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Organizations**

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CENTERS FOR MEDICARE & MEDICAID SERVICES

SUPERIOR HEALTH
Quality Alliance

Exploring Best Practices Related to the ABCS of Heart Health: A Structured Collaborative

Session 3: Aspirin Use and Cholesterol Management

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Introductions

- Name
- Title
- Clinic/Organization, location
- What are one or two things from our first and second session on self-measured blood pressure (SMBP) that you were able to or tried to put into practice this last month?

Ideas Discussed in the Last Two Sessions

- What a self-measured blood pressure (SMBP) program is.
- The benefits of a SMBP program.
- Identifying a SMBP program champion.
- SMBP training techniques for patients.
- Cleaning and disinfecting of loaner blood pressure cuffs.
- Using SMBP CPT codes to achieve a positive return on investment.

Collaborative Schedule

1 – 2 p.m. ET / Noon – 1 p.m. CT

- May 7– Tobacco Cessation
- June 4 – Cardiac Rehab

Objectives

Aspirin use:

- Understand the role of aspirin in cardiovascular health.
- Identify appropriate candidates for aspirin therapy.
- Educating patients and use of shared decision-making.

Cholesterol management:

- Understand the role of cholesterol and cholesterol management in cardiovascular health.
- Identify the risk factors for high cholesterol.
- Educating patients on lifestyle modifications for cholesterol management.

Aspirin Use

Mechanism of Action

- Aspirin reduces platelet aggregation and thrombus formation.
- Primary prevention: Since aspirin reduces clotting action, it was thought that daily aspirin therapy could possibly prevent myocardial infarction (MI) or stroke.
- Secondary prevention: Because aspirin inhibits platelet aggregation, thereby reducing the risk for recurrent arterial thrombosis, aspirin may be a therapy used in secondary prevention of cardiovascular disease (CVD).

Evolution of Aspirin Use in Primary Prevention of CVD

- Aspirin use as part of primary prevention was motivated by initial antithrombotic successes in trials of secondary prevention of CVD.
- First appearance as a major primary prevention guideline was based on five major trials conducted between 1988 and 2001.
- These initial trials reported that aspirin used in primary prevention reduced nonfatal MI with a trend to lower mortality, especially in persons with increased CVD risk.

Evolution of Aspirin Use in Primary Prevention of CVD – (continued)

2018: Three separate major trials as part of primary prevention:

- Aspirin to Reduce Risk of Initial Vascular Events (ARRIVE).
- ASCEND (A Study of Cardiovascular Events in Diabetes).
- Aspirin in Reducing Events in the Elderly (ASPREE).
- Conclusions: No significant difference in first occurrence of MI or stroke or in death from CVD between the study and control groups.

2020: Published TIPS-3 (The International Polycap Study 3)

- Conclusion: When used in primary prevention, aspirin use showed no difference regarding death from cardiovascular causes, MI, or stroke

Evolution of Aspirin Use in Secondary Prevention of CVD

- Antithrombotic Trialists' Collaboration
 - International guidelines recommend lifelong aspirin as secondary prevention for most adults at risk for recurrent CVD.
- The advent of newer and more potent antiplatelet drugs, such as the P2Y inhibitors (e.g. Plavix), have expanded antithrombotic options for secondary prevention beyond aspirin.

Aspirin – Primary Prevention Recommendations

- Daily low-dose aspirin therapy (75-100 mg orally daily) may be recommended for the primary prevention of MI or stroke for:
 - Select adults, 40 to 70 years of age, who are at higher risk for atherosclerotic cardiovascular disease (ASCVD) but not at increased bleeding risk.
 - Select adults younger than 60 and who have diabetes and at least one other heart disease risk factor, such as smoking or high blood pressure.
- U.S. Preventive Service Task Force (USPSTF) recommends against initiating the use of low-dose aspirin in most cases for patients **over 60** years of age for primary prevention of ASCVD.

Aspirin – Secondary Prevention Recommendations

- Daily low-dose aspirin therapy may be recommended for the secondary prevention of MI or stroke for patients:
 - With ASCVD
 - With existing heart problems, including a history of:
 - MI
 - Stroke
 - Angioplasty
 - Percutaneous coronary intervention (PCI)
 - Coronary artery bypass surgery (CABG)
- Decisions should be based on clinician judgment and long-term antiplatelet strategy.

Identifying Appropriate Candidates for Aspirin Therapy

- Patient risk assessment
 - History of cardiovascular events
 - Risk factors
 - Falls
 - Alcohol use
 - Drug interactions
 - Family and social history
- Balancing benefits and risks
 - Bleeding risks
 - Allergic reactions

Patient Education and Shared Decision-Making

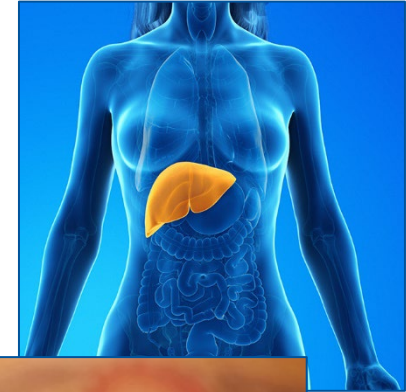
- Encourage active patient and caregiver involvement.
- Communicate the benefits and risks to patients.
- Address patient concerns and questions.

Resource: Motivational Interviewing: [Back to Baseline and Beyond: Partnering with Patients Using Motivational Interviewing \(youtube.com\)](#)

Cholesterol Management

What is Cholesterol?

We may associate cholesterol with fatty foods, but most of the waxy substance is made by our own bodies. The liver produces 75% of the cholesterol that circulates in our blood. The other 25% comes from food.



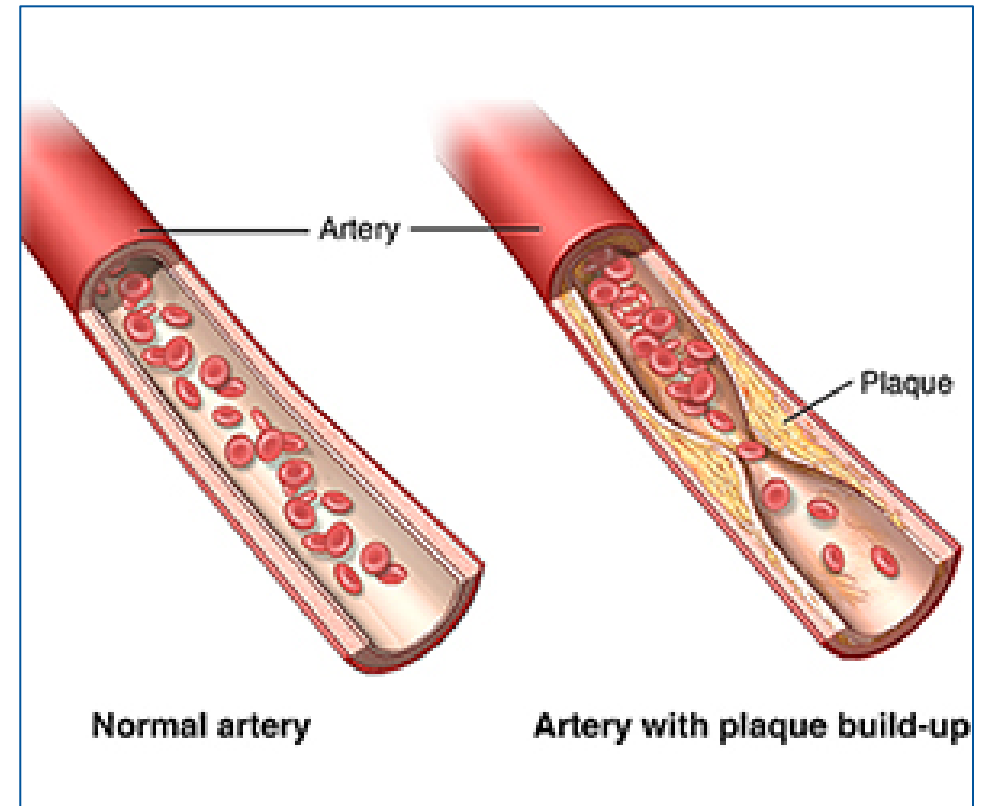
What is Cholesterol – continued?

Cholesterol is a type of lipid (fat) that is essential. It helps with:

- Cell membrane structure
- Hormone production
- Bile acid synthesis
- Vitamin D synthesis

LDL, HDL and Lipoprotein: The Good and the Bad

LDL (Low-Density Lipoprotein), HDL (High-Density Lipoprotein), and triglycerides are different types of lipids (fats) present in the bloodstream. They play distinct roles in the body and have varying effects on cardiovascular health.



Low-Density Lipoprotein (LDL)

- “Bad” or lethal cholesterol.
- Transportation for cholesterol.
- Plaque buildup in the arteries (atherosclerosis).
- Optimal LDL cholesterol levels less than 100 mg/dL.

High-Density Lipoprotein (HDL)

- “Good” or healthy cholesterol.
- Transport excess cholesterol back to the liver for disposal.
- High levels of HDL cholesterol = reduced risk of heart disease.
- Optimal HDL cholesterol levels are:
 - 40 mg/dL or higher for men.
 - 50 mg/dL or higher for women.

<https://my.clevelandclinic.org/health/articles/11920-cholesterol-numbers-what-do-they-mean>

Triglycerides

Triglycerides are a type of fat stored in fat cells.

- Come from the fats we eat.
- Also produced by the liver.

Elevated triglyceride levels can be caused by factors such as:

- Obesity, physical inactivity, excessive alcohol consumption, and a diet high in carbohydrates and sugars.

High triglyceride levels = an increased risk of heart disease.

- When combined with low HDL cholesterol and high LDL the risk increases.

Optimal triglyceride levels are less than 150 mg/dL.

Total Cholesterol

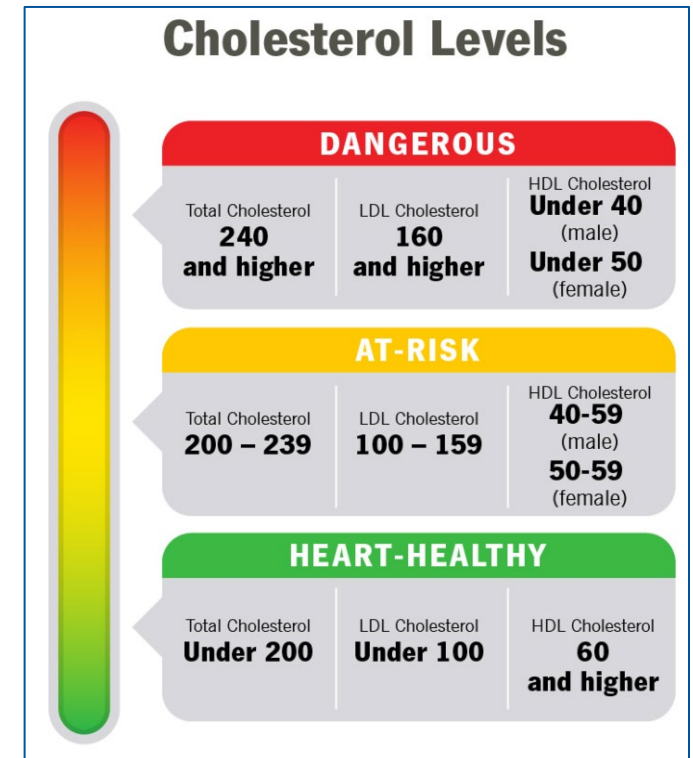
Total cholesterol refers to the overall amount of cholesterol present in a person's blood. It includes several types of cholesterol:

- LDL
- HDL
- Triglycerides

LDL, HDL, Triglycerides and Total Cholesterol

- HDL – Good or healthy
- LDL – Bad or lethal
- Triglycerides when elevated – harmful
- Total cholesterol

All are necessary and maintaining a balance among these different types of lipids is crucial for cardiovascular health and overall well-being.



Current Guidelines for Cholesterol Testing

1. General cholesterol testing recommendations
2. Lipid panel components
3. Target cholesterol levels
4. Follow-up and monitoring
5. Special populations

Risk Factors for Elevated Cholesterol Outside Our Control

- Genetics and family history
- Age and gender
- Ethnicity and race
- Hormonal changes
- Underlying medical conditions
- Genetic lipid disorders
- Genetic variations in lipid pathways
- SDOH – Social Determinants of Health



https://www.cdc.gov/cholesterol/risk_factors.htm

Risk Factors for Elevated Cholesterol Within Our Control

- Dietary choices
- Physical activity
- Maintaining a healthy weight
- Tobacco cessation
- Limiting alcohol intake
- Stress management



Recommendations for Change: Lifestyle Modifications for Cholesterol Management

- Focus on a heart-healthy diet/nutrition.
 - Role of weight management.
- Regular physical activity and recreation (150 mins per week).
- Tobacco cessation.
- Alcohol in moderation.
- Stress management.
- Medication adherence and regular check-ups.

Medications for High Cholesterol

- **Statins:** Lower LDL cholesterol by slowing liver production and increasing removal of cholesterol from blood.
- **Bile acid sequestrants:** Remove cholesterol from blood by binding with bile acids.
- **Niacin (Nicotinic Acid):** Improves all lipoprotein levels, raising HDL and lowering total cholesterol, LDL, and triglycerides.
- **Fibrates:** Lower triglycerides by reducing production in the liver.
- **Injectable Medicines (PCSK9 Inhibitors):** Lower LDL cholesterol by increasing LDL receptor removal.

Current Guidelines for Medication Usage

- Patients 40 to 75 years who have one or more cardiovascular risk factors (i.e., dyslipidemia, diabetes, hypertension, or smoking) and an estimated 10-year CVD risk of 10% or greater:
 - **Recommendation:** Initiate a statin.
- Patients aged 40 to 75 years who have one or more cardiovascular risk factors (i.e., dyslipidemia, diabetes, hypertension, or smoking) and an estimated 10-year CVD risk of 7.5% to less than 10%:
 - **Recommendation:** Selectively offer a statin.
- Patients 76 years or older:
 - **Recommendation:** The evidence is insufficient to recommend for or against starting a statin.

Based on available evidence the use of moderate-intensity statin therapy seems reasonable for the primary prevention of CVD in most patients.

Patient Education and Shared Decision-Making in Cholesterol Management

Empowering patients for informed health choices:

- Importance of patient education.
- Benefits of shared decision-making.
- Tools and resources for patient engagement.



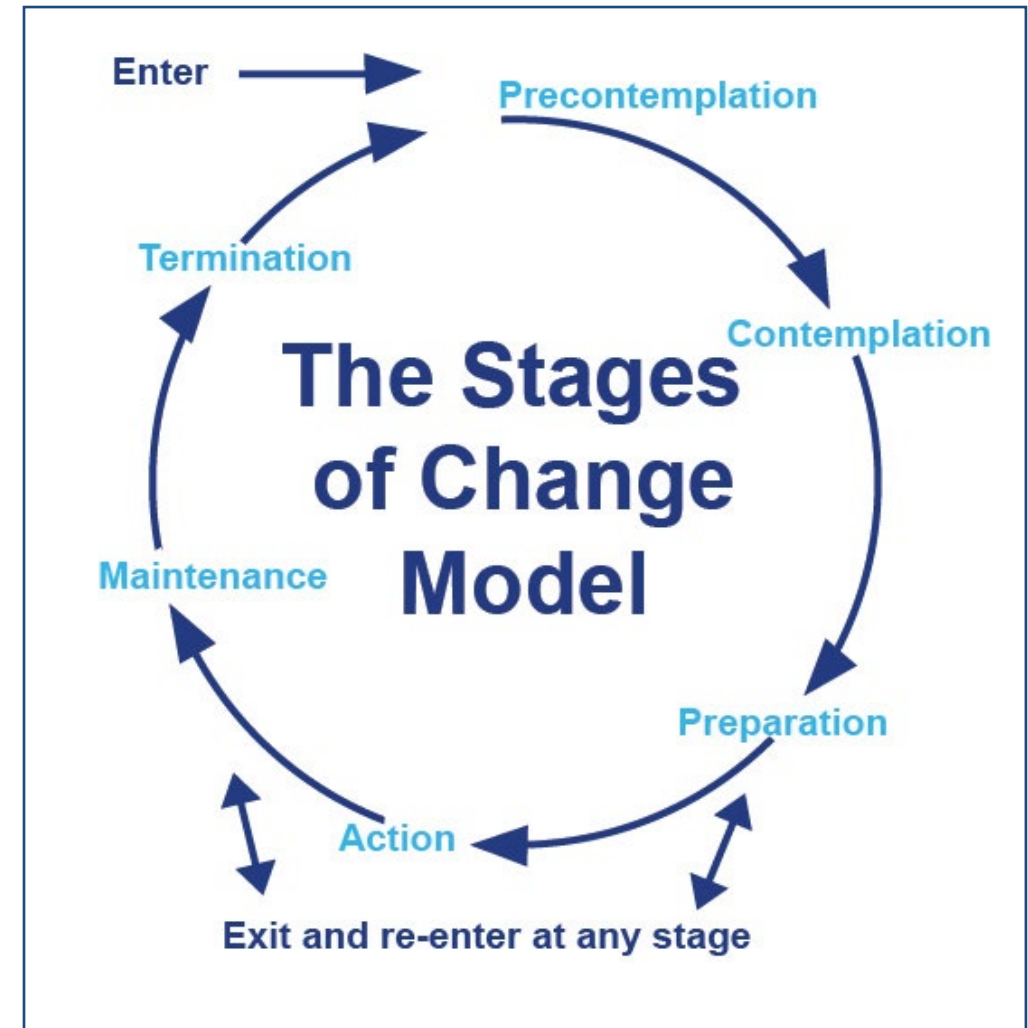
Readiness to Change Model

- Readiness to Change Model also known as the Transtheoretical Model (TTM).
- Developing a reliable framework for:
 - Self-change, or professionally-assisted-change, is beneficial for those seeking change and for those in the health care system who are assisting with change.
- When using this model of change, “changers” are not coerced.
 - Patients are to be supported and not coerced.
 - Meet patient at their current stage.
 - Motivational Interviewing.

Readiness to Change Model or the Transtheoretical Model (TTM)

Change process involves six stages:

1. Pre-contemplation
2. Contemplation
3. Preparation
4. Action
5. Maintenance
6. Termination



Summary/Key takeaways: Empowering Patients for Better Health

- Aspirin use
- Cholesterol management
- Patient education
- Share-decision making
- Readiness to change model

Questions?

Polling Questions

Resources: Aspirin

- [Aspirin in the Modern Era of Cardiovascular Disease Prevention - PMC \(nih.gov\)](#)
- [The Role of Aspirin in the Prevention of Cardiovascular Disease - PMC \(nih.gov\)](#)
- [New USPSTF Recommendation on Aspirin in CVD: No For Primary Prevention, Yes For Secondary Prevention - American College of Cardiology \(acc.org\) Aspirin and Heart Disease | American Heart Association](#)
- [Daily aspirin therapy: Understand the benefits and risks - Mayo Clinic](#)
- [New USPSTF Recommendation on Aspirin in CVD: No For Primary Prevention, Yes For Secondary Prevention - American College of Cardiology \(acc.org\)](#)
- [Daily aspirin therapy: Understand the benefits and risks - Mayo Clinic](#)
- [Back to Baseline and Beyond: Partnering with Patients Using Motivational Interviewing \(youtube.com\)](#)

Resources: Cholesterol

- [American College of Cardiology \(ACC\)](#)
- [American Heart Association \(AHA\)](#)
- [National Cholesterol Education program](#)
- [Journals of American College of Cardiology](#)
- [Million Hearts](#)
- Cholesterol Clinical Practice Guidelines 2018
AHA/ACC/AACVPR/AAPA/ABC/ACPM/ADA/AGS/ APhA/ASPC/NLA/PCNA Guideline
on the Management of Blood Cholesterol: Executive Summary
<https://www.ahajournals.org/doi/pdf/10.1161/CIR.0000000000000624>
- <https://www.uncoverlpa.com/AboutLpa>

Resources: Cholesterol – *continued*

- Video: Medline: <https://medlineplus.gov/medlineplus-videos/cholesterol-good-and-bad/>
- <https://my.clevelandclinic.org/health/articles/11920-cholesterol-numbers-what-do-they-mean>
- [Patient education: High cholesterol and lipid treatment options \(Beyond the Basics\) – UpToDate](#)
- [Stages of Change Model - Rural Health Promotion and Disease Prevention Toolkit \(ruralhealthinfo.org\)](#)
- [Recommendation: Statin Use for the Primary Prevention of Cardiovascular Disease in Adults: Preventive Medication | United States Preventive Services Taskforce \(uspreventiveservicestaskforce.org\)](#)
- https://www.cdc.gov/cholesterol/risk_factors.htm

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Continue the Conversation in Superior Health Connect



Connect is a shared learning environment for Superior Health participants to come together to foster and promote an all-teach-all-learn climate that provides the framework to improve and sustain mutual health care quality improvement initiatives locally, regionally, and nationally.

<https://superiorqio.mn.co/spaces/9165488/feed>

Other Superior Health Services

On-site Free Mobile Vaccination Clinic and Health Fairs

- COVID-19 vaccination clinic with health education topics including:
 - Self-measured blood pressure
 - Chronic kidney disease
 - Safe opioid use/substance use disorder and stigma
 - Dietary resources (i.e., CKD, DASH diet/diabetes)
 - Cancer screening
 - Mobility resources/falls
 - Tobacco cessation
 - And more!

For more information contact immunizations@superiorhealthqa.org and get your Health Fair Request started today!



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