
Updates in Primary Care

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Disclosures

I have nothing to disclose

Learning Objectives

- Know recommended screening guidelines
- Familiarize with updated treatment protocols for common medical problems
- Recognize the core measures being used to assess for quality by CMS

Screening Guidelines

Grade Definitions

- **Grade A**
 - Recommended w/ a high certainty that the net benefit is substantial
 - Offer this service
 - **Grade B**
 - Recommended w/ high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial
 - Offer this service
 - **Grade C**
 - Recommend selectively offering of providing service to individual patients based on shared decision making. There is at least moderate certainty that the net benefit is small.
 - Offer for selected patients depending on individual circumstances.
 - **Grade D**
 - Recommend against this service. There is a moderate or high certainty that the service has no net benefit or the harms outweigh the benefits
 - Discourage use of this service
 - **Grade I**
 - Current evidence is insufficient to balance benefits and harms. Evidence is poor or lacking.
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Cancer screening

Breast Cancer

Colon cancer

Prostate Cancer

Lung Cancer

Cervical Cancer

Breast Cancer Screening

- When
 - Age start between 40 and 50 depending on risk factors
 - USPSTF says 50 for most women (Grade B) screening from 40-49 based on shared decision making (Grade C)
 - ACA says age 45
 - If family history of breast cancer in 1st degree relative, start 10 years prior to diagnosis
 - How
 - Mammography- preferred
 - Clinical breast exam and Self breast exam- not as standardized, no change in breast cancer deaths
 - MRI- in combination with mammography only for high-risk
 - Thermography- inferior based on several studies
 - US and tomography- may be used in combo w/ mammography if needed
 - How Often
 - USPSTF says every 2 years
 - ACA says yearly from 45-54 then every 2 years for average risk
 - Core measure: women aged 50-74 should have a mammogram at least every 2 years
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Colon Cancer Screening

- When

- Previously starting at age 50 or if FMH, 10 years prior to diagnosis of 1st degree relative
- ACA now recommends starting at age 45, may not yet be covered by insurance (2018)
- Continue until 75 or when life expectancy < 10 years

- How

- High risk patients (family history, h/o polyps, FMH genetic predisposition, IBD)- colonoscopy
 - Colonoscopy q10 years- gold standard
 - Sigmoidoscopy every 5 years
 - FIT testing yearly
 - CT Colonography every 5 years- might be preferred for older pts w/ comorbidities
 - FIT-DNA multitargeted stool DNA test (Cologuard) every 3 years. Higher sensitivity than FIT, but more expensive
 - Core measure: patients 50-75 years old should have appropriate CRC screening
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Prostate Cancer Screening

Famously controversial

- Shared decision making
 - Discuss risks vs benefits of screening
 - Average risk: start discussing at age 50-55 if life expectancy is over 10 years
 - Higher risk: BRCA carriers, AA men, men w/ FMH in a 1st degree relative diagnosed <65, may start discussion at age 40-45
 - Stop at 70 or if <10 year life expectancy
 - How
 - PSA: first line screening
 - DRE use for screening is controversial
 - If screening is negative, may repeat after 2 years for PSA <2.5 and after 1 year if PSA 2.5 or greater (ACS)
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Lung Cancer Screening

Lung cancer is the leading cause of cancer deaths among men and women

- When
 - Adults 55-80 (USPSTF) or 55-74 (ACS) who have a 30 pack-year history and currently smoke or quit within the past 15 years
 - How
 - Low-dose CT chest yearly
 - Abnormal result is a noncalcified nodule >4mm
 - Screening w/ CXR not recommended
 - Discuss risks of screening with the patient
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Cervical Cancer Screening

- When
 - Age 21-64
 - **No screening before 21** or after 64, diagnostic paps may, however, be necessary based on individuals
 - Stop at 65 if pt has had appropriate screening: at least 2 normal paps w/in 10 years
 - How
 - **Cervical cytology: age 21-29 every 3 years**
 - **Cervical cytology w/ HPV co-testing age 30-64 every 5 years**
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Chronic Condition Screening

Diabetes

Hypertension

Hyperlipidemia

HIV

Hepatitis C

Diabetes and Prediabetes Screening

- When
 - Risk factors: BMI >25, age >45, DM in 1st degree relative, sedentary lifestyle, high risk ethnic group, h/o GDM, HTN, HLD, PCOS, vascular disease
 - Adults w/ 2 or more risk factors should be screened every 3 years (ADA)
 - Adults w/o risk factors should be screened starting at age 45, repeat every 3 years (ADA)
 - USPSTF: screen adults 40-70 who are overweight or obese every 3 years
 - How
 - A1c, fasting plasma glucose, or 2 hour GTT
 - Diagnosis of Prediabetes
 - A1c 5.7%-6.4%, fasting glucose 100-126 or 2 hour GTT 140-199
 - Diagnosis of Diabetes
 - A1c >6.5%, fasting glucose >126 2 hour GTT >200, symptoms w/ random glucose >200
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Hypertension Screening

- Yearly screening at wellness visit for everyone 18 and older (may start earlier for patients w/ childhood obesity)
 - If risk factors for hypertension, screen q6mo
 - Stage 1- systolic 130-139mmHg or diastolic 80-89mmHg
 - Stage 2- systolic 140 or higher or diastolic 90 or higher
 - Diagnosis of hypertension is made off one reading if the patient presents in hypertensive urgency or emergency (BP >180/120 w/ or w/o symptoms) or has an initial screening of 160/100 w/ end-organ damage.
 - All other patients with elevated blood pressure will need at least 2 measurements for a diagnosis at least 2 weeks apart.
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Hyperlipidemia Screening

- All adults age 20-40: screen with a lipid panel every 4-6 years (AHA)
 - After age 40: Use ASCVD risk tool to assess 10 year risk and adjust screening interval based on the results.
 - LDL >190 should be treated in age 20-40, although a discussion should be had on risks/benefits of treatment
 - If lipids are near, but not at treatment threshold, repeat in 3 years
 - After age 40, use ASCVD risk estimator to decide on diagnosis and treatment of HLD.
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HIV

- Who

- Screen adolescents and adults beginning at age 15 up until age 65 at least once unless risk factors require screening earlier or later
- Screen women early during every pregnancy
- Risk factors: MSM, IV drug users, having anal intercourse w/o condom, vaginal intercourse w/o condom with more than 1 partner whose HIV status is unknown, transactional sex, presence of other STIs, partner with an STI, partner with HIV or in a high risk category or request for STI testing.
 - Screen patients with risk factors at least annually.

- How

- Preferred screening with a fourth-generation antigen/antibody combination HIV-1/2 immunoassay plus a confirmatory HIV-1/HIV-2 antibody differentiation immunoassay
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Hepatitis C

- Who
 - Adults age 18-79, screen at least once
 - Higher risk in baby boomer population (born between 1945 and 1965), those with HIV infection, MSM, past or present use of hemodialysis, currently or previously incarcerated, current or past history of IVDA
 - How
 - Screen with antibody test (POC, lab-based, rapid home tests)
 - Negative Ab test doesn't require further testing
 - Positive test requires f/u w/ HCV RNA
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Management Guidelines

Hypertension Management

Blood pressure goals

- JNC 7 vs. JNC 8: JNC 8 (2014 JAMA paper) recommended relaxing control guidelines. For core measures, either guideline is acceptable for now
 - JNC 7: patients 18-85 yo w/ diagnosis of HTN should have a goal BP of 140/90
 - JNC 8:
 - Pts age 18-59 goal BP 140/90
 - Pts 60-85 w/ diabetes or CKD goal 140/90
 - Pts 60-85 w/o diabetes or CKD goal 150/90
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CAD Management

Aspirin/Antithrombotic Use

- Who
 - Patients 18 and older who were discharged alive for acute MI, CABG or PCI during the prior 12 months or had a diagnosis of ischemic vascular disease
- What
 - Patients should be treated with aspirin or another antithrombotic for at least 1 year

Beta Blocker use

- Who
 - Patients 18 and older who were hospitalized and discharged alive w/in 6 months w/ a diagnosis of acute MI
- What
 - Patients should receive persistent beta blocker treatment for 6 months after discharge

Diabetes Management

A1c Goal

- Core measure goal for patients age 18-75 is below 9%
 - Test A1c at least yearly
 - Clinical goals
 - Most patients should have a goal of 7% or lower
 - Older patients or those with a h/o severe hypoglycemia should set a goal at 8% or lower
 - FSBG goals: fasting glucose 80 to 130 mg/dL; postprandial glucose (90 to 120 minutes after a meal) less than 180 mg/dL
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Other Diabetes Care Goals

- Eye exam: patients age 18-75 should have yearly retinal exam
 - Foot exam: patients age 18-75 should have yearly foot exam w/ inspection, monofilament exam and pulse
 - Nephropathy: patients age 18-75 should have yearly nephropathy screening
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FIRST-LINE Therapy is Metformin and Comprehensive Lifestyle (including weight management and physical activity)

INDICATORS OF HIGH-RISK OR ESTABLISHED ASCVD, CKD, OR HF¹

CONSIDER INDEPENDENTLY OF BASELINE A1C OR INDIVIDUALIZED A1C TARGET

ASCVD PREDOMINATES

- Established ASCVD
- Indicators of high ASCVD risk (age ≥ 55 years with coronary, carotid or lower extremity artery stenosis $>50\%$, or LVH)

PREFERABLY

GLP-1 RA with proven CVD benefit¹

OR

SGLT2i with proven CVD benefit¹ if eGFR adequate²

If A1C above target

If further intensification is required or patient is now unable to tolerate GLP-1 RA and/or SGLT2i, choose agents demonstrating CV safety:

- For patients on a GLP-1 RA, consider adding SGLT2i with proven CVD benefit¹
- DPP-4i if not on GLP-1 RA
- Basal insulin³
- TZD⁴
- SU⁵

HF OR CKD PREDOMINATES

- Particularly HFwEF (LVEF $<45\%$)
- CKD: Specifically eGFR 30-60 mL/min/1.73 m² or UACR >30 mg/g, particularly UACR >300 mg/g

PREFERABLY

SGLT2i with evidence of reducing HF and/or CKD progression in CVD trials if eGFR adequate²

OR

If SGLT2i not tolerated or contraindicated or if eGFR less than adequate² add GLP-1 RA with proven CVD benefit¹

If A1C above target

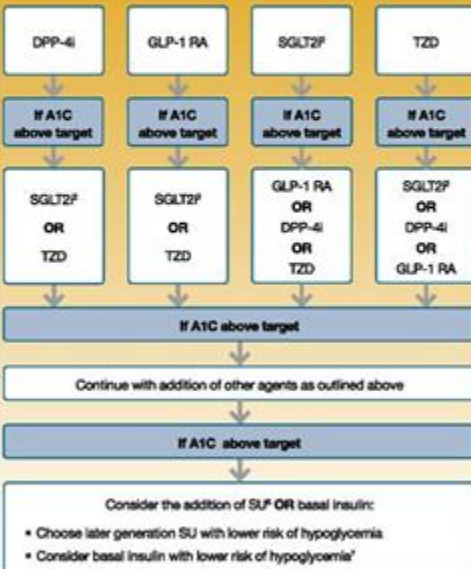
Avoid TZD in the setting of HF. Choose agents demonstrating CV safety:

- For patients on a SGLT2i, consider adding GLP-1 RA with proven CVD benefit¹
- DPP-4i (not saxagliptin) in the setting of HF (if not on GLP-1 RA)
- Basal insulin³
- SU⁵

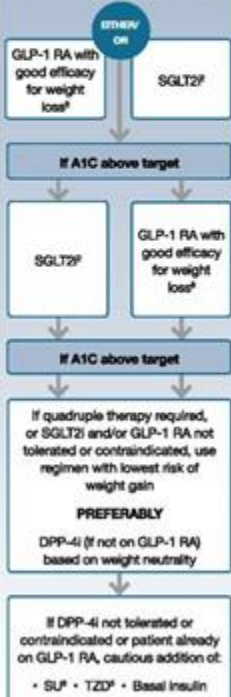
NO

IF A1C ABOVE INDIVIDUALIZED TARGET PROCEED AS BELOW

COMPELLING NEED TO MINIMIZE HYPOGLYCEMIA



COMPELLING NEED TO MINIMIZE WEIGHT GAIN OR PROMOTE WEIGHT LOSS



COST IS A MAJOR ISSUE⁹⁻¹⁰



1. Proven CVD benefit means it has label indication of reducing CVD events
 2. Be aware that SGLT2i labelling varies by region and individual agent with regard to indicated level of eGFR for initiation and continued use
 3. Empagliflozin, canagliflozin and dapagliflozin have shown reduction in HF and to reduce CKD progression in CVD trials. Canagliflozin has primary renal outcome data from CREDENCE. Dapagliflozin has primary heart failure outcome data from DAPA-HF
 4. Degludec or U100 glargine have demonstrated CVD safety
 5. Low dose may be better tolerated though less well studied for CVD effects

6. Choose later generation SU to lower risk of hypoglycemia, Glimepiride has shown similar CV safety to DPP-4i
 7. Degludec / glargine U300 < glargine U100 / detemir < NPH insulin
 8. Semaglutide > liraglutide > dulaglutide > exenatide > lisdexamfetamine
 9. If no specific comorbidities (i.e. no established CVD, low risk of hypoglycemia and lower priority to avoid weight gain or no weight-related comorbidities)
 10. Consider country- and region-specific cost of drugs. In some countries TZDs relatively more expensive and DPP-4i relatively cheaper

LVH = Left Ventricular Hypertrophy; HFwEF = Heart Failure reduced Ejection Fraction
 UACR = Urine Albumin-to-Creatinine Ratio; LVEF = Left Ventricular Ejection Fraction

How to get to A1c Goal

- Metformin remains 1st line agent for DM2
 - Early introduction of insulin for initial A1c >10%
 - Pts who have atherosclerotic disease
 - GLP-1 or SGLT2 with proven CVD benefit preferred
 - Pts who have CHF or CKD
 - SGLT2 w/ HF/CKD benefit
 - If contraindicated due to GFR, GLP-1
 - Compelling need to promote weight loss/minimize weight gain
 - GLP-1 w/ good weight loss or SGLT2
 - Avoid
 - SGLT2 with very high initial BS (300) due to risk of DKA
 - TZD in the setting of heart failure
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Hyperlipidemia Management

- Elevated LDL
 - Moderate-intensity statin: atorvastatin 10 to 20 mg once daily; lovastatin 40 mg once daily; pravastatin 40 mg once daily; rosuvastatin 5 mg once daily; rosuvastatin 5 to 10 mg daily; simvastatin 40 mg once daily
 - Further therapy needed: High-intensity statin: atorvastatin 40 to 80 mg once daily; rosuvastatin 20 to 40 mg once daily
 - Further therapy needed OR contraindication to statin therapy: PCSK9 or ezetimibe
 - Hypertriglyceridemia
 - Goal of treatment is to lower pancreatitis risk and potentially lower CVD event
 - First line lifestyle modifications
 - Fasting triglycerides >886 or significant h/o pancreatitis w/ triglycerides >500, start w/ fibrate
 - 2nd line combination of fibrates w/ fish oil
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Questions?

References

- <https://www.ncbi.nlm.nih.gov/books/NBK395579/>
- http://www.qualityforum.org/CQMC_Core_Sets.aspx
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