

RCHC Colon Cancer Preventative Screening Initiative

ProjectNest Competition 2020

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Pitch

- **Rowan Community Health Center (RCHC):**
 - Free, student-run healthcare clinic
 - Located in Lindenwold, serves Lindenwold community as well as the surrounding Greater Philadelphia and Camden County
- **Need for screening services:**
 - No current screening services in place
 - Essential step for early detection/prevention of colon cancer
- ***Our goal: use funds to start a colon cancer screening program for underprivileged community members***
- **Long-term impact:**
 - Refer patients to Rowan Medicine specialty offices
 - Increase the awareness of available resources within the community
 - Less cases and deaths associated with colorectal cancer

Timeline

**ProjectNest
Competition**

Purchase of FIT

**Positive screening results, referral
to Rowan GI Department**

**Funds Awarded to RCHC for
use of screening products**

**Implementation of
Colon/Rectal Cancer
Screening at next clinic day**

**Lindenwold and surrounding
communities see reduction
in Colon Cancer or advanced
stages of Colon Cancer**



Who is the Benefitting Audience?



Colon Cancer Statistics

“Cancer screenings allow cancer to be caught at earlier stages (e.g., before symptoms appear), and earlier stage cancers are often easier and less costly to treat for patients and health care payers. Screening for colorectal cancer can actually prevent the disease by detecting and removing pre-cancerous growths.”

-Jennifer Singleterry, American Cancer Society Cancer Action Network

- 1 in 23 people develop colon cancer
- 3rd most common cancer in both men and women in U.S.
- 2nd leading cause of cancer-related death in the U.S., for men and women
- Estimated more than half of all cases can be prevented by regular colonoscopy screening!

Needs-Based Analysis

2015 National Health Interview Survey reports that the colorectal screening rate using a Fecal Occult Blood Test for the uninsured patient was 22%



The national average for the insured patient was 63%



Local health needs assessment reported about 16% of the Lindenwold population had access to colon/rectal cancer screening

Uninsured patients are less likely to survive a diagnosis

“ACS research shows that individuals with health insurance are nearly twice as likely as those without it to have access to critical early detection cancer procedures. Uninsured Americans are less likely to get screened for cancer, are more likely to be diagnosed with cancer at an advanced stage, and are less likely to survive that diagnosis than their insured counterparts.”

Needs-Based Analysis

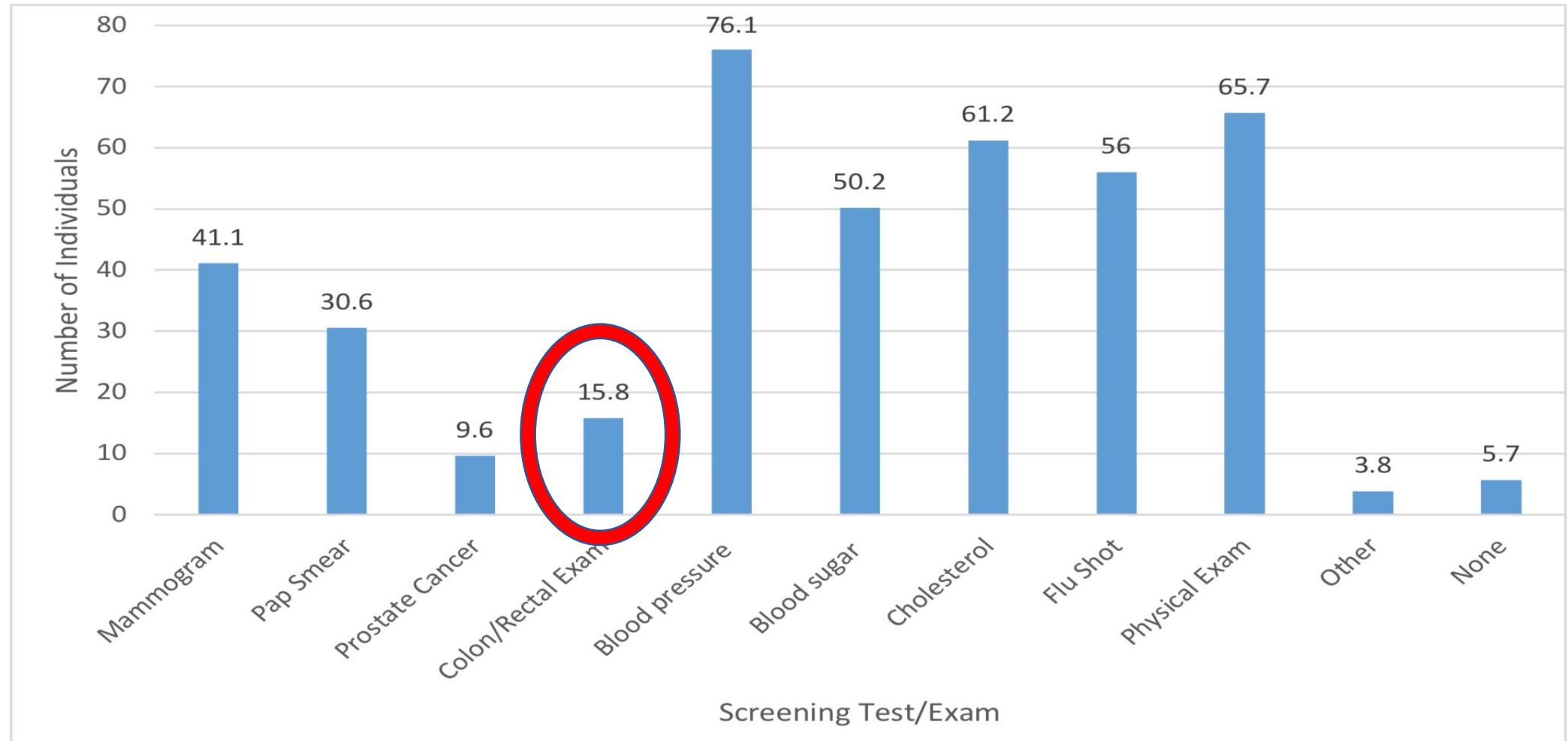


Figure 1. Number of individuals accessing screening on a yearly basis.

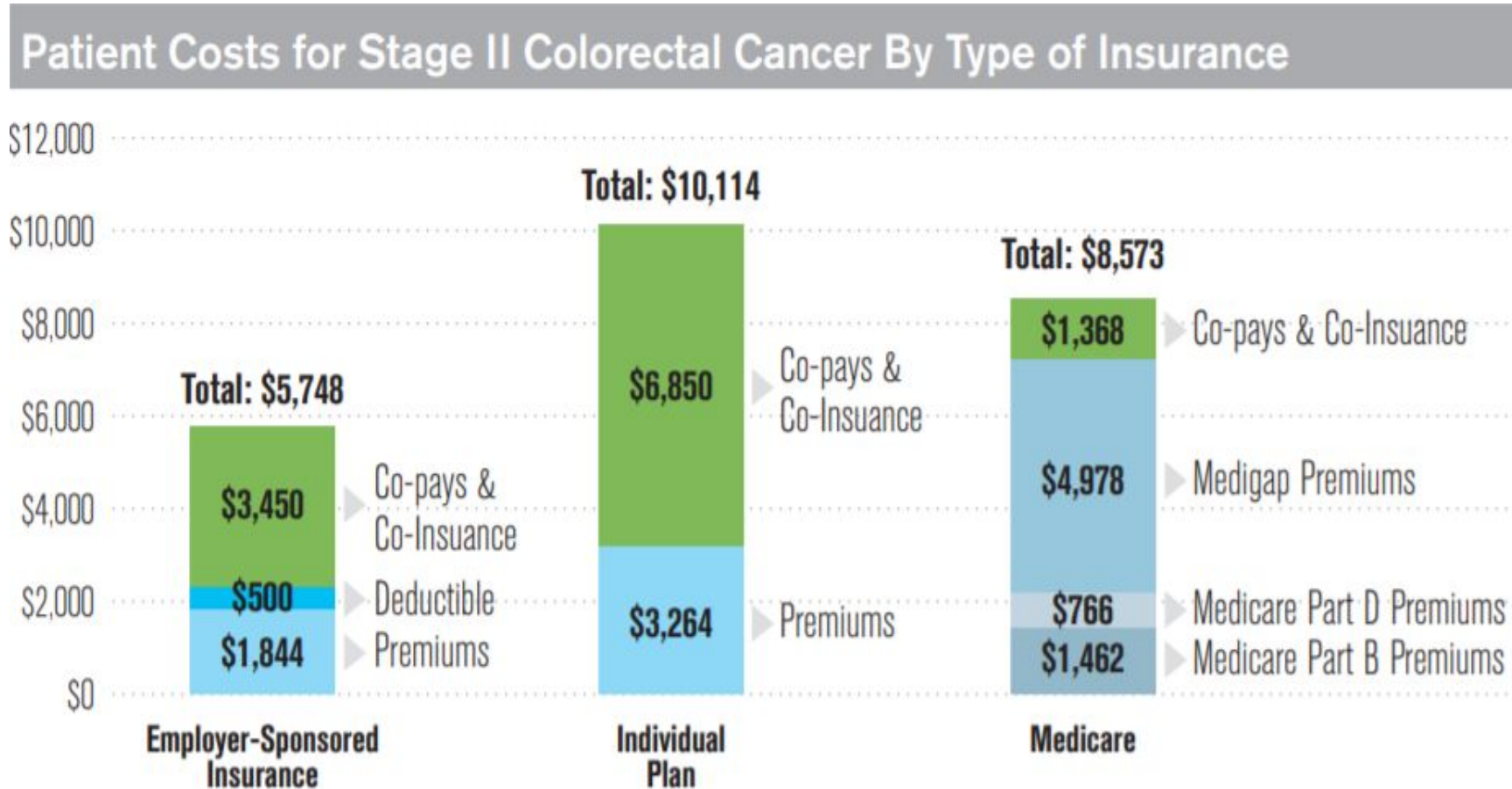
84.2% do not have access

An estimated mere 15.8% of the Lindenwold population has access to colon/rectal cancer screening tests - *one of the main communities the RCHC serves.*

Financial Analysis

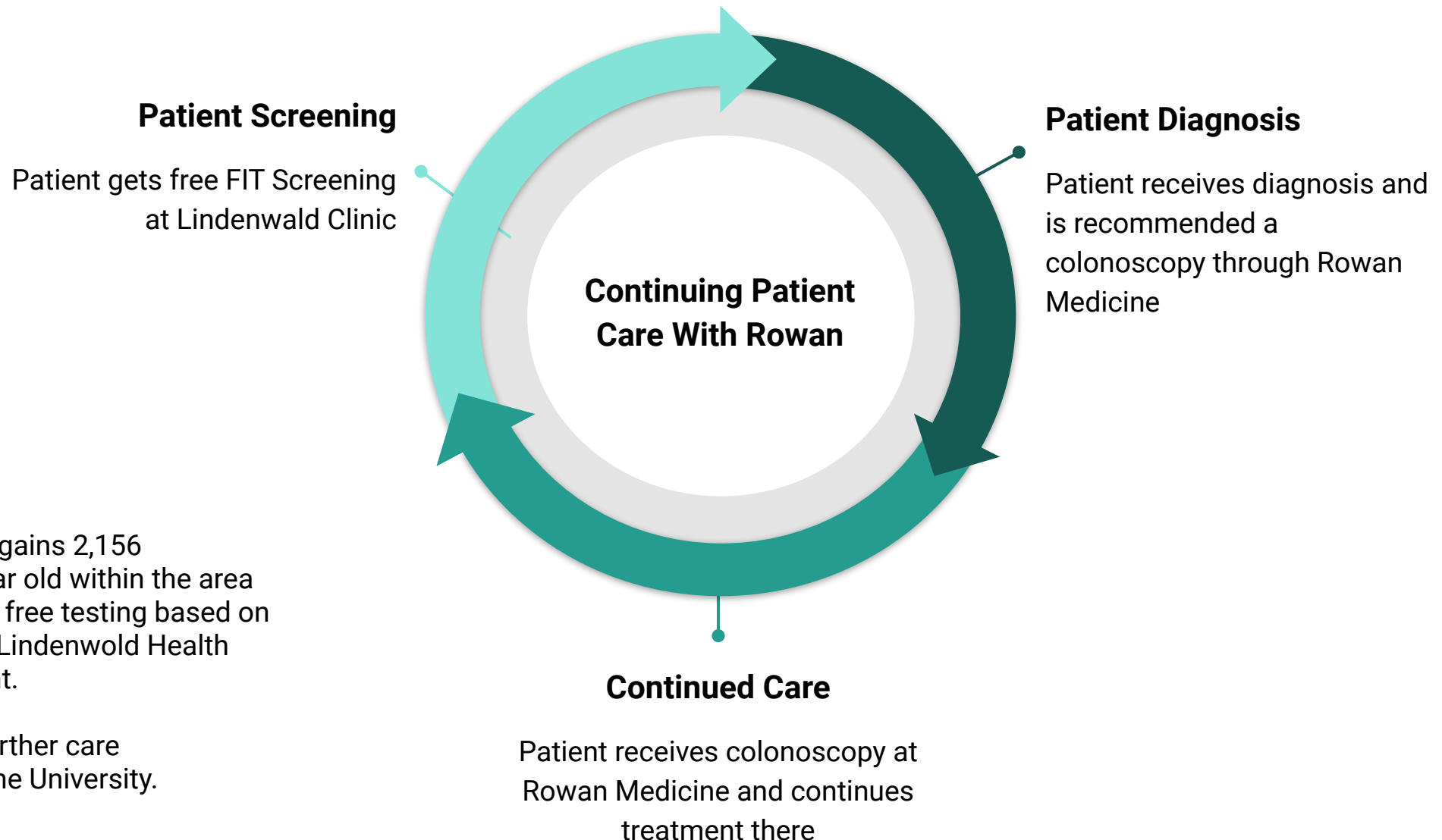
- Studies show the FIT test cost \$7,700/QUAL (\$USD) and only required 267 additional colonoscopies
 - Screening colonoscopies gained 14.4 discounted QALs per 1,000 persons and cost \$33,900/QUAL, but required an additional 758 colonoscopies
- Implementing screenings at earlier ages “averted 13-14 colorectal cases and 6-7 colorectal deaths and gained 27-28 discounted QALs **while saving \$163,700-\$445,800**”
- **FIT Test is less than \$5.00 a test for the clinic to purchase**

Financial Analysis



Screened Individuals can catch cancer before it forms and cure it. If Colorectal Cancer is diagnosed in later stages, the costs can rack up to over \$10,000 per year with insurance and even more when uninsured.

Financial Analysis



Implementability

- Time:
 - Immediate implementation
- Manpower:
 - Rowan Community Health Center a
 - Team members
 - Volunteers
 - Newly instated Rowan GI Club members
- Technology:
 - Fecal Immunohistochemical Test (FIT)

Technology

Fecal Immunohistochemical Test

- Tests for hidden blood in stool
- Health care provider will give FIT Kits to patients for use in the privacy of the home with proper education



SHOP ▾ COLON CANCER SCREENING ▾ HOMELAB TESTS ▾

Search



Second Generation FIT® Fecal Immunochemical Test - Kit of 20

\$ 99.99

At a glance: Second Generation FIT® Kit of 20 includes 20 collection tubes and 20 individually wrapped cassettes to perform 20 tests. Current LOT expiration is 03/2020. Tax free and free shipping.

QTY

—	1	+
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ADD TO CART

Buy with **PayPal**

More payment options

Strategic Pillars

ACCESS

Located at a strategic area in the heart of Lindenwold, within a community high demand for medical care. RCHC is easily accessed by underserved communities from Camden and Lindenwold by both train and bus

QUALITY

Dedicated to provide medical service of high quality, to the standards of Rowan Medicine

AFFORDABILITY

Focuses on providing high quality medical care completely free of charge, available for all members of community regardless of insurance status

ECONOMIC ENGINE

Adds to the services and resources Rowan University will have to offer to the surrounding communities

Works Cited

1. National Health Interview Survey Homepage. 2015.
2. Getting to Know the Neighborhood: A local community health needs assessment.
3. “The Costs of Cancer: Addressing Patient Costs.” Cancer Action Network, American Cancer Society, 2017
4. Ladabaum U et al. Cost-effectiveness and national effects of initiating colorectal cancer screening for average-risk persons at age 45 years instead of 50 years. *Gastroenterology* 2019 Mar 28; [e-pub]. (<https://doi.org/10.1053/j.gastro.2019.03.023>)

Questions?

SWOT on FIT Test

STRENGTHS

- Sensitivity is 98% accurate
- Specificity is 96% accurate
- Extremely affordable for patients and medical centers
- Less invasive than colonoscopy
- Quick results
- Test can be done in the home or medical facility

OPPORTUNITIES

- Patients have easy access to colon cancer screenings and future screenings
- More education on preventative screening care for future relationships with the university
- Brand recognition with Rowan as providing quality and affordable care

WEAKNESSES

- Possibility for false positives or negatives
- Requires some patient education for test kit
- Patients must travel to clinic to pick up test
- Test must be redone every year
- Patients may not trust medical students to deliver care

THREATS

- Patients who are recommended colonoscopies may seek care outside Rowan
- Possible legal ramifications for inaccurate tests
- Technology updates may eventually replace this test

Colon Cancer Screening Recommendations

- Why we Screen:
 - find and remove polyps before they become cancer
 - to find CRC early - when it is small and likely has not spread, and when treatment can be more effective
- 2 Types of Screening:
 - visual exam - tests that can find both polyps and colorectal cancer
 - stool-based tests - mainly find cancer
 - colonoscopy will be needed if results are abnormal
- Age 45, both men and women, at average risk, should begin regular screening with either stool-based test or visual exam
 - continue regular colorectal cancer screening through the age of 75
 - FIT every year
 - Colonoscopy every 10 years
 - CT colonography every 5 years
 - Flexible sigmoidoscopy every 5 years

PATIENT INSTRUCTIONS

For assistance with these instructions contact your physician's office.



Step 1: Sample Deposit



Fill out personal information on attached label on tubes



Make bowel movement, wipe normally and retain a small amount of feces on toilet paper.

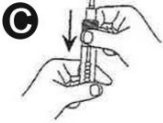
Step 2: Sample Collection



Unscrew the top of the collection tube and remove the applicator stick.



Collect a small sample of feces onto the grooves of the wand from the toilet tissue.
DO NOT CLUMP, SCOOP OR FILL THE TUBE



Screw the applicator back into the tube and secure tightly.

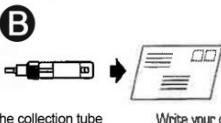
Step 3: Sample Return

WARNING:

Alcohol and certain medications such as aspirin, indomethacin, reserpine, phenibutazone, corticosteroids and non-steroidal, anti-inflammatory drugs (e.g. Ibuprofen) may cause gastrointestinal irritation and subsequent bleeding in some patients. Such substances should be discontinued at least 48 hours prior to sample collection.



Complete the information requested on the patient return form.



Insert the collection tube along with the return form into the return mailing pouch and secure tightly.



Write your clinic or physician's address on the return envelope.

Return the sample packet immediately to the clinic or laboratory by mail or in person.



PATIENT RETURN FORM

NAME: _____

STOOL COLLECTION DATE: _____

PATIENT ID: _____

AGE: _____ SEX: _____

ADDRESS: _____

CITY: _____

STATE: _____

ZIP CODE: _____

PHONE: _____

Cut along dotted line, and return this with sample collection tube to your doctor or laboratory.

TEST RESULTS

☐ POSITIVE (Occult blood is detected in your stool sample)

☐ NEGATIVE (No occult blood is detected in your stool)

☐ INVALID (This may be due to inadequate or excessive sample being collected or delay in sample transportation to the clinic)

	FIT	STOOL CARD
Sensitivity	98%	32%
Specificity	96%	73%
PPV	93%	6%
NPV	91%	69%
Samples needed	1	3
Commercial Insurance	\$24.02 average	\$2.38 average
Medicare/Medicaid	\$ 22.22	\$0