

# ACS FluFOBT Program

## A Proven Approach to Increase Colorectal Cancer Screening

Massachusetts Annual Adult Immunization Conference

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- *I have no relationships to disclose .*
- *I may discuss the use of vaccines in a manner not approved by the U.S. Food and Drug Administration.*
- *But in accordance with ACIP recommendations.*



# Objectives

- Brief review of colorectal cancer epidemiology
- Screening imperative
- Screening Options; especially FIT
- FluFIT program evidence
- Helping primary care providers improve rates
- Questions



# Colorectal Cancer



# Colorectal Cancer (CRC)

- 3<sup>rd</sup> most common cancer and the 2<sup>nd</sup> deadliest
  - 136,800 new cases expected
  - More than 50,000 deaths
- 1.2 million Americans living with CRC
- Death rates have fallen steadily past 20 years

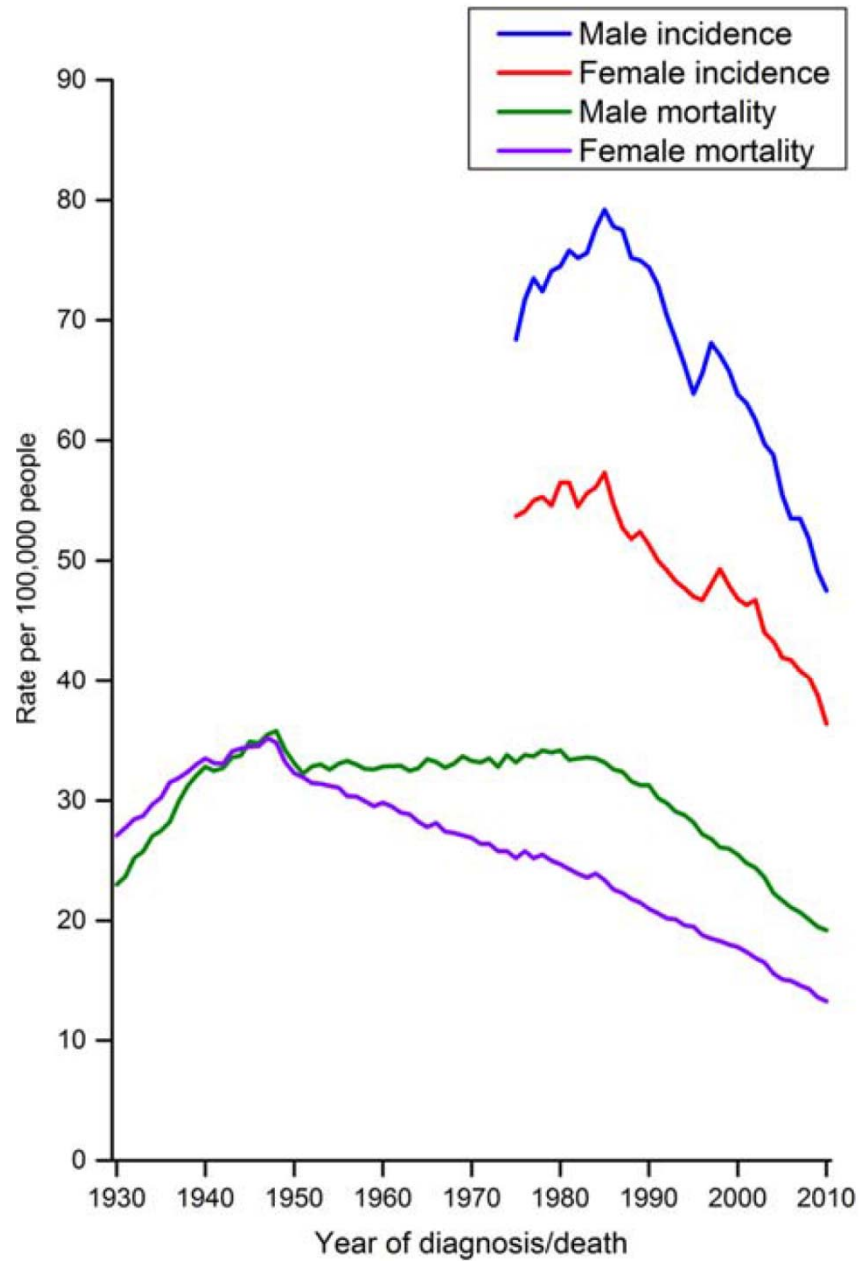


FIGURE 4. Long-Term Trends in Colorectal Cancer Incidence (1975-2010) and Mortality (1930-2010) Rates\* by Sex, United States.



# Trends in CRC incidence and mortality

Research suggests that observed declines in incidence and mortality are due in large part to:

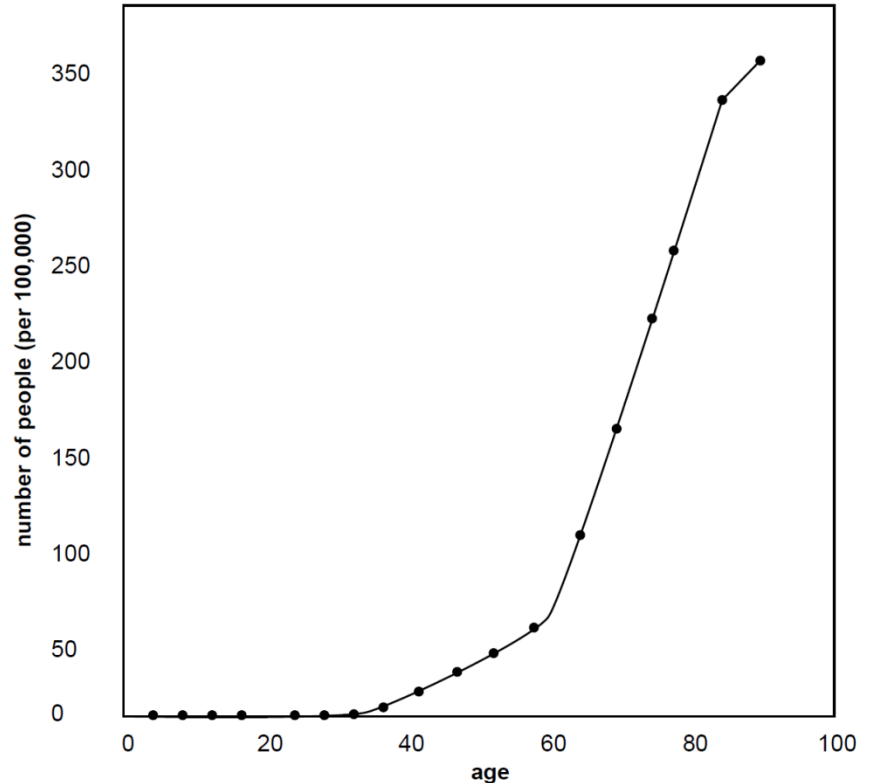
- CRC treatment advances
- Screening → detecting cancers at earlier, more treatable stages
- Screening and polyp removal, preventing progression of polyps to invasive cancers
  - NEJM study Feb 2012 showed polyp removal associated with 53% lower risk of CRC death

# Age: the most impactful risk factor

CRC usually develops after age 50.

The chances of getting it increases as you get older.

Incidence of Colon Cancer by Age



<http://science.education.nih.gov/supplements/nih1/cancer/guide/pdfs/ACT3M.PDF>

**CRC screening should begin at age 50 for most people, earlier for those with a family history.**





# Non-Modifiable Risk Factors

- Age
  - 90% of cases occur in people 50 and older
- Gender
  - slight male predominance, but common in both men and women
- Race/Ethnicity – higher rates among
  - African Americans
  - Native Americans (esp. Northern Plains Tribes)
  - Alaska Natives
  - Ashkenazi Jews

# Modifiable risk factors

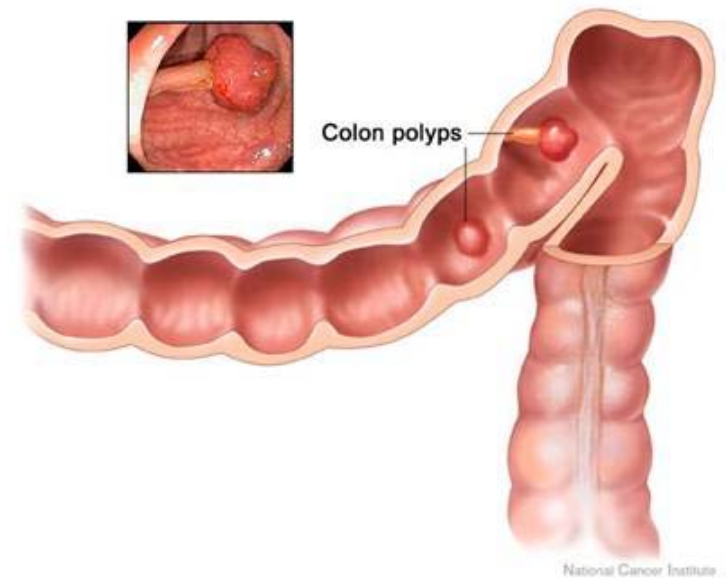
- Lack of physical activity
  - Less active → raises risk
- Overweight
  - Obesity → raises risk of having and of dying from CRC
- Smoking → raises risk
- Alcohol use → raises risk
- Type 2 diabetes → raises risk



# Risk factor - polyps

Different types of polyps:

- Hyperplastic
  - Low risk: very small chance they'll grow into cancer
- Adenomas
  - About **9 out of 10** colon and rectal cancers start as adenomas



# Why Screen?

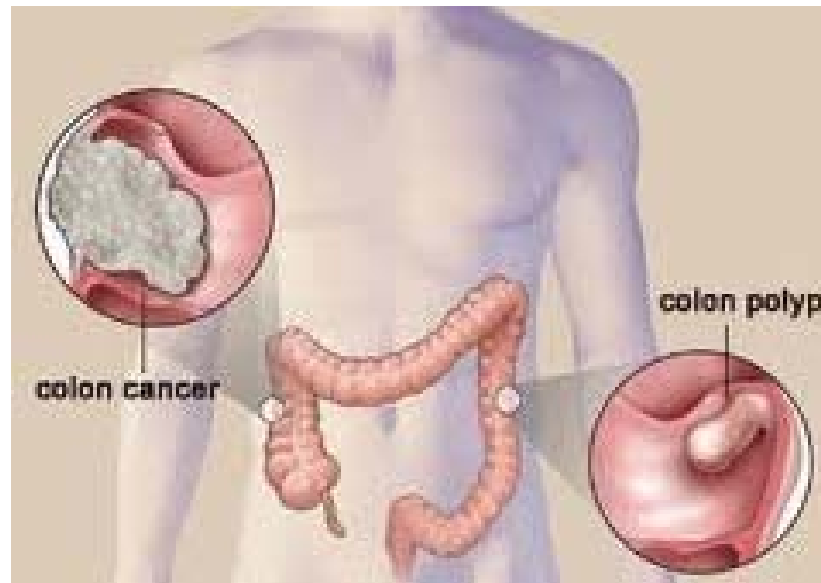
There are two aims of testing:

## 1. Prevention

Find and remove polyps to prevent cancer

## 2. Early Detection

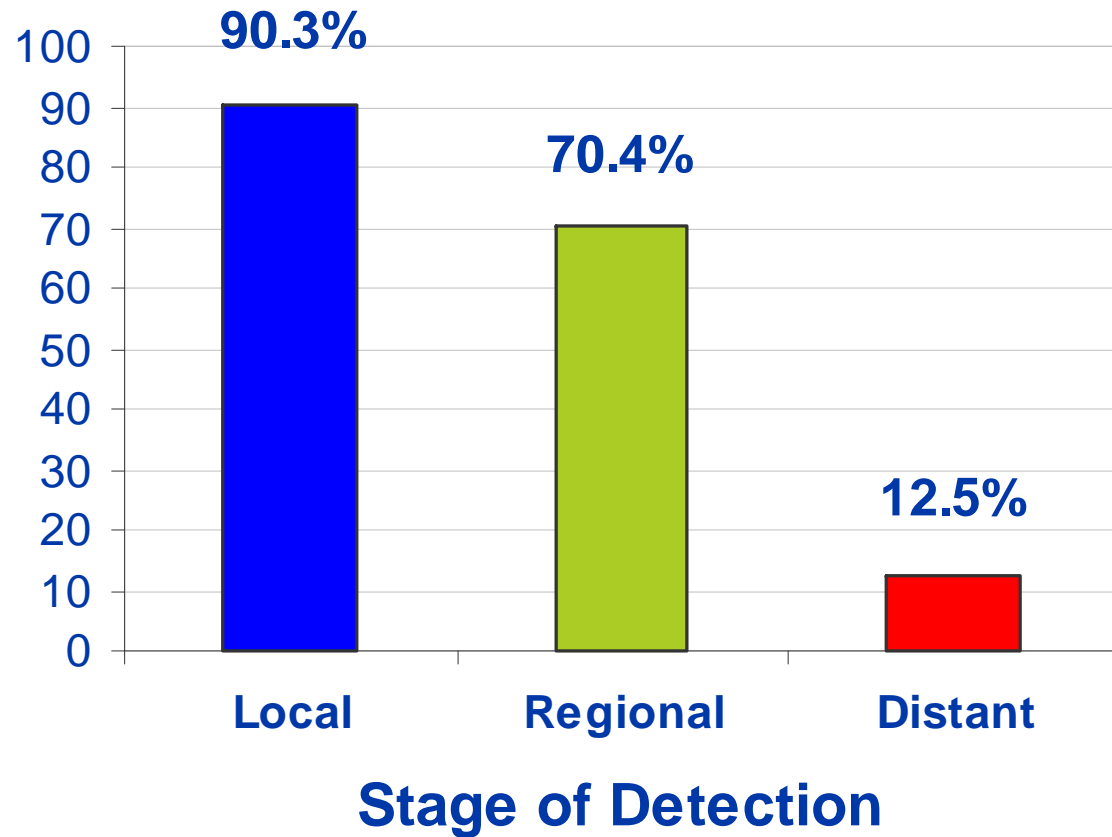
Find cancer in the early stages, when best chance for a cure



# Benefits of Screening

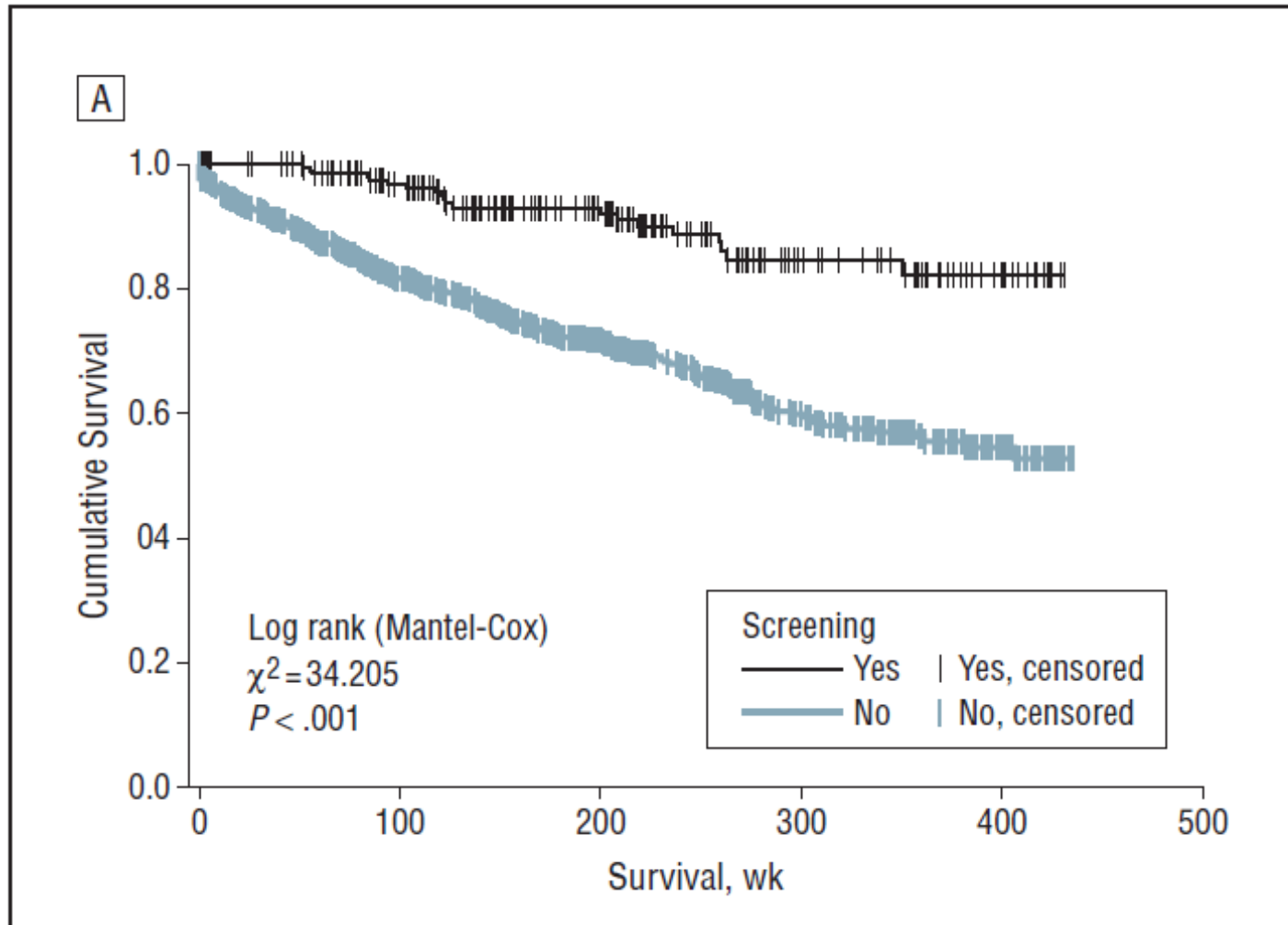
## Survival Rates by Disease Stage\*

**5-yr  
Survival**



\*1996 - 2003

# Impact of Screening





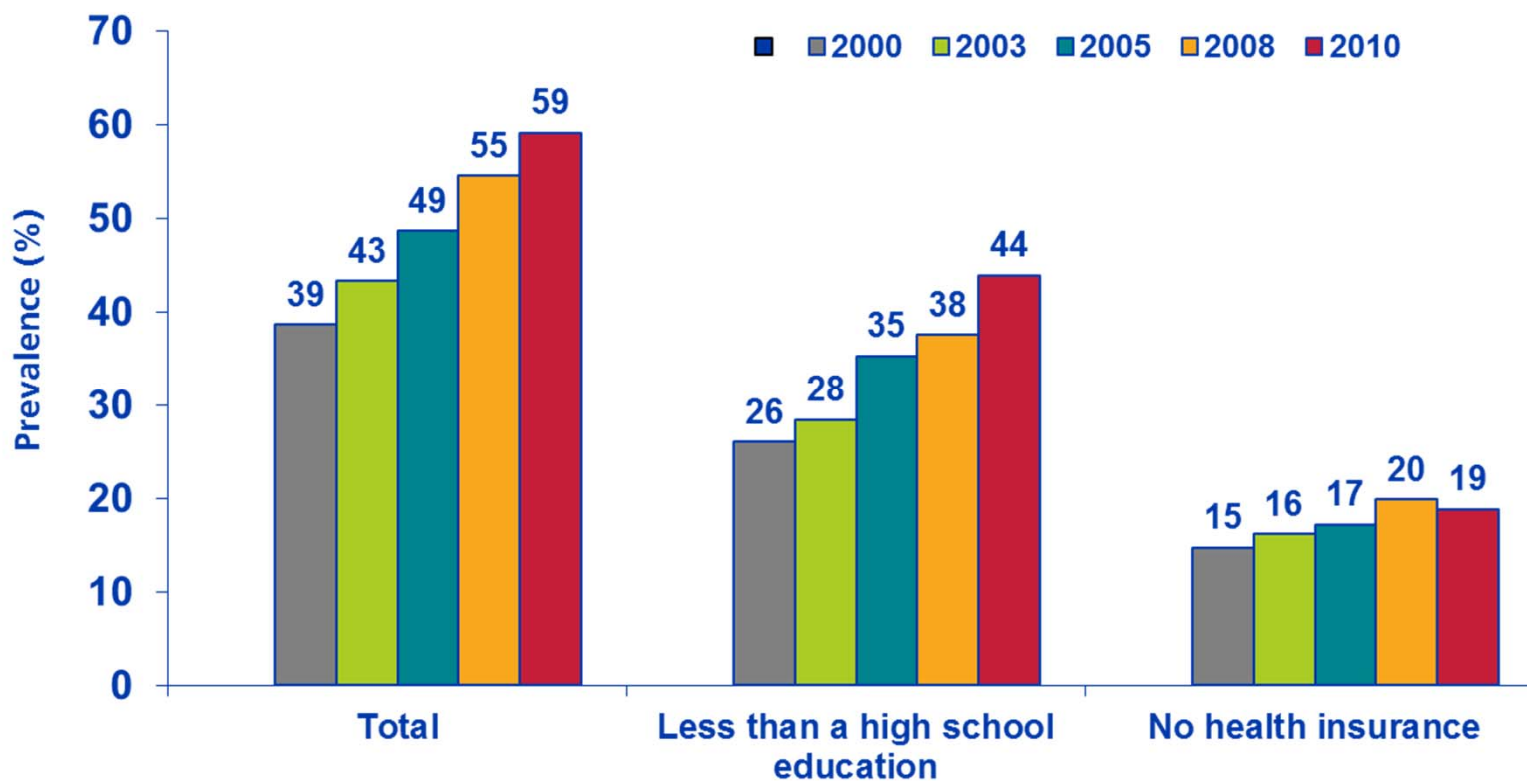
# SCREENING RATES



We **save lives** and create more birthdays  
by helping you stay well, helping you get well,  
by finding cures, and by fighting back.

[cancer.org](http://cancer.org) | 1.800.227.2345

## Trends in Recent\* CRC Screening Prevalence (%), by Educational Attainment and Health Insurance Status, Adults 50-75 Years, US, 2000-2010



**Source:** Klabunde et al, *Cancer Epidemiol Biomarkers Prev* 2011;20:1611-1621

National Health Interview Survey Public Use Data File 2010, National Center for Health Statistics, Centers for Disease Control and Prevention, 2011.

American Cancer Society, Surveillance Research, 2011

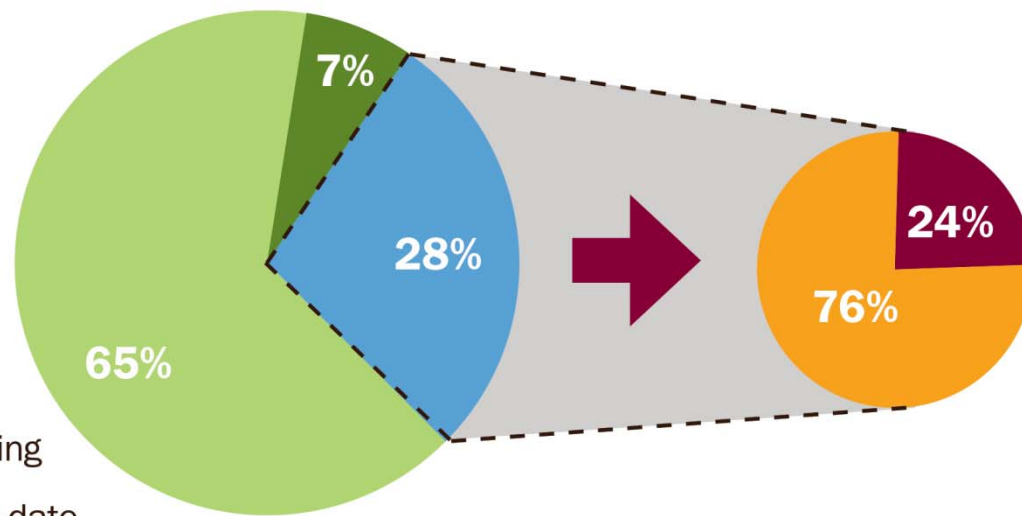


# Who's Not Screened?



Testing status  
of adults aged  
50–75 years

- Up-to-date CRC testing
- Tested but not up-to-date
- Never tested



Insurance status  
of never tested  
adults aged  
50–75 years

- Insured
- Uninsured

SOURCE: Behavioral Risk Factor Surveillance System, 2012



# UTD with CRC Screening (BRFSS 2012)

State	%	(95% CI)
<b>Overall</b>	<b>65.1</b>	<b>(64.7–65.5)</b>
<b>Highest tertile</b>		
Massachusetts	76.3	(74.9–77.6)
New Hampshire	75.3	(73.4–77.0)
Maine	73.1	(71.6–74.6)
Rhode Island	72.7	(70.5–74.9)
Connecticut	72.1	(70.1–74.0)
Vermont	71.4	(69.4–73.3)
Delaware	71.2	(68.6–73.6)
Wisconsin	71.2	(68.4–73.7)
Minnesota	70.6	(69.0–72.1)
Maryland	70.4	(68.6–72.2)
New York	69.4	(66.8–71.9)
Michigan	69.0	(67.3–70.7)
North Carolina	68.2	(66.5–69.8)
Virginia	68.0	(66.0–69.9)
Utah	68.0	(66.3–69.6)
Georgia	67.2	(64.9–69.5)
California	67.1	(65.2–68.8)
<b>Middle tertile</b>		
Washington	66.8	(65.4–68.2)
District of Columbia	66.7	(62.9–70.3)
Pennsylvania	66.5	(65.1–68.0)
Iowa	65.9	(64.0–67.7)
Colorado	65.4	(63.8–66.9)
Alabama	64.9	(63.0–66.8)
Oregon	64.7	(62.3–67.0)
Kansas	64.6	(63.0–66.1)
Tennessee	64.3 <sup>s</sup>	(62.1–66.5)
Florida	64.2	(61.8–66.5)
South Carolina	64.2	(62.4–65.9)
Hawaii	64.1	(61.6–66.6)
Missouri	64.0	(61.6–66.3)
Ohio	63.3	(61.7–64.9)
Kentucky	62.9	(61.0–64.8)
West Virginia	62.7	(60.6–64.8)
New Jersey	62.4	(60.6–64.0)





# CRC screening in Community Health Centers

## **New UDS measure - Colorectal Cancer Screening**

- Measure – Percent of patients in universe who received appropriate screening for colorectal cancer
- Universe is adults who were age 51 through age 74 during the measurement year and seen in the measurement year
- Requires documentation of test performed by grantee or by another care giver
- 2012 Nationwide Rate – 30.2%
  - Slightly increased in 2013



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# Screening Tests




The best test is the one  
that gets done

Sydney J Winawer, MD

# Age to Begin and End Screening (ACS and USPSTF Comparison)

Recommendation	ACS/USMSTF/ACR	USPSTF	ACG
Age to begin and end screening in average risk adults	Begin at age 50, and end screening at a point where curative therapy would not be offered due to life-limiting comorbidity	Begin screening at age 50. <b>Routine screening between ages 76-85 is not recommended.</b> Screening after age 85 is not recommended.	Begin screening at age 50. <u>African Americans at age 45.</u>
Screening in high risk adults	Detailed recommendations based on personal risk and family history	No specific recommendations for age to begin testing or type of testing	Detailed recommendations based on personal risk and family history



# Recommended Screening Tests

## ACS and USPSTF

- Colonoscopy every 10 years
- High Sensitivity Fecal Occult Blood Testing every year (annually)
  - Guaiac
  - Immunochemical
  - DNA testing every three years
- Flexible Sigmoidoscopy (FSIG) every 5 years
  - Rarely used in U.S.






# Why Colonoscopy is NOT gold standard

- Evidence does not support “best test” or “gold standard”
  - Colonoscopy misses ~ 10% of significant lesions in expert settings
  - More costly on a one-time basis
  - Higher potential for patient injury than other tests
  - Measurable outcomes vary widely (i.e. test performance is highly operator dependent)



Adapted from Jack Tippit, Saturday Evening Post



# Stool Testing (FOBT and FIT)

Polyps and cancer often leak only small amounts of blood

Fecal Occult Blood Tests (FOBT) and Fecal Immunochemical Tests (FIT) can find this small amount of blood in the stool.

If blood is found in the stool the patient needs a colonoscopy.

# Stool Test: Guaiac

- Most common type in U.S.
- Solid evidence (3 RCT's)
- 30 year f/u (NEJM Oct 2013)
- Need specimens from 3 bowel movements
- Non-specific
- Results influenced by foods and medications
- Better sensitivity with newer versions (Hemoccult Sensa)
- Older forms (Hemoccult II) **not recommended!**



# Fecal Immunochemical Tests (FIT)

- Specific for human blood and for lower GI bleeding
- Results not influenced by foods or medications
- Some types require only 1 or 2 stool specimens
- Higher sensitivity than older forms of guaiac-based FOBT
- Costs more than guaiac tests (but higher reimbursement)

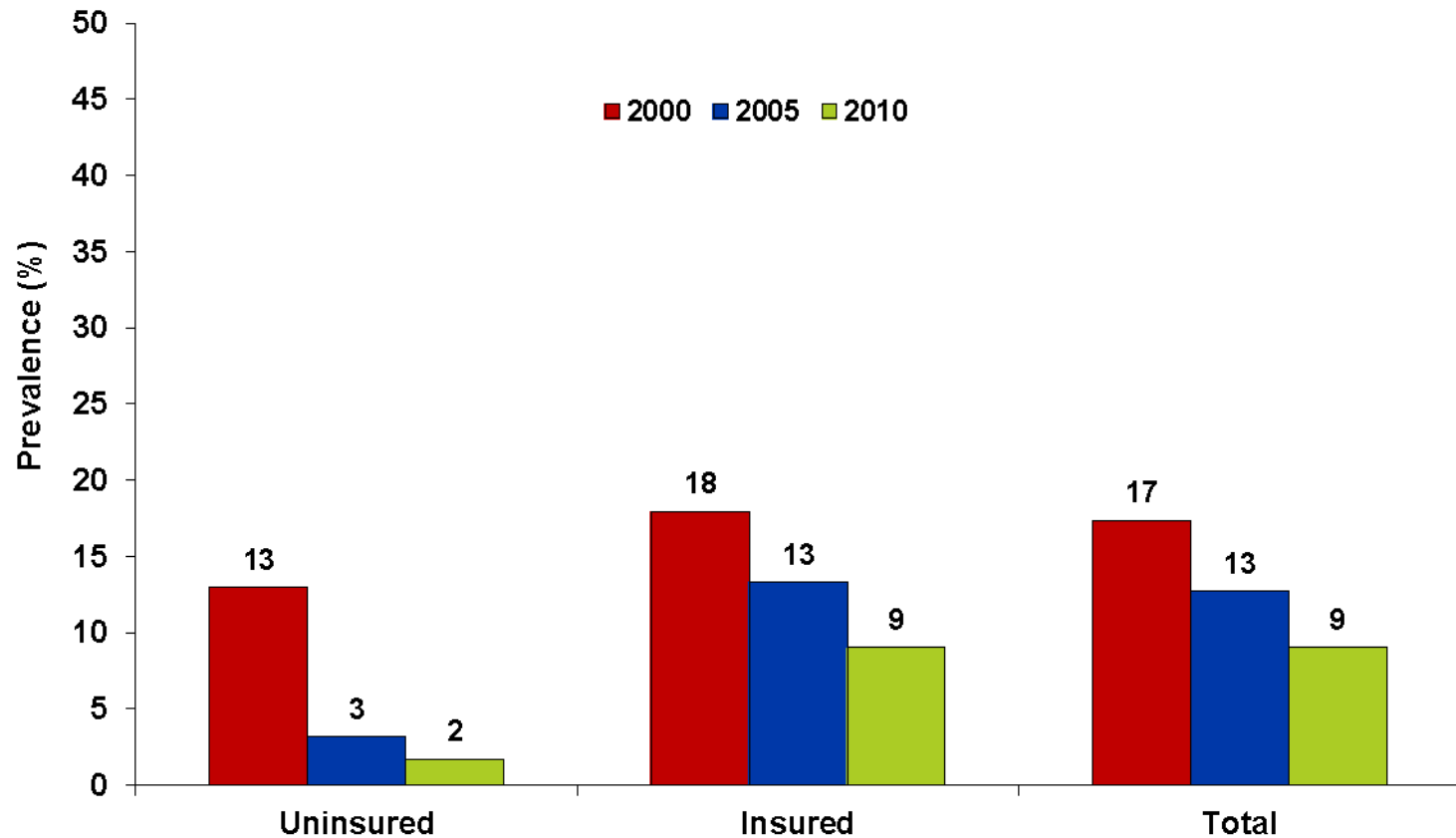




# PROVIDER PERCEPTIONS AFFECT SCREENING CHOICE AND MAY BE A BARRIER

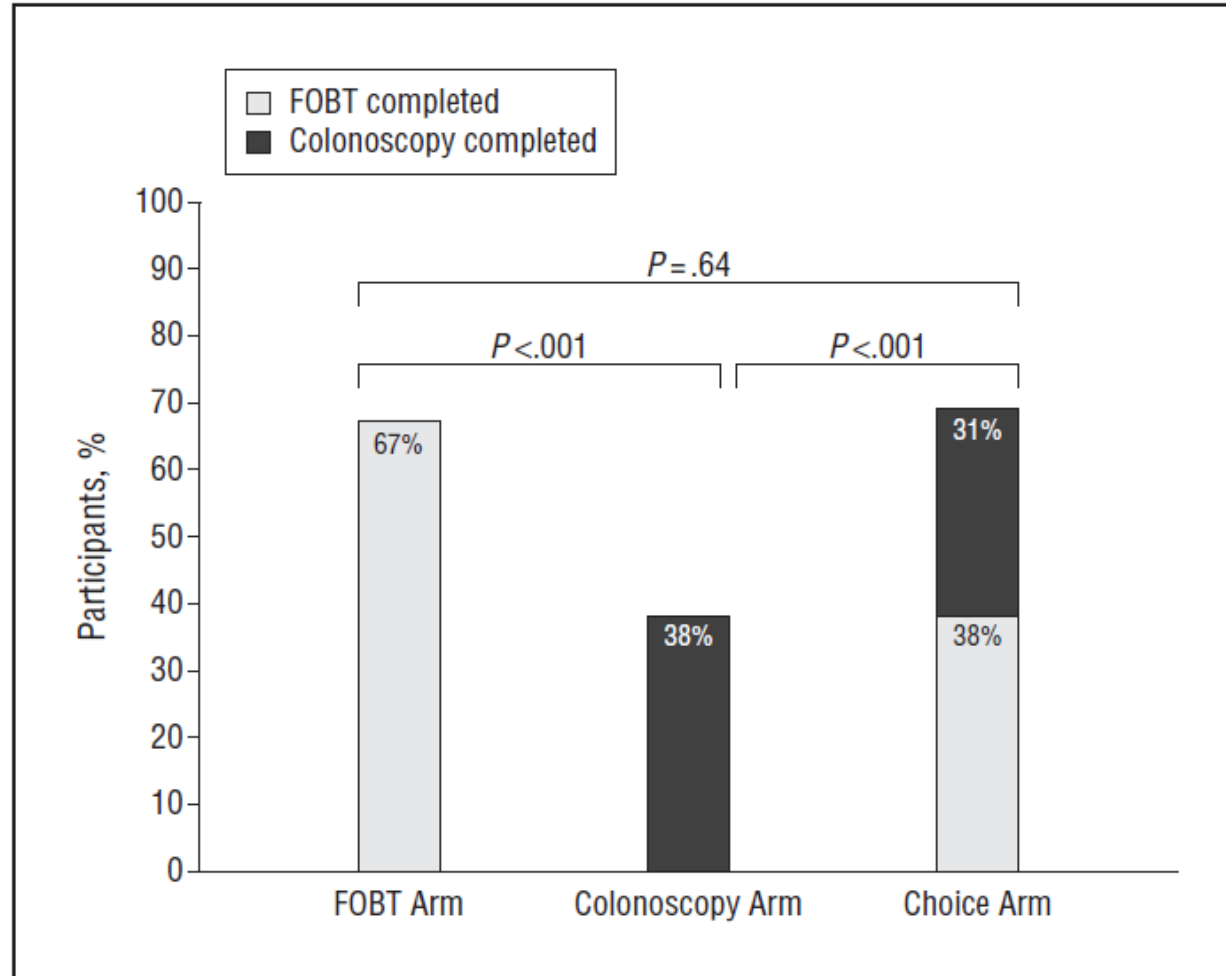
- Survey of 180 clinicians
- Colonoscopy: : Highly effective-92%
- FIT: Highly effective-25%
- In addition: colonoscopy was preferred despite the fact that 51% of providers reported it was not readily available
- 82% of those clinicians felt that many of their patients had financial barriers to screening colonoscopy

## Trends in the Prevalence of Fecal Occult Blood Test\* by Health Insurance Status, US, 2000-2010



\*A fecal occult blood test in the past year among adults  $\geq 50$  years; estimates age-adjusted to the 2000 US standard population.  
Source: National Health Interview Survey, National Center for Health Statistics, Centers for Disease Control and Prevention.

# Patient Preferences



Inadomi, Arch Intern Med 2012



# Stool Tests: Accuracy

Annals of Internal Medicine

REVIEW

## Accuracy of Fecal Immunochemical Tests for Colorectal Cancer

### Systematic Review and Meta-analysis

Jeffrey K. Lee, MD, MAS; Elizabeth G. Liles, MD, MCR; Stephen Bent, MD; Theodore R. Levin, MD; and Douglas A. Corley, MD, PhD

**Background:** Performance characteristics of fecal immunochemical tests (FITs) to screen for colorectal cancer (CRC) have been inconsistent.

**Purpose:** To synthesize data about the diagnostic accuracy of FITs for CRC and identify factors affecting its performance characteristics.

**Data Sources:** Online databases, including MEDLINE and EMBASE, and bibliographies of included studies from 1996 to 2013.

**Study Selection:** All studies evaluating the diagnostic accuracy of FITs for CRC in asymptomatic, average-risk adults.

**Data Extraction:** Two reviewers independently extracted data and critiqued study quality.

**Data Synthesis:** Nineteen eligible studies were included and meta-analyzed. The pooled sensitivity, specificity, positive likelihood ratio, and negative likelihood ratio of FITs for CRC were 0.79 (95% CI, 0.69 to 0.86), 0.94 (CI, 0.92 to 0.95), 13.10 (CI, 10.49 to 16.35), 0.23 (CI, 0.15 to 0.33), respectively, with an overall diagnostic accuracy of 95% (CI, 93% to 97%). There was substantial hetero-

geneity between studies in both the pooled sensitivity and specificity estimates. Stratifying by cutoff value for a positive test result or removal of discontinued FIT brands resulted in homogeneous sensitivity estimates. Sensitivity for CRC improved with lower assay cutoff values for a positive test result (for example, 0.89 [CI, 0.80 to 0.95] at a cutoff value less than 20  $\mu\text{g/g}$  vs. 0.70 [CI, 0.55 to 0.81] at cutoff values of 20 to 50  $\mu\text{g/g}$ ) but with a corresponding decrease in specificity. A single-sample FIT had similar sensitivity and specificity as several samples, independent of FIT brand.

**Limitations:** Only English-language articles were included. Lack of data prevented complete subgroup analyses by FIT brand.

**Conclusion:** Fecal immunochemical tests are moderately sensitive, are highly specific, and have high overall diagnostic accuracy for detecting CRC. Diagnostic performance of FITs depends on the cutoff value for a positive test result.

**Primary Funding Source:** National Institute of Diabetes and Digestive and Kidney Diseases and National Cancer Institute.

*Ann Intern Med.* 2014;160:171-181.

For author affiliations, see end of text.

[www.annals.org](http://www.annals.org)

**Table 1. Sensitivity and Specificity of the Multitarget Stool DNA Test and the Fecal Immunochemical Test (FIT) for the Most Advanced Findings on Colonoscopy.**

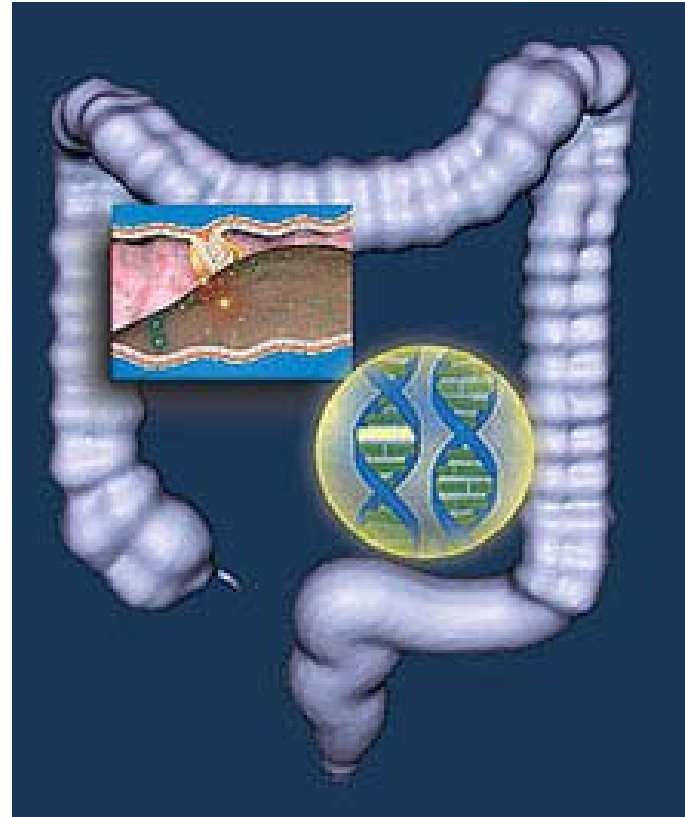
Most Advanced Finding	Colonoscopy (N = 9989)		Multitarget DNA Test (N = 9989)		FIT (N = 9989)	
	no.	Positive Results	Sensitivity (95% CI)	Positive Results	Sensitivity (95% CI)	
		no.	%	no.	%	
<b>Colorectal cancer</b>						
Any	65	60	92.3 (83.0–97.5)	48	73.8 (61.5–84.0)	
Stage I to III*	60	56	93.3 (83.8–98.2)	44	73.3 (60.3–83.9)	
Colorectal cancer and high-grade dysplasia	104	87	83.7 (75.1–90.2)	66	63.5 (53.5–72.7)	
Advanced precancerous lesions†	757	321	42.4 (38.9–46.0)	180	23.8 (20.8–27.0)	
Nonadvanced adenoma	2893	498	17.2 (15.9–18.6)	220	7.6 (6.7–8.6)	
			Specificity (95% CI)		Specificity (95% CI)	
All nonadvanced adenomas, non-neoplastic findings, and negative results on colonoscopy	9167	1231	86.6 (85.9–87.2)	472	94.9 (94.4–95.3)	
Negative results on colonoscopy	4457	455	89.8 (88.9–90.7)	162	96.4 (95.8–96.9)	

\* These stages of colorectal cancer, as defined by the system recommended by the American Joint Committee on Cancer, are associated with an increased rate of cure.

† Advanced precancerous lesions include advanced adenomas and sessile serrated polyps measuring 1 cm or more.

# Stool DNA Test (sDNA)

- Fecal occult blood tests detect blood in the stool – which is intermittent and non-specific
- Colon cells are shed continuously
- Polyps and cancer cells contain abnormal DNA
- Stool DNA tests look for abnormal DNA from cells that are passed in the stool\*



\*All positive tests should be followed with colonoscopy




# Stool Testing Quality Issues

- In-office FOBT is essentially worthless as a screening tool for CRC and **should never be used**.
- CRC screening by FOBT should be performed with *high-sensitivity* FOBT - either FIT or a highly sensitive gFOBT (such as Hemoccult SENSA).
  - Older, less sensitive guaiac tests (such as Hemoccult II) should not be used for CRC screening.
- Annual testing
- All positive screening tests should be evaluated by colonoscopy



# hqFOBT/FIT ARE EXCELLENT OPTIONS

- There is no evidence from RCT's that one screening test is the "best".
- Based on modeling studies that assume 100% adherence for stool testing and colonoscopy, years of life saved through an annual high quality stool-blood screening program are COMPARABLE to a high-quality colonoscopy-based screening program when positive tests are followed by colonoscopy
- PEOPLE LIKE CHOICES !!!



# Fecal Immunochemical Test Program Performance Over 4 Rounds of Annual Screening: A Retrospective Cohort Study

Christopher D. Jensen, PhD, MPH; Douglas A. Corley, MD, PhD; Virginia P. Quinn, PhD, MPH *Ann Intern Med.* 2016;164(7):456-463. doi:10.7326/M15-0983

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- 670,000 adults aged 50 to 70 who were mailed an FIT kit in 2007 or 2008. Roughly half completed the test within 1 year and were mailed kits annually for the next 3 years (response rates for these subsequent years, 75%–86%)
- Overall, FIT screening identified 80% of patients with colorectal cancer diagnosed within 1 year of testing. FIT performance declined slightly after the first round of screening, but then generally held
- **The authors conclude that "annual programmatic FIT screening is both feasible and effective" for population-level colorectal cancer screening**



# How Can We Increase Cancer Screening Rates in Practice- What Works ?

## 5 Essentials:

**#1 A Recommendation to every patient**

**#2 An Office Policy**

**#3 A reminder system**

**#4 An effective communication system**

**#5 A reliable data collection and follow-up system**



# A Novel Approach ACS

- A strategy that may add to CRCs efforts is the FLU-FIT Program, which is designed to allow non-physician-led health care teams to offer FIT kits to eligible patients when they seek annual influenza vaccinations





FluFOBT



# What is a FluFOBT program?

- Annual flu shot visits are an opportunity to reach many people who also need CRC screening
- Health center staff recommend CRC screening and provide FOBT kits to eligible patients when they get their annual flu shot
  - Either a high sensitivity FOBT or a FIT can be used for the FluFOBT Program
- Patient completes FOBT **at home** and returns kit to doctor's office or mails kit to the lab for processing
- FluFOBT programs are well accepted by patients
- Studies show FluFOBT leads to higher CRC screening rates (including studies in community health centers)



# Why try FluFOBT?

- Many sites use FluFOBT to begin the process of incorporating CRC screening into routine practice outside of Flu season
- Same Guidelines Apply
  - Like flu shots, CRC screening with stool tests are repeated every year
  - Annual testing is needed to be effective and evidence-based



## GETTING STARTED

- The landscape: #'s of eligible people
- How many will there be?
- Eligible population 50-75yrs. no colonoscopy in the last 10 years...
  - Has not had an FOBT test in the past year...
- Est 3,000; (-)30% (high risk or otherwise not eligible)=2100; Goal rate of flu vaccination at 40% =840
- Who gets flu vaccine in the office? What setting? Provider of staff initiated at time of visit? Flu Clinics run by staff? Consider how to deploy resources
- Local solutions
- Who will be advocates and who will not?



# How To Set Up Your Flu-FOBT Program

- Put your team together
  - Select a champion to coordinate your efforts
  - Select team members and staffing levels
- Train your team (see ACS FluFOBT Program Implementation Guide)
  - Information about the importance of flu shots and CRC screening
  - Information about how to organize your workflow
  - Assessing eligibility
  - Talking points with patients about FOBT and completing the test
  - Record keeping and follow up with patients provided FOBT kits



## Program Set Up (continued)

- Choose times and locations for your program and advertise the fact that FOBT will be offered with flu shots this year. Decide:
  - When to start
  - Where to hold the program
  - How to advertise
- Design a patient flow and management plan



# CRC Screening Eligibility & FluFOBT

- When should a patient be offered a FOBT kit during the ACS FluFOBT Program?
- Patient –
  - Is 50 years or older...
  - Has not had a colonoscopy in the last 10 years...
  - Has not had an FOBT test in the past year...



# CRC Screening Eligibility & Flu-FOBT

- When should a patient **NOT** be offered a FOBT kit during the Flu-FOBT clinic?
  - Less than age 50
  - Had a colonoscopy in the last 10 years
  - Had a FOBT test in the past year
  - Has a personal history of Crohn's Disease or Ulcerative Colitis\*
  - Has a personal history of polyps or cancer\*
  - Has a family history of polyps or cancer in a family member younger than age 60\*
  - Rectal bleeding, blood in stool or other symptoms

*\*Patients with these risk factors should be directed to a clinician for correct screening recommendations*





# Talking with Patients about CRC

- It is important to educate your patients about the importance of colorectal cancer screening and the FOBT
- It is very important to remind patients to complete and return the FOBT kit (with instructions for doing so) at the time the kits are distributed
- Telephone or post card reminders are imperative if the patient has not returned the kit within 14 days.

**Studies show that reminders can double return rates!**



# Elements of Successful Program

- Strong leader/champion
- Commitment
- Seamlessness of workflow- Ease of implementation-Can't interfere too much with ongoing care
- Clear goals and opportunities for communication: office-wide- staff and providers
- Ongoing monitoring-documentation and follow-up



# Barriers

(Similar to Flu Vaccination Initiatives)

- Provider and staff engagement
- Overwhelmed providers/staff
- Competing initiatives
- EHR Issues
- Missed opportunities

# STAGES OF PROVIDER READINESS



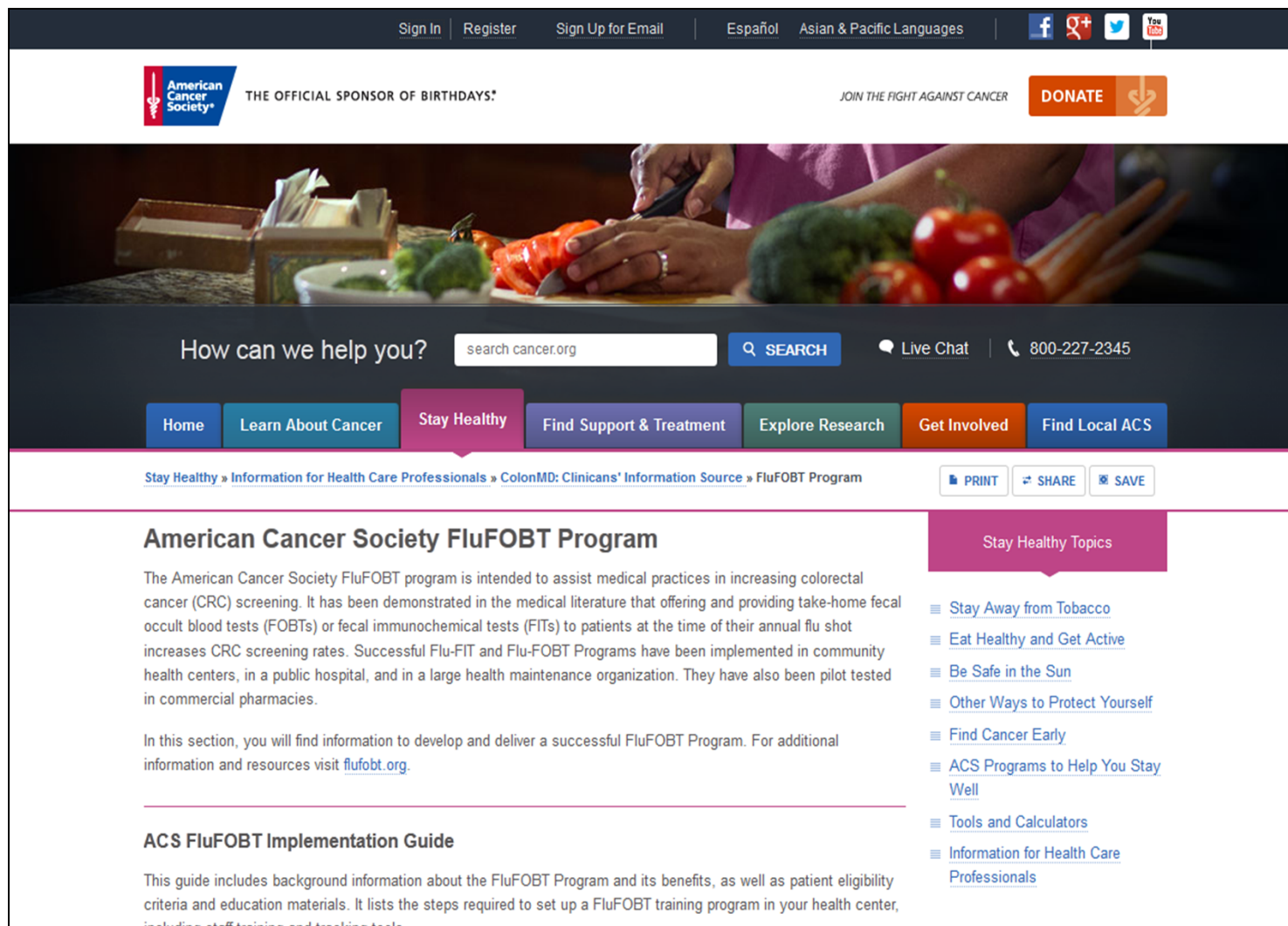
- Denial
- Anger
- Bargaining
- Depression
- Acceptance



## What's in the ACS FluFOBT Program Implementation Guide?

- Background information on Colorectal Cancer and FluFOBT
- Patient eligibility criteria
- Colorectal cancer screening recommendations
- Patient education
- Guidance on setting up your FluFOBT Program
- Implementation recommendations and resources
- Example advertising and tracking tools

# American Cancer Society FluFOBT Program Implementation Guide and Materials



The screenshot displays the American Cancer Society website. At the top, there are navigation links for 'Sign In', 'Register', 'Sign Up for Email', 'Español', and 'Asian & Pacific Languages'. Social media icons for Facebook, Google+, Twitter, and YouTube are also present. The American Cancer Society logo is on the left, with the tagline 'THE OFFICIAL SPONSOR OF BIRTHDAYS\*'. On the right, there is a 'JOIN THE FIGHT AGAINST CANCER' slogan and a 'DONATE' button with a download icon.

The main navigation bar includes 'Home', 'Learn About Cancer', 'Stay Healthy' (highlighted), 'Find Support & Treatment', 'Explore Research', 'Get Involved', and 'Find Local ACS'. Below this is a search bar with the text 'How can we help you?' and 'search cancer.org', along with 'SEARCH', 'Live Chat', and '800-227-2345'.

The breadcrumb trail reads: 'Stay Healthy » Information for Health Care Professionals » ColonMD: Clinicians' Information Source » FluFOBT Program'. There are 'PRINT', 'SHARE', and 'SAVE' buttons.

## American Cancer Society FluFOBT Program

The American Cancer Society FluFOBT program is intended to assist medical practices in increasing colorectal cancer (CRC) screening. It has been demonstrated in the medical literature that offering and providing take-home fecal occult blood tests (FOBTs) or fecal immunochemical tests (FITs) to patients at the time of their annual flu shot increases CRC screening rates. Successful Flu-FIT and Flu-FOBT Programs have been implemented in community health centers, in a public hospital, and in a large health maintenance organization. They have also been pilot tested in commercial pharmacies.

In this section, you will find information to develop and deliver a successful FluFOBT Program. For additional information and resources visit [flufobt.org](http://flufobt.org).

### ACS FluFOBT Implementation Guide

This guide includes background information about the FluFOBT Program and its benefits, as well as patient eligibility criteria and education materials. It lists the steps required to set up a FluFOBT training program in your health center, including staff training and tracking tools.

#### Stay Healthy Topics

- Stay Away from Tobacco
- Eat Healthy and Get Active
- Be Safe in the Sun
- Other Ways to Protect Yourself
- Find Cancer Early
- ACS Programs to Help You Stay Well
- Tools and Calculators
- Information for Health Care Professionals

[www.cancer.org/flufobt](http://www.cancer.org/flufobt)



# Evidence

- Community Health Centers
- Offering annual fecal occult blood tests at annual flu shot clinics increases colorectal cancer screening rates. Potter MB, Phengrasamy L, Hudes ES, McPhee SJ, Walsh JM Ann Fam Med. 2009;7:17-23.



# EVIDENCE

- **Offering Annual Fecal Occult Blood Tests at Annual Flu Shot Clinics Increases Colorectal Cancer Screening Rates:**

Michael B. Potter, MD<sup>1</sup> La Phengrasamy, MPH<sup>1</sup>

Esther S. Hudes, PhD, MPH et al. Department of Family and Community Medicine  
The study included 514 patients aged 50 to 79 years, with 246 in the control group and 268 in the intervention group.

- The study was time randomized. On 8 dates of an annual flu shot clinic at the San Francisco General Hospital, patients were offered flu shots as usual (control group) and on 9 other dates, patients were offered both flu shots and FOBT kits (intervention group).
- At the conclusion of flu season, FOBT screening rates increased by 4.4 percentage points from 52.9% at baseline to 57.3% (P = .07) in the control group, and increased by 29.8 percentage points from 54.5% to 84.3% (P <.001) in the intervention group, with **the change among intervention participants 25.4 percentage points greater than among control participants (P value for change difference <.001).**
- **CONCLUSIONS** Offering FOBT kits during flu shot clinics dramatically increased the CRCS rate for flu shot clinic attendees. Pairing home FOBT kits with annual flu shots may be a useful strategy to improve CRCS rates in other primary care or public health settings.
- **Ann Fam Med 2009;7:17-23. DOI: 10.1370/afm.934.**



# EVIDENCE

## The Effectiveness of the FLU–FOBT Program in Primary Care A Randomized Trial

- Michael B. Potter, MD, Judith M. E. Walsh, et al
- Randomized clinical trial. During intervention weeks, nurses routinely initiated the offering of FOBT to eligible patients who were given FLU (FLU–FOBT group). During control weeks, nurses provided FOBT with FLU only when ordered by the primary care clinician and during usual care (FLU-only group). Six community clinics in San Francisco.
- Patients aged 50–75 years who received FLU during primary care visits during an 18-week intervention beginning on September 28, 2009. 695 intervention and 677 control
- CRC screening rate **increased from 32.5% to 45.5% (13.0 percentage points) in the FLU–FOBT group, and from 31.3% to 35.6% (4.3 percentage points) in the FLU-only group (p0.018 for change difference)**
- **Conclusion:** FLU/FOBT Program participants were twice as likely to complete CRC screening as those receiving usual care. The FLU/FOBT Program is a practical strategy to increase CRC screening in community clinics.
- **AmJ Prev Med 2011;41(1):9–16) ©2011 American Journal of Preventive Medicine**
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# EVIDENCE

- **The FLU-FIT Program: An Effective Colorectal Cancer Screening Program for High Volume Flu Shot Clinics:**  
Observational study-managed care setting
- Among eligible participants in the FLU only group (N = 4653), 13.7% completed FIT within 90 days of their influenza vaccine, and in the FLU-FIT group (N = 2812), 30.3% completed FIT (P <.0001).
- Overall, the CRCs rate for the FLU-only group increased from 51.5% to 56.3% (increase of 4.8 percentage points), compared with an increase from 49.2% to 63.2% (increase of 14.0 percentage points) in the FLU-FIT group (P <.0001 for change difference).
- **Conclusions: The FLU-FIT Program is feasible to implement in a high volume influenza vaccination clinic conducted in a managed care setting and increases colorectal cancer screening activity among eligible influenza vaccination recipients who are reached with the intervention. (Am J Manag Care. 2011;17(8):577-583)**



# EVIDENCE

- Effectiveness and Reach of the FLU-FIT Program in an Integrated HealthCare System: A Multisite Randomized Trial
  - Michael B. Potter, MD, Lynn M. Ackerson, PhD, Vicky Gomez, MPH, Judith M.E. Walsh, MD, MPH, Lawrence W. Green, PhD, Theodore R. Levin, MD, and Carol P. Somkin, PhD
  - KP randomly assigned influenza clinic dates to intervention (FIT offered) or control (FIT not offered) and compared subsequent CRCS activity.
  - **Analysis: 26.9% (900/3351) and 11.7% (336/ 2884) of intervention and control patients completed an FIT, respectively, within 90 days of vaccination (P£.001).**
  - **Conclusions.** This intervention may increase CRCS among those not reached by other forms of CRCS outreach. Future research should include the extent to which these programs can be disseminated and implemented nationally. (**Am J Public Health.2013;103:1128–1133. doi:10.2105/AJPH.2012. 300998**)



# CONCLUSION

- Colorectal cancer mortality can be reduced with screening
- Only 65% of US adults aged 50 to 75 years were up to date with guideline-recommended screening in 2012 (BRFSS)
- ACS GOAL: 80% BY 2018/ HEALTHY PEOPLE 2020 70.5%
- Achieving high CRCS rates requires evidence-based approaches, such as removal of barriers to obtaining and completing recommended tests, 1-to-1 health care team member interventions, and organized patient reminders.
- A combination of traditional primary care strategies and an organized system of FIT kit mailings has led to a CRCS rate of more than 75.0% for patients aged 50 to 75 years, exceeding the Healthy People 2020 target of 70.5%. Nonetheless, many age-eligible patients remain unscreened



MAKE PREVENTION PART OF EVERY  
VISIT





## HELPING PRIMARY CARE PHYSICIANS INCREASE COLORECTAL SCREENINGS IN THEIR PRACTICE

- 45 y .o. hypertensive smoker with hyperlipidemia presents with a cough for two weeks
- Dx: bronchitis
- Tx: bronchodilator/ Quit smoking
- No hx of health maintenance visits
- FH: Brother died of CRC age 58



## HELPING PRIMARY CARE PHYSICIANS INCREASE COLORECTAL SCREENINGS IN THEIR PRACTICE

- 48 y o healthy woman, with only a few episodic visits to your practice visits for rash
- PH colonoscopy where she formerly lived for rectal bleeding age 43 – negative except for hemorrhoids “a few polyps”. Unclear about recommended follow-up if any
- No records available: “ I had them sent”
- Health maintenance by gyn





## HELPING PRIMARY CARE PHYSICIANS INCREASE COLORECTAL SCREENINGS IN THEIR PRACTICE

- A healthy, busy family physician whose 57 y o brother had an adenomatous polyp at age 52 finally makes time to have colonoscopy: Stage 1 rectal



HELPING PRIMARY CARE PHYSICIANS INCREASE  
COLORECTAL SCREENINGS IN THEIR PRACTICE

- IN NEXT MONTH FIVE PHYSICIANS (FRIENDS,  
AND PARTNERS) AND AT LEAST FIVE FRIENDS,  
AND COUNTLESS PATIENTS ARE SCREENED  
!!!!