Colorectal Cancer Screening 101

NORTH DAKOTA
COLORECTAL CANCER
ROUNDTABLE

NORTH DAKOTA COLORECTAL CANCER ROUNDTABLE

We are a coalition of organizations and individuals dedicated to increasing the use of colorectal cancer screening throughout North Dakota.

We thank the American Cancer Society global headquarters for allowing the use of much of their content to be shared in these slides and be made available for provider champions across the state of North Dakota to share with their peers.

Together, we can save lives from colorectal cancer!

Sneak Peak

- Colorectal Cancer (CRC) screening guidelines
  - ACS and USPSTF

- Screening tests overview

Our Belief: *All people should benefit equally from life-saving CRC screening.*

Our Goal: *Achieve an 80% CRC screening rate in every community, regardless of the hurdles that must be crossed.*

Colorectal Cancer (CRC) in North Dakota

- 2nd leading cause of cancer death in the US and in ND
- Incidence rates have steadily declined over the past 20 years
- However, CRC is on the rise in younger people. Incidence rates have increased by 51% since 1994 in individuals age 20 – 49
  - North Dakota is a hot spot for this trend
- Despite significant progress in screening, **33% of eligible North Dakotans are still not up to date with CRC screening**.

SCREENING GUIDELINES FOR AVERAGE RISK ADULTS (ACS & USPSTF)

Recommendations	ACS, 2018	USPSTF, 2016
Age to start screening S-strong Q-Qualified	Age 45y Starting at 45y (Q) Screening at aged 50y and older - (S)	Aged 50y (A)
Choice of test	High-sensitivity stool-based test or a structural exam.	Different methods can accurately detect early stage CRC and adenomatous polyps.
Acceptable Test options	• FIT annually • HSgFOBT annually • mt-sDNA every 3y • Colonoscopy every 10y • CTC every 5y • FS every 5y **All positive non-colonoscopy tests should be followed up with colonoscopy.**	• HSgFOBT annually • FIT annually • sDNA every 1 or 3y • Colonoscopy every 10y • CTC every 5y • FS every 5y • FS every 10y plus FIT every year
Age to stop screening	Continue to 75y as long as health is good and life expectancy 10+y (Q) 76-85y individual decision making (Q) >85y discouraged from screening (Q)	76-85 y individual decision making (C)

HIGH RISK INDIVIDUALS MUST BE RECOGNIZED AND ADDRESSED

Personal history

- Adenomatous Polyps
- Colorectal cancer
- Inflammatory bowel disease
  - Ulcerative colitis
  - Crohn's disease

Family history

- Colorectal cancer or adenomas
- Hereditary syndrome (FAP, Lynch Syndrome)

Individuals with these conditions should:

- Begin screening earlier (10 years before age at diagnosis of index case)
- Be aware that **colonoscopy** is the only recommended screening test for most

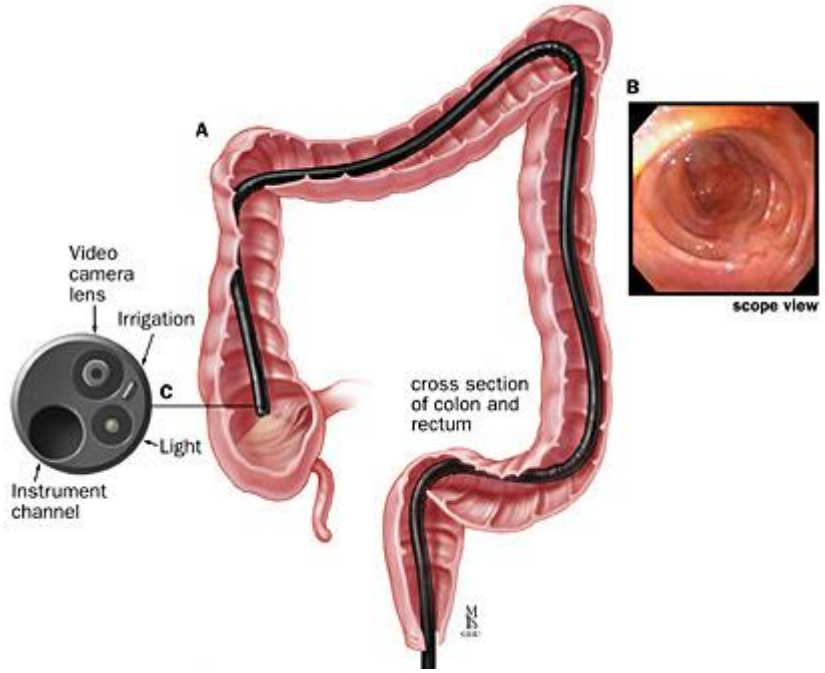
Colorectal Cancer Signs & Symptoms

- A change in bowel habits, such as diarrhea, constipation, or narrowing of the stool, that lasts for more than a few days
- A feeling of needing to have a bowel movement that's not relieved by having one
- Rectal bleeding with bright red blood
- Blood in the stool, which may make the stool look dark
- Cramping or abdominal pain
- Weakness and fatigue
- Unintended weight loss

https://www.cancer.org/cancer/colon-rectal-cancer/detection-diagnosis-staging/signs-and-symptoms.html

Colonoscopy

- Allows direct visualization of entire colon lumen
- Screening, diagnostic and therapeutic
- 10 yr interval
- The most common screening test in US and ND



Colonoscopy is a great screening test, but:

- Many patients face barriers or are not willing
  - Requires bowel prep, time off work, caregiver to drive
- More costly, wide variation in quality, invasive
- Practices solely focused on colonoscopy associated with low screening rates

TYPES OF STOOL TESTS

Tests that detect blood (Fecal Occult Blood Tests)

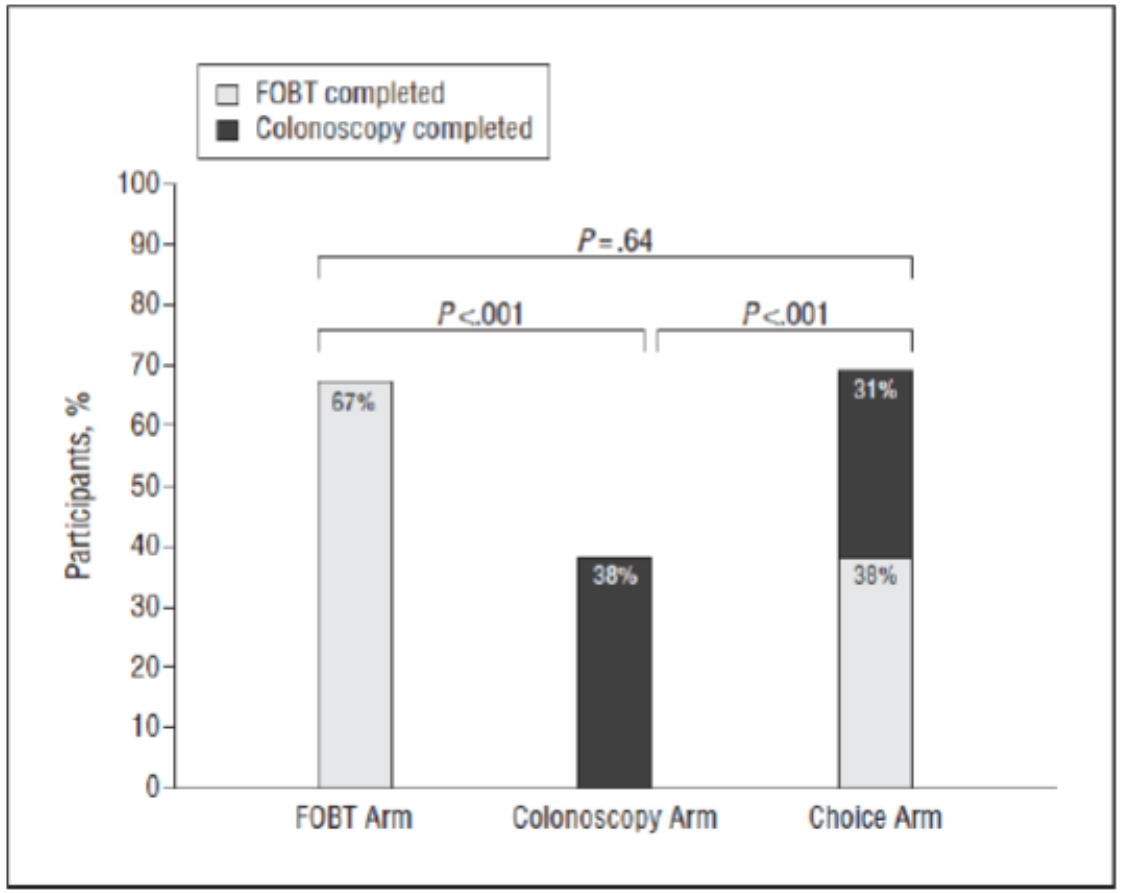
- Two types (but multiple brands, variable performance)
  - Guaiac-based FOBT
  - Fecal Immunochemical Tests (FIT)

Tests that detect aberrant DNA

- One test (Cologuard) available in US
  - Combined DNA mutation test with FIT
  - Referred to as “mt-sDNA” or “FIT-DNA”

> Remember: Stool tests are only appropriate for **average risk** patients

PATIENT PREFERENCES



Inadomi, Arch Intern Med 2012

- Patients who are presented with screening options are more likely complete some form of screening.
- “The best test is the one that gets done!”
- Modeling studies suggest years of life saved through a high-quality stool-based screening program are similar to outcomes with a high-quality colonoscopy screening program.

GUAIAC FECAL OCCULT BLOOD TESTS

- Historically was most common FOBT in US
- Solid evidence (3 RCTs)
- Requires specimens from three bowel movements
- Non-specific
- Results influenced by foods and medications
- Only high-sensitivity guaiac FOBT (Hemoccult II Sensa) is appropriate for screening
- Older forms (Hemoccult II) are **not recommended by ACS, USPSTF**

FECAL IMMUNOCHEMICAL TESTS (FIT)

- Detect blood by immunoassay
  - An antibody specifically recognizes the globin component of human hemoglobin
- High specificity for **human blood** and for **lower GI bleeding**
- No reported interference by foods or medications
- Most brands require only one or two stool specimens
- Higher sensitivity than guaiac FOBT
  - Cancer sensitivity ~70% with high quality FIT

Cologuard/mt-sDNA TEST

- Only one test (Cologuard) currently available
- Combines tests for stool DNA markers associated with cancer and adenomas **plus** a high quality FIT
- Referred to as a “multi-target stool DNA test” (“mt-sDNA”)

- 3 year screening interval
- All positives require colonoscopy
- Company mails test directly to patients and does reminder calls (60-65% completion rate)
- More costly than FIT

ADVANTAGES OF STOOL TESTS

- Far less expensive than colonoscopy
  - Medicare reimbursement $20 - $25 per test
- No bowel preparation
- Done in privacy at home
- No need for time off work or assistance getting home after the procedure
- Non-invasive – no risk of pain, bleeding, perforation
- Limits need for colonoscopies – required only if stool blood testing is abnormal

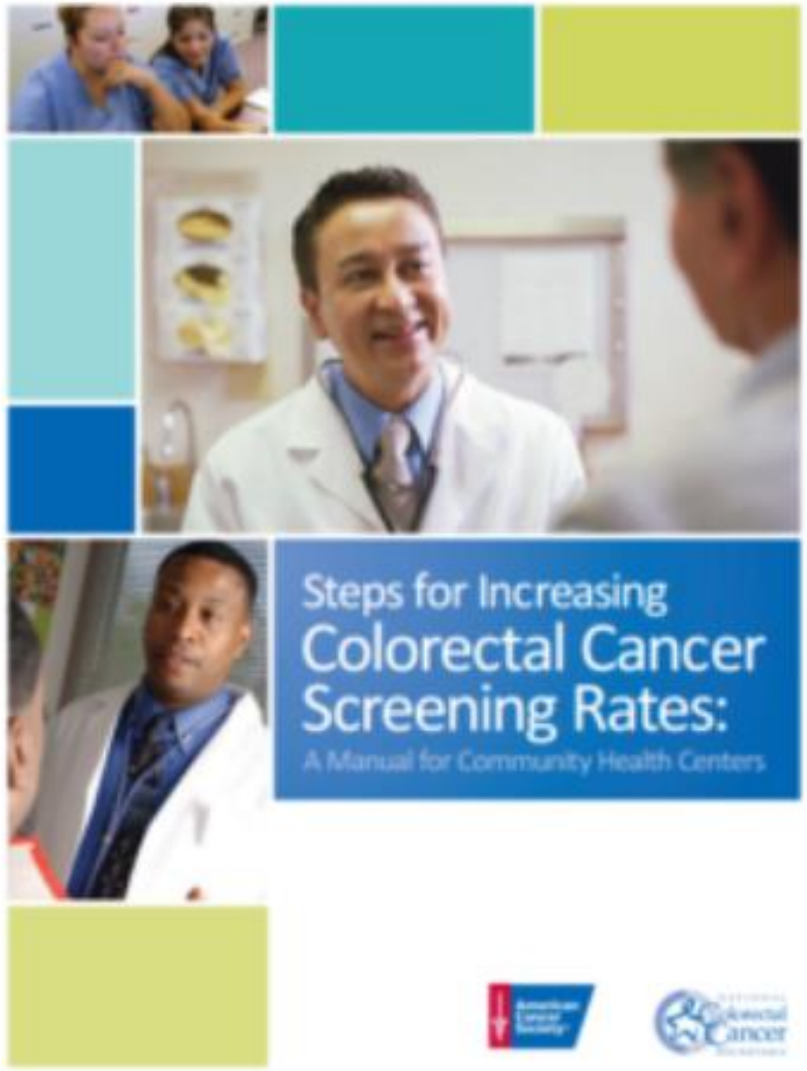
STOOL TEST QUALITY ISSUES

- All positive tests must be followed up with colonoscopy
  - Follow up often lacking
    - No documented follow up for **1 in 3** positives in many settings
    - Failure to follow up positive tests in a timely manner is associated with increased risk of future CRC diagnosis and advanced stage disease
  - There is **no value** in repeating a positive stool test!
- Patients should be informed that:
  - A positive stool test requires colonoscopy follow up, and
  - This colonoscopy may be treated as diagnostic → cost sharing

DIGITAL RECTAL EXAM SPECIMENS MISSED 19 OF 21 CANCERS

- DRE is essentially worthless as a screening tool and **should never be used**
- Missed **19 of 21** cancers found at colonoscopy in largest study (DRE with guaiac FOBT)
- No studies showing efficacy of DRE sampling for FIT

Learn More:



- **ND Clinician FAQ Documents:**
  - Answering Patient Questions
  - Answering Common Clinician Questions
- Steps for Increasing CRC Screening Rates
- Clinician's Reference: Stool-Based Tests
- Research-tested Messaging to Reach the Unscreened
- www.NCCRT.org
- North Dakota Colorectal Cancer Roundtable