Session packet: hypertension, hyperlipidemia and obesity

This packet contains:

* A brief guide for the session leader on how to conduct the session
* A hypertension, hyperlipidemia and obesity handout for the session attendees that can also be used by the presenter during the session to guide the discussion
* Flashcards on hypertension, hyperlipidemia and obesity to use as a pre-session learning tool
* A sign-in sheet for the session

*All materials in this packet can be adapted to fit your professional development program goals, your practice’s procedures and any performance metrics or performance measurement intervals you have in place as part of a value-based payment model.\**

*\*Please note that practice guidelines frequently change. This packet is only an example and may not include the latest recommendations. Update these materials to include the latest treatment guidance and statistics before training your staff.*

**Session leader guide**

*Share the pre-session learning flashcards with medical assistant (MA) attendees at least several days before the session so they can come prepared.*

Tips for making this a successful session:

* Begin as close to the start time as possible, even if others are still joining the group.
* Have printouts of the handout available for attendees to follow along with the presentation and to take with them after the session to refresh their knowledge.
* Consider updating the handout to include the latest statistics for your state. You can find information on these websites:
  + Hypertension prevalence: <http://www.cdc.gov/dhdsp/data_statistics/fact_sheets/fs_bloodpressure.htm>.
  + Hyperlipidemia prevalence: <http://www.cdc.gov/dhdsp/data_statistics/fact_sheets/fs_cholesterol.htm>.
  + Obesity prevalence: <http://www.cdc.gov/obesity/data/prevalence-maps.html>.
* If your practice uses a registry, consider discussing how the registry tracks patients with hypertension, hyperlipidemia and/or obesity to give the MAs a sense of the population they will actually see in the clinic. Share the number of patients who have these conditions in your practice and pertinent details, such as number of patients with each condition, patient age ranges, etc. You may want include a de-identified patient profile from the registry to highlight exams that are performed for these patients, recent lab results and what they mean for the patient’s overall health and the scheduled follow-up care.
* If you have handouts or brochures that you give to patients to educate them about hypertension, hyperlipidemia and/or obesity, it may be useful to bring them to the session to discuss with the group. This will also make the attendees aware of all the materials at their disposal to improve patient care.
* Consider taking advantage of the STEPS Forward™ module “Improving blood pressure control” and the corresponding training materials to help your team learn the Measure, Act, Partner (M.A.P.) approach to managing high blood pressure.

*Use the following handout as a discussion guide during the session.*

**Hypertension, hyperlipidemia and obesity handout**

**Definitions**

* *Hypertension (HTN*) is the clinical term for high blood pressure.
  + Normal blood pressure values range from 90/60 mmHg to 120/80 mmHg.
* People with HTN have blood pressure ≥140/90 mmHg.
* Prehypertension is the precursor to HTN. Patients with prehypertension have elevated blood pressure but are not yet at the level that would be considered HTN.
* There are no signs or symptoms of HTN, so many patients are unaware of their condition.
* Hypertension is a chronic condition. There is no cure and treatment focuses on management through weight reduction, exercise and medications.
* *Hyperlipidemia* is the clinical term for high cholesterol. It is also sometimes called hypercholesterolemia.
  + Cholesterol is a natural substance found in our blood and nerve cells.
  + Foods also contain cholesterol, specifically animal fats. Common sources of cholesterol include eggs, meat, cheese and other dairy products.
  + When too much cholesterol is circulating in the blood stream, it can build up inside the artery walls, causing them to narrow and restrict the blood flow to vital organs.
  + Normal values are total cholesterol <200 mg/dL, LDL (“bad”) cholesterol <100 mg/dL, HDL (“good”) cholesterol >40 mg/dL for men and >50 mg/dL for women and triglycerides <150 mg/dL.
  + Total cholesterol scores are calculated using this equation: HDL cholesterol + LDL cholesterol + 20% of the triglyceride level.
  + High cholesterol has no symptoms.
  + Treatment involves the use of various medications to lower LDL cholesterol and triglycerides and increase HDL cholesterol.
* *Obesity* is determined by a person’s body mass index (BMI) and waist circumference.
  + BMI is an estimate of body fat based on a person’s height and weight.
  + The National Heart, Lung and Blood Institute has an [online BMI calculator](http://www.nhlbi.nih.gov/health/educational/lose_wt/BMI/bmicalc.htm) where you can enter height and weight and compute BMI.
  + Normal BMI is 18-24, BMI of 25-29 is considered overweight and BMI ≥30 is considered obese.

**How many people are affected?**

*Hypertension statistics*

* Approximately 30 percent of American adults have HTN. That’s nearly 70 million people.
* Half of the population with HTN does not have their condition under control.
* Nearly 1 in 3 American adults have signs of prehypertension and are at risk of developing HTN.
* HTN is most prevalent in people age 55 and over.
* Men and women are almost equally affected.
* African Americans are more likely than Caucasians to have HTN.
* In 2009, there were more than 55 million doctor visits to treat HTN.
* [insert state-level statistics if desired]
* [insert information from your practice’s registry if applicable]

*Hyperlipidemia statistics*

* Thirty-three percent of Americans have high levels of LDL cholesterol. That’s 71 million people.
* One-third of the population with hyperlipidemia does not have their condition under control.
* Fewer than half of the population with hyperlipidemia receives treatment to lower their cholesterol levels.
* [insert state-level statistics if desired]
* [insert information from your practice’s registry if applicable]

*Obesity statistics*

* More than 60 percent of adults are considered overweight or obese based on their BMI.
* Approximately 35 percent of Americans are obese. That’s 78.6 million people.
* More than one-third of children and young adults ages 6 to 19 are considered to be overweight or obese.
* Rates of overweight and obesity are higher in Hispanics and African Americans than Caucasians.
* Middle-aged adults (age 40-59) are more likely to be obese than adults in other age groups.
* [insert state-level statistics if desired]
* [insert information from your practice’s registry if applicable]

**How are HTN, hyperlipidemia and obesity related?**

* Obesity is a risk factor for HTN and hyperlipidemia.
* Foods high in cholesterol are usually also high in calories, which contributes to obesity.
* The build-up of cholesterol in the artery walls can restrict blood flow, which increases blood pressure and can lead to HTN.

**Why is it important to treat these conditions?**

* If they are not treated, HTN and hyperlipidemia can lead to heart attack, stroke and heart failure.
* Being obese also puts patients at risk for type 2 diabetes, gallstones, breathing problems and certain cancers.

**Risk factors**

* The risk factors for HTN, hyperlipidemia and obesity are nearly identical

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| Hypertension | Hyperlipidemia | Obesity |
| Obesity | Obesity |  |
| Diabetes | Diabetes |  |
| Smoking tobacco | Smoking tobacco |  |
| Eating foods high in sodium and low in potassium and drinking excess alcohol | Unhealthy diet that is high in saturated fats, trans fats and cholesterol | Unhealthy diet |
| Not getting enough exercise or being inactive | Lack of exercise or physical activity | Lack of exercise or physical activity |
| Genetics and family history | Genetics and family history | Genetics and family history |
| Advanced age | Older age |  |
| Prehypertension and/or pre-existing conditions |  |  |
| African American |  |  |

**Recommended lifestyle changes to help patients address HTN, hyperlipidemia and obesity**

* Start and maintain a healthy eating plan
* Reduce the amount of salt in the diet
* Lose weight if overweight or obese
* Avoid drinking too much alcohol
* Stop smoking
* Exercise at least 30 minutes per day most days of the week
* Reduce stress

**Why is physical activity so important for these patients?**

* Improves blood pressure and cholesterol levels and decreases weight
* Lowers the risk of type 2 diabetes, heart disease, stroke and some cancers
* Strengthens lungs, muscles and joints
* Slows bone loss
* Increases energy levels
* Helps people relax and cope with stress
* Promotes better sleep

**Medical management of HTN and hyperlipidemia**

* Antihypertensive medications to lower blood pressure
  + Commonly prescribed antihypertensive medications include
    - ACE inhibitors like Prinivil® (lisinopril), Vasotec® (enalapril) and Altace® (Ramipril)
    - ARBs like Diovan® (valsartan), Atacand® (candesartan) and Cozaar® (losartan)
    - Beta blockers like Toprol-XL® (metoprolol) and Corgard® (nadolol)
    - Calcium channel blockers like Norvasc® (amlodipine) and Cardizem® (diltiazem)
    - Diuretics like Lasix® (furosemide) and Microzide® (hydrochlorothiazide, HCTZ)
  + Taking a correct blood pressure reading is critical for selecting the correct type and dose of antihypertensive medication
* Medications to lower cholesterol
  + Statins to lower LDL cholesterol
    - Common statins prescribed are Lipitor® (atorvastatin), Zocor® (simvastatin), Crestor® (rosuvastatin)
    - Statins should be taken at night because most cholesterol is synthesized when dietary intake is at its lowest, which occurs overnight
  + Other medications used to lower LDL cholesterol and triglycerides and increase HDL cholesterol are nicotinic acid, fibrates, and bile acid sequestrants

**References**

1. American Heart Association. <http://www.heart.org/>. Accessed February 9, 2016.
2. Mayo Clinic. High cholesterol. <http://www.mayoclinic.org/diseases-conditions/high-blood-cholesterol/home/ovc-20181871>. Accessed February 9, 2016.
3. National Heart, Lung and Blood Institute. Calculate your body mass index. <http://www.nhlbi.nih.gov/health/educational/lose_wt/BMI/bmicalc.htm>. Accessed February 9, 2016.
4. Centers for Disease Control and Prevention. High blood pressure facts. <http://www.cdc.gov/bloodpressure/facts.htm>. Updated February 19, 2015. Accessed February 10, 2016.
5. Centers for Disease Control: Division for Heart Disease and Stroke Prevention. Cholesterol fact sheet. <http://www.cdc.gov/dhdsp/data_statistics/fact_sheets/fs_cholesterol.htm>. Updated April 30, 2015. Accessed February 10, 2016.
6. National Institute of Diabetes and Digestive and Kidney Diseases. Overweight and obesity statistics. <http://www.niddk.nih.gov/health-information/health-statistics/Pages/overweight-obesity-statistics.aspx>. Updated October 2012. Accessed February 10, 2016.
7. Centers for Disease Control and Prevention: Division of Nutrition, Physical Activity and Obesity. Adult obesity facts. <http://www.cdc.gov/obesity/data/adult.html>. Updated September 21, 2015. Accessed February 10, 2016.
8. National Heart, Lung and Blood Institute. Overweight and obesity. <http://www.nhlbi.nih.gov/health/health-topics/topics/obe>. Updated July 13, 2012. Accessed February 10, 2016.
9. American Heart Association. Understand your risk for high blood pressure. <http://www.heart.org/HEARTORG/Conditions/HighBloodPressure/UnderstandYourRiskforHighBloodPressure/Understand-Your-Risk-for-High-Blood-Pressure_UCM_002052_Article.jsp#.VruAkfkrKC8>. Accessed February 9, 2016.
10. Centers for Disease Control and Prevention. Cholesterol. <http://www.cdc.gov/cholesterol/index.htm>. Updated March 16, 2015. Accessed February 10, 2016.

Adapted with permission from Vanguard Medical Group medical assistant professional development training materials.

*Source: AMA. Practice transformation series: medical assistant professional development. 2016.*

**Pre-session learning flashcards**

*Share these flashcards with session attendees several days before the session so they can come prepared. Some of the flashcards contain highlighted areas where you can insert details specific to your practice. Two blank pages are provided if you’d like to create your own flashcards that are specific to your team or curriculum.*

*Instruct the session attendees to print the page of cards, cut along the dotted horizontal lines, and then fold vertically on the solid lines to create flashcards that they can use to quiz themselves prior to the professional development session.*

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| *WHAT IS A NORMAL BLOOD PRESSURE READING?* | According to the American Heart Association, a normal blood pressure is <120/80 mmHg |
| ***HOW MANY NUMBERS DOES A BLOOD PRESSURE READING HAVE?*** | A blood pressure reading has two numbers: systolic blood pressure (top number) and diastolic blood pressure (bottom number) |
| ***WHAT IS HYPERTENSION (HTN)?*** | High blood pressure |
| ***WHAT IS THE RANGE OF BLOOD PRESSURE READINGS FOR STAGE ONE HYPERTENSION (HTN)?*** | Stage 1 HTN: 140/90–159/99 mmHg |
| ***WHAT IS THE RANGE OF BLOOD PRESSURE READINGS FOR STAGE TWO HYPERTENSION (HTN)?*** | Stage 2 HTN: 160/100 mmHg and above |
| ***WHAT ARE THE COMPLICATIONS FROM HIGH BLOOD PRESSURE?*** | High blood pressure is known as the “silent killer” because many people have it but do not know it. Untreated, high blood pressure can lead to:   * Kidney failure * Blindness * Heart failure * Stroke * Heart attack * Death |
| ***WHAT IS THE DASH DIET AND HOW DOES IT RELATE TO HYPERTENSION?*** | DASH stands for Dietary Approaches to Stop Hypertension:   1. Eat more fruits, vegetables and low-fat   dairy (tell patients that fresh is best)   1. Eat more whole grain products, fish,   poultry and nuts  3. Eat less red meat and no processed meats  4. Do not add salt to food (raw or when cooking) |
| ***WHAT ARE SOME EASY WAYS TO ENCOURAGE PATIENTS TO THEIR LOWER BLOOD PRESSURE WITH EXERCISE?*** | Here are some suggestions:   1. Park further away from the door 2. Take the stairs 3. Take the dog for a walk 4. Make exercise convenient |
| ***WHAT IS CHOLESTEROL?*** | Cholesterol is a soft, waxy substance found in lipids (fats). It is present in blood and nerve cells. It is also found in animal products, such as eggs, meat, and cheese. |
| ***WHAT IS HYPERLIPIDEMIA?*** | High cholesterol |
| ***WHY IS HYPERLIPIDEMIA A HEALTH RISK?*** | Extra cholesterol circulating in the blood builds up slowly in the inner walls of arteries in the brain and heart.  This causes the arteries to narrow.  When the arteries narrow, not enough oxygen gets from the heart to the rest of the body.  This can lead to heart attack and stroke. |
| ***WHAT ARE THE SIGNS AND SYMPTOMS OF HYPERLIPIDEMIA?*** | Usually there are no signs and symptoms.  Some people may develop deposits of fat under the skin around the eyes but this is the only visible sign.  Hyperlipidemia is diagnosed based on blood tests. |
| ***WHAT IS THE TREATMENT PLAN FOR HYPERLIPIDEMIA?*** | 1. Cholesterol-lowering medication (statins) 2. Meal planning (low fat and based on “Create Your Plate” guidelines) 3. Exercise |
| ***WHAT IS “CREATE YOUR PLATE?”*** | Think of a plate as a clock. Draw a line from 12 to 6, diving the plate in half. Now draw a line to divide one half of the plate into quarters. The largest portion (half the plate) is for non-starchy green vegetables. In one quarter, put grains and starchy foods. In the other quarter, put protein.  This method helps patients become aware of portion control and make better food choices without having to count calories. |
| ***WHAT IS THE NORMAL VALUE FOR LOW DENSITY LIPOPROTEIN (LDL) CHOLESTEROL IN A LIPID PANEL?*** | <100 mg/dL  For “bad” cholesterol, lower numbers are better. |

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| *WHAT IS THE NORMAL VALUE FOR HIGH DENSITY LIPOPROTEIN (HDL) CHOLESTEROL IN A LIPID PANEL?* | >40 mg/dL for men and >50 mg/dL for women  For “good” cholesterol, higher numbers are better. |
| ***WHAT ARE THE NORMAL VALUES FOR TOTAL CHOLESTEROL IN A LIPID PANEL?*** | <200 mg/dL  Lower numbers are better. |
| ***WHAT ARE NORMAL VALUES FOR TRIGLYCERIDES?*** | <150 mg/dL  Lower numbers are better. |
| ***WHERE DOES CHOLESTEROL COME FROM?*** | 75% is produced by your body, 25% comes from your diet |

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| *WHAT HAPPENS IF LIFESTYLE CHANGES DO NOT LOWER A PATIENT’S CHOLESTEROL LEVEL?* | If lifestyle changes do not work, then cholesterol-lowering medications may be needed. |
| ***WHAT CLASSES OF DRUGS LOWER CHOLESTEROL?*** | * Statins * Fibrates * Nicotinic acid * Bile acid sequestrants |
| ***NAME SOME COMMONLY PRESCRIBED STATINS*** | Atorvastatin (Lipitor®)  Simvastatin (Zocor®)  Pravastatin (Pravachol®)  Rosuvastatin (Crestor®) |
| ***WHAT BMI RANGES DEFINE NORMAL, OVERWEIGHT AND OBESE?*** | Normal BMI: 18-24  Overweight BMI: 25-29  Obese BMI: ≥30 |

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| *WHAT DISEASES DOES BEING OBESE PUT PEOPLE AT RISK FOR?* | Obesity increases the risk of diabetes, heart disease, hypertension, stroke and joint disease. |
| ***WHAT DOES “YO-YO” DIETING CAUSE*** | "Yo-Yo" dieting causes serious health risks by stressing the heart, kidneys and other organs. |
| ***WHAT PERCENT OF PATIENTS WHO PARTICIPATE IN SPECIALIZED “DIET PROGRAMS” GAIN THE WEIGHT BACK?*** | 90% of patients participating in all diet programs gain weight back within 2 years. |
| ***HOW MANY CALORIES ARE IN A GRAM OF FAT?*** | 9 calories per gram; fats have the highest concentration of calories |

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| *HOW MANY CALORIES ARE IN A GRAM OF PROTEIN?* | Proteins have 4 calories per gram |
| ***HOW MANY CALORIES ARE IN A GRAM OF CARBOHYDRATE?*** | Carbohydrates have 4 calories per gram |
| ***HOW MANY CALORIES ARE IN A GRAM OF ALCOHOL?*** | Alcohol has 7 calories per gram |
| ***WHAT ARE THE CLASSES AND NAMES OF SOME COMMONLY PRESCRIBED ANTIHYPERTENSIVE MEDICATIONS?*** | ACE inhibitors - "pril" Ex: lisinopril (Prinivel®)  ARBs - “sartan” Ex: valsartan (Diovan®)  Beta blockers - "olol" Ex: metoprolol (Toprol-XL®)  Calcium channel blockers - Ex: amlodipine (Norvasc®) |

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| *NAME TWO ACTIONS THAT CAN FALSELY ELEVATE A BLOOD PRESSURE READING* | 1. Rolling up a sleeve so that it acts like a tourniquet and constricts blood flow 2. Using a cuff that is too small |
| ***WHAT ARE SOME LIFESTYLE CHOICES THAT CAN ELEVATE BLOOD PRESSURE?*** | 1. Tobacco smoking 2. Uncontrolled stress 3. Obesity |
| ***DESCRIBE THE PROPER STEPS FOR TAKING A PATIENT’S BLOOD PRESSURE*** | 1. Allow patient to relax and get comfortable 2. Remove clothing from arm before placing the cuff 3. Have patient sit with their legs uncrossed and arm supported 4. Place cuff with lower edge about 1 inch above the bend in the elbow 5. Place middle of cuff directly above the “eye” of the elbow |
| ***DOES THE BLOOD PRESSURE CUFF***  ***SIZE MATTER?***  ***DESCRIBE GOOD CUFF PLACEMENT*** | Proper blood pressure cuff size is important to get an accurate reading.   1. The inflatable part of the cuff should cover approximately 80% of the circumference of upper arm 2. The cuff should cover two-thirds of the distance from the elbow to the shoulder 3. The lower edge of the cuff should be approximately 1 inch above the bend in the elbow 4. The cuff should not be constrictive before it is inflated |

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| *WHAT IS WHITE COAT HYPERTENSION?* | It is a phenomenon where patients exhibit elevated blood pressure in a clinical setting but not in other settings. It is believed that this is due to the anxiety some people experience during a clinic visit. |
| ***ARE BLOOD PRESSURE READINGS THE SAME IN THE LEFT AND RIGHT ARM?*** | In general, a difference of 10 mmHg or less between left and right arm readings is considered normal and not a cause for concern.  Differences greater than 10 mmHg between left and right arm readings should be discussed with the doctor. |
| ***WHY IS OBTAINING A CURRENT WEIGHT IMPORTANT DURING THE OFFICE VISIT?*** | 1. Office policy (weight every visit; weight/height annually) 2. Necessary for calculating BMI 3. Helps provider in managing weight-related chronic diseases 4. Required for accurate medication dosing |
| ***WHAT IS A GOOD RESPONSE TO A PATIENT WHO REFUSES TO BE WEIGHED DURING ROOMING?*** | “In order for your provider to properly assess and treat you, she needs your most accurate weight.”  If the patient continues to refuse, avoid a confrontation and offer:  “I understand. I'll let the provider know and you can discuss this when she comes in.” |

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*Source: AMA. Practice transformation series: medical assistant professional development. 2016.*

Medical assistant professional development sign in sheet

Topic: Hypertension, hyperlipidemia and obesity

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*Source: AMA. Practice transformation series: medical assistant professional development. 2016.*