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Pittsburgh CME Conference

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Cancer Screening Guideline Update (*Patient Safety*)

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Disclosures:

Speaker has no disclosures and there are no conflicts of interest.

The speaker has attested that their presentation will be free of all commercial bias toward a specific company and its products.

The speaker indicated that the content of the presentation will not include discussion of unapproved or investigational uses of products or devices.

CANCER SCREENING GUIDELINES UPDATE

Niladri Das, MD
UPMC St. Margaret Family Medicine Residency
November 7th, 2014

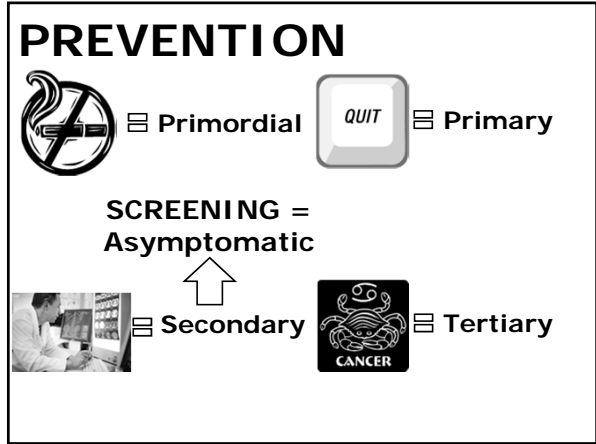


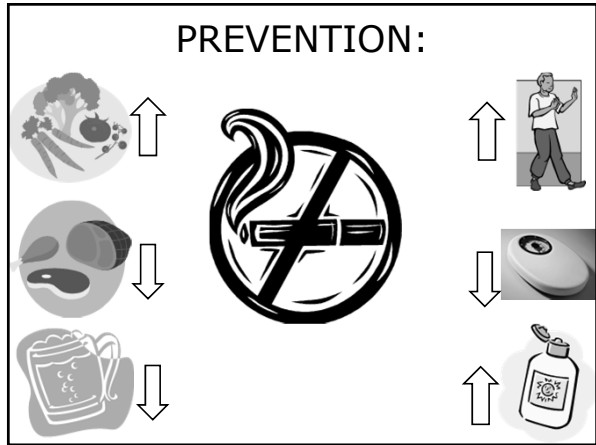
Disclosures

- Dr. Niladri Das has no conflict of interest, financial agreement, or working affiliation with any group or organization.

OBJECTIVES

- Know and understand the current screening recommendations
- Know why to screen with these tests... Sensitivity & Specificity (Sort Of)
- Know why some of the guidelines have changed
- Apply knowledge to cancer based case studies.





SCREENING for CANCER

- Public Perception: IT'S GREAT!
- Reality:
 - Cancer ≠ Cancer ≠ Cancer
 - Screening ≠ Screening ≠ Screening
 - EXTREMELY COMPLICATED!

ENTER the USPSTF

United States Preventative Services Task Force
 -Established in 1984

- “group of national experts in prevention and evidence-based medicine that works to improve the health of all Americans by making evidence-based recommendations about clinical preventive services such as screenings, counseling services, or preventive medications”
- “The USPSTF is made up of 16 volunteer members who come from the fields of preventive medicine and primary care, including internal medicine, family medicine, pediatrics, behavioral health, obstetrics/gynecology, and nursing.”

Health & Human
 Services



Agency for Healthcare
 Research & Quality
 (AHRQ)



USPSTF



OTHER
 INSURERS




MEDICARE

97 Current USPSTF Recommendations

- 12 Address Cancer Screening with Grades

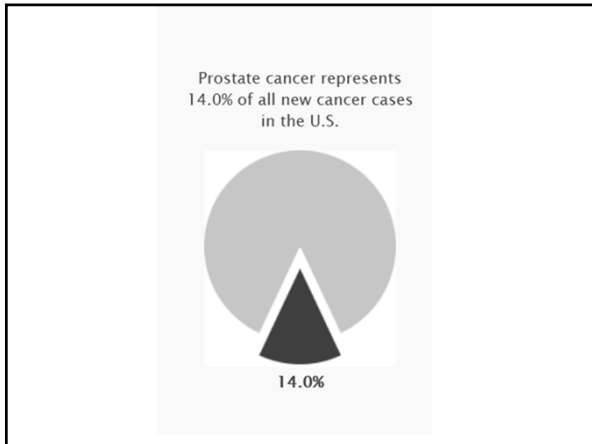
GRADE	DEFINITION	Suggestion for practice
A	Recommended. High certainty of substantial net benefit.	Offer or provide this service
B	Recommended. High certainty net benefit is moderate or moderate certainty benefit moderate or substantial.	Offer or provide this service
C	Selectively offering. Patient preference, professional judgement. Moderate certainty net benefit small.	Offer or provide for selected pts/individual circumstances
D	Recommends against. Moderate to high certainty NO net benefit or harms outweigh benefit.	Discourage the use of this service
I	Insufficient Evidence	Read the rec. Uncertainty.

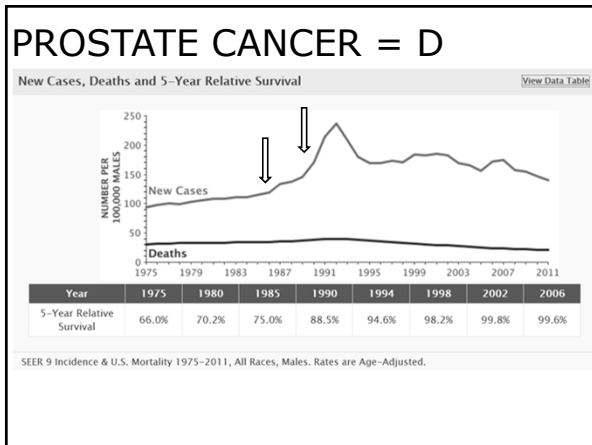
Certainty of Net Benefit	Magnitude of Net Benefit			
	Substantial	Moderate	Small	Zero/negative
High	A	B	C	D
Moderate	B	B	C	D
Low	Insufficient			



- November 1st, 2014 issue of American Family Physician
- *“Screening for Cancer: Concepts and Controversies”*
- Excellent discussion of Lead Time Bias and Overdiagnosis

TYPE OF CANCER	New Cases 2014	Deaths 2014	USPSTF Update	Level of Rec
1. Prostate	233,000	29,480	May 2012	D
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21. Cervix	12,360	4,020	Mar. 2012	A
25. Testis	8,820	380	Apr. 2011	D





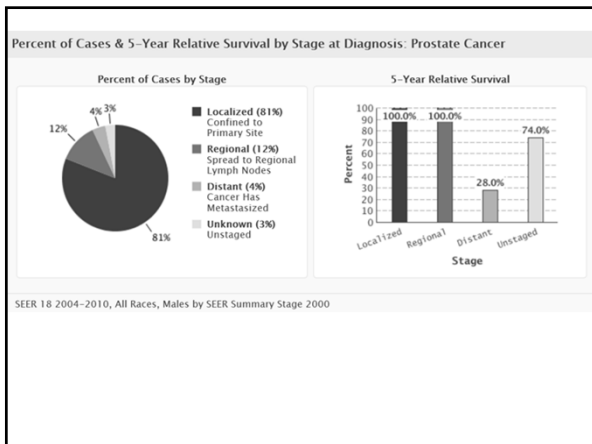
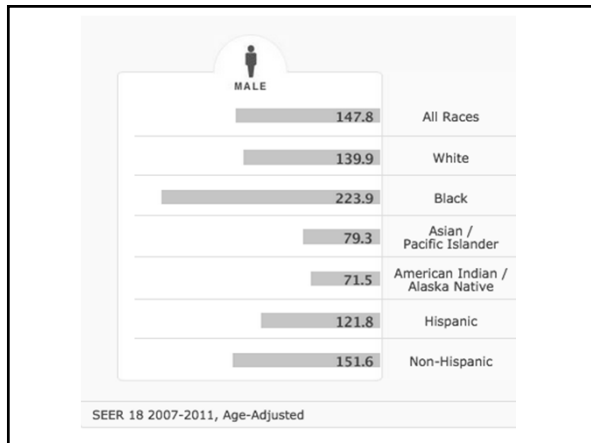


TABLE 1.
Expected Outcomes When 1,000 Men Aged 55-69 Years
Are Screened With Prostate-Specific Antigen Testing Every
1-4 Years for 10 Years

100-120 men will have at least 1 false-positive result.
 110 men will be diagnosed with prostate cancer.
 29 men will develop erectile dysfunction as a result of treatment.
 18 men will develop urinary incontinence as a result of treatment.
 0-1 deaths from prostate cancer will be prevented.

Source: Adapted from the 2012 US Preventive Service Task Force recommendation statement [10].



**PROSTATE CANCER =
 USPSTF Grade D**

**Recommendation Updated
 May 2012**

Medicare > 50

- Pays for Yearly DRE
- Pays for Yearly PSA

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Breast Cancer Screening Recommendations

Population	Recommendation	Grade (What's This?)
Women, Age 50-74 Years	The USPSTF recommends biennial screening mammography for women 50-74 years.	B
Women, Before the Age of 50 Years	The decision to start regular, biennial screening mammography before the age of 50 years should be an individual one and take patient context into account, including the patient's values regarding specific benefits and harms.	C
Women, 75 Years and Older	The USPSTF concludes that the current evidence is insufficient to assess the benefits and harms of screening mammography in women 75 years and older. Go to the Clinical Considerations section for information on risk assessment and suggestions for practice regarding the I statement.	I
All Women	The USPSTF recommends against teaching breast self-examination (BSE).	D

Last update 2009; Update in Progress

MEDICARE

- Screening mammogram once every 12 months (11 full months must have passed since the last screening)
- Diagnostic mammogram when medically necessary
- Who's eligible?
 - Women with Medicare 40 or older are covered
 - Women with Medicare between 35-39 can get one baseline mammogram

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LUNG CANCER SCREENING: 12/2013

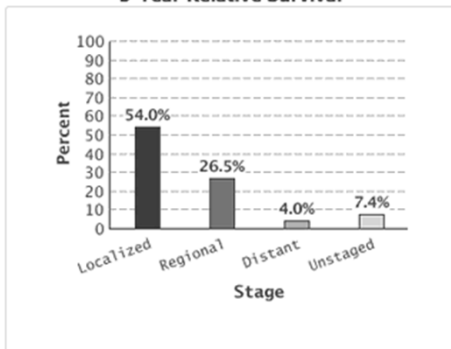
USPSTF recommends

- Annual Screening with
- low-dose computed tomography (LDCT)
- in adults aged 55 to 80 years
- 30 pack-year smoking history and currently smoke or have quit within the past 15 years.

Screening should be discontinued once a person has not smoked for 15 years or develops a health problem that substantially limits life expectancy or the ability or willingness to have curative lung surgery.

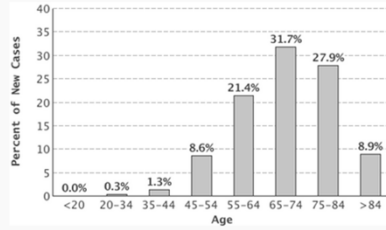
WHY?

5-Year Relative Survival



WHY?

Percent of New Cases by Age Group: Lung and Bronchus Cancer



Lung and bronchus cancer is most frequently diagnosed among people aged 65-74.

Median Age At Diagnosis

70

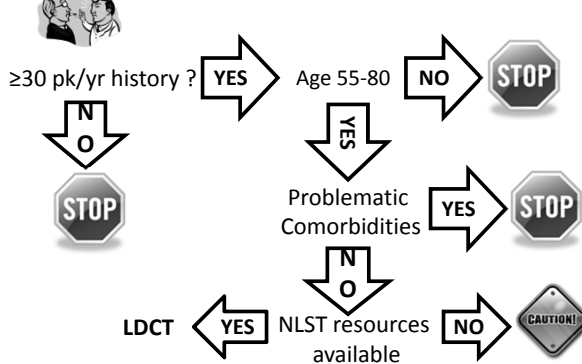
SEER 18 2007-2011, All Races, Both Sexes

National Lung Screening Trial (NLST)

Low Dose CT vs CXR

- 53,454 current or former heavy smokers ages 55 to 74
- Asymptomatic
- 3 fewer lung cancer deaths with CT than CXR
- 24% of CTs were + for something, 7 % for CXR = Additional Testing
- Adenocarcinomas and Squamous Cell Lung Cancers NOT SCLC

Smoker/Ex-Smoker (Quit \leq 15yrs)



Low Dose CT Scan

- Lower Radiation exposure; Similar to Mammogram

NLST

- Resources were very organized, protocolized following a finding on the CT Scan

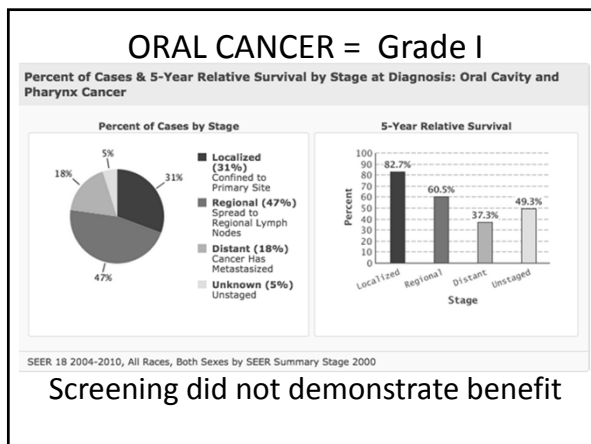
Lung Cancer Screening: USPSTF = Grade B AAFP = Grade I

- 24 % of CTs Positive; but not for Lung Cancer
- 96% False Positive Rate
- Additional Testing
- Number needed to Screen to Prevent 1 Lung Cancer Death over 5 years was 360
- Discuss with patients extensively
- Medicare does not pay for this yet

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Population	Recommendation	Grade (What's This?)
Adults, beginning at age 50 years and continuing until age 75 years	The USPSTF recommends screening for colorectal cancer using fecal occult blood testing, sigmoidoscopy, or colonoscopy in adults, beginning at age 50 years and continuing until age 75 years. The risks and benefits of these screening methods vary.	A
Adults age 76 to 85 years	The USPSTF recommends against routine screening for colorectal cancer in adults 76 to 85 years of age. There may be considerations that support colorectal cancer screening in an individual patient.	C
Adults older than age 85 years	The USPSTF recommends against screening for colorectal cancer in adults older than age 85 years.	D
Computed Tomographic Colonography and Fecal DNA testing as screening modalities	The USPSTF concludes that the evidence is insufficient to assess the benefits and harms of computed tomographic colonography and fecal DNA testing as screening modalities for colorectal cancer.	I

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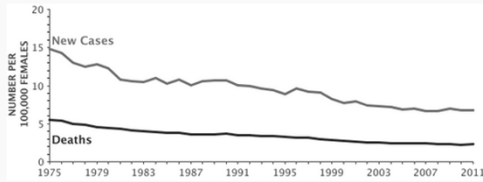
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OVARIAN CANCER = Grade D

- Reviewed 09/2012
- Transvaginal U/S and CA-125
- Bimanual Exam not studied
- Why not?
 - RCT: 1% PPV
 - 20:1 Ratio of Surgery to Cancer
 - Surgical Major Complication rate b/t 7-20%

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CERVICAL CANCER: Grade A



Year	1975	1980	1985	1990	1994	1998	2002	2006
5-Year Relative Survival	68.1%	68.0%	66.4%	72.1%	72.0%	72.5%	69.8%	71.5%

CERVICAL CANCER: Grade A

Women 21 to 65 (Pap Smear) or 30-65 (in combo with HPV testing)

The USPSTF recommends screening for cervical cancer in women age 21 to 65 years with cytology (Pap smear) every 3 years or, for women age 30 to 65 years who want to lengthen the screening interval, screening with a combination of cytology and human papillomavirus (HPV) testing every 5 years. See the [Clinical Considerations](#) for discussion of cytology method, HPV testing, and screening interval.

A

MEDICARE

- Once every 24 months for all women
- Once every 12 months if you're at high risk for cervical or vaginal cancer, or if you're of childbearing age and have had an abnormal Pap test in the past 36 months

CASE SCENARIOS:
FOOD for THOUGHT

Useful Websites

- <http://epss.ahrq.gov/PDA/index.jsp>
- <http://www.uspreventiveservicestaskforce.org/uspstopics.htm>
- <http://seer.cancer.gov>
- <http://www.medicare.gov/coverage/preventive-and-screening-services.html>

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QUESTIONS?

COMMENTS.
