

(Potpourri of) Health Screening Guidelines

American College of Osteopathic Internists
Clinical Challenges in Hospital Medicine

May 9th, 2019



University Hospitals
Primary Care Institute

Cleveland | Ohio

Conflicts of Interest

- I have no Conflicts of Interest and receive no support from industry.

Objectives

Primary Prevention

- 1) To Bring Practicing Hospitalists Up to Date on current Health Screening Guideline
- 2) Review Cancer Screenings for the adult patient
- 3) To Understand the Opportunity for Hospitalists to actively participate Quality Measures in the Out-patient Setting

Where Do Guidelines come from?

- Sources
 - American Diabetes Association,
 - American College of Cardiology
 - American Heart Association
 - American Cancer Society
 - American Gastroenterology Society, etc
- We will focus on 2 sets of measures:
 - 1. United States Preventative Service Task Force**
 - 2. CMS Core Measures**
 - Considerable overlap from one set of guidelines and measures to another
 - Many are considered best practice

What is the USPSTF?

U.S. Preventive Services Task Force

- Created in 1984
- Independent, volunteer panel of national experts in prevention and evidence-based medicine.
- Charge: Improve the health of all Americans by making evidence-based recommendations about clinical preventive services such as screenings, counseling services, and preventive medications.
- All recommendations are published on the Task Force's web site and/or in a peer-reviewed journal.
- Currently with 98 published Guidelines

USPSTF

Task Force members:

- Preventive Medicine and Primary Care
- Internal Medicine
- Family Medicine
- Pediatrics
- Behavioral Health
- Obstetrics and Gynecology
- Nursing.

USPSTF

Their Recommendations:

- Based on a rigorous review of existing peer-reviewed evidence
- Strength of Evidence
- Balance of Benefits and Harms of Preventive Service
- No consideration for cost
- Help PCP's and patients decide together whether a preventive service is right for a patient's needs.

Assign a letter grade (A thru D grade or an I statement).

- Apply only to people who have no signs or symptoms of the specific disease or condition under evaluation
- Address only services offered in the PCP Setting or by Referral

USPTF

Grade	Definition	Suggestions for Practice
A	The USPSTF recommends the service. There is high certainty that the net benefit is substantial.	Offer or provide this service.
B	The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial.	Offer or provide this service.
C	The USPSTF recommends selectively offering or providing this service to individual patients based on professional judgment and patient preferences. There is at least moderate certainty that the net benefit is small.	Offer or provide this service for selected patients depending on individual circumstances.
D	The USPSTF recommends against the service. There is moderate or high certainty that the service has no net benefit or that the harms outweigh the benefits.	Discourage the use of this service.
I Statement	The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of the service. Evidence is lacking, of poor quality, or conflicting, and the balance of benefits and harms cannot be determined.	Read the clinical considerations section of USPSTF Recommendation Statement. If the service is offered, patients should understand the uncertainty about the balance of benefits and harms.

Why does Grade Matter?

Affordable Care Act:

...to provide benefits for and prohibit the imposition of cost-sharing requirements (i.e. no copay, no deductible applies) for the following:

- **Evidenced-based items or Services**
 - *That have a rating of “A” or “B” in the current recommendations of the United States Preventive Services Task Force (USPSTF) with respect to the individual involved*
- **Immunizations** for routine use in (all ages)
 - Advisory Committee on Immunization Practices (ACIP) of the (CDC)
- **Infants, Children, and Adolescents**
 - evidence-informed preventive care and screenings provided for in the comprehensive guidelines supported by the Health Resources and Services Administration (HRSA); and
- **Women**
 - evidence-informed preventive care and screening provided for in comprehensive guidelines supported by HRSA...if not included in recommendations of the USPSTF

Core Quality Measures

The Core Quality Measure Collaborative

- America's Health Insurance Plans (AHIP) & Member Plans
 - Chief Medical Officers
 - Leaders from CMS
 - National Quality Forum (NQF)
 - Physician Organizations
- Alternative Payment Systems through CMS and others are based on these measures (MIPS, MACRA, ACO's, PCMH, etc.)

The Core Measures Sets (Eight Sets)

1. **Accountable Care Organizations (ACOs), Patient Centered Medical Homes (PCMH), and *Primary Care***
2. Cardiovascular
3. Gastroenterology
4. HIV and Hepatitis C
5. Medical Oncology
6. Obstetrics and Gynecology
7. Orthopedics
8. Pediatric

Primary Care Measures

Cardiovascular Disease

Diabetes

Question 1

A 68 year old women with BMI of 25 presents to the hospital for dizziness of 2 years duration worsening over the past few weeks. She is otherwise healthy. She was found to be well hydrated, and cardiac and neurologic work up were unremarkable.

You complete your plan to send her home. Which is true of her target Blood Pressure in the out-patient setting.

- a) Blood Pressure of less than 160/90 and since she is complaining of dizziness.
- b) Systolic Blood Pressure of <140 and diastolic BP of <90.
- c) Systolic Blood Pressure \leq 130 and Diastolic BP \leq 80.
- d) Systolic Blood Pressure <120 and Diastolic BP <80

Hypertension Guidelines

- Joint National Committee (JNC) 8 (2014)
- American College of Cardiology/American Heart Association (2017)
- European Society of Cardiology/European Society for Hypertension (2018)

JNC- 8 Hypertension Guidelines

BP Category	SBP		DBP
Normal	<120 mm Hg	and	<80 mm Hg
Elevated	120–129 mm Hg	and	<80 mm Hg
Hypertension			
Stage 1	130–139 mm Hg	or	80–89 mm Hg
Stage 2	≥140 mm Hg	or	≥90 mm Hg

2014 Evidence-Based Guideline for the Management of High Blood Pressure in Adults: Report From the Panel Members
 Appointed to the Eighth Joint National Committee (JNC 8)
 JAMA. 2014;311(5):507-520. doi:10.1001/jama.2013.284427

Hypertension JNC 8 Summary

- In patients >60 years of age
 - without comorbidities Goal is <150/90 mmHg
 - with diabetes +/- chronic kidney disease Goal is <140/90 mmHg
- In patients 18 to 59 years of age
 - without major comorbidities Goal is <140/90 mmHg
- First-line and Second-line treatments limited to 4 classes
 - thiazide diuretics
 - calcium channel blockers (CCBs)
 - ACEIs
 - ARBs

Comparison of Guidelines for Pharmacologic Treatment of HTN in Older Adults

American College of Physicians American Academy of Family Physicians

Treatment is recommended for:

- adults 60 years and older with systolic BP persistently >150 mm Hg
- target systolic BP <150 mm Hg

Decisions regarding initiating or intensifying pharmacologic treatment:

- should be considered for certain adults 60 years and older with high cardiovascular risk, based on individualized assessment, to achieve **a target systolic BP of less than 140 mm Hg.**

American College of Cardiology/ American Heart Association

Treatment is recommended for:

- adults 65 years and older with an average systolic BP ≥ 130 mm Hg
- target systolic BP <130 mm Hg.

Decisions regarding the intensity of pharmacologic therapy and choice of drugs

- based on clinical judgment, patient preferences
- team-based approach to assess risks and benefits for adults 65 years and older
- Consider hypertension, a high burden of comorbidities, and limited life expectancy.

Doust J, Vandvik PO, Qaseem A, et al. Guidance for modifying the definition of diseases: a checklist. *JAMA Intern Med.* 2017;177(7):1020–1025.

Primary Care Measures

Cardiovascular Care

- *Controlling High Blood Pressure* *
 - The Percentage of Adults who had a diagnosis of hypertension (HTN) and whose blood pressure (BP) was adequately controlled (<140/90) during the measurement year.

- *Controlling High Blood Pressure* *
 - The percentage of Adults who had a diagnosis of hypertension and whose BP was adequately controlled during the measurement year based on the following criteria:
 - Age 18-59 = <140/90 mm Hg
 - Age 60-85 w/ diabetes = <140/90 mm Hg
 - Age 60-85 w/o diabetes = <150/90 mm Hg

*Either measure acceptable based on JNC 7 or JNC 8 allowing higher measures

2014 Evidence-Based Guideline for the Management of High Blood Pressure in Adults: Report From the Panel Members Appointed to the Eighth Joint National Committee (JNC 8), JAMA. 2014;311(5):507-520. doi:10.1001/jama.2013.284427

Primary Care Measures

Cardiovascular Care (continued)

- **Persistent Beta Blocker Post MI**
 - The percentage of patients who were hospitalized and discharged ...who received persistent beta-blocker treatment for six months after discharge.
- **Ischemic Vascular Disease: Use of ASA or other antithrombotic**
 - The percentage of patients discharged ... for acute myocardial infarction (AMI), coronary artery bypass graft (CABG) or percutaneous coronary interventions (PCI) ...who remained on ASA or other antithrombotic

<https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/QualityMeasures>

Aspirin Use to Prevent Cardiovascular Disease and CRC

Population	Recommendation	Grade
Age 50 to 59 years with a $\geq 10\%$ 10-year CVD risk	The USPSTF recommends initiate low-dose aspirin use for the primary prevention of cardiovascular disease (CVD) and colorectal cancer (CRC) in adults aged 50 to 59 years who have a 10% or greater 10-year CVD risk, are not at increased risk for bleeding, have a life expectancy of at least 10 years, and are willing to take low-dose aspirin daily for at least 10 years.	B
Age 60 to 69 years with a $\geq 10\%$ 10-year CVD risk	The decision to initiate low-dose aspirin use for the primary prevention of CVD and CRC should be an individual one. Those likely to benefit: <ul style="list-style-type: none"> • Not at increased risk for bleeding, • Have a life expectancy of at least 10 years • Willing to take low-dose aspirin daily for >10 years. 	C
Adults < 50 years	The current evidence is insufficient	I
Age 70 years or older	The current evidence is insufficient	I

Bibbins-Domingo K; U.S. Preventive Services Task Force. Aspirin Use for the Primary Prevention of Cardiovascular Disease and Colorectal Cancer: U.S. Preventive Services Task Force Recommendation Statement. *Ann Intern Med.* 2016;164(12):836-845.

Low Dose Aspirin Use for Primary Prevention:

Recommendations by others

- **The AHA and the American Stroke Association**
 - recommend the use of low-dose aspirin for cardiovascular prophylaxis
 - adults at higher risk 10-year CVD risk of 6% to 10%
- **The American Diabetes Association**
 - Patients with type 1 or 2 diabetes who have an increased CVD risk (>10% 10-year CVD risk)
 - Not recommended for
 - men younger than 50 years or
 - women younger than 60 years who have low CVD risk
 - risk for bleeding outweighs the potential benefits of aspirin treatment
- **The Academy of Family Physicians**
 - consistent with those of the USPSTF .
- **The American College of Chest Physicians**
 - suggests that patients older than 50 years without symptomatic CVD.

Bibbins-Domingo K; U.S. Preventive Services Task Force. Aspirin Use for the Primary Prevention of Cardiovascular Disease and Colorectal Cancer: U.S. Preventive Services Task Force Recommendation Statement. *Ann Intern Med.* 2016;164(12):836-845.

Abdominal Aortic Aneurysm Screening

Population	Recommendation	Grade
Men 65 to 75 Ever Smoked	Recommends one-time screening for abdominal aortic aneurysm (AAA) with ultrasonography in men ages 65 to 75 years who have ever smoked.	B
Men 65 to 75 Never Smoked	Recommends that clinicians selectively offer screening for AAA in this group.	C
Women 65 to 75 Ever Smoked	Current evidence is insufficient to assess the balance of benefits and harms of screening for AAA in women ages 65 to 75 years who have ever smoked.	I
Women Who Have Never Smoked	Recommends against routine screening for AAA in women who have never smoked.	D

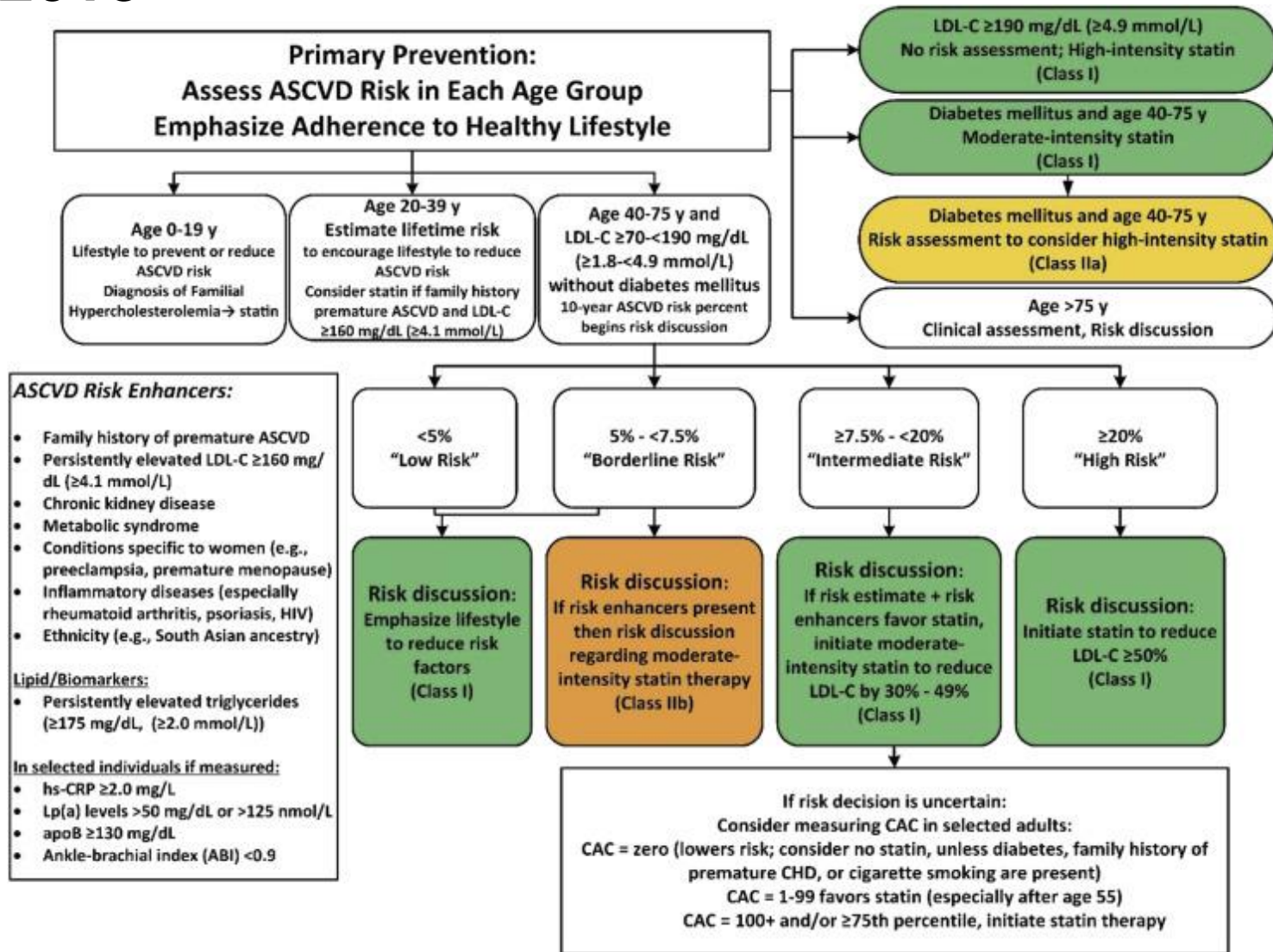
Final Update Summary: Abdominal Aortic Aneurysm: Screening. U.S. Preventive Services Task Force. March 2017.
<https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/abdominal-aortic-aneurysm-screening>

Statin Use for the Primary Prevention of CVD

Adults aged 40 to 75 with no history of CVD, 1 or more CVD Risk Factors

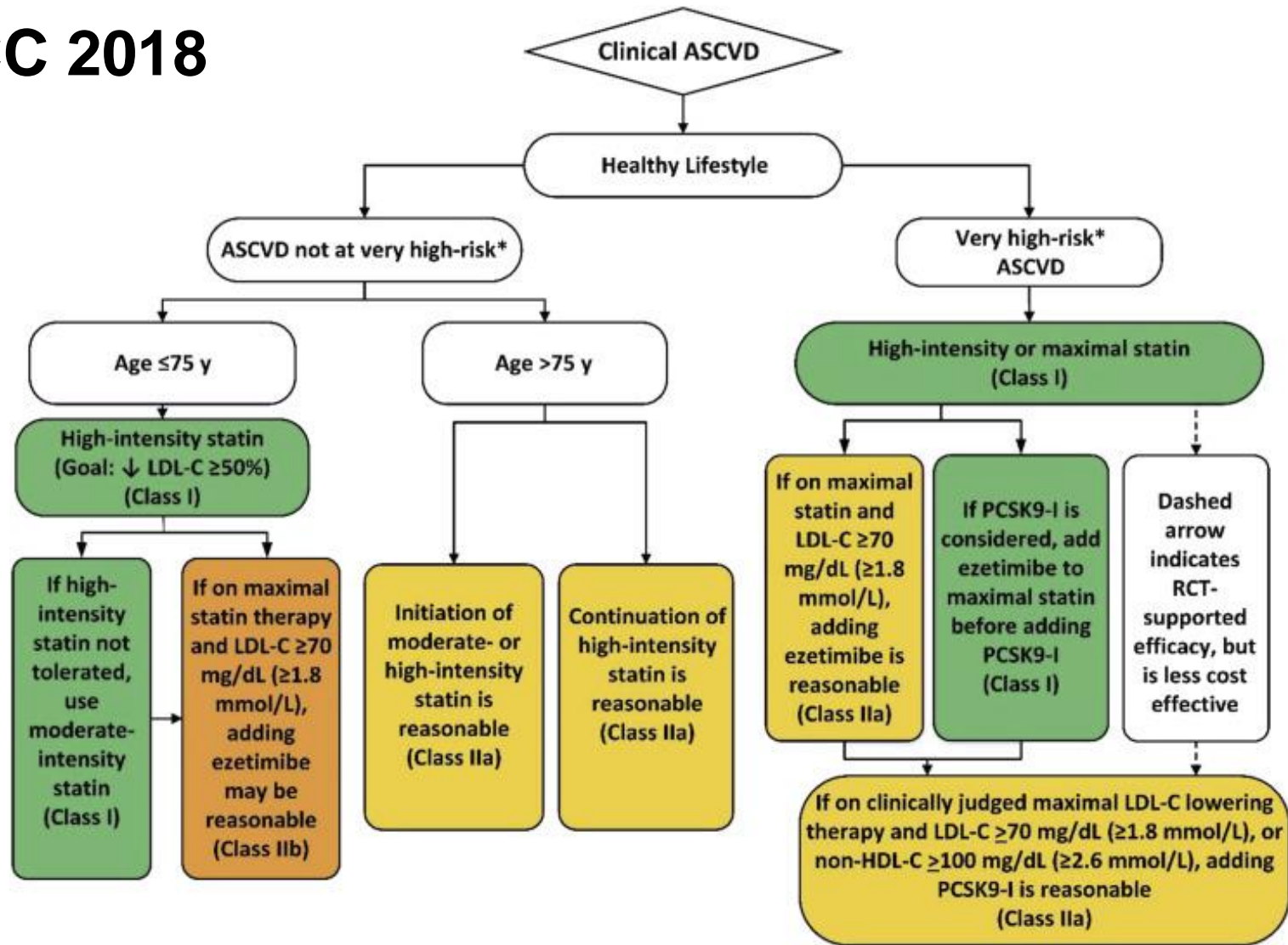
Population	Recommendation	Grade
Calculated 10-year CVD event risk of 10% or greater	Use low- to moderate-dose statin if 1) they have 1 or more CVD risk factors they have a calculated 10-year risk of a cardiovascular event of 10% or greater. Requires universal lipids screening in adults aged 40 to 75 years.	B
Calculated 10-year CVD event risk of 7.5% to 10%	Consider low- to moderate-dose statin to certain adults without a history of CVD when all of the following criteria are met: 1) they are aged 40 to 75 years; 2) they have 1 or more CVD risk factors (ie, dyslipidemia, diabetes, hypertension, or smoking); 3) they have a calculated 10-year risk of a cardiovascular event of 7.5% to 10%.	C
>76 years	Insufficient Evidence	I

AHA/ACC 2018



2018 AHA/ACC/AACVPR/AAPA/ABC/ACPM/ADA/AGS/APhA/ASPC/NLA/PCNA
Guideline on the Management of Blood Cholesterol

AHA/ACC 2018



2018 AHA/ACC/AACVPR/AAPA/ABC/ACPM/ADA/AGS/APhA/ASPC/NLA/PCNA
Guideline on the Management of Blood Cholesterol

Levels of Evidence Supporting American College of Cardiology/American Heart Association and European Society of Cardiology Guidelines, 2008-2018

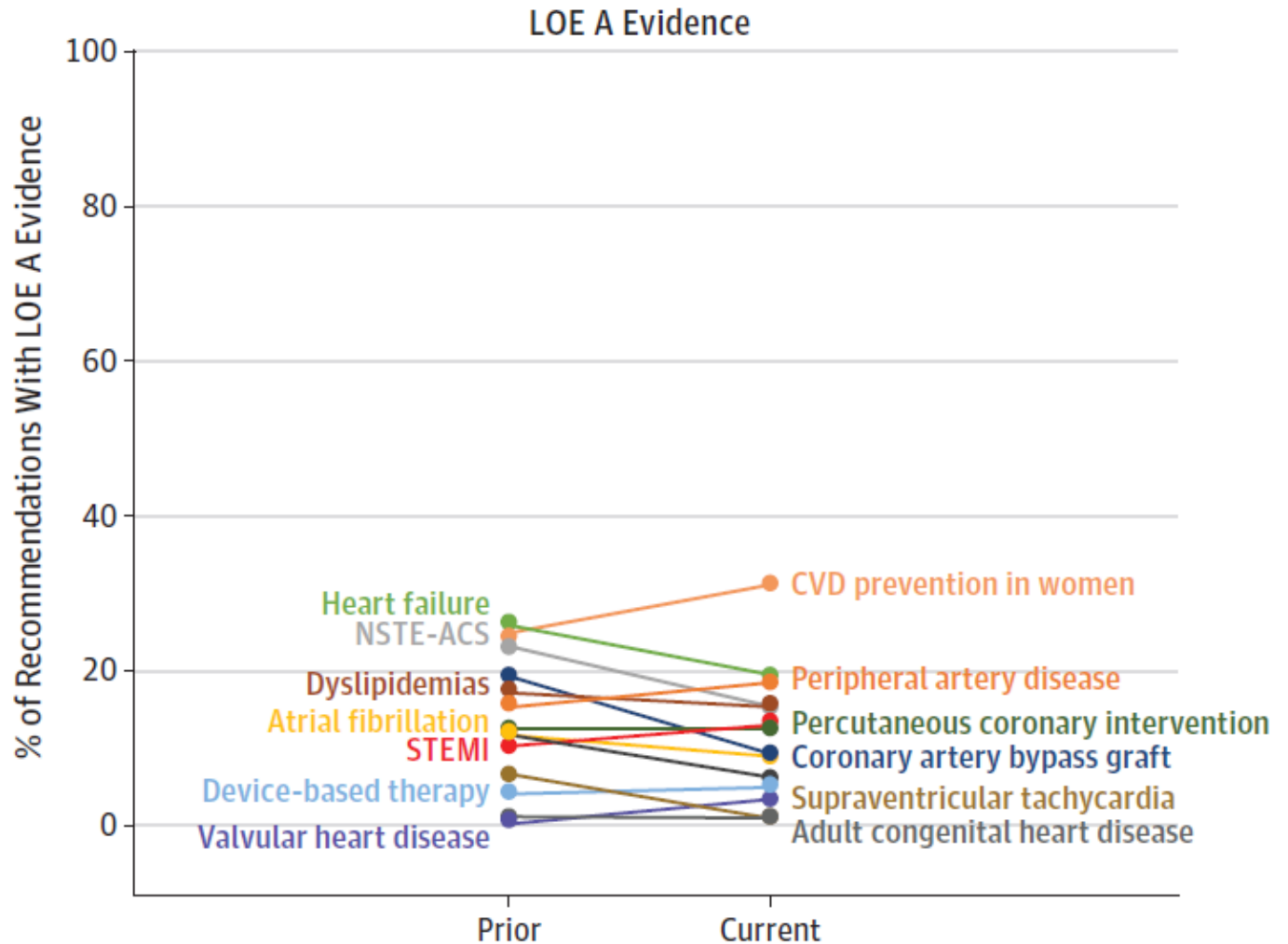
Fanaroff AC, Califf RM, Windecker S, Smith SC Jr, Lopes RD.

- **OBJECTIVE:** To determine the class of LOE supporting current Guidelines over time.
- **DATA:** Current American College of Cardiology/American Heart Association (ACC/AHA) and European Society of Cardiology (ESC) clinical guideline documents (2008-2018)
 - The number of recommendations and the distribution of LOE
 - A [supported by data from multiple RCTs or a single, large RCT]
 - B [supported by data from observational studies or a single RCT]
 - C [supported by expert opinion only]
- **MAIN OUTCOMES AND MEASURES:** The proportion of guideline recommendations supported by evidence from multiple RCTs (LOE A)
- **RESULTS:** A 26 current ACC/AHA guidelines
 - 248 recommendations as LOE A (8.5%) [Median 7.9%(25th-75th percentiles,0.9%-15.2%)]
 - 1465 (50.0%) as LOE B
 - 1217 (41.5%) as LOE C.
 - * Similar findings for ESC Guidelines.
- **CONCLUSIONS:** When comparing current guidelines with prior versions, the proportion of recommendations that were LOE A did not increase in either ACC/AHA (median, 9.0% [current] vs 11.7%[prior]) or ESC guidelines (median, 15.1%[current] vs 17.6%[prior]).

JAMA. 2019 Mar 19;321(11):1069-1080. doi: 10.1001/jama.2019.1122.

Proportion of Recommendations with Level of Evidence A

A Current and prior ACC/AHA guidelines



JAMA. 2019 Mar 19;321(11):1069-1080. doi: 10.1001/jama.2019.1122.

Diabetes Mellitus Screening

MYTH: Diabetes is not a serious disease.

FACT: Diabetes is a growing epidemic with a devastating physical, emotional and financial toll on our country.

It kills more Americans each year
than AIDS and breast cancer
COMBINED.



- 100 Million with Diabetics and Prediabetes in the US
- Diabetes Mellitus increases with age to an estimated 25% age>65 (Census data)
- Early asymptomatic treatment reduces cardiovascular risk
- Average Medical Expenditure for Diabetics \$13,750 per month
 - Estimates of >58% is diabetes related
 - Estimate is 2.3x higher compared to those without diabetes

Abnormal Blood Glucose and Type 2 Diabetes Screening

Population	Recommendation	Grade
<p>Adults aged 40 to 70 years who are overweight or obese</p>	<p>Test those individuals with a BMI ≥ 25</p> <p>Diagnosis:</p> <ul style="list-style-type: none"> • HgbA1C $\geq 6.5\%$ • Fasting Glucose of $\geq 126\text{mg/dl}$ 	<p>B</p>
	<p>Repeat Testing:</p> <p>Every 3 years for</p> <ul style="list-style-type: none"> • HgbA1C $< 5.7\%$ • Fasting Glucose of 100-125mg/dl <p>Every 1-2 years for</p> <ul style="list-style-type: none"> • HgbA1C 5.7-6.4% • Fasting Glucose of $\geq 126\text{mg/dl}$ 	<p>C</p>

Final Update Summary: Abnormal Blood Glucose and Type 2 Diabetes Mellitus: Screening. U.S. Preventive Services Task Force. September 2016.

Primary Care Measures

Diabetes

- **Comprehensive Diabetes Care:**

The percentage of patients 18-75 years of age with diabetes (1 & 2) who...

- **HgbA1c >9.0%**

- ...whose most recent HbA1c level during the measurement year was >9.0% (*poor control*) or was *missing a result*, or if an HbA1c test was not done during the measurement year.

- **HgbA1c testing**

- ...who received an HbA1c test during the measurement year.

<https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/QualityMeasures>

Primary Care Measures

Diabetes (continued)

- **Comprehensive Diabetes Care:**
The percentage of patients 18-75 years of age with diabetes (1 & 2) with...
 - **Retinal Exam**
 - ...who had an eye exam (retinal) performed.
 - **Foot Care**
 - ...who received a foot exam (visual inspection and sensory exam with mono filament and a pulse exam) during the measurement year.
 - **Nephropathy Screening**
 - ...who received a nephropathy screening test or had evidence of nephropathy during the measurement year.

<https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/QualityMeasures>

Primary Care Measures

Screening for Cancer

Primary Care Measures

Prevention and Wellness

- **Cervical Cancer Screening**
 - Percentage of Women age 21–64
 - who had cervical cytology performed every 3 years.
 - Percentage of Women age 30–64
 - who had cervical cytology/ HPV co-testing every 5 years.
- Non-recommended Cervical Cancer Screening in Adolescent Females
 - The percentage of women under the age of 21 who were screened unnecessarily for cervical cancer.

<https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/QualityMeasures>

Primary Care Measures

Prevention and Wellness

- **Breast Cancer Screening**
 - The percentage of women 50-74 years of age who had a mammogram to screen for breast cancer.
 - **Note:** Measure specifications align with the recently updated USPSTF guidelines.
- **Colorectal Cancer Screening**
 - The percentage of patients 50–75 years of age who had appropriate screening for colorectal cancer.

Question 2

Which of the following statements is incorrect about Breast Cancer Screening?

- a) Women should begin screening at the age of 40 and continue until the age of 75 with annual mammography
- b) Women age 60 to 69 are most likely to benefit from breast cancer screening
- c) False positive results are greatest in younger women, and lead to more unnecessary interventions
- d) Risk Assessment for breast cancer should precede decisions regarding breast cancer screening

Breast Cancer

- Most frequent type of Cancer (excluding Skin Cancer)
- Risk Stratification



Breast Cancer Screening

Population	Recommendation	Grade
Women aged 50 to 74 years	The USPSTF recommends biennial screening mammography for women aged 50 to 74 years.	B
Women aged 40 to 49 years	<p>The decision to start screening mammography in women prior to age 50 years should be an individual one</p> <ul style="list-style-type: none"> Average risk for breast cancer <ul style="list-style-type: none"> 40 to 49 years <ul style="list-style-type: none"> May reduce cancer risk, but <older women Increase false positives 50 to 74 years- Greatest Benefit 60 to 69 years are most likely to avoid breast cancer death through mammography screening. 	C
Women aged 75 years or older	The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening mammography in women aged 75 years or older.	I

Final Update Summary: Breast Cancer: Screening. U.S. Preventive Services Task Force. February 2018.
<https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/breast-cancer-screening>

Breast Cancer Risk Assessment

Table 5. FHS-7

Did any of your first-degree relatives have breast or ovarian cancer?
Did any of your relatives have bilateral breast cancer?
Did any man in your family have breast cancer?
Did any woman in your family have breast and ovarian cancer?
Did any woman in your family have breast cancer before age 50 y?
Do you have 2 or more relatives with breast and/or ovarian cancer?
Do you have 2 or more relatives with breast and/or bowel cancer?

* From reference ¹⁸. One positive response initiates referral.

Ontario Family History Assessment Tool, Manchester Scoring System, Referral Screening Tool, Pedigree Assessment Tool, and **FHS-7**.

*relatives =Include yourself, parents, children, brothers/sisters, aunts/uncles, nieces/nephews, and grandparents

Breast Cancer Screening Summary Findings

- Over a 10-year period, screening 10,000 women by age group:
 - age 40 to 49 years will result in 3 fewer breast cancer deaths
 - age 50 to 59 years will result in 8 fewer breast cancer deaths
 - age 60 to 69 years will result in 21 fewer breast cancer deaths.
- The benefits are lower for younger age group.
- Even with the conservative estimate of 1 in 8 breast cancer cases being over-diagnosed, for every woman who avoids a death from breast cancer through screening, 2 to 3 women will be treated unnecessarily.
- Women aged 40 to 49 years who have a first-degree relative with breast cancer have a risk for breast cancer similar to that of women aged 50 to 59 years without a family history.

Comparison of Breast Cancer Screening Guidelines

Breast Cancer Screening Guidelines for Women

	U.S. Preventive Services Task Force ¹ 2016	American Cancer Society ² 2015	American College of Obstetricians and Gynecologists ³ 2011	International Agency for Research on Cancer ⁴ 2015	American College of Radiology ⁵ 2010	American College of Physicians ⁸	American Academy of Family Physicians ⁷ 2016
Women aged 40 to 49 with average risk	The decision to start screening mammography in women prior to age 50 years should be an individual one. Women who place a higher value on the potential benefit than the potential harms may choose to begin biennial screening between the ages of 40 and 49 years.	<i>Women aged 40 to 44 years should have the choice to start annual breast cancer screening with mammograms if they wish to do so. The risks of screening as well as the potential benefits should be considered.</i> <i>Women aged 45 to 49 years should get mammograms every year.</i>	Screening with mammography and clinical breast exams annually.	Insufficient evidence to recommend for or against screening.	Screening with mammography annually.	Discuss benefits and harms with women in good health and order screening with mammography every two years if a woman requests it.	The decision to start screening mammography should be an individual one. Women who place a higher value on the potential benefit than the potential harms may choose to begin screening.
Women aged 50 to 74 with average risk	Biennial screening mammography is recommended.	<i>Women aged 50 to 54 years should get mammograms every year.</i> <i>Women aged 55 years and older should switch to mammograms every 2 years, or have the choice to continue yearly screening.</i>	Screening with mammography and clinical breast exam annually.	<i>For women aged 50 to 69 years, screening with mammography is recommended.</i> <i>For women aged 70 to 74 years, evidence suggests that screening with mammography substantially reduces the risk of death from breast cancer, but it is not currently recommended.</i>	Screening with mammography annually.	Physicians should encourage mammography screening every two years in average-risk women.	Biennial screening with mammography.

<https://www.cdc.gov/cancer/breast/pdf/BreastCancerScreeningGuidelines.pdf>

Primary Care Measures

Pulmonary

- Medication Management for People with Asthma
 - Percent of patients 5-64 years with persistent asthma & were dispensed appropriate medications that they remained on during the treatment period.
 - Two rates are reported:
 - 1) Percent of patients who remained on a controller medication for at least 50% of their treatment period.
 - 2) Percent of patients who remained on a controller medication for at least 75% of their treatment period.
- Avoidance of Antibiotic Treatment in Adults with Acute Bronchitis
 - The percentage of adults 18–64 years of age with a diagnosis of acute bronchitis who were not dispensed an antibiotic prescription.

Question 3

A 55 year old white male presents for his annual history and physical exam. He is concerned about Prostate Cancer even though he has no family history. What recommendations do you have for this patient?

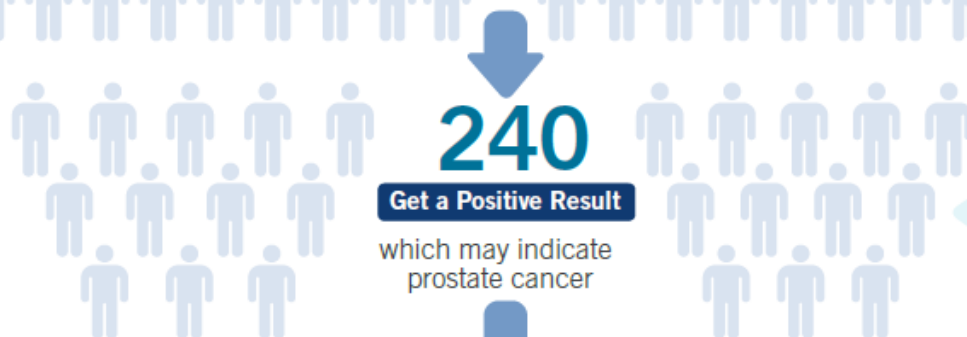
- a) He should have an Annual PSA and digital rectal exam.
- b) He should have a baseline PSA and annual PSA screen with discussion on risks and benefits of screening. Discuss risks and benefits and let him know he should not be screened since the risks for PSA screening outweigh the benefits.
- c) Annual Digital Rectal Exam and PSA every 5 years is adequate for low risk patients

Prostate Cancer Screening

Population	Recommendation	Grade
Men aged 55 to 69 years	For men aged 55 to 69 years, the decision to undergo periodic prostate-specific antigen (PSA)-based screening for prostate cancer should be an individual one. Clinicians should consider the balance of benefits and harms on the basis of family history, race/ethnicity, comorbid medical conditions, patient values about the benefits and harms of screening and treatment-specific outcomes, and other health needs. Clinicians should not screen men who do not express a preference for screening.	C
Men 70 years and older	The USPSTF recommends against PSA-based screening for prostate cancer in men 70 years and older.	D

Final Update Summary: Prostate Cancer: Screening. U.S. Preventive Services Task Force. April 2019.
<https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/prostate-cancer-screening1>



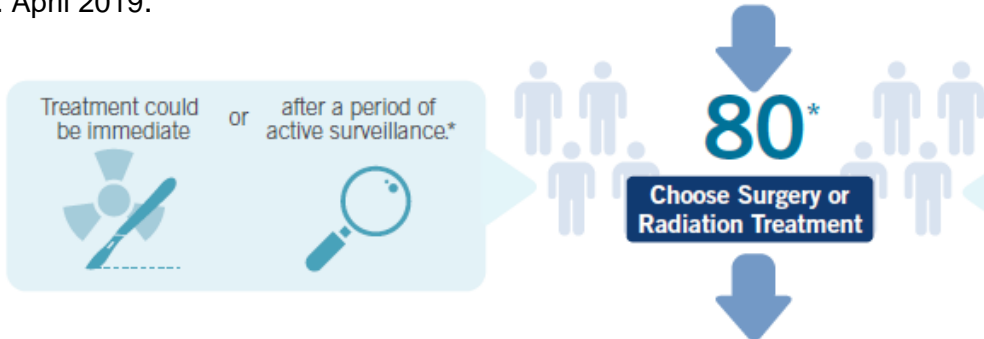


Many of these men will learn they have a **false-positive result** after getting a biopsy.
Potential side effects of biopsy:

- Pain • Bleeding
- Infection



20%–50%
of these men will be diagnosed with cancer that never grows, spreads, or harms them, also known as overdiagnosis.



Treatment could be immediate or after a period of active surveillance.*

Erectile dysfunction 50
Urinary incontinence 15
Number of men who will experience negative outcomes **

- 3** Avoid Cancer Spreading to Other Organs
- 1** Avoids Death From Prostate Cancer***
- 5** Die From Prostate Cancer Even After Surgery or Treatment

Benefits vs. Risks for Men 55-69

Prostate Cancer: Screening. U.S. Preventive Services Task Force. April 2019.

Colorectal Cancer Screening

Population	Recommendation	Grade
Adults aged 50 to 75 years	Recommends screening for colorectal cancer starting at age 50 years until 75 years. The risks and benefits of different screening methods vary.	A
Adults aged 76 to 85 years	<p>The decision to screen for colorectal cancer in adults aged 76 to 85 years should be an individual one.</p> <ul style="list-style-type: none">• Greatest benefit for those who have never been screened for colorectal cancer• Screening would be best if:<ol style="list-style-type: none">1) healthy enough to undergo treatment if colorectal cancer is detected2) do not have comorbid conditions that would significantly limit their life expectancy.	C

JAMA. 2016;315(23):2564-2575. doi:10.1001/jama.2016.5989

Colorectal Cancer Screening Methods

Screening Method	Frequency	Evidence of Efficacy	Other Considerations
Stool-Based Tests			
FOBT	Every year	High-sensitivity versions (eg, Hemoccult SENSА)	Performed at home
FIT	Every year	Colorectal Cancer Sensitivity 82% (79% to 88%) Specificity 84% (91% to 93%)	No bowel Prep Performed at Home
FIT-DNA	Every 1 or 3 y	Colorectal Cancer Sensitivity 92% (95% CI, 84% to 97%) Specificity 84% (95% CI, 84% to 85%)	There is insufficient evidence about appropriate longitudinal follow-up of abnormal findings after a negative diagnostic colonoscopy;
Direct Visualization Tests			
Colonoscopy	Every 10 y	Colorectal Cancer Sensitivity 94.72% Specificity 99.8%	Requires less frequent screening. Screening and Diagnostic

Question 4

- A 65 year old male with a 30 pack year history of smoking, who quit 5 years ago presents for chest pain and admitted to the CDU for serial enzymes. He is considered low risk for acute myocardial event and discharged is planned. He has a normal PA and Lateral CXR.
 - It is recommended that he follow up with PCP, and outpatient stress test with cardiologist on consult.
 - You recommend in addition to that he discuss Screening for Lung Cancer with
 - a) CXR every 3 years
 - b) Low Dose CT annually until he is 75
 - c) CXR annually
 - d) Low Dose CT annually indefinitely
 - e) CT with Contrast annually

Lung Cancer Screening



Population	Recommendation	Grade
Adults Aged 55-80, with a History of Smoking	<ul style="list-style-type: none">• Recommends annual screening for lung cancer with low-dose computed tomography (LDCT) if<ul style="list-style-type: none">• they have a 30 pack-year smoking history• and currently smoke• or have quit <u>within</u> the past 15 years.• Screening should be discontinued <i>once a person has not smoked for 15 years</i> or develops a health problem that substantially limits life expectancy or the ability or willingness to have curative lung surgery.	A

Final Update Summary: Lung Cancer: Screening. U.S. Preventive Services Task Force. July 2015.

<https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/lung-cancer-screening>

Primary Care Measures

Other Measures

Primary Care Measures

Prevention and Wellness

- **Tobacco Use: Screening and Cessation**
 - Percentage of patients who were screened for tobacco use at least once during the two-year measurement period
 - AND who received cessation counseling intervention if identified as a tobacco user.
- **Body Mass Index (BMI) Screening and Follow-Up**

during the current encounter or during the previous six months

 - Percentage of patients with a documented BMI **and**
 - For BMI outside of normal parameters, a follow-up plan is documented
- Normal Parameters:
 - Age >65 years BMI \geq **23** and < **30**
 - Age 18 – 64 years BMI \geq **18** and < **25**.

Primary Care Measures

Care Coordination / Patient Safety

Medication Reconciliation

Percentage of patients aged 18 years and older

- ***discharged from any inpatient facility*** (e.g. hospital, skilled nursing facility, or rehabilitation facility)
- ***and seen within 30 days of discharge*** in the office by the physician, prescribing practitioner, RN, or clinical pharmacist
- ***who had reconciliation of the discharge medications with the current medication list in the outpatient medical record documented.***
 - reported as two rates stratified by age group: 18-64 and 65+.

<https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/QualityMeasures>

Primary Care Measures

Utilization and Cost / Overuse

- Use of Imaging Studies in Low Back Pain

Patient Experience

- CG CAHPS

Behavioral Health

- Depression Response at 12 months Using PHQ-9 Screening Tool
 - Percent of patients with remission (score >9 and at <5 at 12 months)
- Depression Response at 12 months Using PHQ-9 Screening Tool
 - Progress Towards Remission (Score >9 → 50% reduction)

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Osteoporosis to Prevent Fractures

Population	Recommendation	Grade
Women 65 years and older	Recommend screening for osteoporosis osteoporotic fractures in women 65 years and older. (Medicare covers Biannual Screening)	B
Postmenopausal women <65 years at increased risk of osteoporosis	Recommend screening for osteoporosis as determined by a formal clinical risk assessment tool.	B
Men	Current evidence is insufficient to assess screening for osteoporosis to prevent osteoporotic fractures in men.	I

Osteoporosis to Prevent Fractures: Screening. U.S. Preventive Services Task Force. June 2018.

Frax Risk Assessment Tool

- Age
- Sex
- Weight
- Height
- Previous fracture
- Parent fractured hip
- Current smoking
- Glucocorticoids
- Rheumatoid arthritis
- Secondary osteoporosis
- Alcohol 3 or more units/day
- *Bone mineral density (BMD)*

Osteoporosis Screening

Tools to assess osteoporosis risk:

- Simple Calculated Osteoporosis Risk Estimation (SCORE; Merck)
- Osteoporosis Risk Assessment Instrument (ORAI)
- Osteoporosis Index of Risk (OSIRIS)
- Osteoporosis Self-Assessment Tool (OST).
- FRAX tool (University of Sheffield)
 - assesses a person's 10-year risk of fracture
 - Previous DXA results
 - Without Previous DXA
- Based on FRAX tool, a 65-year-old white woman with no other risk factors has an **8.4% 10-year risk** for any osteoporotic fracture.
- Screen a **woman <65** with FRAX tool est. **10 year risk >8.4%**

Question 5

USPTF Recommends Hepatitis C Screening is recommended for High risk for infection and annually for those born between 1945 and 1965.

- a) True
- b) False

Hepatitis C Screening

Population	Recommendation	Grade
Adults at High Risk	<p>Screening for hepatitis C virus (HCV) infection</p> <ul style="list-style-type: none">• Patients at high risk for infection.• Offering 1-time screening for HCV infection to adults born between 1945 and 1965.	B

Final Update Summary: Hepatitis C: Screening. U.S. Preventive Services Task Force. September 2016.
<https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/hepatitis-c-screening>

Adult Immunization Schedule 2019

(www.CDC.gov.)

Vaccine	19–21 years	22–26 years	27–49 years	50–64 years	≥65 years
Influenza inactivated (IIV) or Influenza recombinant (RIV) or	1 dose annually				
Influenza live attenuated (LAIV)					
Tetanus, diphtheria, pertussis (Tdap or Td)	1 dose Tdap, then Td booster every 10 yrs				
Measles, mumps, rubella (MMR)	1 or 2 doses depending on indication (if born in 1957 or later)				
Varicella (VAR)	2 doses (if born in 1980 or later)				
Zoster recombinant (RZV) (preferred) or					2 doses
Zoster live (ZVL)					1 dose
Human papillomavirus (HPV) Female	2 or 3 doses depending on age at initial vaccination				
Human papillomavirus (HPV) Male	2 or 3 doses depending on age at initial vaccination				
Pneumococcal conjugate (PCV13)					1 dose
Pneumococcal polysaccharide (PPSV23)	1 or 2 doses depending on indication				1 dose
Hepatitis A (HepA)	2 or 3 doses depending on vaccine				
Hepatitis B (HepB)	2 or 3 doses depending on vaccine				
Meningococcal A, C, W, Y (MenACWY)	1 or 2 doses depending on indication, then booster every 5 yrs if risk remains				
Meningococcal B (MenB)	2 or 3 doses depending on vaccine and indication				
Haemophilus influenzae type b (Hib)	1 or 3 doses depending on indication				60

National Impact Assessment of the Centers for Medicare & Medicaid Services (CMS) Quality Measures Reports 2018

- Patient impacts estimated from improved national measure rates
 - 670,000 additional patients with controlled blood pressure (2006–2015).
 - 510,000 fewer patients with poor diabetes control (2006–2015).
 - 12,000 fewer deaths following hospitalization for a heart attack (2008–2015).
 - 70,000 fewer unplanned readmissions (2011–2015).
 - 840,000 fewer pressure ulcers among nursing home residents (2011–2015).
- The highest estimated *Costs Avoided* for Key Indicators
 - increased medication adherence (\$4.2 billion–\$26.9 billion)
 - reduced pressure ulcers (\$2.8 billion–\$20.0 billion)
 - fewer patients with poor control of diabetes (\$6.5 billion–\$10.4 billion).
- Performance trends are improving for 60% for measures analyzed

<https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/QualityMeasures>

Thank You

