

Colorectal Cancer: Prevention, Treatment & A Path Forward



Geisinger
College of
Health Sciences

A large teal chevron graphic pointing to the right, located on the left side of the slide.

Welcome

Julie Byerley, MD, MPH

President and Dean, Geisinger College of Health Sciences

Community support



A large teal chevron graphic pointing to the right, located on the left side of the slide.

Introduction

Samuel Lesko, MD, MPH



Agenda

Testimonials

- Matthew Stopper, MD
- Aimee Kearney
- Gail Smeraldi

Panel Discussion

- **Sam Lesko, MD, MPH** – medical director of the Northeast Regional Cancer Institute
- **Michael Kondash, DO** – family medicine, PrimeMed Medical Group
- **Joseph P. Bannon, MD** – colon & rectal surgery, Geisinger
- **Amber L. Sobuto, DO** – medical oncology & hematology, Hematology & Oncology Associates of NEPA
- **Christopher A. Peters, MD** – radiation oncology, Northeast Radiation Oncology Center

Q&A

A large teal arrow graphic pointing from the left edge of the frame towards the right, serving as a background for the text.

Testimonial: Matthew Stopper, MD



Testimonial: Aimee Kearney

Testimonial: Gail Smeraldi

A large teal chevron graphic pointing to the right, located on the left side of the slide.

Epidemiology

Samuel Lesko, MD, MPH

What is cancer?

- Group of 100+ diseases
- Uncontrolled growth of abnormal cells
- Invasion of other tissues
- Genetic diseases
 - Control of cell growth and function
 - Inherited
 - Acquired

Colorectal Cancer: United States 2025

Fourth most common cancer

- 154,000 cases per year
- (Rate: 35 / 100,000)

Second leading cause of cancer death

- 53,000 deaths per year
- (Rate: 13 / 100,000)

Colorectal Cancer: NEPA 2017-2021

Fourth most common cancer

- >500 cases per year
- 14% HIGHER than the US rate

Second leading cause of cancer death

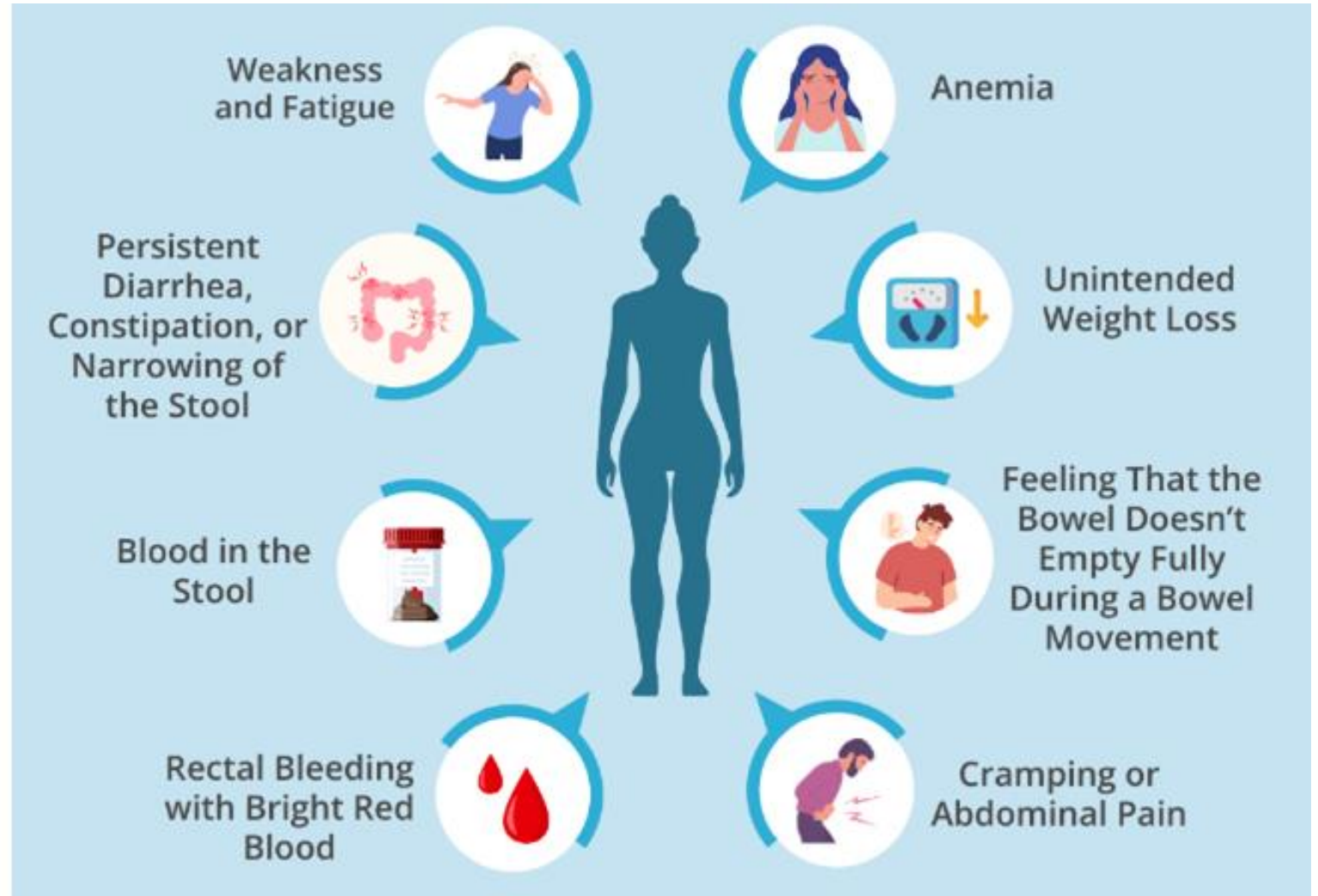
- ~200 deaths per year
- 17% HIGHER than the US rate

Risk factors

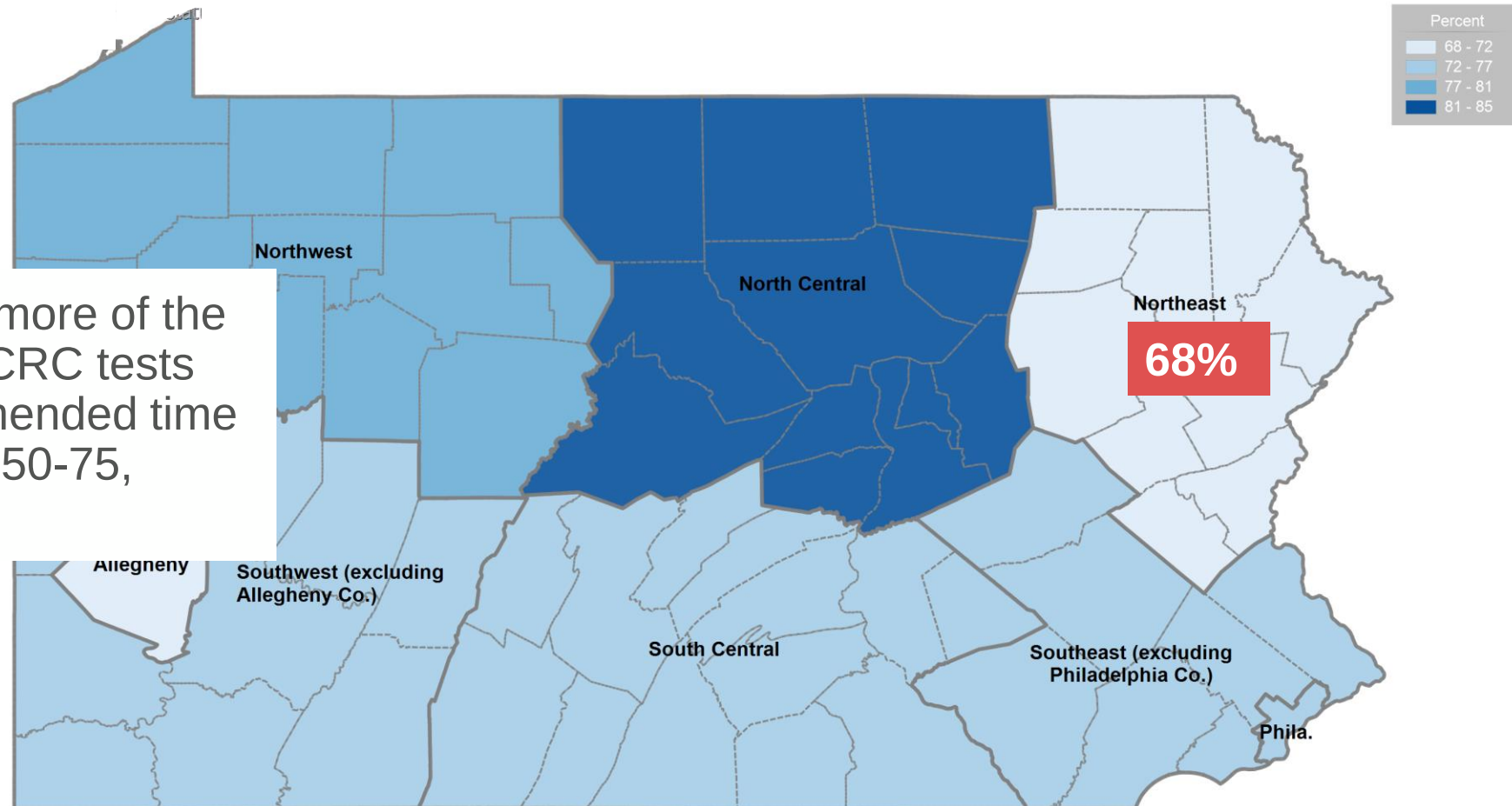
- Hereditary Syndromes
- Family history
- Age
- Sex, Race
- Inflammatory bowel disease
- Obesity, diabetes
- Diet, tobacco, alcohol
- Radiation to abdomen and pelvis
- Exercise

Signs & symptoms

- None (early)
- Blood in or on stool
- Change in bowel habits
- Abdominal pain
- Weight loss
- Anemia (iron deficiency, blood loss)



Pennsylvania BRFSS: Colorectal Cancer Screening



Received one or more of the recommended CRC tests within the recommended time interval, age 50-75, 2020

Michael Kondash, DO

- Screening information

Recommendations/Guidelines

Screenings for colorectal cancer in all adults ages 45 to 75 are recommended by:

United States Preventive
Services Taskforce (USPSTF)

Center for Disease Control
and Prevention (CDC)

Colorectal Society

American Cancer Society



CDC recommends that patients under the age of 45 be screened if patients have a history of:

Inflammatory bowel disease

A personal or family history of
colorectal cancer or polyps

Genetic syndromes such as
familial adenomatous
polyposis (FAP) or

hereditary non-polyposis
colorectal cancer (Lynch
syndrome)



For patients ages 76 through 85, the decision to be screened should be based on a person's preference, life expectancy, overall health and prior screening history.

Screening options

Non-invasive stool-based tests

- **Cologuard**
 - Multitarget stool DNA test. The recommended frequency of this test is every 3 years.
- **Fecal Immunochemical Test (FIT)**
 - Recommended frequency of this test is annually
- **High-sensitivity guaiac-based fecal occult blood test (HS-gFOBT)**
 - Recommended frequency of this test is annually.

Visual exams

- **Colonoscopy**
 - every 10 years
- **CT Colonography (virtual colonoscopy)**
 - every 5 years
- **Flexible colonoscopy**
 - every 5 years

Barriers to screening

- **Denial:** patients do not believe they belong to the at-risk demographics.
- **Cultural:** some patients trust in natural remedies or foods.
- **Socioeconomical:** cost of testing, taking time off of work, transportation issues.
- **Lack of motivation:** patients have other priorities or concerns for may be embarrassed to have testing done.

Who should advise for colorectal screenings?

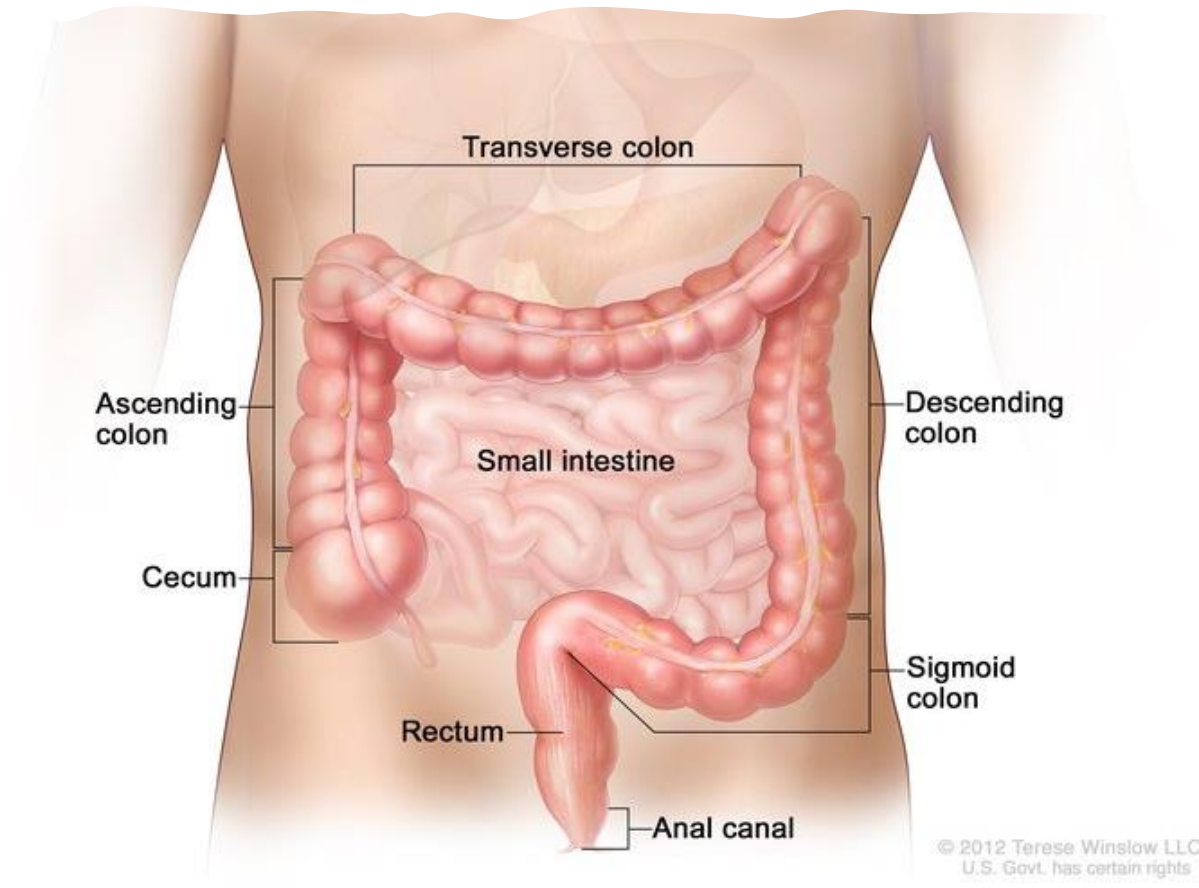
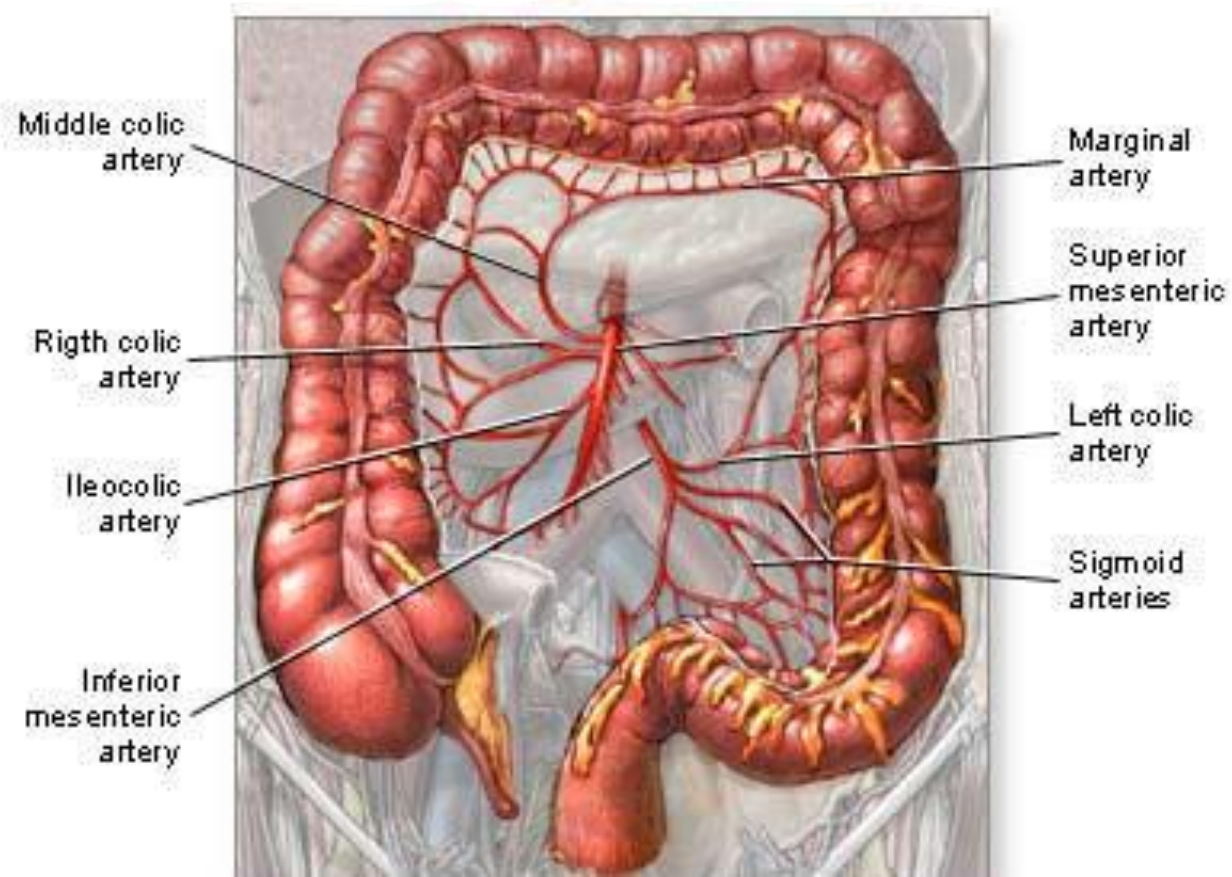
- Family physicians, internists, gastrointestinal/cologuard specialists, urology, OBGYN, hematology and oncology. All physicians, nurses and practioners involved in patients care.
- Family members, friends, neighbors.
- Health systems practicing population management such as sending FIT test to patient in mail to patient who have not been screened.
- Industry leaders and authorities such as Exact Sciences, TV Ads, Websites, News platforms, Social Media platforms, and local non-profit entities such as NE Regional Cancer Institute.
- Anyone and everybody!

Jay Bannon, MD

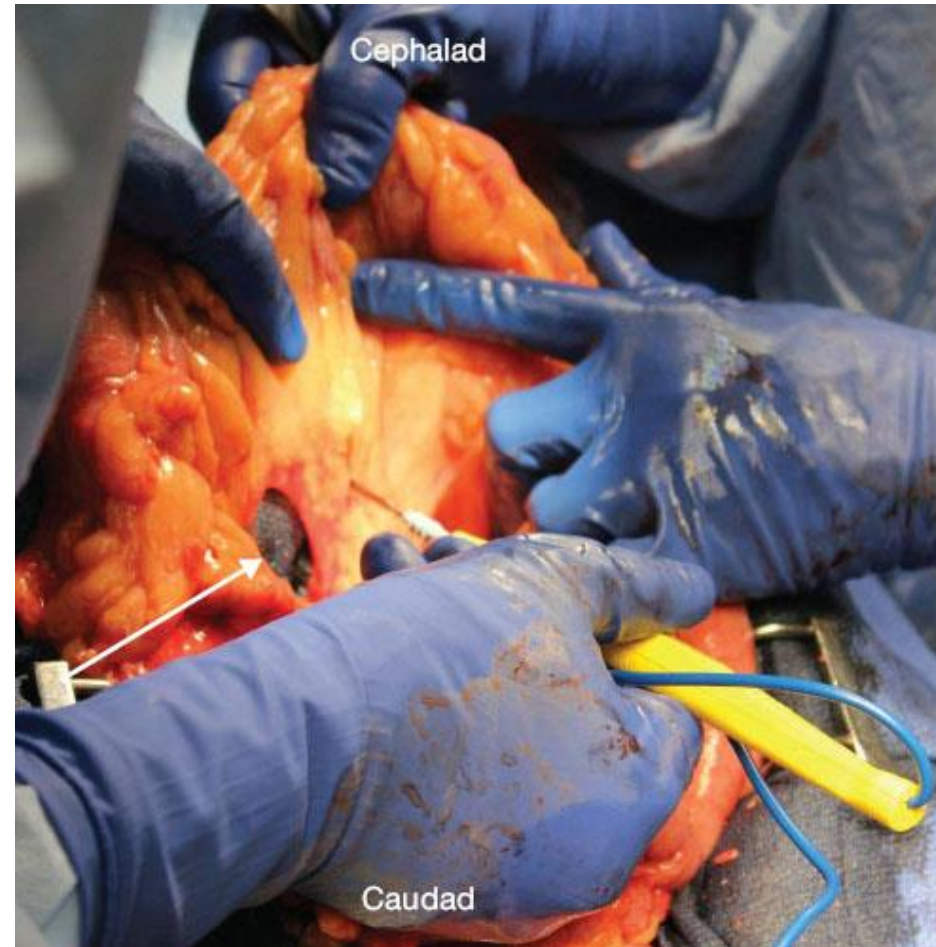
- Surgical options

Colon anatomy

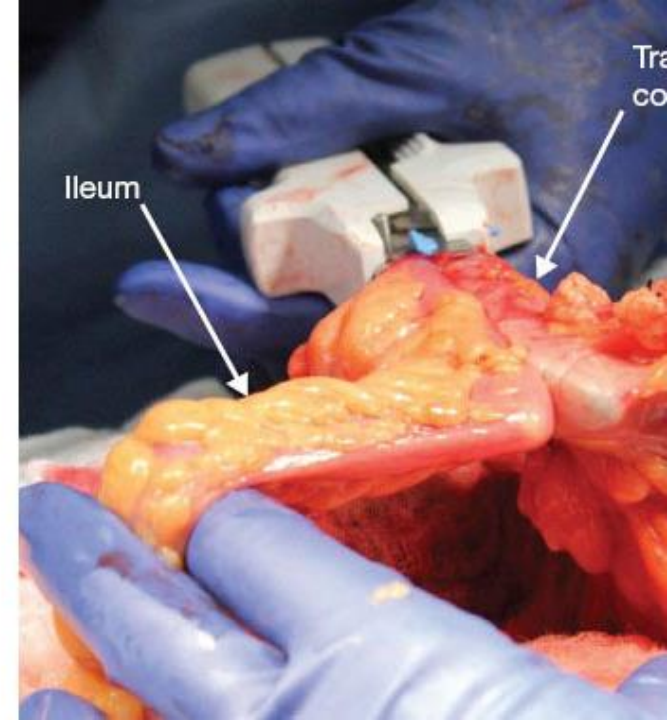
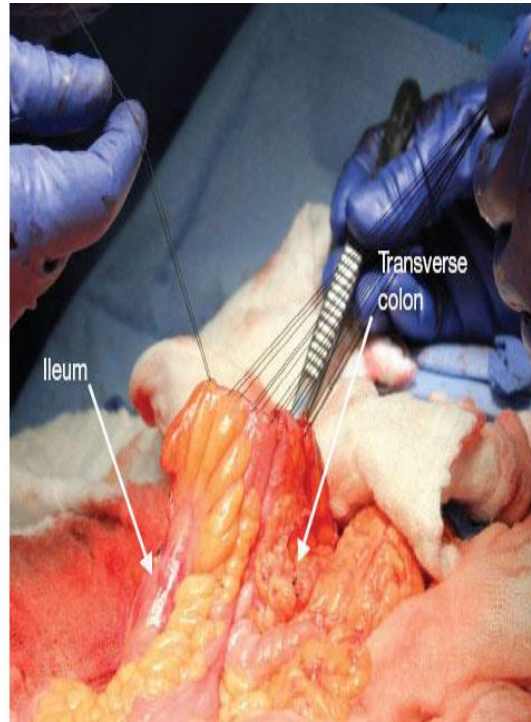
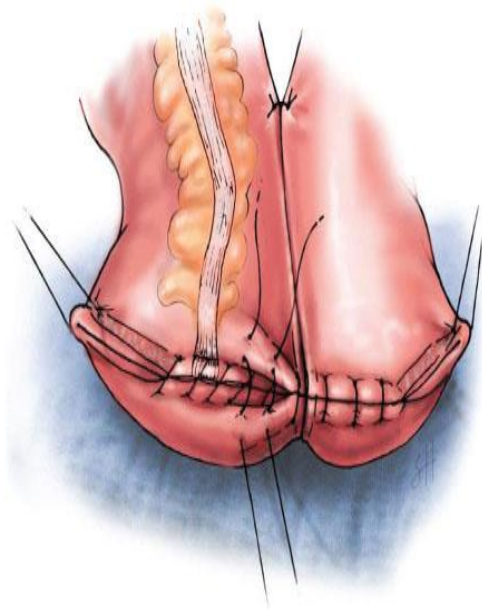
- Blood supply and anatomy determine extent of resection



Colon and rectal cancer

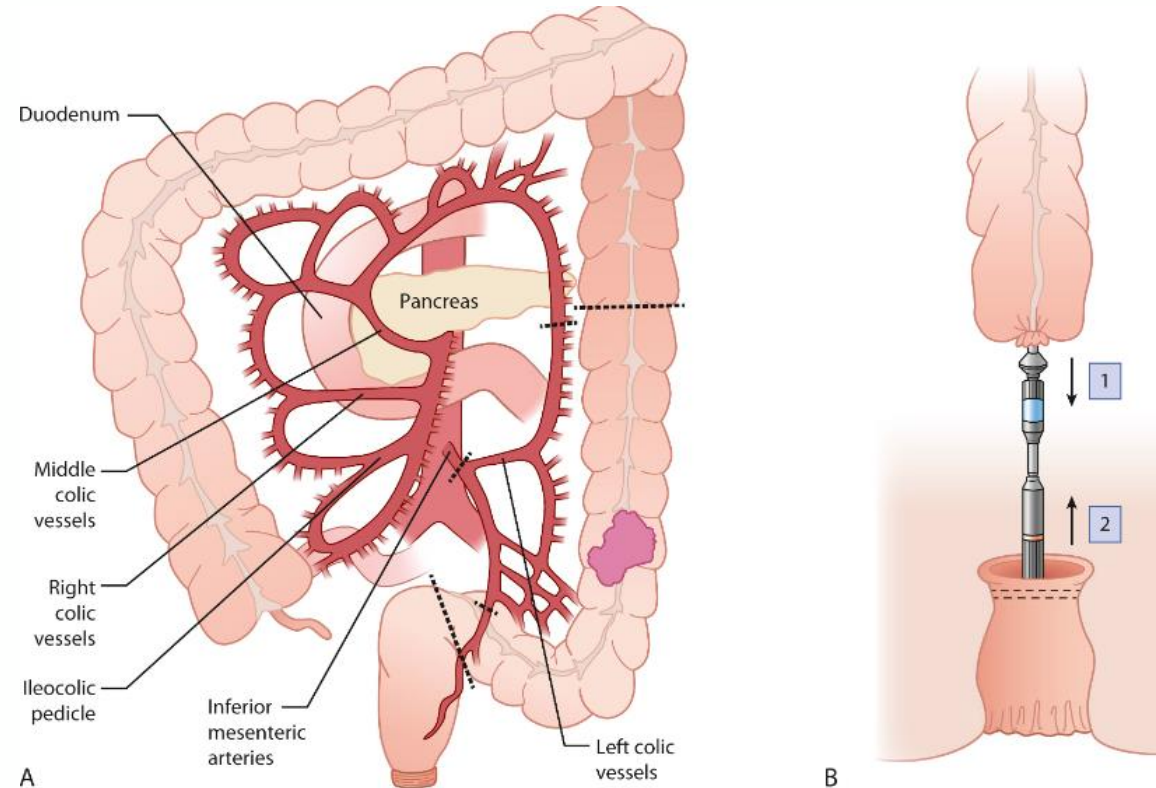


Colon anastomosis



Colon anastomosis

- Avoid need for colostomy



(A) Left hemicolectomy. The inferior mesenteric artery is ligated and the marginal artery is ligated just distal to level of transection of the colon. The hemorrhoidal vessels are ligated within the proximal mesorectum. (B) Colorectal anastomosis with circular stapler. 1 , Anvil in the proximal colon; 2 , Shaft of the transanally placed circular stapler.

Colon and Rectal Cancer Surgery

- Colonoscopy and Polypectomy
- Open surgery
- Laparoscopic and Robotic Surgery
- Emergency operations
- Trans anal excision

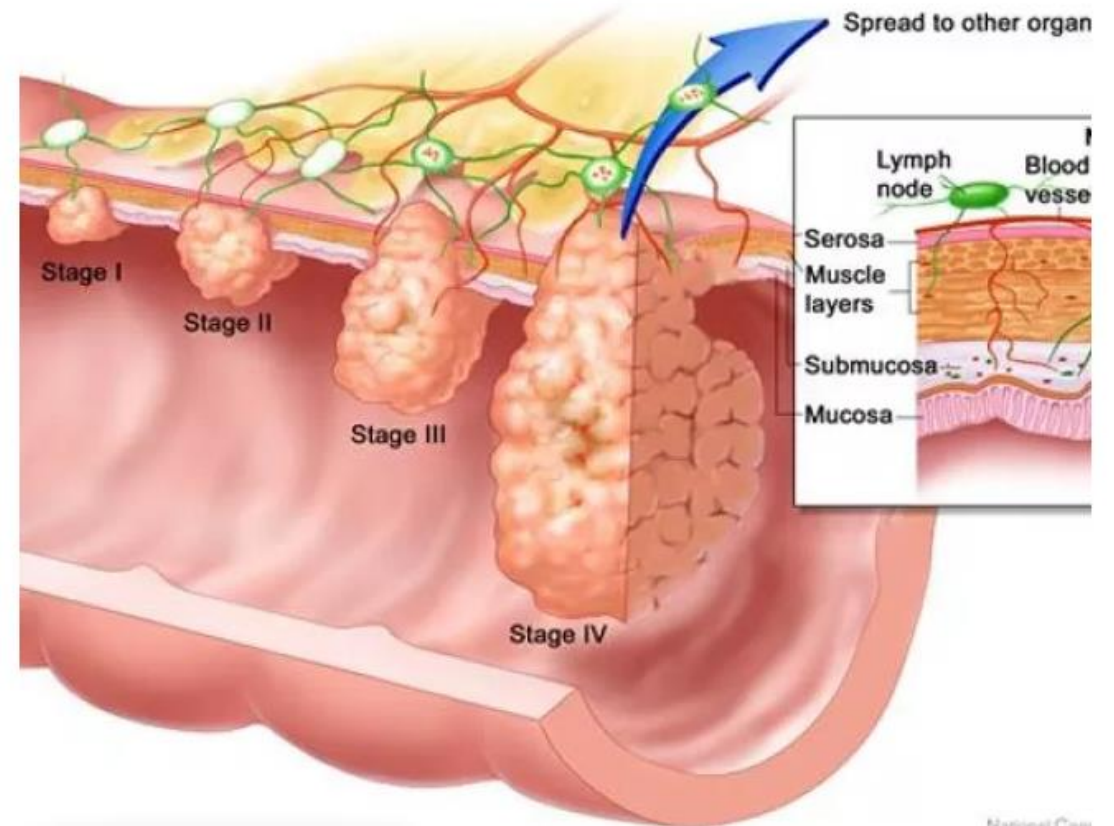
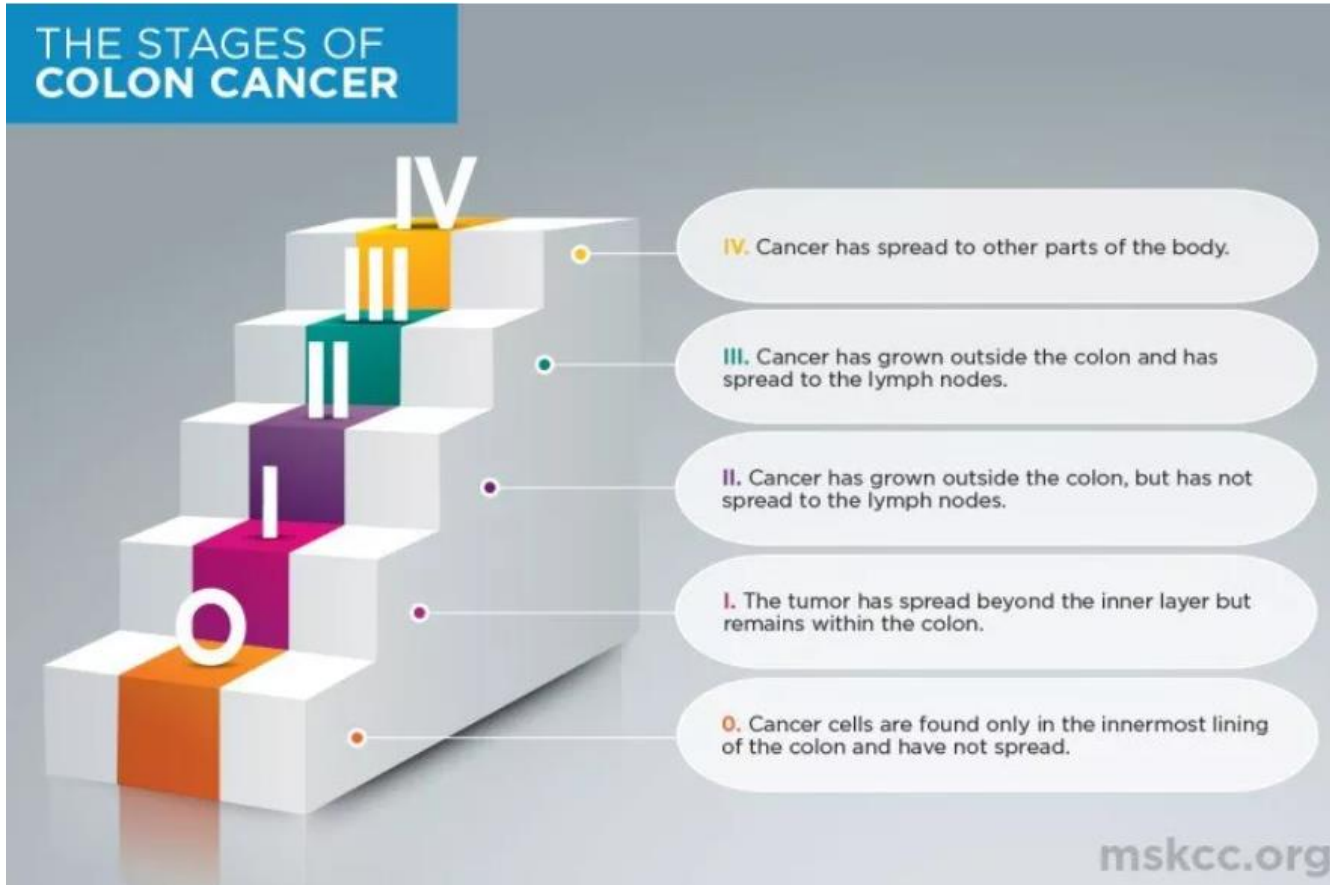
Low complication rates

Team approach is the key to success.

Amber Sobuto, DO

- Medical oncology

Colon Cancer Staging



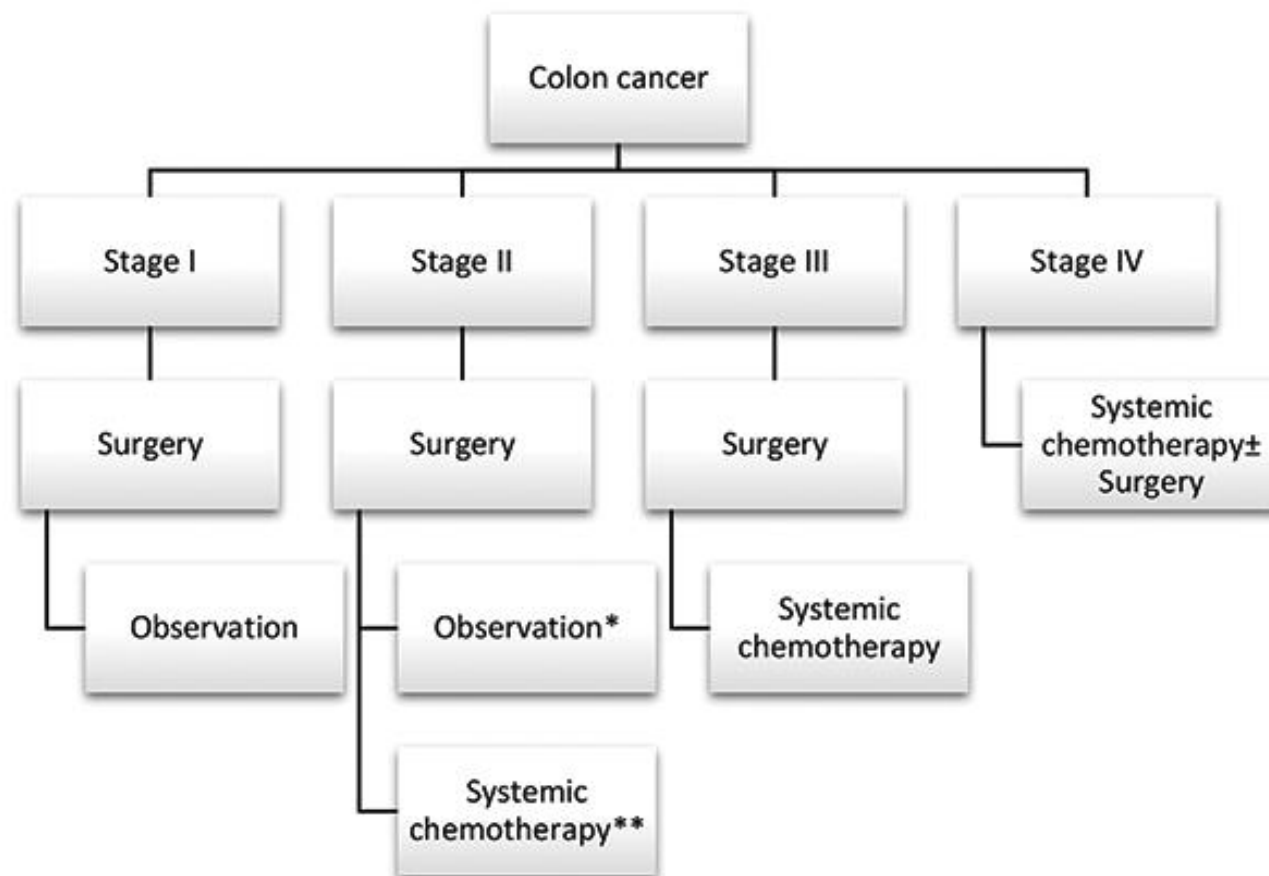
Goal of chemotherapy:

- Increase the chance for cure (before or after surgery)
- Rectal cancer is often being treated with “TNT”
- Prolong life, decrease symptoms of disease
- Oral chemotherapy can be an option

5-year survival:

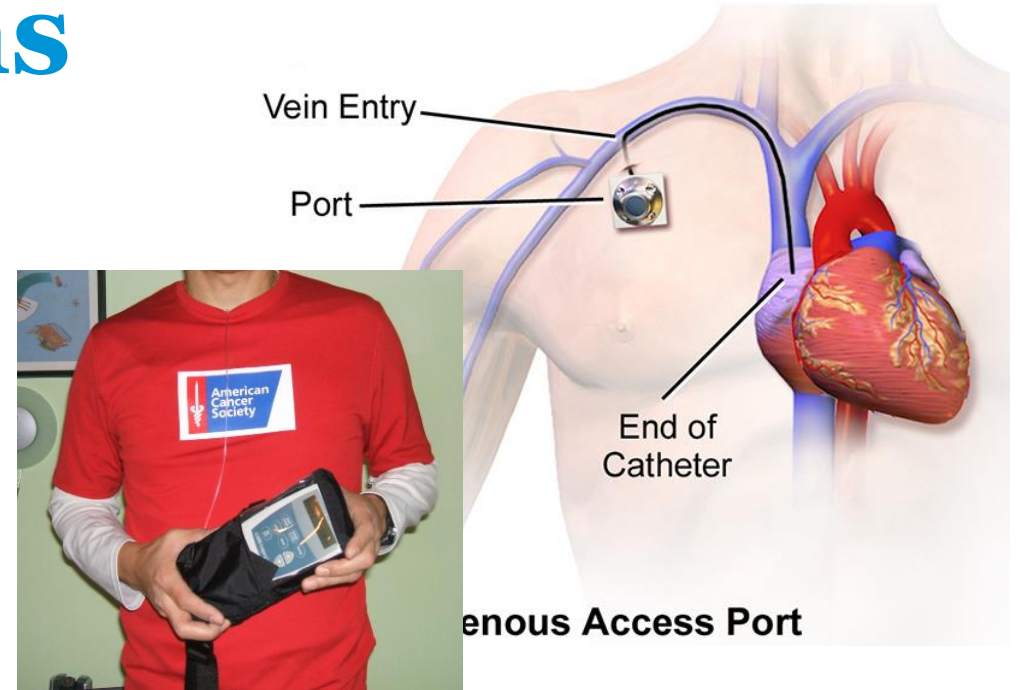
- Stage I: 90-95%
- Stage II: 80-85%
- Stage III: 65-70% (~50% without chemotherapy)
- Stage IV: 10-15%

Colorectal cancer treatment



Chemotherapy options

- FOLFOX - every 2 weeks x 3-6 months
 - 5- Fluorouracil (5 FU)
 - Given IV push
 - Given as continuous infusion (46-48 hours)
 - Oxaliplatin
 - Leucovorin
- CAPEOX - every 3 weeks x 8 cycles
 - Capecitabine (Twice daily x 14/21d)
 - Oxaliplatin
 - Infusion via PAC every 3 weeks
- Targeted therapies:
 - Proteins on cancer cell surface
 - Medications against blood vessels supplying cancer cells
 - Immunotherapy
 - Biomarker directed therapies



Side effects

- Fatigue
- Lowering the blood counts
- Risk for infection, bleeding, anemia – low risk neutropenia
- Nausea/vomiting
- Low risk
- Diarrhea or constipation
- Hair loss (not typical)
- Neuropathy*
- Cold sensitivity
- Peripheral neuropathy
- Skin reactions

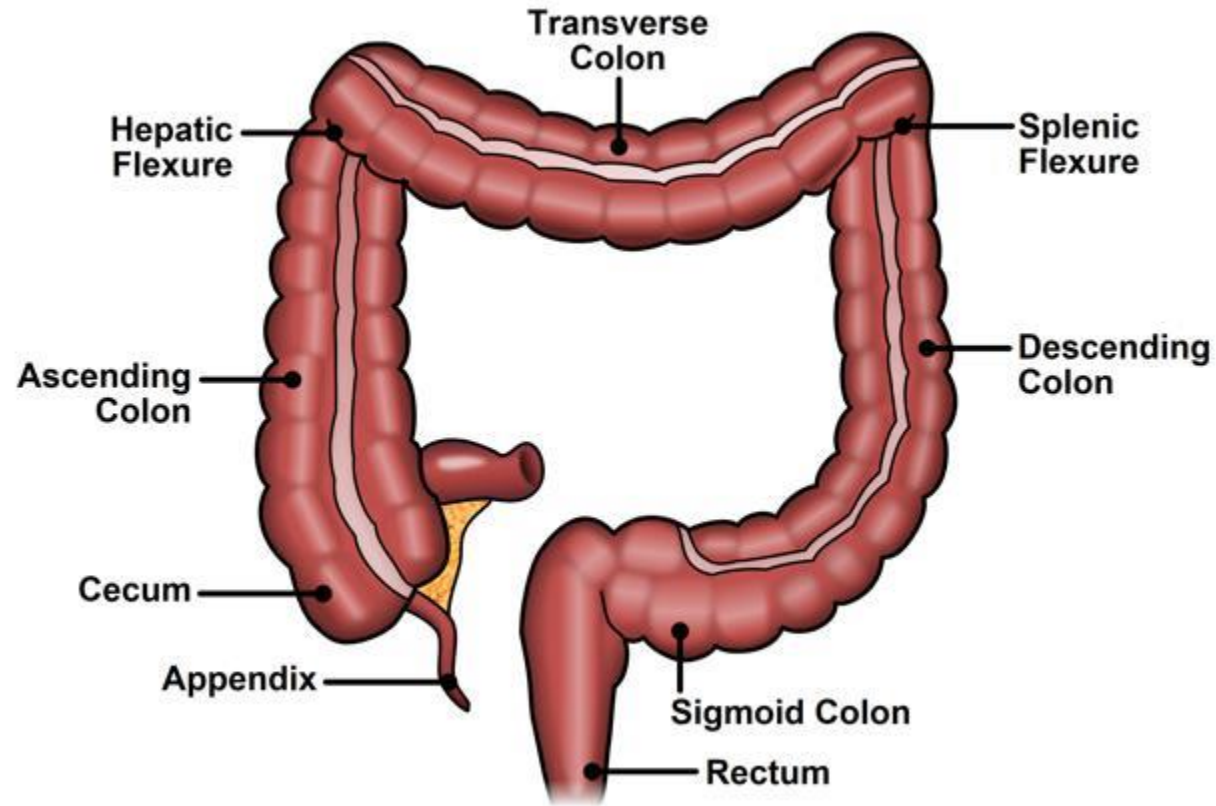
Christopher Peters, MD

- Radiation therapy

Role of radiation oncologist

- Help stage the patient
- Facilitate multidisciplinary discussion with patient, primary care physician, GI doctor, colorectal surgeon, medical oncologist, others
- Determine if cancer is localized or disseminated
- Colon Cancer vs. Rectal Cancer

Colorectal Cancer



<https://staging.fascrs.org/patients/diseases-and-conditions/a-z/rectal-cancer>

Copyright 2020 The American Society of Colon and Rectal Surgeons

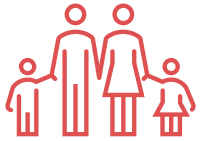
Rectal Cancer

- Radiotherapy often used BEFORE surgery, along with chemotherapy to reduce the size of the tumor
- RT plays a prominent role in T2 or higher rectal cancer stages
- RT **improves survival and reduces the chance of local recurrence** vs surgery alone or postop RT
- RT enhances surgical outcomes, facilitates TME
- RT provides symptomatic relief to patients who may have symptoms such as bleeding, pain, or partial obstruction
- Radiation treatment is a focused beam of energy targeted and directed to the cancer. Takes about 5 minutes a day. Like getting an Xray. Pt does not feel anything
- Side effects of treatment depend on where we are focusing the beam

A large teal arrow pointing from the left edge of the frame towards the right, serving as a background for the text.

**What can I do to
reduce my risk?**

Risk reduction



Family history

Learn your family history with cancer.



Diet

Eat a healthy diet to improve your gut health.



Exercise

Exercise and maintain a healthy weight.



Avoid tobacco

Tobacco chemicals can increase likelihood of disease.

Get screened!

The #1 thing you can do to prevent colon cancer.





Q&A

For more information...

To view the resources from tonight's presentation, scan the QR code or visit go.geisinger.edu/crcevent.



Thank you



Geisinger
College of
Health Sciences