and practices have been undertaken in this sub-ICB to support with sharing of best practices around the region. Prevalence in three sub-ICBs were lower than the national average, whilst four sub-ICBs had a higher than average rate of FH prevalence.

Case finding and Prevalence Familial hypercholesterolemia (FH)

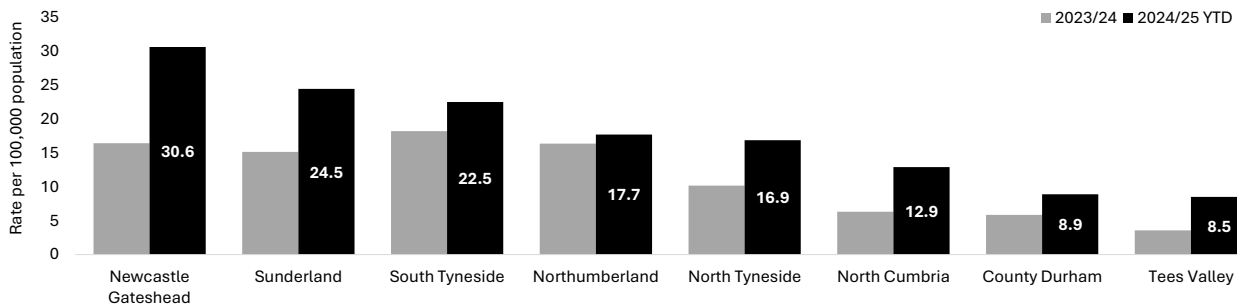
Genetic Testing for familial hypercholesterolemia (FH)

FH Genetic Testing

National programme ambition: Increase genetically confirmed heterozygous FH to **25%** by **2026**

	Service 4						Comparators from various time points (not routinely updated)				
	To Nov 2020	1 Nov 2020 to 31 Mar 2021	1 Apr 2021 to 31 Mar 2022	1 Apr 2022 to 31 Mar 2023	1 Apr 2023 to 31 Mar 2024	1 Apr 2024 to 31 Aug 2024	England	NI	Wales	Scotland	UK
Year testing commenced							historic	2000	2005	2008	historic
% patients identified (using 1 in 270 estimate using ICB September 2022 population)	8.6%	9.0%	9.8%	11.3%	12.7%	13.5%	5.8%	21.4%	12.2%	10.6%	7.7%
Index patient with positive genetic testing result	448	26	48	62	67	40	3,059	343	643	1,081	5,126
Index patient with negative or variant of uncertain significance (VUS) genetic testing result	745	77	138	252	293	203	8,423	2,797	2,297	5,942	19,459
Diagnostic yield	37.6%	25.2%	25.8%	19.7%	18.6%	16.5%	26.6%	10.9%	21.9%	15.4%	20.9%
Positive relatives	554	22	49	117	97	52	3,232	1,136	792	1,028	6,188
Negative relatives	538	23	56	95	110	63	3,174	1,237	661	1,073	6,145
Relatives tested per positive index patient	2.4	1.7	2.2	3.4	3.1	2.9	2.1	6.9	2.3	1.9	2.4
Positive relatives per positive index patient	1.2	0.8	1.0	1.9	1.4	1.3	1.1	3.3	1.2	1	1.2
Total positive tests	1,002	48	97	179	164	92	6,291	1,479	1,435	2,109	11,314

Index patients tested per 100,000 population



Data source: Data supplied by Dr Ciaran McNulty, Deputy Head of Newcastle Genetics Laboratory.

Definitions / Notes

The data presented in the table and chart relates to the number of genetic tests for FH carried out in the NENC region. Data was supplied by Dr Ciaran McNulty from the Newcastle Genetics Laboratory.

The estimated percentage of FH patients identified is based on the estimated FH prevalence of 1 in 270 people [10], along with population estimates.

Data presented in the chart shows the number of index tests carried out per 100,000 population, by sub-ICB. It should be noted that this is experimental data and needs to be explored further.

What is the data telling us?

Data within the table shows that between 1st April - 31st August 2024, there were 243 genetic FH tests undertaken for index patients. Of these, 40 patients had a positive genetic test and 203 a negative test, giving a diagnostic yield of 16.5%.

During this time period, there were 115 tests carried out on relatives of patients who had a positive genetic test. Of these, there were 52 positive tests.

Therefore, between 1st April and 31 August 2024, there were 92 positive genetic tests for FH (including index and cascade testing).

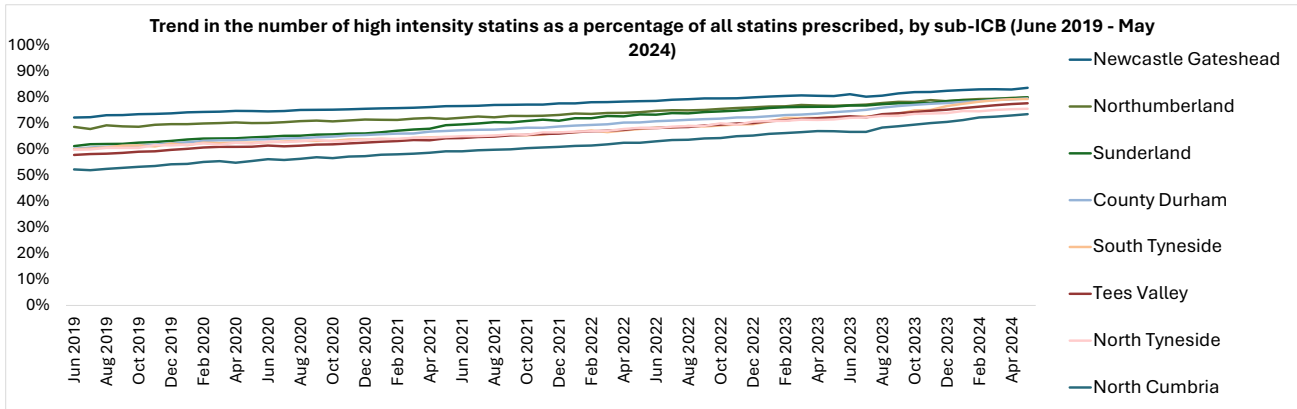
Using population and FH prevalence estimates, and the number of positive genetic tests to date, an estimated 13.5% of people with FH in NENC have been identified using genetic testing.

The experimental data within the chart shows the number of index tests carried out per 100,000 population by sub-ICB for the 2023/24 and 2024/25 YTD. There is a wide variation across NENC, with the highest rates in Newcastle Gateshead (30.6 per 100,000) and the lowest in Tees Valley (8.5 per 100,000).

Condition Management and Treatment Cholesterol

Percentage of HIST uptake as a proportion of all statins prescribed

National programme ambition: Aim for **80%** HIST prescribed compared to all prescribing in primary care by **2026**



Data source: *OpenPrescribing.net, Bennett Institute for Applied Data Science, University of Oxford, 2024*

Definitions / Notes

This indicator is defined as the number of high intensity statin items prescribed as a percentage of all statins prescribed.

Improving outcomes for patients with CVD is a clinical priority in the NHS long term plan. To support delivery of this, national guidance for lipid management for primary and secondary prevention of CVD has been published [11,12], with NICE guidelines for CVD risk assessment and reduction, including lipid modification, also published [13]. NICE guidance on lipid modification recommends the use of a high-intensity statin (i.e. one that reduces LDL cholesterol by 40% or more) for the primary and secondary prevention of CVD. Nationally, the aim is for at least 80% of statins prescribed to be HIST within primary care by 2026. HISTs include drugs such as Atorvastatin (>20mg), Simvastatin (>20mg), and Rosuvastatin (>10mg).

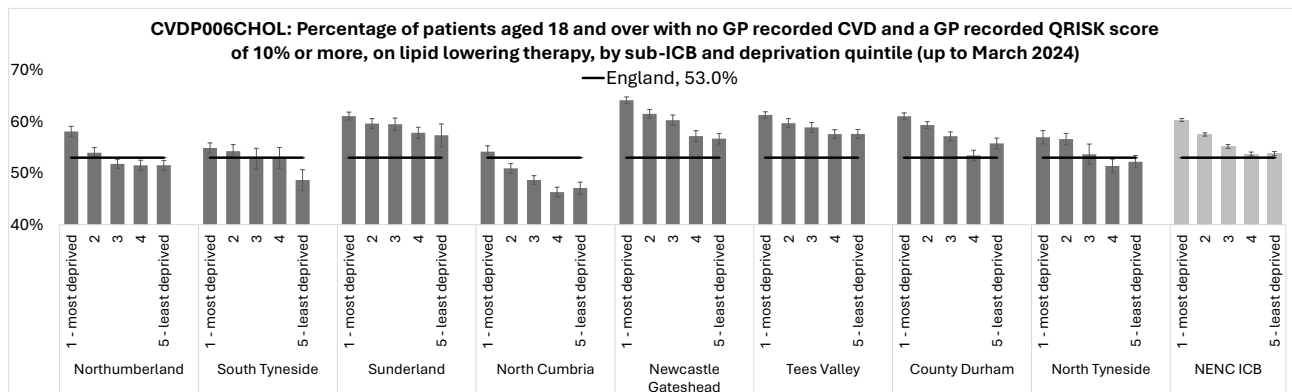
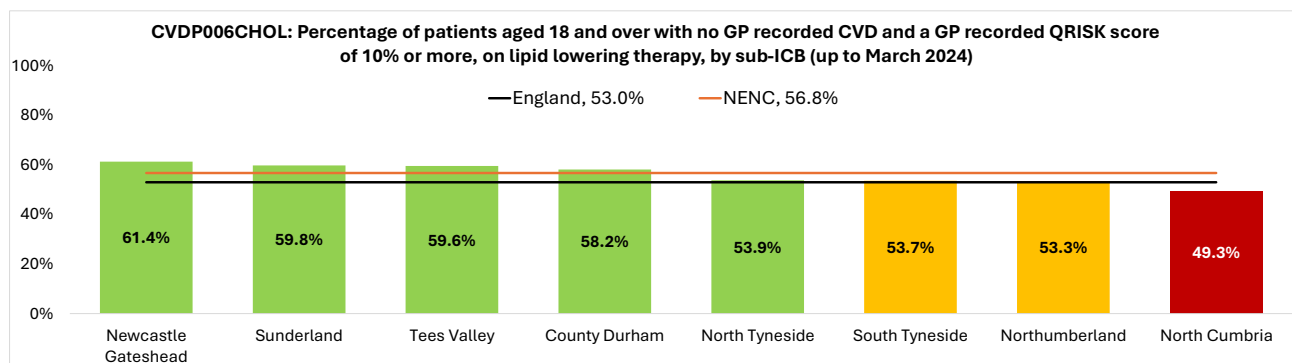
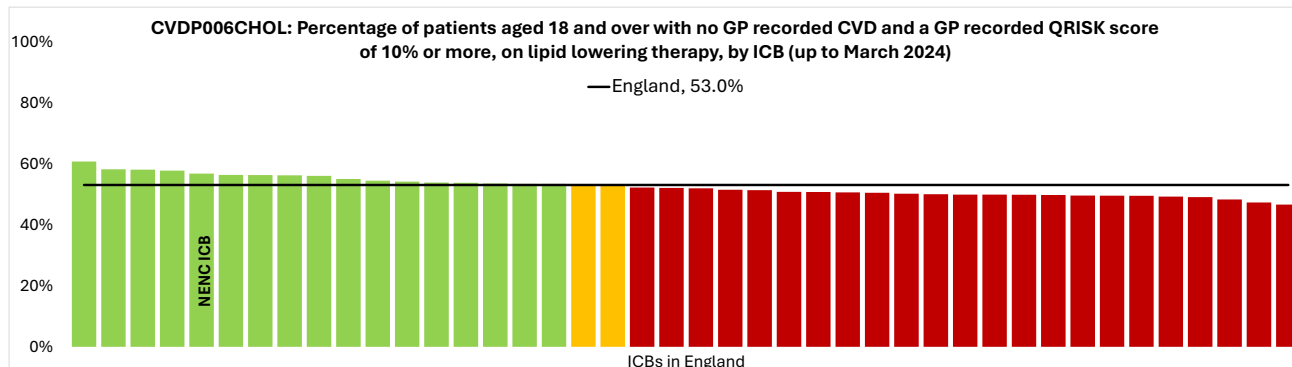
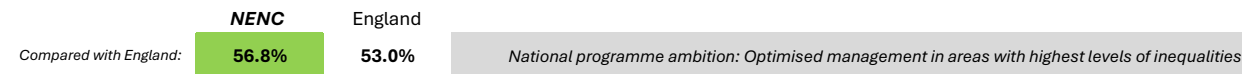
What is the data telling us?

The chart shows that since June 2019, the number of HIST as a percentage of total statin prescriptions has steadily increased in all sub-ICB locations, with Newcastle Gateshead consistently having the highest percentage prescribed, and North Cumbria the lowest. As of May 2024, the number of HIST as a percentage of all statins prescribed ranged from 84% in Newcastle Gateshead to 73% in North Cumbria. Compared to the national target for 2026, HIST accounted for at least 80% of all statins prescribed in three sub-ICBs as of May 2024 (Newcastle Gateshead, Northumberland, and Sunderland).

Condition Management and Treatment Cholesterol

Percentage of patients aged 18 and over with no GP recorded CVD and a GP recorded QRISK score of 10% or more, on lipid lowering therapy

CVDP006CHOL



Data source: Cardiovascular Disease Prevention Audit (CVDPREVENT), Data & Improvement Tool 2024, <https://www.cvdprevent.nhs.uk/>

Definitions / Notes

Percentage of patients aged 18 and over with a GP recorded QRISK score of 10% or higher, who have received a prescription for lipid lowering therapy in the last 7 months, excluding patients with GP recorded CVD. The QRISK score is 3 or more months prior to the audit end date. The data source for this indicator is from the CVDPREVENT Audit. Patients included in this indicators are from Cohort 1 (high risk conditions cohort) and Cohort 3 (Case finder cohort). This indicator relates to the management of cholesterol in patients at risk of CVD.

Another national priority for lipid optimisation is focused on prioritised case finding and optimised management in PCNs with the highest level of inequalities. Lipid lowering therapy with high-intensity statins is a clinically effective treatment option for the primary prevention of CVD (reducing the risk of first CVD events). The QRISK3 assessment tool is recommended for use by NICE to calculate the estimated CVD risk within the next 10 years for people aged 25 to 84 years old (including people with type 2 diabetes) [14]. Adults with a 10-year risk of cardiovascular disease (CVD) of 10% or more for whom lifestyle changes are ineffective or inappropriate, are encouraged to discuss the risks and benefits of starting statin therapy with their healthcare professional.

What is the data telling us?

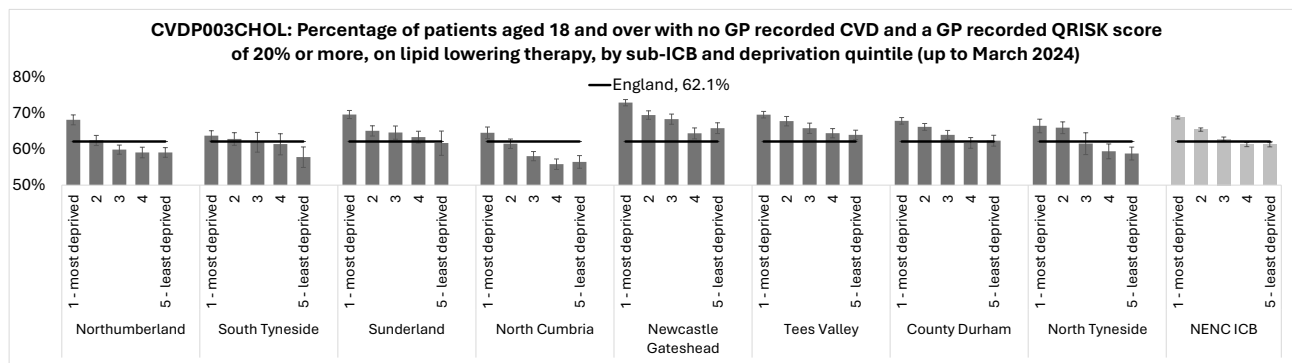
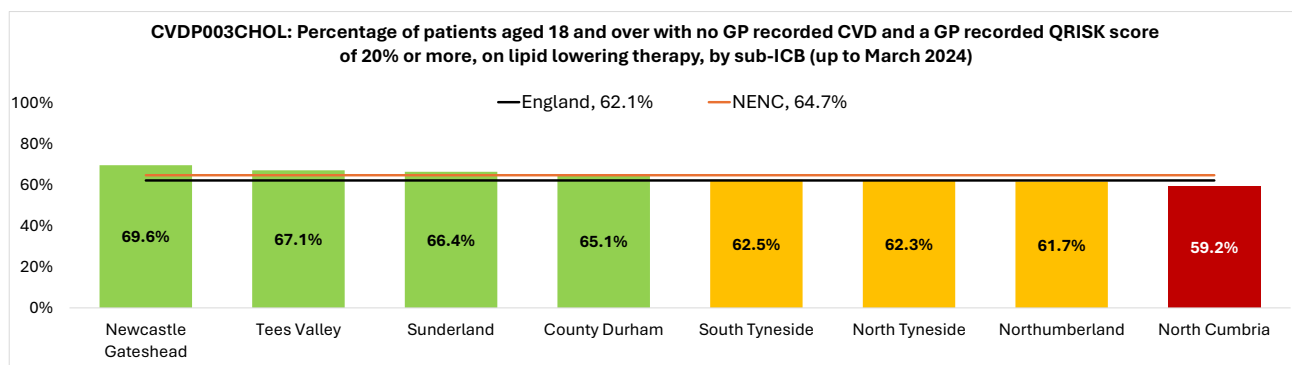
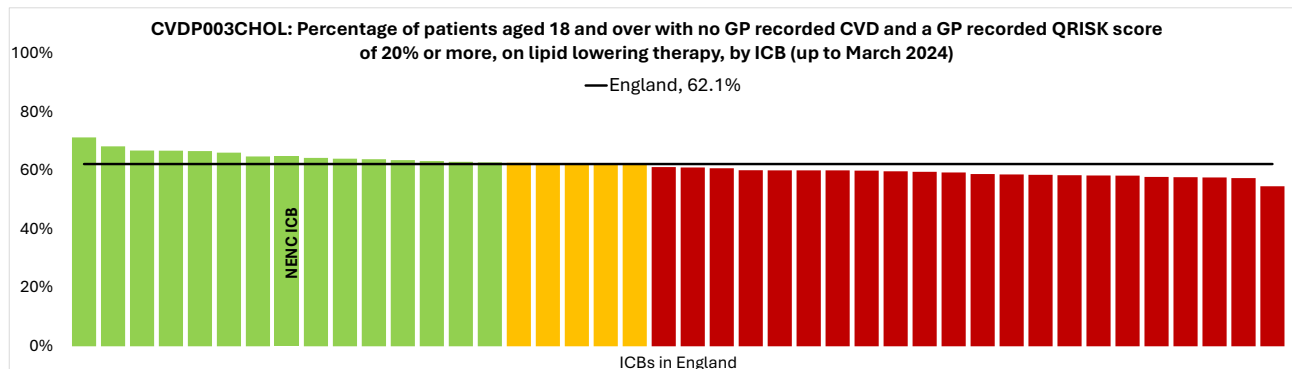
The percentage of patients with no CVD record and a QRISK score of 10% or more, on LLT was significantly better in the NENC (56.8%) compared to the England average (53.0%). Across the NENC ICB, the percentage of patients with no GP recorded CVD and a QRISK score of 10% or more, on LLTs ranged from 49.3% in North Cumbria to 61.4% in Newcastle Gateshead sub-ICB. Performance in North Cumbria was significantly worse than the national average. Taking into account the relative proportion of people in each deprivation quintile of NENC, performance for this indicator was approximately 9 percentage points better in the most deprived areas compared to the most affluent areas. Better performance in this indicator suggests that management of cholesterol is better optimised, as those patients identified as at risk of developing CVD are being managed appropriately, thus supporting to reduce the risk of developing CVD in the future.

Condition Management and Treatment Cholesterol

Percentage of patients aged 18 and over with no GP recorded CVD and a GP recorded QRISK score of 20% or more, on lipid lowering therapy

CVDP003CHOL

Compared with England: **NENC** 64.7% **England** 62.1% *National programme ambition: Optimised management in areas with highest levels of inequalities*



Source: Cardiovascular Disease Prevention Audit (CVDPREVENT), Data & Improvement Tool 2024, <https://www.cvdprevent.nhs.uk/>

Definitions / Notes

Percentage of patients aged 18 and over with a GP recorded QRISK score of 20% or higher, who have received a prescription for lipid lowering therapy in the last 7 months, excluding patients with GP recorded CVD. The QRISK score is 3 or more months prior to the audit end date. The data source for this indicator is from the CVDPREVENT Audit. Patients included in this indicators are from Cohort 1 (high risk conditions cohort) and Cohort 3 (Case finder cohort). This indicator relates to the management of cholesterol in patients at risk of CVD.

The QRISK3 assessment tool is recommended for use by NICE to calculate the estimated CVD risk within the next 10 years for people aged 25 to 84 years old (including people with type 2 diabetes) [14]. Adults with a 10-year risk of cardiovascular disease (CVD) of 20% or more for whom lifestyle changes are ineffective or inappropriate, are encouraged to discuss the risks and benefits of starting statin therapy with their healthcare professional. This indicator relates to indicator CVDP006CHOL but includes patients who have a higher risk of a cardiovascular event within the next 10 years.

What is the data telling us?

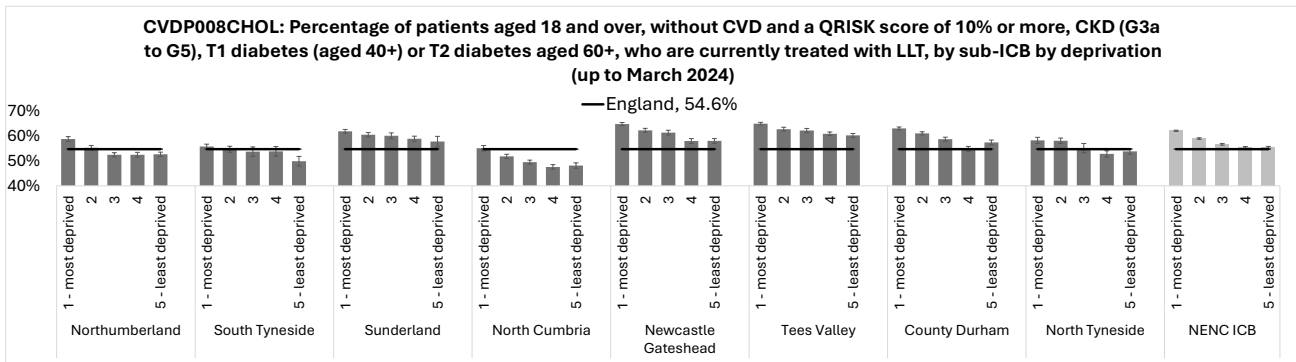
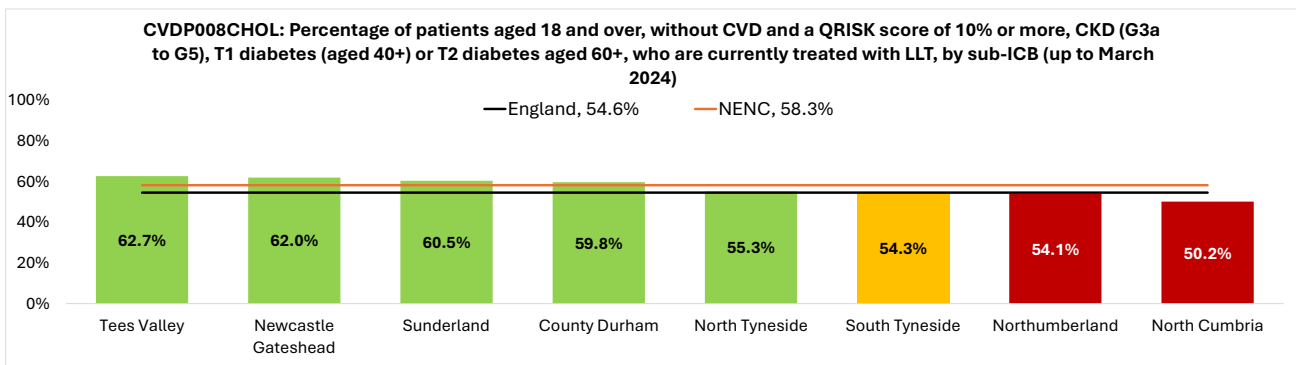
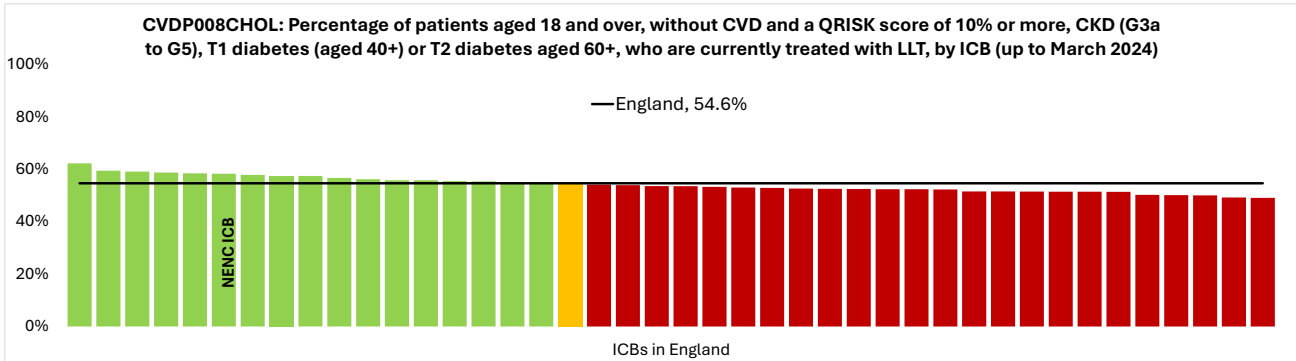
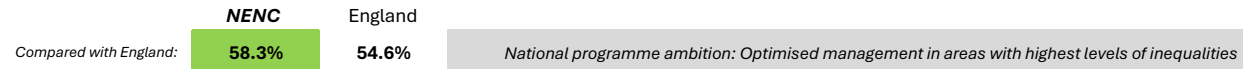
The percentage of patients without CVD who have a QRISK score of 20% or more who are on LLT was significantly better in the NENC ICB (64.7%) compared to the national average (62.1%).

Across the NENC ICB, performance of this indicator ranged from 59.2% in North Cumbria sub-ICB to 69.6% in Newcastle Gateshead sub-ICB. Taking into account the relative proportion of people in each deprivation quintile of NENC, performance for this indicator was approximately 10 percentage points better in the most deprived areas compared to the most affluent areas. Better performance in this indicator suggests that management of cholesterol is better optimised, as those patients identified as at risk of developing CVD are being managed appropriately, thus supporting to reduce the risk of developing CVD in the future.

Condition Management and Treatment Cholesterol

Percentage of patients aged 18 and over, with no GP recorded CVD and a GP recorded QRISK score of 10% or more, CKD (G3a to G5), T1 diabetes (aged 40 and over) or T2 diabetes aged 60 and over, who are currently treated with lipid lowering therapy

CVDP008CHOL



Data source: Cardiovascular Disease Prevention Audit (CVDPREVENT), Data & Improvement Tool 2024, <https://www.cvdprevent.nhs.uk/>

Definitions / Notes

Percentage of patients aged 18 and over, with no GP recorded CVD and a GP recorded QRISK score of 10% or more, Chronic Kidney Disease categories G3a to G5 (previously stage 3 to 5), Type 1 diabetes (aged 40 and over) or Type 2 diabetes aged 60 and over, who have received a prescription for lipid lowering therapy in the last 7 months. The data source for this indicator is from the CVDPREVENT Audit. Patients included in this indicators are from Cohort 1 (high risk conditions cohort) and Cohort 3 (Case finder cohort). This indicator relates to the management of cholesterol in patients on lipid lowering therapy.

This indicator concentrates on the primary prevention of CVD, by managing cholesterol in patients with some CVD risk factors or those with a high risk of developing CVD. Whilst it is important to identify and address modifiable risk factors such as smoking, diet, obesity, alcohol intake and physical activity levels, if lifestyle modification is ineffective or inappropriate lipid lowering therapy is recommended for cholesterol reduction [15].

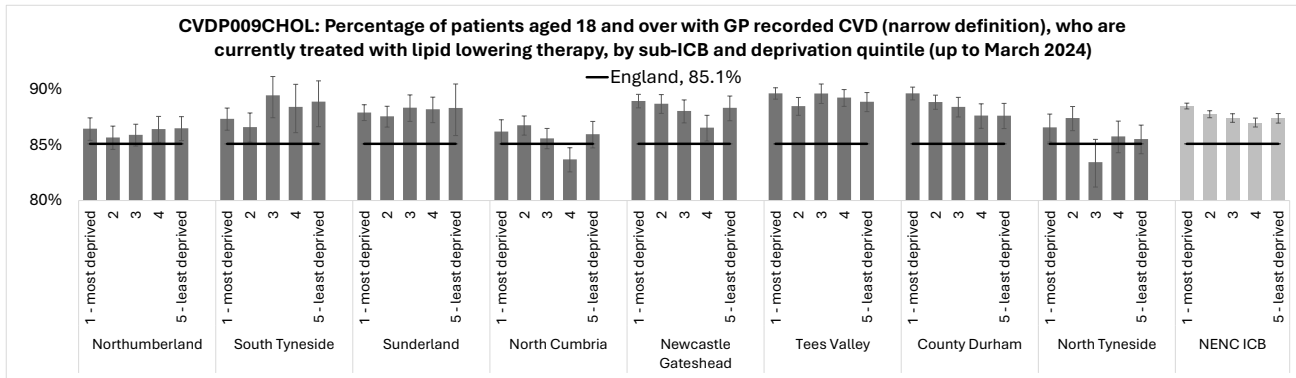
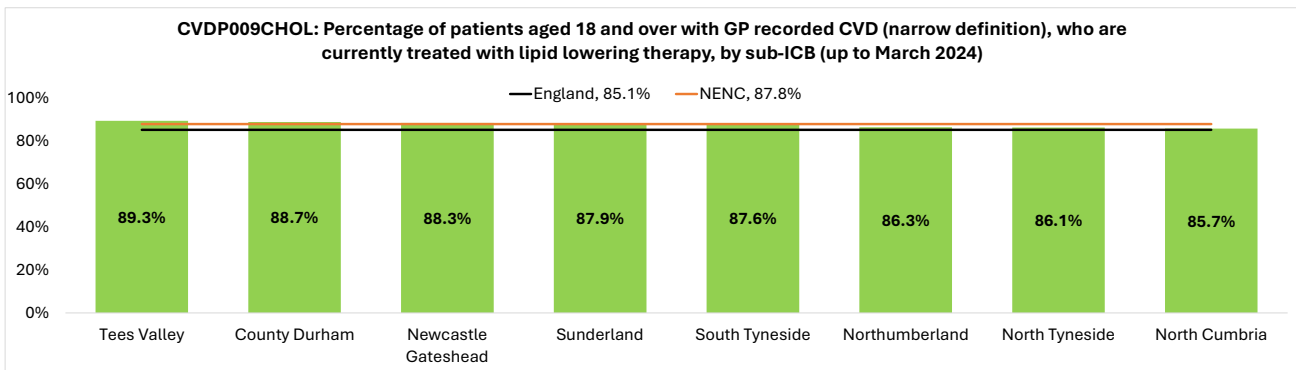
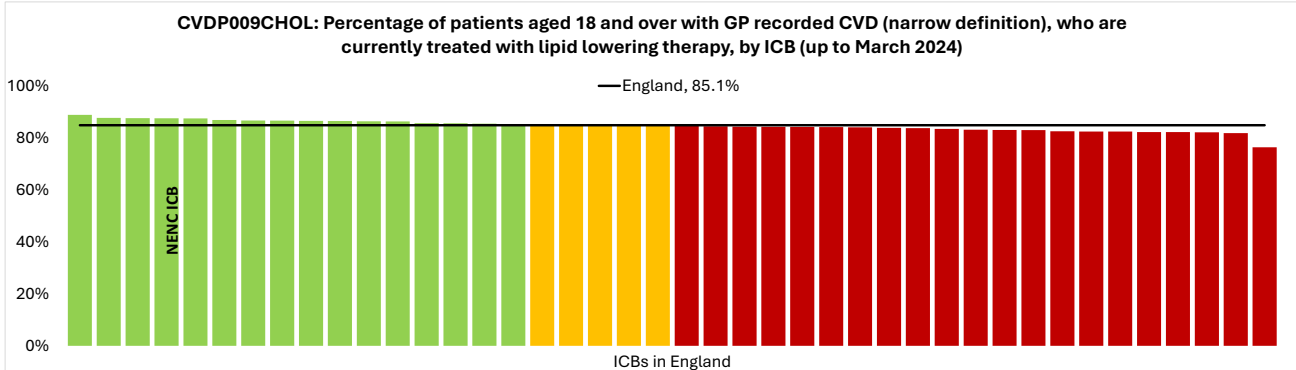
What is the data telling us?

The NENC ICB had a significantly better percentage of patients who have identified risk factors for CVD on LLT (58.3%) compared to the England average (54.6%). Within the NENC ICB, performance of this indicator ranges from 50.2% of patients who have identified risk factors for CVD on LLT in North Cumbria, to 62.7% of patients in Tees Valley. Both Northumberland and North Cumbria sub-ICBs performed significantly worse than the England average. Taking into account the relative proportion of people in each deprivation quintile of NENC, performance for this indicator was approximately 9 percentage points better in the most deprived areas compared to the most affluent areas. Better performance in this indicator suggests that management of cholesterol is better optimised, as those patients identified as at risk of developing CVD are being managed appropriately, thus supporting to reduce the risk of developing CVD in the future.

Condition Management and Treatment Cholesterol

Percentage of patients aged 18 and over with GP recorded CVD (narrow definition), who are currently treated with lipid lowering therapy CVDP009CHOL

Compared with England: **NENC 87.8%** **England 85.1%** *National programme ambition: 95% of those with CVD on LLT by 2026 and optimised management in areas with highest inequalities*



Data source: Cardiovascular Disease Prevention Audit (CVDPREVENT), Data & Improvement Tool 2024, <https://www.cvdprevent.nhs.uk/>

Definitions / Notes

Percentage of patients aged 18 and over with GP recorded CVD (narrow definition), who have received a prescription for lipid lowering therapy in the last 7 months. The data source for this indicator is from the CVDPREVENT Audit. Patients included in this indicators are from Cohort 2 (CVD cohort). This indicator relates to the management of cholesterol in patients with CVD on lipid lowering therapy.

People with established CVD can benefit from reducing cholesterol level, the NICE guidance NG238 outlines the recommendations for commencing lipid lowering therapy in people with pre-existing CVD. Higher proportions of patients receiving lipid lowering therapy can represent better quality of care, whereas lower proportions could indicate lower levels of LLT prescribing [13]. One of the national priorities for lipid optimisation is based around increasing appropriate lipid lowering treatment from 82.35% (June 2023) to 95% in people with CVD by 2026 [11].

What is the data telling us?

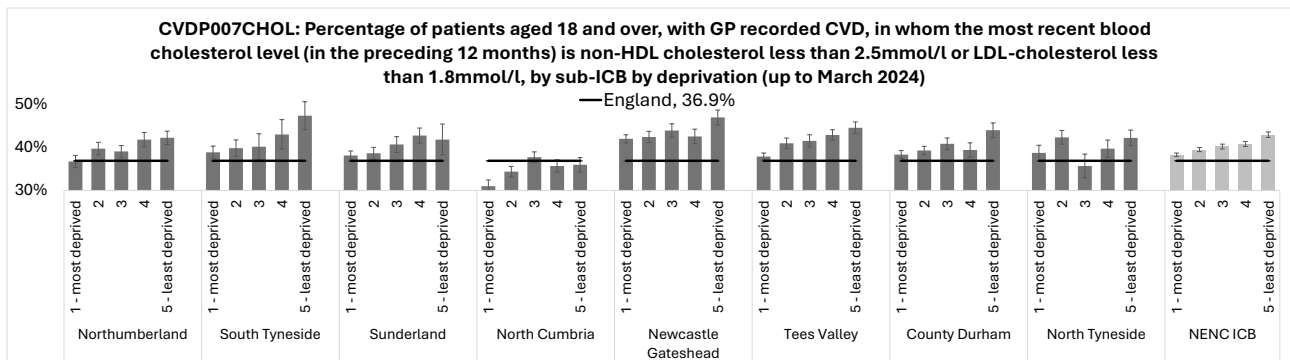
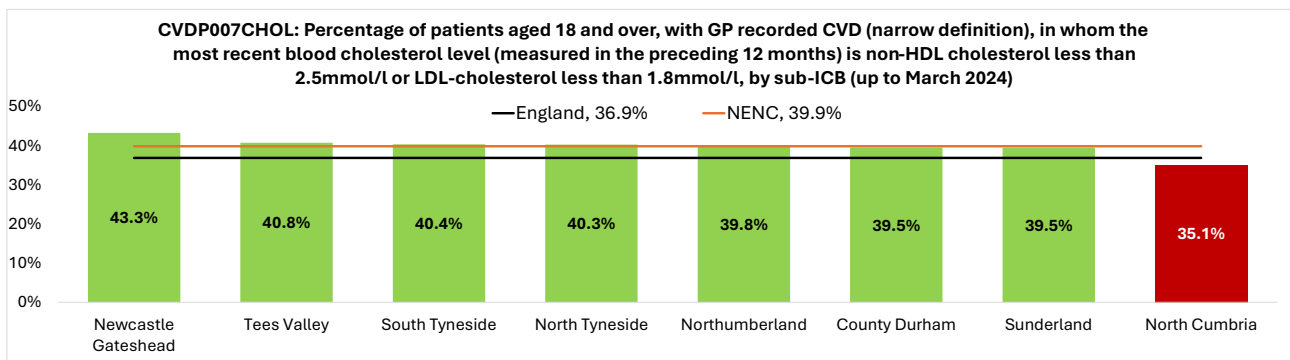
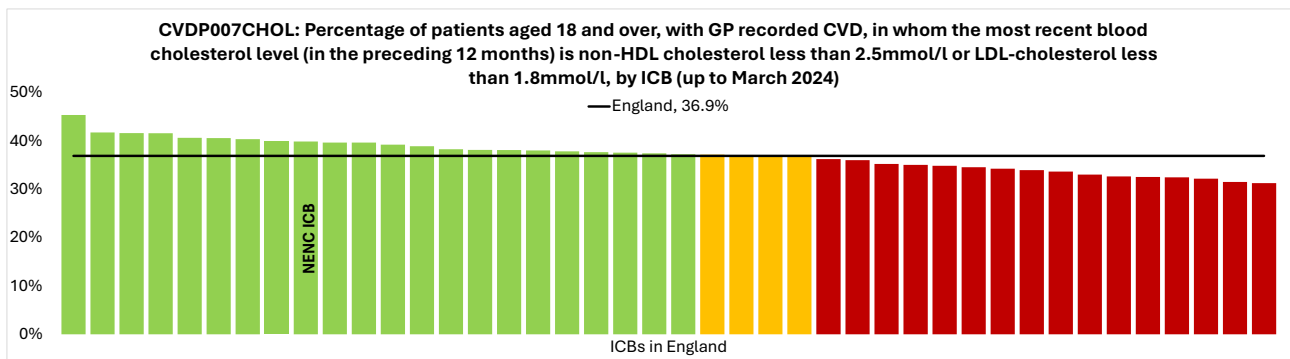
Across England, NENC ICB had one of the highest proportion of patients with CVD who received LLT in the last 7 months (87.8%), significantly higher than the England average of 85.1%. Within the NENC ICB, the achievement for this indicator ranged from 85.7% in North Cumbria to 89.3% in Teesside, with performance in all sub-ICBs in NENC better than the national average. Taking into account the relative proportion of people in each deprivation quintile of NENC, performance for this indicator was approximately 2 percentage points better in the most deprived areas compared to the most affluent areas. Better performance in this indicator suggests that management of cholesterol is better optimised, as those patients identified as at risk of developing CVD are being managed appropriately, thus supporting to reduce the risk of developing CVD in the future.

Condition Management and Treatment Cholesterol

Percentage of patients aged 18 and over, with GP recorded CVD (narrow definition), in whom the most recent blood cholesterol level (measured in the preceding 12 months) is non-HDL cholesterol less than 2.5mmol/l or LDL-cholesterol less than 1.8mmol/l
CVDP007CHOL

Narrow definition of CVD includes CHD, non-haemorrhagic stroke, transient ischaemic attack (TIA), peripheral arterial disease (PAD)

Compared with England: **NENC 39.9%** **England 36.9%** *National programme ambition: Optimised management in areas with highest levels of inequalities*



Data source: Cardiovascular Disease Prevention Audit (CVDPREVENT), Data & Improvement Tool 2024, <https://www.cvdprevent.nhs.uk/>

Definitions / Notes

The percentage of patients aged 18 and over with GP recorded CVD (narrow definition which includes CHD, non-haemorrhagic stroke, transient ischaemic attack (TIA), peripheral arterial disease (PAD)), whose most recent blood cholesterol level (measured in the preceding 12 months) is within treatment target levels (non-HDL cholesterol less than 2.5mmol/l or if there is no non-HDL cholesterol reading the LDL-cholesterol less than 1.8mmol/l). The data source for this indicator is from the CVDPREVENT Audit. Patients included in this indicators are from Cohort 2 (CVD cohort). This indicator relates to the management of blood cholesterol in patients with CVD.

Lowering cholesterol in all people with established CVD is recommended to help reduce the risk of progression. Following a diagnosis of CVD, regular monitoring and a reduction of cholesterol to the specific treatment targets (non-HDL cholesterol less than 2.5mmol/l or LDL-cholesterol less than 1.8mmol/l) is recommended by NICE, to reduce the risk of CVD progression [13].

What is the data telling us?

This indicator aims to show the percentage of patients with CVD who are within the treatment target levels, suggesting that management for CVD is optimised and cholesterol levels are within an acceptable range to help reduce the progression of CVD.

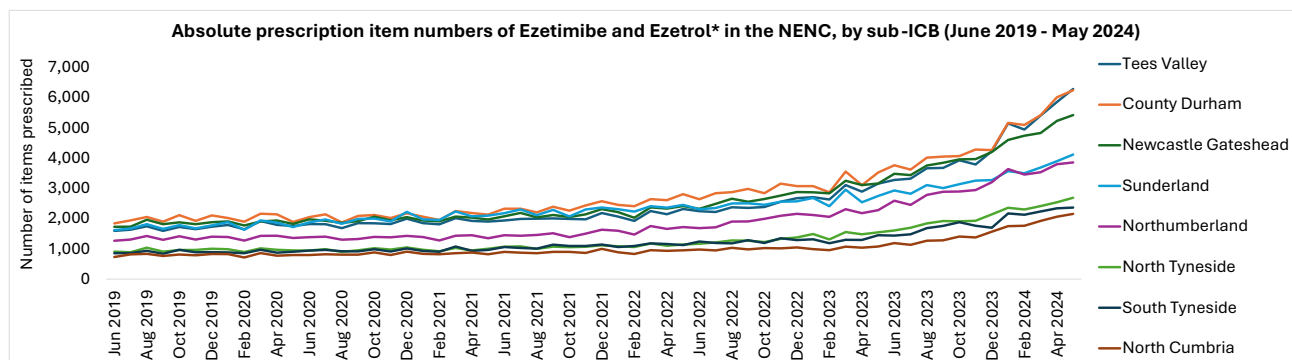
The NENC ICB had a significantly better percentage of CVD patients within the treatment target levels (39.9%) compared to the national average (36.9%).

Across the NENC ICB, performance for this indicator ranged from 35.1% in North Cumbria to 43.3% in Newcastle Gateshead. All sub-ICBs with exception of North Cumbria had a significantly better percentage of CVD patients with blood cholesterol levels within the treatment target levels than the England average.

Taking into account the relative proportion of people in each deprivation quintile of NENC, performance for this indicator was approximately 5 percentage points worse in the most deprived areas compared to the most affluent areas. This suggests that in general patients in more affluent areas are more likely to achieve the treatment target levels for cholesterol, achieved through optimised treatment regimes and lifestyle management.

Condition Management and Treatment Cholesterol

Absolute prescription items for Ezetimibe and Ezetrol



Data source: *OpenPrescribing.net, Bennett Institute for Applied Data Science, University of Oxford, 2024*

Definitions / Notes

Ezetimibe is a medication used in the management and treatment of hypercholesterolemia [16,17]. Studies have suggested that ezetimibe can lower LDL cholesterol levels by 13-20% [18]. Ezetimibe may be prescribed if an individual cannot take statins, or if statins do not work.

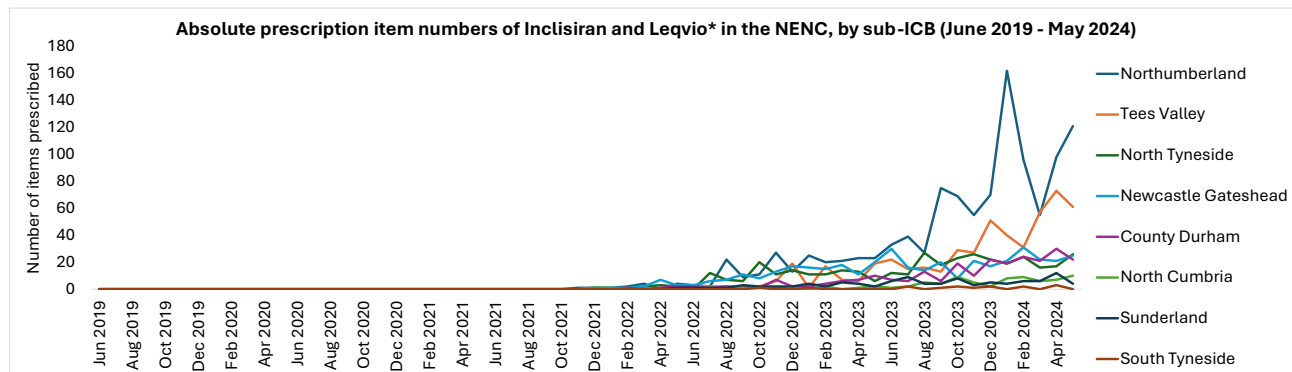
* Ezetrol is the brand name of Ezetimibe.

The indicator shows the absolute count of the number of prescription items for the generic product Ezetimibe and the branded product Ezetrol between June 2019 to May 2024. Items include the number of times a medicine has been prescribed and does not include information about how much of it has been prescribed [19]. Counts relate to primary care prescribing only and data originates from reimbursement claims from dispensing contractors (e.g. pharmacies), and therefore does not include prescriptions which are issued but never dispensed. The data also describes the information on the prescription form, not what was actually dispensed. For example, items prescribed generically may be dispensed as brands.

What is the data telling us?

The number of prescription items for Ezetimibe and Ezetrol was relatively constant across all sub-ICB locations between June 2019 and early 2022. Since then, all sub-ICBs have seen a general increase in the number of prescriptions items for Ezetimibe and Ezetrol, with the greatest increases observed since early 2023. Across several sub-ICBs, including Tees Valley, County Durham, and Newcastle and Gateshead there has been a particularly large increase in the number of prescription items for Ezetimibe and Ezetrol since late 2023. To note, prescription item numbers should be not directly compared across sub-ICBs due to the population differences.

Absolute prescription items for Inclisiran and Leqvio



Date source: *OpenPrescribing.net, Bennett Institute for Applied Data Science, University of Oxford, 2024*

Definitions / Notes

Inclisiran is an innovative new treatment option for people at risk of CVD and can be used to treat high cholesterol in people whose cholesterol is not adequately controlled with first line medications such as statins, ezetimibe, or ezetimibe with bempedoic acid [20]. Inclisiran gained NICE approval in September 2021, recommending the drug for people with high cholesterol who have already had a previous cardiovascular event to reduce their LDL cholesterol levels. Health Innovation Networks are the delivery partners for the deployment of Inclisiran across England, and HI NENC have worked closely with clinicians across the region to introduce Inclisiran into local lipid management pathways, with the Northern England Evaluation and Lipid Intensification (NEELI) guidelines developed to support introduction [21,22].

*Leqvio is the brand name of Inclisiran

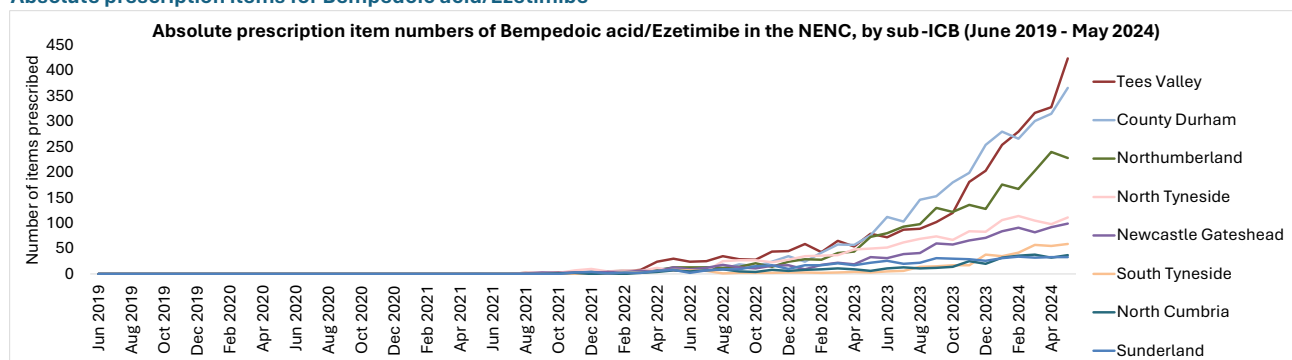
The indicator shows the absolute count of the number of prescription items for the generic product Inclisiran and the branded product Leqvio between June 2019 to May 2024. Items include the number of times a medicine has been prescribed and does not include information about the quantity of medicine prescribed. Counts relate to primary care prescribing only and data originates from reimbursement claims from dispensing contractors (e.g. pharmacies), and therefore does not include prescriptions which are issued but never dispensed. The data also describes the information on the prescription form, not what was actually dispensed. For example, items prescribed generically may be dispensed as brands.

What is the data telling us?

Across all sub-ICB locations in the NENC, there has been a gradual increase in the number of prescription items for Inclisiran and Leqvio since September 2021. The number of prescription items remain below 200 per month in all sub-ICBs. The largest increase in the number of prescription items for Inclisiran and Leqvio were in Northumberland and in County Durham. To note, prescription item numbers should be not directly compared across sub-ICBs due to the population differences.

Condition Management and Treatment Cholesterol

Absolute prescription items for Bempedoic acid/Ezetimibe



Data source: *OpenPrescribing.net, Bennett Institute for Applied Data Science, University of Oxford, 2024*

Definitions / Notes

Bempedoic acid/ezetimibe is an oral combination tablet that can be used to reduce LDL-cholesterol levels in adults with primary hypercholesterolaemia or mixed dyslipidaemia [23]. NICE guidelines recommend the use of Bempedoic acid/Ezetimibe only if statins are not tolerated or are contradicted, or if Ezetimibe alone does not control LDL cholesterol well enough [24].

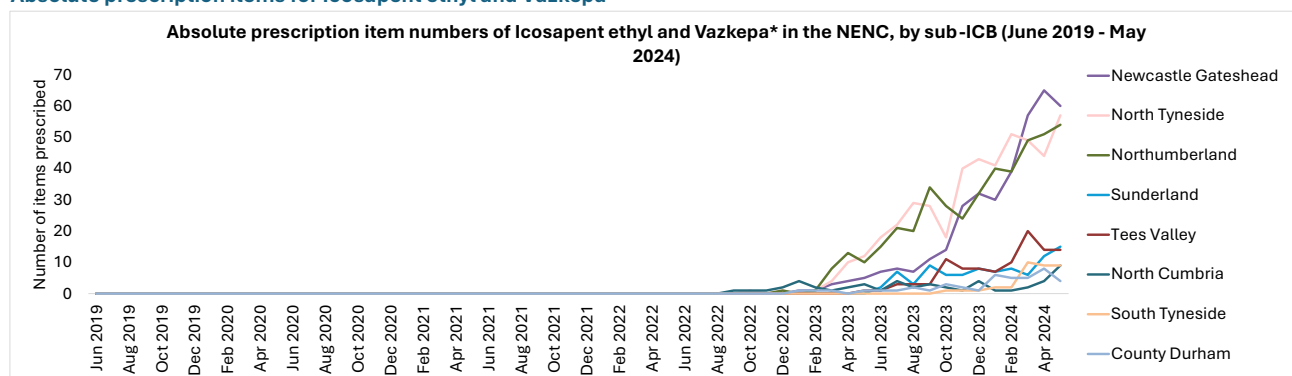
Nexlizet is the brand name of Bempedoic acid/Ezetimibe, however there were no prescriptions recorded for this across England.

The indicator shows the absolute count of the number of prescription items for the generic product Bempedoic acid/Ezetimibe between June 2019 to May 2024. Items include the number of times a medicine has been prescribed and does not include information about the quantity of medicine prescribed. Counts relate to primary care prescribing only and data originates from reimbursement claims from dispensing contractors (e.g. pharmacies), and therefore does not include prescriptions which are issued but never dispensed. The data also describes the information on the prescription form, not what was actually dispensed. For example, items prescribed generically may be dispensed as brands.

What is the data telling us?

The trend shows that for five of the sub-ICBs in the NENC region there has been a modest increase in the number of prescription items of Bempedoic acid/Ezetimibe since mid 2021, with sharper increases in the number of prescription items in Tees Valley, County Durham and Northumberland, particularly since April 2023. Prescription item numbers of Bempedoic acid/Ezetimibe remain relatively low across all sub-ICB location in the NENC. To note, prescription item numbers should be not directly compared across sub-ICBs due to the population differences.

Absolute prescription items for Icosapent ethyl and Vazkepa



Date source: *OpenPrescribing.net, Bennett Institute for Applied Data Science, University of Oxford, 2024*

Definitions / Notes

Icosapent ethyl is a highly purified omega 3 fatty acid known as eicosapentaenoic acid (EPA). Icosapent ethyl is recommended as an option for reducing the risk of cardiovascular events in adults with established CVD or at high risk of cardiovascular events [25]. It is recommended for use if individuals have a high risk of cardiovascular events who have LDL cholesterol which is well controlled with statins but who have raised fasting triglycerides, thus who are at risk of future heart attacks or strokes [26].

*Vazkepa is the brand name for Icosapent ethyl.

The indicator shows the absolute count of the number of prescription items for the generic product Icosapent ethyl and the branded product Vazkepa between June 2019 to May 2024. Items include the number of times a medicine has been prescribed and does not include information about the quantity of medicine prescribed. Counts relate to primary care prescribing only and data originates from reimbursement claims from dispensing contractors (e.g. pharmacies), and therefore does not include prescriptions which are issued but never dispensed. The data also describes the information on the prescription form, not what was actually dispensed. For example, items prescribed generically may be dispensed as brands.

What is the data telling us?

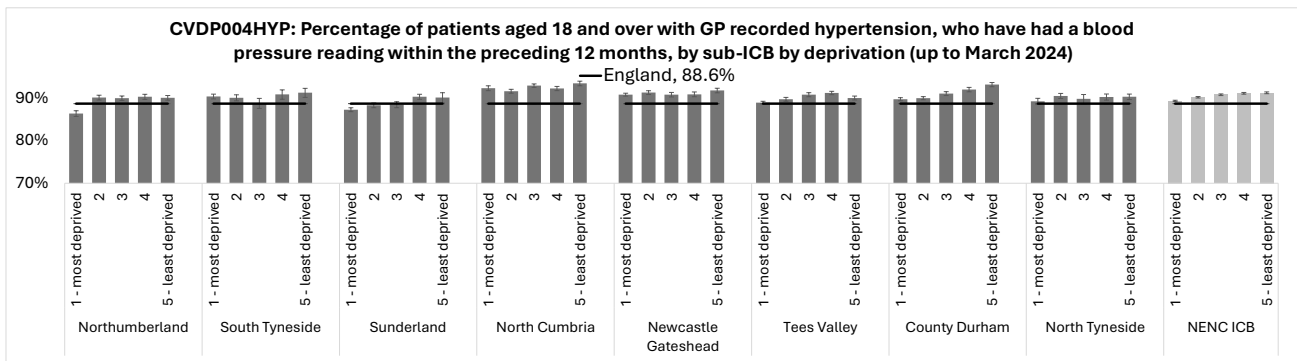
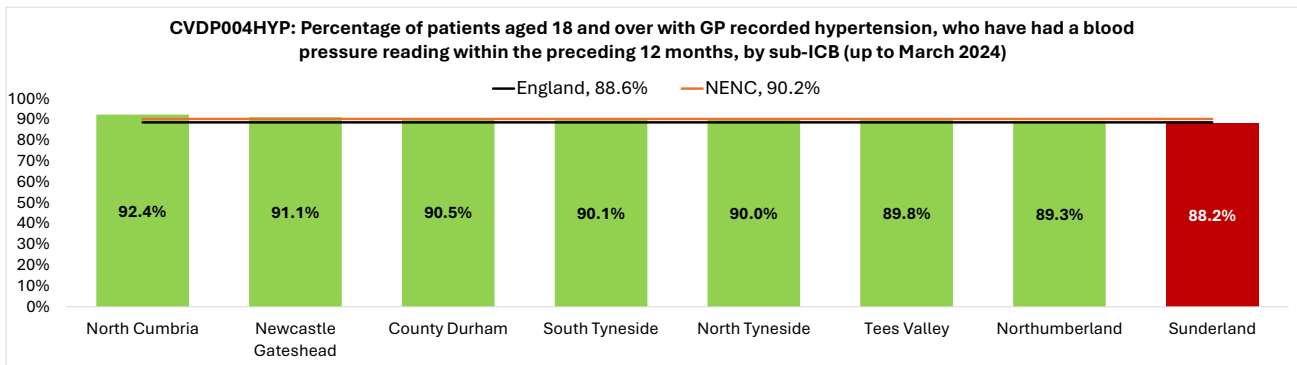
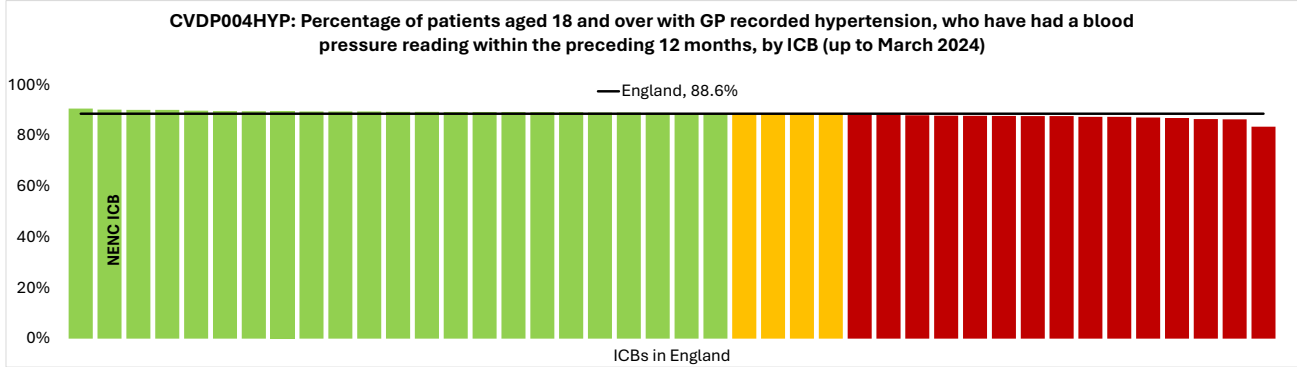
Although prescription item numbers for Icosapent ethyl or Vazkepa are low across all sub-ICB locations, since early 2023, there has been a sharp rise in the number of prescriptions in Newcastle Gateshead, North Tyneside and Northumberland. Prescription numbers for Icosapent ethyl or Vazkepa in the remaining sub-ICB locations have seen modest increases over time. To note, prescription item numbers should be not directly compared across sub-ICBs due to the population differences.

Condition Management and Treatment

Hypertension

Percentage of patients aged 18 and over with GP recorded hypertension, who have had a blood pressure reading within the preceding 12 months
CVDP004HYP

Compared with England: **NENC 90.2%** **England 88.6%** *National programme ambition: Optimised management in areas with highest inequalities*



Data source: Cardiovascular Disease Prevention Audit (CVDPREVENT), Data & Improvement Tool 2024, <https://www.cvdprevent.nhs.uk/>

Definitions / Notes

The percentage of patients aged 18 and over with GP recorded hypertension who have had a blood pressure (BP) reading within the preceding 12 months. The data source for this indicator is from the CVDPREVENT Audit and NHS Digital - Patients registered at a GP practice. Patients included in this indicator are from Cohort 1 (high risk conditions cohort) and Cohort 2 (CVD cohort). This indicator relates to the monitoring of patients with recorded hypertension.

Treatment for hypertension is very effective at lowering blood pressure and at improving outcomes and significantly reduces the risk of heart attacks, stroke, heart failure and all-cause mortality. The NICE hypertension guideline NG136 recommends yearly monitoring of BP, and therefore a higher percentage on this indicator is indicative of better management of hypertension [1].

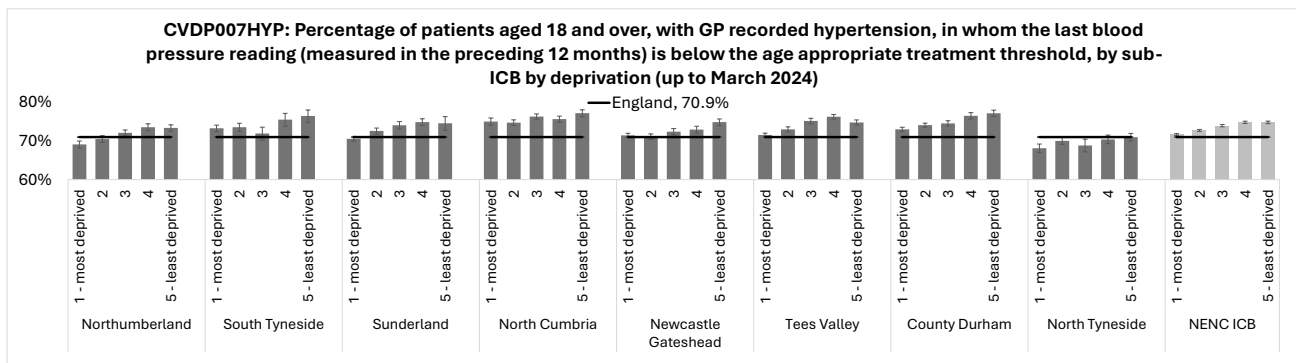
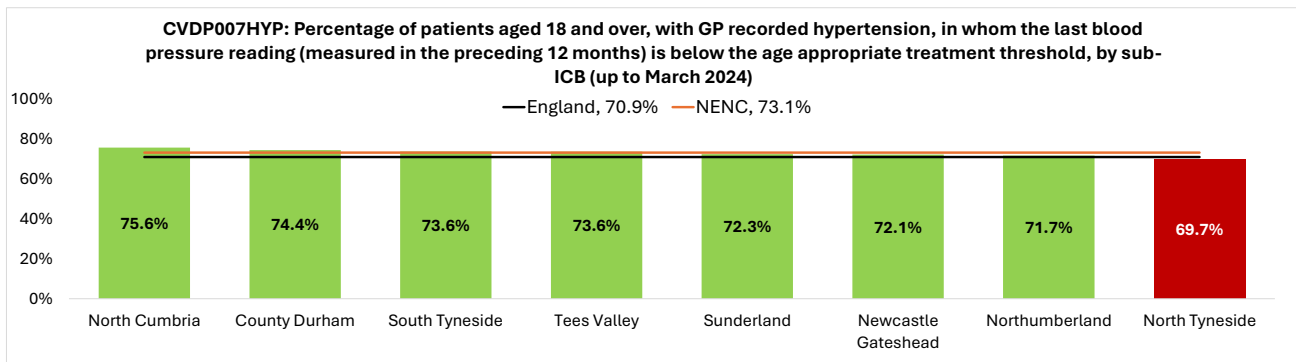
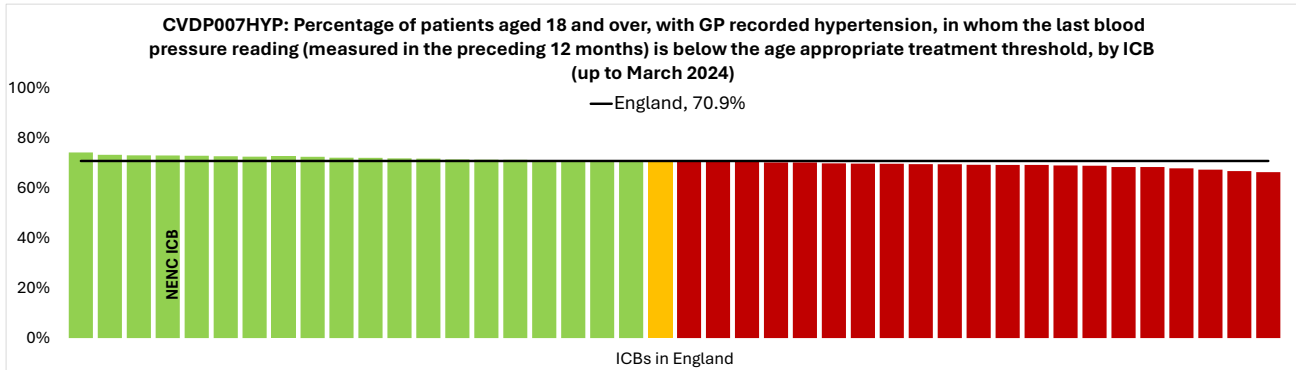
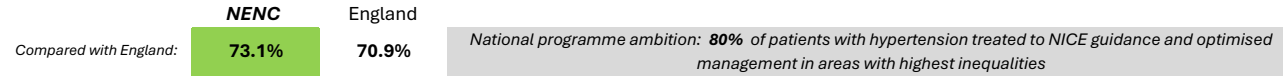
What is the data telling us?

The percentage of patients with hypertension who had a BP reading within the last 12 months was 90.2% in the NENC, significantly better than the England average of 88.6%. At sub-ICB level, only Sunderland sub-ICB had a significantly worse percentage for this indicator compared to the England average, with variation across the region from 88.2% in Sunderland to 92.4% in North Cumbria. Taking into account the relative proportion of people in each deprivation quintile of NENC, performance for this indicator was approximately 2.5 percentage points worse in the most deprived areas compared to the most affluent areas. This suggests there are disparities across the social gradient for regular blood pressure monitoring for patients with hypertension, which may impact on the likelihood of patients being treated to target in more deprived areas, thus potentially limiting the impact on reducing the risk of future CVD events.

Condition Management and Treatment Hypertension

Percentage of patients aged 18 and over, with GP recorded hypertension, in whom the last blood pressure reading (measured in the preceding 12 months) is below the age appropriate treatment threshold.

CVDP007HYP



Data source: Cardiovascular Disease Prevention Audit (CVDPREVENT), Data & Improvement Tool 2024, <https://www.cvdprevent.nhs.uk/>

Definitions / Notes

The percentage of patients aged 18 and over with GP recorded hypertension, in whom the last blood pressure reading (recorded in the last 12 months) is below the age appropriate treatment threshold (140/90 mmHg or less in patients 79 and under and 150/90mmHg or less in patients aged 80 and over). The data source for this indicator is from the CVDPREVENT Audit and NHS Digital - Patients registered at a GP practice. Patients included in this indicators are from Cohort 1 (high risk conditions cohort) and Cohort 2 (CVD cohort). This indicator relates to the management of patients with recorded hypertension.

High blood pressure accounts for approximately half of all strokes and ischemic heart disease events globally, and in England high BP is the number one risk factor for CVD mortality and morbidity. Effective treatment of hypertension is through lowering blood pressure, which translates into improving outcomes and reducing the risk of heart attacks, stroke, heart failure and all-cause mortality. In England, there is a national ambition to increase the number of people diagnosed with high BP who are treated to target as per the NG136 NICE guidelines to 80% by 2029. There are different treatment targets for blood pressure depending on a person's age. For adults with hypertension aged under 80, the target is to reduce blood pressure to below 140/90 mmHg and for adults aged 80 and over to below 150/90mmHg [1]. Treatment targets depend on the person's age (under 80 years old, or over 80 years old). Higher proportions of patients managed to target represents better quality of care.

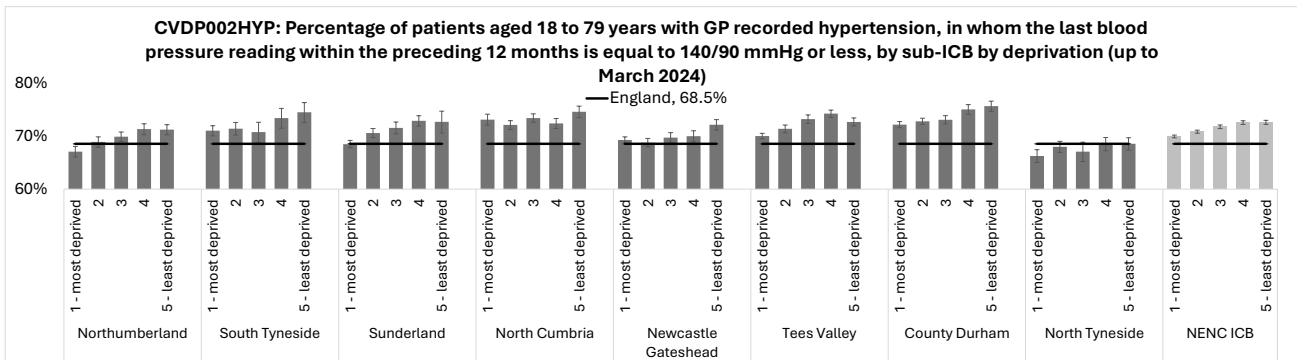
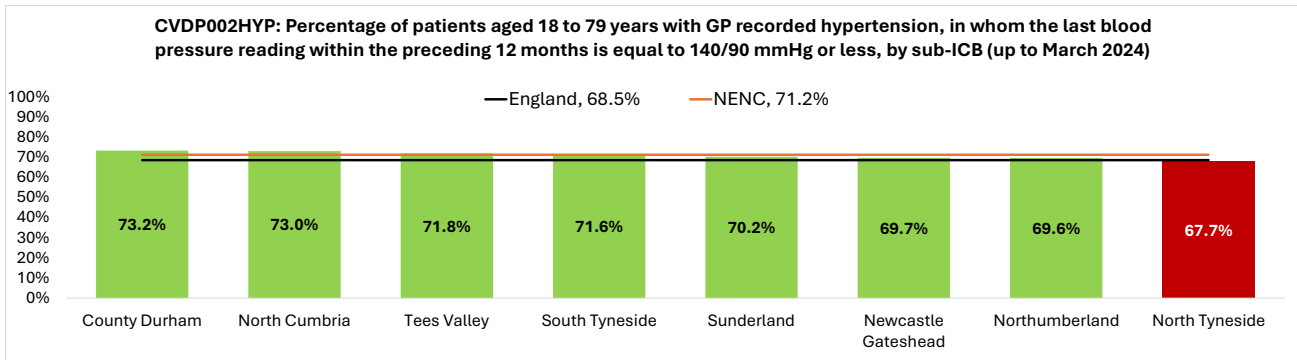
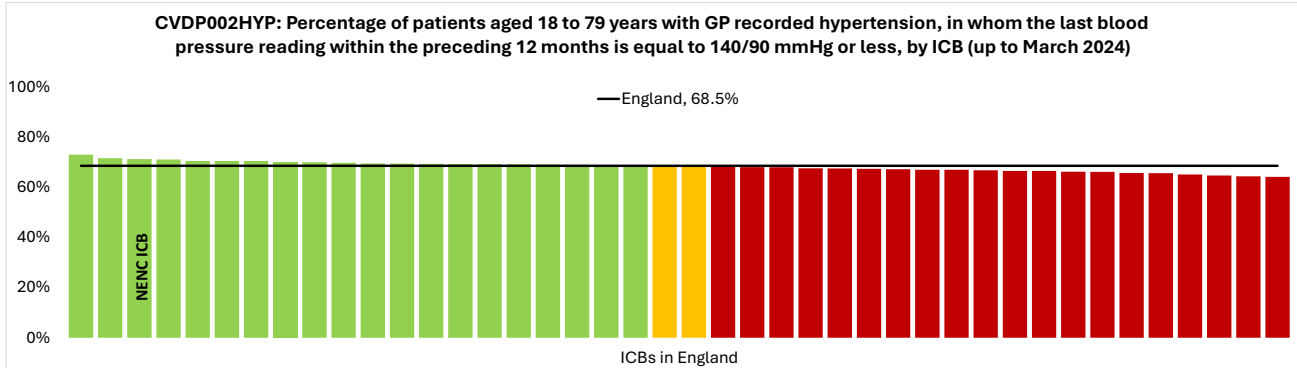
What is the data telling us?

The percentage of patients aged 18+ with hypertension whose last blood pressure reading was below the age appropriate treatment threshold in the NENC ICB was 73.1%, significantly better than the England average of 70.3%. At sub-ICB level across NENC, performance of this indicator ranged from 69.7% in North Tyneside to 75.6% in North Cumbria, showing that there is slight variation across the region in attainment of age appropriate blood pressure thresholds. Taking into account the relative proportion of people in each deprivation quintile of NENC, performance for this indicator was approximately 4 percentage points worse in the most deprived areas compared to the most affluent areas. The difference in the achievement of blood pressure targets across the deprivation quintiles suggests there are disparities across the social gradient in the sustained management of blood pressure for patients with hypertension.

Condition Management and Treatment Hypertension

Percentage of patients aged 18 to 79 years with GP recorded hypertension, in whom the last blood pressure reading within the preceding 12 months is equal to 140/90 mmHg or less
CVDP002HYP

Compared with England: **NENC 71.2%** **England 68.5%** *National programme ambition: 80% of patients with hypertension treated to NICE guidance and optimised management in areas with highest inequalities*



Data source: Cardiovascular Disease Prevention Audit (CVDPREVENT), Data & Improvement Tool 2024, <https://www.cvdprevent.nhs.uk/>

Definitions / Notes

The percentage of patients aged 18 to 79 years with GP recorded hypertension, in whom the last blood pressure reading within the preceding 12 months is equal to 140/90 mmHg or less. The data source for this indicator is from the CVDPREVENT Audit and NHS Digital - Patients registered at a GP practice. Patients included in this indicators are from Cohort 1 (high risk conditions cohort) and Cohort 2 (CVD cohort). This indicator relates to the management of patients aged between 18 - 79 with recorded hypertension.

High blood pressure accounts for approximately half of all strokes and ischemic heart disease events globally, and in England high BP is the number one risk factor for CVD mortality and morbidity. Effective treatment of hypertension is through lowering blood pressure, which translates into improving outcomes and reducing the risk of heart attacks, stroke, heart failure and all-cause mortality. In England, there is a national ambition to increase the number of people diagnosed with high BP who are treated to target as per the NG136 NICE guidelines to 80% by 2029. For adults with hypertension aged under 80, the target is to reduce blood pressure to below 140/90 mmHg [1]. Higher proportions of patients managed to target represents better quality of care.

What is the data telling us?

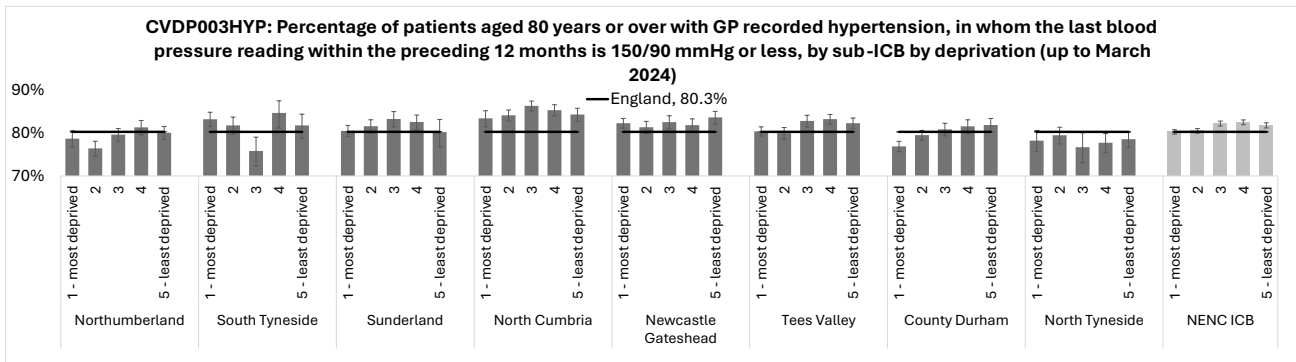
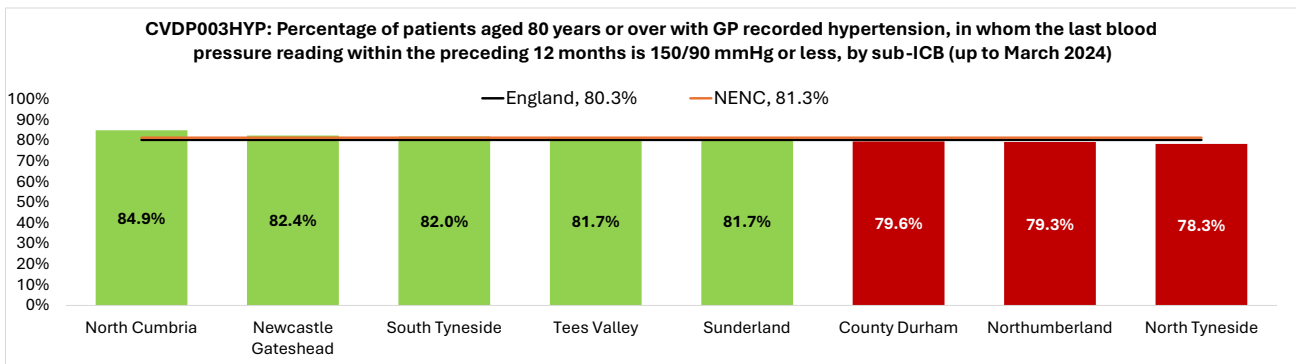
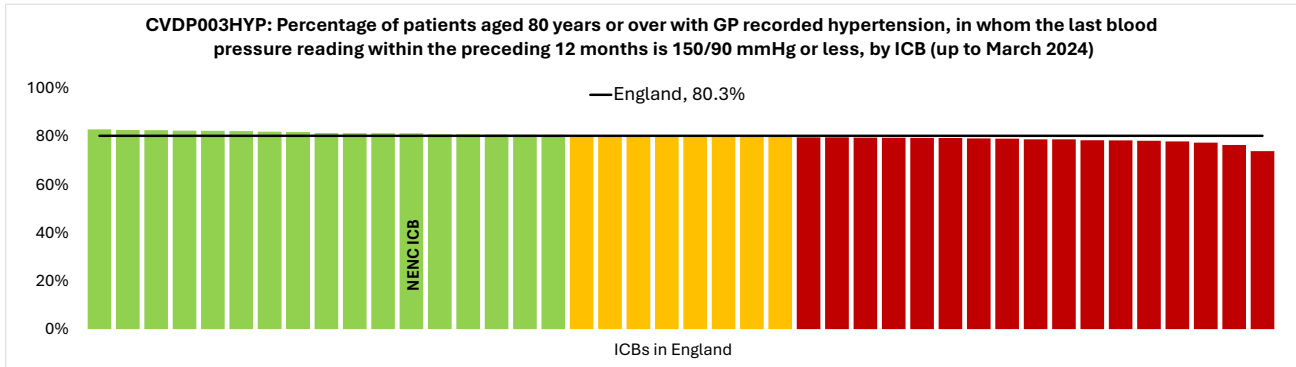
For patients under the age of 80, the percentage of patients with hypertension who have a BP reading below or equal to 140/90 mmHg in the last 12 months in the NENC was significantly better than the England average (71.2% vs 68.5%). At sub-ICB level in the NENC, the percentage of patients aged below 80 with hypertension who had a BP reading below the age appropriate target ranged from 67.7% in North Tyneside, to 73.2% in County Durham, indicating a variation in achievement of BP management targets in patients with hypertension across the region. Taking into account the relative proportion of people in each deprivation quintile of NENC, performance for this indicator was approximately 4 percentage points worse in the most deprived areas compared to the most affluent areas. This suggests that in areas of greater deprivation, fewer patients with hypertension have regular blood pressure monitoring (CVDP004HYP) and fewer are treated to target levels, which is likely to impact on the reduction of possible future CVD events.

Condition Management and Treatment Hypertension

Percentage of patients aged 80 years or over with GP recorded hypertension, in whom the last blood pressure reading within the preceding 12 months is 150/90 mmHg or less

CVDP003HYP

	NENC	England	National programme ambition: 80% of patients with hypertension treated to NICE guidance and optimised management in areas with highest inequalities
Compared with England:	81.3%	80.3%	



Data source: Cardiovascular Disease Prevention Audit (CVDPREVENT), Data & Improvement Tool 2024, <https://www.cvdprevent.nhs.uk/>

Definitions / Notes

The percentage of patients aged 80 years or over, with GP recorded hypertension, in whom the last blood pressure reading within the preceding 12 months is 150/90 mmHg or less. The data source for this indicator is from the CVDPREVENT Audit and NHS Digital - Patients registered at a GP practice. Patients included in this indicators are from Cohort 1 (high risk conditions cohort) and Cohort 2 (CVD cohort). This indicator relates to the management of patients aged 80 and over with recorded hypertension.

High blood pressure accounts for approximately half of all strokes and ischemic heart disease events globally, and in England high BP is the number one risk factor for CVD mortality and morbidity. Effective treatment of hypertension is through lowering blood pressure, which translates into improving outcomes and reducing the risk of heart attacks, stroke, heart failure and all-cause mortality. In England, there is a national ambition to increase the number of people diagnosed with high BP who are treated to target as per the NG136 NICE guidelines to 80% by 2029. For adults with hypertension aged 80 and over, the target is to reduce blood pressure to below 150/90mmHg [1]. Higher proportions of patients managed to target represents better quality of care.

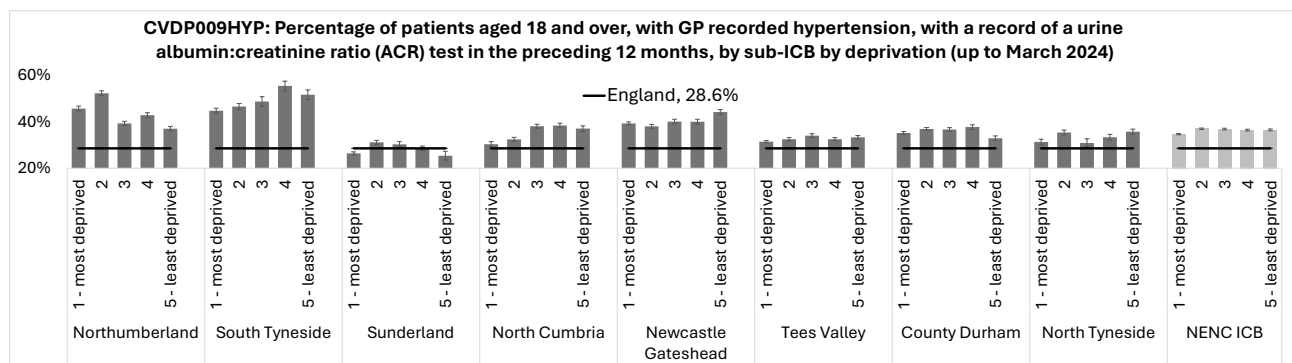
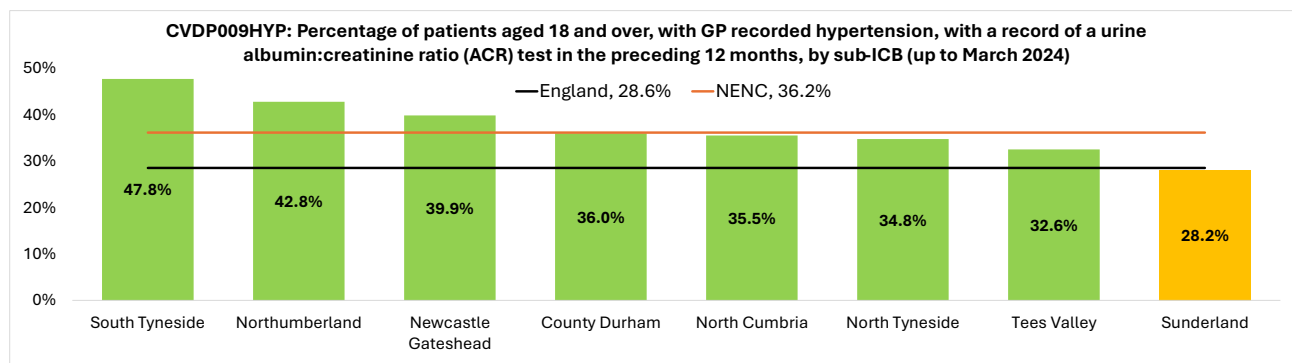
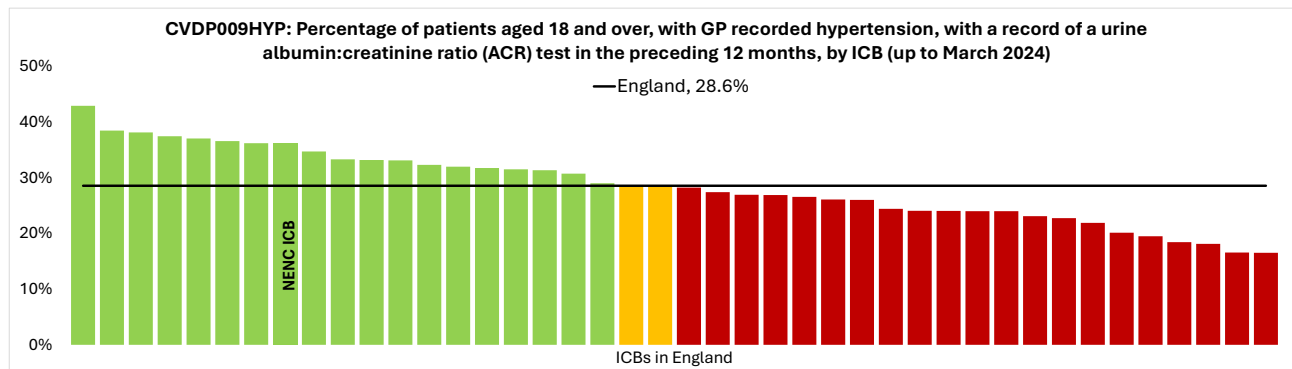
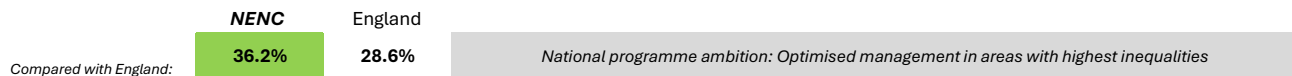
What is the data telling us?

For patients aged 80 years and older with hypertension, the percentage whose last BP reading was below or equal to the target of 150/90mmHg was 81.3% in NENC, significantly better than the England average of 80.3%. At sub-ICB level, five of the eight sub-ICBs within the NENC had a significantly better percentage of patients aged 80 and over with hypertension who had a BP reading within the treatment target, and ranged from 78.3% in North Tyneside to 84.9% in North Cumbria. When taking in account the relative proportion of people in each deprivation quintile of NENC, there was no clear relationship between deprivation and performance of this indicator.

Condition Management and Treatment Hypertension

Percentage of patients aged 18 and over, with GP recorded hypertension, with a record of a urine albumin:creatinine ratio (ACR) test in the preceding 12 months

CVDP009HYP



Data source: Cardiovascular Disease Prevention Audit (CVDPREVENT), Data & Improvement Tool 2024, <https://www.cvdprevent.nhs.uk/>

Definitions / Notes

The percentage of patients aged 18 and over, with GP recorded hypertension (excluding patients with chronic kidney disease (CKD) (G3a to G5)), with a record of a urine albumin:creatinine ratio (ACR) or protein:creatinine ratio (PCR) test in the preceding 12 months. The data source for this indicator is from the CVDPREVENT Audit. Patients included in this indicators are from Cohort 1 (high risk conditions cohort) and Cohort 2 (CVD cohort). This indicator relates to the management of patients with recorded hypertension.

Hypertension and CKD often co-exist. NICE guidance suggests that all people with a new diagnosis of hypertension should have a kidney function test [3]. People with hypertension have a high risk of developing CKD, and although the NICE hypertension guidance does not specify a time period for regular ongoing kidney function testing in people with hypertension, the NICE Clinical Knowledge Summary (CKS) for hypertension suggests that checking kidney function including a urine albumin:creatinine ratio should be part of the annual review process [27]. It is recommended that measurement of the albumin:creatinine ratio from urine tests form part of the set of measures used to test renal function. Higher proportions of patients managed to target represents better quality of care.

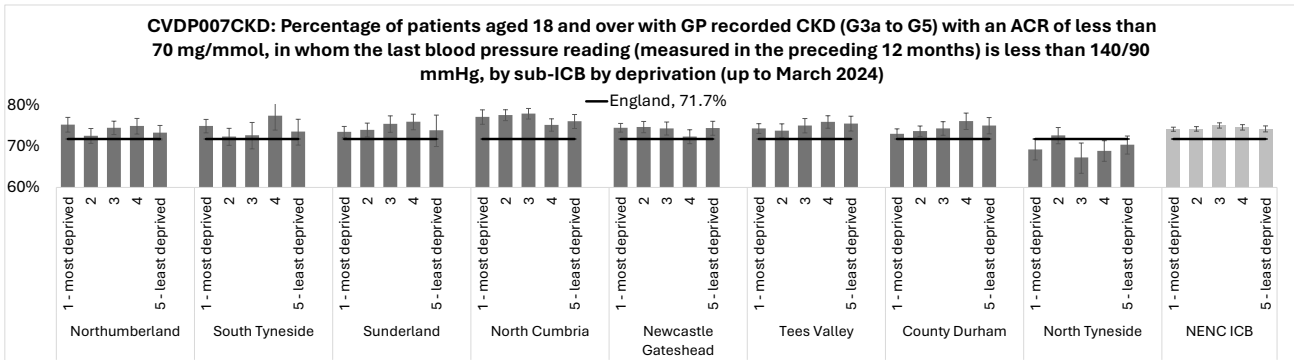
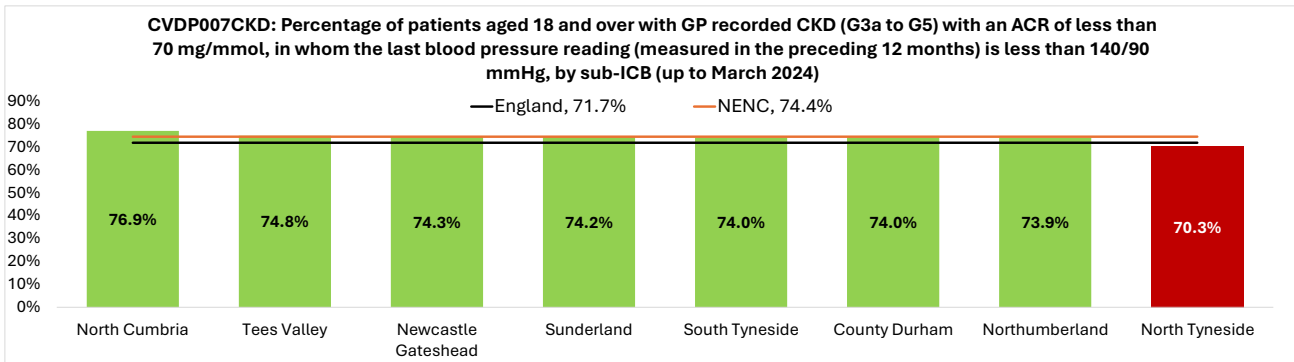
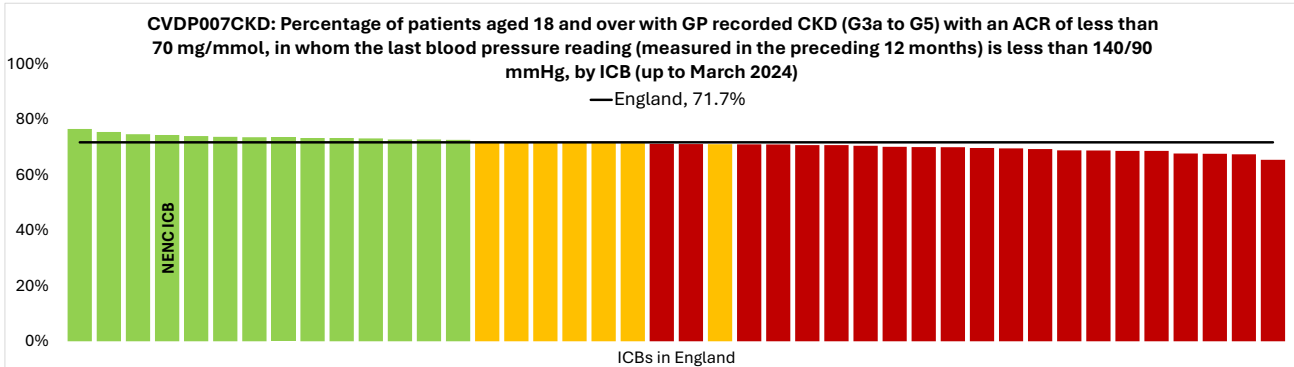
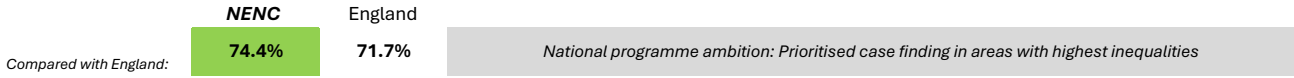
What is the data telling us?

For patients with hypertension with no recorded CKD, the percentage who had an ACR or PCR test in the last 12 months was 36.2% in the NENC ICB, significantly better than the national average of 28.6%. All sub-ICBs in the NENC, except Sunderland sub-ICB, had a significantly better percentage of patients with hypertension who had an ACR or PCR in the last 12 months. Sunderland sub-ICB had a similar percentage compared to the national average. Performance for this indicator ranged from 28.2% in Sunderland to 47.8% in South Tyneside. When taking in account the relative proportion of people in each deprivation quintile of NENC, there was no clear relationship between deprivation and performance of this indicator.

Condition Management and Treatment CKD

Percentage of patients aged 18 and over with GP recorded CKD (G3a to G5) with an ACR of less than 70 mg/mmol, in whom the last blood pressure reading (measured in the preceding 12 months) is less than 140/90 mmHg.

CVDP007CKD



Data source: Cardiovascular Disease Prevention Audit (CVDPREVENT), Data & Improvement Tool 2024, <https://www.cvdprevent.nhs.uk/>

Definitions / Notes

The percentage of patients with GP recorded chronic kidney disease (CKD) categories G3a to G5 (previously stage 3 to 5) and with an albumin creatinine ratio (ACR) of less than 70 mg/mmol, in whom the last blood pressure reading (measured in the preceding 12 months) is less than 140/90 mmHg. The data source for this indicator is from the CVDPREVENT Audit (numerator) and NHS Digital (denominator). Patients included in this indicators are from Cohort 1 (high risk conditions) and Cohort 2 (CVD cohort). This indicator relates to the monitoring of patients with CKD.

Blood pressure (BP) control is an important factor in reducing the progression of CKD, this indicator uses a specific ACR level to guide blood pressure treatment levels. The majority of patients with CKD will have ACR levels below 70mg/mmol, and a BP target of less than 140/90 mm/Hg is recommended. For people with CKD and higher levels of albuminuria (70mg/mmol or more), a lower blood pressure target of 130/80 mm/Hg is recommended (NICE guidance NG203) [3]. To note, only patients with an ACR reading <70 mg/mmol are included in this indicator. Higher proportions of patients managed to target can represent better quality of care.

What is the data telling us?

The percentage of patients with CKD with an ACR of less than 70 mg/mmol who had a BP reading less than 140/90 mmHg was 74.4% in the NENC ICB, significantly better than the national average of 71.1%. Across the NENC ICB, the percentage of patients with CKD with an ACR of less than 70 mg/mmol who had a BP reading less than 140/90 mmHg ranged from 70.3% in North Tyneside to 76.9% in North Cumbria, with North Tyneside the only sub-ICB in the region performing significantly worse than the national average. When taking in account the relative proportion of people in each deprivation quintile of NENC, there was no clear relationship between deprivation and performance of this indicator.

Condition Management and Treatment CKD

Percentage of patients aged 18 and over with GP recorded CKD (G3a to G5), with a record of an eGFR test in the preceding 12 months

CVDP006CKD

NENC

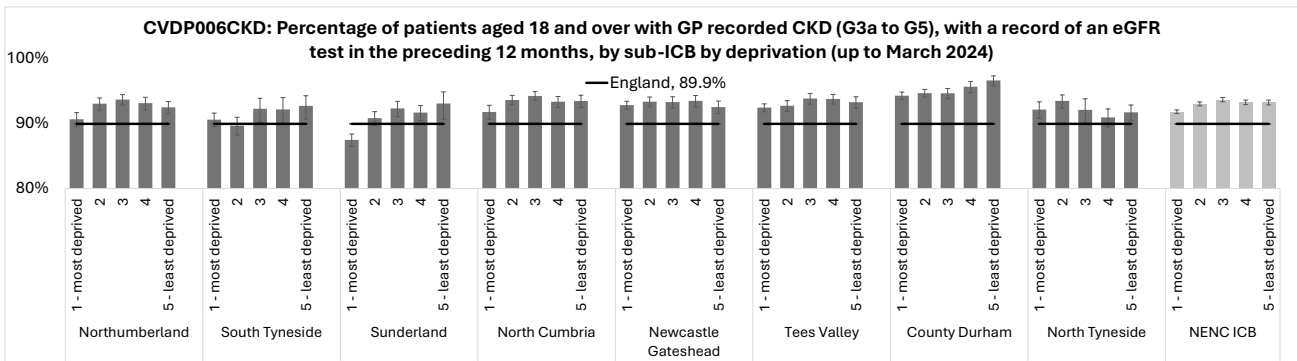
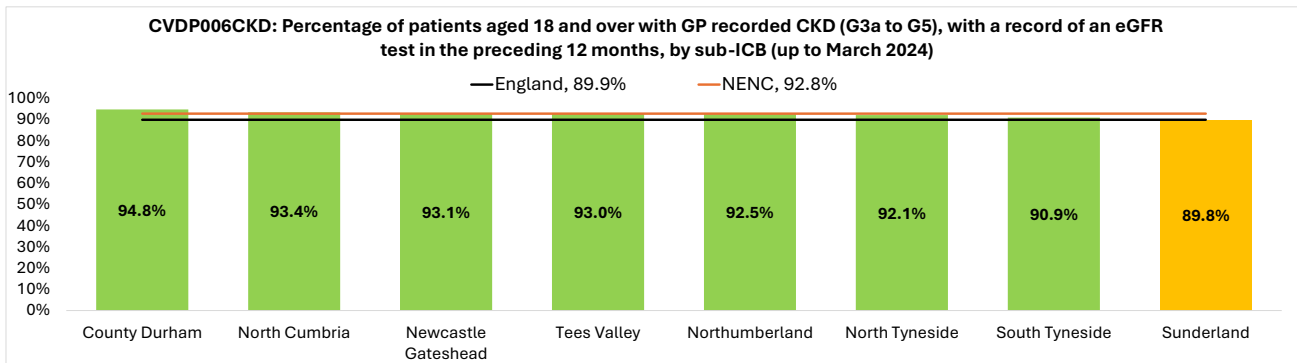
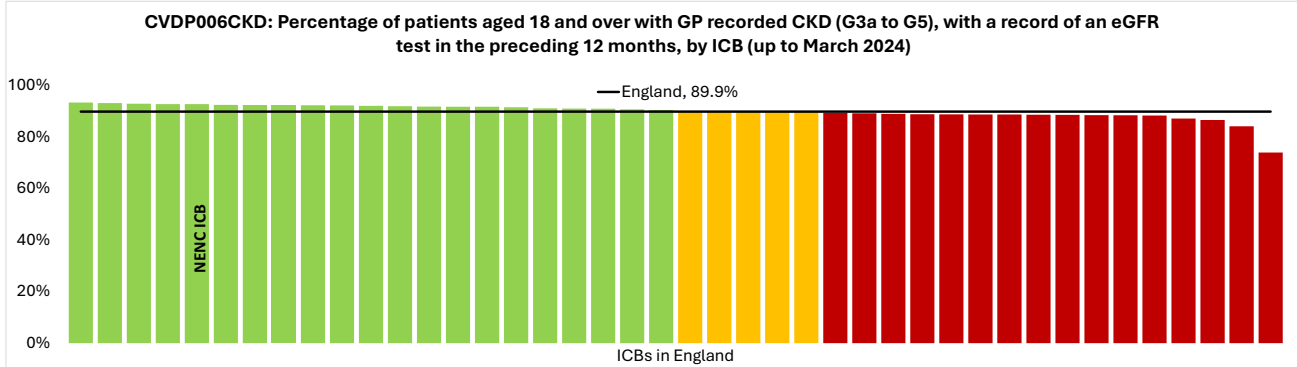
England

Compared with England:

92.8%

89.9%

National programme ambition: Optimised management in areas with highest inequalities



Data source: Cardiovascular Disease Prevention Audit (CVDPREVENT), Data & Improvement Tool 2024, <https://www.cvdprevent.nhs.uk/>

Definitions / Notes

The percentage of patients aged 18 and over, with GP recorded Chronic Kidney Disease categories G3a to G5 (previously stage 3 to 5), with a record of an eGFR (estimated glomerular filtration rate) test in the preceding 12 months. The data source for this indicator is from the CVDPREVENT Audit (numerator) and NHS Digital (denominator). Patients included in this indicators are from Cohort 1 (high risk conditions) and Cohort 2 (CVD cohort). This indicator relates to the monitoring of patients with CKD.

Patients with CKD should have regular urine and blood tests to understand the level of kidney damage and progression of damage. eGFRs can be used to measure kidney efficiency. Depending on CKD grade a minimum timeframe for monitoring is suggested, and for any grade from G3a and above this minimal monitoring is at least once a year, this increases to 4 or more times a year in category G5 (NICE guidance NG203) [3]. Differing levels of treatment can be an indicator of variation in the quality of care. Higher proportions of patients managed to target can represent better quality of care.

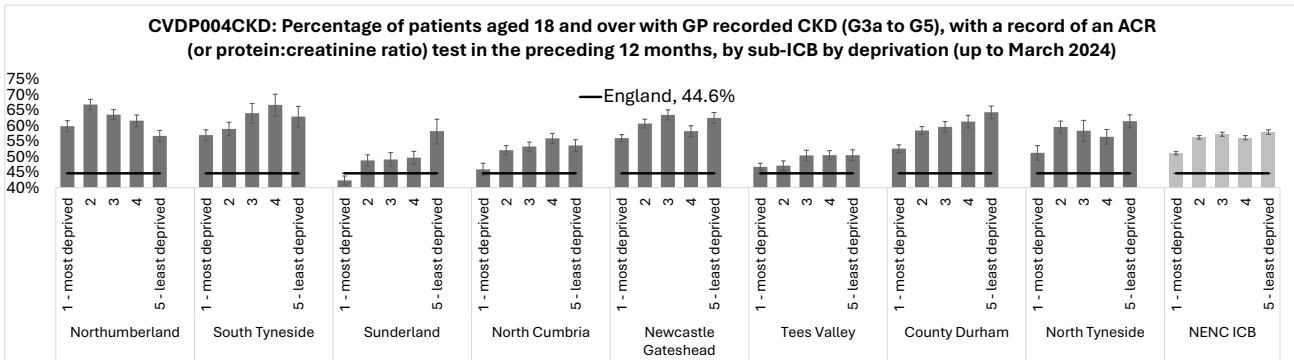
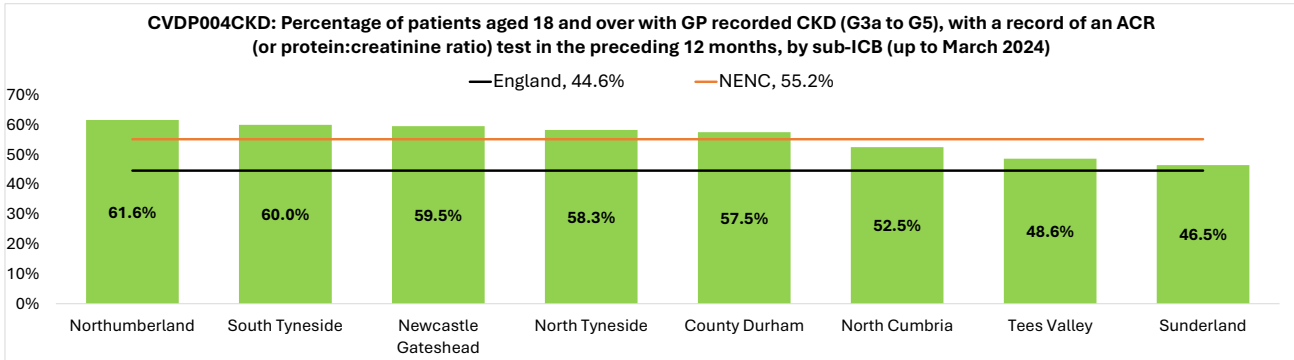
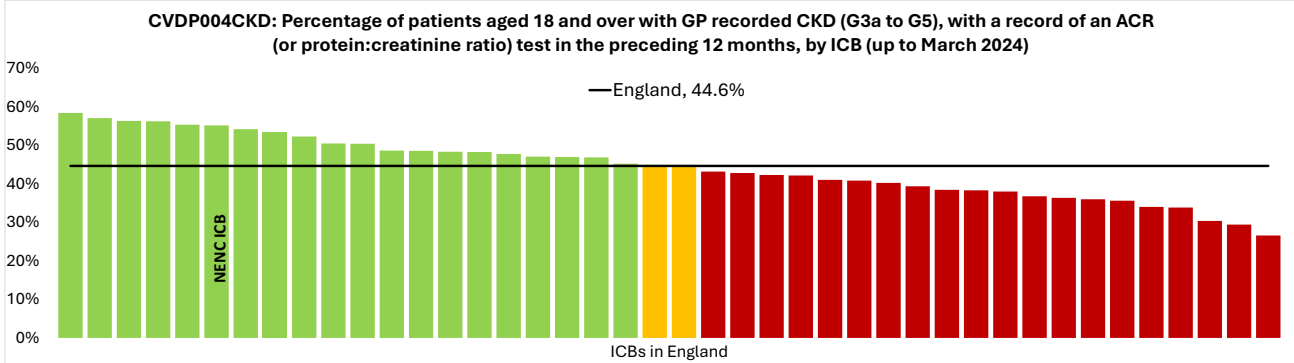
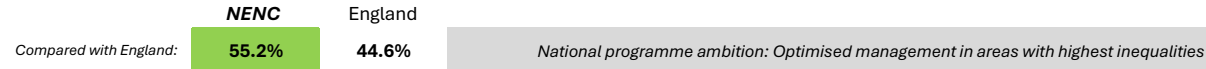
What is the data telling us?

The percentage of patients with CKD who had an eGFR test within the preceding 12 months was 92.8% in NENC ICB, significantly better than the national average (89.9%). Across the NENC, all sub-ICBs, with exception of Sunderland, had significantly better percentages of patients with CKD who had a eGFR test within the preceding 12 months, and ranged from 89.8% in Sunderland to 94.8% in County Durham. When taking in account the relative proportion of people in each deprivation quintile of NENC, there was no clear relationship between deprivation and performance of this indicator.

Condition Management and Treatment CKD

Percentage of patients aged 18 and over with GP recorded CKD (G3a to G5), with a record of a urine albumin:creatinine ratio (or protein:creatinine ratio) test in the preceding 12 months

CVDP004CKD



Data source: Cardiovascular Disease Prevention Audit (CVDPREVENT), Data & Improvement Tool 2024, <https://www.cvdprevent.nhs.uk/>

Definitions / Notes

The percentage of patients aged 18 years and above with GP recorded CKD categories G3a to G5 (previously stage 3 to 5), in whom there is a record of a urine albumin:creatinine ratio (ACR) (or protein:creatinine ratio) test in the preceding 12 months. The data source for this indicator is from the CVDPREVENT Audit (numerator) and NHS Digital (denominator). Patients included in this indicator are from Cohort 1 (high risk conditions) and Cohort 2 (CVD cohort). This indicator relates to the monitoring of patients with CKD.

People with CKD require regular monitoring as progressive CKD (from G1 to G5) has a worse prognosis, increased risk of complications, and may require early intervention to prevent further kidney deterioration. The NICE guideline for CKD suggests that ACR monitoring should be individualised based on a person's individual characteristics, risk of progression and whether a change in ACR is likely to lead to a change in management [3]. In practice the KDIGO CKD publication recommends assessing GFR and albuminuria at least annually in people with CKD [28].

What is the data telling us?

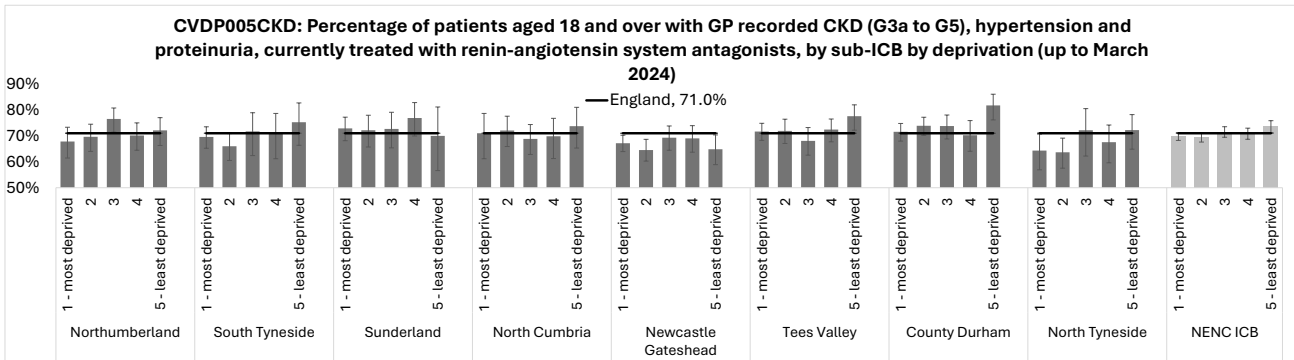
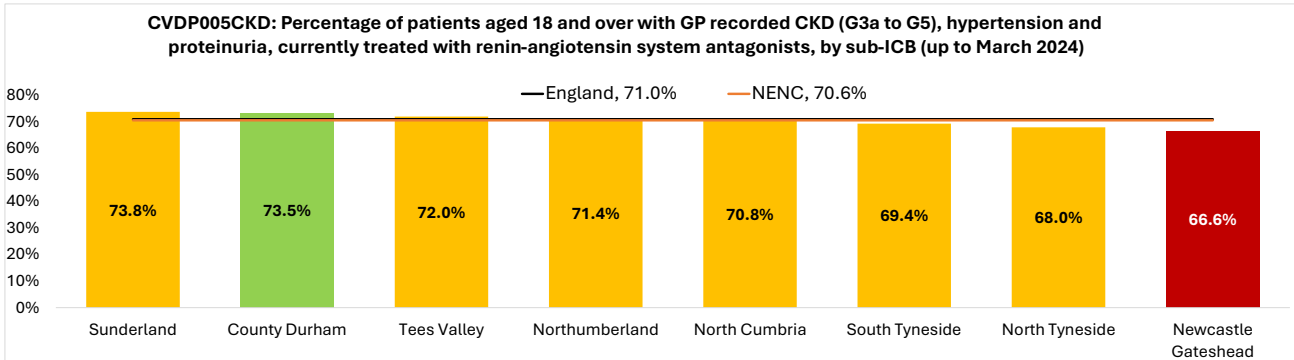
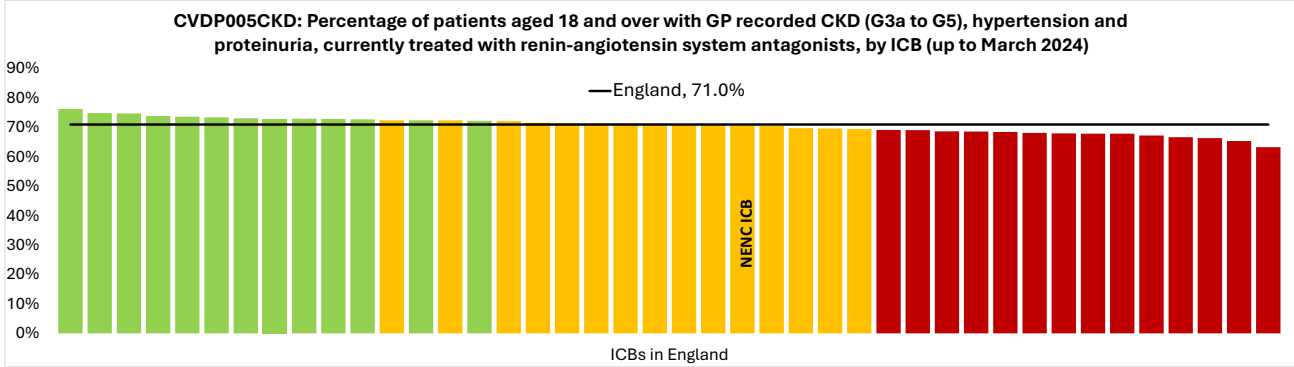
The percentage of patients with CKD with an ACR (or PCR) test recorded in the preceding 12 months was 55.2% in the NENC, significantly better than the national average of 44.6%.

Although across the NENC, all sub-ICBs had a significantly better percentage of patients with CKD with an ACR test recorded in the preceding 12 months compared to the England average, there was a wide variation in performance, ranging from 46.5% in Sunderland to 61.6% in Northumberland. When taking in account the relative proportion of people in each deprivation quintile of NENC, there was no clear relationship between deprivation and performance of this indicator.

Condition Management and Treatment CKD

Percentage of patients aged 18 and over with GP recorded CKD (G3a to G5), hypertension and proteinuria, currently treated with renin-angiotensin system antagonists
CVDP005CKD

Compared with England: **NENC 70.6%** **England 71.0%** *National programme ambition: Optimised management in areas with highest inequalities*



Data source: Cardiovascular Disease Prevention Audit (CVDPREVENT), Data & Improvement Tool 2024, <https://www.cvdprevent.nhs.uk/>

Definitions / Notes

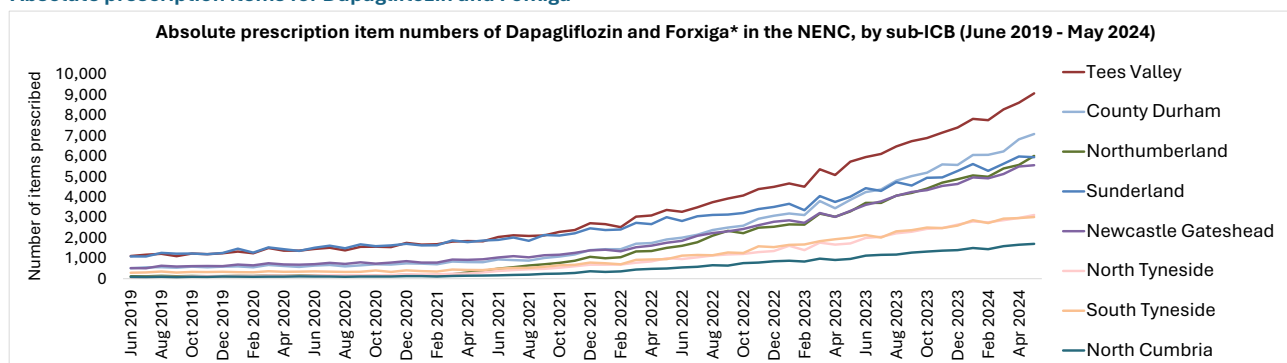
The percentage of patients aged 18 years and above with GP recorded CKD categories G3a to G5 (previously stage 3 to 5), and GP recorded hypertension and proteinuria/albuminuria (as defined in the NDA proteinuria code set) in whom there is a record of a prescription for ACE inhibitors (ACE-I) or angiotensin receptor blocker (ARBs) in the preceding 7 months. The data source for this indicator is from the CVDPREVENT Audit (numerator) and NHS Digital (denominator). Patients included in this indicators are from Cohort 1 (high risk conditions) and Cohort 2 (CVD cohort). This indicator relates to the management of patients with CKD. Treatment with renin-angiotensin system antagonists for people with CKD and hypertension can prevent or delay the progression of CKD, reduce or prevent the development of complications, and reduce the risk of cardiovascular disease (NICE guideline NG203). NICE guidance recommends ACE inhibitor use in adults, children and young people with CKD who have hypertension and an ACR over 30 mg/mmol [3].

What is the data telling us?

The percentage of patients with CKD, hypertension and proteinuria currently treatment with ACE-Is or ARBs was 70.6% in NENC, similar to the national average of 71.0%. Across the NENC, the majority of sub-ICBs had a similar percentage of patients with CKD, hypertension and proteinuria currently treatment with ACE-Is or ARBs compared to England. County Durham (73.5%) had a significantly better percentage, and Newcastle Gateshead a significantly worse percentage (66.6%). When taking in account the relative proportion of people in each deprivation quintile of NENC, there was no clear relationship between deprivation and performance of this indicator.

Condition Management and Treatment CKD

Absolute prescription items for Dapagliflozin and Forxiga



Data source: OpenPrescribing.net, Bennett Institute for Applied Data Science, University of Oxford, 2024

Definitions / Notes

Dapagliflozin is an SGLT2 inhibitor which is mainly used to treat type 2 diabetes, but is also recommended as an option for treating symptomatic chronic heart failure with reduced ejection fraction in adults, only if it is used as an add-on to optimised standard care, and for use in patients with CKD [29,30]. For use in the treatment of CKD, Dapagliflozin helps to slow the rate of CKD progression and can be used as an add on to optimised standard care with ACE-ls or ARBs. SGLT2 inhibitors work by blocking the SGLT2 protein in the kidney to reduce glucose reabsorption and increase urinary glucose and sodium excretion. Blocking this protein alleviates kidney damage by reducing pressure and inflammation in the kidneys independent of the glucose lowering effects [31].

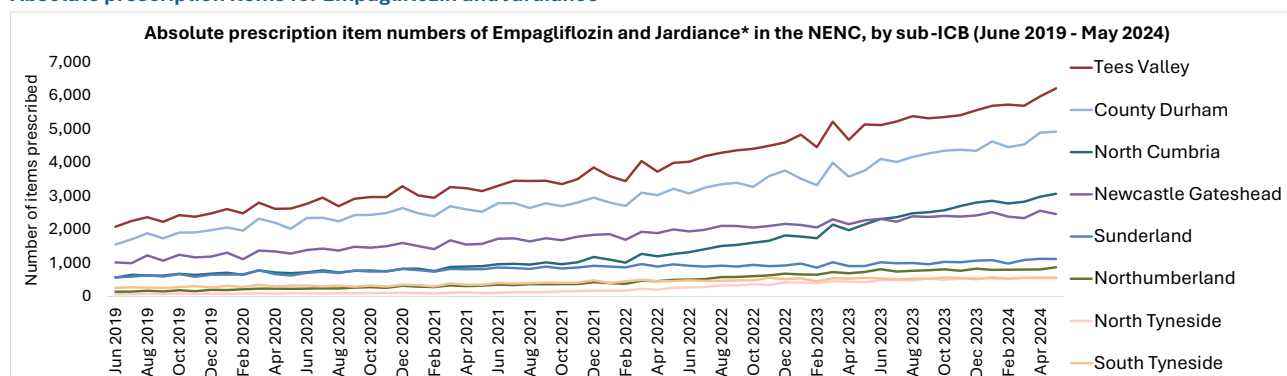
*Forxiga is the brand name for Dapagliflozin.

The indicator shows the absolute count of the number of prescription items for the generic product Dapagliflozin and the branded product Forxiga between June 2019 to May 2024. Items include the number of times a medicine has been prescribed and does not include information about the quantity of medicine prescribed. Counts relate to primary care prescribing only and data originates from reimbursement claims from dispensing contractors (e.g. pharmacies), and therefore does not include prescriptions which are issued but never dispensed. The data also describes the information on the prescription form, not what was actually dispensed. For example, items prescribed generically may be dispensed as brands.

What is the data telling us?

Prescription item numbers of Dapagliflozin or Forxiga were relatively steady across all sub-ICBs between June 2019 and March 2021. Since then, prescription item numbers have steadily increased in all sub-ICBs, with the greatest increase in Tees Valley sub-ICB over the time period. To note, prescription item numbers should be not directly compared across sub-ICBs due to the population differences.

Absolute prescription items for Empagliflozin and Jardiance



Data source: OpenPrescribing.net, Bennett Institute for Applied Data Science, University of Oxford, 2024

Definitions / Notes

Empagliflozin another SGLT2 inhibitor that is mainly used to treat type 2 diabetes but as with Dapagliflozin, can also be used to treat symptomatic chronic heart failure with reduced ejection fraction in adults, only if it is used as an add-on to optimised standard care [21]. Empagliflozin is also recommended for use in adults with CKD to help slow disease progression [32], only if it is used as an add-on to optimised standard care with ACE-ls or ARBs and who have an eGFR of:

- 20 mL/min/1.73 m² to less than 45 mL/min/1.73 m² or
- 45 mL/min/1.73 m² to 90 mL/min/1.73 m² and either:
- a urine albumin-to-creatinine ratio of 22.6 mg/mmol or more, or
- type 2 diabetes.

* Jardiance is the brand name of Empagliflozin.

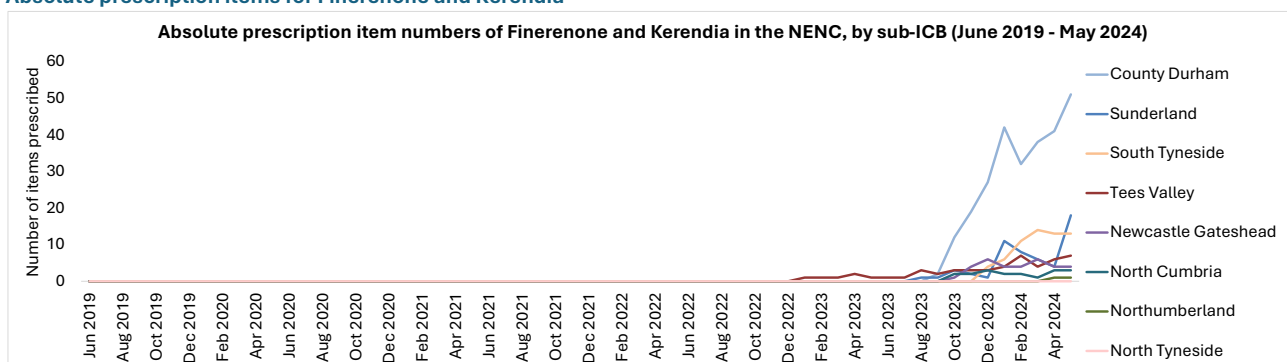
The indicator shows the absolute count of the number of prescription items for the generic product Empagliflozin and the branded product Jardiance between June 2019 to May 2024. Items include the number of times a medicine has been prescribed and does not include information about the quantity of medicine prescribed. Counts relate to primary care prescribing only and data originates from reimbursement claims from dispensing contractors (e.g. pharmacies), and therefore does not include prescriptions which are issued but never dispensed. The data also describes the information on the prescription form, not what was actually dispensed. For example, items prescribed generically may be dispensed as brands.

What is the data telling us?

Since June 2019, there has been a steady rise in the number of prescription items for Empagliflozin or Jardiance across all sub-ICBs, with Tees Valley consistently having the highest number of prescriptions of all sub-ICBs in the NENC. To note, prescription item numbers should be not directly compared across sub-ICBs due to the population differences.

Condition Management and Treatment CKD

Absolute prescription items for Finerenone and Kerendia



Data source: *OpenPrescribing.net, Bennett Institute for Applied Data Science, University of Oxford, 2024*

Definitions / Notes

Finerenone is a non-steroidal mineralocorticoid receptor antagonist that is recommended as an option for treating stage 3 and 4 CKD associated with type 2 diabetes in adults only if it is used as an add-on to optimised standard care of ACE-Is, ARBs, SGLT2 inhibitors or if the individual has an eGFR of 25 ml/min/1.73m² or more [33].

* Kerendia is the brand name of Finerenone.

The indicator shows the absolute count of the number of prescription items for the generic product Finerenone and the branded product Kerendia between June 2019 to May 2024. Items include the number of times a medicine has been prescribed and does not include information about the quantity of medicine prescribed. Counts relate to primary care prescribing only and data originates from reimbursement claims from dispensing contractors (e.g. pharmacies), and therefore does not include prescriptions which are issued but never dispensed. The data also describes the information on the prescription form, not what was actually dispensed. For example, items prescribed generically may be dispensed as brands.

What is the data telling us?

Finerenone or Kerendia prescribing numbers remain low across all sub-ICB locations up to May 2024. The trend chart shows that Tees Valley was the first sub-ICB in the NENC to begin prescribing Finerenone or Kerendia in late 2022 and has seen a modest rise in prescription items per month since. In August 2023, the prescription numbers for Finerenone or Kerendia sharply increased in up to approximately 40 in early 2024 in County Durham. To note, prescription item numbers should be not directly compared across sub-ICBs due to the population differences.

References, Data Sources and Methods

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1. <https://www.nice.org.uk/guidance/NG136/chapter/recommendations#diagnosing-hypertension>
2. <https://www.ncbi.nlm.nih.gov/books/NBK568778/>
3. www.nice.org.uk/guidance/NG203
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13. <https://www.nice.org.uk/guidance/ng238>
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15. <https://data.cvdprevent.nhs.uk/data-explorer?period=17&level=1&area=1&indicator=33&metadata=33#33>
16. <https://www.nice.org.uk/guidance/ta385/chapter/1-recommendations>
17. <https://bnf.nice.org.uk/drugs/ezetimibe/>
18. <https://www.ncbi.nlm.nih.gov/books/NBK532879/>
19. <https://openprescribing.net/faq/>
20. <https://www.nice.org.uk/guidance/ta733>
21. <https://healthinnovationnenc.org.uk/what-we-do/improving-population-health/cardiovascular-disease-prevention/lipid-management-pathway/inclisiran/>
22. <https://ntag.nhs.uk/guidelines/>
23. <https://www.drugs.com/bempedoic-acid-and-ezetimibe.html>
24. <https://www.nice.org.uk/guidance/ta694>
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26. <https://www.nice.org.uk/guidance/ta805>
27. <https://cks.nice.org.uk/topics/hypertension/management/management/#annual-review-of-care>
28. https://kdigo.org/wp-content/uploads/2017/02/KDIGO_2012_CKD_GL.pdf
29. <https://www.nice.org.uk/guidance/ta775/resources/dapagliflozin-for-treating-chronic-kidney-disease-pdf-82611498049477>
30. <https://ntag.nhs.uk/wp-content/uploads/2023/11/NENC-regional-SGLT2-top-tips-v1.2-NTAG-approved-March-2023-v2-UPDATE-June-2023.pdf?UNLID=501518905202433174756>
31. <https://swlimo.southwestlondon.icb.nhs.uk/wp-content/uploads/Dapagliflozin-for-the-treatment-of-CKD-information-sheet-v1.1.pdf>
32. <https://www.nice.org.uk/guidance/ta942>
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CVD Prevent

Data source

CVD Prevent indicators were downloaded from the data explorer tool on the CVD Prevent webpage: <https://data.cvdprevent.nhs.uk/data-explorer>

Link: <https://www.cvdprevent.nhs.uk/>

CVD Prevent Audit Methodologies

Numerator data was obtained from the CVD Prevent Audit (LINK) and denominator data was obtained from NHS Digital, specifically, patients registered at a GP practice. Detailed information about the CVD Prevent methodology can be found through the CVD Prevent Methodology webpage.

Link: <https://data.cvdprevent.nhs.uk/methodology>

Confidence intervals and RAG coding

Upper and lower confidence intervals for each value were calculated at 95% significance level using the Wilson Score method and were used to determine significant differences to England. For indicators that focused on condition management or monitoring, RAG rating was used to determine whether an area had performed 'better' or 'worse' than the England average. Amber colours indicate that there was no significant difference the England value.

For prevalence indicators, or where inappropriate to label values as 'worse' or 'better', the terms 'higher' or 'lower' were used with neutral colouring.

Link: <https://fingertips.phe.org.uk/profile/guidance/supporting-information/PH-methods>

Compared with England	Significantly Better	Similar	Significantly Worse
	Significantly Higher	Similar	Significantly Lower

Breakdown by deprivation quintile

Where data was presented at sub-ICB level, split by deprivation quintile, the slope index of inequality (SII) was calculated to measure how performance of the indicator changes across the social gradient, i.e., how much an indicator varies with deprivation. The measure requires a linear relationship between the indicator and deprivation, which was visually confirmed before the calculation was applied.

Link: <https://analytics.phe.gov.uk/apps/health-inequalities-dashboard/#SII>

Open Prescribing

Data source

Data relating to prescribing indicators were downloaded from Open Prescribing

Link: <https://openprescribing.net/>

Methodology

For each indicator, the absolute count of the number of prescription items for the generic product and the branded product were obtained. Items include the number of times a medicine has been prescribed and does not include information about how much of it has been prescribed [23].

Counts relate to primary care prescribing only and data originates from reimbursement claims from dispensing contractors (e.g. pharmacies), and therefore does not include prescriptions which are issued but never dispensed. The data also describes the information on the prescription form, not what was actually dispensed. For example, items prescribed generically may be dispensed as brands.

Link: <https://openprescribing.net/faq/>

HIST proportions

The list of relevant statins to include in the numerator and denominator were obtained from the national team within NHS England who supplied this data to the AHSNs during the previous CVD programme.

FH Genetic Testing

Data was supplied by Dr Ciaran McNulty from the Newcastle Genetics Laboratory. The estimated percentage of FH patients identified is based on the estimated FH prevalence of 1 in 270 people, along with population estimates. Data presented is experimental data and needs to be explored further.