Plan to spend about 60 minutes preparing for this talk. Learners should receive a copy of the Adult Disease Prevention handout to use as a guide for Parts 1 and 2. Please print this prior to the lecture. Use the interactive boards as an outline to present the talk while adding information from the facilitator guide and your own knowledge. This content is important but can be dry. Do your best to prompt the learners to fill in the guidelines prior to clicking to make it more interactive.

Anticipated time to deliver the talk with and without cases or other features: without cases is 30 minutes. The cases may take an additional 10-15 min.

The talk can be presented in two ways:

1. Project the “Interactive Board” OR

2. Reproduce your own drawing of the presentation on a whiteboard.

**Objective 1: Establish a framework for approaching disease prevention and screening in the primary care setting.**

Begin by reviewing the framework presented in Adult Disease Prevention Part 1 to emphasize thinking about the 5 key areas of screening and prevention. Remind learners that the recommendations discussed in this lecture are for asymptomatic individuals at average-risk. Increased risk factors such as family history or comorbidities will impact how we consider screening and prevention, and that we may pursue testing for diagnosis instead.

**Objective 2: Identify and apply appropriate screening recommendations for substance use, mental health**

*Substance Use*

* Alcohol –
  + The USPSTF recommends screening all adults for unhealthy alcohol use. The National Institute on Alcohol Abuse and Alcoholism (NIAAA) defines unhealthy alcohol use as:
    - More than 4 drinks per day or 14 drinks per week in a healthy male adult aged 21-64
    - More than 3 drinks per day or 7 drinks per week in a healthy male ≥65
    - More than 3 drinks per day or more than 7 drinks per week in healthy adult women of all ages
  + There is no agreed upon frequency for screening, but most organizations support annual screening. There are multiple screening tools available but with the Single Alcohol Screening Question (SASQ) and AUDIT-C used most frequently due to good sensitivity and specificity for detecting unhealthy alcohol use. Our recommendation would be to start by asking “Do you sometimes drink beer, wine or other alcoholic beverages?” and then follow up with the SASQ: “How many times in the past year have you had five (four for women) or more drinks in a day?” The AUDIT-C is also used in some institutions but is longer.
  + The CAGE questions can be used to determine dependence but are not recommended for screening.
* Tobacco Use –
  + The USPSTF recommends assessing and recording tobacco use at all visits as this increases the likelihood of discussions about cessation (Grade A). There is no standardized assessment tool for tobacco use and this is often performed by the Medical Assistant. However, learners should be aware of these pearls:
    - Ask patients if they ever smoke to help identify non-daily or intermittent smokers.
    - Ask about all types of tobacco and nicotine products (including cigarettes, cigars, pipes, smokeless tobacco, water pipes/hookahs, bidis, and electronic cigarettes).
  + For patients who use tobacco, follow-up with a full assessment of frequency of use, products used, dependence, history or quit attempts and readiness to quit.
* Illicit Drugs –
  + The USPSTF recommends assessing for unhealthy drug use in all adults regardless of risk factors. This is typically performed annually. Unhealthy drug use is defined as the use of substances (not including alcohol or tobacco products) that are illegally obtained or the nonmedical use of prescription psychoactive medications. Screening for unhealthy drug use involves asking 1+ questions about drug use, not lab testing for the presence of drugs. There are several screening tools available. One that is easily integrated into primary care is a single-item question asking: “How many times in the past year have you used an illegal drug or used a prescription medication for non-medical reasons?”

*Mental Health*

Familiarize the learners with the concept of screening for mental health disorders, primarily depression and anxiety. Tools such as the PHQ-2, PHQ-4 and PHQ-9 can be used for depression screening and the GAD-7 can be used for anxiety screening.

**Objective 3:** Identify and apply appropriate cardiovascular disease screening – including screening for lipid disorder, diabetes, abdominal aortic aneurysm (AAA), obesity, and hypertension

*Hypertension*

All adults should be screened for hypertension via office-based blood pressure readings. Screening intervals are not well studied, but the USPSTF recommends that people aged 40+, or younger with increased risk, should have annual screening. If elevated, ambulatory or home-based blood pressure reading should be used to determine if treatment should be initiated. At this point share with the learner that they will have a more in-depth discussion of hypertension diagnosis and management in a later module.

*Obesity*

Screening for obesity is important as many high-risk patients may otherwise not be identified and educated on the health risks and treatment options. All adults should be screened for obesity by measuring height and weight to calculate the body mass index (BMI) (Grade B). USPSTF recommends that anyone with a BMI of 30 kg/m2 or higher should be referred to intensive, multicomponent behavioral interventions. Remind the learners that obesity can be broken down into three classes based on BMI: class 1 (BMI of 30.0 to 34.9), class 2 (BMI of 35.0 to 39.9), or class 3 (BMI of ≥40).

*Diabetes*

Screening guidelines for diabetes differ slightly between the American Diabetes Association (ADA) and the USPSTF. For purposes of this lecture and the follow-up lecture on diabetes management, the ADA guidelines are recommended.

ADA: Screening should be considered in adults of any age with overweight or obesity (BMI ≥25 kg/m2 or ≥23 kg/m2 in Asian Americans) and who have one or more additional risk factors for diabetes. All individuals should be screened at age 35 regardless of risk factors.

USPSTF: The USPSTF recommends screening all adults aged 35 to 70 years who are overweight or obese and asymptomatic should for abnormal blood glucose.

Screening can be accomplished via A1C, fasting plasma glucose, or glucose tolerance test. In primary care we typically perform either an A1C or fasting glucose due to ease of testing. If screening tests are normal, they should be repeated at least every 3 years. For prediabetes, test yearly.

*Lipid Disorders*

The USPSTF recommends screening for and treating lipid disorders in adults aged 40 to 75 years who have a 10-year cardiovascular risk of more than 10% and one or more cardiac risk factors (grade B). For those with a 10-year cardiovascular risk of 7.5% to 10% and one or more risk factors, consider a statin, though the benefit will be smaller. The USPSTF cites insufficient evidence of screening and/or treatment at age <40 or >75.

There are differing practices about screening for lipid disorders. Many practitioners will screen adult patients who have not been previously screened with a lipid panel when they establish care. For high-risk individuals, a lipid panel is typically repeated every 3 years, and for low risk individuals it is repeated every 5 years. A lipid panel does not have to be ordered fasting for screening purposes, but the patient will need to have it repeated if it is abnormal or if triglycerides are too high to calculate an LDL.

Remind the learners that this is for *primary* prevention, and that ordering lipid panels for their patients with diabetes or family history of lipid disorders is different.

*Abdominal Aortic Aneurysm*

The USPSTF recommends 1-time screening for abdominal aortic aneurysm (AAA) with an abdominal ultrasound in men aged 65 to 75 years who have ever smoked. Selective screening can be performed in men within this age group who have never smoked. There are no recommendations for AAA screening in females regardless of smoking status.

*Diet and Physical Activity*

The USPSTF recommends referring adults with cardiovascular disease risk factors to behavioral counseling interventions to promote a healthy diet and physical activity as primary prevention for cardiovascular disease.

There is no single approach to diet. In general, counsel patients to eat a variety of food types especially including fruits, vegetables, legumes, nuts, and whole grains. Increased fiber intake has been associated with lower CV risk. Patients should limit red and processed meats, high sodium foods, saturated and trans fats, and added sugars.

Physical activity guidelines for adults as defined by the US Department of Health and Human Services recommends that adults should do at least 150 minutes (2 hours and 30 minutes) to 300 minutes (5 hours) a week of moderate-intensity, or 75 minutes (1 hour and 15 minutes) to 150 minutes (2 hours and 30 minutes) a week of vigorous-intensity aerobic physical activity. In addition, strengthening activities should be performed at least twice per week.

**Objective 4: Identify patients at risk for intimate partner violence, falls and osteoporosis.**

*Family Planning*

Family planning care should be considered in adults of reproductive age. This includes assessing reproductive goals and helping men and women make informed decisions about their fertility and contraceptive use that are aligned with their preferences. The USPSTF recommends that all women who are planning or capable of pregnancy take a daily supplement containing 0.4 to 0.8 mg (400 to 800 µg) of folic acid.

*Falls*

Older patients (>65 or other risk factors) should be screened for falls annually and offered exercise interventions to prevent falls. Screening can be accomplished via three questions (at risk if YES to any question):

* Do you feel unsteady when standing or walking?
* Do you worry about falling?
* Have you fallen in the past year? (If YES ask, “How many times?” “Were you injured?”)

The CDC STEADI guide provides a helpful algorithm to approach fall screening and prevention.

*Osteoporosis*

Women age ≥65 or postmenopausal women younger than 65 years at increased risk of osteoporosis should be screened for osteoporosis via assessment of bone density. This is typically measured with a dual-energy X-ray absorptiometry (DEXA) scan. The USPSTF currently states there is insufficient evidence to recommend screening in men, though this guideline is currently under review. The interval to repeat a screening scan is not well-defined: please see the osteoporosis talk for further details.

*Advanced Care Planning*

Advanced care planning should be considered as a preventative care element for patient care for adults of all ages with more emphasis on those who have multiple comorbidities or are older. Advanced directives include assigning a medical durable power of attorney, establishing a living will or completing an order for scope of treatment (in Colorado this is the MOST form but varies by state).

***Intimate Partner Violence/Elder abuse and abuse of vulnerable adults***

The USPSTF recommends that all women of reproductive age be screened for intimate partner violence (IPV). Screening is typically done annually or since the last encounter and should be done in private. Several screening tools exist for assessing intimate partner violence including: Humiliation, Afraid, Rape, Kick (HARK); Hurt, Insult, Threaten, Scream (HITS); Partner Violence Screen (PVS); and Woman Abuse Screening Tool (WAST), among others.

As an example, HITS includes the following:

How often does your partner:

* Hurt you physically?
* Insult you or talk down to you?
* Threaten you with harm?
* Scream or curse at you?

Encourage learners to become familiar with one of these tools, or to ask their institution which tool is preferred.

The USPSTF does not have a recommendation for screening older and vulnerable adults for abuse. However, primary care clinicians should be aware of the types of abuse that occur and risk factors for becoming a victim. These are highlighted in the interactive board.