

Michigan Quality Improvement Consortium Guideline

Screening and Management of Hyperlipidemia

The following guideline recommends risk assessment, stratification, education, counseling and pharmacological interventions for the management of low-density lipoprotein cholesterol (LDL-C)

Eligible Population	Key Components	Recommendation and Level of Evidence								
Age \geq 18 years	Risk Assessment	<ul style="list-style-type: none"> Screening: Initial fasting lipid profile (i.e., total, LDL-C, HDL-C, triglycerides); If normal repeat at least every five years [D] Treatment is based on LDL-C, major risk factors and presence of CHD or equivalent. 								
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LDL $>$ 100	Risk Stratification	<ul style="list-style-type: none"> Calculate short-term risk for patients with 2+ risk factors using Framingham projection of 10-year absolute risk [D]: <table border="1"> <thead> <tr> <th>Categorical Risk</th> <th>Goal for LDL-C</th> </tr> </thead> <tbody> <tr> <td> <ul style="list-style-type: none"> CHD or CHD risk equivalents 10-year risk: $>$ 20% </td> <td>$<$ 100 mg/dL</td> </tr> <tr> <td> <ul style="list-style-type: none"> 2+ risk factors 10-year risk: \leq 20% </td> <td>$<$ 130 mg/dL</td> </tr> <tr> <td> <ul style="list-style-type: none"> 0 - 1 risk factor </td> <td>$<$ 160 mg/dL</td> </tr> </tbody> </table>	Categorical Risk	Goal for LDL-C	<ul style="list-style-type: none"> CHD or CHD risk equivalents 10-year risk: $>$ 20% 	$<$ 100 mg/dL	<ul style="list-style-type: none"> 2+ risk factors 10-year risk: \leq 20% 	$<$ 130 mg/dL	<ul style="list-style-type: none"> 0 - 1 risk factor 	$<$ 160 mg/dL
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Education and risk factor modification	Educate patient/family regarding Therapeutic Lifestyle Changes (TLC): <ul style="list-style-type: none"> Reduce saturated fats and cholesterol [A], increase plant stanols/sterol (e.g. cholesterol-lowering margarines), increase viscous soluble fiber (e.g. oats, barley, lentils, beans). Decrease weight and increase exercise to moderate level of activity for 30 minutes, most days of the week [A]. 									
Pharmacologic interventions	<ul style="list-style-type: none"> TLC and/or drug therapy may be initiated based on the LDL-C level and/or presence of CHD risk or CHD risk factors. Initiate statin therapy for patients with atherosclerotic CHD or when the LDL-C is not at goal by 6 - 8 weeks after TLC have begun in earnest. Statins are the most commonly used lipid-lowering agents. Liver function test monitoring is recommended for 12 weeks following treatment initiation, or dosage increases, of any statin. Evaluate and adjust drug therapy at 6 - 8 week intervals. For patients who do not reach LDL-C goal, consider referral to lipid specialist. 									

Levels of Evidence for the most significant recommendations: A = randomized controlled trials; B = controlled trials, no randomization; C = observational studies; D = opinion of expert panel

This guideline represents core management steps. It is based on several sources, including: Lipid Management in Adults, Institute for Clinical Systems Improvement, 2006 (www.icsi.org). Individual patient considerations and advances in medical science may supersede or modify these recommendations.