

Health Plan of Michigan Clinical Practice Guideline 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 ≥ 18 years | Risk Assessment | <ul style="list-style-type: none"> Screening: Initial fasting lipid profile (i.e., total, LDL, HDL, triglycerides); If normal repeat at least every five years [D] Treatment is based on LDL, major risk factors and presence of CHD or equivalent. <table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> Major Risk Factors: <ul style="list-style-type: none"> Cigarette smoking *Hypertension (BP ≥ 130/90) On antihypertensives, regardless of current BP levels HDL: < 40 (HDL ≥ 60 = negative risk factor) Family history (first degree) of premature CHD (men < 55 years; women < 65 years) Age (men ≥ 45 years; women ≥ 55 years) </td> <td style="width: 50%; vertical-align: top;"> CHD Risk Equivalents: <ul style="list-style-type: none"> Other clinical forms of atherosclerotic disease (e.g., peripheral arterial disease, abnormal aortic aneurysm, and/or symptomatic carotid artery disease) Diabetes Multiple risk factors confer a 10-year risk for CHD > 20% CHD and CHD risk equivalents give a >20% risk of CHD event within 10 years </td> </tr> </table> | Major Risk Factors: <ul style="list-style-type: none"> Cigarette smoking *Hypertension (BP ≥ 130/90) On antihypertensives, regardless of current BP levels HDL: < 40 (HDL ≥ 60 = negative risk factor) Family history (first degree) of premature CHD (men < 55 years; women < 65 years) Age (men ≥ 45 years; women ≥ 55 years) | CHD Risk Equivalents: <ul style="list-style-type: none"> Other clinical forms of atherosclerotic disease (e.g., peripheral arterial disease, abnormal aortic aneurysm, and/or symptomatic carotid artery disease) Diabetes Multiple risk factors confer a 10-year risk for CHD > 20% CHD and CHD risk equivalents give a >20% risk of CHD event within 10 years | | | | | |
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| | 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="0" style="width: 100%;"> <tr> <td style="width: 50%;"><u>Categorical Risk</u></td> <td style="width: 50%;"><u>Goal for LDL</u></td> </tr> <tr> <td> <ul style="list-style-type: none"> CHD or CHD risk equivalents 10-year risk: > 20% </td> <td style="text-align: center;">< 100 mg/dl</td> </tr> <tr> <td> <ul style="list-style-type: none"> 2+ risk factors 10-year risk: ≤ 20% </td> <td style="text-align: center;">< 130 mg/dl</td> </tr> <tr> <td> <ul style="list-style-type: none"> 0 – 1 risk factor </td> <td></td> </tr> </table> | <u>Categorical Risk</u> | <u>Goal for LDL</u> | <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: ≤ 20% | < 130 mg/dl | <ul style="list-style-type: none"> 0 – 1 risk factor |
| <u>Categorical Risk</u> | <u>Goal for LDL</u> | | | | | | | | |
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| <ul style="list-style-type: none"> 0 – 1 risk factor | | | | | | | | | |
| 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 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 Statin 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 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.

Approved by MQIC Medical Directors August 2007

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*The Hypertension Risk Factor of 130/90 opposed to 140/90 was a recommendation by the HPM PAC Committee 11/30/07.