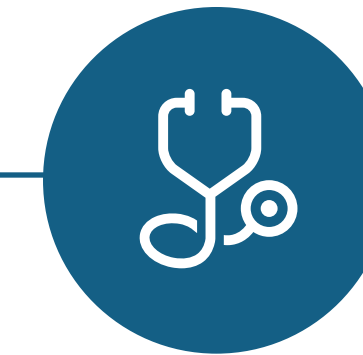
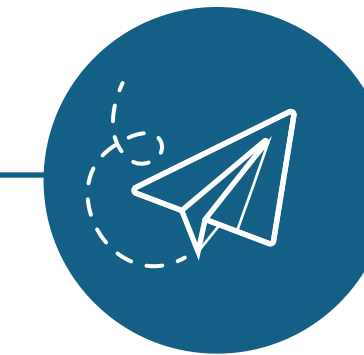
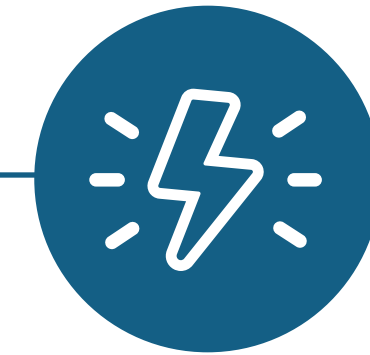




# COLORECTAL CANCER HRA

HIGH/INCREASED RISK - EXISTING CONDITION(S)

## GOAL: MAINTAIN PRIMARY CARE RELATIONSHIP TO MANAGE CRC RISKS



### RESULT EXPLAINED

People in this category have reported at least 1 of the following high-risk factors for developing colorectal cancer (CRC):

- History of a hereditary CRC syndrome in a parent, child, brother, or sister
- Personal history of a hereditary CRC syndrome
- Personal history of ulcerative colitis or Crohn's disease
- Personal history of colorectal cancer
- Personal history of polyps or other abnormal CRC screening result

Screening recommendations for people in this category depend on many factors and are not easily generalized.

Recommendations may vary greatly from the screening recommendations for those at average risk for developing CRC.

### EXAMPLE PERSONA

Thomas is a 65-year-old African American male who had a colonoscopy 13 years ago. His colonoscopy revealed 4 tubular polyps, so a follow-up colonoscopy in 3 years was recommended. Thomas's first colonoscopy experience was unpleasant, so he has avoided repeating the test.

Although Thomas was given his results and his risk factors were explained at the time of his colonoscopy, he's forgotten most of that information in the intervening 13 years.

Thomas often hears that CRC screening should be done every 10 years, so he's taking the assessment to learn his risk and what his screening options are.

### CUSTOMIZED CALL-TO-ACTION MESSAGES

Focus Call to Action (CTA) messaging in the follow-up section of portal on:

- Regular CRC screening
- Scheduling an appointment

### PHONE CALL FOLLOW UP

Follow up with users as soon as possible by phone call to:

- Review the results report with them and explain why screening is recommended
- Explain that there are several tests to look for CRC, including colonoscopy and non-invasive stool tests
- Encourage an appointment for CRC screening

### FOLLOW-UP EMAILS

Customize your follow-up email content to explain:

- The importance of finding CRC early, when it's easier to treat
- That screening intervals depend on past results and the type of test used
- That some lifestyle risk factors may be changed, thereby lowering CRC risk

### PRIMARY CARE FOLLOW UP

Evaluate the patient's conditions and their hereditary risks and determine the appropriate screening schedule for the patient. This schedule may start earlier and be more frequent due to the increased risks associated with the patient's conditions and/or hereditary risks.

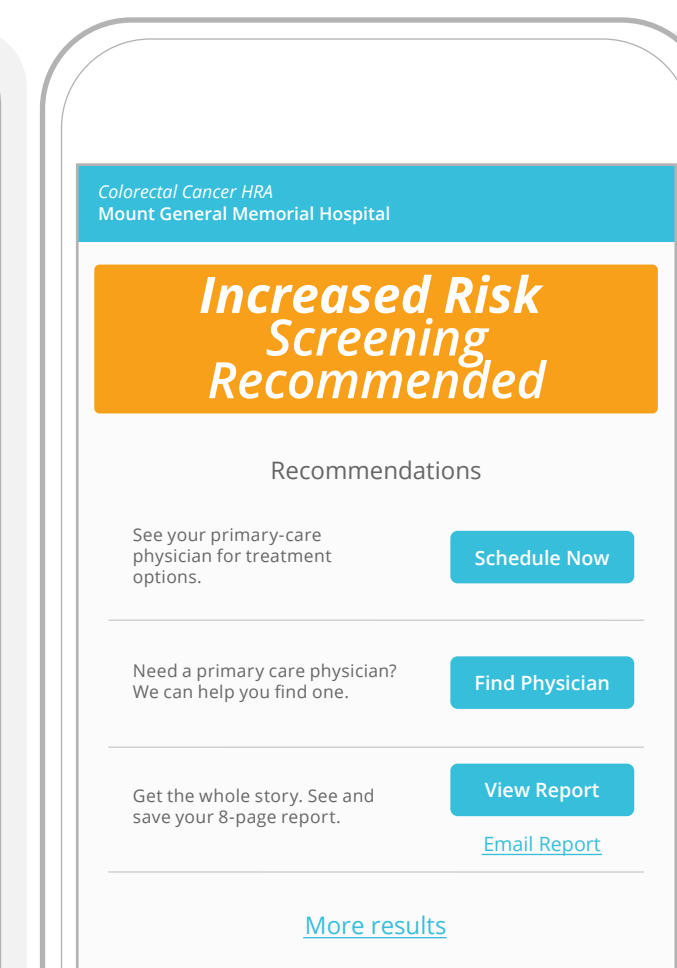
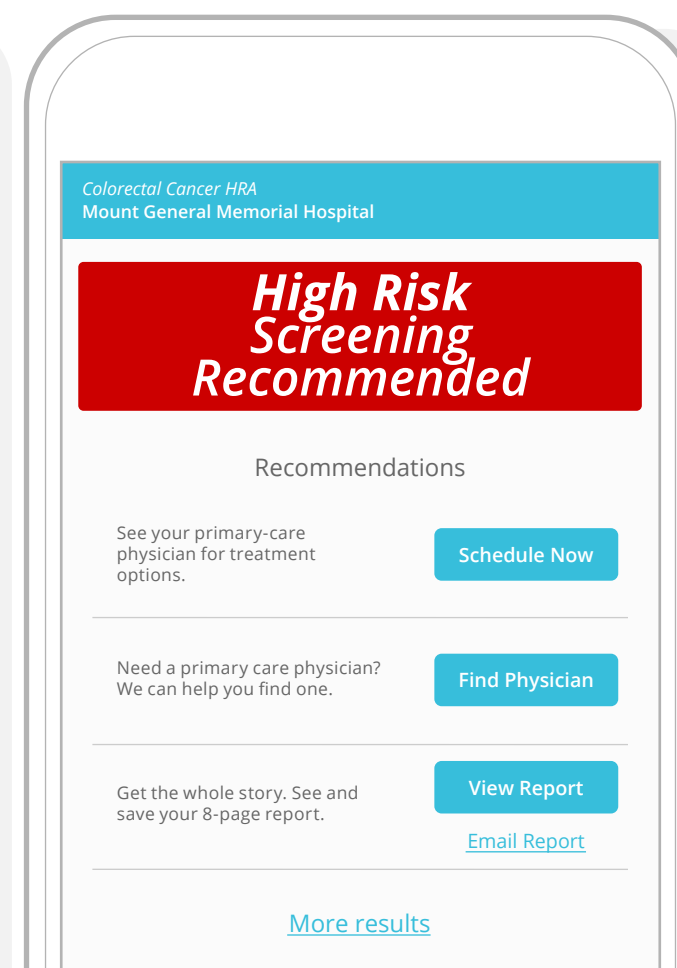
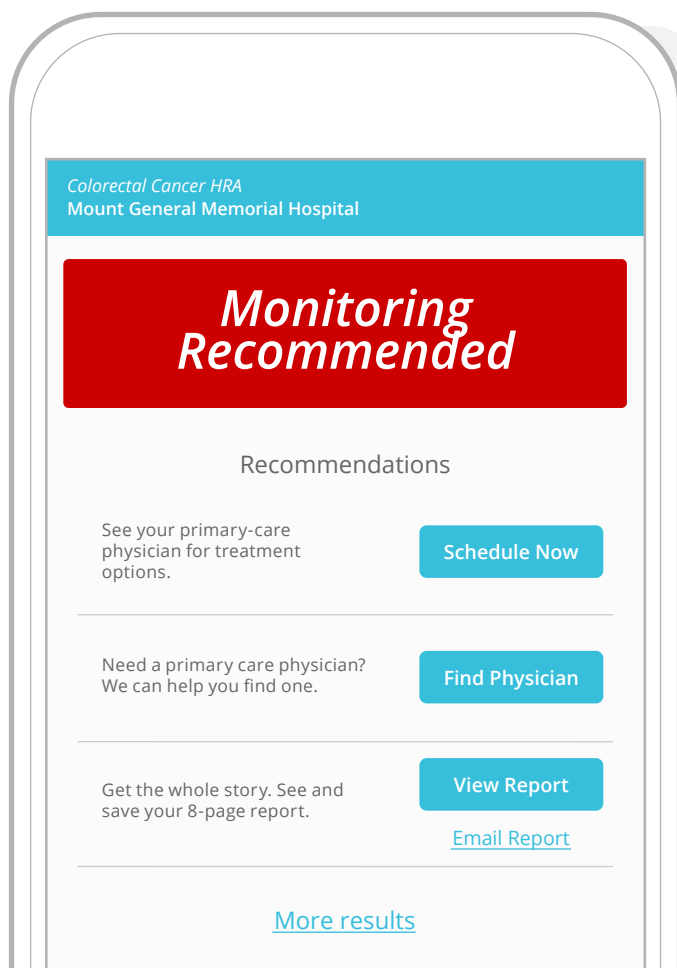
Communicate the importance of regular screening to the patient due to the increased risks associated with the patient's conditions and/or family history.

### OTHER CONSIDERATIONS

The assessment asks for the history of these hereditary colorectal cancer (CRC) syndromes: familial adenomatous polyposis (FAP), Lynch syndrome (formerly called hereditary nonpolyposis colorectal cancer or HNPCC), or family colon cancer syndrome X.

Some may have had a colonoscopy or other tests to look for CRC. Their screening results may be outdated or up-to-date.

Other reported CRC risk factors may include type 2 diabetes, obesity, smoking, moderate/heavy alcohol use, or a sedentary lifestyle.





# COLORECTAL CANCER HRA

INCREASED RISK - CONCERNING SYMPTOMS

## GOAL: SCHEDULE APPOINTMENT WITH PRIMARY CARE TO DISCUSS SYMPTOMS



### RESULT EXPLAINED

People in this category reported they routinely experience at least 1 of the following symptoms:

- Blood in or on their stool (bowel movement)
- Diarrhea, constipation, or feeling that the bowel does not empty all the way
- Abdominal pain, aches, or cramps that don't go away
- Unexplained weight loss

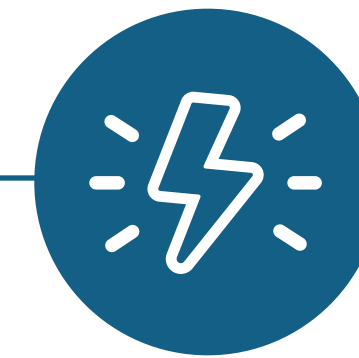
This group is advised to schedule an appointment with their doctor as soon as possible, however screening recommendations depend on many factors and are not easily generalized. Recommendations may vary greatly from the screening recommendations for those at average risk for developing CRC.



### EXAMPLE PERSONA

Kelly is a 35-year-old Caucasian woman who has been experiencing abdominal pain and constipation for the past several weeks, though her diet has not changed. Most recently she noticed she sometimes has blood in her stools and is concerned that her symptoms may indicate something more serious. She searched online and found the Colorectal Cancer Risk assessment on her health clinic's website. Based on her results, she decided to make an appointment with her doctor for an evaluation and to determine her next steps.

Once her symptoms are assessed by her doctor, an appropriate recommendation about whether she should be screened for CRC can be made.



### CUSTOMIZED CALL-TO-ACTION MESSAGES

Focus Call to Action (CTA) messaging in the follow-up section of portal on:

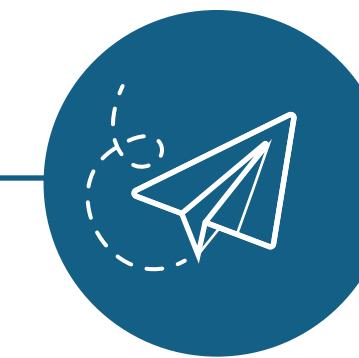
- Regular CRC screening
- Scheduling an appointment



### PHONE CALL FOLLOW UP

Follow up with users as soon as possible by phone call to:

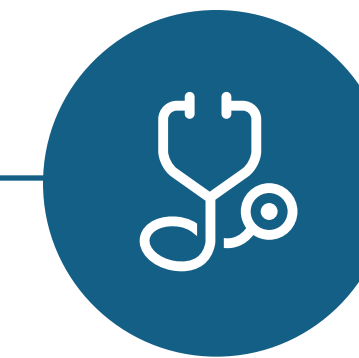
- Review the results report with them and explain why their screening recommendation must be determined by a doctor
- Encourage an appointment with a doctor to review their CRC risk and recommended screening schedule



### FOLLOW-UP EMAILS

Customize your follow-up email content to explain:

- The importance of following their doctor-recommended screening schedule
- How a family history of CRC may increase their CRC risk
- That, for some people, improving lifestyle risk factors may lower CRC risk



### PRIMARY CARE FOLLOW UP

Evaluate the patient's symptoms to determine if additional action is warranted. These symptoms may warrant high priority screening or other actions based on diagnosis. If no immediate actions are warranted, begin a discussion about regular screening and determine if genetic screening may be relevant.

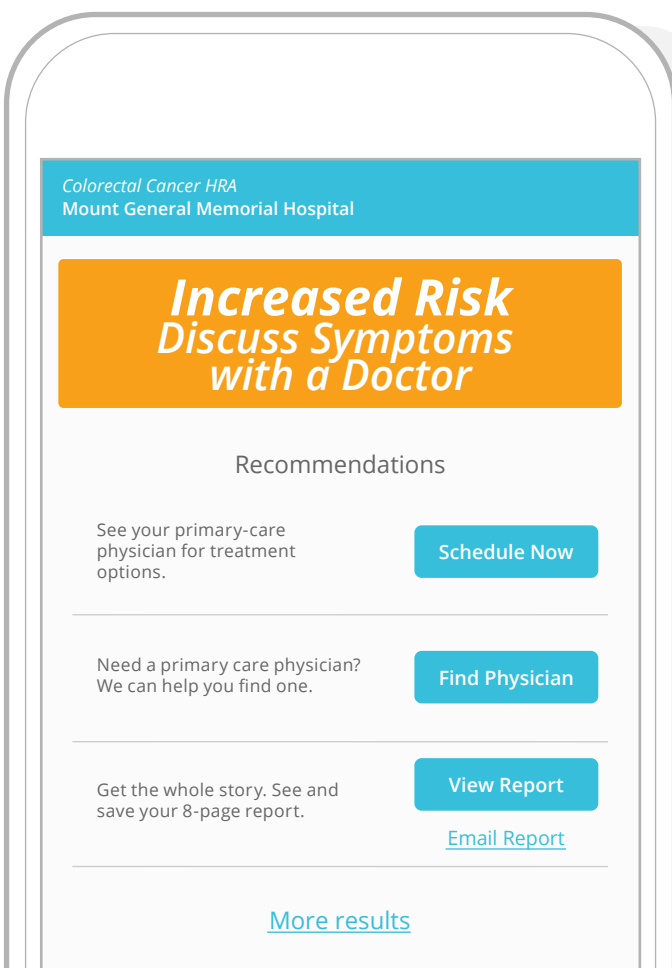
### OTHER CONSIDERATIONS

The assessment asks for the history of these hereditary colorectal cancer (CRC) syndromes: familial adenomatous polyposis (FAP), Lynch syndrome (formerly called hereditary nonpolyposis colorectal cancer or HNPCC), or family colon cancer syndrome X.

People in this category may also report a history of pre-cancerous polyps or colorectal cancer in their immediate family (i.e. parent, child, brother, or sister).

Some may have had a colonoscopy or other tests to look for CRC. Their screening results may be outdated or up-to-date.

Other reported CRC risk factors may include type 2 diabetes, obesity, smoking, moderate/heavy alcohol use, or a sedentary lifestyle.





# COLORECTAL CANCER HRA

INCREASED RISK - FAMILY HISTORY

## GOAL: SCHEDULE APPOINTMENT WITH PRIMARY CARE TO DISCUSS SCREENING



### RESULT EXPLAINED

People in this category reported the following:

- History of colorectal cancer or pre-cancerous polyp in a parent, child, brother or sister

Screening recommendations for people in this category depend on many factors and are not easily generalized. Recommendations may vary greatly from the screening recommendations for those at average risk for developing CRC.



### EXAMPLE PERSONA

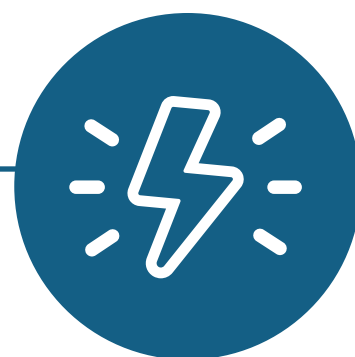
Carlos is 36-year-old Hispanic male who is in good health. His older brother recently had a routine colonoscopy during which pre-cancerous polyps were discovered and removed. His brother's results concerned him and he wondered if genetics were a factor for CRC risk.

Carlos found the Colorectal Cancer Risk assessment through a link on his local hospital's Facebook page. He decided to complete the assessment to determine his own risk. His result convinced him to discuss his options at his next doctor appointment.



### DOES THE USER HAVE A PRIMARY CARE PHYSICIAN?

YES



### CUSTOMIZED CALL-TO-ACTION MESSAGES

Focus Call to Action (CTA) messaging in the follow-up section of portal on:

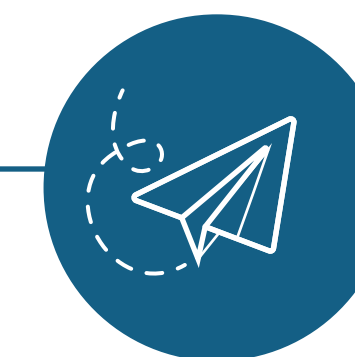
- Scheduling an appointment
- Regular CRC screening



### PHONE CALL FOLLOW UP

Follow up with users as soon as possible by phone call to:

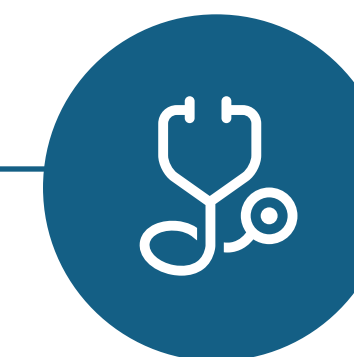
- Review the results report with them and explain why their screening recommendation must be determined by a doctor
- Encourage an appointment with a doctor to review their CRC risk and recommended screening schedule



### FOLLOW-UP EMAILS

Customize your follow-up email content to explain:

- The importance of following their doctor-recommended screening schedule
- How a family history of CRC may increase their cancer risk
- That some lifestyle risk factors may be changed, thereby lowering CRC risk



### PRIMARY CARE FOLLOW UP

Evaluate the patient's family history of cancer to determine if genetic evaluation is warranted. Determine appropriate screening schedule based on increased risk due to family history. This schedule may start earlier and be more frequent due to increased hereditary risks.

NO



### CUSTOMIZED CALL-TO-ACTION MESSAGES

Focus Call to Action (CTA) messaging in the follow-up section of portal on:

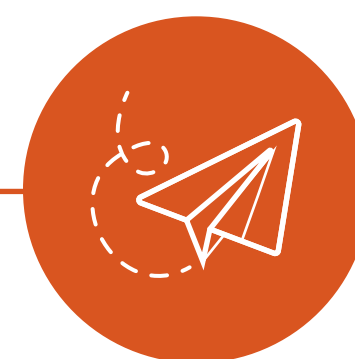
- Finding a doctor
- Scheduling an appointment



### PHONE CALL FOLLOW UP

Follow up with users as soon as possible by phone call to:

- Review the results report with them and explain why their screening recommendation must be determined by a doctor
- Find a primary care provider and set up and appointment



### FOLLOW-UP EMAILS

Customize your follow-up email content to explain:

- How a family history of CRC may increase their cancer risk
- That some lifestyle risk factors may be changed, thereby lowering CRC risk



### PRIMARY CARE FOLLOW UP

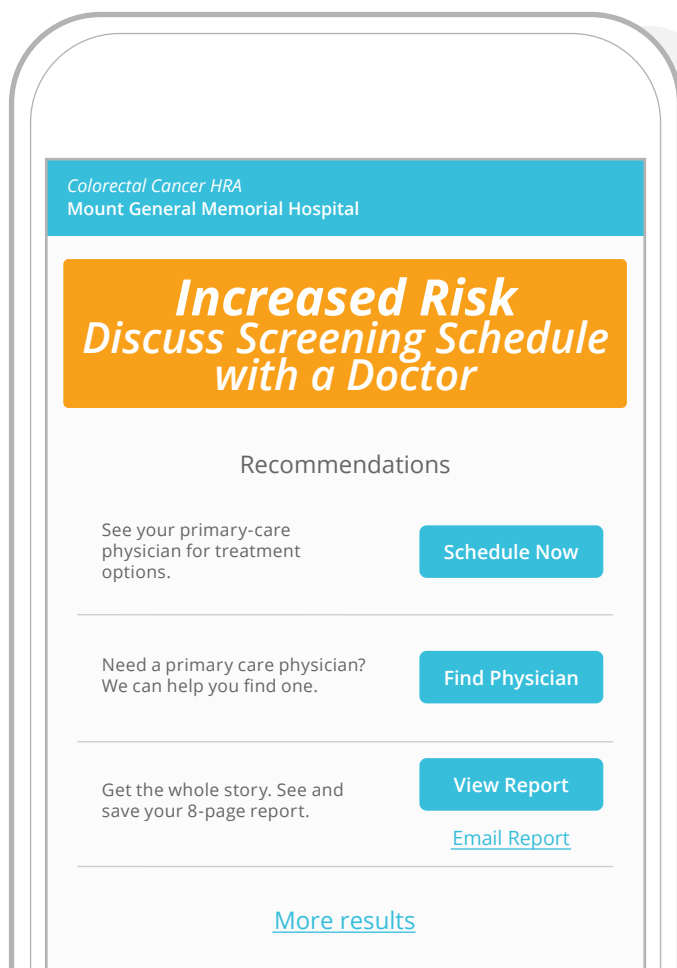
Evaluate the patient's family history of cancer to determine if genetic evaluation is warranted. Determine appropriate screening schedule based on increased risk due to family history. This schedule may start earlier and be more frequent due to increased hereditary risks.

### OTHER CONSIDERATIONS

People in this category may have already had a colonoscopy or other tests to look for colorectal cancer (CRC). They did not report any history of abnormal CRC screening test results. Their screening results may be outdated or up-to-date.

People in this category did not report a family or personal history of familial adenomatous polyposis (FAP), Lynch syndrome, or family colon cancer syndrome X, but did report a family history of colorectal cancer or pre-cancerous polyps.

Other reported CRC risk factors may include type 2 diabetes, obesity, smoking, moderate/heavy alcohol use, or a sedentary lifestyle.





# COLORECTAL CANCER HRA

AVERAGE RISK - SCHEDULE SCREENING NOW



## RESULT EXPLAINED

People in this category are between the ages of 45 and 74 and have never been screened for colorectal cancer.

Most organizations recommend that routine screening for CRC should begin at age 45. Some continue to recommend screening start at age 50. For this reason, people age 45 or older should ask their doctor about screening.



## EXAMPLE PERSONA

Linda is a 46-year old Asian woman who has a physical every year and who diligently tracks her health history.

Linda has no known family history of colorectal cancer (CRC). Her only risk factors for CRC are type 2 diabetes, obesity, and a sedentary lifestyle.

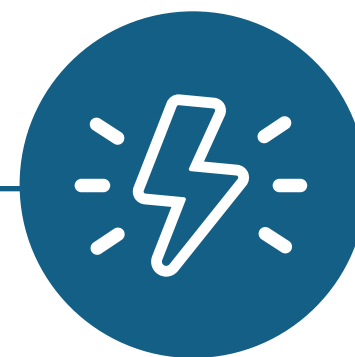
During last year's physical, Linda's doctor told her it was time to begin routine screening for CRC, but she didn't pursue it.

Linda wants more information about the screening interval recommended by her doctor. And even though she knows colonoscopy is the gold-standard for screening, she wants to learn more about other screening options for people with her health history.



## DOES THE USER HAVE A PRIMARY CARE PHYSICIAN?

YES



### CUSTOMIZED CALL-TO-ACTION MESSAGES

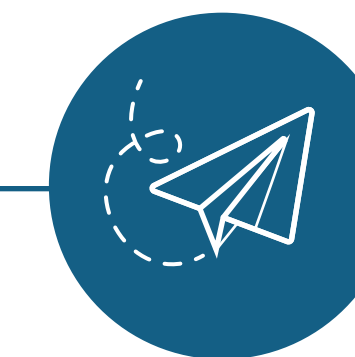
Focus Call to Action (CTA) messaging in the follow-up section of portal on scheduling an appointment.



### PHONE CALL FOLLOW UP

Follow up with users by phone call to:

- Review the results report with them and explain why screening is recommended at age 45
- Explain that there are several tests to look for CRC, including colonoscopy and non-invasive stool tests
- Encourage annual physicals



### FOLLOW-UP EMAILS

Customize your follow-up email content to explain:

- The importance of finding CRC early, when it's easier to treat
- How a family history of CRC may increase their cancer risk
- That some lifestyle risk factors may be changed, thereby lowering CRC risk



### PRIMARY CARE FOLLOW UP

Confirm that the patient has not been screened before and should schedule screening now. Establish a regular schedule for the patient and ensure that the patient schedules their screening.

Communicate the importance of following their screening schedule.

NO



### CUSTOMIZED CALL-TO-ACTION MESSAGES

Focus Call to Action (CTA) messaging in the follow-up section of portal on:

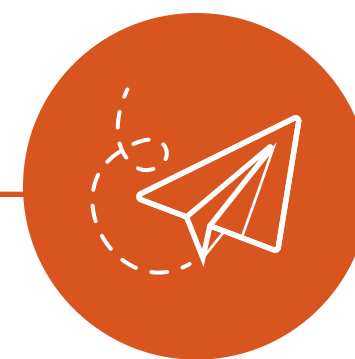
- Finding a doctor
- Scheduling an appointment



### PHONE CALL FOLLOW UP

Follow up with users by phone call to:

- Find a primary care physician and set up an appointment
- Review the results report with them and explain why screening is recommended at age 45
- Explain that there are several tests to look for CRC, including colonoscopy and non-invasive stool tests



### FOLLOW UP EMAILS

Customize your follow-up email content to explain:

- The importance of finding CRC early, when it's easier to treat
- How a family history of CRC may increase their cancer risk
- That some lifestyle risk factors may be changed, thereby lowering CRC risk



### PRIMARY CARE FOLLOW UP

Confirm that the patient has not been screened before and should schedule screening now. Establish a regular schedule for the patient and ensure that the patient schedules their screening.

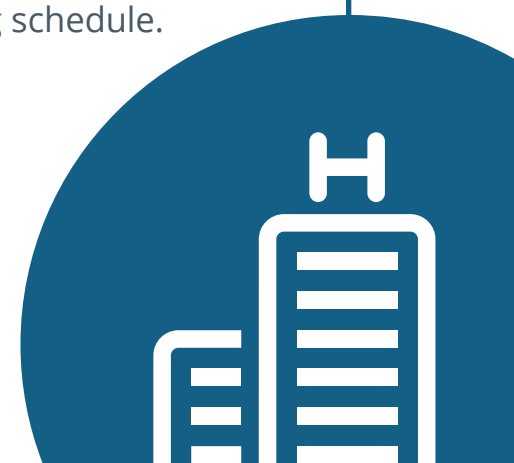
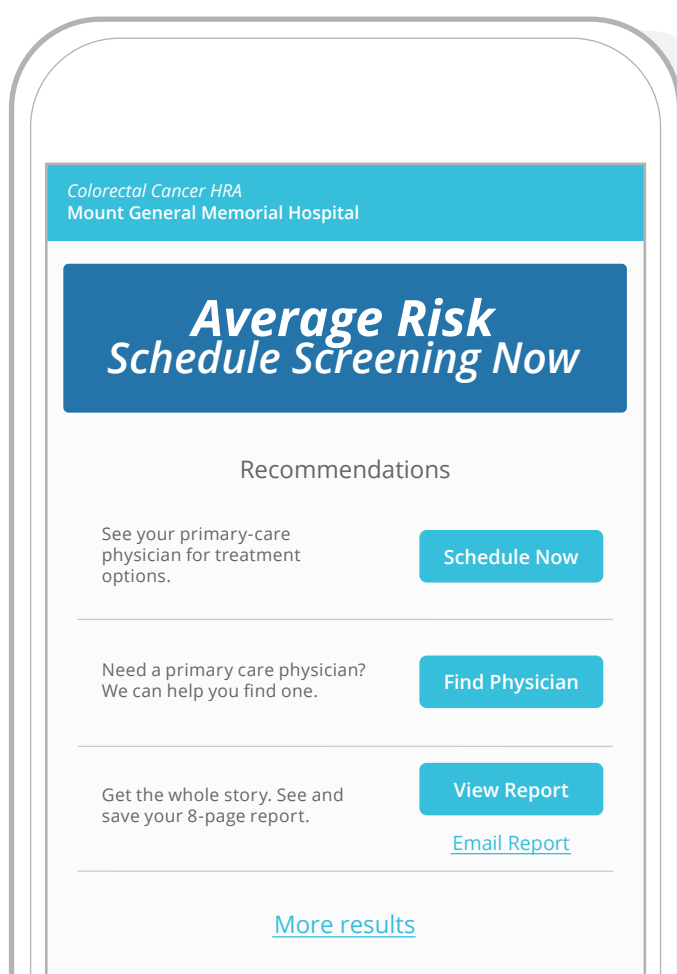
Communicate the importance of following their screening schedule.

## OTHER CONSIDERATIONS

People in this category did not report a significant family history of colorectal cancer (defined as more than 1 immediate family member with CRC or a pre-cancerous polyp).

People in this category did not report a personal or family history of familial adenomatous polyposis, Lynch syndrome, or family colon cancer syndrome X. They also did not report a personal history of colorectal cancer or inflammatory bowel disease (ulcerative colitis or Crohn's disease). They may have had a colonoscopy or other tests to look for CRC. They did not report any history of abnormal CRC screening test results. Their screening results may be outdated or up-to-date.

Other reported CRC risk factors may include type 2 diabetes, obesity, smoking, moderate/heavy alcohol use, or a sedentary lifestyle.





# COLORECTAL CANCER HRA

AVERAGE RISK - CONTINUE YOUR REGULAR SCREENING SCHEDULE

## GOAL: DISCUSS COLORECTAL CANCER RISKS AND SCREENING SCHEDULE WITH A DOCTOR



### RESULT EXPLAINED

People in this category are age 45 or older, have been screened in the past. Their test results were normal and they reported no other known risk factors for CRC.

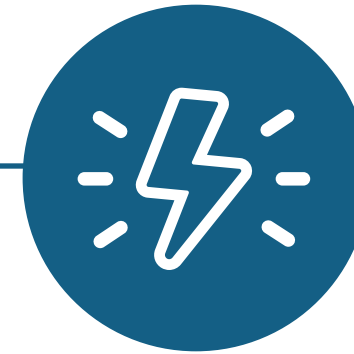
Most organizations recommend that routine screening for CRC should begin at age 45. Some continue to recommend screening start at age 50. For this reason, people age 45 or older should ask their doctor about screening.



### EXAMPLE PERSONA

Tina is a 54-year-old Caucasian female who is overweight and recently quit smoking. She had her first colonoscopy 4 years ago at age 50. Her test results indicated she had no pre-cancerous polyps or other abnormalities.

She recently read an article recommending regular screening for people age 45 and older. She could not remember when she was due for her next screening or if she was at risk due to her lifestyle and decided to take the Colorectal Cancer Risk assessment. Based on her results, she decided to review her screening schedule with her doctor at her next scheduled primary care visit.



### CUSTOMIZED CALL-TO-ACTION MESSAGES

Focus Call to Action (CTA) messaging in the follow-up section of portal on:

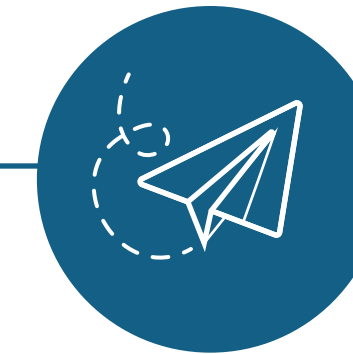
- Regular CRC screening
- Scheduling an appointment



### PHONE CALL FOLLOW UP

Follow up with users by phone call to:

- Review the results report with them and explain why following their recommended screening schedule is important
- Encourage an appointment with a doctor to review their CRC risk and recommended screening schedule



### FOLLOW-UP EMAILS

Customize your follow-up email content to explain:

- The importance of finding CRC early, when it's easier to treat
- How a family history of CRC may increase their cancer risk
- That some lifestyle risk factors may be changed, thereby lowering CRC risk



### PRIMARY CARE FOLLOW UP

Establish a regular schedule for the patient. Confirm that the patient has been screened before and determine the appropriate next screening date. If appropriate, ensure the patient schedules their next screening.

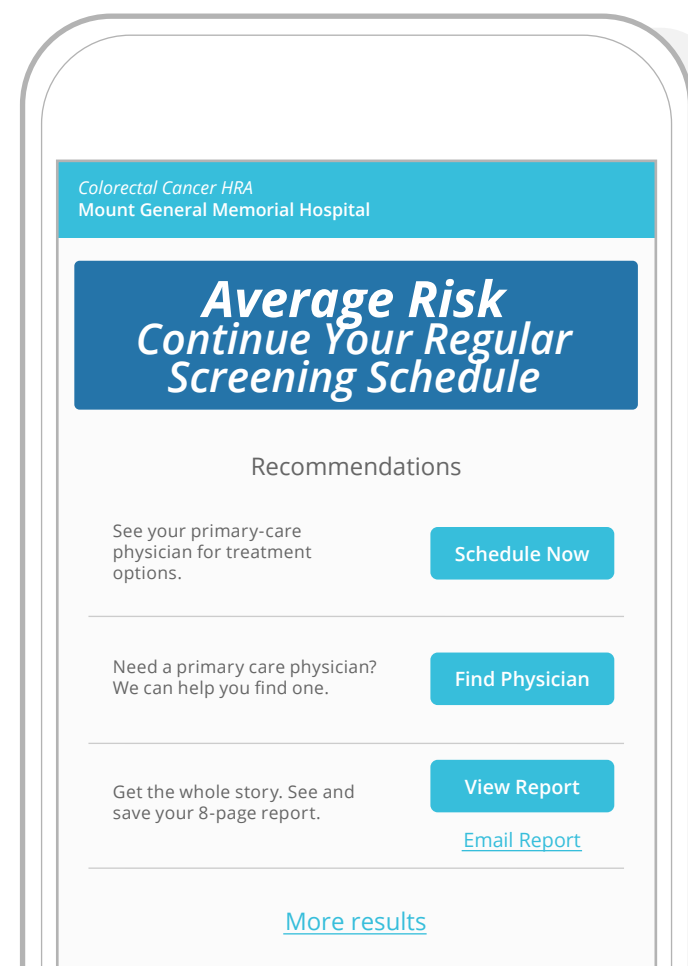
Communicate the importance of following their screening schedule.

### OTHER CONSIDERATIONS

People in this category have already had a colonoscopy or other tests to look for colorectal cancer (CRC). They did not report any history of abnormal CRC screening test results. Their screening results may be outdated or up-to-date.

People in this category did not report a personal or family history of familial adenomatous polyposis, Lynch syndrome, family colon cancer syndrome X, CRC or pre-cancerous polyps OR a personal history of ulcerative colitis or Crohn's disease.

Other reported CRC risk factors may include type 2 diabetes, obesity, smoking, moderate/heavy alcohol use, or a sedentary lifestyle.





# COLORECTAL CANCER HRA

AVERAGE RISK - BELOW RECOMMENDED AGE FOR SCREENING

## GOAL: DISCUSS SCREENING SCHEDULE DURING A REGULAR PRIMARY CARE VISIT



### RESULT EXPLAINED

People in this category are under age 45 and reported no other known risk factors for CRC.

Most organizations recommend that routine screening for CRC should begin at age 45. Some continue to recommend screening start at age 50. For this reason, people under age 45 should ask their doctor when to begin screening.



### EXAMPLE PERSONA

During Colon Cancer Awareness Month, Jake saw an ad recommending colonoscopies for anyone age 45 or older.

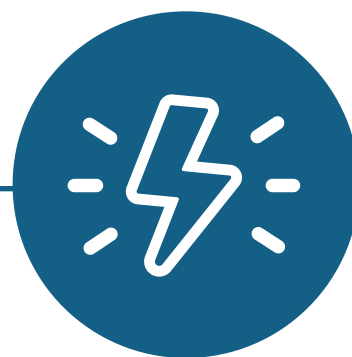
Jake is 43-year-old Caucasian male who is very active and fit. He doesn't think he has any risk factors for colorectal cancer (CRC), and he decides to take the assessment just out of curiosity.

He had been unaware that different organizations recommend screening at different ages. He now understands that he needs to discuss his screening options with a doctor.



### DOES THE USER HAVE A PRIMARY CARE PHYSICIAN?

YES



### CUSTOMIZED CALL-TO-ACTION MESSAGES

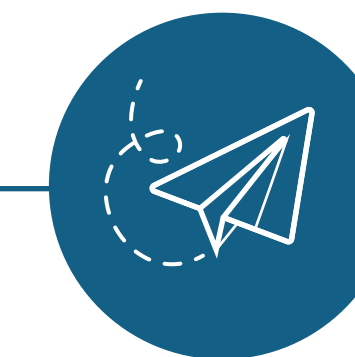
Focus Call to Action (CTA) messaging in the follow-up section of portal on scheduling an appointment.



### PHONE CALL FOLLOW UP

Follow up with users by phone call to:

- Review the results report with them and explain why screening is recommended at age 45
- Explain that there are several tests to look for CRC, including colonoscopy and non-invasive stool tests
- Encourage annual physicals



### FOLLOW-UP EMAILS

Customize your follow-up email content to explain:

- The importance of finding CRC early, when it's easier to treat
- How a family history of CRC may increase their cancer risk
- That some lifestyle risk factors may be changed, thereby lowering CRC risk



### PRIMARY CARE FOLLOW UP

Determine the appropriate age to begin screening and communicate that age to the patient. If appropriate, assist the patient in scheduling their initial screening.

Communicate the importance of beginning screening at the appropriate time and following their designated screening schedule.

NO

## GOAL: CREATE A RELATIONSHIP WITH A PRIMARY CARE PHYSICIAN



### CUSTOMIZED CALL-TO-ACTION MESSAGES

Focus Call to Action (CTA) messaging in the follow-up section of portal on:

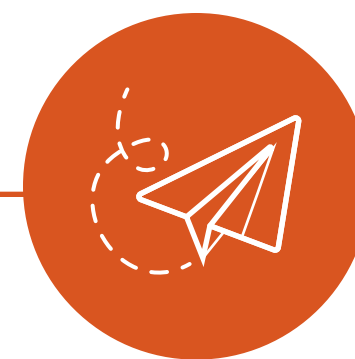
- Finding a doctor
- Scheduling an appointment



### PHONE CALL FOLLOW UP

Follow up with users by phone call to:

- Find a primary care physician and set up an appointment
- Review the results report with them and explain why screening is recommended at age 45
- Explain that there are several tests to look for CRC, including colonoscopy and non-invasive stool tests



### FOLLOW UP EMAILS

Customize your follow-up email content to explain:

- The importance of finding CRC early, when it's easier to treat
- How a family history of CRC may increase their cancer risk
- That some lifestyle risk factors may be changed, thereby lowering CRC risk



### PRIMARY CARE FOLLOW UP

Determine the appropriate age to begin screening and communicate that age to the patient. If appropriate, assist the patient in scheduling their initial screening.

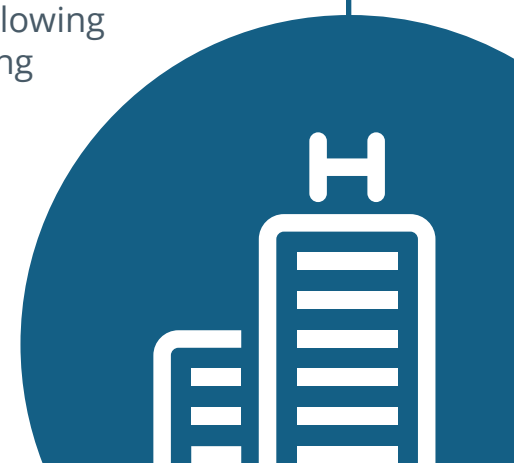
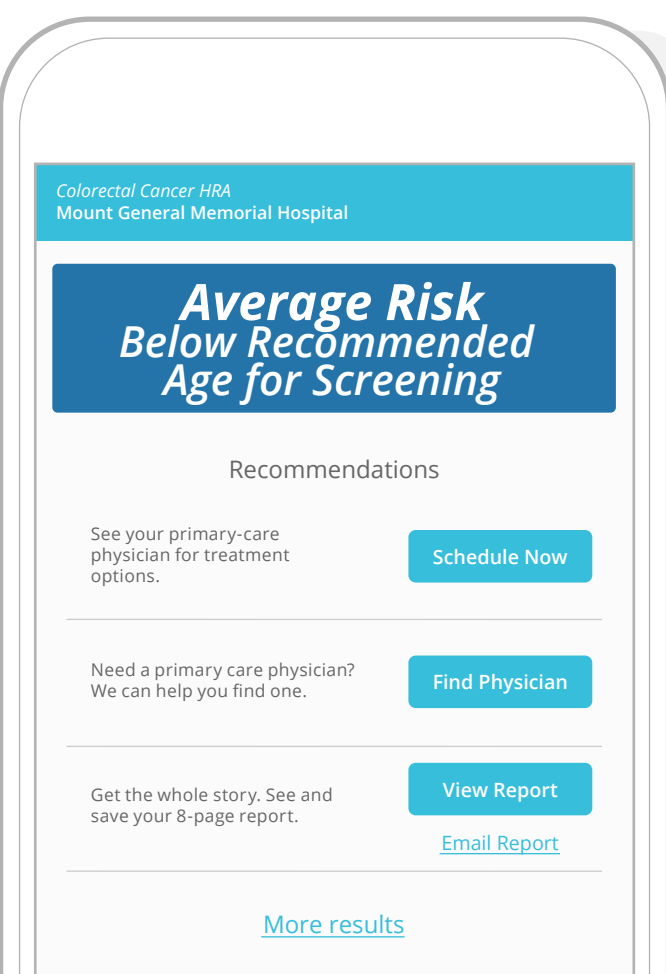
Communicate the importance of beginning screening at the appropriate time and following their designated screening schedule.

### OTHER CONSIDERATIONS

People in this category may have already had a colonoscopy or other tests to look for colorectal cancer (CRC). They did not report any history of abnormal CRC screening test results. Their screening results may be outdated or up-to-date.

People in this category did not report a personal or family history of familial adenomatous polyposis, Lynch syndrome, family colon cancer syndrome X, CRC or pre-cancerous polyps OR a personal history of ulcerative colitis or Crohn's disease.

Other reported CRC risk factors may include type 2 diabetes, obesity, smoking, moderate/heavy alcohol use, or a sedentary lifestyle.





# COLORECTAL CANCER HRA

AVERAGE RISK - ABOVE RECOMMENDED AGE FOR SCREENING

## GOAL: DISCUSS COLORECTAL CANCER RISKS DURING A REGULAR PRIMARY CARE VISIT



### RESULT EXPLAINED

People in this category are age 75 or older and reported no other known risk factors for CRC.

Screening recommendations for people aged 75+ depend on many factors and are not easily generalized.



### EXAMPLE PERSONA

Martha is a 77-year-old African American female who is in generally good health and has no family history of CRC.

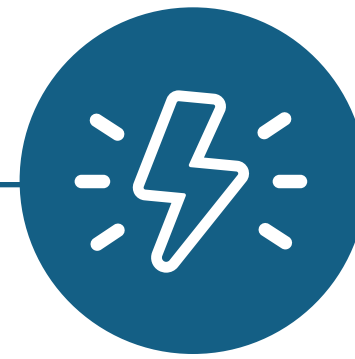
Martha last had a colonoscopy at age 65 and her results were normal.

Because she read that screening should be done every 10 years, she was concerned she may be overdue for her test. She took the Colorectal Cancer Risk assessment and was surprised to learn that at her age she may no longer require regular screening.



### DOES THE USER HAVE A PRIMARY CARE PHYSICIAN?

YES



### CUSTOMIZED CALL-TO-ACTION MESSAGES

Focus Call to Action (CTA) messaging in the follow-up section of portal on scheduling an appointment.



### PHONE CALL FOLLOW UP

Follow up with users by phone call to:

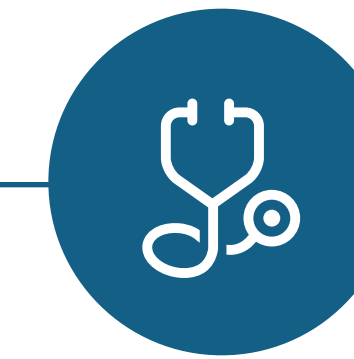
- Review the results report with them and explain why screening may no longer be recommended at age 75+
- Encourage annual physicals



### FOLLOW-UP EMAILS

Customize your follow-up email content to explain:

- How a family history of CRC may increase their cancer risk
- That some lifestyle risk factors may be changed, thereby lowering CRC risk



### PRIMARY CARE FOLLOW UP

Evaluate the risks and benefits of screening for patients aged 75+, and determine if screening is appropriate for the patient. If appropriate for this patient, establish a screening schedule for the patient.

NO

## GOAL: CREATE A RELATIONSHIP WITH A PRIMARY CARE PHYSICIAN



### CUSTOMIZED CALL-TO-ACTION MESSAGES

Focus Call to Action (CTA) messaging in the follow-up section of portal on:

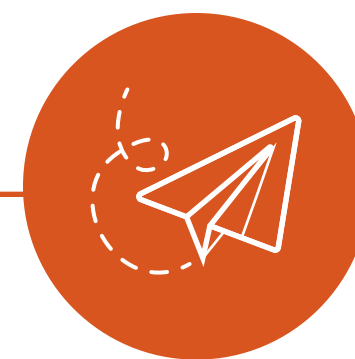
- Finding a doctor
- Scheduling an appointment



### PHONE CALL FOLLOW UP

Follow up with users by phone call to:

- Find a primary care provider and set up an appointment
- Review the results report with them and explain why screening may no longer be recommended at age 75+



### FOLLOW UP EMAILS

Customize your follow-up email content to explain:

- How a family history of CRC may increase their cancer risk
- That some lifestyle risk factors may be changed, thereby lowering CRC risk



### PRIMARY CARE FOLLOW UP

Evaluate the risks and benefits of screening for patients aged 75+, and determine if screening is appropriate for the patient. If appropriate for this patient, establish a screening schedule for the patient.

### OTHER CONSIDERATIONS

People in this category may have already had a colonoscopy or other tests to look for colorectal cancer (CRC). They did not report any history of abnormal CRC screening test results. Their screening results may be outdated or up-to-date.

People in this category did not report a personal or family history of familial adenomatous polyposis, Lynch syndrome, family colon cancer syndrome X, CRC or pre-cancerous polyps OR a personal history of ulcerative colitis or Crohn's disease.

Other reported CRC risk factors may include type 2 diabetes, obesity, smoking, moderate/heavy alcohol use, or a sedentary lifestyle.

