2014- 2015 Clinical Guidelines and Recommendations

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Published In/Presented At

Careyva, B. (2015, July 29). *2014-2015 Clinical Guidelines and Recommendations.* Presentation presented at: The Chesapeake Summer Escape CME Conference, Cambridge, MD.

2014 - 2015 Clinical Guidelines and Recommendations

PAFP Summer CME Conference

Beth Careyva, MD

July 29, 2015

Objectives

- Review recommendations from recently published clinical guidelines
- Discuss implications for clinical practice using a case-based approach

Guidelines for Review

- American Diabetes 2015 Standards of Care
- USPSTF Screening for Thyroid Dysfunction
- USPSTF Screening for Carotid Artery Stenosis
- American College of Physicians Diagnosis of OSA
- American Academy of Pediatrics Fluoride Use in Children
- Advisory Committee on Immunization Practices Pneumococcal Immunization Updates

Standards of Medical Care in Diabetes—2015: Summary of Revisions

Diabetes Care 2015;38(Suppl. 1):S4 | DOI: 10.2337/dc15-S003

American Diabetes 2015 Standards of Care

Standards of Medical Care in Diabetes—2015: Summary of Revisions

Diabetes Care 2015;38(Suppl. 1):S4 | DOI: 10.2337/dc15-S003

1. Strategies for Improving Care

Diabetes Care 2015;38(Suppl. 1):S5–S7 | DOI: 10.2337/dc15-S004

Recommendations

- A patient-centered communication style that incorporates patient preferences, assesses literacy and numeracy, and addresses cultural barriers to care should be used. **B**
- Treatment decisions should be timely and founded on evidence-based guidelines that are tailored to individual patient preferences, prognoses, and comorbidities. **B**
- Care should be aligned with components of the Chronic Care Model (CCM) to ensure productive interactions between a prepared proactive practice team and an informed activated patient. **A**
- When feasible, care systems should support team-based care, community involvement, patient registries, and decision support tools to meet patient needs. **B**

Standards of Medical Care in Diabetes—2015: Summary of Revisions

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Section 2: Classification and Diagnosis of Diabetes

- BMI cut point for screening overweight and obese Asian Americans for prediabetes and type 2 diabetes changed from 25 kg/m^2 to 23 kg/m^2

Standards of Medical Care in Diabetes—2015: Summary of Revisions

Diabetes Care 2015;38(Suppl. 1):S4 | DOI: 10.2337/dc15-S003

Section 4: Foundations of Care: Education, Nutrition, Physical Activity, Smoking Cessation, Psychosocial Care, and Immunization

- Limit time spent being sedentary to < 90 minutes at a time
- E-cigarettes not supported as an alternative to smoking
- Immunization recommendations updated to include recommendations for PCV13 and PPSV23

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Diabetes Care 2015;38(Suppl. 1):S4 | DOI: 10.2337/dc15-S003

Section 6: Glycemic Targets

- Fasting blood glucose target: 80-130 mg/dL
  (previously 70-130 mg/dL)

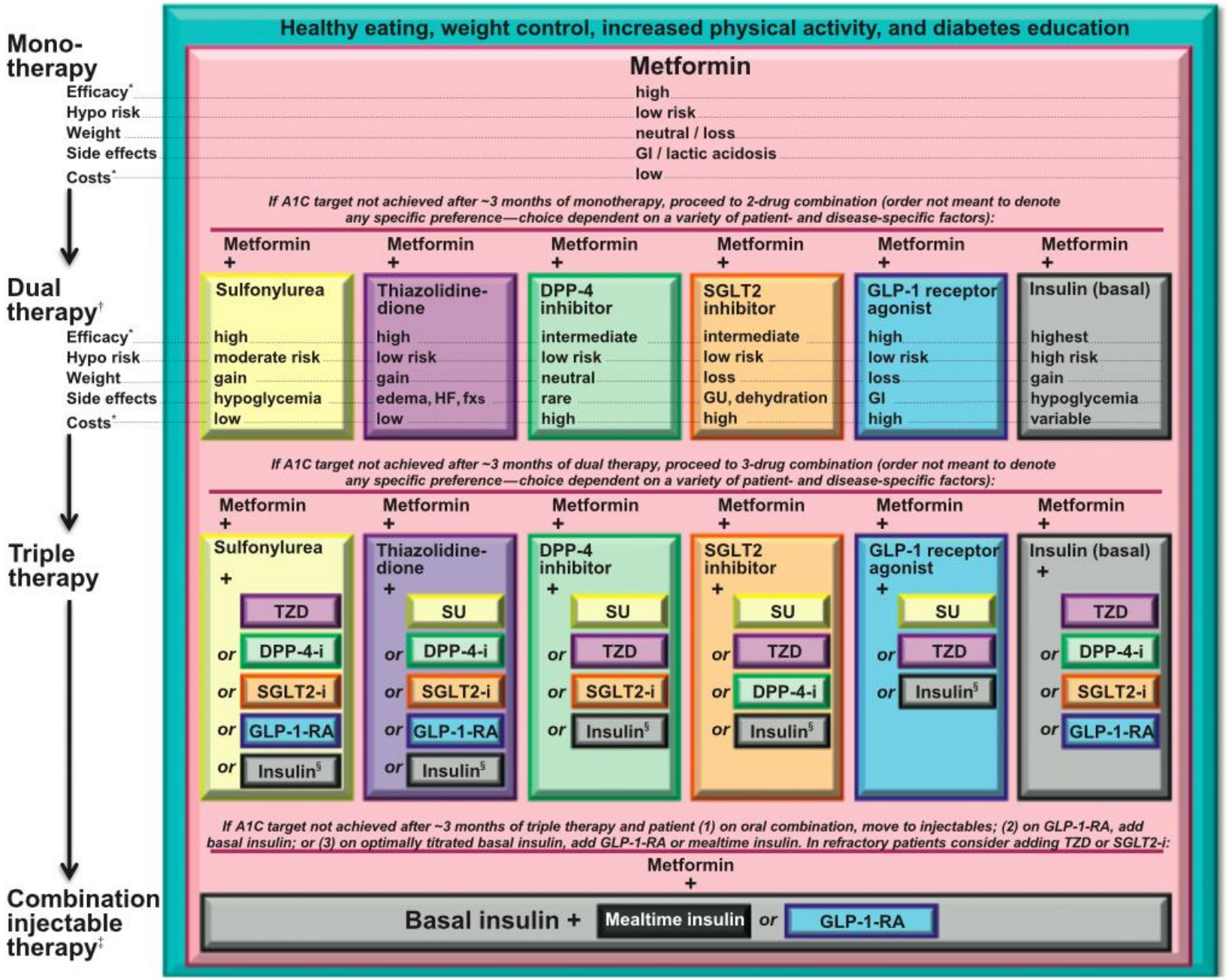
- New recommendations to assess readiness for continuous glucose monitoring (CGM)

Standards of Medical Care in Diabetes—2015: Summary of Revisions

Diabetes Care 2015;38(Suppl. 1):S4 | DOI: 10.2337/dc15-S003

Section 7: Approaches to Glycemic Treatment

- Algorithm updated to reflect all currently available therapies


Healthy eating, weight control, increased physical activity, and diabetes education
Mono-therapy
Efficacy*
Hypo risk
Weight
Side effects
Costs*
Metformin
high
low risk
neutral / loss
GI / lactic acidosis
low
If A1C target not achieved after ~3 months of monotherapy, proceed to 2-drug combination (order not meant to denote any specific preference—choice dependent on a variety of patient- and disease-specific factors):
Dual therapy†
Efficacy*
Hypo risk
Weight
Side effects
Costs*
Metformin + Sulfonylurea
high
moderate risk
gain
hypoglycemia
low
Metformin + Thiazolidine-dione
high
low risk
gain
edema, HF, fxs
low
Metformin + DPP-4 inhibitor
intermediate
low risk
neutral
rare
high
Metformin + SGLT2 inhibitor
intermediate
low risk
loss
GU, dehydration
high
Metformin + GLP-1 receptor agonist
high
low risk
loss
GI
high
Metformin + Insulin (basal)
highest
high risk
gain
hypoglycemia
variable
If A1C target not achieved after ~3 months of dual therapy, proceed to 3-drug combination (order not meant to denote any specific preference—choice dependent on a variety of patient- and disease-specific factors):
Triple therapy
Metformin + Sulfonylurea + TZD or DPP-4-i or SGLT2-i or GLP-1-RA or Insulin§
Metformin + Thiazolidine-dione + SU or DPP-4-i or SGLT2-i or GLP-1-RA or Insulin§
Metformin + DPP-4 inhibitor + SU or TZD or SGLT2-i or Insulin§
Metformin + SGLT2 inhibitor + SU or TZD or DPP-4-i or Insulin§
Metformin + GLP-1 receptor agonist + SU or TZD or Insulin§
Metformin + Insulin (basal) + TZD or DPP-4-i or SGLT2-i or GLP-1-RA
If A1C target not achieved after ~3 months of triple therapy and patient (1) on oral combination, move to injectables; (2) on GLP-1-RA, add basal insulin; or (3) on optimally titrated basal insulin, add GLP-1-RA or mealtime insulin. In refractory patients consider adding TZD or SGLT2-i:
Combination injectable therapy‡
Metformin +
Basal insulin + Mealtime insulin or GLP-1-RA

FDA Approved DM2 Medications

- SGL2 Inhibitors
  - Dapagliflozen (January 2014)
  - Empagliflozen (August 2014)
- GLP1 Receptor Agonists
  - Abliglutide (April 2014)
  - Dulaglutide (April 2014)

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Section 8: Cardiovascular Disease and Risk Management

- Diastolic blood pressure goal: 90 mmHg for most people with diabetes and hypertension
- Statin treatment recommendations based on 2013 American College of Cardiology/American Heart Association guidelines
- Screening lipid profile recommended at diagnosis, age 40, and “periodically thereafter”

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Section 9: Microvascular Complications and Foot Care

- Foot exam at every visit for patients with insensate feet, foot deformities, or a history of foot ulcers

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Section 11: Children and Adolescents

- A target A1c of <7.5% is recommended, though individualization is encouraged

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Section 12: Management of Diabetes in Pregnancy

- New section with recommendations related to pregnancy and diabetes, including preconception counseling, medications, blood glucose targets, and monitoring

Recommendations

- Provide preconception counseling that addresses the importance of tight control in reducing the risk of congenital anomalies with an emphasis on achieving A1C <7%, if this can be achieved without hypoglycemia. **B**
- Potentially teratogenic medications (ACE inhibitors, statins, etc.) should be avoided in sexually active women of childbearing age who are not using reliable contraception. **B**
- GDM should be managed first with diet and exercise, and medications should be added if needed. **A**
- Women with pregestational diabetes should have a baseline ophthalmology exam in the first trimester and then be monitored every trimester as indicated by degree of retinopathy. **B**
- Due to alterations in red blood cell turnover that lower the normal A1C level in pregnancy, the A1C target in pregnancy is <6% if this can be achieved without significant hypoglycemia. **B**
- Medications widely used in pregnancy include insulin, metformin, and glyburide; most oral agents cross the placenta or lack long-term safety data. **B**

JM

- 74 year old female
- PMH: DM2, HTN, HL, osteoporosis
- Medications: metformin, glipizide, lisinopril, atorvastatin, ibandronate, calcium/vitamin D
- 3 month follow up visit

JM

- Fasting blood glucose log

Date	Fasting Blood Glucose
June 1	72
June 2	104
June 3	79
June 4	97
June 5	81

What would you do next? (choose all that apply)

A) Tell her that her diabetes is very well controlled
B) Review signs/symptoms of hypoglycemia
C) Discontinue glipizide
D) Discontinue metformin and glipizide

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Summary

- Diastolic blood pressure and cholesterol guidelines updated
- Lower end of fasting blood glucose target adjusted to 80 mg/dL
- Focus on individualization and patient-centered care

USPSTF Screening for Thyroid Dysfunction

U.S. Preventive Services Task Force 2015 Recommendation

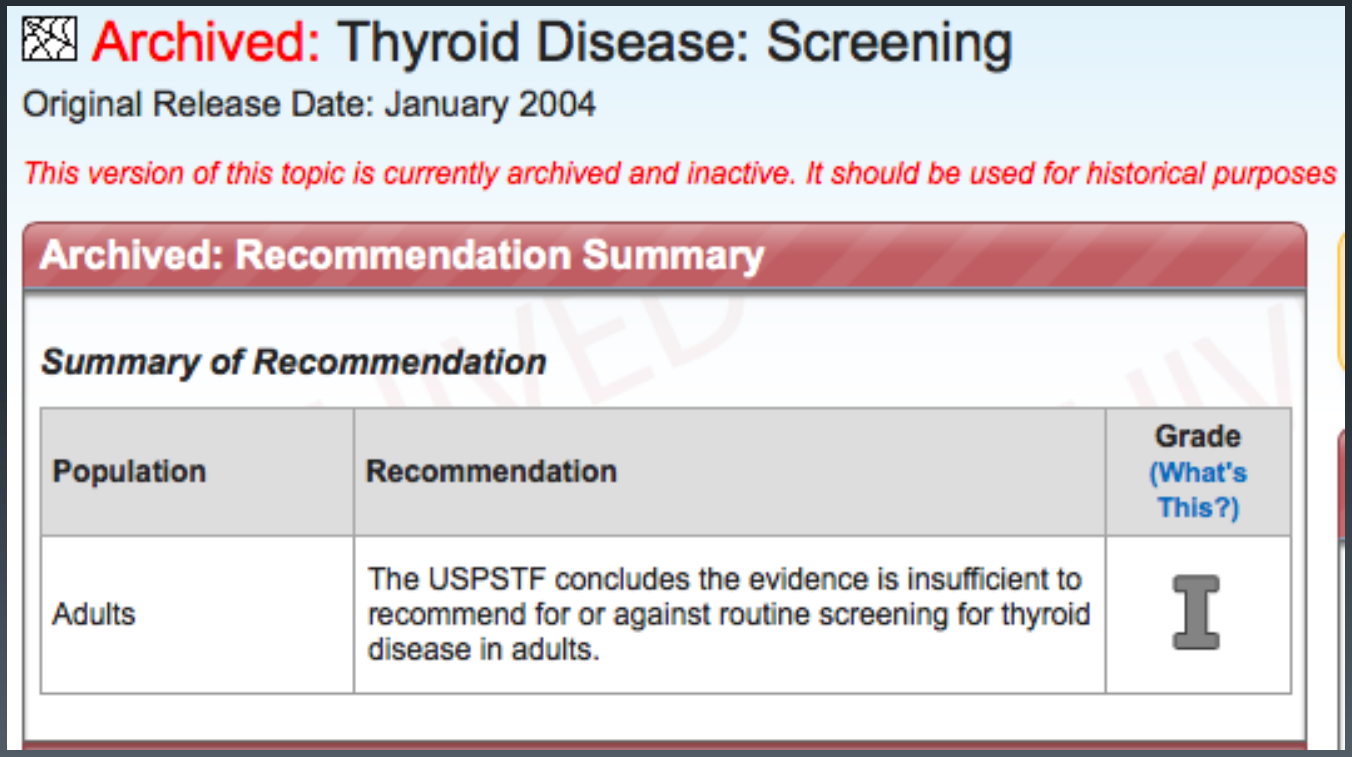
Thyroid Dysfunction: Screening

Release Date: March 2015

Recommendation Summary

Population	Recommendation	Grade (What's This?)
Nonpregnant, asymptomatic adults	The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for thyroid dysfunction in nonpregnant, asymptomatic adults.	I

U.S. Preventive Services Task Force 2004 Recommendation



Archived: Thyroid Disease: Screening

Original Release Date: January 2004

This version of this topic is currently archived and inactive. It should be used for historical purposes

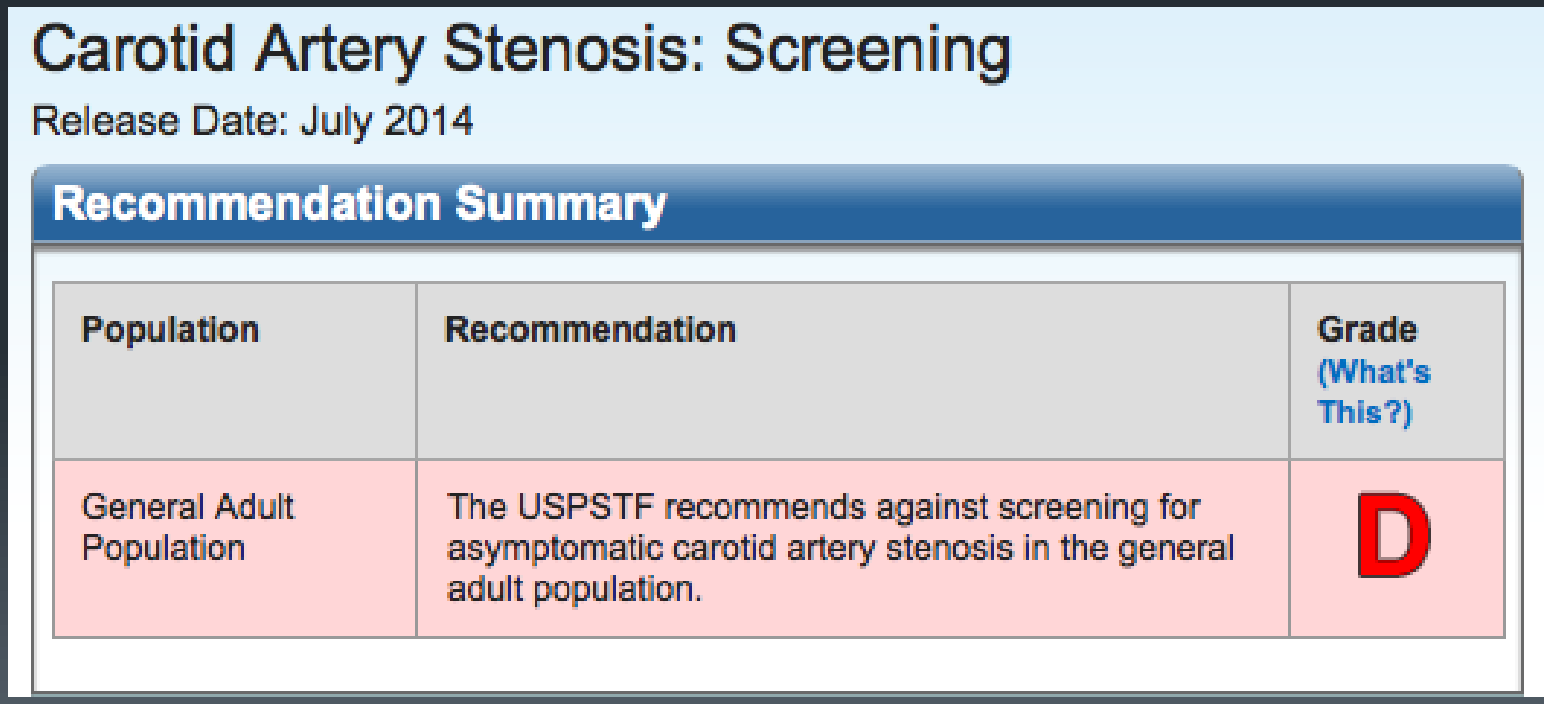
Archived: Recommendation Summary

Summary of Recommendation

Population	Recommendation	Grade (What's This?)
Adults	The USPSTF concludes the evidence is insufficient to recommend for or against routine screening for thyroid disease in adults.	I

USPSTF Screening for Carotid Artery Stenosis

U.S. Preventive Services Task Force 2014 Recommendation



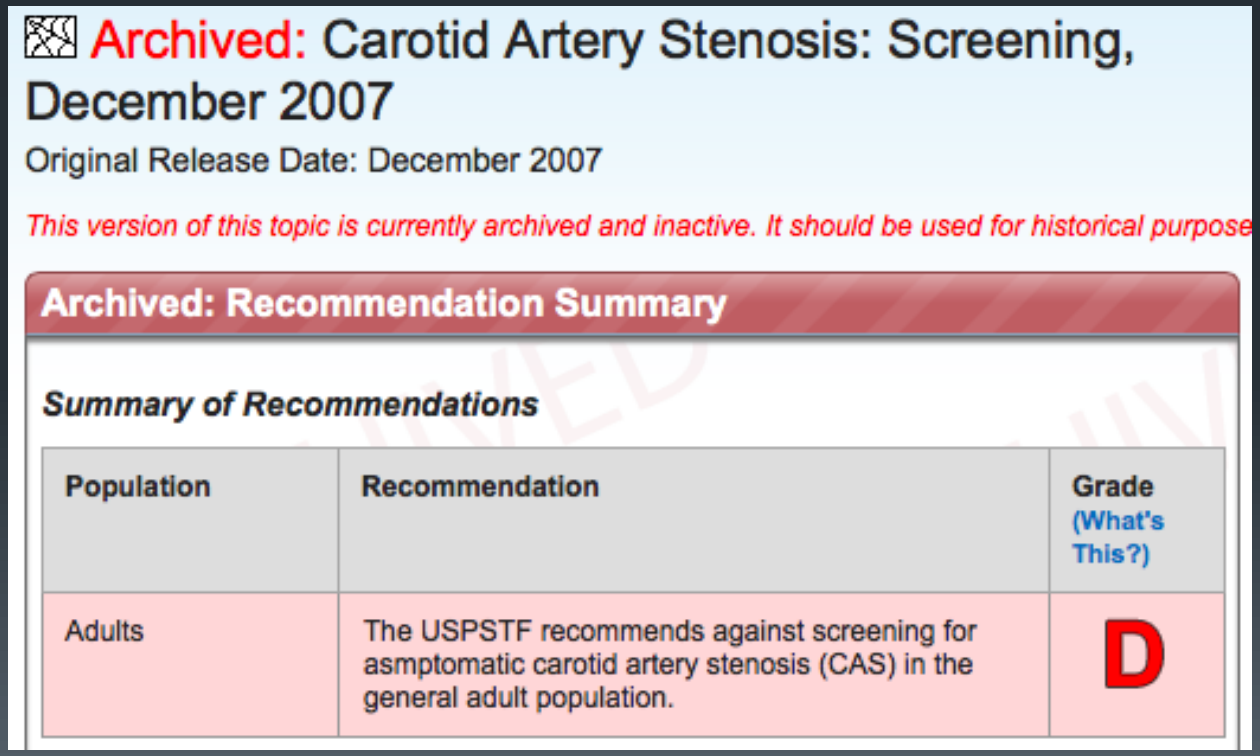
Carotid Artery Stenosis: Screening

Release Date: July 2014

Recommendation Summary

Population	Recommendation	Grade (What's This?)
General Adult Population	The USPSTF recommends against screening for asymptomatic carotid artery stenosis in the general adult population.	D

U.S. Preventive Services Task Force 2007 Recommendation



Archived: Carotid Artery Stenosis: Screening, December 2007

Original Release Date: December 2007

This version of this topic is currently archived and inactive. It should be used for historical purpose

Archived: Recommendation Summary

Summary of Recommendations

Population	Recommendation	Grade (What's This?)
Adults	The USPSTF recommends against screening for asmptomatic carotid artery stenosis (CAS) in the general adult population.	D

American College of Physicians Diagnosis of OSA

CLINICAL GUIDELINE

ACP American College of Physicians℠
Leading Internal Medicine, Improving Lives

Diagnosis of Obstructive Sleep Apnea in Adults: A Clinical Practice Guideline From the American College of Physicians

Amir Qaseem, MD, PhD, MHA; Paul Dallas, MD; Douglas K. Owens, MD, MS; Melissa Starkey, PhD; Jon-Erik C. Holty, MD, MS; and Paul Shekelle, MD, PhD, for the Clinical Guidelines Committee of the American College of Physicians*

- Recommendation 1: ACP Recommends a sleep study for patients with unexplained daytime sleepiness
- Grade: weak recommendation, low-quality evidence

CLINICAL GUIDELINE

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Diagnosis of Obstructive Sleep Apnea in Adults: A Clinical Practice Guideline From the American College of Physicians

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- Recommendation 2: ACP recommends polysomnography for diagnostic testing in patients suspected of obstructive sleep apnea. ACP recommends portable sleep monitors in patients without serious comorbidities as an alternative to polysomnography when polysomnography is not available for diagnostic testing.
- Grade: weak recommendation, moderate quality evidence

ACP Recommendations for OSA

- Increased emphasis on diagnostic testing for unexplained daytime sleepiness
- Portable monitors may be used in low risk patients
- Utility of portable monitors for diagnosing OSA in patients with comorbid conditions, such as CHF or COPD, unknown

Case: SJ

"I feel so tired during the day, even when I get a lot of sleep."

- 34 year old female
- PMH: obesity, gestational diabetes
- SH: Lives with husband and 1 year old child

Case: SJ

- TSH, CBC, and Lyme's tests all normal
- Sleep hygiene has not decreased fatigue

What would you do next?

A) Order a sleep study
B) Tell her to drink more coffee
C) Encourage close follow up and consider further testing if symptoms progress or do not improve

What would you do next?

A) Order a sleep study
B) Tell her to drink more coffee
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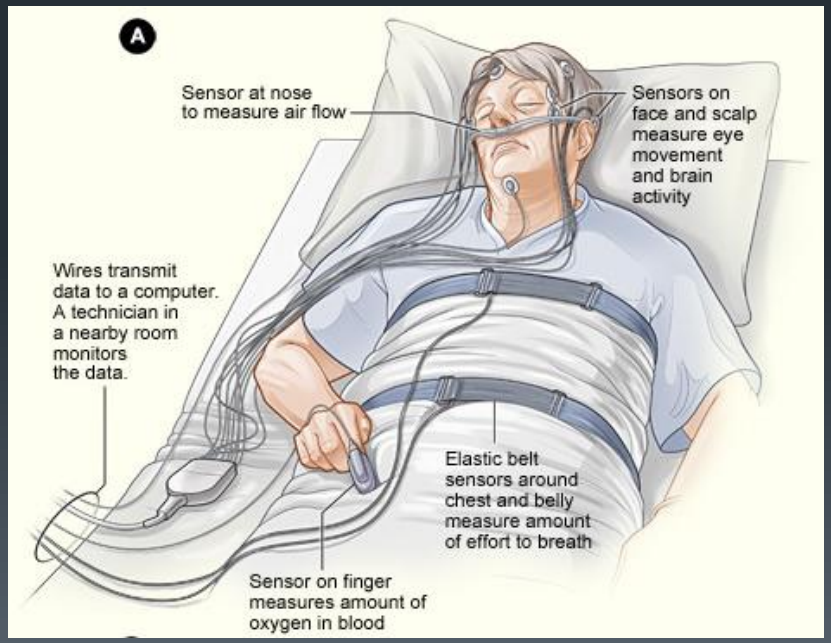
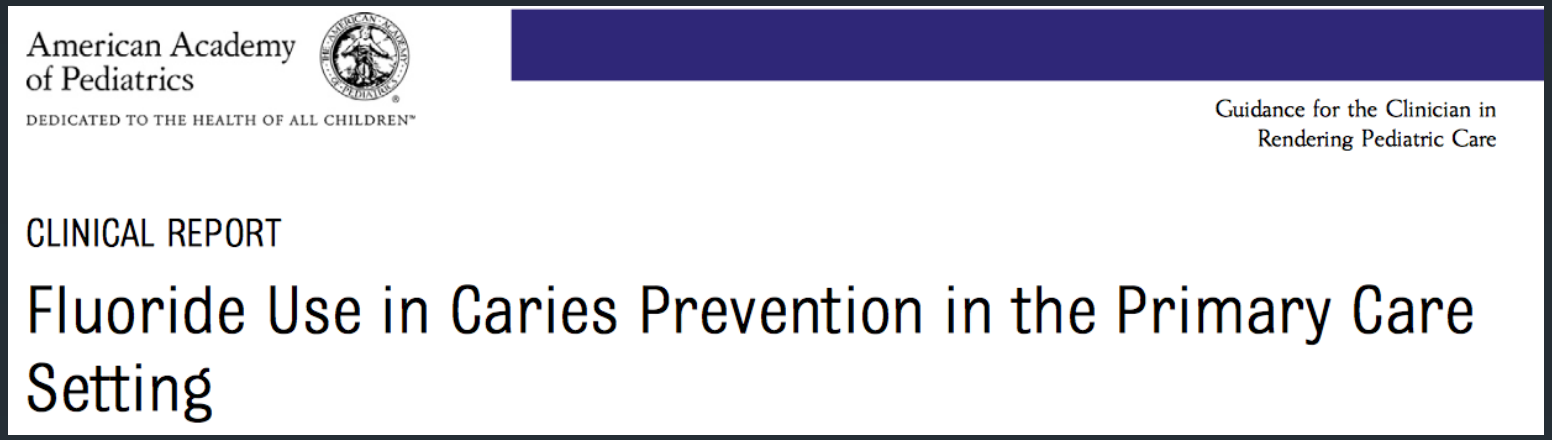
Daytime Sleepiness

- Sleep study warranted for unexplained daytime sleepiness



Sleepcenter.org

American Academy of Pediatrics Fluoride Use in Children



- Dental caries are the most common chronic disease of childhood
- Caries (acid produced by bacteria erodes tooth enamel) are preventable
- Fluoride has proven effectiveness to decrease dental caries

American Academy of Pediatrics

DEDICATED TO THE HEALTH OF ALL CHILDREN™

Guidance for the Clinician in Rendering Pediatric Care

CLINICAL REPORT

Fluoride Use in Caries Prevention in the Primary Care Setting

Fluoride Modalities

TABLE 1 Summary of Fluoride Modalities for Low- and High-Risk Patients

Fluoride Modality	Low Caries Risk	High Caries Risk
Toothpaste	Starting at tooth emergence (smear of paste until age 3 y, then pea-sized)	Starting at tooth emergence (smear of paste until age 3 y, then pea-sized)
Fluoride varnish	Every 3–6 mo starting at tooth emergence	Every 3–6 mo starting at tooth emergence
Over-the-counter mouth rinse	Not applicable	Starting at age 6 y if the child can reliably swish and spit
Community water fluoridation	Yes	Yes
Dietary fluoride supplements	Yes, if drinking water supply is not fluoridated	Yes, if drinking water supply is not fluoridated

Fluoride Use in Caries Prevention

- Perform oral health risk assessments on all children beginning at 6 months of age
- Assess a child's exposure to fluoride and determine the need for supplements
- Understand indications for fluoride varnish
- Advocate for water fluoridation in the local community

What Public Health Can Learn About Branding From "Parks and Recreation": Fluoride, TDAZZLE, and H2Flow

"All I have on my side is facts and science...and people hate facts and science".

-Leslie Knope

Oral Health Risk Tools Available

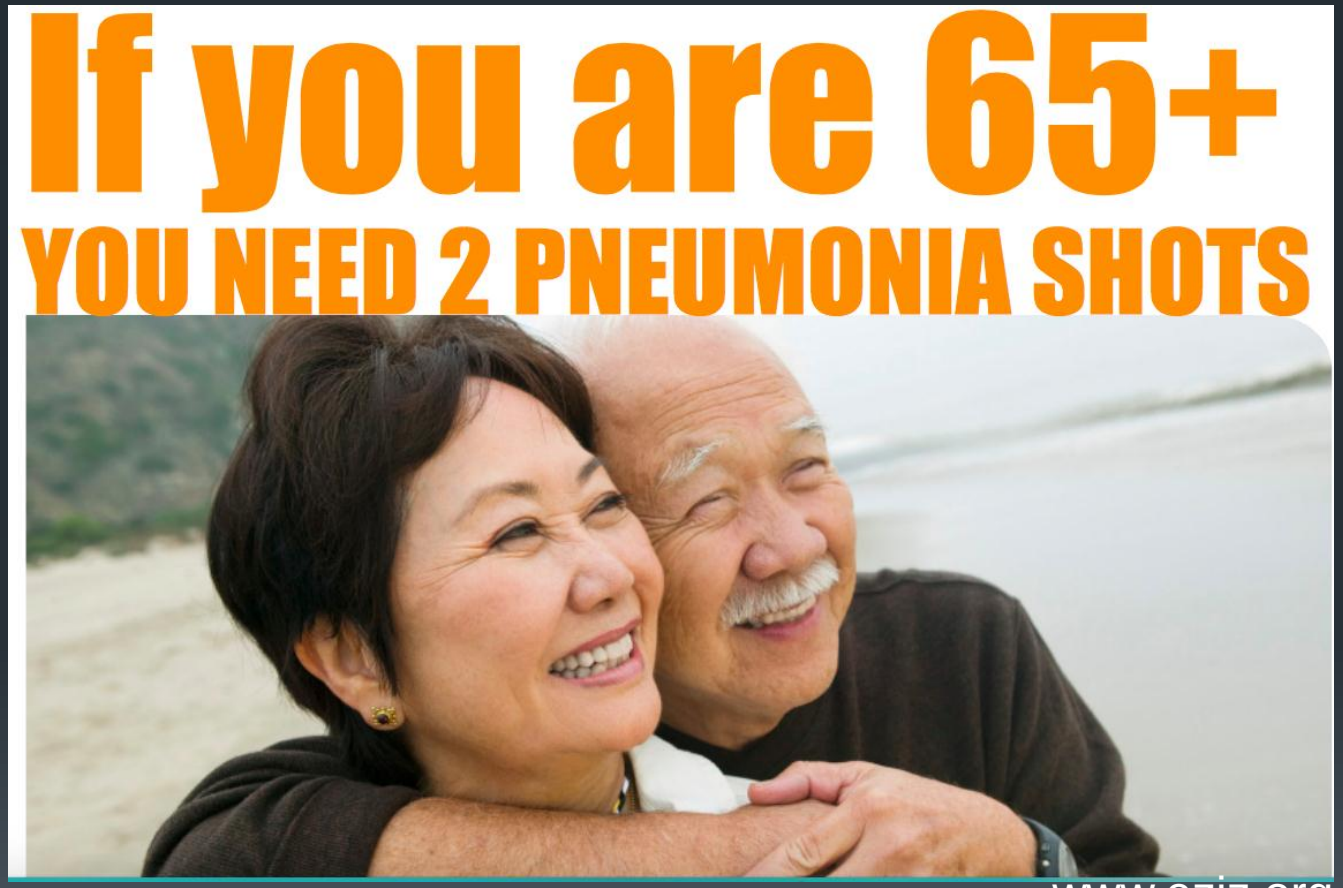
TABLE 1

American Academy of Pediatric Dentistry Caries-Risk Assessment Tool (CAT)

Risk Factors to Consider	**Risk Indicators**		
(For each item below, circle the most accurate response found to the right under "Risk Indicators")	High	Moderate	Low
Part 1 – History (determined by interviewing the parent/primary caregiver)			
Child has special health care needs, especially any that impact motor coordination or cooperation[A]	Yes		No
Child has condition that impairs saliva (dry mouth)[B]	Yes		No
Child's use of dental home (frequency of routine dental visits)	None	Irregular	Regular
Child has decay	Yes		No
Time lapsed since child's last cavity	<12 months	12 to 24 months	>24 months
Child wears braces or orthodontic/oral appliances[C]	Yes		No
Child's parent and/or sibling(s) have decay	Yes		No

Brightfutures.aap.org

Advisory Committee on Immunization Practices Pneumococcal Immunization Updates

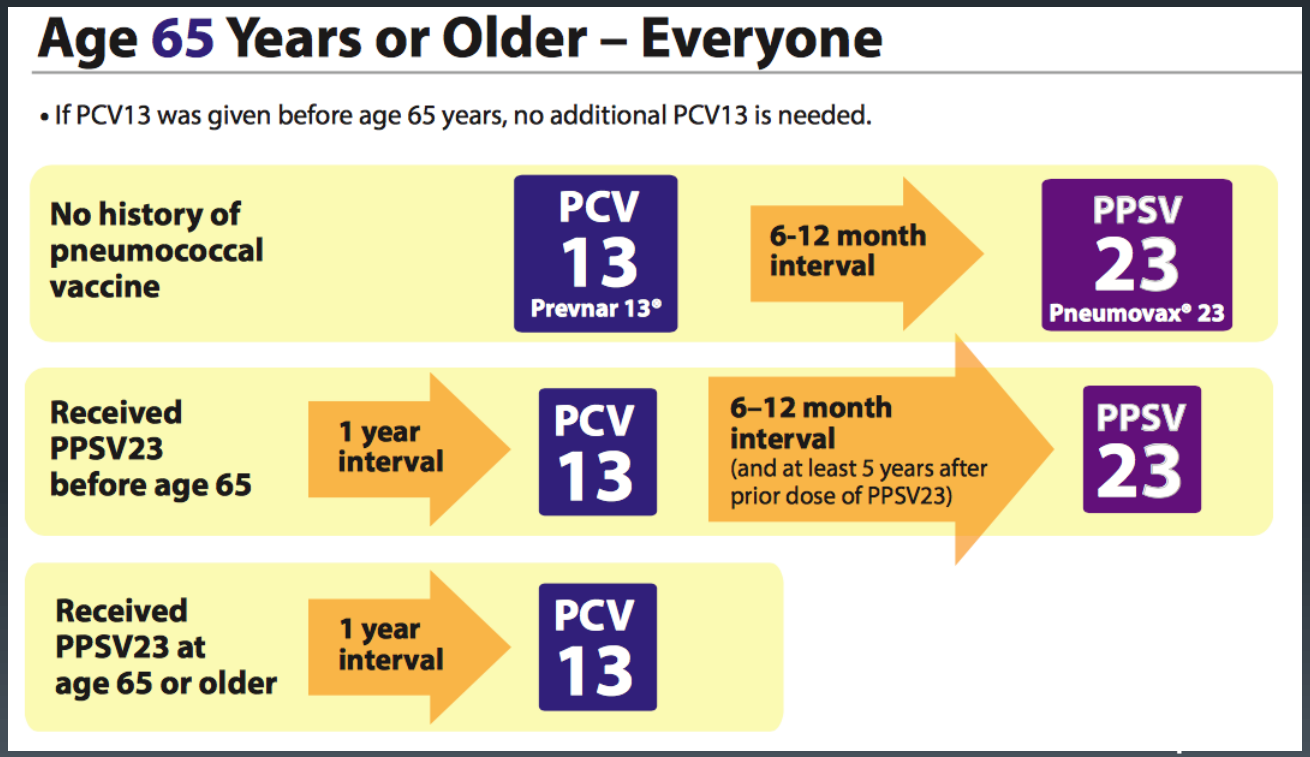


www.eziz.org

Advisory Committee on Immunization Practices - Recommendations for PCV13 Vaccine

- All adults 65 years of age or older receive a dose of PCV13 followed by a dose of PPSV23 6-12 months later
- Adults over age 65 who have already received PPSV23 at age 65 and older can have PCV13 in 12 months

Recommendations for Age 65 or Older



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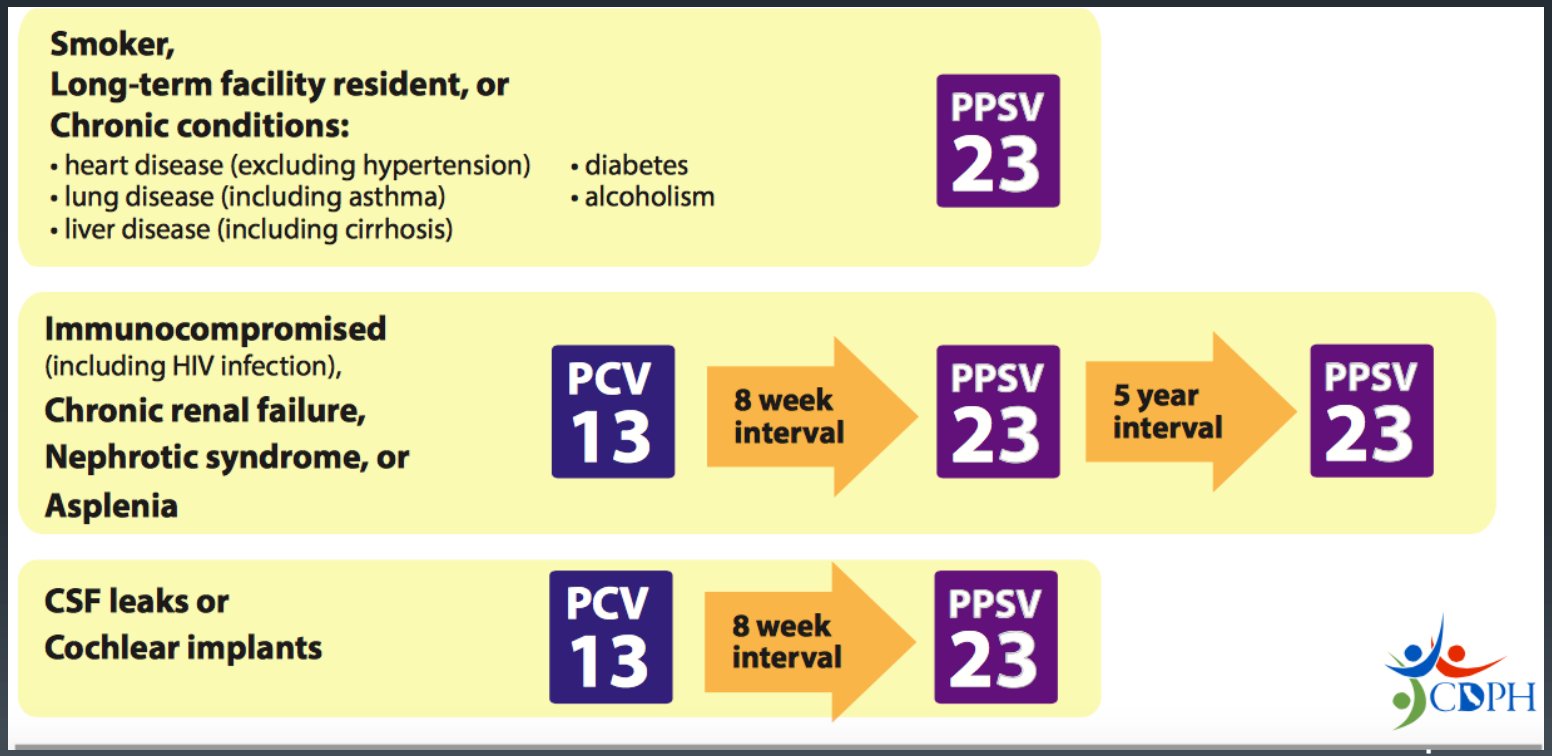
Recommendations for Age 19 or Older



www.eziz.org

Case: RM

"I just saw a commercial about some other pneumonia shot."

- 67 year old female
- PMH: DM2, HTN, HL
- Received PPSV23 7 months ago

What would you tell her?

A) You have already been immunized for pneumonia and do not need another vaccine

B) You can receive PCV13 today

C) You should return in 5 months for PCV13

What would you tell her?

A) You have already been immunized for pneumonia and do not need another vaccine

B) You can receive PCV13 today

C) You should return in 5 months for PCV13

Case

- 37 year old male
- PMH: Seasonal Allergies, Current smoker

What would you tell him?

A) He doesn’t meet criteria for either pneumonia vaccine
B) He should have the new pneumonia vaccine, PCV13, followed by PPSV23 in one year
C) He should be immunized with PPSV23 today
D) He should have PPSV23 today, followed by PCV13 in one year

What would you tell him?

A) He doesn’t meet criteria for either pneumonia vaccine
B) He should have the new pneumonia vaccine, PCV13, followed by PPSV23 in one year
C) He should be immunized with PPSV23 today
D) He should have PPSV23 today, followed by PCV13 in one year

Summary

- Minimum FBG target changed to 80 mg/dL
- Sleep studies recommended for those with unexplained daytime sleepiness
- Oral health risk tools and fluoride may help prevent dental caries
- Patients over the age of 65 need PPV13 and PPSV23

References

1. American Diabetes Association. Standards of Medical Care in Diabetes-2015. Diabetes Care.2015;38:S1-S93.
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6. Tomczyk S, Bennett NM, Stoecker C, et al. Use of PCV-13 and PPSV-23 among adults age 65 and older: recommendations of the ACIP. MMWR.2014;63(37):822-825.