



Colorectal Cancer Screening: Tools for Your Practice and the Evidence for Them

Jean Burg, MD
Department of Family Medicine
North Bronx Healthcare Network

Outline



- Current physician practices
- Importance of a doctor's recommendation
- Getting a recommendation to each patient
- Evidence for effective strategies
- Address common barriers to screening

Q: Do Physician Screen
Their Patients for CRC?



A: Yes, 98% already do.

(Klabunde, et. al., Prev Med 2003)

Why Do Physicians Screen for CRC?



- It reduces the incidence and mortality of CRC
- CRC malpractice cases are costly and rising (“failure to screen” now common complaint)
- CRC Screening is a HEDIS measure as of 2006
- CME credit is now available for practice improvement: AAFP, ABIM, AMA (20 cr)

What is the Problem?



- Screening rates are lower than expected
- Medical practice is demand (patient) driven and practice demands are numerous/diverse
- < 25% of PCP's nationwide think 75% of their eligible patients are screened (Klabunde, 2003)
- Screening rates are less for persons with less education, no health insurance, lower SES.

Q: Why focus on primary care practice? What can we do about it?



- We have it in our power to improve the screening rate. 'This is our sphere of influence.'
- 80-90% of people >age 50 see a 1°MD q year
(BRFSS, CDC)
- Few practices currently have mechanisms to assure that every eligible patient gets a recommendation for screening.

BUT, How Useful is a Doctor's Recommendation?



Aren't we bucking human nature with this one?

Colon Exam



Adapted from Jack Tippit, Saturday Evening Post

Q: Is a Doctor's Recommendation Really That Useful?



A: Yes. Unequivocally! A physician's recommendation is the most consistently influential factor !

Q: How do we know this?



- **A:** This conclusion has an evidence base from research on breast, cervical, and colorectal cancer screening.

Most Influential Factor: Recommendation from a Physician



- While many factors play a role, the evidence supporting the vital role of a physician's recommendation derives from many sources.
- A recommendation from a primary care clinician has been identified most consistently as the factor of prime influence.

Seeff LC, et al., Cancer 2004; Etzioni DA, et al, Cancer 2004; Zapka JG, et al., Am J Prev Med 2002; O'Malley AS, et al. J Gen Intern Med 2002; Gilbert A, et al., Prev Med 2005; Grady KE, et al., Prev Med 1992; Fox SA, Stein JA. Med Care 1991.

Evidence from Screening for Breast and Cervical Cancer



- A doctor's recommendation is the single most important motivator for mammogram & pap smear screening (#41-46)
- Further, it shows that the lack of a recommendation is experienced as a barrier (#47)

Reference numbers correspond to the list in the **Toolbox and Guide**, posted at the ACS website.

Evidence from Research on Screening for Colorectal Cancer



- Receiving FOBT cards from a doctor is a strong predictor of screening status (#49)
- Ever receiving a flex sig recommendation increases the likelihood having flex sig (#48)
- Seeing a doctor within the prior year is a strong predictor of screening status (#49)
- More preventive health visits increases odds of having been screened (#50)

Reference numbers correspond to the list in the **Toolbox and Guide**, posted at the ACS website.

What is the Evidence from Statewide Surveys?



- Pennsylvania: 90% of those who reported a recommendation vs. 17% of those who did not were screened (#51)
- Maryland: 67% of those who reported a recommendation the last year vs. 5% of those who had not completed FOBT* (26% received the rec)

*MD Cancer Survey, 2006.

What is the Evidence from Statewide Surveys, cont'd



- Maryland: 85% of those who reported a recommendation for endoscopy vs 25% who did not have endoscopy (73% ever rec)
- Those with screening endoscopy not up-to-date when asked "why", said:
 - 23% "doctor didn't order it, or didn't say I needed it."* (*most common single reason*)

What is the Evidence from Statewide Surveys, cont'd



- Those with no FOBT (last year/ever) when asked “why”, replied:
 - 29% “doctor didn’t order it, or didn’t say I needed it. *(most common reason)*

How Can We Increase CRC Screening Rates in Practice?



4 Essentials:

#1 A Recommendation to every patient

#2 An Office Policy

#3 A Reminder System

#4 An Effective Communication System

Essential #1: Screening Recommendation



Goal=recommendation to each eligible patient

- Requires an opportunistic/global approach*
i.e. don't limit efforts to "check-ups"
- Requires a system that doesn't depend on the doctor alone.

***Note: An opportunistic approach doesn't justify an in-office FOBT which has negative evidence. (Collins, et. al. *Ann Int Med*)**

Essential #2: An Office Policy



- States the intent of the practice.
 - tangible, maintains consistency
 - prerequisite for reliable, reproducible practice
- Algorithms easiest policies to follow.
- Beware: one size does not fit all practices!
- Beware: one size does not fit all patients!

Factors to Consider in Your Office Policy



- 1. Individual Risk Level (“risk stratification”)
- 2. Medical resources (endoscopy available?)
- 3. Insurance (insured? covered? deductible? copay?)
- 4. Patient Preference
 - Patients do have preferences (#128, #129)
 - We often neglect to ask about them (#127)
 - We won’t know unless we ask

Reference numbers correspond to the list in the **Toolbox and Guide**, posted at the ACS website.

Risk Level

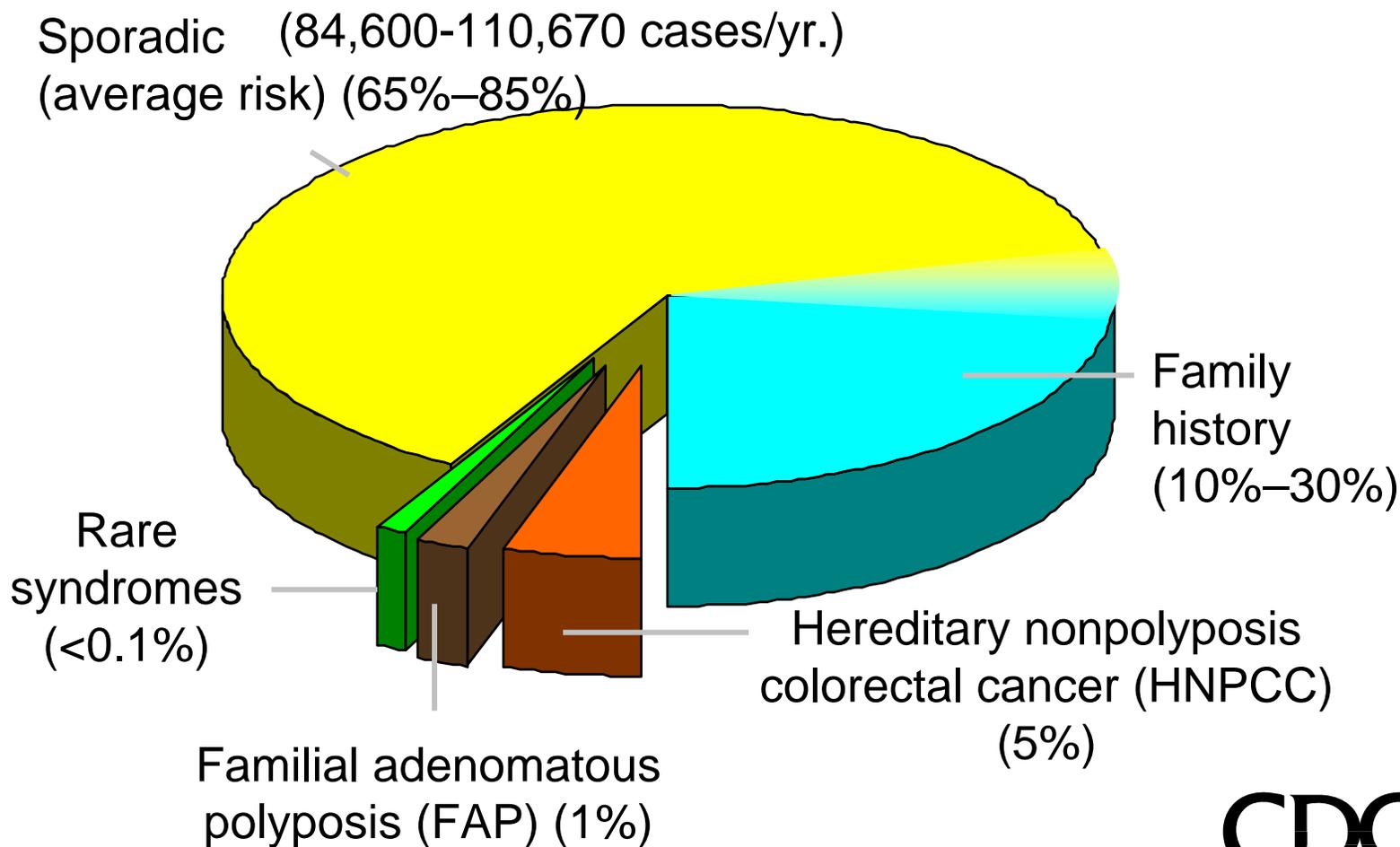
A horizontal brushstroke in a golden-yellow color, with a textured, painterly appearance, spanning across the width of the slide below the title.

- Average
- Increased
- High

CRC Screening Recommendations by Risk Category

Risk Category	Age to Begin Screening	Recommendations
Average Risk No Risk factors No symptoms	<Age 50	No Screening Needed
	>Age 50	Screen with any one of the following options: Colonoscopy q 10 yrs OR FS q 5 yrs DCBE q 5 yrs OR CT Colonography (CTC) q 5 yrs OR gFOBT q yr OR FIT q yr OR sDNA (interval uncertain)
Increased Risk CRC or adenomatous polyp in a first degree relative	Age 40 or 10 years prior to the earliest CRC diagnosis in the family	Colonoscopy
Highest Risk Personal history for >8 years of Crohn's Disease or Ulcerative Colitis or a hereditary syndrome (HNPCC or, FAP)	Any age	Needs specialty evaluation and colonoscopy

Q: How Many at Increased Risk?



Individual Risk Based on Family History of CRC[‡]

Familial setting:

colon cancer risk:

<ul style="list-style-type: none">■ No history of colorectal cancer or adenoma (general population in the US)■ One FDR with an adenomatous polyp*■ One FDR with colon cancer■ FDR with CRC diagnosed at <50 years■ Two FDRs with colon cancer*	<ul style="list-style-type: none">■ 6% lifetime
<ul style="list-style-type: none">■ One second or third-degree relative with CRC	<ul style="list-style-type: none">■ ~2 fold increase■ 2-3 fold increase■ 3-4 fold increase■ 3-4 fold increase
<ul style="list-style-type: none">■ Two second degree relatives with colon cancer	<ul style="list-style-type: none">■ ~1.5 fold increase■ ~ 2-3 fold increase

*FDR, First-degree relatives - include parents, siblings and children. ‡Adapted from AGA Guidelines: Winawer SJ, et al., Colorectal cancer screening and surveillance: clinical guidelines and rationale-Update based on new evidence. *Gastroenterology*. 2003 Feb; 124(2):page 550

Questions to Determine Risk



- Have you or any members of your family had colorectal cancer?
- Have you or any members of your family had an adenomatous polyp?
- Has any member of your family had a CRC or adenomatous polyp when they were under the age of 50? (If yes, consider a hereditary syndrome)
- Do you have a history of Crohn's Disease or Ulcerative Colitis (more than eight years)?
- Do you or members of your family have a history of cancer of the endometrium, small bowel, ureter or renal pelvis? (If yes, consider HNPCC. Check the criteria).

Office Policies



- Examples of Office policies in toolkit:
 - Policy for assessing risk to determine appropriate screening methodology (p. 25)
 - Policy for FOBT/FIT kit distribution and tracking (p. 30)
 - ***NOTE: Patients with a positive FOBT should be referred for colonoscopy.***

Pages reference information in CRC screening toolbox and Guide;
cancer.org/colonmd



A Tool for Increasing CRC Screening: The
Direct Referral For Colonoscopy Procedure
Form

NYC CRC Screening Guidelines

- NYC recommends colonoscopy as the primary screening test for colon cancer.
 - Colonoscopy detects more than 95% of early colon cancer.
 - Colonoscopy is safe. The risk of serious complications is less than 1 in 1,000.
- FOBT is recommended by NYC for individuals who are unable or unwilling to have a colonoscopy.

Why Direct Referral?

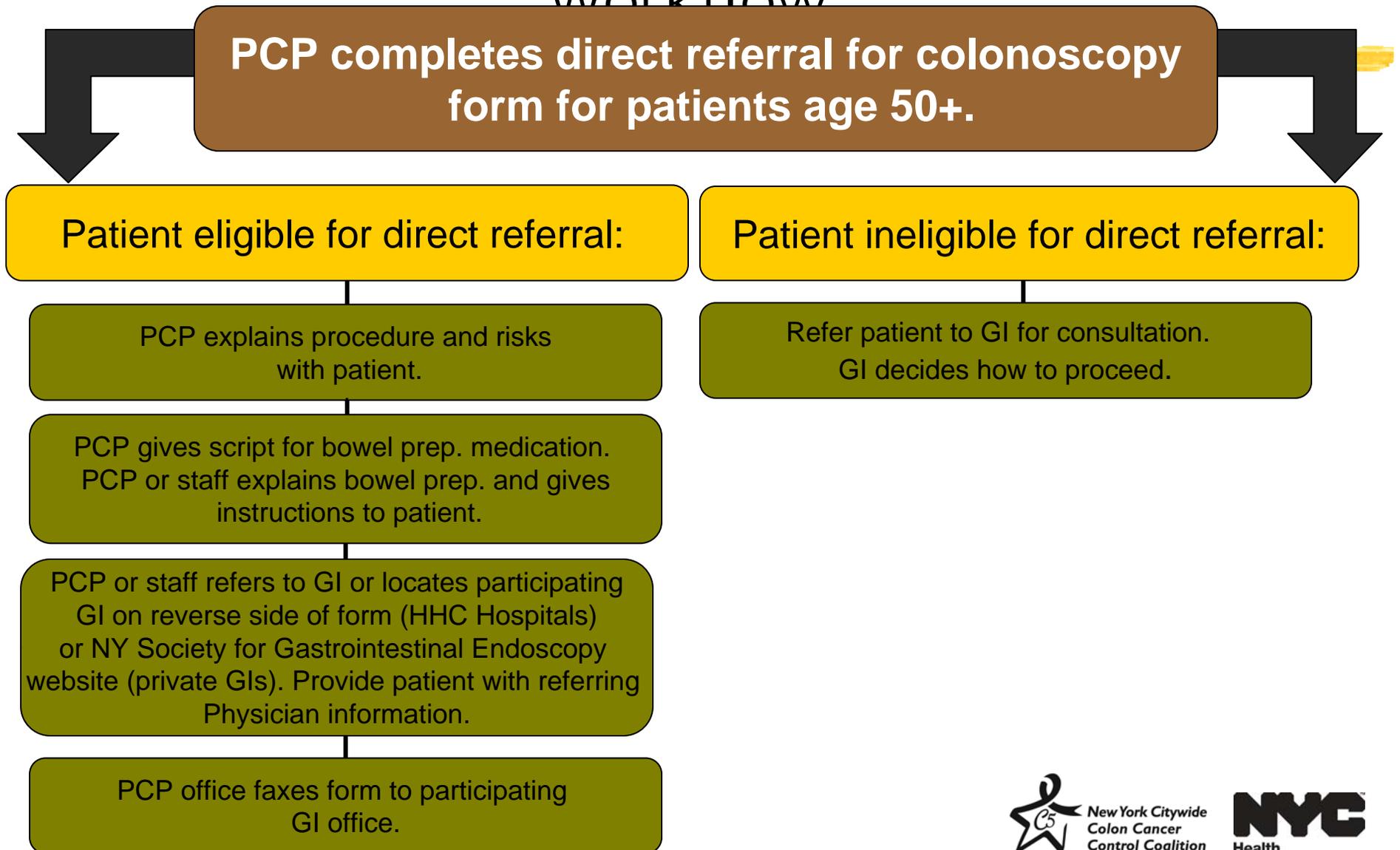
- Patients not contraindicated DO NOT need a consultation visit with a GI prior to colonoscopy; these patients can be referred directly for the procedure.
- Streamlining the referral process saves patients and GIs time, and may reduce wait times for procedure.

In Your Packet: Direct Referral for Colonoscopy Assessment Form

- What is it?
 - An assessment form to identify appropriate patients for direct referral for colonoscopy

- Form includes:
 - Medical history; contraindications; special handling for diabetic patients
 - Medications, Allergies
 - Referring physician contact information
 - Resources for finding a GI who accepts direct referrals

Workflow



Bowel Prep Handout Available in NYC Through 311

HOW TO PREPARE FOR YOUR COLONOSCOPY			
HEALTH CARE PROVIDER: Fill in the appropriate days and dates below, check the box next to the prep you have prescribed, and fill in the time to begin prep.			
7 DAYS BEFORE Day: Date:	IF YOU TAKE ANY OF THE FOLLOWING MEDICATIONS, TALK TO YOUR DOCTOR ABOUT HOW TO ADJUST YOUR MEDICATIONS THE WEEK BEFORE THE COLONOSCOPY:		
	Aspirin Ibuprofen	Medicine for pain or arthritis Blood thinners	Iron supplements Diabetes medicines
6,5,4,3,2 DAYS BEFORE	FOLLOW A NORMAL DIET AND DRINK PLENTY OF FLUIDS.		
1 DAY BEFORE (MEDICATION) Day: Date:	BOWEL PREPARATION (Use the checked preparation):		
	<input type="checkbox"/> 4-liter mixture (PEG) <ul style="list-style-type: none"> You will get a large jug with a small amount of powder in it. Add water to fill the jug and shake it well. At _____: _____, drink 1 glass of the mix every 10 minutes until it is gone. 	<input type="checkbox"/> 2-liter mixture with laxative pills (PEG 3350 + bisacodyl) <ul style="list-style-type: none"> You will get laxative pills and a jug with a small amount of powder in it. At noon, take 4 laxative pills. Add water to fill the jug and shake it well. After a bowel movement, or at 6:00 pm, drink 1 glass of the mix every 10 minutes until it is gone. 	<input type="checkbox"/> Low-volume mixture with laxative pills (PEG 3350 + bisacodyl) <ul style="list-style-type: none"> You will get laxative pills and a small bottle filled with white powder. At noon, take 4 laxative pills. After a bowel movement, or at 6:00 pm, mix 1 capful of powder with one 8oz-glass of clear liquid and drink. Do this every 10 minutes until you have had 8½ glasses. 
1 DAY BEFORE (DIET) Day: Date:	DIET INSTRUCTIONS FOR ALL PREPARATIONS:		
	<ol style="list-style-type: none"> Starting when you wake up, DO NOT EAT ANY SOLID FOOD. Do not eat any of the following: grains (breads, pasta, rice, cereal, etc.); fish; meat; milk products (milk, cheese, ice cream, yogurt, butter, etc.); vegetables or fruit. Follow a CLEAR LIQUID DIET. Have as much as you like of the following liquids all day: <ul style="list-style-type: none"> <li style="display: inline-block; width: 45%;">Clear broth (vegetable or fat-free chicken) <li style="display: inline-block; width: 45%;">Frozen popsicles (not red or purple) 		

BUT do PCPs have time for this?

- Pap smear takes 5 minutes to perform
 - 5 minutes/yr X 10 years = **50 minutes**
- Mammogram takes 3 minutes to order
 - 3 minutes/yr X 10 years = **30 minutes**
- Colonoscopy takes 10 minutes to explain options, order test, prescribe prep and instructions
 - 10 minutes every 10 years = **10 minutes**

Other Free Resources Available in NYC Through '311'



City Health Information

March 2003

The New York City Department of Health and Mental Hygiene

Vol. 22 No. 2

PREVENTING COLORECTAL CANCER

New York City-Specific Guidelines for Colorectal Cancer Screening

MOST PEOPLE 50 YEARS OF AGE AND OLDER SHOULD UNDERGO:

COLONOSCOPY EVERY 10 YEARS

Annual fecal occult blood testing (FOBT) is an acceptable, although not optimal, alternative for those unwilling or unable to undergo colonoscopy.

Persons at high risk for colorectal cancer should begin screening with colonoscopy at age 40 or earlier.

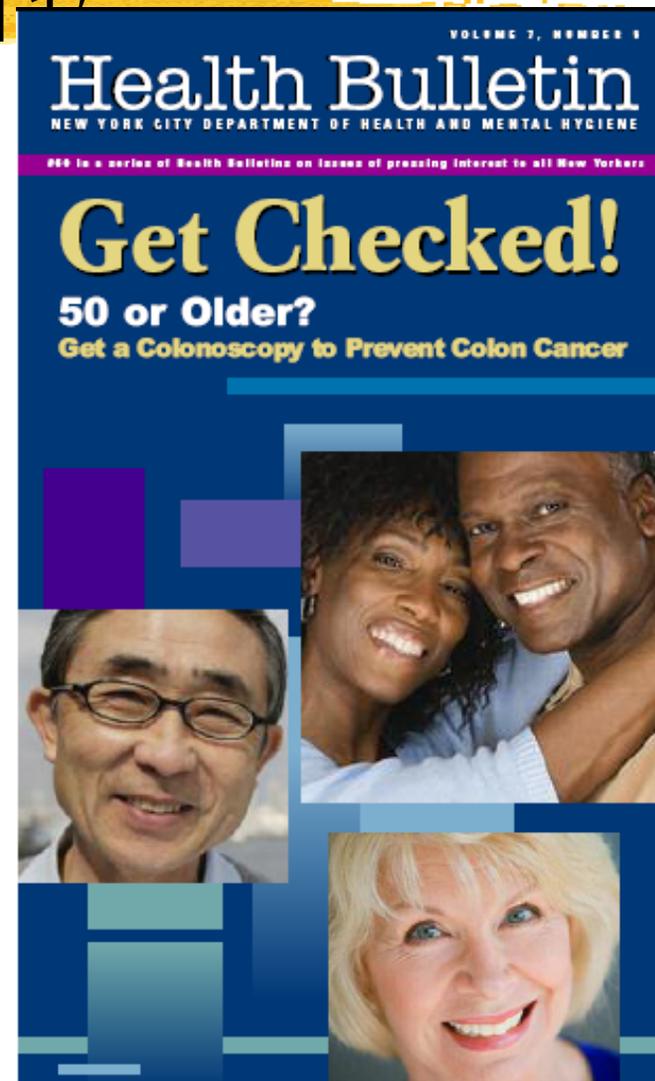
Colorectal cancer causes more cancer deaths among nonsmokers than any other form of cancer. It is estimated that 250,000 New Yorkers age 50 and over have undetected colon polyps. Without early detection and treatment, up to 20,000 of these New Yorkers will develop cancer in the next 20 years. Screening methods able to detect early colorectal cancer include colonoscopy, sigmoidoscopy, fecal occult blood testing (FOBT), double contrast barium enema, and computer tomographic colonoscopy (virtual colonoscopy).¹

Colonoscopy is the most sensitive and specific of these screening methods; it visualizes the entire colon and rectum and enables the physician to identify and remove precancerous polyps and *in situ* carcinomas during a single examination. Although colonoscopy is relatively expensive, it remains the preferred method for high-risk patients

with advanced neoplasia, assuming that all patients with an adenoma in the distal colon subsequently undergo complete colonoscopy.²

The double contrast barium enema and virtual colonoscopy are more costly and not as well studied as other screening methods. In addition, they are less sensitive in detecting early lesions.

The New York City Department of Health and Mental Hygiene (NYC DOHMH) recommends colonoscopy every 10 years as the preferred colorectal cancer screening test, with annual FOBT of 3 consecutive stool samples as an acceptable, although not optimal, alternative for those patients unable or unwilling to undergo colonoscopy. Persons at high risk for colorectal cancer should begin screening with colonoscopy at age 40 or earlier. Our recommenda-



Questions?

- Contact:

Corinne Meli, MPH

NYC DOHMH

Phone: (212) 361-2144

Email: cmeli@health.nyc.gov

Essential #3: A Reminder System



- Two types:
 - Physician Reminders
 - Patient Reminders
- There is evidence for effectiveness of both

Physician Reminder Types



- Chart Prompts
 - Problem lists
 - Screening schedules
 - Integrated summaries
- Alerts - placed in chart
- Follow-Up Reminders
 - Tickler System
 - Logs and Tracking
- Electronic Reminder Systems (EHR)

Evidence on Physician Reminders

% Improved

- **Meta-analysis #1**

13.2%

35 RCT's- on mammogram

rates-prompts, staff roles, logs

(Mandelblatt, Yarbrough, Ca Epid.Bio. Prev 1999)

- **Meta-analysis #2**

13.1 (5.8-18%)

33 RCT's-on approaches to increase

preventive service use (inc. fobts)

- prompts, alerts, ticklers

(Balas EA, et. al. Arch Int Med 2000)

How Include Reminders?



- Advanced Preparation
 - Chart reviews before the visit with alert
 - Staff can ask the patient with give you an alert
- Audits – reminders after the fact
 - Referred to as “Cognitive” approach (#89)
 - 18.6% improvement
 - 21% when combined with other reminders
- Logs/Ticklers
 - Maintained for follow-up

Reference numbers correspond to the list in the **Toolbox and Guide**, posted at the ACS website.

Examples of Office Reminder Tools



- Typical screening schedule for placement in the chart (p. 126-129)
- FOBT Tracking Sheet (p. 132)
- Chart audit template (p. 131)

Pages reference information in CRC screening toolbox and Guide;
cancer.org/colonmd

What About Patient Reminders ?



- Two types
 - 1. Cues to action
 - 2. Education
- The evidence on Reminders for CRC screening
 - Increased return of Stool Blood Tests (SBT)[±]
 - Increased screening with SBT or Endoscopy[§]

[±] Myers, et. al., Medical Care, 1991.

[§] Myers, et. al., CA, 2007.

Evidence on Patient Reminders for Mammograms



- A Meta-analysis of 45 RCT studies on Mammography*
 - Letters, phone reminders, Rx's
 - 13-17.6% screening improvement
 - Two options work better than one

*Yabroff KR, Mandelblatt JS. Cancer Ep Bio Prev 1999.

Templates for Reminders



- The Toolbox and Guide has model postcards that may be used by your practice.
- Reminder letter that can be sent to a patient who is at increased risk.
- Reminder letter for individuals at average risk.
- Sample letter that can be sent to a patient who has had a positive result on a stool blood test.

All of these templates are located in Appendix E of the Toolbox

Essential #4: An Effective Communication System



- Better communication has many benefits.
- So how can we improve it?
 - Staff involvement
 - Decision aids
 - Theory-based approaches
- Theory-based communication has documented a greater impact.

An Effective Communication System



- Meta-analysis of patient interventions for mammography - education and communication strategies*
 - Theory based communication was more effective:
 - 24% improvement in screening rates vs 0% for generic education

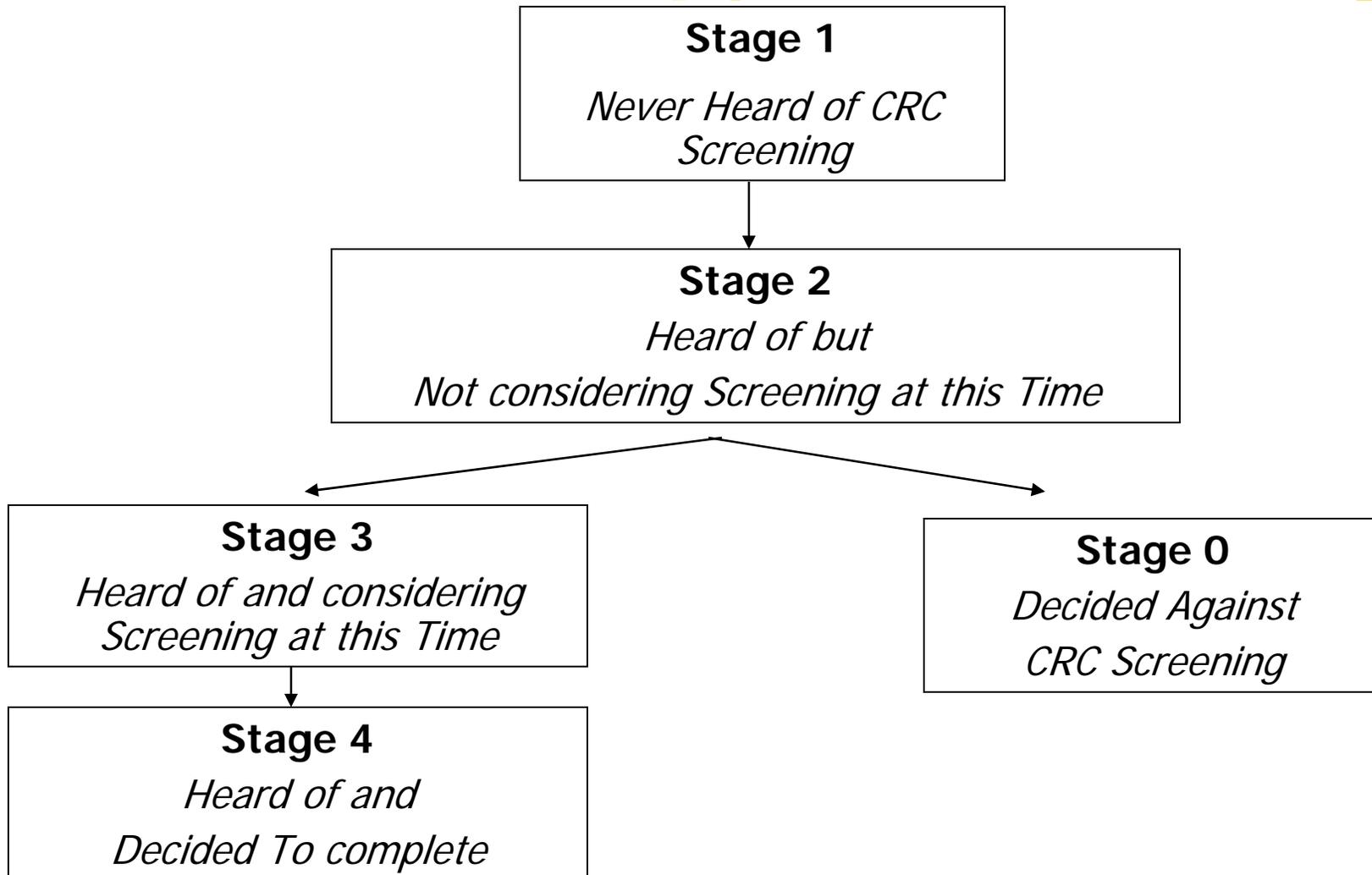
*Yabroff and Mandelblatt, 1999.

An Effective Communication System



- Examples of theory-based communication based on behavior models
 - Health Belief Model
 - Social Cognitive Theory
 - Theory of Reasoned Action
 - Theory of Planned Behavior
 - Decision Stage Model

A Decision Stage Model for CRC Screening



Other Barriers to Physician Practice



- Out of Date Knowledge
 - 30% still do one FOBT in the office
 - Some may believe a DRE is highly effective
 - Some may repeat false positives – No longer recommended
 - As many as half of all pos. screens get no colonoscopy
- Lack of Confidence in Effectiveness
- Inadequate Resources
- Cost and Reimbursement

Case Study #1



- A 45 year old man goes to the doctor for a sore shoulder. The history form collected at the front desk reveals that his 59 year old brother had an adenomatous polyp found recently.

What is the man's risk of CRC?



- A. Average Risk
- B. Increased Risk
- C. High Risk

Would you recommend screening
to this man?



- A. No, because it is not his check up?
- ✓ ■ B. Yes, because you can't raise screening rates without taking every opportunity to screen.
- C. It would depend on how much time I had.

What screen do you recommend?

- A. Stool Blood Testing (SBT)
- B. Flexible Sigmoidoscopy (FS)
- C. SBT + FS
- ✓ ■ D. Colonoscopy
- E. Any of the tests preferred by the patient

Case Study #2



- A 40 year old woman comes in for heartburn. The waiting room history reveals that her mother and her sister both had colorectal cancer. Her mother was diagnosed at age 50 and her sister had uterine cancer at age 50.

What is her risk level?



- A. She is at average risk.
- B. She is at increased risk
- C. She is at high risk.
- ✓ ■ D. It is impossible to define her risk level based on the information provided.

What action will be indicated?



- A. Colonoscopy
- B. Genetic testing
- C. Referral to a gastroenterologist.
- ✓ ■ D. All of the above

The Four Essentials: A Review



- A recommendation to every eligible patient
- An office policy
- A reminder system
- An effective communication system

In Conclusion



- Screening reduces incidence & mortality
- Physician recommendation has the largest influence on screening rates
- Physicians can improve their office effectiveness through use of these essentials
- The Toolbox and Guide is designed to provide what you need for your practice.

Thank You!



Toolbox and Guide

cancer.org/colonmd

(see list on the right)

“For Your Clinical Practice”

Acknowledgement:

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Department of Family Medicine

Thomas Jefferson University