



Expanding the Bandwidth of Care

*Dr. Kathleen Cowling
Covenant HealthCare Chief of Staff*

When I finished my residency, the internet was just getting underway and was not the tool for medical education that it is today. Back then, learning and teaching was primarily done through face-to-face and written communications, with some “cool” audio-visual aides.

Nowadays, the bandwidth of communications has expanded exponentially thanks to the internet, which has revolutionized information access. Today, it is expected that medical students and residents will access information online while providing patient care or while using a decision tool like MD-calc to make evidence-based medical decisions. Even patients are doing research online to take a more active role in their care.

Transforming Medicine

The internet has transformed medical decision-making and hopefully improved diagnostic accuracy. Patients are better informed about what is available to them and with the CURES Act, they often have the results of their labs and imaging via MyChart before we even have the chance to discuss it with them.

All forms of communication – personal, written, digital – have become contemporaneous and instantaneous. The fallout is that patients have come to expect this instant gratification not only in their daily lives, but in their healthcare too. Waiting a few weeks to see a specialist has become so intolerable that many patients are opting for telehealth and other choices. Telehealth is a great tool, increasing access to quality care, but so is personalized, one-on-one visits with trusted providers.

On top of that, the media is rife about big telehealth deals and huge companies investing in the business of providing access to care in one way or another. So, more change is afoot. Companies like Innerbody Research, for example, are not only offering access to telehealth services, but also to expert advice and product reviews that guide smarter decisions.

Expanding Our Bandwidth

The human connection in healthcare cannot be replaced by a webpage full of information – much of which is questionable. We know

from the past three years of navigating a pandemic that misinformation purposefully provided to the masses caused more casualties.

With Americans spending nearly seven hours a day online according to Datareportal and increasingly turning to telehealth, are providers missing the boat if we do not engage patients where they spend much of their time? Are we doing a disservice by not guiding them to the right information?

Maybe it is time to expand our communications bandwidth even more, beyond what we already do. Patients need to be able to trust their providers and believe that:

- We know and care about their medical history better than anyone.
- We are the best educated regarding healthcare and the medical choices available to them.
- We are the best resource for guiding them to credible online information sources too.

Making the Digital Leap

I know all of us, to some degree, have made the digital leap in how we serve our patients – from accessing medical information online, to using Epic and communicating via portals, to doing video chats. Like our patients, we too are drivers of the internet evolution.

Going forward, though, let’s be sure that we continue to “stick with the times” and make the digital leap in how we interact with our patients and how we optimize their navigation to important medical resources.

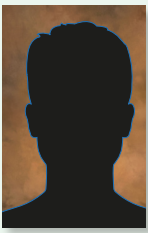
It is no longer enough to just keep up with our specialty CME, but now we must educate ourselves about various platforms and apps too. At the same time, we need to avoid losing our “personal touch” in the digital dust. Put simply, our patients deserve extraordinary care, but we must up our communications bandwidth to provide it.

Sincerely,

Dr. Kathleen Cowling

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Optimizing Lab Ordering Performance with CareSelect®

Dr. Shane Starr, Covenant HealthCare Laboratory Medical Director and
Carrie Travis, Covenant HealthCare Laboratory and Support Services Director

Getting the right test at the right time is important for patients and their care providers. Redundant testing not only slows down the turnaround time for lab operations, but consequently delays important results that help guide critical treatment plans. It also increases costs for everyone, an especially difficult situation for people on fixed incomes with high copays.

Studies show that inappropriate test ordering is one of the biggest reasons for needless repetition, with 10-25% of all hospital-performed, inpatient tests not indicated, and two-thirds of reordered tests either clinically unimportant or unnecessary¹.

Various healthcare institutions are trying to correct this problem, including Covenant HealthCare which recently decided to implement CareSelect®, a laboratory performance improvement software system.

About CareSelect®

CareSelect® is a clinical decision support tool developed by Mayo Clinic in partnership with Change Healthcare. The goal is to optimize laboratory services by creating a best practice environment that transforms labs into clinical and fiscal value centers. It runs silently alongside Epic, in the background, without provider interruption.

CareSelect® achieves this goal by:

- Continuously analyzing patient information and provider orders, using a complex algorithm and artificial intelligence (AI) to understand trends, flag redundant testing and suggest alternative testing options based on the patient's care profile.
- Aligning patient care models with up-to-date evidence-based clinical standards and with appropriate-use criteria authored by Mayo Clinic. This provides clinical insights that help guide more informed ordering decisions and appropriateness.
- Providing real-time, point-of-order intervention and education, notifying the provider of, for example, an unnecessary repetitive order, cautions about interfering substances that can affect results, better and lower-cost test options, cautions about commonly confused tests, and more.
- Offering actionable alerts only when clinically necessary, which flow smoothly within the ordering workflow.

Key Benefits

CareSelect® is proven to benefit patients, providers and healthcare institutions alike. Examples include:

- A decrease in redundant and unnecessary laboratory testing.
- An increase in more appropriate testing options via suggestions from the software's AI.

Those benefits, in turn, can result in:

- **Lower healthcare costs** for patients and healthcare systems. After turning on certain test ordering alerts:

- Riverside Hospital (341 beds) realized, within one month, a 20% drop in labs per discharge, and a 22% reduction in orders for four targeted tests.
- Carle Foundation (450 beds) saw a major drop in commonly confused tests, including a 77% drop in inappropriately ordered High-Sensitivity C-Reactive Protein tests and a 39% drop for 1,25 dihydroxy vitamin D tests.
- **A better provider experience** via:
 - Medical record streamlining, making it easier to find relevant laboratory data without sifting through the patient's chart.
 - More education and prompts during the ordering process. CareSelect® will, for instance, alert the provider that results already exist and ask if they want to continue with the order.
- **A better patient experience** via less testing, less discomfort and shorter hospital stays as appropriate diagnoses, consults and treatments are achieved more quickly and accurately.

Next Steps

As part of the Covenant Lab Utilization Committee's efforts to improve efficiency, CareSelect® was introduced to the Medical Executive Committee in July and approved for implementation. Key CareSelect® milestones are as follows:

- It was initially implemented in late August and is currently running behind the scenes to collect and analyze ordering activity.
- After 90 days, the Committee will work with medical staff to identify data-driven opportunities to improve ordering efficiencies.
- CareSelect® will officially be launched in October/November to target those opportunities.

Summary

CareSelect® is an important analysis tool to optimize the right order at the right time for patient care. Patients will benefit from fewer lab tests and providers will benefit from education about test criteria, guidelines and alternative test options.

Reducing redundant and unnecessary testing while improving patient care is tantamount to providing extraordinary care. While no single system solution can fix everything, CareSelect® promises to make a notable, positive difference.

For more information, contact Dr. Starr at 989.583.6703 (shane.starr@chs-mi.com).

FOOTNOTE: ¹Change HealthCare



Staying Alert to Cardiomyopathy in Pregnant and Post-Partum Women

Dr. Nishtha Sareen, Ascension Medical Group, Riverfront Cardiology

Heart disease is the leading cause of death in men and women, but women have higher mortality rates due to often-vague symptoms that are ignored or misdiagnosed. There is an intricate relationship between the cardiovascular system and various phases in a women’s life, including pregnancy and menopause.

According to the Registry of Pregnancy and Cardiac Disease, the highest maternal mortality (2.4%) was found in patients with cardiomyopathy (CMP). Pregnant and postpartum women in various minority groups have worse cardiovascular outcomes, even when adjusting for socioeconomic factors and comorbidities.

This article summarizes ways to reduce CMP for all women, including insights on preconception, peripartum and postpartum management, and a new potential treatment.

The Science Behind Awareness

Many studies underscore the need to stay alert to CMP in women before, during and after childbirth. For example:

- Compared with white women, black women had a higher risk of mortality, myocardial infarction, stroke, pulmonary embolism, and peripartum cardiomyopathy with the odds ratio of 1.45, 1.23, 1.57, 1.42 and 1.71, respectively.
- Subsequent pregnancies for women with previous peripartum cardiomyopathy (PPCM) have been associated with further decreases in left ventricular (LV) function, maternal death and adverse fetal outcomes. PPCM begins during the final month of pregnancy through five months after delivery.
- An international systematic review that included 93 subsequent pregnancies with persistent LV dysfunction reported, 48% experienced further LV ejection fraction (LVEF) deterioration, 49% heart failure symptoms and 16% mortality, but those rates decreased to 27%, 32% and 0% respectively among 98 patients who recovered their LV function before a subsequent pregnancy.

Pregnancy Risk Factors and Management

PPCM is most common after age 30 although it can happen at any age. It is also most common in obese patients, or those with a personal history of heart issues. Timely recognition and careful management can improve outcomes.

Treatment requires multidisciplinary collaboration between OB/GYN and cardiology specialties. Please see **Table 1** for basic PPCM management actions.

New Treatment Possibility

Bromocriptine is a newer potential treatment for consideration in addition to the established heart failure regimen. Given the evidence to support the oxidative stress–prolactin hypothesis of PPCM, bromocriptine may be a potential, FDA-approved addition to PPCM treatment. When combined with conventional HF therapy, it:

- Led to an 11.37% increase in LVEF after six months compared to conventional HF treatment only.
- Reduced mortality associated with PPCM with no thromboembolism events recorded in a study of 263 patients.
- May improve systolic and diastolic function, and NYHA functional classification.

More studies are underway to evaluate bromocriptine’s effectiveness, risk factors and side effects.

Summary

People are surprised when pregnant women have heart attacks, especially women with no existing heart conditions or comorbidities. How can this happen, they say, and what did we miss? Sometimes, it is impossible to know but often, we can prevent it.

CVD will continue to be the number one killer of women overall unless changes are made in patient management. Let us be the change we want to see for our mothers, sisters and daughters.

TABLE 1: BASIC PPCM MANAGEMENT ACTIONS		
For Patients Considering a Pregnancy	For Pregnant Patients	For Postpartum PPCM Patients
<ul style="list-style-type: none"> • Ask about any family or personal history of ischemic heart disease, CMP, arrhythmia or hypertensive disorders. • Evaluate all medications being used for current heart conditions, and possibly prescribe low-dose ASA to prevent pre-eclampsia for those with hypertension. 	<ul style="list-style-type: none"> • Carefully monitor their heart condition and adjust medications as needed. • For ischemic heart disease, assess for possible ACS, consider a coronary angiography and manage any antiplatelet therapy. • For CMP, review anticoagulation therapy for those with PPCM. • For arrhythmia, the team may need to consider ablation for acute refractory arrhythmias. 	<ul style="list-style-type: none"> • Continue to monitor and adjust medications and, for hypertension, blood pressure. • Discuss counseling when future pregnancies are being considered, and the need to manage the heart disease as early as possible. • Discuss how to reduce future cardiovascular events. • Discuss contraception options.

For more information, contact Dr. Sareen at 989.754.3000 or nishtha.sareen@ascension.org.



Is It Just A Hemorrhoid?

Dr. Jacquelyn Charbel, Colon & Rectal Surgery, Covenant Medical Group

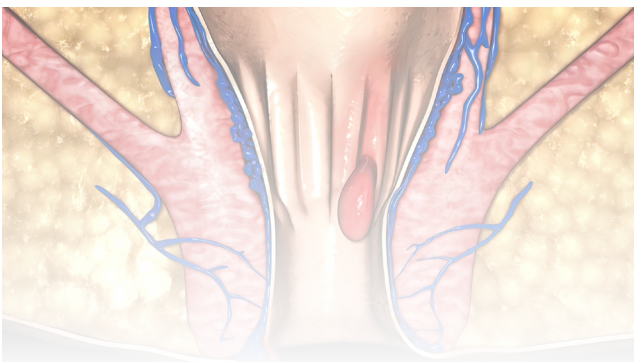
It is not uncommon to notice a lump that seems to have formed over a short amount of time in the rectal area. This can be a soft lump (or lumps) around the anus or a harder lump. Sometimes there may be associated bleeding; other times there is no blood and simply just a lump. Many people believe *“It’s just a hemorrhoid; no big deal!”*

That may be a true assumption. Sometimes, though, it *IS* a big deal and should be examined further. It could also be an infection or anal abscess, or it could be a sign of cancer. In recent years, we have seen a national increase in the incidence of colorectal and anal cancer, particularly in those under age 50 – underscoring the need for careful attention.

Causes for Rectal Abnormalities

Although hemorrhoid enlargement is a frequent cause of rectal lumps or bumps, it is not the only potential cause. There are other reasons that a change in the rectal area can occur, such as rectal cancer (adenocarcinoma), anal cancer (squamous cell carcinoma), melanoma, abscess, or sebaceous cyst enlargement to name a few.

Table 1 describes a few common conditions, symptoms and diagnosis/treatment. Sometimes the lumps may be painful, in other instances the lump may be painless. Itching may or may not occur.



Further Evaluation

No matter the symptoms associated with the lump or any change in anal anatomy, an evaluation by a specialist is warranted. Too many times there have been patients of all ages who present with what they believed to be a hemorrhoid, but it turned out to be something else requiring treatment. The one belief these patients had in common was that they all believed it would just “go away.”

An anorectal examination and quite often, a colonoscopy, are appropriate next steps in the workup to ensure an accurate diagnosis and treatment.

Infections are often treated with surgical drainage. Chronic hemorrhoid problems may need to be corrected with surgery, as would pre-cancerous polyps. Anal cancers may be treated with a combination of chemotherapy and radiation.

Be a Little Paranoid

Too often, colorectal specialists see conditions that could have been prevented. It is okay for providers to be a little paranoid during routine or other exams, asking patients if they have noticed any changes in their anal region – lumps, bumps, pain or whatever. Quite often, patients won’t bring it up out of embarrassment.

As always, it is also important to remind patients to get their preventive colorectal screens and to practice good lifestyle habits too.

The bottom line is that early and accurate diagnosis is the best way to facilitate timely treatment for optimal outcomes no matter the diagnosis.

For more information, contact Dr. Charbel at 989.583.7460 or jacquelyn.charbel@chs-mi.com.

TABLE 1: OVERVIEW OF ANAL CONDITIONS

CONDITION	POSSIBLE SYMPTOMS	DIAGNOSIS
Hemorrhoids	<ul style="list-style-type: none"> Lumps and bumps around the anal area Bright red blood on toilet paper or in toilet after a bowel movement (especially when straining) Rectal pain, pressure, burning, and itching 	<ul style="list-style-type: none"> Rectal exam if they don’t go away in a few days with over-the-counter treatments and sitz baths
“Something Else”	<ul style="list-style-type: none"> Pelvic pain and fever Fullness around anal area Abnormal anal discharge Narrow stools/changes in bowel movements Fecal incontinence Swollen lymph nodes in groin or anal area 	<ul style="list-style-type: none"> Unusual findings followed with a biopsy Anorectal exam Colonoscopy



e-Tools Update: Helping You Improve Efficiency and Communications

Dr. Aaron Smith, Covenant HealthCare Chief Medical Informatics Officer and Frank Fear, Covenant HealthCare Vice President and Chief Information Officer

Despite every provider’s passion to help the sick and injured, we are all feeling the pace of change both professionally and personally – a situation exacerbated by supply chain, mental health and workforce availability issues related to Covid-19.

As we transition from surviving the pandemic to **thriving** in today’s world, Covenant HealthCare is focused on meeting the evolving needs of providers and patients alike.

This includes giving providers reliable access to e-tools that help them efficiently deliver high-quality care to patients while decreasing the cognitive burden and delays that lead to job frustration and burn-out. These same tools also improve the accuracy of patient data and decision-making, thus enhancing patient outcomes too.

Below is an update on a few e-tools already driving improvements in efficiency and communications. The December issue will highlight e-tools that drive quality as well, including a new e-Smart app focused on improving information accuracy.

Reducing Pop-Up Alerts

Epic has many forms of clinical decision support, ranging from medication warnings to Best Practice Advisories. However, ever-increasing numbers of pop-up alerts lead to fatigue and the potential to overlook a critical warning alert. The Over-ride and Near Miss Committee routinely evaluates these warnings and adjusts triggers to remove alerts that are marginal and clinically insignificant. Areas of progress include:

- An overall 33% reduction in alerts in 2022 versus the same period in 2021.
- An 88% reduction of nuisance aspirin alerts.
- A decrease in drug food alerts from 400,000 in 2021 to 2,000 in 2022.

This places us in the top quartile performance for BPA alerts across the entire Epic community.

Optimizing Problem Lists

Covenant has been running Epic for 15 years, resulting in a huge database of critical patient information. The ability to efficiently pull this data from a patient’s chart is the foundation of high-quality care. The information itself also forms the basis for all of Epic’s clinical decision support tools.

That said, a patient’s Problem List can become extensive and unwieldy over time. We can all recall patients with “15 active problems” displayed in no particular order. Recent changes, however, are addressing this problem. To summarize:

- Problem Lists are now categorized in more intuitive ways, viewable by organ systems or medical specialties.
- This enables quicker reviews and mitigates the chance of overlooking a key problem buried in a long list of conditions.

- Future enhancements include leveraging this technology to sort and present relative testing results in a more digestible format.

In addition, a new application called eSmart was launched in July to address the issue of outdated and duplicative Problem List items. Key benefits include:

- Improved Clinical Decision support.
- Improved documentation/data accuracy and coding/billing support.

Improving Secure Chat Communications

Epic’s Secure Chat, introduced in 2021, allows providers to communicate, connect and collaborate more efficiently in the context of a patient’s chart.

Many problems can be addressed with a brief chat-message exchange, allowing providers to exchange clinical information and images more productively and in a HIPAA-compliant manner. They can also save time by avoiding “on-hold” wait times for page calls.

Providers can access Secure Chat on their phones by scanning a QR code below for easy setup. More improvements are coming to increase Secure Chat’s effectiveness, such as:

- **In November:** Receiving messages as part of a group chat, even when marked unavailable, will no longer occur.
- **Coming Soon:** An On-Call Finder to help providers find the responsible provider covering for a particular group or on-call specialty.



Epic Haiku iPhone or Android Mobile Phone



Epic Canto iPad

Summary

Having the right tools to efficiently deliver high-quality care while enhancing your own work-life balance is essential to job satisfaction. You can expect to see more e-tool improvements in the future. Please stay tuned to the December issue for details about e-tools that drive quality, such as the new eSmart app to increase information accuracy.

For more information, contact Dr. Smith at 989.583.6256 or aaron.smith@chs-mi.com.



Reversing the Growing Childhood Mental Health Crisis

Dr. Kai Anderson, Associate Director, Psychiatry Residency, CMU College of Medicine

The United States has seen a 30% rise in mental health issues in children since the onset of the COVID-19 pandemic.

These children have increased rates of suicidal ideation, self-harming behaviors, substance abuse and eating disorders. They've experienced multiple stressors during the pandemic, from the loss of loved ones and social interactions to the increase in racial tensions, hate crimes and violence, to a surge of online harassment and bullying.

All of this adds up to a growing number of children with trauma-related illness and the mounting need for mental health services – all during an unparalleled shortage of trained providers.

Now, more than ever, the medical community must work together to identify children at risk, make referrals to appropriate experts, and give children and their families the tools to build resilience.

How Early Support Mitigates Risk

Children are particularly vulnerable to the impact of adverse childhood events (ACEs), according to a major CDC-Kaiser ACE study published in the 1990s. This can put them at a considerable disadvantage, compromising their brains, immune systems, cognitive functioning and critical thinking (see Figure 1). Other studies found that:

- Nearly two-thirds of children had experienced or witnessed violence, crime, or abuse in the past year.
- More than a third had endured a physical assault.

Toxic stress increases the risk for mental and physical illness, angry behaviors, criminal records, early death and intergenerational trauma.

Early support is proven to help mitigate those risks. Connections with caring adults and mental health providers help children cope with ACEs and become more resilient. This, in turn, can lead to healthier, self-supporting individuals, families and communities.

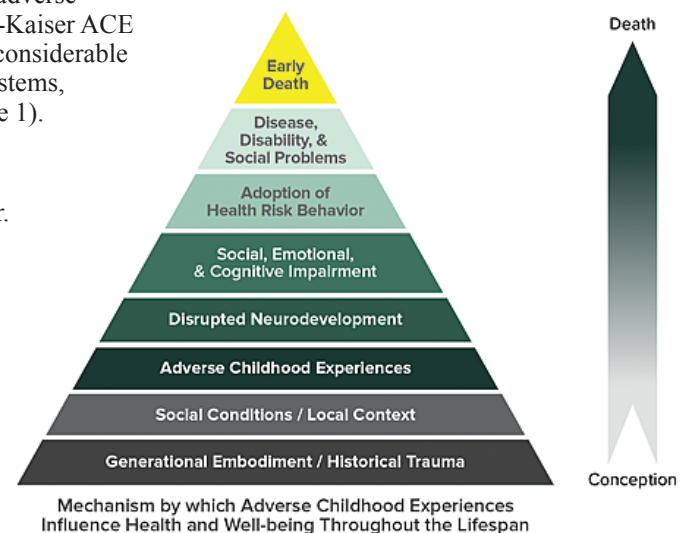


FIGURE 1

SOURCE: CDC

What Providers Can Do

Healthcare providers are in a unique position to screen for ACEs and coordinate additional care. If a child is experiencing problems, a few gentle, open-ended questions can open the door to productive conversations. Key red flags include:

- Social withdrawal
- Major changes in behavior, e.g., a quiet child becoming irritable or aggressive or a gregarious child becoming withdrawn
- Academic issues
- Suspected substance abuse
- Anxiety or hypervigilance

Referrals to support systems that range from mental health counselling to educational programs may be appropriate. See Table 1 for useful physician resources.

TABLE 1: PHYSICIAN RESOURCES

ACEs Prevention: <https://blog.pcc.com/what-are-aces-6-resources-for-physicians-to-care-for-and-prevent-youth-trauma>

Michigan ACE Initiative: <https://www.miace.org/>

NEAR: https://www.michigan.gov/mdhhs/-/media/Project/Websites/mdhhs/Folder50/Folder11/NEAR_Collaborative_Annual_Report_September_2021.pdf?rev=8569ea1fa7ac4bf182321e568d9ff80a

CDC Grant: <https://www.pacesconnection.com/blog/highlights-from-michigan-one-of-four-states-to-receive-cdc-preventing-aces-project-funding>

How the State is Helping

Michigan, as with other states, is implementing programs to reduce and prevent ACEs. It established, for example:

- The Michigan ACE Initiative in 2016 to accelerate ACE awareness, and to educate state and community leaders about ACE impacts and prevention strategies.
- The complementary NEAR Collaborative in 2018, which views trauma holistically through the lens of Neuroscience, Epigenetics and Adverse childhood experiences while providing critical tools to promote Resilience.

This combined approach:

- Builds a common understanding across the state to tackle ACEs more effectively.
- Promotes proven solutions to prevent and treat ACEs, trauma and toxic stress.
- Aligns systems, policies and programs to support resilience.
- Trains Master Trainers across state agencies and academia about NEAR, ACEs and proven solutions.

Thanks to these efforts, Michigan was one of four states to receive a \$1.5 million grant in 2020 from the CDC to further fund ACE prevention. It was awarded to the Michigan Public Health Institute which is partnering with the Michigan ACE Initiative, Central Michigan University, and other groups to help fund programs and policies.

See Table 1 for more information about the actions above.

Closing Note

That old saying “It takes a village” is perfectly true when it comes to addressing childhood trauma and putting children on a positive path forward, especially in today’s challenging environment. Our children are our future, and we all have a vested interest in helping them overcome adversity in ways that help them – and our communities – succeed.

For more information, contact Dr. Anderson at 989.790.5990 or kai.anderson@cmich.edu.



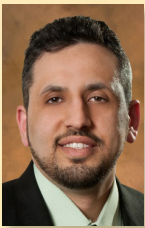
The Covenant Chart is published four times a year. Send submissions to: Marcus Atkins, Physician Liaison, at marcus.atkins@chs-mi.com or call 989.284.2555 (cell) or 989.583.4051 (office).

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The Chart Spotlights

Congratulations Providers of the Month!

Your patients and colleagues are saying extraordinary things...



JULY 2022

Dr. Jihad Jbara, Family Medicine

"Dr. Jbara has a sincere and gentle bedside manner. He is a gifted listener and puts his patients at ease, assuring they are both heard and seen."

"Dr. Jbara gets the job done efficiently and supports the team. He is a true asset to the hospitalist service and the Emergency Care Center!"

"Dr. Jbara went above and beyond to help us answer a query during one of his partner's absences. There was no hesitation."



AUGUST 2022

Dr. Mary Arvanitis, Emergency Medicine

"Dr. Arvanitis is an excellent Emergency Room doctor! She took the extra time to keep us informed and well-cared for."

"Dr. Arvanitis listened to all my concerns and made me feel safe."

"Dr. Arvanitis was excellent, very thorough and informative."



SEPTEMBER 2022

Dr. Jorge Reguero-Hernandez, Colon and Rectal Surgery

"Dr. Hernandez was very helpful; he explained what was going on in my case and how he can fix it. He was very good about answering my questions too."

"Dr. Hernandez is the best doctor I have been to in many years. He is very professional and truly cared about my issue."

"Dr. Hernandez has a great rapport with the office staff, and we are very pleased with him. He is easy to talk to and compassionate."