NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

NICE indicator validity assessment

# Indicator NM244

The percentage of patients with a total cholesterol reading in the preceding 12 months greater than 7.5 mmol/litre who have been:

* diagnosed with secondary hyperlipidaemia or
* clinically assessed for familial hypercholesterolaemia or
* referred for assessment for familial hypercholesterolaemia or
* genetically diagnosed with familial hypercholesterolaemia.

# Indicator type

General practice indicator suitable for use outside the Quality and Outcomes Framework.

# Importance

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| **Considerations** | **Assessment** |
| The [NHS Long Term Plan](https://www.longtermplan.nhs.uk/areas-of-work/cancer/) identifies cardiovascular disease as a clinical priority, and the single biggest condition where lives can be saved by the NHS over the next 10 years by improving the treatment of high-risk conditions. The plan commits to increasing the diagnosis of familial hypercholesterolaemia (FH) from 7% to 25% by 2024/25. FH affects at least 150,000 people in England ([IIF guidance 2022/23](https://www.england.nhs.uk/publication/network-contract-directed-enhanced-service-investment-and-impact-fund-2022-23-updated-guidance/)).  This indicator is based on an indicator previously included in the CVD prevention domain of the [Investment and Impact Fund (IIF) 2022/23](https://www.england.nhs.uk/publication/network-contract-directed-enhanced-service-investment-and-impact-fund-2022-23-updated-guidance/). It promotes ensuring that appropriate action for new high cholesterol readings. | The indicator reflects a specific priority area identified by NHS England. |
| [Public Health England](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/731873/familial_hypercholesterolaemia_implementation_guide.pdf) (2018), report that most cases of FH remain undiagnosed, and only an estimated 8 to 15% of cases are known (based on prevalence estimates of 1:250 and 1:500).  [March 2023 Network contract directed enhanced service data](https://digital.nhs.uk/data-and-information/publications/statistical/mi-network-contract-des/2022-23) show that:   * 31% of people with cholesterol levels in the at-risk range for FH have a subsequent record of assessment, referral or diagnosis. * 10% of people with cholesterol levels in the at-risk range for FH have a relevant personalised care adjustment code.   [CVDPREVENT audit](https://www.nhsbenchmarking.nhs.uk/cvdprevent-outputs) data (December 2022) highlight:   * 0.15% of total registered patients have cholesterol levels indicating possible FH but no FH diagnosis or investigation. There was little difference between males and females and between deprivation quintiles. * The percentage with no diagnosis increased with age from 0.04% in those aged 18-39 years to 0.61% in those aged 80 and over. * Prevalence of GP recorded possible, probable and confirmed FH was 0.18% for all ages. * Prevalence increased with age, increased slightly from most to least deprived quintiles and was higher in females than males. | The indicator relates to an area where there is known variation in practice.  The indicator should help address under-diagnosis by improving the case-finding process. |
| Familial hypercholesterolaemia (FH) is a genetic disorder that causes a high cholesterol level. This increases the likelihood of coronary artery disease, heart attacks and sudden cardiac death. Early detection and genetic diagnosis will lead to provision of appropriate lipid-lowering treatment to lower these risks and improve outcomes. | The indicator will lead to a meaningful improvement in patient outcomes. |

# Evidence base

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| **Considerations** | **Assessment** |
| [Familial hypercholesterolaemia: identification and management](https://www.nice.org.uk/guidance/cg71/) (NICE clinical guideline 71) recommendations:  1.1.1 Suspect familial hypercholesterolaemia (FH) as a possible diagnosis in adults with:   * a total cholesterol level greater than 7.5 mmol/l or * a personal or family history of premature coronary heart disease (an event before 60 years in an index individual or first-degree relative). [2008, amended 2019]   1.1.5 Use the [Simon Broome criteria (see appendix F of the full guideline](https://www.nice.org.uk/guidance/cg71/evidence/full-guideline-appendix-f-pdf-241917811)) or [Dutch Lipid Clinic Network (DLCN) criteria](https://www.nice.org.uk/guidance/cg71/chapter/recommendations#dutch-lipid-clinic-network-dlcn-criteriascore) to make a clinical diagnosis of FH in primary care settings. This should be done by a healthcare professional competent in using the criteria.  1.1.6 Refer the person to an FH specialist service for DNA testing if they meet the Simon Broome criteria for possible or definite FH, or they have a DLCN score greater than 5.  1.1.8 Healthcare professionals should consider a clinical diagnosis of homozygous FH in adults with a low-density lipoprotein cholesterol (LDL‑C) concentration greater than 13 mmol/l and in children/young people with an LDL‑C concentration greater than 11 mmol/l. All people with a clinical diagnosis of homozygous FH should be offered referral to a specialist centre. | The indicator is derived from a high-quality evidence base.  The indicator aligns with the evidence base. |

# Specification

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| **Considerations** | **Assessment** |
| Numerator: The number in the denominator who have been:   * diagnosed with secondary hyperlipidaemia after the earliest total cholesterol greater than 7.5 mmol/litre at any time; or * clinically assessed for familial hypercholesterolaemia at any time; or * referred for assessment for familial hypercholesterolaemia at any time; or * genetically diagnosed with familial hypercholesterolaemia at any time.   Denominator: The number of patients with a total cholesterol reading in the preceding 12 months greater than 7.5 mmol/litre.  Personalised care adjustments or exception reporting should be considered to account for situations where the patient is receiving palliative care or declines assessment.  The construction searches for the earliest total cholesterol reading in the preceding 12 months that would indicate a risk of FH as per NICE guidance.  ([IIF Guidance 2022/23](https://www.england.nhs.uk/publication/network-contract-directed-enhanced-service-investment-and-impact-fund-2022-23-updated-guidance/) and [NHS Digital Business rules for network contract DES (NCD) - Cardiovascular Disease Prevention](https://digital.nhs.uk/data-and-information/data-collections-and-data-sets/data-collections/quality-and-outcomes-framework-qof/quality-and-outcome-framework-qof-business-rules/enhanced-services-es-vaccination-and-immunisation-vi-and-core-contract-components-2022-2023)) | The indicator has defined components necessary to construct the indicator, including numerator, denominator and exclusions. |
| There is no minimum number of patients required for general practice indicators intended for use outside the QOF. However, consideration should be given to whether the majority of results would require suppression because of small numbers.  Committee feedback indicated that there was likely to be less than 20 patients per practice with new cholesterol readings above the at-risk threshold each year. | The indicator does not outline a minimum number of patients needed to be confident in the assessment of variation. |

# Feasibility

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| **Considerations** | **Assessment** |
| A similar indicator was previously included in the IIF and the data published monthly by NHS digital as part of the [network contract directed enhanced service](https://digital.nhs.uk/data-and-information/publications/statistical/mi-network-contract-des/2022-23). | The indicator is repeatable. |
| [Business rules](https://digital.nhs.uk/data-and-information/data-collections-and-data-sets/data-collections/quality-and-outcomes-framework-qof/quality-and-outcome-framework-qof-business-rules/enhanced-services-es-vaccination-and-immunisation-vi-and-core-contract-components-2022-2023) could be adapted from the Network Contract DES 2022/23. | The indicator is measuring what it is designed to measure.  The indicator uses existing data fields. |

# Acceptability

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| **Considerations** | **Assessment** |
| No concerns were raised during testing and consultation about the attribution of responsibility. It was felt that ensuring appropriate action is taken was within the control of general practice.  This indicator accompanies NM244 as a direct result of stakeholder feedback and committee discussion on the benefits and practicality of focusing only on readings in the preceding 12 months. | The indicator assesses performance that is attributable to or within the control of the audience. |
| The results can be used to understand if appropriate action is taking place for people with cholesterol readings above the at-risk threshold and performance compared to previous years. Feedback at consultation and testing for NM244 supported the opportunity to increase FH diagnosis. | The results of the indicator can be used to improve practice |

# Risk

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| **Considerations** | **Assessment** |
| None identified. | The indicator has an acceptable risk of unintended consequences. |