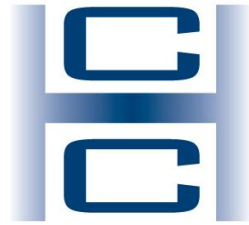


Presenting the next generation
of Colon Cancer Screening



COLON HEALTH CENTER
OF DELAWARE

Virtual • Convenient • Life-saving

Integrated screening from Mid-Atlantic GI Consultants

Apex Medical Building
537 Stanton-Christiana rd, Ste 202
Newark, DE 19713
Phone: 302-995-COLO
Fax: 302-225-8063

Integrated Virtual Colonoscopy™ Registration and Information Packet

<u>Documents</u>	<u>Instructions</u>
VC Registration/Request Form	Fill-out and Return or Fax
VC Consent Form	Sign and Return or Fax
Financial Policies	Sign and Return or Fax
What to Expect with VC	For Your Information
Directions to Colon Health Center of Delaware	For Your Information
Newspaper Articles on VC	For Your Information

**Once Registration and Consent Form are Faxed or Returned to us,
we can provide a colon prep kit for your study.**



COLON HEALTH CENTER OF DELAWARE

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DLP: _____

Case #: _____

Integrated Virtual Colonoscopy™ Registration/Request Form

Name: _____ Requested Day(s)/Date(s) of Study: _____

Home Address: _____

City _____ State _____ Zip _____ SSN: _____

Email Address: _____ Do you check email?: Yes () No ()

Home Phone: _____ Cell Phone: _____ Work Phone: _____

Age: _____ DOB: _____ Sex: M F Marital Status: M S Weight: _____ lbs.

Emergency Contact Person: _____ Relation: _____ Contact #: _____

Primary Physician: _____ GI Physician, if any: _____

Primary Insurance: _____ Secondary Insurance: _____

Member # _____ Member # _____

Group # _____ Group # _____

Subscriber Name (if not you): _____ DOB: _____ SSN: _____

Do you have any personal history of:

	Yes	No	
Colon Cancer or Polyps	()	()	If yes, which and when: _____
Prior Colon Cancer Screening	()	()	If yes, type of screening and when: _____
Iodine Allergy	()	()	If so, type of reaction: _____

Do you currently have any of the following symptoms?

	Yes	No
Abdominal pain	()	()
Diarrhea	()	()
Blood in Stools	()	()
Constipation	()	()
Weight Loss	()	()

Do you take any of the following medications?

	Yes	No
Aspirin	()	()
Coumadin/Warfarin	()	()
Plavix	()	()
Iron-containing vitamins	()	()
Fiber Supplements	()	()

Do you have any of the following conditions?

	Yes	No
Kidney Failure on Hemodialysis	()	()
Any Bleeding Disorder	()	()
Latex Allergy	()	()
On a Transplant List	()	()
On Home Oxygen	()	()
Implanted Cardiac Defibrillator	()	()
Cardiac Pacemaker	()	()
Asthma, Emphysema, COPD	()	()
Congestive Heart Failure	()	()
Diabetes	()	()
Diverticulitis	()	()

If yes, Type of Disorder: _____
If yes, Type of Reaction: _____
If yes, Organ: _____

Tech Notes: _____ L CO2

Patient Signature: _____ Date: _____

Please bring completed form with you when you pick up prep kit, or Fax to 302-225-8063

Integrated Virtual Colonoscopy™

Informed Consent

1. I, _____ authorize Colon Health Center of Delaware and Mid-Atlantic GI Consultants, PA (MAGIC), its employees, and contracted agents to perform a Virtual Colonoscopy (VC) , also known as CT Colonography, as a screening test for colorectal cancer. The interpretation of your study is performed by an independently-contracted radiology group.
2. **VC as a Screening Test:** I understand that VC is endorsed by the American Cancer Society, the American College of Radiology, and multiple GI societies as a screening test for colorectal cancer in average risk patients without abdominal or bowel symptoms. I realize that if I have a personal or family history of colon cancer or polyps, traditional colonoscopy is a preferable test given the likelihood of finding subsequent polyps. If I have such a history, yet decide to move forward with VC because it is convenient, non-invasive, or sedation-free, I realize that there is a small chance of missing a polyp that might have been found on traditional colonoscopy.
3. **Radiology Interpretation:** My VC exam will be interpreted by a licensed, independently-contracted, radiology group that is a separate independent entity from MAGIC, Colon Health Center of Delaware, and Colon Health Centers of America. MAGIC, Colon Health Center of Delaware, and Colon Health Centers of America do not interpret your VC, and retain no control over the independent contractor radiology group's interpretation of your VC. I understand that MAGIC, Colon Health Center of Delaware, and Colon Health Centers of America are not liable for any missed findings, incorrect interpretations, or bad outcomes that may result from the interpretation or misinterpretation of your VC. The identity of the radiologist who will interpret your study is available upon request.
4. **Extracolonic Findings:** VC obtains images similar, but not identical, to a standard abdominal/pelvic CT scan. These “outside-the-bowel” images are also reviewed as a part of the interpretation of your study, and could result in the discovery of clinically important or unimportant findings. A report will be sent to you and to your physician, who will be solely responsible for the follow-up and management, if indicated. Colon Health Centers of Delaware, MAGIC, its owners, employees, or contracted agents are not be responsible for following up on any such extracolonic findings once they have been reported to your physician. VC is not an adequate substitute for a standard CT scan if signs and symptoms indicate such testing. If an extracolonic abnormality is present, the VC may not detect it.
5. **Risks:**
 - a. No screening test is perfect, including VC and traditional colonoscopy. Both VC and traditional colonoscopy may miss existing polyps in 5-15% of cases. Fortunately, most of these missed polyps are smaller, less significant polyps. Some very small polyps found may not be reported because their removal would not justify undergoing a colonoscopy. Either VC or traditional colonoscopy may, in rare cases, miss a cancer. Receiving VC or traditional colonoscopy does not guarantee that you will not develop colon cancer. However, the identification and removal of polyps has been shown to significantly decrease your risk of colon cancer in the future.
 - b. During VC the tip of a small flexible catheter is placed approximately one inch inside the rectum and a low flow of carbon dioxide gas is used to gently inflate the colon to improve visualization. Occasionally the patient will feel a slight bloating, cramping, or pain sensation during the study. This sensation usually ceases the moment the test ends. In extremely rare cases, this low flow gas may cause a bowel perforation, usually caused by the presence of diverticula (weakened colon out-pouches).
6. **Opportunity for Same-Day Colonoscopy:** If polyps or other important findings are discovered on your VC, MAGIC will offer you the opportunity for a same-day therapeutic colonoscopy if it is medically safe for you to undergo, and it is allowed by your insurer. If you have certain medical conditions or are on certain medications, it will not be safe to undergo colonoscopy in an outpatient setting, and you will need to have your colonoscopy at the hospital on another day. You will have an opportunity to go over all the risks and benefits of a colonoscopy prior to any procedure being performed. If a same-day colonoscopy is recommended in order to remove polyps, and you either are unable to undergo it for medical reasons, or decline for personal reasons, it will be solely your responsibility to schedule and complete this second procedure.
7. **Transportation after Same-Day Colonoscopy:** Patients may drive themselves to the VC test, and most will be able to drive themselves home or to work after receiving a “clean colon” bill of health on their VC. A minority of patients will require same-day colonoscopy (with anesthesia) to remove polyps. These patients will not be able to drive themselves home, or for the rest of the day. Any patient who wants the opportunity to undergo same-day colonoscopy, if polyps are found on VC, must identify an individual who can be “on call” to drive them home after the test. No colonoscopy will be performed unless this ride is specifically identified and confirmed prior to the colonoscopy.
8. **Clinical Research and Registry:** I agree to allow the images and de-identified clinical information from my study—but no personally identifiable information—to be used for clinical research on colon cancer screening, including but not limited to participation in the American College of Radiology’s CTC Registry, as outlined in 38 CFR 16.101(b)(4).
9. **Alternatives:** I am aware of the alternatives to VC for colon cancer screening, which are 1) traditional colonoscopy, 2) a less sensitive screening test such as fecal occult blood testing, flexible sigmoidoscopy, or double-contrast barium enema, or 3) no testing at all.
10. I have read and fully understand the contents of this consent form, the risks and benefits of the test, and have had the opportunity to ask and receive satisfactory answers to all my questions and concerns:

Witness: _____ Patient/Responsible Party: _____ Date: _____

Do not sign this consent form unless you have read and understood this entire consent and all of your questions and concerns have been fully and satisfactorily answered.



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Financial Policies

Payment for Services

If medical insurance information is received at the time of service, a claim will be submitted to your insurance company as a courtesy. Insurance co-payments and annual deductibles not met for the year are payable when services are rendered. Any services that are not fully reimbursed by your insurance and are indicated to be the patient's responsibility on your Explanation of Benefits, will be due and payable upon receipt of a billing statement. Unless you are covered by a government program (Medicare, Medicaid, etc.) or a private insurance that has an agreement that prohibits members from being billed, and if correct insurance information or referral documentation is not presented at the time of service, you are responsible for the full amount of charges incurred. Because it is prohibited by law, this center is not able to forgive or "write off" your deductible, co-payment, or co-insurance payments due.

If you do not have medical insurance, full payment will be expected at the time of service. If this is not possible, financial arrangements need to be made prior to services rendered. If your account should become delinquent, and is forwarded to our collection attorney, it may negatively affect your credit rating.

I understand that if my referring physician is unwilling or unable to provide a referral/authorization for my study, that I will be responsible for payment in full for such procedure. I understand that if my insurance carrier denies reimbursement for this procedure for any reason, including, but not limited to if it is deemed experimental or investigational that I will be responsible for payment in full for such procedure. This rule will also apply if my insurance carrier deems this procedure investigational, experimental, and does not provide any reimbursement to the provider of care. I understand that I have the option of rescheduling my procedure if I so desire and will not be charged a fee.

Assignment of Benefits

I hereby irrevocably authorize Colon Health Centers of Delaware to apply for Medicare/Medicaid, and other health insurance benefits on my behalf and to take all necessary steps to collect such benefits, including but not limited to filing for arbitration as provided by statutes. I hereby authorize payment of any/all medical benefits and insurance proceeds be made on my behalf to the above. I certify that the information I have reported with regard to my insurance carrier(s) is correct. I authorize the release of medical information about me to my health insurance carrier and CMS (Center for Medicare & Medicaid Services) agents, and any and all other information needed to determine the benefits payable for related services(s).

Release of Information

I hereby authorize Colon Health Center of Delaware and/or its designees to provide treatment and/or examination and release any information pertinent to my case in the course of my examination or treatment to my physician, insurance company, adjustor, or attorney, if applicable in this case.

Patient's Name: _____

Date: _____

Signature of Patient/Guardian: _____



COLON HEALTH CENTER
OF DELAWARE

What to Expect with Integrated Virtual Colonoscopy™

The Prep

Cleansing the bowel is very important to ensure the highest quality screening exam. After making an appointment for a virtual colonoscopy (VC) screening, you must purchase a VC prep kit—this may be picked up at the Center or shipped to you prior to your exam. Ideally, the prep should be reviewed one week prior to your study, although the major portion of the prep takes place in the 24 hours before the study. Our typical prep involves taking several small tablets, drinking two 10 oz. bottles of lemon-flavored laxative, and drinking lots of clear fluids. While no colon cleansing prep is fun, our prep is simple and not nearly as bad as many people think. And remember, it could Save Your Life! Please refer to the VC Prep Instructions for details.

Arriving at the Center

Please arrive at the Colon Health Center at least 15 minutes prior to your scheduled study. The receptionist will check you in, confirm your insurance status, and make sure you have signed a consent and privacy form. You will be shown into a private dressing room where you will be asked to put on a hospital gown. You will remain in the comfortable, private dressing room where you may watch the flat-panel TV, make cell phone calls, or access the internet from your laptop, until called for your study. The dressing room can be locked to protect your valuables.

The VC Exam

The study usually takes about 10-15 minutes. You will not need any sedation medicine or IV for this exam. When ready, the CT technician will bring you from the dressing room via a private hallway into the private VC room. Once on the CT table, the technician will need to insert a small (smaller than a straw), flexible tube 1-2 inches inside your rectum. This is not painful and is easier than the digital rectal exam you may have received during a physical exam.

This small tube is necessary for the following reason: The colon is a floppy tube and needs to be gently inflated in order to obtain the highest quality images. The tube is used to gently inflate the colon with carbon dioxide (CO₂) gas to allow for better images. Occasionally patients will report a brief period of bloating, cramping, or feeling like they need to move their bowels. This is normal. If this sensation occurs, it is usually brief, mild, may respond to positioning, and will go away immediately after the test is over. After the test, most of the gas is absorbed immediately by the colon, but a small amount may pass through the rectum. Don't worry, this is not "your gas", it is the odorless CO₂ gas that we gave you!

You will then receive a quick overview scan, followed by two brief testing scans, one on your back and one on your stomach. You will be asked to hold your breath for about 10-15 seconds during each of these two passes. That's it; the VC exam is done!

After the VC Exam

You can expect to feel completely normal immediately after the exam. You will be taken back to your dressing room where you can get dressed in your street clothes.

About 10-15% of average risk patients will have polyps discovered on VC that should be removed. Therefore, most patients will want to wait the expected 45-60 minutes while their VC exam is read by the radiologist. If a patient has polyps, they will be given the opportunity to have the polyps removed that same day without needing a second prep. This is a major advantage of having the VC done at our Colon Health Center! A small number of patients will not be eligible to receive an outpatient colonoscopy the same day, either because of a medical condition or the need to remain on blood thinners, etc. These patients can be dismissed from the center after being advised on how to schedule a traditional colonoscopy at the hospital. The exam report will be sent to you and your physician.

If you wait for your results, there are several options for the expected 45-60 minute wait. You may wait in the comfortable waiting room or dressing room and watch TV, access our free Wi-Fi internet service, make cell phone calls (from private dressing rooms only), or read a newspaper or magazine, or you may provide a cell phone number where you can be reached, and leave to run errands, etc. for an hour. **You must not have any food, drink, gum, candy, or anything by mouth during this waiting time. Doing so could prevent you from receiving a colonoscopy that day, if you happened to need one.**

If your VC reading finds significant polyps, and you can safely undergo colonoscopy in an outpatient setting you will be directed to the endoscopy center section of the Colon Health Center, about 1/3 mile away. **Because of the sedation/anesthesia with colonoscopy, you will need to arrange for a ride home. This ride must be present before you can receive your colonoscopy.**

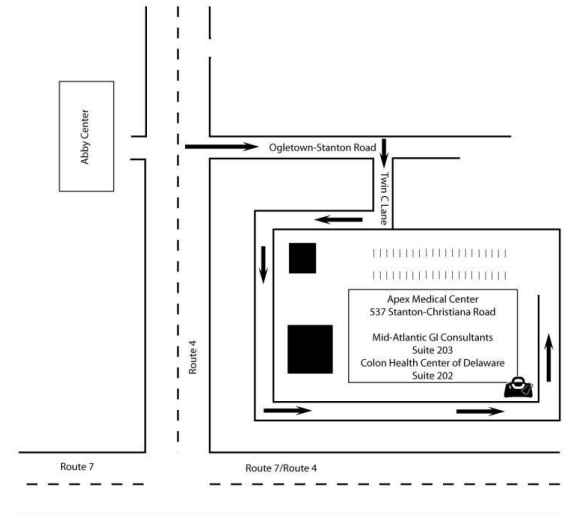
If the VC results return with no significant findings (about 85% of patients), your screening is complete! You may drive yourself home, to work, etc. and resume all activities, including eating your normal diet.

Directions to:



COLON HEALTH CENTER
OF DELAWARE

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For On-line Map use this Link: [Directions to Colon Health Center of Delaware](#)

From Wilmington, Philadelphia, and New Jersey:

- Take I-95 south and use Exit 4B (Metroform) onto Route 58 west (Churchmans Rd.)
- Proceed on Rt 58W to 6th traffic light (Rt. 4) and turn Right onto Rt. 4E
- Make the 2nd left turn onto Ogletown-Stanton Rd. and make an immediate right onto Twin C Lane
- Follow signs to the APEX Medical Building. Parking lot is behind the large Doctors Bag sculpture.
- Colon Health Center of Delaware is on second floor, Suite 202.

From Newark and Maryland:

- Take I-95 North and use Exit 4B (Metroform) onto Rt. 7 North
- Proceed on Rt. 7 to second traffic light and turn left onto Rt. 4
- Make the 1st right onto Ogletown-Stanton Rd. and make an immediate right onto Twin C Lane
- Follow signs to the APEX Medical Building. Parking lot is behind the large "Doctor's Bag" sculpture.
- Colon Health Center of Delaware is on second floor, Suite 202.

From Pike Creek, Hockessin, and Southern Chester County:

- Take Rt. 7 (Limestone Road) South past Delaware Park to Rt. 4. Turn right on Rt. 4
- Make the 1st right onto Ogletown-Stanton Rd. and make an immediate right onto Twin C Lane
- Follow signs to the APEX Medical Building. Parking lot is behind the large "Doctor's Bag" sculpture.
- Colon Health Center of Delaware is on second floor, Suite 202.

From Southern New Castle County and Kent County:

- Take Rt. 1 North. Rt. 1 turns into Rt. 7 North near Christiana Mall
- Proceed on Rt. 7 to Rt. 4 and turn left onto Rt. 4
- Make the 1st right onto Ogletown-Stanton Rd. and make an immediate right onto Twin C Lane
- Follow signs to the APEX Medical Building. Parking lot is behind the large "Doctor's Bag" sculpture.
- Colon Health Center of Delaware is on second floor, Suite 202.

CT Scans Gain Favor as Option for Colonoscopy

By RHONDA L. RUNDLE
October 28, 2008; Page D1

When Janice Rodefelf turned 50, her doctor began hounding her to get a colonoscopy. But Ms. Rodefelf was afraid to have the test, which involves snaking a thin tube through the large intestine. It wasn't until she recently was offered a noninvasive "virtual colonoscopy" that she relented.

The test, a type of CT scan in which the patient lies on a table that slides in and out of a tunnel of X-ray detectors, revealed several suspicious growths, called polyps, on the inner wall of Ms. Rodefelf's colon. To remove them, she underwent a standard colonoscopy later the same day. Some of the polyps turned out to be pre-cancerous.

"I'm glad I finally went ahead because those can turn into full-blown cancer," says the 58-year-old retiree in Cottage Grove, Wis.

Virtual colonoscopy, formally known as computed tomographic, or CT, colonography, has been available for some time. But more medical centers are gearing up to offer the procedure at a time when new research shows it can be about as effective at finding large polyps as a standard colonoscopy. The cost of the virtual test can run from \$500 to \$1,500, or less than half the total cost of a standard colonoscopy. But the newer procedure is rarely covered by health insurers for routine cancer screening.

As in Ms. Rodefelf's case, patients who opt for a virtual colonoscopy may not be able to avoid undergoing the standard procedure as well. That's because when large polyps are detected during the virtual test, doctors must perform a standard colonoscopy to remove them.

When smaller polyps are found, doctors aren't in agreement about what to do. All such growths are routinely removed during standard colonoscopy. But CT colonography researchers are still figuring out when it's safe to leave tiny polyps, and how often to repeat the imaging test. The American Cancer Society recommends that a virtual colonoscopy for healthy men and women 50 or older be repeated every five years if no polyps are found. For standard colonoscopy, the group's recommendation for healthy individuals is every 10 years.

Ready For Your Virtual Colonoscopy Closeup?

When suspicious growths are detected in a virtual colonoscopy, patients must undergo a standard colonoscopy to have them removed. At some medical centers, this conveniently can be done the same day.

Hospital or clinic	Price	Standard colonoscopy available same day, if needed
Invision Sally Jobe Denver	\$800	Limited availability
Johns Hopkins Hospital Baltimore	1,000	Coming in January
M.D. Anderson Cancer Center Houston	1,500	Yes
Virginia Commonwealth University Medical Center Richmond, Va.	750	Yes, same-day referral to nearby endoscopy center
Mayo Clinic (Rochester, NY, and Scottsdale, Ariz.)	1,400-1,500	Possibly; ask when booking an appointment
Ronald Reagan UCLA Hospital Los Angeles	505	No
University of Chicago Hospital Chicago	1,153	Yes
University of Wisconsin Hospital Madison	1,200	Yes
Beth Israel Deaconess Medical Center Boston	1,017	Yes, starting this week

Source: WSJ research

Colon cancer is the second leading cause of cancer death in the U.S., with more than 130,000 new cases diagnosed every year. But studies show that roughly half of all Americans 50 and older aren't getting colonoscopies, possibly because the procedure is scary, requires sedation and carries a tiny risk of bowel perforation. Physicians are hopeful that the easier, less invasive virtual colonoscopy will significantly boost screening rates.

"It is one of the most important advances in medicine in the past five to 10 years because colon cancer is so common and so preventable" when polyps are detected early and removed, says Robert Halvorsen Jr., professor of radiology at Virginia Commonwealth University's School of Medicine.

In CT colonography, the X-ray detectors feed data to a computer program that then creates a three-dimensional model of the abdomen and pelvis. The radiologist's view simulates a flight through the colon, giving the procedure its nickname of virtual colonoscopy. Both virtual and standard tests usually require patients to fast the night before and drink foul-tasting laxatives to cleanse the bowel, which makes it easier for doctors to see abnormalities in the colon.

Accuracy Was Questioned

Until recently, virtual colonoscopies' accuracy in detecting polyps has been questioned, partly because results varied widely in tests at different centers. But a

large new study conducted at 15 U.S. medical centers by the American College of Radiology Imaging Network, and sponsored by the National Cancer Institute, has convinced more medical professionals of the test's effectiveness. The results, published in the *New England Journal of Medicine* in September, "provide evidence that CT colonography is approximately as successful as standard colonoscopy in the detection of colonic polyps," says Dr. Halvorsen, one of the study's co-authors. "It is also much easier for patients, does not require the patient to be sedated, miss a full day of work, or have someone to drive them home," he says.

Many physicians expect the new study to help push the Centers for Medicare & Medicaid Services, which oversees the big government insurance programs, to start covering virtual colonoscopies as soon as next year, a move that private insurers are likely to follow. The agency says its coverage review is set for completion in February.

Some medical centers are getting ready for increased demand. Virtual colonoscopies are generally performed on the same equipment used for other CT scans, which most radiology facilities already have. But centers must acquire specialized computer software to perform CT colonography and train radiologists to read the results. The tests also could provide radiology departments in hospitals and clinics with additional new revenue.

Some medical centers also are rearranging work schedules so that when a radiologist is performing a CT colonography, a gastroenterologist is available in case the patient needs polyps removed; the new study found this occurs among 17% of patients. A good colon-screening service should offer same-day polyp removal because patients shouldn't be forced to endure the distasteful laxative preparation a second time, says Richard Obregon, a radiologist at Invision Sally Jobe, a radiology group in the Denver area that is expanding its colon-screening service. Such coordinated scheduling is already practiced with other screenings, such as mammography programs that offer immediate diagnostic tests.

Return Visit

After Ms. Rodefeld completed her virtual colonoscopy last month, she was sent home and told to continue fasting until her results were reviewed. A couple hours later, she received a call telling her that polyps had been found and a standard colonoscopy would be needed to remove them. "I said 'I don't want to drink that stuff again, so I'll do it today. Let's get this over with,'" she recalls.

The CT imaging test, which took just 15 minutes, was at an outpatient facility affiliated with the University of Wisconsin near her home and she was able to drive herself; the 90-minute colonoscopy was at the university hospital in Madison, further away, and her husband drove her. It required sedation and monitoring that aren't available at the outpatient center. By five o'clock, Ms. Rodefeld was finished and sent home.

"Patients really appreciate that one-stop prep," says Perry Pickhardt, a researcher and professor who established the university's program. Wisconsin's largest health insurers have covered virtual colonoscopy since 2004.

Standard colonoscopies are the most common procedure gastroenterologists perform. CT colonography, meanwhile, is performed by radiologists. That has led to some turf tensions between the two fields. But those tensions are now easing, as most professionals conclude that the new imaging test will increase screening rates and save lives.

Some Risks Seen

Robert S. Sandler, a gastroenterologist and professor at the University of North Carolina School of Medicine, says many people will continue to request a standard colonoscopy. That's because they will prefer a "definitive" test that can detect and remove polyps at the same time, he says. Also, virtual colonoscopies expose patients to small doses of radiation. This "isn't a big risk, but it's not zero," especially when the CT colonography is repeated every three to five years, he says.

But virtual colonoscopies all but eliminate the most serious risk of a standard colonoscopy: perforation of the bowel. The risk is small -- between one and two per thousand tests -- but it can cause severe infection and even death.

"I would never have it done again," says Margery Gould, a 69-year-old retired Los Angeles county employee, who nearly died earlier this year after a series of complications following a botched colonoscopy. Would she have a virtual colonoscopy? "Absolutely," she says, "because it's not invasive."

Unpleasant procedure becomes a little less so

Virtual screenings can allow patients to bypass invasive colonoscopies

BY HIRAN RATNAYAKE • THE NEWS JOURNAL • NOVEMBER 18, 2008



Dr. Mark Baumel is CEO of Colon Health Centers of America

John Sentman knew he needed a colorectal cancer screening. He's 56, and a colonoscopy is recommended for anyone older than 50. But even though the procedure was covered by his insurance, he continued to put it off.

"It was just the hassle of getting it," said Sentman, who lives in Mill Creek. "The whole procedure didn't sound like something I wanted to do."

Many patients avoid screenings for obvious reasons. A traditional colonoscopy involves snaking a narrow tube through the patient's large intestine, often while sedated. Preparing for the procedure is also an unpleasant experience, since the patient is required to fast and imbibe nasty solutions to cleanse the bowel.

A virtual colonoscopy is a noninvasive and cheaper alternative. But if the patient undergoing one is found to have a suspicious polyp in the intestine, he must then get a traditional colonoscopy -- and endure the same prep a second time.

Then Sentman learned of a new screening process now available in Delaware. At the Colon Health Center of Delaware in Newark, a patient can get a virtual colonoscopy and, if necessary, a traditional colonoscopy at a nearby gastroenterological practice the same day. That way the patient doesn't have to endure a second bowel prep.

"The whole idea is that if they are clean after the virtual colonoscopy, they can go home," said Dr.

Mark Baumel, CEO of Colon Health Centers of America and head of the local practice. "If they need to get a polyp removed, they can get it removed immediately."

More practices nationwide are acquiring the imaging and endoscopy capabilities needed to provide this kind of service, said Dr. Joel V. Brill, chair of the Practice Management & Economics Committee for the American Gastroenterological Association.

"Patients want convenience and they want excellence," he said. "With this, you not only get the diagnosis but you can also get the procedure if you need it."

Integrating the procedures

Gastroenterologists perform traditional colonoscopies. But it is radiologists who specialize in reading virtual colonoscopies, which range from \$500 to \$1,500 -- about half the cost of traditional colonoscopies.

"I knew that virtual colonoscopies were going to be a big disruption that could impact their work," said Baumel, former chief medical officer with Mercy Health System in Philadelphia who has consulted with gastroenterologists. "Or it could be a big benefit for them if they could just put the whole thing together. Gastroenterologists needed the solution that would be the best for them."

The solution, he said, was an integrated screening approach. Baumel opened the first Colon Health Center in Delaware, a partnership with Mid-Atlantic GI Consultants, because Blue Cross Blue Shield of Delaware is one of few health insurance plans covering virtual colonoscopies. Baumel hopes to open more centers around the region.



Kathy Garrett, CT and radiology technologist, operates the computer imaging equipment.

In Delaware, colorectal cancer was the second-leading cause of cancer-related deaths, killing 828 people between 2000 and 2004, according to the most recent statistics. Colon cancer is also one of the most treatable cancers if it's caught early. But about 40 percent of local Blue Cross members who are candidates for colorectal screenings haven't received them, said Dr. Paul Kaplan, the company's chief medical officer.

Blue Cross Blue Shield of Delaware is conducting a pilot study to see if coverage of virtual colonoscopies boosts the number of people who get screened.

"I think this integrated approach will definitely make it more acceptable to people," Kaplan said. "The prep is the hardest part, and the last thing you want to do is put more barriers in front of people."

To further appeal to patients, Colon Health Centers of America hired decorator M. Yurick Design to create an aesthetic interior that resembles a spa. In the lobby of the Colon Health Center in Newark, a trickling wall fountain is surrounded by shimmering wallpaper and dim amber lights. A 52-inch flat-screen TV occupies another wall decorated in soft pastel colors, and tropical plants dot the floors.

Same-day follow-up

Sentman went for his screening at the Colon Health Center of Delaware last month. A computed tomography machine took hundreds of images of his colon during the virtual colonoscopy. The electronic images were then immediately sent to radiologists in Ohio who examined them for anything suspicious.

Sentman said he waited just an hour before getting the results. He spent the time watching TV and surfing the Web on his laptop computer in a private booth.

When the results arrived, he was found to have a suspicious thickening of the wall of his large intestine. So, a couple hours later, that thickening was biopsied to test for cancer during a traditional colonoscopy at Mid-Atlantic GI Consultants, a half-mile away.

Each day, the center keeps two slots open for patients who may need a same-day traditional colonoscopy. So far 35 of the 250 patients who have been screened at the Colon Health Center have been sent to Mid-Atlantic GI Consultants the same day for follow up.

Sentman was glad he was able to avoid a second bowel prep. To ready himself for the screening, he had to fast for 24 hours and consume two solutions of magnesium citrate and laxative tablets and one solution of barium sulfate and iodine. Not only do the solutions taste unpleasant, but they cause frequent diarrhea which helps clean out the colon, giving radiologists and gastroenterologists a clear view.



The Colon Health Center of Delaware offers noninvasive virtual colonoscopies. If a polyp is found during the screening, the patient is sent to Mid-Atlantic GI Consultants, about a half-mile away, for a traditional colonoscopy.

"If you're trying to minimize costs with health care, how much more expensive is it going to be if someone doesn't get it done and ends up with colon cancer?" said Sentman, whose biopsy came back negative for cancer. "Then you got thousands and thousands of dollars you're going to spend. So this is a good way to reach people like myself who are leery of a colonoscopy."

Research offers validation

The U.S. Preventive Services Task Force recommends colorectal cancer screenings every 10 years for patients between the ages of 50 and 75. But it has not recommended virtual colonoscopies, concluding that the evidence is insufficient to assess the benefits and harms of such screenings.

Medicare doesn't cover virtual colonoscopies. But if that changes, insurers will likely follow suit. "If Medicare covers

it, that certainly produces pressure on the commercial insurers," said Brill, also chief medical officer of a medical management company in Phoenix.

Proponents of virtual colonoscopies say there's an increasing amount of research validating the effectiveness of the screenings. Two medical studies on the procedure were published in the September issue of the *New England Journal of Medicine*. One study found that virtual colonoscopies are as effective in detecting precancerous growths as traditional colonoscopies. The other study involved almost 1,300 patients who had tested negative for growths through virtual colonoscopies. It found that, five years later, none of those patients had developed colorectal cancer. Virtual colonoscopy has been available for roughly 15 years.

Since his experience, Sentman's aversion of colorectal cancer screenings has vanished.

"I've told several people that they ought to get it done," he said.