Pathways for optimising lipid management in secondary prevention of cardiovascular disease: purpose and development of the pathways

The AHSN Network

Purpose of the pathways

Cardiovascular disease (CVD) is a leading cause of premature death and disability due to the consequences of stroke, myocardial infarction and heart failure. The NHS Long Term Plan outlined an ambition to support the prevention of 150,000 heart attacks, strokes and dementia cases, making CVD the largest area where the NHS can save patient lives over the next ten years.

Lipid management in England must improve to drive better CVD outcomes – every 1 mmol/L reduction in LDL-C is tied to a 22% reduction in major vascular events after 1 year. CVD is also the largest driver of inequalities in life-expectancy in England. The excess non-covid mortality currently seen is due to cardiovascular disease.

To address the clinical priority of improved lipid management, two pathways – one for acute cardiovascular disease in secondary care and one for primary care clinicians - have been developed. These pathways meet the need to provide clear and simple guidance for clinicians on how optimal lipid management may be achieved.

- **What these pathways are:** these pathways provide an additional resource which can be used to support patient management. They have been developed to support healthcare professionals implement NICE and other relevant evidence in lipid management in secondary prevention. They should be considered alongside other relevant guidance e.g. the NICE Statin Intolerance Pathway https://www.nice.org.uk/guidance/cg181/resources/endorsed-resource-statin-intolerance-pathway-8836602301
- **What these pathways are not:** these are not comprehensive clinical guidelines setting out all clinical scenarios, nor do they seek to set out the clinical evidence base for interventions which is covered in the relevant NICE Technology Appraisals
- These pathways define a High Intensity Statin as Atorvastatin 80 mg once daily (40 mg once daily if dose reduction considered indicated) or rosuvastatin 20 mg once daily if atorvastatin is contraindicated

Development of the pathways

These pathways were developed in line with NICE Guidance and adapted by a Clinical Advisory Group, chaired by Professor Gary Ford (Chief Executive of Oxford AHSN and Consultant Stroke Physician), and coordinated by the Accelerated Access Collaborative (AAC). Membership included representation from the NHS England National Clinical Directors for Stroke, Heart Disease, and Primary Care, and the National Speciality Adviser for CVD Prevention, alongside primary care and secondary care clinical specialists in cardiovascular disease.

The pathways are based on the AAC's NICE-endorsed lipid management pathway, as well as a primary care pathway developed by UCLPartners. The primary care pathway is supported by the broader UCLPartners Proactive Care Frameworks including comprehensive search and stratification tools and resources to support clinical care, self-management and behaviour change.

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Pathways for optimising lipid management in secondary prevention: key themes at feedback and future iterations of the pathways

The AHSN Network

Key themes at feedback

A summary of feedback is presented below.

Feedback from stakeholders broadly fell into four categories, set out below. All feedback was reviewed and taken into account when developing the final iteration of the pathways for publication. In summary, the feedback covered:

- **Benefit of the pathways:** overall the two pathway documents were well received as additional tools for clinicians, notwithstanding amendments to improve readability, consistency, and a number of clinical amendments.
- **Origins of the pathways**: Stakeholders requested further information on how the pathways had been developed, including use of relevant data, the membership of the group involved and any conflicts of interest. Membership is set out in the previous section, 'Development of the pathways'
- **Interaction of the pathway with other resources:** respondents queried how the pathway would align with other national clinical guidelines such as NICE, and use of evidence in the pathway. As above, the pathway will be updated to align with NICE guidance, and the relevant NICE Technology Appraisals are referenced where, for example, information on trial data can be found
- **Clinical feedback on the pathway**: the majority of stakeholder feedback focussed on clinical content of the pathways, including highlighting the role of lifestyle factors in lipid management; the importance of shared-decision making; noting the applicability of the pathway to specific patient cohorts including those with advanced frailty; noting that the pathway does not address all clinical scenarios, and; highlighting the importance of consistency in use of clinical thresholds. A comprehensive review of stakeholder responses took onboard all feedback for consideration. The remit of the pathways is set out in the previous section, 'Purpose of the pathways'

Future iterations of this pathway

- These pathways will be reviewed and updated by the AHSN Network to ensure continued alignment with the relevant NICE and other guidance
- Use of these pathways, including adaptation to local need, is at the discretion of clinicians. Adoption of these pathways should follow routine local clinical governance processes
- **Lipid Optimisation Pathway following an Acute Cardiovascular Event** © Oxford Academic Health Science Network, prepared to aid clinical practice and support education activities – it can be used and reproduced for this purpose
- **Lipid Optimisation Pathway for Secondary Prevention in Primary Care** © UCLPartners 2022, developed as part of the UCLP Proactive Care Frameworks to aid clinical practice and support education activities - it can be used and reproduced for this purpose

Lipid Optimisation Pathway following an Acute Cardiovascular Event
Acute Ischaemic Stroke / Transient Ischaemic Attack (TIA) or Acute Coronary Syndrome (ACS)

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- **Obtain Lipid Profile on Admission preferably LDL-C**
- **Review pre-event lipid lowering therapy including statin therapy tolerance and adherence**
- **Provide lifestyle advice**
- **Commence / optimise all patients on high intensity statin unless statin intolerant**
- **Use shared-decision making and incorporate patient preference in treatment and care decisions**
- **Set LDL-C target. Aim is to achieve for most patients LDL-C < 1.8mmol/L[1]; or non HDL-C < 2.5 mmol/l if no LDL-C result available**

Not on statin or other LLT	On statin or other LLT		Pre-event statin intolerance		
	LDL-C ≥ 1.8mmol/L	LDL-C < 1.8mmol/L	Not on LLT	On LLT LDL-C ≥ 1.8mmol/L	On LLT LDL-C < 1.8mmol/L
Initiate LLT HI statin +/- Ezetimibe	***Intensify LLT*** HI statin + Ezetimibe or HI statin + Inclisiran[2] or HI statin + PCSK9i[3]	***Continue LLT*** HI statin +/- Ezetimibe	***Initiate / intensify LLT*** Ezetimibe +/- Bempedoic acid or Inclisiran[2] or PCSK9i[3]		***Continue LLT***

- **At 3-8 weeks following acute event undertake secondary care review**
- **Repeat lipid profile, determine if at LDL-C target, assess adherence to therapy and any adverse events**

At target	Not at target
Continue LLT	***Intensify / change LLT*** according to NICE eligibility

LLT - Lipid lowering therapy
HI – High intensity

- **Provide clear management plan of LLT to Primary Care Team and Patient including non-HDL-C target.**
- **Agree follow up plan in primary or secondary care including arrangements to administer second dose Inclisiran where relevant**

[1] Following ACS a lower LDL-C target < 1.4 mmol/l may be appropriate. [2] Inclisiran is a NICE approved option where LDL-C > 2.6 mmol/l despite maximum tolerated statin therapy.
[3] PCSK9is are a NICE approved option where LDL-C > 3.5 mmol/l very high risk (recurrent CV events or multiple vascular beds) or > 4.0 mmol/l high risk patients (ACS, Ischaemic stroke)

BIASP British & Irish Association of Stroke Physicians Advancing stroke medicine
Primary Care Cardiovascular Society Driving primary care to deliver the best in cardiovascular health
HEART UK THE CHOLESTEROL CHARITY
British Cardiovascular Society

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