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

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## 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)

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- It reduces the incidence and mortality of CRC
- CRC Screening is a HEDIS measure as of 2003
  - HEDIS=nationally accepted quality measure
  - Now part of pay for performance (Medicare)
- CRC malpractice cases are costly and rising ("failure to screen" now common complaint)
- 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, op cit)
- 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.'
- Majority 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.

#### Case Study

A 45 year old man goes to the doctor for a sore shoulder. The history form collected at the front desk reveals that his 55 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

#### 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

# 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. Yes, because he is at increased risk and could be screened 10 years earlier than his youngest family member with CRC.

#### 2008 CRC Screening Guidelines:

- Exams that are designed to detect both early cancer and precancerous polyps should be encouraged if resources are available and patients are willing to undergo an invasive test
- If the full range of screening tests are not available, physicians should make every effort to offer at least one test from each category

#### 2008 CRC Screening Guidelines

#### Average risk adults age 50 and older

Tests that detect adenomatous polyps and cancer

- Flexible sigmoidoscopy (FSIG) every 5 years\*, or
- Colonoscopy every 10 years, or
- Double contrast barium enema (DCBE) every 5 years\*, or
- CT colonography (CTC) every 5 years\*

\*Note: All positive screening tests should be followed up with colonoscopy \*\*Must detect at least 50%

### 2008 CRC Screening Guidelines

Tests that primarily detect cancer \*\*

- Annual guaiac-based fecal occult blood test (gFOBT)\* with high test sensitivity for cancer, or
- Annual fecal immunochemical test (FIT)\* with high test sensitivity for cancer, or
- Stool DNA test (sDNA)\*, with high sensitivity for cancer, interval uncertain

\*Note: All positive screening tests should be followed up with colonoscopy \*\*Must detect at least 50%

#### If tests that can prevent CRC are preferred, why not recommend them alone? 3 Reasons

- 1. Greater patient requirements for successful completion
   Endoscopic and radiologic exams require a bowel prep and an office or facility visit
- 2. More invasive than fecal testing, therefore higher potential for patient injury
  - Risk levels vary between tests, facilities, practitioners
- 3. Patient preference
  - Many individuals don't want an invasive test or a test that requires a bowel prep
  - Some prefer to have screening in the privacy of their home
  - Some may not have access to the invasive tests due to lack of coverage or local resources

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#### **Other Stool Test Cautions**

- ONLY AT-HOME TEST ACCEPTABLE
- Positive FOBT should not be repeated
  - Should be followed with a colonoscopy

#### Screening Options: Can We Get to 80%

What are the benchmarks for the main screening tests?\*

Endoscopy (over 50, ever)

- Delaware.....74.3 %
- Maryland.....71.3 %

#### □ Stool Blood Tests (over 50, last 2 years)

- Florida.....29 %
- California......27.8%
- Maine.....27.7%

\*BRFSS, CDC, 2008. N.B. This does not mean up to date.

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

#### A: Yes. Unequivocally!

The physician's recommendation is the most consistently influential factor in cancer screening!

#### EBM CME

The evidence for this is based on analysis of large data bases from population based surveys, specifically the National Health Interview Surveys in 2000 & 2003, statewide cancer surveys from two states (California, Maryland), practice based interventions, and qualitative research.

# How Can We Get to Goal of 80% Patients Screened?

#### KEY POINT: Most Influential Factor: Recommendation from a Physician (Clinician)

- Although other factors, such as health insurance status play a role, the evidence supporting the role of a physician's recommendation derives from many types of research-based and population sources and is geographically constant.
- A recommendation from a primary care clinician has been identified most consistently, directly and indirectly, as the factor of prime influence.

#### Q: How do we know this?

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

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)

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)

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

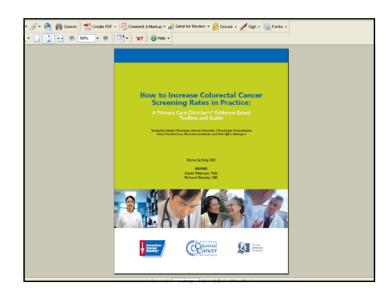
# What is the Evidence from Statewide Surveys, cont'd

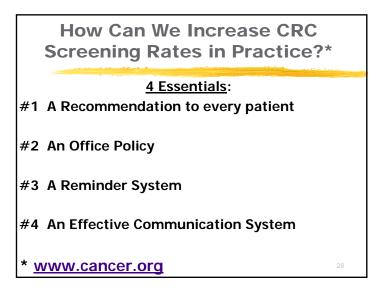
- Maryland: 85% of those who reported a recommendation for endoscopy vs 25% who did not had an endoscopy(73% ever rec rec)
- Those with screening endoscopy not upto-date when asked "why", said:
  - 23% "doctor didn't order it, or didn't say I needed it.\* (most common single reason)

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)

\*Ibid





# 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.
- \*N.B. An opportunistic approach doesn't justify an in-office FOBT which has negative evidence. (Collins, et. al. *An Int Med*)

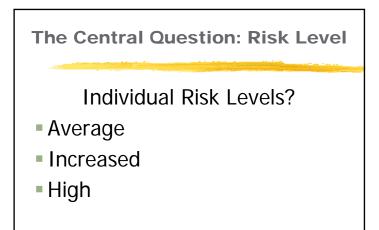
#### Essential #2: An Office Policy

- 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 doctors!
- Beware: one size does not fit all patients!

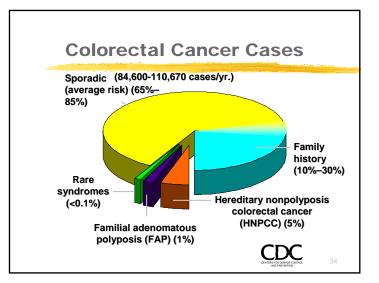
# How to involve staff who work in the practice?

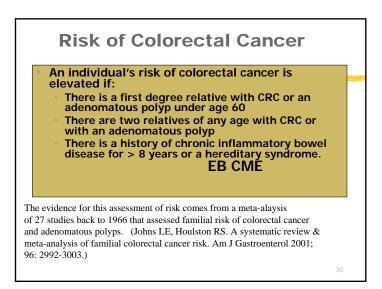
#### Factors to Consider in Your Office Policy

- 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



Familial Setting	Approximate lifetime risk of colon cancer
No history of colorectal cancer or adenoma (General population in the U.S.)	6%
One second or third-degree relative with CRC	About a 1.5 fold increase
One first-degree relative with an adenomatous polyp	About a 2 fold increase
One first-degree relative with colon cancer®	2-3 fold increase
Two second-degree relatives with colon cancer	About a 2-3 fold increase
Two first-degree relatives with colon cancer <sup>®</sup>	3-4 fold increase
First-degree relative with CRC diagnosed at < 50 years	3-4 fold increase





#### **Q: How Many at Increased Risk?**

- A: Many more than we usually think.
- Too much emphasis in the past on the "average risk" person, assumed to represent the vast majority.
- In fact, with CRC, 15-35% of the population is at increased risk.

#### Case Study

 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.

# 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 any 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.)

#### What is her risk level?

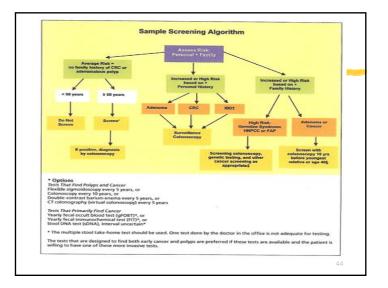
- A. She is at average risk.
- B. She is at increased risk
- C. She is at high risk.
- D. It is impossible to define her risk level based on the information provided.

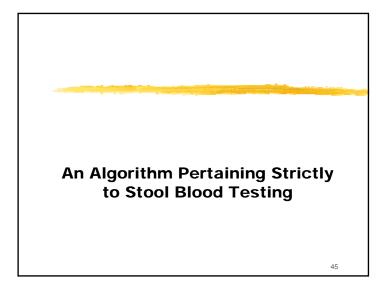


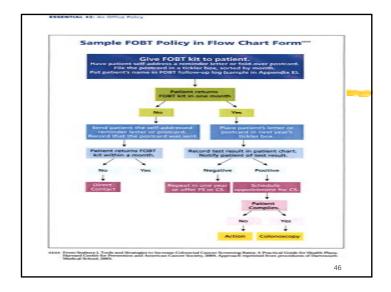
- A. Colonoscopy
- B. Genetic Testing
- C. Referral to a gastroenterologist.
- D. All of the above

 See Screening Recommendations at a Glance also, Toolbox and Guide (p 63), for another approach to visualizing this policy.

	at a Glance	
Risk Category	Age to Begin Screening	Recommendations
Average Fisk No risk factors No symplocus*	< Age 50 > Age 50	No Screening Needed Screen with any one of the screen with any one of the screen screen screen and Cancer and Cancer Screen Cancer Cancer From The Privac Cancer From The Privac Cancer From The Privac Cancer From Screen From The Screen From Screen
Increased Risk CRC or adenomatous polyp in a first degree relative*	Age 40 or 10 years younger than the earliest diagnosis in the family, whichever comes first	Colionoscopy*
Highest Risk Personal history for > 8 years of Crohn's Disease or Ulcerative Colliss or a heredilary syndrome (HNPCC or, FAP, ARSAP)	Any age	Needs speciality evaluation and colonoscopy
If the test is positive, a colonosc The multiple stool take-home to not adequate for testing. Interval uncertain.		done by the doctor in the office is







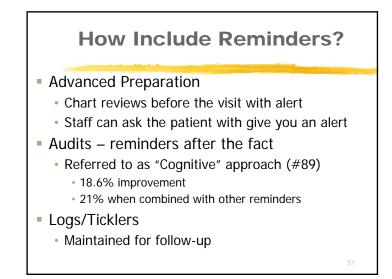
#### **Barriers to Physician Practice Essential #3: A Reminder System** Inadequate follow up of positive FOBT - Approximately 30% of patients told they had a positive FOBT reported that this test was either followed up with a Two types: repeat FOBT, or no diagnostic work up. Every positive FOBT should lead to a diagnostic work-up. Physician Reminders EBM CME Patient Reminders There is evidence for effectiveness of both This finding is based on two cross sectional surveys: the first is of 1147 Inis finding is based on two cross sectional surveys: the first is of 114/ physicians who responded to the National Survey of Colorectal Cancer Screening Practices, the second was based on the responses of 11,365 individual respondents to the NHIS. The physicians survey indicated that nearly 30% of positive FOBT's were followed up with another FOBT rather than used as the basis for a complete diagnostic work-up. The NHIS survey had an identical result, with 30% of individuals indicating they did not get a diagnostic exam after a engine FOPT \* a positive FOBT.\* \*Nadel et al, Annals of Int Med Jan 2005

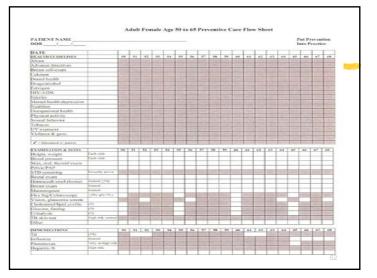


#### Chart Prompts

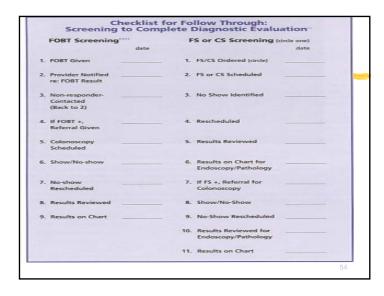
- Problem lists
- Screening schedules
- Integrated summaries
- Alerts placed in chart
- Follow-Up Reminders
  - Tickler System
  - Logs and Tracking
- Electronic Reminder Systems (HER)

## Evidence on Physician Reminders <u>% Improved</u> • Meta-analysis #1 35 RCT's- on mammogram rates-prompts, staff roles, logs (Mandelblatt, Yarbroff, Ca Ep.Biom. Prev 1999) • Meta-anlaysis #2 33 RCT's-on approaches to increase preventive service use (inc. fobts) - prompts, alerts, ticklers (Balas EA, et. al. Arch Int Med 2000)





	Date
a. At home FOBT Kit Given	
<ol> <li>FOBT Test Completed</li> </ol>	
c. Results Received	
<ol> <li>If No Completion or Results,</li> </ol>	
Reminder Card/Letter Sent	
<ol> <li>Patient Notified of Finding</li> </ol>	
f. Referred for CS if Positive	
Placed in Tickler File if Negative for	
next year	
. Referred for FS if FOBT Negative	
. FS Scheduled	
. FS Test Completed	
I. FS Results Received	
. If No Completion or Results,	
FS Reminder Card/Letter Sent	
. FS Patient Notified of Finding	
. FS Placed in Tickler File if Negative	
. Scheduled for CS if Positive	
. Referred for CS	
CS Scheduled	
CS Test Completed	
CS Results Received	
. If No Completion or Results,	
CS Reminder Card/Letter Sent	
. CS Patient Notified of Finding	
. CS Placed in Tickler File if Negative	



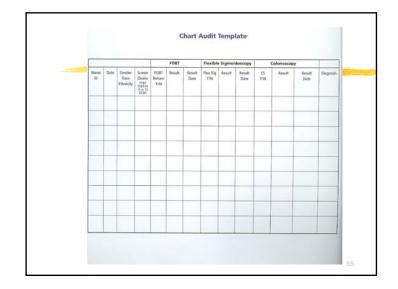
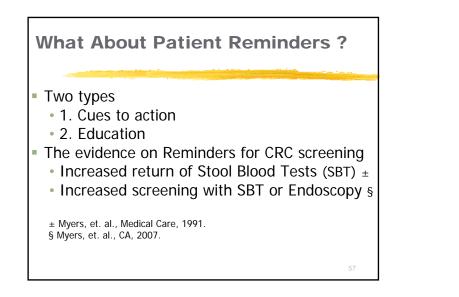


Chart # and Phone #	Name	Sex	Race/Ethn.	DOB	Risk A/I/H	FOBT Distrib. date	FOBT Result	FS Referral date	CS Referral date	Needs FOBT FS, CS, None	Reminder Written/ Telephone Date(s)	Test Result & Notification Date	Commen (other C) screenin needed
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	_												
		$\vdash$											



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.

Date	_
Dear (Name):	
Colon cancer is the second leading cause of cancer-related deaths in the United States, and men and women are equally at risk. The good news is that colon cancer can be prevented or detected early and death from colon cancer can be prevented if screening is done on a regular basis.	
Our records indicate that it is time for your annual physical and cancer screening. Please call your primary care physician, at XXXXXXXXXXX so that you can schedule an appointment at your carllest convenience.	
Sincerely,	
	-



Average Risk Reminder	
Dute	
	«FirstNam
Name Stroet	«Address»
Surver City	«City», «St
	Dear +First
Dear (Name):	
	We wanted
Colorectal cancer is the second leading cause of cancer death among men and women in	(FOBT). Th
the United States. The good news is that this disease can be prevented. Screening tests are	you may ha
vital to preventing colorectal cancer because they can detect pre-cancerous polyps that can be removed easily with routine procedures. Lifestyle changes, such as improving diet	
can be removed easily with routine procedures. Lifestyre changes, such as improving user and increasing physical activity, can also reduce the risk of cancer.	You now ne
and increasing physical activity, can also reduce the fisk of cancer.	if a polyp o growth is fi
Like many people, you are at risk for colorectal cancer. I am writing to remind you to call	potential c
your primary care physician today to schedule a colorectal cancer screening appointment.	colonoscop
By getting colorectal cancer screening tests regularly, colorectal cancer can be found and	hospital. T
treated early when the chances for cure are best.	inside your
	will explain
Please read the enclosed brochure to learn about colorectal cancer screening. If you'd like	We can ass
to know more about colon cancer and the testing process. I would be happy to talk with	Please call
you about it further. You can also call the American Cancer Society at 1-800-ACS-2345 or	take this let
visit www.cancer.org, Whatever your next step, I hope you'll schedule your next screening	
test soon. It just might save your life.	Thank you
	describes o
Sincerely,	
	Sincerely,
	Sincerety,
Enclosure: Colon Testing Can Save Your Life brochure	
Enclosure: Color Jesting Can Sale and Life or chaine	
	Medical Dir
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	Date
FirstName- «LastName-	
Address	
City», «State» «Zip»	
Dear «FirstName» «LastN	ame»,
FOBT). The results of you	e you on successfully completing the Fecal Occult Blood Testing r FOBT test for colon and rectal cancer screening showed that ar stool and that further testing is needed.
You now need a colonosco	py to look for a possible source of the bleeding and to determine
	ent. Usually there is no serious problem, or if a precancerous
	removed to prevent cancer. However, cancer is one of the
potential causes for your b	sleeding; we want to be very careful to rule out this possibility. A
	e that must be done by a doctor at an endoscopy center or a
nospital. This test will requ	aire that you have anesthesia and will allow a doctor to look
	estine to check for a growth or a polyp or cancer. The doctor
will explain the colonosco	py results to you after the test.
We can assist you with sch	reduling a colonoscopy. Please call or visit our office.
Please call	to obtain a referral or set up an appointment. Also, please
ake this letter with you to	your next doctor's appointment.
thank you for following up	p on your healthcare needs. I am enclosing a brochure that
lescribes colonoscopy. We	have a video tape available if you would like to view it.
incerely,	

#### Essential #4: An Effective Communication System

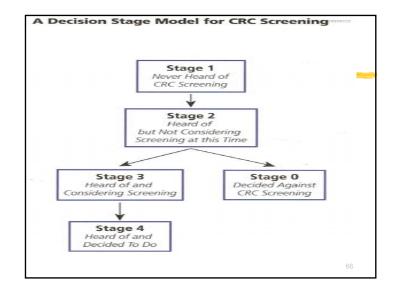
- Better communication has many benefits.
- Communication with patients
- Within the practice
- How to improve interior communication?
  - Staff involvement
  - Decision aids
  - Theory-based approaches
- Among the parts of the system (primary practice and specialists)

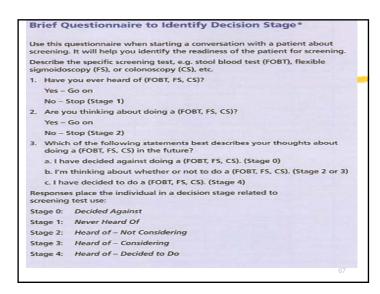
An Effective Communication System

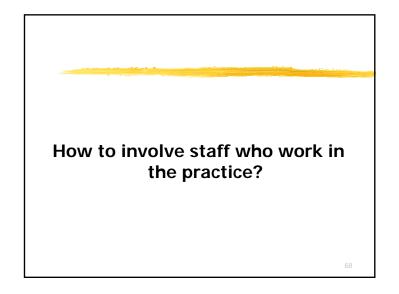
- Meta-analysis of patient interventions for mammography - education and communication strategies\*
  - Theory based communication was more effective
  - 24% improvement in screening rates vs 0% for generic education

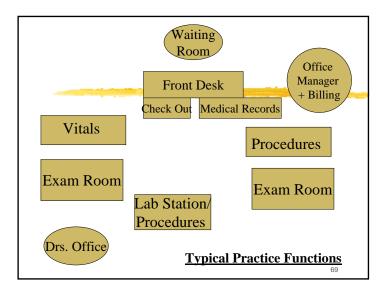
\* Yabroff and Mandelblatt, op cit

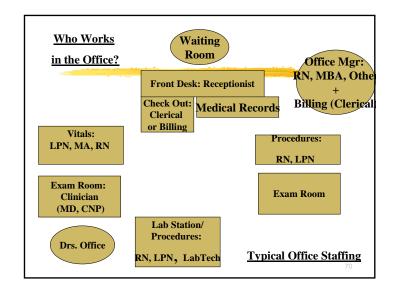




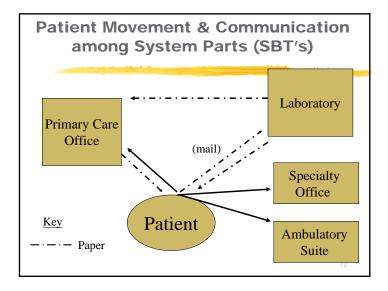


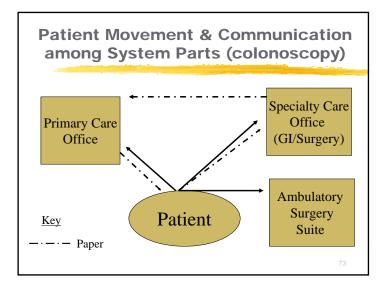


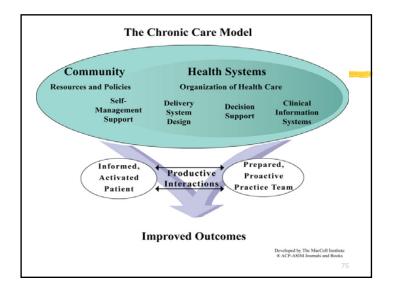


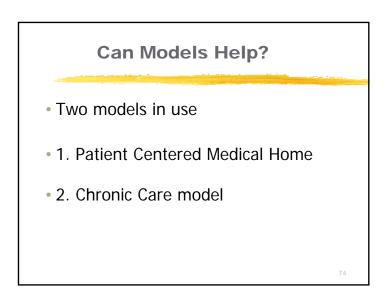


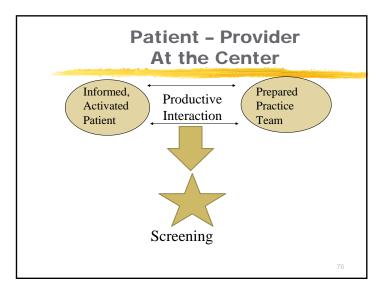
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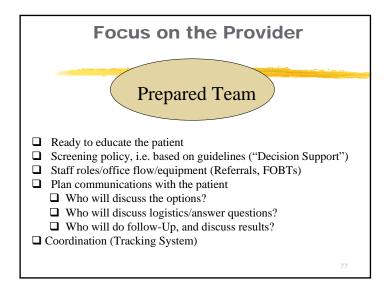


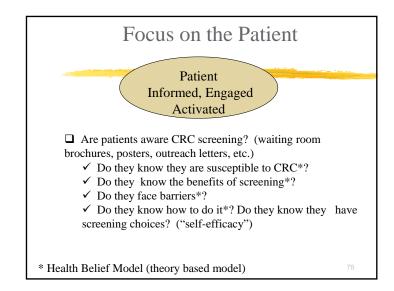


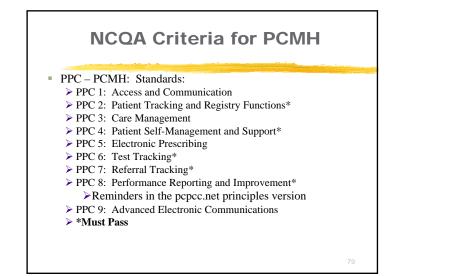














- A recommendation to every eligible patient
- An office policy
- A reminder system
- An effective communication system

#### 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"

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