

Clinical Prevention in Older Adults

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Learning Goals

- Understand a framework for prevention and apply to older adults
- Learn where to go for prevention recommendations for older adults
- Learn some key concepts in what makes prevention different in older adults and how to apply these
- Apply “Two Experts Model” of Shared Decision Making

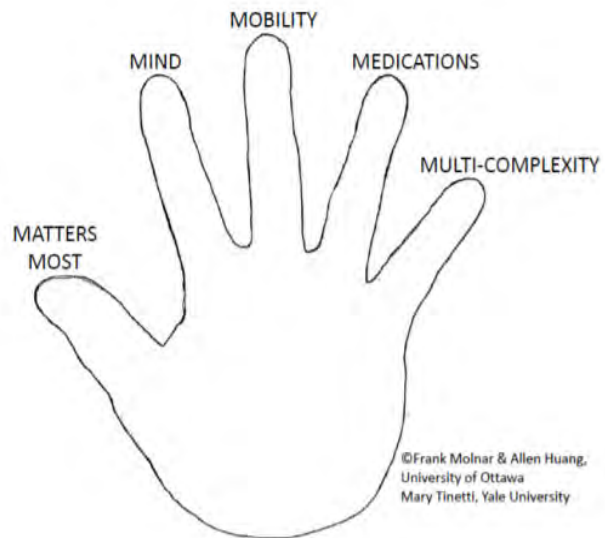
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Disclosures

- Cynthia Burdick - none
- Amy Wilkerson - none

Geriatrics High Five!



©Frank Molnar & Allen Huang,
University of Ottawa
Mary Tinetti, Yale University

Prevention!



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Where to go for recommendations?

- USPSTF
- Government agencies - CDC
- Professional Organizations – American Urologic Association, American Geriatrics Society
- Private advocacy groups – American Cancer Society

-Sometimes with conflicting recommendations!!



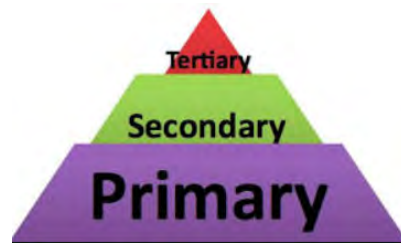
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What is prevention?

- **Primary** – preventing disease onset
- **Secondary** – preventing progression of disease
- **Tertiary** – reducing impairments, disabilities, or complications



Clark DW. Preventive medicine for the doctor in his community: an epidemiologic approach. *Am J Public Health Nations Health*. 1958;48(7):947.

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Domains of prevention - USPSTF



- **Screening Tests:**
 - DEXA, cancer screening (breast, colon, lung), AAA
- **Counseling Services:**
 - Falls prevention, weight loss, alcohol use, skin cancer prevention
- **Preventive medication:**
 - Aspirin, statins, vitamin D + Calcium, breast cancer risk-reducing medications

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Cancer Prevention Interventions

AVAILABLE TODAY BECAUSE OF RESEARCH

MEDICATIONS

proven to reduce risk of breast and colon cancers in those at increased risk.

LIFESTYLE CHOICES

such as avoid or quit tobacco, limit alcohol, avoid known carcinogens, keep active & avoid obesity.

TREATMENTS FOR INFECTIONS

known to increase cancer risk, including hepatitis C, HIV, and H. pylori.

SCREENING TESTS

that allow removal of precancerous lesions, such as colon polyps.

VACCINES TO PROTECT

against infection with human papillomavirus (HPV) and hepatitis B.

SURGERY

to remove tissues at risk, such as for women with increased risk of breast and ovarian cancer.

prevention.cancer.gov
NCI Division of Cancer Prevention

American Geriatrics Society White Paper on Healthy Aging – 5 Domains of Prevention

- Promoting health, preventing injury, and managing chronic conditions
- Optimizing **cognitive** health
- Optimizing **physical** health
- Optimizing **mental** health
- Facilitating **social engagement**



American Geriatrics Society White Paper on Healthy Aging



TABLE 1. Examples of Interventions to Promote Healthy Aging, According to the National Prevention, Health Promotion and Public Health Council Strategy

DOMAIN	EXAMPLES BY LEVEL OF PREVENTION		
	Primary Prevention	Secondary Prevention	Tertiary Prevention
Promoting health, preventing injury, and managing chronic conditions	<ul style="list-style-type: none"> ■ Maintaining healthful balanced nutrition ■ Avoiding tobacco ■ Avoiding recreational drugs or excess alcohol ■ Maintaining sleep hygiene ■ Maintaining ideal body weight ■ Practicing oral hygiene ■ Managing stress 	<ul style="list-style-type: none"> ■ Hypertension management ■ Hyperlipidemia management ■ Diabetes treatment ■ Ischemic heart disease treatment 	<ul style="list-style-type: none"> ■ Rehabilitation services ■ Use of adaptive equipment ■ Palliative care
Optimizing cognitive health	<ul style="list-style-type: none"> ■ Lifelong learning ■ Lifelong intellectual engagement 	<ul style="list-style-type: none"> ■ Early detection of sensory impairment ■ Caregiver education 	<ul style="list-style-type: none"> ■ Community modification ■ Environmental modification

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Optimizing physical health	<ul style="list-style-type: none"> ■ Optimal calcium and vitamin D intake ■ Regular physical activity 	<ul style="list-style-type: none"> ■ Fall prevention programs ■ Osteoporosis screening and management ■ Dental examinations ■ Osteoarthritis management 	<ul style="list-style-type: none"> ■ Rehabilitation technologies ■ Use of adaptive equipment ■ Environmental modification
Optimizing mental health	<ul style="list-style-type: none"> ■ Getting adequate sleep ■ Avoiding substance abuse ■ Engaging in meaningful work ■ Participating in enriching social activities ■ Finding life purpose 	<ul style="list-style-type: none"> ■ Easily available mental health services ■ Effective management of mental health disorders ■ Reduction of mental health stigma 	<ul style="list-style-type: none"> ■ Elder abuse screening ■ Accessible family and social supports ■ Senior safety services
Facilitating social engagement	<ul style="list-style-type: none"> ■ Forming meaningful relationships with people who share interests ■ Engaging in civic activities ■ Meeting safety, financial, and housing needs 	<ul style="list-style-type: none"> ■ Education and prescriptive planning for social networking 	<ul style="list-style-type: none"> ■ Adaptive equipment ■ Accessible and safe environments ■ Empowered community outreach

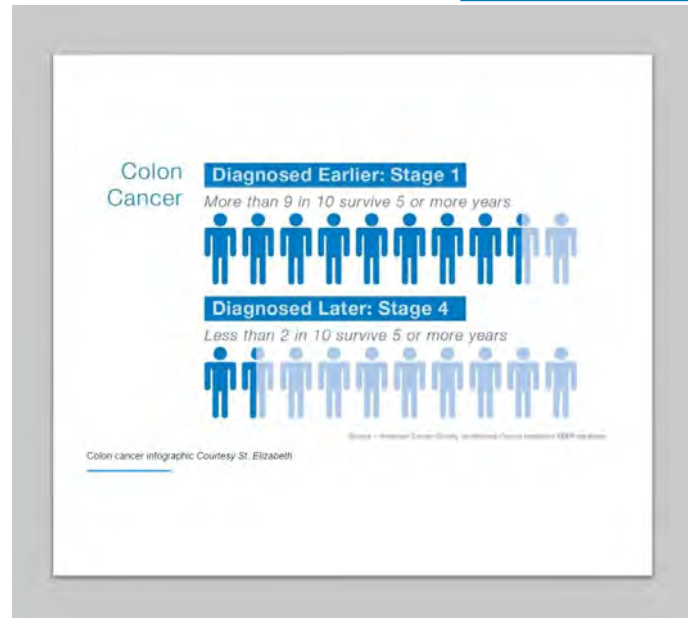
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Benefits of Screening

Earlier Diagnosis
=
Improved
Outcomes



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Harms Associated with Preventive Screening

- **Overdiagnosis**
- False positives
- Hazards from to the test itself
- Adverse effects of unnecessary treatment
- Cascade of testing / Incidentalomas
- Labeling effect
- Diverting resources from provider



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Criteria for Screening Tests

- Condition must be **serious** and **prevalent** in the population tested.
- Disease should have an **asymptomatic phase** that can be detected by screening.
- Screening must be **safe, sensitive, and specific**.
- **Effective treatment available** early in the disease course results in lower morbidity and mortality than treatment after symptoms develop.
- Screening **costs** should be acceptable.
- Ideally, screening should have been **found effective** in a randomized controlled trial.

Clark DW. Preventive medicine for the doctor in his community: an epidemiologic approach. *Am J Public Health Nations Health*. 1958;48(7):947.

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Benefits – Harms = Net Health Benefits



Recommendations must offer a **positive net health benefit**

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What Makes Prevention and Screening Different in Older Adults?



Provider expertise²

- Screening options
- Life expectancy
- Time to Benefit
- Treatment options
- Outcome possibilities

Patient expertise

- What matters most
- Cognitive status
- Functional status
- Experience of illness
- Social circumstances
- Attitude to risk
- Values
- Preferences

Shared decision

- A mutual decision that best meets patient needs

1. Schuerman, J. – ICSI, June 8, 2012

2. Coulter, A., Collins, A., Making Shared Decision-Making a Reality, The Kings Fund 2011

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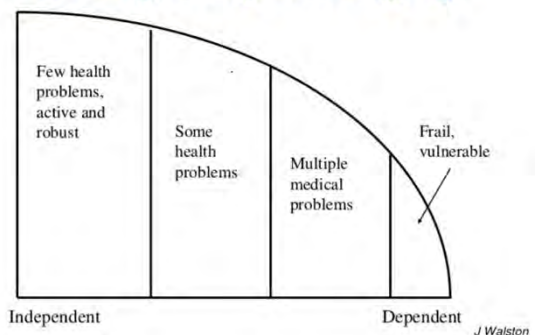
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What Makes Prevention and Screening Different in Older Adults?

- Consider life expectancy
- Do not offer an intervention that will not benefit them in the time they have remaining
- Consider what matters most
- Consider cognitive status



Heterogeneity with Aging



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What Makes Prevention and Screening Different in Older Adults?

American Geriatrics Society

View all recommendations from this society

Released February 27, 2014; revised April 23, 2015

Don't recommend screening for breast, colorectal, prostate or lung cancer without considering life expectancy and the risks of testing, overdiagnosis and overtreatment.



choosingwisely.org

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Where to go for Prevention and Screening Recommendations for Older Adults




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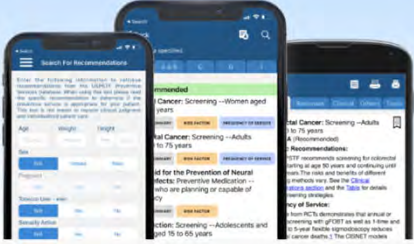
[Home](#) [About](#) [Grade Definitions](#) [Web](#) [Widget](#) [API](#)

Prevention TaskForce


The Prevention TaskForce (formerly ePSS) application assists primary care clinicians to identify the screening, counseling, and preventive medication services that are appropriate for their patients.

The Prevention TaskForce data is based on the current recommendations of the U.S. Preventive Services Task Force (USPSTF) and can be searched by specific patient characteristics, such as age, sex, and selected behavioral risk factors.


When using this tool please read the specific recommendation to determine if the preventive service is appropriate for your patient. This tool is not meant to replace clinical judgment and individualized patient care.




USPSTF Recommendations App for Web and Mobile Devices




USPSTF Recommendations application for desktop browsers




USPSTF Recommendations application for mobile devices



USPSTF Recommendations application into your application

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<https://www.uspreventiveservicestaskforce.org/webview>



[Apps](#) [By Grade](#) [By Topic](#) [Tools](#)

SEARCH

ENGLISH METRIC

KEYWORDS

Age

Weight

Height

Sex

Pregnant


Tobacco User - ever

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ALL A B C D I

A - Recommended (14)

Cervical Cancer: Screening -- Women aged 21 to 65 years	RECOMMENDATION	SUMMARY	RISK FACTOR	FREQ. OF SERVICE
Colorectal Cancer: Screening -- Adults aged 50 to 75 years	RECOMMENDATION	SUMMARY	RISK FACTOR	FREQ. OF SERVICE
Folic Acid for the Prevention of Neural Tube Defects: Preventive Medication -- Women who are planning or capable of pregnancy	RECOMMENDATION	SUMMARY	RISK FACTOR	FREQ. OF SERVICE
Hepatitis B Virus Infection in Pregnant Women: Screening -- Pregnant women	RECOMMENDATION	SUMMARY	RISK FACTOR	FREQ. OF SERVICE
High Blood Pressure in Adults: Screening -- Adults aged 18 years or older	RECOMMENDATION	SUMMARY	RISK FACTOR	FREQ. OF SERVICE
Human Immunodeficiency Virus (HIV) Infection: Screening -- Adolescents and adults aged 15 to 65 years	RECOMMENDATION	SUMMARY	RISK FACTOR	FREQ. OF SERVICE

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Prevention TaskForce Search

Recommendations By Grade

Search: 75 yrs, Female



A - Recommended (5)

Colorectal Cancer: Screening -- Adults aged 50 to 75 years

Interventions for Tobacco Smoking Cessation in Adults, Including Pregnant Persons -- Nonpregnant adults

Prevention of Human Immunodeficiency Virus (HIV) Infection: Preexposure Prophylaxis -- Persons at high risk of HIV acquisition

Screening for Hypertension in Adults -- Adults 18 years or older without known hypertension

Syphilis Infection in Nonpregnant Adults and Adolescents: Screening -- Asymptomatic, nonpregnant adults and adolescents who are at increased risk for syphilis infection

B - Recommended (17)

BRCA-Related Cancer: Risk Assessment, Genetic Counseling, and Genetic Testing -- Women with a personal or family history of breast, ovarian, tubal, or peritoneal cancer or an ancestry associated with BRCA1/2 gene mutation

Breast Cancer: Medication Use to Reduce Risk -- Women at increased risk for breast cancer aged 35 years or older

(partial list)

One-Page Adult Preventive Health Care Schedule: USPSTF Recommendations at a Glance

BONUS DIGITAL CONTENT



Adult Preventive Health Care Schedule: Recommendations from the USPSTF (as of June 8, 2020)

To be used in conjunction with USPSTF recommendation statements (for additional details see tables and references at <https://www.aafp.org/afp/PHCS>)
Only grade A/B recommendations are shown


Age	18	21	24	25	35	40	45	50	55	59	65	70	74	75	80
USPSTF screening recommendations															
Alcohol misuse ¹		(B)													
Depression ²		(B)													
Hypertension ³		(A)													
Obesity/weight loss ⁴				(B) if BMI 30 kg per m ³ or greater											
Tobacco use and cessation ⁵		(A)													
Hepatitis C virus infection ⁶		(B)													
HIV infection ⁷		(A)											(A) if at increased risk		
Hepatitis B virus infection ⁸				(B) if at increased risk											
Syphilis ⁹				(A) if at increased risk											
Tuberculosis ¹⁰				(B) if at increased risk											
BRCA gene risk assessment ¹¹				(B) if appropriate personal or family history of BRCA-related cancer or ancestry											
Chlamydia and gonorrhea ¹²				(B) if sexually active	(B) if at increased risk										
Intimate partner violence ¹³				(B) women of childbearing age											
Cervical cancer ¹⁴				(A) See p. 3 for test options and screening intervals											
Abnormal glucose/type 2 diabetes mellitus ¹⁵								(B) if overweight or obese							
Colorectal cancer ¹⁶								(A)							
Breast cancer ¹⁷									(B) biennial screening						
Lung cancer ¹⁸										(B) if 30-pack-year history and current or former smoker (quit in past 15 years)					
Osteoporosis ¹⁹										(B) if postmenopausal and elevated risk		(B)			

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WHAT WOULD YOU LIKE TO DO?



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CANCER SCREENING




COMMUNICATING PROGNOSIS


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WHAT WOULD YOU LIKE TO SCREEN FOR?



COLORECTAL CANCER



BREAST CANCER



BOTH CANCERS

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Cancer Screening



Table 1—Preventive Health Measures Available for Older Adults and Recommended Use

Procedure	≥10 years remaining life expectancy	5 to <10 years remaining life expectancy	Moderate dementia	Near end of life	SOE	Cost-effectiveness ^a
Cancer screening						
Mammography	Every 2 years if <75 years old; consider stopping if ≥75 years old	Not recommended	Not recommended	Not recommended	A/C ^b	Somewhat cost-effective for women <80 years old, may be cost-effective for women ≥80 years old in top quartile of life expectancy.
Pap smear	Stop after age 65	Not recommended	Not recommended	Not recommended	B	Cost-effective to stop
Prostate-specific antigen	Consider discussing pros/cons if remaining life expectancy >10 years; stop at age 70	Not recommended	Not recommended	Not recommended	B	Uncertain

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HealthinAging.org

Trusted Information. Better Care.

Not every older adult needs all of these tests. Your healthcare provider will work with you to determine which screening tests are likely to benefit you, based on your individual circumstances.

- + High Blood Pressure
- + Weight
- + Vision
- + Hearing
- + Diabetes

Prevention

Basic Facts

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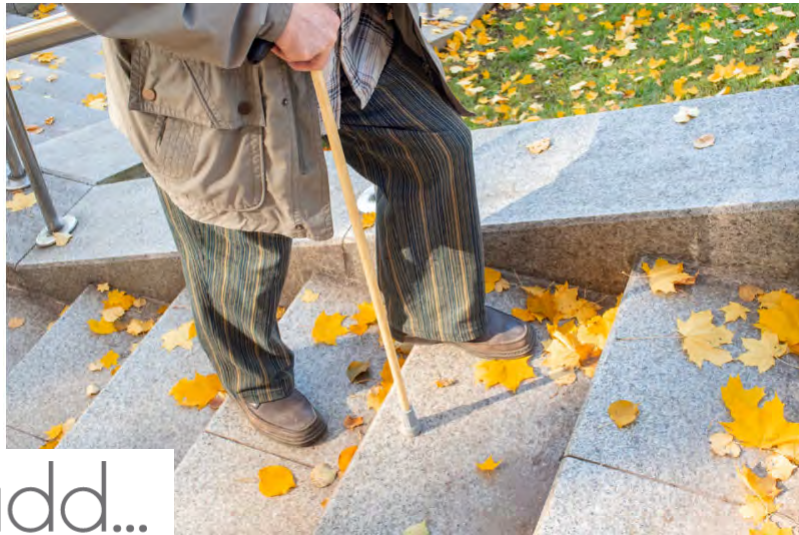
People who have a shorter life expectancy due to other illnesses are less likely to benefit from cancer screening tests. It's important to talk with your healthcare provider about whether screening tests for cancer are more likely to benefit or harm you.

The following recommendations are for people at average risk of disease. People at high risk, or people with a history of abnormal tests, may need screening earlier and more often.

— Breast Cancer

The current recommendations are for:

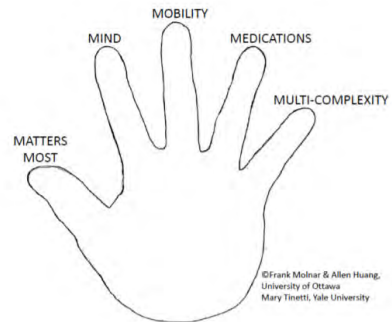
- Women between the ages of 50 and 75 to have a mammogram every two years.
- Mammograms may be appropriate for women after the age of 75 who are healthy and expected to live for at least 10 more years.



just add...

What Makes Prevention and Screening Different in Older Adults?

- **Consider life expectancy**
- Do not offer an intervention that will not benefit them in the time they have remaining
- Consider what matters most
- Consider cognitive status



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How do you estimate life expectancy?

- US life table data can be used for average person at any age

National Vital Statistics Reports

OR

- Use previously developed mortality indexes

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Estimating Life Expectancy – Life Tables

National Vital Statistics Reports



Volume 68, Number 7

June 24, 2019

United States Life Tables, 2017

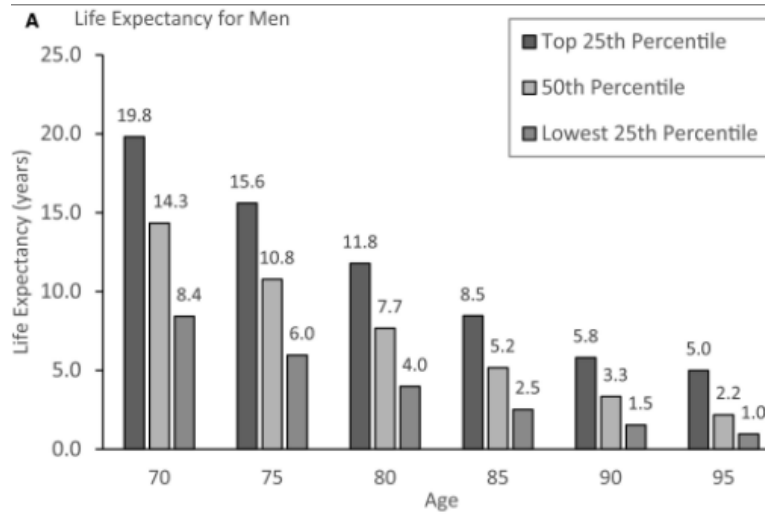
by Elizabeth Arias, Ph.D., and Jiaquan Xu, M.D., Division of Vital Statistics

Table A. Expectation of life, by age, race, Hispanic origin, race for the non-Hispanic population, and sex: United States, 2017

Age (years)	All races and origins			White			Black			Hispanic ¹			Non-Hispanic white ²			Non-Hispanic black ³		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
0	78.6	76.1	81.1	78.8	76.4	81.2	75.3	71.9	78.5	81.8	79.1	84.3	78.5	76.1	81.0	74.9	71.5	78.1
1	78.1	75.6	80.5	78.2	75.8	80.6	75.1	71.8	78.2	81.2	78.5	83.7	77.9	75.5	80.3	74.7	71.4	77.9
5	74.1	71.7	76.6	74.2	71.8	76.7	71.2	67.9	74.3	77.3	74.6	79.8	74.0	71.6	76.4	70.8	67.5	74.0
10	69.2	66.7	71.6	69.3	66.9	71.7	66.3	63.0	69.4	72.3	69.6	74.8	69.0	66.6	71.4	65.9	62.5	69.0
15	64.2	61.8	66.7	64.3	61.9	66.7	61.4	58.1	64.4	67.4	64.7	69.8	64.0	61.7	66.4	61.0	57.6	64.1
20	59.4	57.0	61.8	59.5	57.1	61.8	56.6	53.4	59.5	62.5	59.9	64.9	59.2	56.9	61.5	56.2	53.0	59.2
25	54.7	52.4	56.9	54.7	52.5	57.0	51.9	48.9	54.7	57.7	55.2	60.1	54.5	52.2	56.7	51.6	48.5	54.4
30	50.0	47.8	52.1	50.0	47.9	52.2	47.4	44.5	49.9	53.0	50.5	55.2	49.8	47.7	51.9	47.0	44.1	49.6
35	45.3	43.2	47.3	45.4	43.4	47.4	42.8	40.0	45.2	48.2	45.8	50.3	45.2	43.2	47.2	42.5	39.7	44.9
40	40.7	38.7	42.6	40.8	38.8	42.7	38.3	35.7	40.6	43.5	41.2	45.5	40.6	38.6	42.5	38.0	35.3	40.3
45	36.1	34.2	37.9	36.2	34.3	38.0	33.8	31.3	36.0	38.8	36.6	40.7	36.0	34.2	37.8	33.6	31.0	35.8
50	31.6	29.8	33.4	31.7	29.9	33.4	29.5	27.1	31.6	34.2	32.1	36.0	31.6	29.8	33.3	29.3	26.9	31.4
55	27.4	25.6	28.9	27.4	25.7	29.0	25.5	23.2	27.4	29.8	27.7	31.4	27.3	25.6	28.8	25.2	23.0	27.2
60	23.3	21.7	24.7	23.3	21.8	24.7	21.7	19.6	23.4	25.5	23.6	27.0	23.2	21.7	24.6	21.5	19.4	23.3
65	19.4	18.0	20.6	19.4	18.1	20.6	18.2	16.4	19.7	21.4	19.7	22.7	19.3	18.0	20.5	18.1	16.2	19.5
70	15.7	14.5	16.7	15.6	14.5	16.6	15.0	13.4	16.1	17.5	16.0	18.6	15.6	14.5	16.6	14.9	13.3	16.0
75	12.3	11.3	13.0	12.2	11.2	13.0	11.9	10.7	12.8	13.8	12.6	14.7	12.2	11.2	12.9	11.9	10.6	12.7
80	9.2	8.4	9.8	9.1	8.3	9.7	9.2	8.2	9.8	10.5	9.4	11.1	9.1	8.3	9.7	9.2	8.1	9.8
85	6.6	5.9	7.0	6.5	5.9	6.9	6.9	6.1	7.3	7.6	6.7	8.0	6.5	5.9	6.9	6.9	6.1	7.3
90	4.5	4.1	4.8	4.5	4.0	4.7	5.1	4.5	5.2	5.3	4.6	5.5	4.5	4.0	4.7	5.0	4.5	5.2
95	3.1	2.8	3.2	3.0	2.7	3.2	3.7	3.3	3.7	3.6	3.2	3.7	3.0	2.7	3.2	3.6	3.3	3.7
100	2.2	2.0	2.2	2.1	1.9	2.2	2.7	2.5	2.7	2.6	2.2	2.6	2.1	1.9	2.2	2.7	2.5	2.7

¹Life tables by Hispanic origin are based on death rates that have been adjusted for race and ethnicity misclassification on death certificates. Updated classification ratios were applied; see Technical Notes.
SOURCE: NCHS, National Vital Statistics System, Mortality.

Estimating Life Expectancy – Men



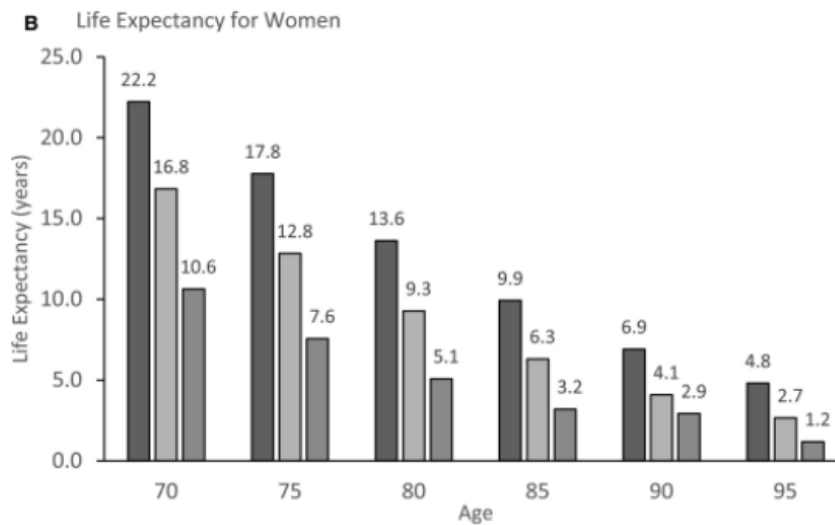
Journal of the American Geriatrics Society, Volume: 66, Issue: 2, Pages: 229-234, First published: 20 November 2017, DOI: (10.1111/jgs.15216)

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Estimating Life Expectancy – Women



Journal of the American Geriatrics Society, Volume: 66, Issue: 2, Pages: 229-234, First published: 20 November 2017, DOI: (10.1111/jgs.15216)

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CANCER SCREENING



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Estimating Life Expectancy

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WHERE IS YOUR PATIENT?



CLINIC -
LIVING AT HOME



NURSING
HOME



HOSPITAL

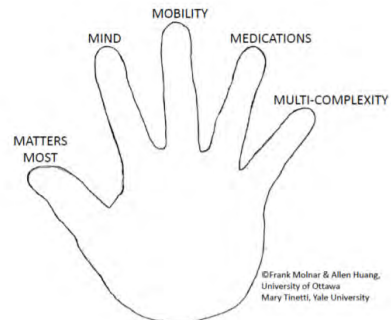


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What Makes Prevention and Screening Different in Older Adults?

- Consider life expectancy
- **Do not offer an intervention that will not benefit them in the time they have remaining = Time to Benefit**
- Consider what matters most
- Consider cognitive status



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What is “Time to Benefit?”

- Time to benefit (TTB) is the time between the preventive intervention (when complications and harms are most likely) to the time when health outcomes improve.

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Lee, S.J. and Kim, C.M. (2018), Individualizing Prevention for Older Adults. J Am Geriatr Soc, 66: 229 -234.

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Special Article | Full Access

Individualizing Prevention for Older Adults

Sei J. Lee MD, MAS Christine M. Kim RN, GNP, APRN-BC

First published: 20 November 2017 | <https://doi.org/10.1111/jgs.15216> | Citations: 22

Table 1. Time to Benefit for Preventive Interventions for Older Adults

Time to Benefit, Years	Preventive Intervention	Guideline	References
8-19 months	Bisphosphonates for osteoporosis	None	15
1-2	Primary prevention, hypertension	None	16, 17, 31
2-5	Primary prevention with statins	None	16, 18-20, 32
5	Surgical (vs transcatheter) aortic valve replacement for high risk aortic stenosis	None	33
6-8	Open (vs endovascular) repair for abdominal aortic aneurysm	None	23
10	Aspirin for cardiovascular disease and colorectal cancer prevention	USPSTF	34
10	Intensive glycemc control in diabetes mellitus	American Geriatrics Society	35



Table 1. Time to Benefit for Preventive Interventions for Older Adults

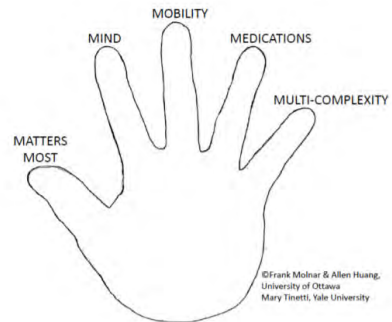
Time to Benefit, Years	Preventive Intervention	Guideline	References
10	Colorectal cancer screening	USPSTF, American College of Physicians, Society of General Internal Medicine	1, 36-38
10	Breast cancer screening	Society of General Internal Medicine, American College of Physicians	1, 37, 38
10-15	Prostate cancer screening	American Urological Association, American College of Physicians	11, 22, 37



For older adults, always consider the life expectancy and time to benefit so you know whether they might benefit from the screening test.

What Makes Prevention and Screening Different in Older Adults?

- Consider life expectancy
- Do not offer an intervention that will not benefit them in the time they have remaining = **Time to Benefit**
- **Consider what matters most**
- Consider cognitive status



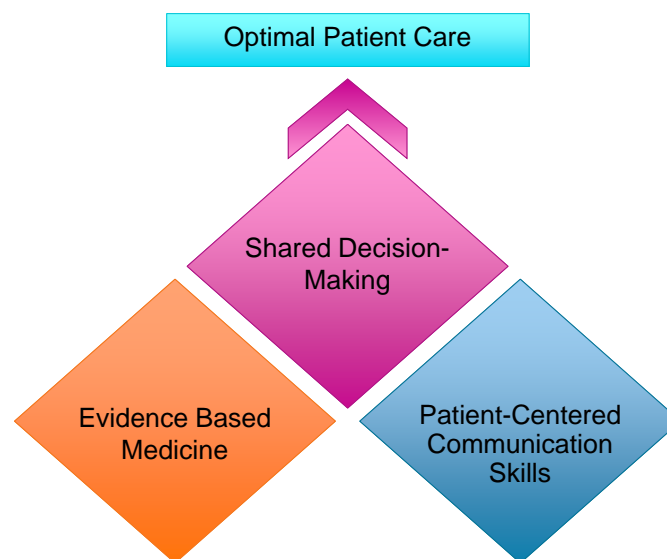
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Shared Decision-Making



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Asking What Matters Most: Why Talk about Shared Decision Making

- Patients not asked their opinions and not well-informed about risk, benefits, alternatives in preference-sensitive decisions
- Doctors aren't very good at diagnosing patient preferences
- If doctors get it wrong, patients will still listen

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When to use Shared Decision Making: When Evidence Supports More than One Approach

- Interventions A and B have similar benefits and different risks
 - e.g., Management of ruptured Achilles tendon
- Interventions A and B have different benefits and risks
 - e.g., Surgery vs. medical management for hip osteoarthritis
- Intervention A has uncertain benefits and certain risks
 - e.g., PSA testing for prostate cancer screening

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How Do Patients Experience Discussion of Medical Decisions?

Decision type	% discussed pros "a lot"	% discussed cons "a lot"
Cancer screening	35-44%	5-7%

About 95% of recommendations: "do it"

Only one in five patients reported being part of decisions about cancer screening

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The Decisions Study. Medical Decision Making 2010; 30 supplement 1



True or False? "Patients Don't Want to Be Involved"

Deber et.al.¹

- Patients with cardiovascular disease
- Two aspects of choice behavior

Problem-Solving

Requires technical knowledge

- Diagnosis
- Testing and treatment options
- Risks and benefits

Decision-Making

Requires knowledge of preferences

- Choosing between testing options
- Choosing between treatment options

¹Deber et.al. "What Role do Patients Want to Play in Treatment Decision Making," Arch Int Med. 1996;156:1414-1420

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Cochrane Review

- Review of 115 RCTs evaluating patient decision aids showed...
 - Increased knowledge
 - Higher proportion of patients with accurate risk perceptions
 - Higher proportion of patients choosing an option congruent with their values
 - More conservative choices (20% less surgery)

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Six Steps: Provide Benefits and Risks









- **Use numbers rather than words when you can. Without them**
 - Patients tend to overestimate the benefits and underestimate the risk
 - Patients have less realistic expectations
- **Check for understanding**

52



Why Use Numbers?







-  Invite Participation
-  Present Options
-  **Provide Benefits and Risks**
-  Elicit Preferences
-  Facilitate Decision Making
-  Implement Decision

Qualitative Term	Your Estimate of Probability
Rare	
Unlikely	
Probably	
Very likely	

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Using the Right Numbers

-  Invite Participation
-  Present Options
-  **Provide Benefits and Risks**
-  Elicit Preferences
-  Facilitate Decision Making
-  Implement Decision

Clear Numbers	Confusing or Biasing Numbers
Natural frequencies	Percentages
Absolute risk	Relative risks
Balanced framing	Gain or loss framing
Graphics and pictures	Lots of numbers

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Pictographs and Balanced Framing

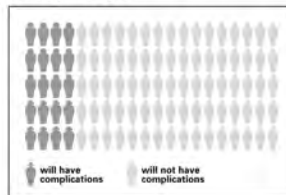
- Invite Participation
- Present Options
- Provide Benefits and Risks**
- Elicit Preferences
- Facilitate Decision Making
- Implement Decision

Risk of Complications

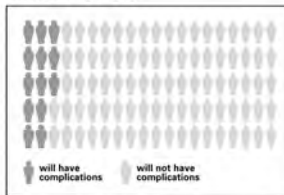
Within 30 days of gastric bypass surgery, as many as 20 out of 100 people will have one or more complications. About 80 out of 100 will not.

Within 30 days of gastric banding surgery, as many as 13 out of 100 people will have one or more complications. About 87 out of 100 will not.

Chance of Complications Within 30 Days of Gastric Bypass Surgery



Chance of Complications Within 30 Days of Gastric Banding Surgery

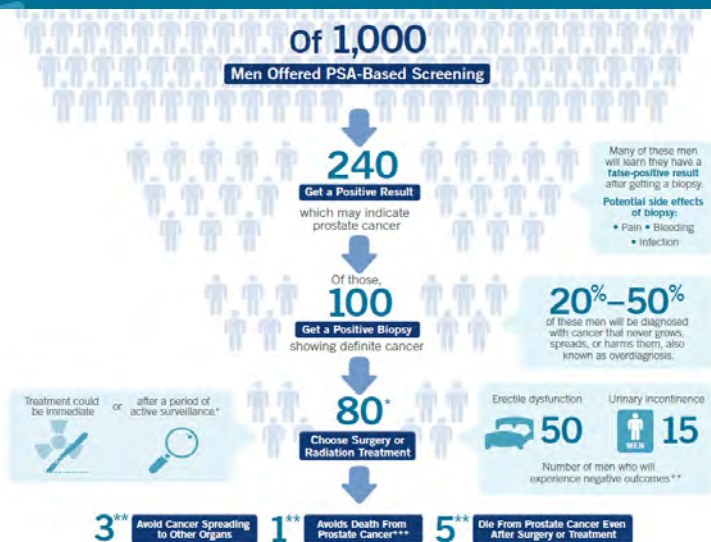


Many of these complications are not medically serious and will get better on their own or with simple treatment. Examples of these complications include vomiting, diarrhea, and wound infections. But some complications are more serious.



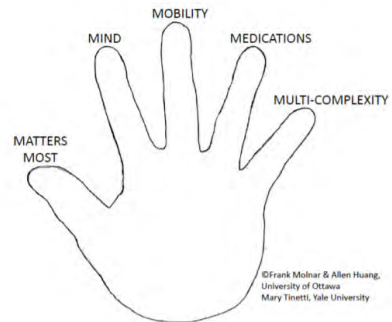
Is Prostate Cancer Screening Right for You?

Understanding the Potential Benefits vs. Risks for Men 55–69



What Makes Prevention and Screening Different in Older Adults?

- Consider life expectancy
- Do not offer an intervention that will not benefit them in the time they have remaining = **Time to Benefit**
- Consider what matters most
- **Consider cognitive status – See NW GWEC recording** *Rational Approach to Preventive Care for Persons with Dementia* by Dr. Amy Thomas January 19, 2021



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Mrs. O

- 78 year old African American woman
- Health is pretty good, no functional or cognitive limitations
- Quit smoking 10 years ago, 30 pack year history
- Mild COPD, does not need controlling meds and no hospitalizations
- Should she have:
 - Mammogram?
 - Colonoscopy?
 - Lung cancer screening?

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Estimate Life Expectancy

Table A. Expectation of life, by age, race, Hispanic origin, race for the non-Hispanic population, and sex: United States, 2017

Age (years)	All races and origins			White			Black			Hispanic ¹			Non-Hispanic white ¹			Non-Hispanic black ¹		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
0	78.6	76.1	81.1	78.8	76.4	81.2	75.3	71.9	78.5	81.8	79.1	84.3	78.5	76.1	81.0	74.9	71.5	78.1
1	78.1	75.6	80.5	78.2	75.8	80.6	75.1	71.8	78.2	81.2	78.5	83.7	77.9	75.5	80.3	74.7	71.4	77.9
5	74.1	71.7	76.6	74.2	71.8	76.7	71.2	67.9	74.3	77.3	74.6	79.8	74.0	71.6	76.4	70.8	67.5	74.0
10	69.2	66.7	71.6	69.3	66.9	71.7	66.3	63.0	69.4	72.3	69.6	74.8	69.0	66.6	71.4	65.9	62.5	69.0
15	64.2	61.8	66.7	64.3	61.9	66.7	61.4	58.1	64.4	67.4	64.7	69.8	64.0	61.7	66.4	61.0	57.6	64.1
20	59.4	57.0	61.8	59.5	57.1	61.8	56.6	53.4	59.5	62.5	59.9	64.9	59.2	56.9	61.5	56.2	53.0	59.2
25	54.7	52.4	56.9	54.7	52.5	57.0	51.9	48.9	54.7	57.7	55.2	60.1	54.5	52.2	56.7	51.6	48.5	54.4
30	50.0	47.8	52.1	50.0	47.9	52.2	47.4	44.5	49.9	53.0	50.5	55.2	49.8	47.7	51.9	47.0	44.1	49.6
35	45.3	43.2	47.3	45.4	43.4	47.4	42.8	40.0	45.2	48.2	45.8	50.3	45.2	43.2	47.2	42.5	39.7	44.9
40	40.7	38.7	42.6	40.8	38.8	42.7	38.3	35.7	40.6	43.5	41.2	45.5	40.6	38.6	42.5	38.0	35.3	40.3
45	36.1	34.2	37.9	36.2	34.3	38.0	33.8	31.3	36.0	38.8	36.6	40.7	36.0	34.2	37.8	33.6	31.0	35.8
50	31.6	29.8	33.4	31.7	29.9	33.4	29.5	27.1	31.6	34.2	32.1	36.0	31.6	29.8	33.3	29.3	26.9	31.4
55	27.4	25.6	28.9	27.4	25.7	29.0	25.5	23.2	27.4	29.8	27.7	31.4	27.3	25.6	28.8	25.2	23.0	27.2
60	23.3	21.7	24.7	23.3	21.8	24.7	21.7	19.6	23.4	25.5	23.6	27.0	23.2	21.7	24.6	21.5	19.4	23.3
65	19.4	18.0	20.6	19.4	18.1	20.6	18.2	16.4	19.7	21.4	19.7	22.7	19.3	18.0	20.5	18.1	16.2	19.5
70	15.7	14.5	16.7	15.6	14.5	16.6	15.0	13.4	16.1	17.5	16.0	18.6	15.6	14.5	16.6	14.9	13.3	16.0
75	12.3	11.3	13.0	12.2	11.2	13.0	11.9	10.7	12.8	13.8	12.6	14.7	12.2	11.2	12.9	11.9	10.6	12.7
80	9.2	8.4	9.8	9.1	8.3	9.7	9.2	8.2	9.8	10.5	9.4	11.1	9.1	8.3	9.7	9.2	8.1	9.8
85	6.6	5.9	7.0	6.5	5.9	6.9	6.9	6.1	7.3	7.6	6.7	8.0	6.5	5.9	6.9	6.9	6.1	7.3
90	4.5	4.1	4.8	4.5	4.0	4.7	5.1	4.5	5.2	5.3	4.6	5.5	4.5	4.0	4.7	5.0	4.5	5.2
95	3.1	2.8	3.2	3.0	2.7	3.2	3.7	3.3	3.7	3.6	3.2	3.7	3.0	2.7	3.2	3.6	3.3	3.7
100	2.2	2.0	2.2	2.1	1.9	2.2	2.7	2.5	2.7	2.6	2.2	2.6	2.1	1.9	2.2	2.2	2.5	2.7

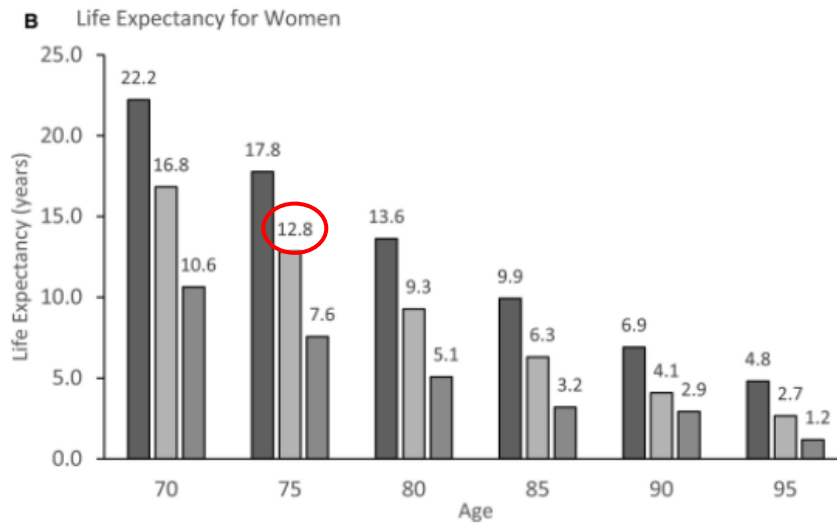
¹Life tables by Hispanic origin are based on death rates that have been adjusted for race and ethnicity misclassification on death certificates. Updated classification ratios were applied; see Technical Notes.
SOURCE: NCHS, National Vital Statistics System, Mortality.

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Estimating Life Expectancy – Women



Journal of the American Geriatrics Society, Volume: 66, Issue: 2, Pages: 229-234, First published: 20 November 2017, DOI: (10.1111/jgs.15216)

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Mortality Risk for Schonberg Index

Points	Risk of FIVE YEAR mortality	Risk of TEN YEAR mortality	Risk of FOURTEEN YEAR mortality
0 - 1	<3%	5 - 11%	19 - 21%
2 - 3	3 - 6%	9 - 12%	19 - 24%
4 - 5	7 - 8%	15 - 21%	27 - 36%
6 - 7	10 - 12%	26 - 37%	42 - 52%
8 - 9	17 - 27%	37 - 44%	42 - 52%
10 - 11	26 - 29%	53 - 60%	74 - 78%
12 - 13	37 - 41%	60 - 68%	81 - 83%
14 - 15	47 - 52%	74 - 76%	87 - 88%
16 - 17	60 - 61%	86 - 87%	100%
≥17	70%	92%	100%

Patients that have >50% chance of death in a specific time interval have an estimated life expectancy less than that time interval. For example, a patient with a 60% mortality risk at 5 years has a life expectancy <5 years.

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Have Time to Benefit Table Handy

Table 1. Time to Benefit for Preventive Interventions for Older Adults

Time to Benefit, Years	Preventive Intervention	Guideline	References
10	Colorectal cancer screening	USPSTF, American College of Physicians, Society of General Internal Medicine	1, 36-38
10	Breast cancer screening	Society of General Internal Medicine, American College of Physicians	1, 37, 38
10-15	Prostate cancer screening	American Urological Association, American College of Physicians	



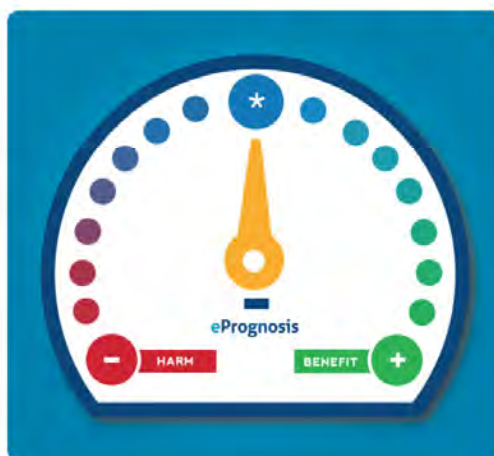
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ePrognosis | CANCER SCREENING

HOME ABOUT SURVEY FEEDBACK GET INVOLVED TERMS



RESULTS

IT IS NOT CLEAR THAT GETTING SCREENED FOR BREAST OR COLORECTAL CANCER WILL HELP THIS PERSON.

THIS PERSON'S THOUGHTS AND FEELINGS SHOULD BE THE MAJOR DRIVER OF THE DECISION.

VIEW HARMS

VIEW BENEFITS

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HOME ABOUT SURVEY FEEDBACK GET INVOLVED TERMS

LEARN MORE

OF 1000 PEOPLE LIKE THIS PERSON WHO GOT TESTED FOR BREAST CANCER

100

PEOPLE WILL EXPERIENCE HARM IN THE FIRST YEAR.

LEARN MORE

AFTER 10 YEARS, OF 1000 PEOPLE LIKE THIS PERSON WHO GOT TESTED FOR BREAST CANCER

1

WILL AVOID DEATH FROM BREAST CANCER.

LEARN MORE

AFTER 10 YEARS, OF THE 1000 PEOPLE LIKE THIS PERSON

300

WILL DIE WHETHER OR NOT THEY GOT TESTED FOR BREAST CANCER.

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HOME ABOUT SURVEY FEEDBACK GET INVOLVED TERMS

BENEFITS

- ✚ A mammogram is more likely to find breast cancer when it is small, improving a woman's chances of only needing a minor surgery.
- ✚ Getting a mammogram may lower a woman's chances of dying from breast cancer.
- ✚ Getting a mammogram may help a woman feel good about herself and her health.

[^ BACK TO TOP](#)

HARMS

- ✚ Getting a mammogram may be uncomfortable or cause anxiety.
- ✚ Some women who get a mammogram will experience a false alarm. These women are told their mammogram is abnormal but additional tests do not show breast cancer. Some women find this experience caused anxiety.
- ✚ Additional tests include: Additional mammograms, Breast ultrasounds, Breast biopsies
- ✚ A mammogram may find breast cancer that could never have caused problems or symptoms in a woman's lifetime.
- ✚ Getting a mammogram may increase the number of tests and treatments a woman gets in her lifetime. Some of the tests and treatments may cause pain, bleeding, fatigue, infection, or other symptoms.

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SHARE YOUR RESULT

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Decision Aids that Consider Prognosis



Decision aid for colon cancer screening:

For women 70-74: [English](#) For men 70-74: [English](#)
 For women 75-79: [English](#) For men 75-79: [English](#)
 For women 80-84: [English](#) For men 80-84: [English](#)

Purpose of this decision aid: This decision aid is designed to help patients decide whether getting screened for colon cancer is the right choice for them.



Decision aid for device for patients with advanced heart failure:

Booklet: [English](#) [Spanish](#) [French](#)
 Video: [English](#)

Purpose of this decision aid: LVADs are devices for patients with advanced heart failure. This page is designed to help you understand what an LVAD is and to help you, your family, and your doctors think about what is best for you. Your values and goals are the most important factors in making a decision.



Decision aid for mammography screening for women aged 75 and older:

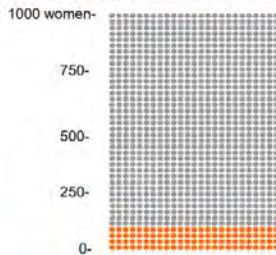


Decision aid for patients considering ICD therapy for primary

The next three pages show what happens to 1,000 women age 75 to 84 who CONTINUE to or DO NOT have mammograms over 5 years ***PLEASE READ BELOW***

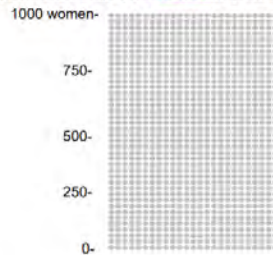
-In the graphs below, each circle represents 1 woman out of 1,000-

Women your age who CONTINUE to have mammograms



100 False Alarms – These women have an abnormal mammogram but additional tests do not show breast cancer. Most women find this experience causes anxiety.

Women your age who DO NOT have mammograms



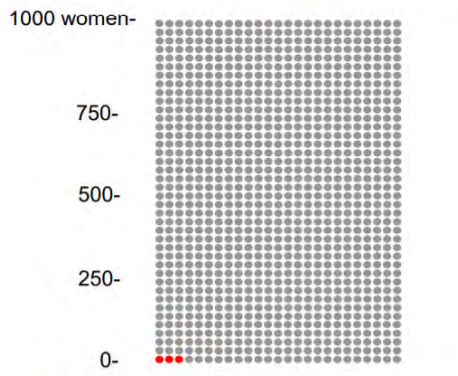
0 False Alarms – 0 women have a mammogram so they do not experience a false alarm.

Additional tests include:

[Additional Mammograms](#) [Breast Ultrasounds](#) [Breast Biopsies](#)

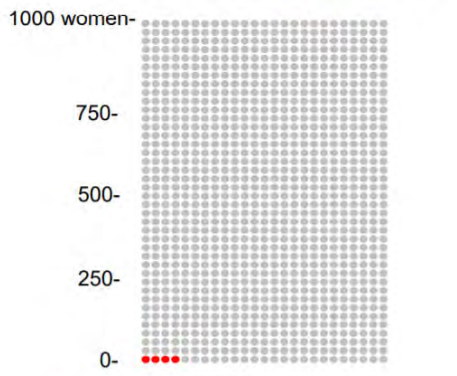


Women your age who CONTINUE to have mammograms



- 3 women die of breast cancer
- 997 women do not die of breast cancer

Women your age who DO NOT have mammograms



- 4 women die of breast cancer
- 996 women do not die of breast cancer

• **Summary:** 1 less woman out of 1,000 may die of breast cancer who chooses to have a mammogram.



← Colorectal Cancer: Screening -- Adults aged 76 to 85 years [C]

GENERAL

RATIONALE

CLINICAL

OTHERS

TOOLS

Specific Recommendations


The decision to screen for colorectal cancer in adults aged 76 to 85 years should be an individual one, taking into account the patient's overall health and prior screening history.

Adults in this age group who have never been screened for colorectal cancer are more likely to benefit.

Screening would be most appropriate among adults who 1) are healthy enough to undergo treatment if colorectal cancer is detected and 2) do not have comorbid conditions that would significantly limit their life expectancy.

Risk Factor Information

For the vast majority of adults, the most important risk factor for colorectal cancer is older age. Most cases of colorectal cancer occur among adults older than 50 years; the median age at diagnosis is 68 years.¹ A positive family history (excluding known inherited familial syndromes) is thought to be linked to about 20% of cases of colorectal cancer.¹ About 3% to 10% of the population has a first-degree relative with colorectal cancer.⁷ The USPSTF did not specifically review the evidence on screening in populations at increased risk; however, other professional organizations recommend that patients with a family history of colorectal cancer (a first-degree relative with early-onset colorectal cancer or multiple first-degree relatives with the disease) be screened more frequently starting at a younger age, and with colonoscopy.⁸ Male sex and black race are also associated with higher colorectal cancer incidence and mortality. **Black adults have the highest incidence and mortality rates compared with other racial/ethnic subgroups.**³ The reasons for these disparities are not entirely clear. Studies have documented inequalities in screening, diagnostic follow-up, and treatment; they also suggest that equal treatment generally seems to produce equal outcomes.⁹⁻¹¹ Accordingly, this recommendation applies to all racial/ethnic groups, with the clear acknowledgement that efforts are needed to ensure that at-risk populations receive recommended screening, follow-up, and treatment.



Lung Cancer: Screening -- Adults aged 50 to 80 years who have a 20 pack-year smoking history and currently smoke or have quit within the past 15 years [B]

GENERAL ASSESSMENT PRACTICE OTHERS TOOLS

Specific Recommendations

The USPSTF recommends annual screening for lung cancer with low-dose computed tomography (LDCT) in adults aged 50 to 80 years who have a 20 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.

Frequency of Service

The USPSTF recommends annual screening for lung cancer with low-dose computed tomography (LDCT) in adults aged 50 to 80 years who have a 20 pack-year smoking history and currently smoke or have quit within the past 15 years.

Risk Factor Information


Smoking and older age are the 2 most important risk factors for lung cancer. The risk of lung cancer in persons who smoke increases with cumulative quantity and duration of smoking and with age but decreases with increasing time since quitting for persons who formerly smoked. The USPSTF considers adults aged 50 to 80 years who have a 20 pack-year smoking history and currently smoke or have quit within the past 15 years to be at high risk and recommends screening for lung cancer with annual LDCT in this population.


African American Black (Black) men have a higher incidence of lung cancer than White men, and Black women have a lower incidence than White women. These differences are likely related to differences in smoking exposure (ie, prevalence of smoking) and related exposure to carcinogens in cigarettes. The differences may also be related to other social risk factors.


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 January 25, 2021

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Addressing Systemic Racism Through Clinical Preventive Service Recommendations From the US Preventive Services Task Force

Chyke A. Doubeni, MD, MPH¹; Melissa Simon, MD²; Alex H. Krist, MD, MPH³

» [Author Affiliations](#) | [Article Information](#)

JAMA. 2021;325(7):627-628. doi:10.1001/jama.2020.26188

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Mrs. O

- 78 year old African American woman
- Health is pretty good, no functional or cognitive limitations
- Quit smoking 10 years ago, 30 pack year history
- Mild COPD, does not need controlling meds and no hospitalizations

- Should she have:
- Mammogram? **MAYBE**
- Colonoscopy? **MAYBE**
- Lung cancer screening? **YES**

• Unless...



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How to communicate the balance of benefits and harms?

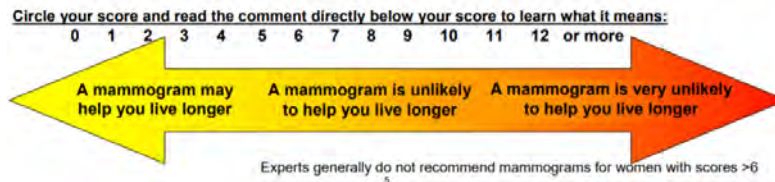
Schoenborn NL, et al JAMA Intern Med 2017;177:1121–1128

YES:

“This test isn’t going to help you live longer,”
or “This test is more likely to hurt you than help you.”

NO:

“You may not live long enough to benefit from this test.”



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USPSTF Grade D: Recommend AGAINST

Table 2—Tests Not Recommended by the USPSTF for Screening Asymptomatic Older Adults for Disease

USPSTF recommends against screening an asymptomatic adult for:	With these tests:
Asymptomatic bacteriuria	Urinalysis
Carotid artery stenosis	Duplex ultrasonography
Cervical cancer in women ≥ 65 years old who have had adequate prior screening or among women who have had a hysterectomy with removal of the cervix for benign disease	Pap smear
COPD	Spirometry
Coronary artery disease in adults at low risk	Resting or exercise ECG
Colon cancer in adults ≥ 85 years old (Screening may be modestly beneficial in adults 76–85 years old with long remaining life expectancy and no or few comorbidities.)	Fecal occult blood test/sigmoidoscopy/colonoscopy
Ovarian cancer	Transvaginal ultrasonography, CA-125, or pelvic examination
Pancreatic cancer	Ultrasonography, abdominal palpation, or serologic markers
Prostate cancer in men ≥ 70 years old	PSA and/or digital rectal examination
Thyroid cancer	Palpation

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In Sum

- Prevention is an important part of older adult health & an ART!
- Must balance the benefits and harms of screening
- Consider life expectancy when making recommendations for or against a preventive treatment
- Consider how much “time to benefit” a preventive measure entails
- There are some wonderful tools to help with patient communication around these concepts
- Shared decision making is key!

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Extra Material

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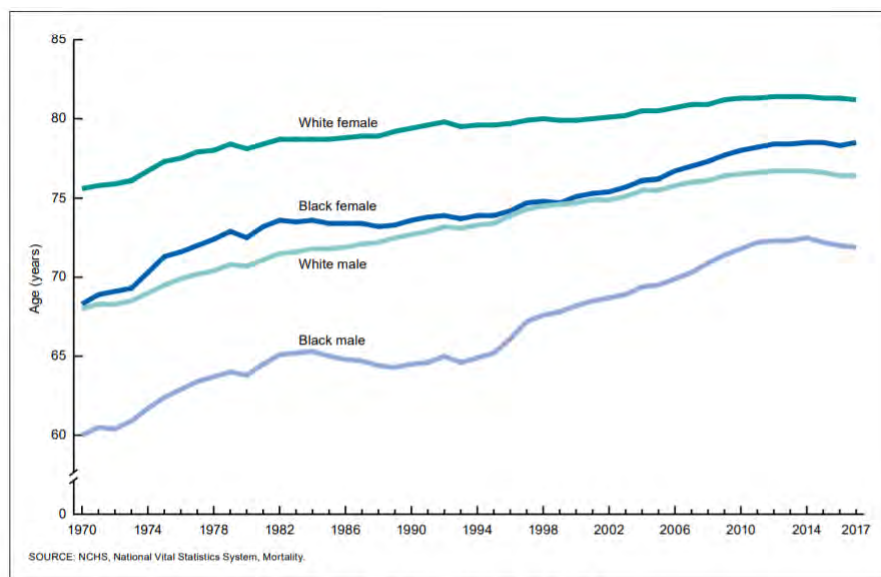


Figure 1. Life expectancy at birth, by race and sex: United States, 1970–2017

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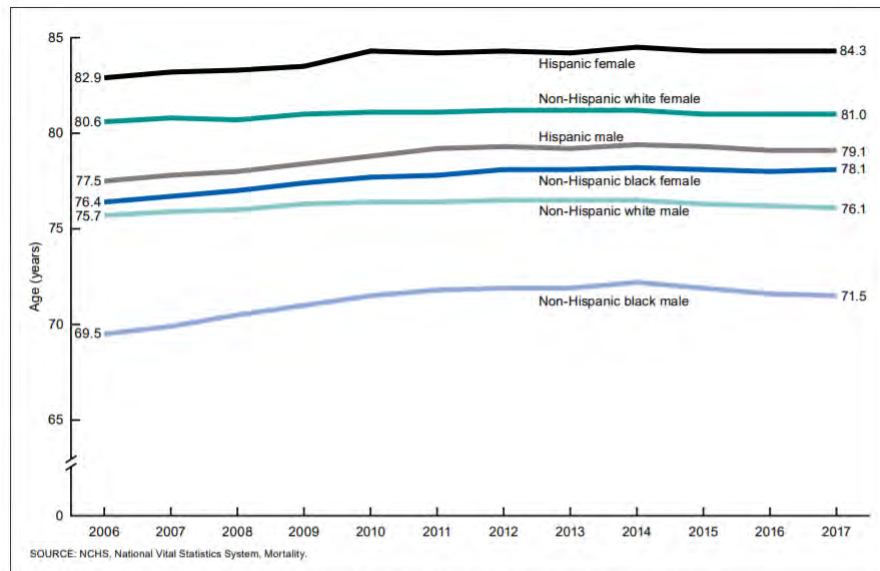



Figure 2. Life expectancy at birth, by Hispanic origin, race, and sex: United States, 2006–2017

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.



The following slides are from AGS Geriatrics Review Syllabus 10th Edition

Cancer Screening



AGS Geriatrics Healthcare Professionals
Leading Change. Improving Care for Older Adults.

Table 1—Preventive Health Measures Available for Older Adults and Recommended Use

Procedure	≥10 years remaining life expectancy	5 to <10 years remaining life expectancy	Moderate dementia	Near end of life	SOE	Cost-effectiveness ^a
Cancer screening						
Mammography	Every 2 years if <75 years old; consider stopping if ≥75 years old	Not recommended	Not recommended	Not recommended	A/C ^b	Somewhat cost-effective for women <80 years old, may be cost-effective for women ≥80 years old in top quartile of life expectancy.
Pap smear	Stop after age 65	Not recommended	Not recommended	Not recommended	B	Cost-effective to stop
Prostate-specific antigen	Consider discussing pros/cons if remaining life expectancy >10 years; stop at age 70	Not recommended	Not recommended	Not recommended	B	Uncertain

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Cancer Screening



Table 1—Preventive Health Measures Available for Older Adults and Recommended Use

Procedure	≥10 years remaining life expectancy	5 to <10 years remaining life expectancy	Moderate dementia	Near end of life	SOE	Cost-effectiveness ^a
Colon cancer screening					A/C ^c	Cost-effective
Fecal occult blood test or fecal immunochemical test	Yearly up to age 75, stop at age 86, shared decision-making ages 76–85	Not recommended	Not recommended	Not recommended		
Colonoscopy	Every 10 years up to age 75, stop at age 86, shared decision-making ages 76–85	Not recommended	Not recommended	Not recommended		
Low-dose CT for lung cancer screening	Consider annually in those at risk ^d , stop at age 80 or adult has not smoked for >15 years	Consider in those at risk ^d , stop at age 80 or adult has not smoked for >15 years	Not recommended	Not recommended	A	Uncertain

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Other Screening Tests



Table 1—Preventive Health Measures Available for Older Adults and Recommended Use

Procedure	≥10 years remaining life expectancy	5 to <10 years remaining life expectancy	Moderate dementia	Near end of life	SOE	Cost-effectiveness ^a
Other screening tests						
Blood pressure	Consider each visit	Consider each visit	Consider each visit	Consider each visit	A	Uncertain
Height	Once a year	Once a year	Consider	Consider	C	Uncertain
Weight	Each visit	Each visit	Each visit	Each visit	C	Uncertain
DEXA screening for osteoporosis	At least once after age 65 in women, or age 60 if high risk	Consider if not done previously	Not recommended	Not recommended	A	Cost-effective
Cholesterol screening	Screen to allow for risk assessment and shared decision-making	Consider	Not recommended	Not recommended	C	Uncertain
Diabetes screening	Screen if patient likely to benefit; consider stopping at age 70	Not recommended	Not recommended	Not recommended	C	Uncertain

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Other Screening Tests



Table 1—Preventive Health Measures Available for Older Adults and Recommended Use

Procedure	≥ 10 years remaining life expectancy	5 to <10 years remaining life expectancy	Moderate dementia	Near end of life	SOE	Cost-effectiveness ^a
Thyrotropin	Consider	Consider	Consider	Consider	C	Uncertain
Ultrasonography for abdominal aortic aneurysm	Once for men 65–75 years old who ever smoked; consider in men who never smoked	Consider	Not recommended	Not recommended	A	Cost-effective
HIV	Consider for those at high risk	Consider for those at high risk	Consider for those at high risk	Not recommended	A	Cost-effective
Hepatitis C	One time for adults up to age 79	One time for those born between 1945–1965	One time for those born between 1945–1965	Not recommended	B	Cost-effective
Hepatitis B	Consider for those at high risk	Consider for those at high risk	Consider for those at high risk	Not recommended	C	Uncertain

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Immunizations



Table 1—Preventive Health Measures Available for Older Adults and Recommended Use

Procedure	≥ 10 years remaining life expectancy	5 to <10 years remaining life expectancy	Moderate dementia	Near end of life	SOE	Cost-effectiveness ^a
Influenza	Annually	Annually	Annually	Annually	A	Cost-effective
Pneumococcal	Once after age 65 ^e	Once after age 65 ^e	Once after age 65 ^e	Once after age 65 ^e	A	Cost-effective
Tetanus	Booster every 10 years	Booster every 10 years	Booster every 10 years	Not recommended	C	Cost-effective (a single booster at age 65)
Herpes zoster series	Once after age 50	Once after age 50	Once after age 50	Once after age 50	A	Cost-effective

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Healthy Lifestyle Coaching



Table 1—Preventive Health Measures Available for Older Adults and Recommended Use

Procedure	≥ 10 years remaining life expectancy	5 to <10 years remaining life expectancy	Moderate dementia	Near end of life	SOE	Cost-effectiveness ^a
Smoking cessation	Every visit	Every visit	Discuss with caregiver	Not recommended	A	Telephone quit lines and counseling are cost-effective.
Exercise	Annually	Annually	Consider annually	Consider	C	Uncertain
Alcohol use disorder	Annually	Annually	Annually	Recommended initially, then if symptomatic	A	Screening and brief behavioral counseling interventions for alcohol abuse are cost-effective.
Driving assessment	Annually	Annually	Annually	Annually	A	Uncertain
Sexual function	Annually	Annually	Consider annually	Not recommended	D	Uncertain

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Geriatric Health Issues



Table 1—Preventive Health Measures Available for Older Adults and Recommended Use

Procedure	≥ 10 years remaining life expectancy	5 to <10 years remaining life expectancy	Moderate dementia	Near end of life	SOE	Cost-effectiveness ^a
Urinary incontinence screening	Annually	Annually	Annually	Annually	C	Uncertain
Visual acuity testing ^f	Consider annually	Consider annually	Consider annually	Not recommended	C	Population screening is not cost-effective; however, targeted screening of high-risk groups may be.
Hearing impairment screening ^{f, g}	Consider annually	Consider annually	Consider annually	Not recommended	C	A simple systematic screen, using an audiometric screening instrument, may be cost-effective for those 55–74 years old.

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Geriatric Health Issues



Table 1—Preventive Health Measures Available for Older Adults and Recommended Use

Procedure	≥10 years remaining life expectancy	5 to <10 years remaining life expectancy	Moderate dementia	Near end of life	SOE	Cost-effectiveness ^a
Cognitive impairment screening ^{g,h}	If symptomatic	If symptomatic	If symptomatic	If symptomatic	C	Uncertain
Gait and balance screening	Annually	Annually	Annually	Annually	C	Uncertain
Depression screening ^{f,g}	Annually	Annually	Annually	Annually	C	Uncertain
Falls risk assessment ^g	Annually	Annually	Annually	Annually	C	Uncertain
Advance directives completion ⁱ	Complete and update as needed	Complete and update as needed	Complete and update as needed	Complete and update as needed	C	Uncertain

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Chemoprevention



Table 1—Preventive Health Measures Available for Older Adults and Recommended Use

Procedure	≥10 years remaining life expectancy	5 to <10 years remaining life expectancy	Moderate dementia	Near end of life	SOE	Cost-effectiveness ^a
Aspirin	Not recommended in adults ≥70 years old. Consider in those 50–59 years old with >10% risk of cardiovascular disease; shared decision-making for men 60–69 years old	Not recommended	Not recommended	Not recommended	A	Uncertain
Vitamin D and calcium	Consider vitamin D at 1,000 IU with calcium at 500–1,200 mg/d in adults ≥65 years old	Consider vitamin D at 1,000 IU with calcium at 500–1,200 mg/d in adults ≥65 years old	Consider vitamin D at 1,000 IU with calcium at 500–1,200 mg/d in adults ≥65 years old	Consider vitamin D at 1,000 IU with calcium at 500–1,200 mg/d in adults ≥65 years old	A	Uncertain
Multivitamin	Not recommended	Not recommended	Not recommended	Not recommended	D	
Hormone therapy (women)	Not recommended	Not recommended	Not recommended	Not recommended	A	

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AGS Table Footnotes



SOURCE: Adapted with permission from Flaherty JH, Morley JE, Murphy DJ, et al. The development of outpatient clinical glidepaths. *J Am Geriatr Soc.* 2002;50(11):1886–1901.

^a Cost-effectiveness is the ratio of costs of a test/procedure compared with the benefits of the test/procedure. It is expressed as the cost per year of life saved or the cost per quality-adjusted-life-year saved. Less than \$50,000 per life-year gained is considered cost-effective.

^b A for women up to age 74 years, C otherwise

^c A remaining life expectancy > 10 years, C otherwise

^d Adults aged 50–80 years old who have a 20 pack-year smoking history and currently smoke or have quit within the past 15 years. www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/lung-cancer-screening

^e If vaccinated with the 23-valent pneumococcal polysaccharide vaccine (PPSV23) before age 65, PPSV23 should be administered again 5 years later. Pneumococcal conjugate vaccine (PCV13) should be administered based on shared clinical decision-making with immunocompetent older adults without cerebrospinal fluid leak or cochlear implant.

^f Required element of Medicare Initial Preventive Physical Examination

^g Required element of Medicare first Annual Wellness Visit

^h Required element of Medicare subsequent Annual Wellness Visits

ⁱ With patient's consent, end-of-life planning is a required element of the Medicare Initial Preventive Physical Examination.



Leading Change. Improving Care for Older Adults.

Table 2—Tests Not Recommended by the USPSTF for Screening Asymptomatic Older Adults for Disease

USPSTF recommends against screening an asymptomatic adult for:	With these tests:
Asymptomatic bacteriuria	Urinalysis
Carotid artery stenosis	Duplex ultrasonography
Cervical cancer in women ≥65 years old who have had adequate prior screening or among women who have had a hysterectomy with removal of the cervix for benign disease	Pap smear
COPD	Spirometry
Coronary artery disease in adults at low risk	Resting or exercise ECG
Colon cancer in adults ≥85 years old (Screening may be modestly beneficial in adults 76–85 years old with long remaining life expectancy and no or few comorbidities.)	Fecal occult blood test/sigmoidoscopy/colonoscopy
Ovarian cancer	Transvaginal ultrasonography, CA-125, or pelvic examination
Pancreatic cancer	Ultrasonography, abdominal palpation, or serologic markers
Prostate cancer in men ≥70 years old	PSA and/or digital rectal examination
Thyroid cancer	Palpation