# Overtesting: Pros and Cons from the Patient Perspective

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### Overtesting

- Data based framework revealing excess cancer incidence in screened population compared to unscreened population, without proportional decrease in mortality.
- Closely related to Overdiagnois Diagnosis of cancers that would otherwise never have caused symptoms or death in a woman's lifetime can expose a woman to the immediate risks of therapy
- Also related to Overtreatment -

### General Patient Perspective

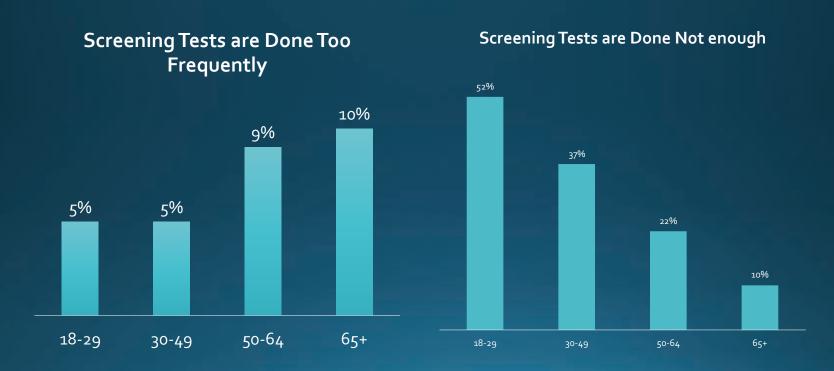
Next, we have a question about standard cancer screening tests such as mammograms, pap smears, PSA tests and colonoscopies. Just based on what you may have read and been told, and taking into account the risks, costs, and benefits, do you think such cancer screening tests are done -- [ROTATED: too frequently, about the right amount of time, (or) not frequently enough]?

	Too frequently	Right amount	Not enough	No opinion
National adults	7%	58%	31%	4%

Nov. 3-6, 2011

GALLUP'

## Age and Perception of Overtesting



## Mammography

#### **Provider Perspective**

- Benefit
  - Reduction in Breast cacner mortality
- Harms
  - Overdiagnosis
  - False Positives
  - False Negatives

#### **Patient Perspective**

- Benefit
  - Reduction in Breast Cancer Mortality
- Harms
  - Discomfort of actual test

## Breast Cancer and Mammography

#### Table 6A. Mammography (%), Women 40 Years and Older, US, 2013

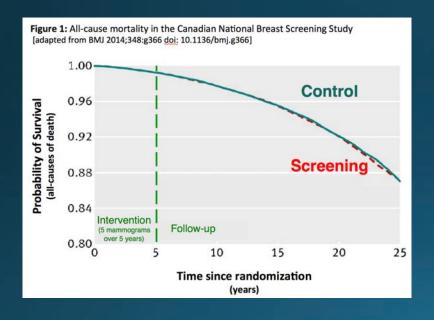
	Within the past year*	Within the past two years*	
Overall	51.3	65.9	
Age (years)			
40-49	46.6	59.6	
50-64	55.8	71.4	
65+	51.7	66.9	
Race/Ethnicity			
White (non-Hispanic)	52.1	66.4	
Black (non-Hispanic)	52.6	66.1	
Hispanic	45.9	61.6	
American Indian/Alaska Native	48.5	63.0	
Asian (non-Hispanic) <sup>†</sup>	50.3	66.9	
Education			
Some high school or less	38.7	52.7	
High school diploma or GED	47.7	61.4	
Some college/Assoc. degree	51.9	67.3	
College graduate	59.5	74.8	
Sexual Orientation			
Gay/lesbian <sup>‡</sup>	56.8	71.1	
Straight§	51.4	65.9	
Bisexual	#	#	
Insurance Status			
Uninsured	22.3	38.0	
Insured	54.8	69.6	
Immigration status			
Born in US	51.8	66.1	
Born in US territory¶	47.2	59.3	
In US fewer than 10 years	27.0	39.9	
In US 10+ years	50.0	66.0	

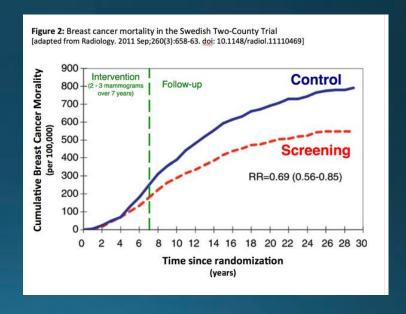
GED-General Educational Development high school equivalency. \*Percentages are age adjusted to the 2000 US standard population; see Statistical Notes (page 52) for further information. \*Does not include Native Hawaiians or other Pacific Islanders. \*Response option provided on the NHIS was "gay or lesbian." \$Response option provided on the NHIS was "straight, that is not gay or lesbian." ¶Have been in the US for any length of time. #Estimate not provided due to instability.

Source: Centers for Disease Control and Prevention. National Health Interview Survey, 2013. Public use data file. See Survey Sources (page 53) for complete citation.

American Cancer Society, Inc., Surveillance Research, 2015

## Benefits of Screening Mammography Medical Perspective

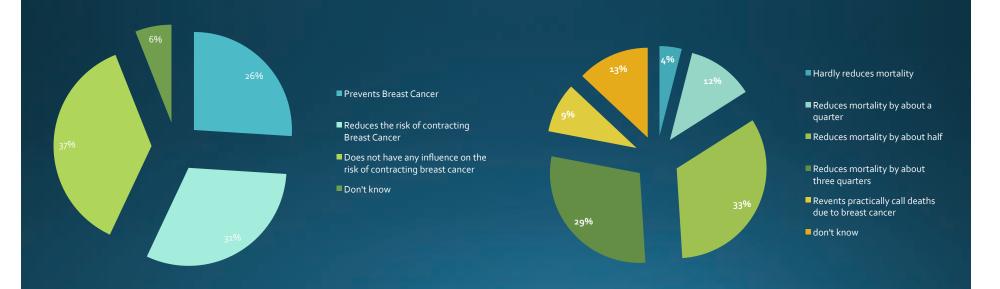




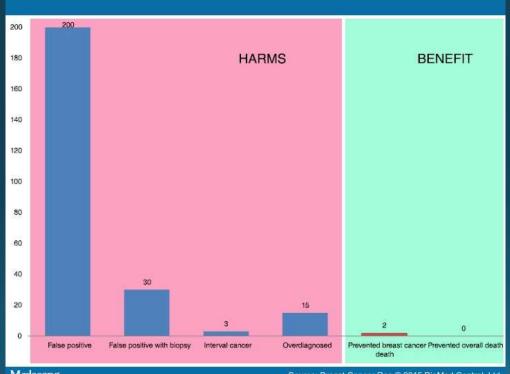
## Benefits of Screening Mammography Patient Perspective







## Harms of Screening Mammography Medical Perspective



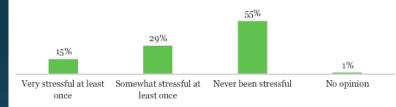
Medscape

Source: Breast Cancer Res @ 2015 BioMed Central, Ltd.

## Harms of Screening Mammography: Patient Perspective

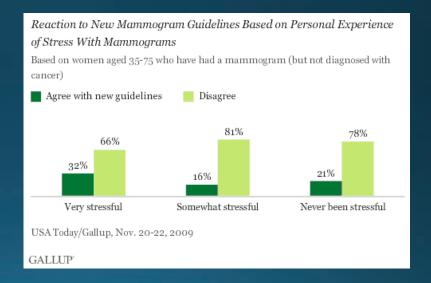
#### History of Stress Due to Mammograms Among Women Aged 35-75 Who Have Had a Mammogram (But Not Diagnosed With Breast Cancer)

We'd like to know how stressful the experiences you have had with mammograms have been for you, both in terms of the actual procedure and also any concerns raised by the test results. Which of the following applies to you —having mammograms has never been stressful for you, on at least one occasion having a mammogram was somewhat stressful for you, or on at least one occasion having a mammogram was very stressful for you?

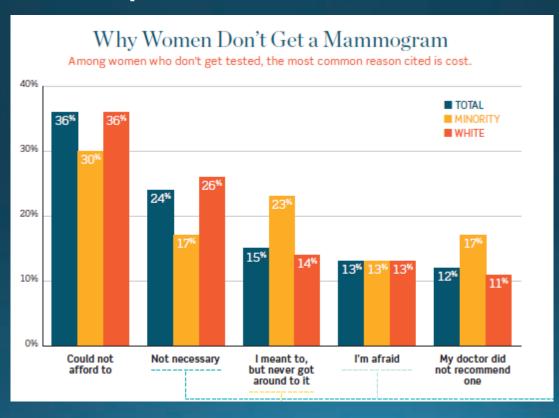


USA Today/Gallup, Nov. 20-22, 2009

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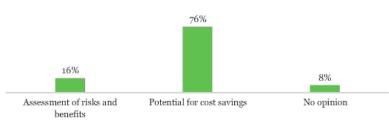
## Patient Perspectives



## Patient Perspective

#### Perceived Basis for Panel's Mammogram Guidelines Among Women Aged 35 to 75 $\,$

Just your best guess, do you think the panel's recommendations were mainly based on -- [a fair assessment of the true medical risks and benefits of mammograms for women in their 40s, (or mainly based on) the potential for cost savings in the healthcare system]?



USA Today/Gallup, Nov. 20-22, 2009

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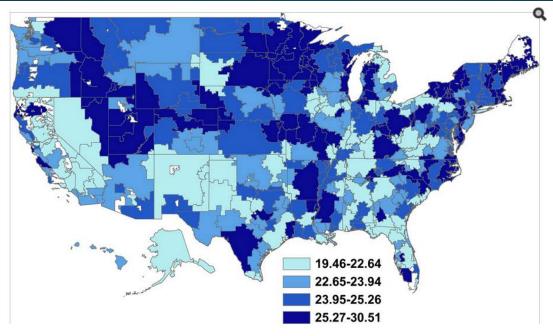




## Colonoscopy

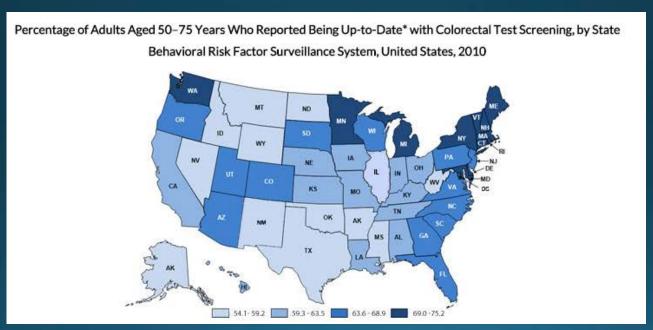
- In 2013 58.3% of US Adults were up to date on colorectal screening.
- Still pockets of overtesting are present
  - Choosing Wisely states "Do not repeat colorectal cancer screening (by any method) for 10 years after a high-quality colonoscopy is negative in average-risk individuals."
  - Medicare data shows 23.5% had a repeat colonoscopy too soon.
    - More than a third of these patients were >80 when they had their FIRST colonoscopy

## Colonoscopy Overtesting in pockets across the US



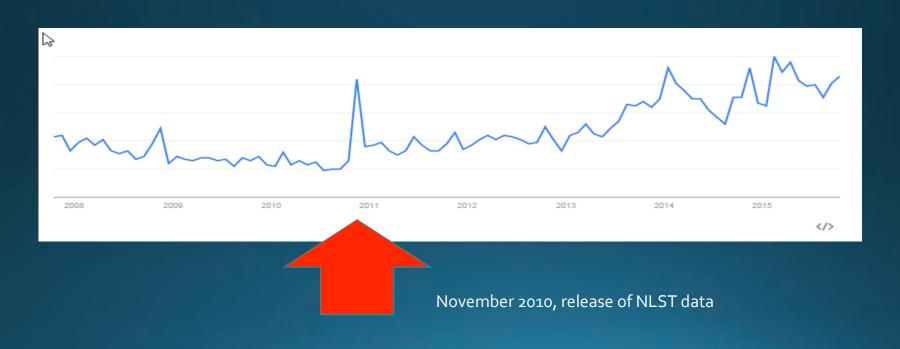
For each of the 306 Hospital Referral Regions in the United States, the percent of colonoscopies performed in Medicare beneficiaries aged 70 and older in 2008/2009 that were potentially inappropriate. Results based on 5% national Medicare claims data.

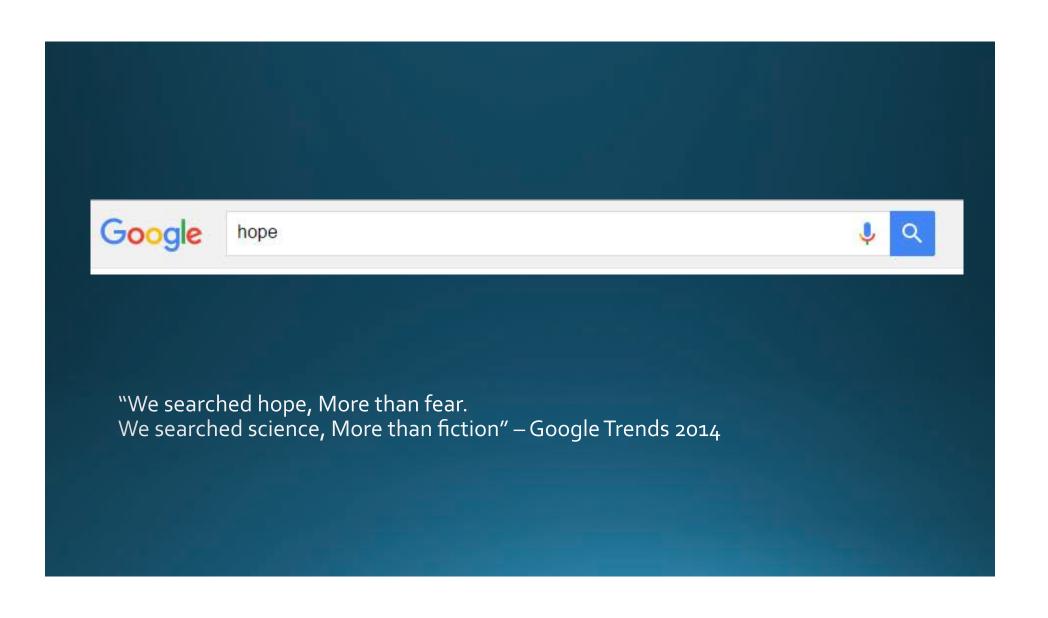
## Colonoscopy Large areas of underutilization



**Source:** Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2010.

## Lung Cancer Screening Google Searches over time





### Sources

- National Cancer Institute. Breast cancer screening—for health professionals (PDQ). http://www.cancer.gov/types/breast/hp/breast-screening-pdq#section/ 1 Accessed October 7, 2015.
- Saad L. Women disagree with new mammogram advice. Gallup. November 24, 2009. http://www.gallup.com/poll/124463/women-disagree-new-mammogram-advice.aspx Accessed October 7, 2015.
- <u>Domenighetti G, D'Avanzo B, Egger M, et al. Women's perception of the benefits of mammography screening: population-based survey in four countries. Int J Epidemiol. 2003;32:816-826. http://ije.oxfordjournals.org/content/32/5/816.full.pdf Accessed October 7, 2015.</u>
- Diagnosis Anxiety: Working Mother Breast Screening Report. Working Mother Research Institute. http://www.wmmsurveys.com/Mammogram Report.pdf. Accessed October 9, 2015
- Cancer Prevention & Early Detection Facts & Figures. American Cancer Society, Inc., Surveillance Research, 2015. Accessed October 9, 2015
- Sheffiled, KM; Han, Y; Yong-Fang, K; Riall, TS; Goodwin, JS. Potentially Inappropriate Screening Colonoscopy in Medicare Patients, Variation by Physician and Geographic Region. *JAMA Intern Med.* 2013;173(7):542-550.
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2010.
- Choosing Wisely.org Accessed October 15, 2015.

### Pre/post Question 1.

Among American Adults this percent believe that screening tests are conducted the right amount (not too much or too little).

- A. 16%
- B. 33%
- C. 58%
- D. 74%

### Pre/Post Question 2.

Repeat colorectal cancer screening should be done this many years after a high quality colonoscopy is negative in average-risk individuals

- A. 5 years
- B. 7 years
- C. 10 years
- D. should not be repeated