Update on CRC Screening

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this year
50,000 PEOPLE
are expected to
DIE of
colorectal cancer

Screening could
SAVE more than HALF
of those lives*

find out how
the other half LIVES —

ask your doctor about a
colonoscopy

American College
of Gastroenterology
www.gi.org

*American Cancer Society *Cancer Facts & Figures 2013*

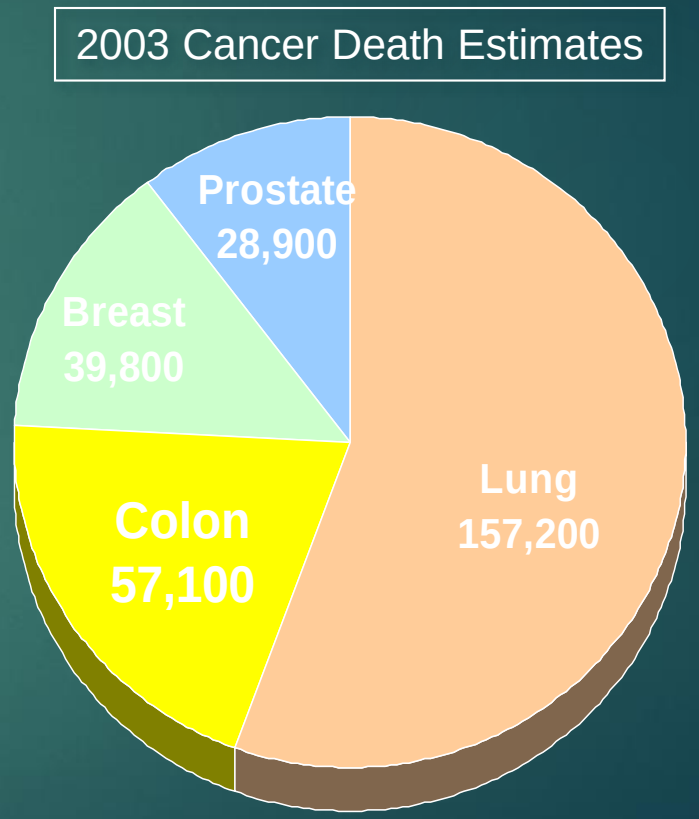
Why talk about it?

One of the most preventable cancers!

- **2nd leading cause of cancer deaths**
- **2nd most common cancer diagnosed in women**
- **1 in 3 people diagnosed will die**
- **Lifetime incidence (average risk): 4.4%**

Nationwide: **147,500 new cases**

57,100 deaths



Data represents 2003 colorectal cancer estimates from the SEER database

Women are…

- Diagnosed with colon cancer at rates **EQUALLY** as men
- **Less likely** to get screening than men

Does Screening Help?

- Death rates from CRC are declining on average 2.7 percent each year between 2004 and 2013
- A microsimulation model, MISCAN-Colon, suggests that screening may account for 53 percent of the observed reduction in CRC mortality

Edwards BK, Ward E, Kohler BA, et al. Annual report to the nation on the status of cancer, 1975-2006, featuring colorectal cancer trends and impact of interventions (risk factors, screening, and treatment) to reduce future rates. Cancer 2010; 116:544.

Current GI Association Screening Guidelines: Who and When To Screen

- Average risk: **start regular screening at age 50**
- Begin screening of **African Americans at age 45**
- People who are in good health and with a life expectancy of more than 10 years should continue regular colorectal cancer screening through the **age of 75**.
- For people **ages 76 through 85**, the decision to be screened should be based on a person's preferences, life expectancy, overall health, and prior screening history.

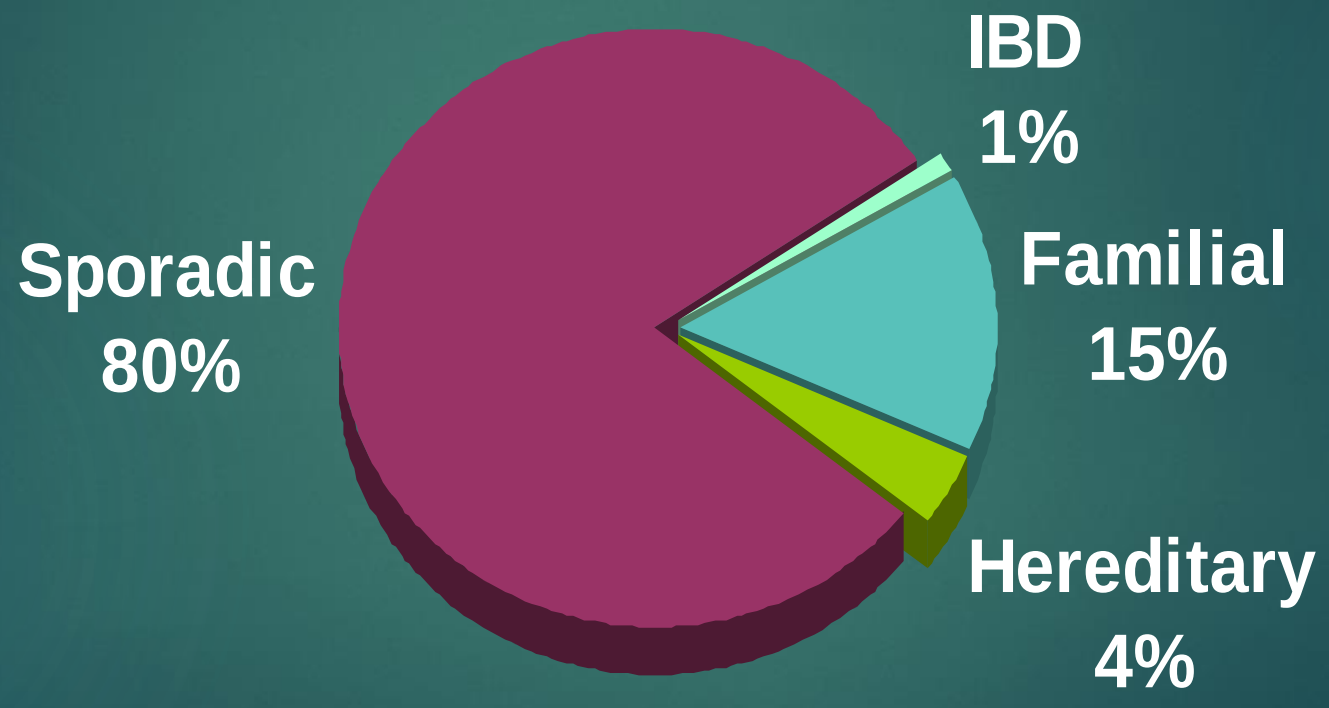
Rex DK, Boland CR, Dominitz JA, et al. Colorectal cancer screening: Recommendations for physicians and patients from the U.S. Multi-Society Task Force on Colorectal Cancer. Gastrointest Endosc 2017; 86:18.

Current Screening Guidelines: Who and When To Screen

- *For screening, people are considered to be at average risk if they **do not** have:
  - A personal history of colorectal cancer or certain types of polyps
  - A family history of colorectal cancer
  - A personal history of inflammatory bowel disease (ulcerative colitis or Crohn's disease)
  - A confirmed or suspected hereditary colorectal cancer syndrome, such as familial adenomatous polyposis (FAP) or Lynch syndrome (hereditary non-polyposis colon cancer or HNPCC)
  - A personal history of getting radiation to the abdomen (belly) or pelvic area to treat a prior cancer

Rex DK, Boland CR, Dominitz JA, et al. Colorectal cancer screening: Recommendations for physicians and patients from the U.S. Multi-Society Task Force on Colorectal Cancer. Gastrointest Endosc 2017; 86:18.

Types of Colon Cancer



Current Screening Guidelines: Who and When To Screen

Family History	Recommended Screening Interval

Rex DK, Boland CR, Dominitz JA, et al. Colorectal cancer screening: Recommendations for physicians and patients from the U.S. Multi-Society Task Force on Colorectal Cancer. Gastrointest Endosc 2017; 86:18.

Current Screening Guidelines: Who and When To Screen

- HNPCC (Lynch Syndrome)
  - Patients who meet the Bethesda criteria should undergo microsatellite instability testing of their tumor or a family member's tumor and/or tumor immunohistochemical staining for mismatch repair proteins (Grade 2 B)
    - Note: we reflexively test ALL tumors at UH for MSI
  - Those with positive genetic testing, or those at risk when genetic testing is unsuccessful in an affected proband, should undergo colonoscopy every 2 years beginning at age 20 – 25 years,
  - Endometrial cancer at a young age (<50)

ACS Update 5/30/2018

- Average risk: **start regular screening at age 45**

The Why (MISCAN Modeling)

- Microsimulation Screening Analysis-Colon (MISCAN-Colon) model was used to inform the US Preventive Services Task Force colorectal cancer (CRC) screening guidelines
- Life-years gained (LYG; benefit), the number of colonoscopies (COL; burden) and the ratios of incremental burden to benefit (efficiency ratio [ER] = ΔCOL/ΔLYG) were projected for different screening strategies.
  - These values were also corrected for life years lost due to screening complications
- Consequently, the balance of burden to benefit of screening improved and now 10-yearly colonoscopy screening starting at age 45 years resulted in an ER of 32

A total of 132 unique screening strategies were evaluated

https://www.uspreventiveservicestaskforce.org/Page/Document/evaluating-test-strategies-for-colorectal-cancer-screening-a-decision-analysis-for-the-us-preventive-services-task-force/colorectal-cancer-screening

US Preventive Services Task Force. Screening for colorectal cancer: US Preventive Services Task Force recommendation statement. JAMA 2016; 315(23):2564-75.

Lifetime number of colonoscopies and life-years gained (LYG) for colonoscopy screening strategies

9 efficient strategies identified

US Preventive Services Task Force. Screening for colorectal cancer: US Preventive Services Task Force recommendation statement. JAMA 2016; 315(23):2564-75.

Why 45?

- It was efficient (1 of the 9)
- Highest # of LYG among the strategies with ERs <40 and 45
- Compared with the current recommendation (screening every 10 years from ages 50-75 years), this strategy resulted in 25 (+6.2%) additional LYG

Peterse EFP, Meester RGS, Siegel RL, et al. The impact of the rising colorectal cancer incidence in young adults on the optimal age to start screening: Microsimulation analysis I to inform the American Cancer Society colorectal cancer screening guideline. Cancer 2018; 124:2964.

Screening Options

- Direct Visualization
  - Colonoscopy every 10 years
  - CT Colonography every 5 years
  - Flexible Sigmoidoscopy every 5 years
  - Flexible Sigmoidoscopy every 10 years with FIT every year

US Preventive Services Task Force. Screening for colorectal cancer: US Preventive Services Task Force recommendation statement. JAMA 2016; 315(23):2564-75.

Stool Testing

- FOBT every year
- FIT every year
- Cologuard (Stool DNA) every 3 years

US Preventive Services Task Force. Screening for colorectal cancer: US Preventive Services Task Force recommendation statement. JAMA 2016; 315(23):2564-75.

FIT vs Cologuard vs Colonoscopy

- 9989 patients enrolled and each underwent FIT, Cologuard AND colonoscopy
- **Cologuard:** sensitivity for CRC of 92%, 40% sensitivity for SSPs >1 cm in size
- **FIT:** 73.8% sensitivity for cancer, sensitivity for SSPs = to the false-positive rate, indicating no sensitivity.

- **Cost effectiveness**: many many modeling studies have been done, and they all show ALL screening tests are cost effective as cost of cancer treatment far outweighs cost of screening (for both colonoscopy AND stool based testing)

Imperiale TF, Ransohoff DF, Itzkowitz SH et al. Multitarget stool DNA testing for colorectal-cancer screening. N Engl J Med 2014;370:1287–1297.

Cologuard

- Covered by Medicare, every 3 years, age 50-85, as a SCREEN
- If positive→need colonoscopy
- Cannot go back to Cologuard

Who CANNOT use Cologuard

•Patients with a history of colorectal cancer, adenomas, or other related cancers.

•Patients who have had a positive result from another colorectal cancer screening method within the last 6 months.

•Patients who have been diagnosed with a relevant familial (hereditary) cancer syndrome, such as Hereditary non-polyposis colorectal cancer syndrome (HNPCCC or Lynch Syndrome), Peutz-Jeghers Syndrome, MYH-Associated Polyposis (MAP), Gardner's syndrome, Turcot's (or Crail's) syndrome, Cowden's syndrome, Juvenile Polyposis, Cronkhite-Canada syndrome, Neurofibromatosis, Familial Hyperplastic Polyposis.

•Patients who have been diagnosed with a condition that is associated with high risk for colorectal cancer. These include but are not limited to:

- Inflammatory Bowel Disease (IBD)Chronic ulcerative colitis (CUC)
- Crohn's disease
- Familial adenomatous polyposis (FAP)
- Family history of colorectal cancer**

Colonoscopy

Get the polyp. Get the cure.

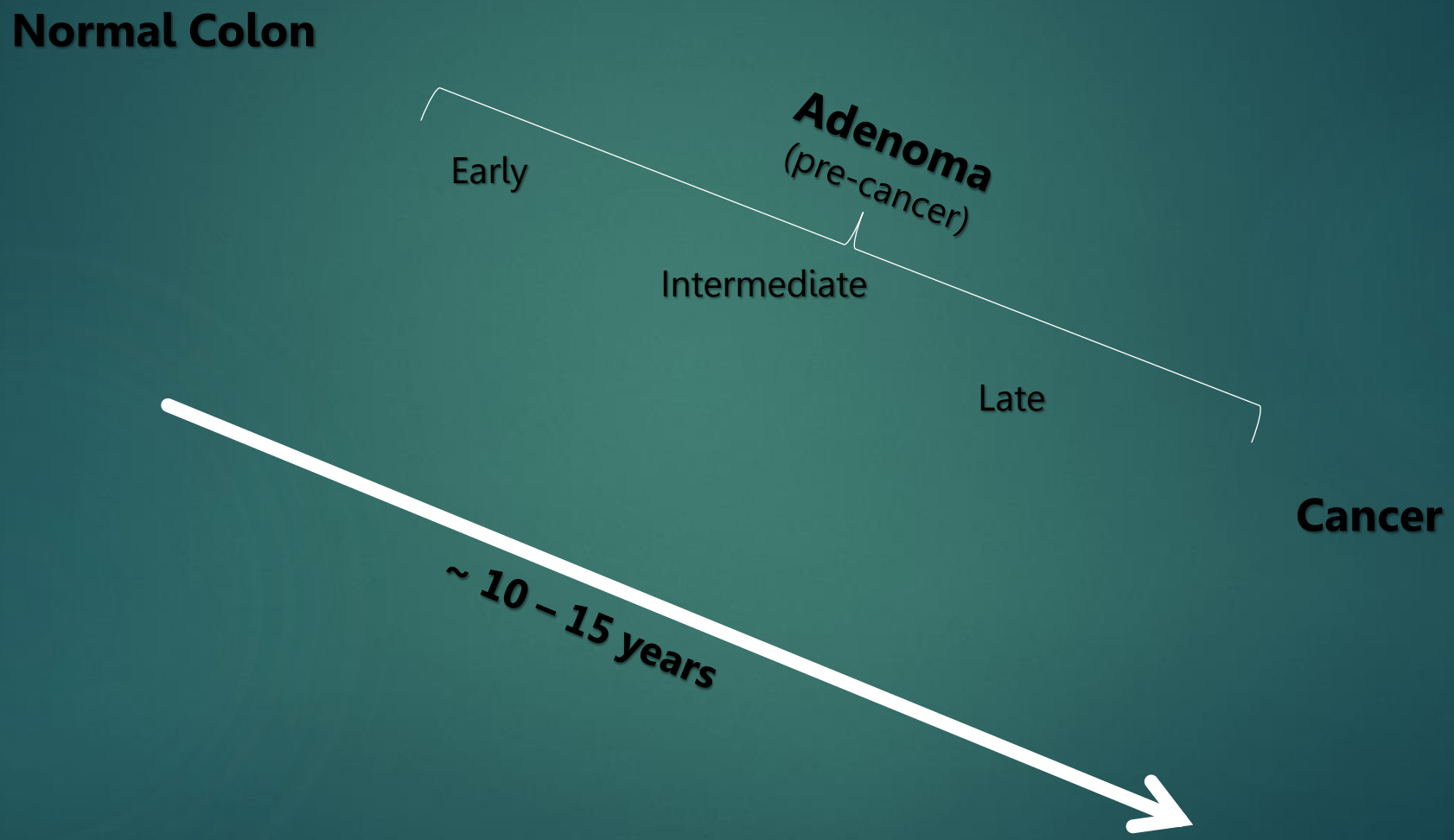
Advantages

- Detects >95% polyps and 100% cancers
- Provides diagnosis and *therapy*
- Medicare covers average-risk

Limitations

- Risks
- Availability
- Cost
- Compliance

Natural History of Colorectal Cancer



Source: Amersi F et al. Clin Colon Rectal Surg. 2005;18(3):133-140; 2. Rozen P, Young G, Levin B, et al. Colorectal Cancer in Clinical Practice, Prevention, Early Detection and Management, Second Edition. CRC Press; 2006.

Adenoma-Carcinoma Sequence

- Most colorectal cancers (CRCs) arise from adenomas
- The progression from adenoma to carcinoma takes about 10 years
- Removal of adenomatous polyps prevents cancer
  - The National Polyp Study followed 1418 patients in whom colonoscopic examination led to the removal of one or more polyps.
  - During a mean follow-up of six years, the incidence of colon cancer was 88 to 90 percent lower than in patients reported in other studies who had polyps that were not removed and 76 percent lower than in the general population.

Winawer SJ, Zauber AG, Ho MN, et al. Prevention of colorectal cancer by colonoscopic polypectomy. The National Polyp Study Workgroup. N Engl J Med 1993; 329:1977.

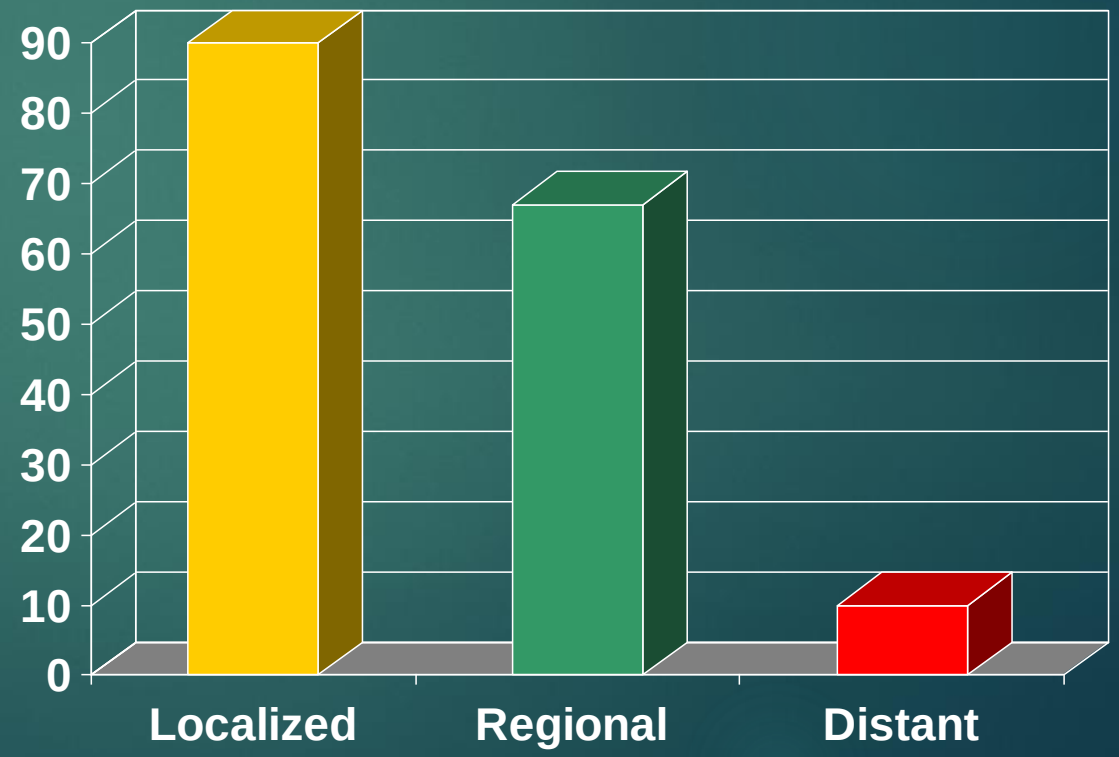
Benefits of Screening

Polypectomy prevents cancer

BUT

90% survival if cancer found early

Five-Year Relative Survival Rates for Colorectal Cancer by Stage at Diagnosis, 1995-2000



Is your provider doing a good job?

Table 3. Tools for patients to enhance colonoscopy quality

Questions for patients to ask prospective colonoscopists to help ensure a high-quality examination
1. What is your adenoma detection rate? (should be ≥25% overall or ≥30% for male patients and ≥20% for female patients) 2. What is your cecal intubation rate (should be ≥95% for screening colonoscopies and ≥90% overall) 3. Do you use split-dosing of bowel preparations? (effective bowel preparation requires that at least half the preparation be ingested on the day of the colonoscopy)
Checks of the endoscopy report after the procedure
1. Does the report include photographs of the end of the colon, including the appendiceal orifice and ileocecal valve/terminal ileum? (this demonstrates that the full extent of the colon was examined) 2. Is the bowel preparation quality described? (the preparation must be adequate to ensure effective examination)

SEE HOW A SMALL DIFFERENCE

can make all the difference

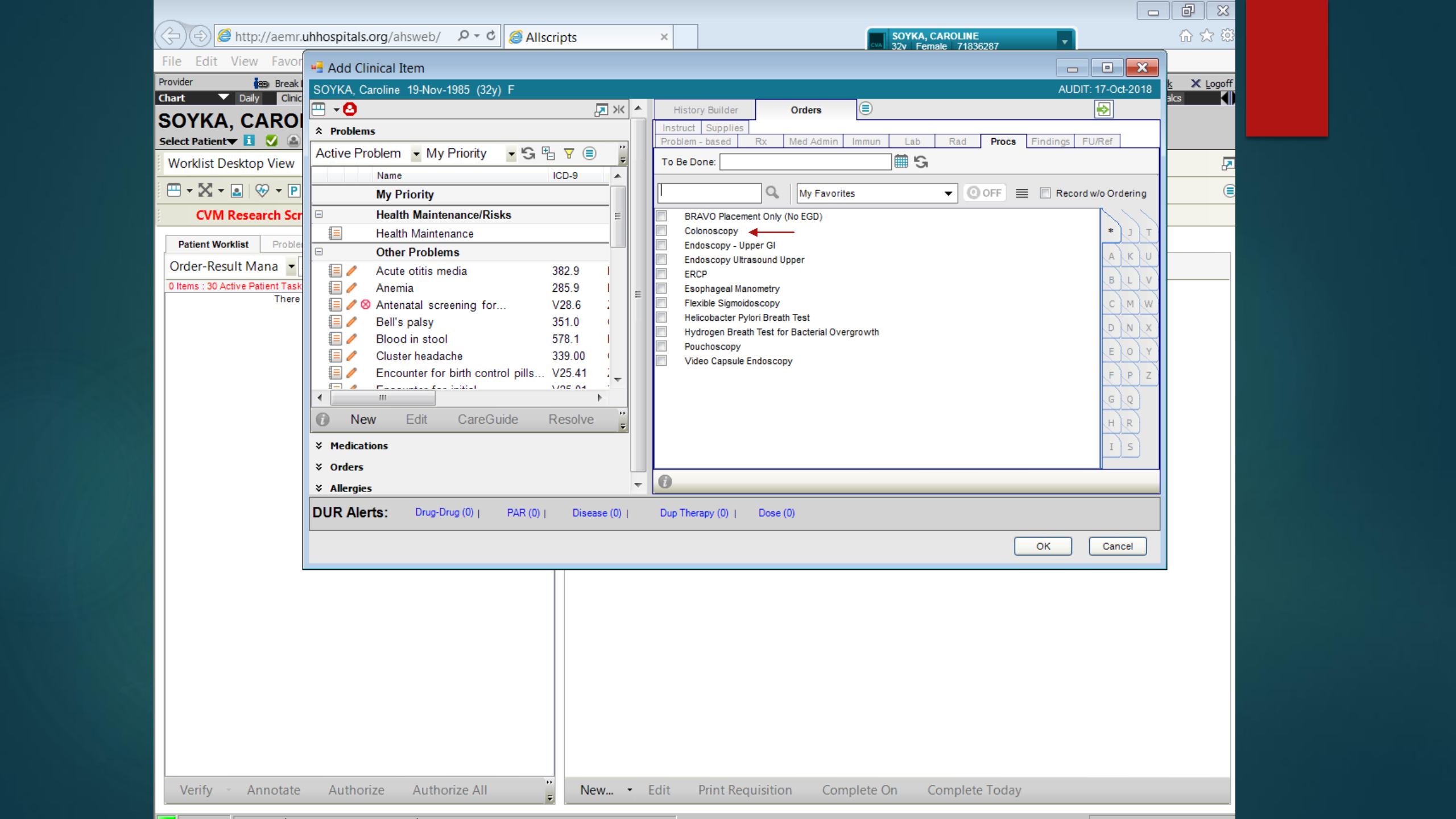
Did you know that your risk of colon cancer increases dramatically after the age of 50? But with regular screening, over 90% of cases can be stopped before the cancer advances[3]

If detected early, colon cancer is highly treatable.[4]

Are people getting tested?

Testing rates remain far too low

- Fewer than half of Americans over age 50 report having had a recent colorectal cancer screening test
- Because of low testing rates, only 39% of colorectal cancers are detected at the earliest, most treatable stage


http://aemr.uhhospitals.org/ahsweb/
Allscripts
SOYKA, CAROLINE
32y Female 71836287
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SOYKA, Caroline 19-Nov-1985 (32y) F
AUDIT: 17-Oct-2018
Problems
Active Problem
My Priority
Name
ICD-9
My Priority
Health Maintenance/Risks
Health Maintenance
Other Problems
Acute otitis media 382.9
Anemia 285.9
Antenatal screening for... V28.6
Bell's palsy 351.0
Blood in stool 578.1
Cluster headache 339.00
Encounter for birth control pills... V25.41
New
Edit
CareGuide
Resolve
Medications
Orders
Allergies
History Builder
Orders
Instruct
Supplies
Problem - based
Rx
Med Admin
Immun
Lab
Rad
Procs
Findings
FU/Ref
To Be Done:
My Favorites
OFF
Record w/o Ordering
BRAVO Placement Only (No EGD)
Colonoscopy
Endoscopy - Upper GI
Endoscopy Ultrasound Upper
ERCP
Esophageal Manometry
Flexible Sigmoidoscopy
Helicobacter Pylori Breath Test
Hydrogen Breath Test for Bacterial Overgrowth
Pouchoscopy
Video Capsule Endoscopy
DUR Alerts:
Drug-Drug (0)
PAR (0)
Disease (0)
Dup Therapy (0)
Dose (0)
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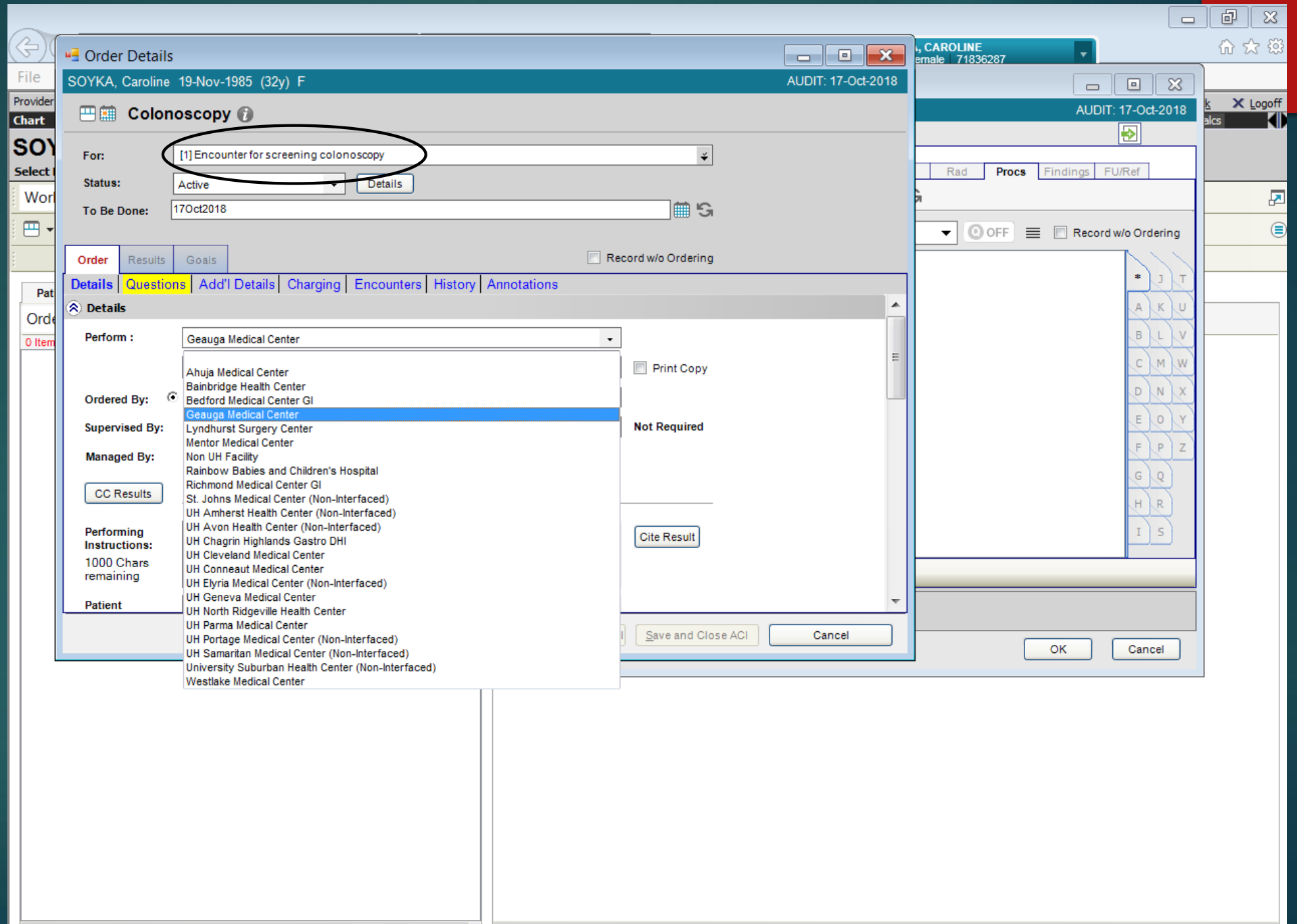
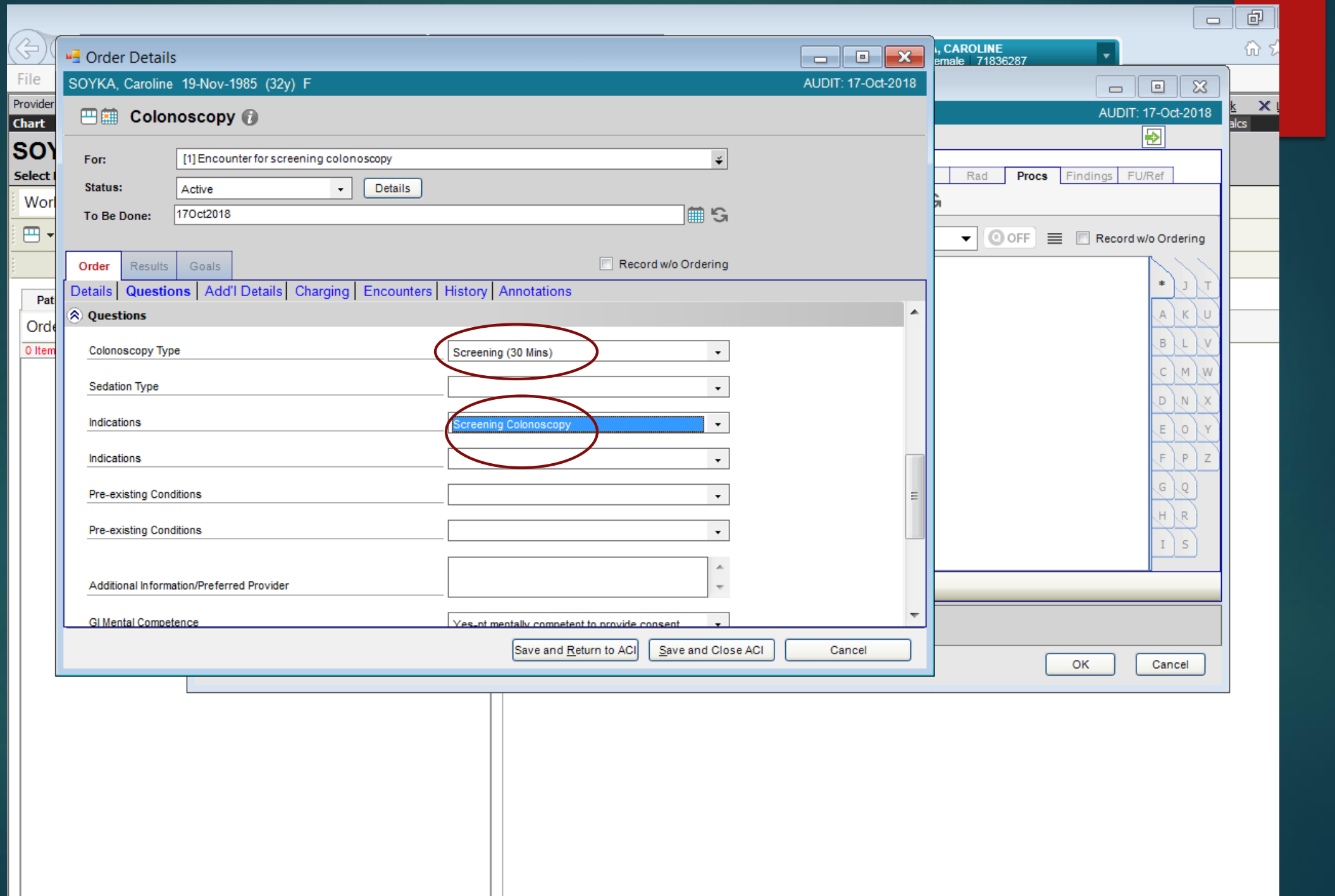
Cancel
Worklist Desktop View
Patient Worklist
Order-Result Mana
Verify
Annotate
Authorize
Authorize All
New...
Edit
Print Requisition
Complete On
Complete Today


Order Details
SOYKA, Caroline 19-Nov-1985 (32y) F
AUDIT: 17-Oct-2018
Colonoscopy
For:
[1] Encounter for screening colonoscopy
Status:
Active
Details
To Be Done:
17Oct2018
Order
Results
Goals
Record w/o Ordering
Details
Questions
Add'l Details
Charging
Encounters
History
Annotations
Details
Perform :
Geauga Medical Center
Ahuja Medical Center
Bainbridge Health Center
Bedford Medical Center GI
Geauga Medical Center
Lyndhurst Surgery Center
Mentor Medical Center
Non UH Facility
Rainbow Babies and Children's Hospital
Richmond Medical Center GI
St. Johns Medical Center (Non-Interfaced)
UH Amherst Health Center (Non-Interfaced)
UH Avon Health Center (Non-Interfaced)
UH Chagrin Highlands Gastro DHI
UH Cleveland Medical Center
UH Conneaut Medical Center
UH Elyria Medical Center (Non-Interfaced)
UH Geneva Medical Center
UH North Ridgeville Health Center
UH Parma Medical Center
UH Portage Medical Center (Non-Interfaced)
UH Samaritan Medical Center (Non-Interfaced)
University Suburban Health Center (Non-Interfaced)
Westlake Medical Center
Print Copy
Ordered By:
Supervised By:
Not Required
Managed By:
CC Results
Performing Instructions:
1000 Chars remaining
Cite Result
Patient
Save and Close ACI
Cancel
AUDIT: 17-Oct-2018
Rad
Procs
Findings
FU/Ref
OFF
Record w/o Ordering
OK
Cancel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To Be Done:
17Oct2018
Order
Results
Goals
Record w/o Ordering
Details
Questions
Add'l Details
Charging
Encounters
History
Annotations
Questions
Colonoscopy Type
Screening (30 Mins)
Sedation Type
Indications
Screening Colonoscopy
Indications
Pre-existing Conditions
Pre-existing Conditions
Additional Information/Preferred Provider
GI Mental Competence
Yes,pt mentally competent to provide consent
Save and Return to ACI
Save and Close ACI
Cancel
AUDIT: 17-Oct-2018
Rad
Procs
Findings
FU/Ref
OFF
Record w/o Ordering
OK
Cancel

My thoughts…

- Colon cancer is the second leading cause of cancer deaths in the U.S. yet it can be prevented by finding and removing precancerous polyps and the best way to find precancerous polyps is to perform screening colonoscopy on asymptomatic individuals
- The dilemma is that at least 40 percent of people eligible to be screened do not get screened. The reasons are numerous, including costs of time and money, access to care, not being aware of screening recommendations and, frankly, just not wanting to have a colonoscopy.
- If the detection rate of dangerous polyps is 42 percent, what is left unsaid is that 58 percent of the most dangerous polyps are not detected by Cologuard, and that is unacceptable.
- It is the last group of patients for which Cologuard is best suited. For people who just do not want to get a colonoscopy, knowing that it can prevent colon cancer, Cologuard is an option. 42 percent is much better than nothing.


COLON CANCER is:
Preventable.
Treatable.
BEATABLE.
Regular testing can prevent colon cancer or find it early.
If you're 50 and older, go get tested!
American Cancer Society
THE OFFICIAL SPONSOR OF BIRTHDAYS.®
cancer.org/fightcoloncancer

Also… many thanks to these OBs