Illuminating Better Health Care
A new specialist plus new technology take gastroenterology to a higher level.

Healthy Economics
New CFO Taylor Walker discusses economic impact and the benefits of the integration agreement.

Nothing To Laugh At
Laughing gas offers a serious benefit to moms for a better birthing experience.

Investing In The Future
Marshall Medical thinks young with a wide range of school and community programs.
On July 18, Marshall Medical Centers announced the news about an integration agreement with Huntsville Hospital that will be effective October 1. From all accounts, this news has been well-received throughout the community, and it has been affirming to hear friends and neighbors talk about how they value the availability of local healthcare and the delivery of services by people they know and trust.

Up until October 1, Marshall Medical has been a community-owned hospital system. After October 1, Marshall Medical…is still a community-owned hospital system. It’s business as usual.

In fact, you might even say it’s business-that-will-be-better-than-ever because of the financial security blanket that’s a key component of the agreement. As the financial trends throughout healthcare continue to chip away at the foundation of financially strong systems – like Marshall Medical – we’ll face the future with another community-owned health system whose core values are the same as ours: Quality healthcare that’s convenient and close to home.

So, in this edition of Health Connections we’ll share stories with you about a couple of Marshall Medical employees who represent the future of healthcare. You’ll also read about the continued investment in technology, and our commitment to the community in other ways that represent the many reasons Marshall Medical is your one choice for quality healthcare.

Claudette H. DeMuth
Director of Marketing and Communications
Marshall Medical Centers
Childbirth is no laughing matter, but expecting moms may have a more pleasant delivery with Marshall Medical Centers’ new laughing gas system for labor pain.

Women who choose to use laughing gas inhale a mix of 50% nitrous oxide and 50% oxygen they control themselves with a mask. It can be used by a woman having natural birth to help her relax and ease the pain. It can also help women who use pain medication by easing the discomfort from the placement of an epidural.

The Foundation for Marshall Medical Centers invested $10,000 in the purchase of two Nitrous Delivery Systems for Marshall North and South’s Labor and Delivery Units after Dr. Megan Zeien from Medical Centers OB/GYN North recommended it.

“Each year proceeds from our Women’s Health Luncheon are used to purchase something for our Labor & Delivery departments,” said Andrea Oliver, director of the Foundation for Marshall Medical Centers. “This past year we were thrilled to raise enough money for a Nitronox system for each facility. It’s really meaningful for the women who participate in that event to give back to women and children at our hospitals.”

Dr. Andreana Johnson, of Medical Centers OB/GYN at Marshall South, said several of her delivering mothers have chosen to use laughing gas. She said they have given positive reviews of the new option because it helps with the pain but they are still able to get up and move around.

“Moms like it because they feel in control of the situation and in control of their labor experience,” Johnson said. “Also, it doesn’t harm the baby.”

Nitrous oxide helps a laboring mother relax and better cope with labor pains, though it doesn’t actually block any pain sensations in the body. It provides a relaxing effect on the body that helps distract from the pain. It can make people feel like they are “floaty” or can induce giggles — hence the name.

Leanna Dilbeck, head nurse of Labor & Delivery at Marshall South, said laughing gas is a good option for mothers who do not want to use opioids and narcotics, or if they are delivering too quickly to get an epidural.

“People are moving toward a more holistic, natural approach,” Dilbeck said.

Laughing gas has been used for pain relief since the 1800s. Typically it is associated with dental procedures, but its use during labor is different in that it isn’t a continuous blast. Rather, it’s completely controlled by the laboring woman and is only used in temporary bursts when she breathes in the air. According to the manufacturer, the system is a safe and proven method for mother and baby. There is no chance of over-sedation because the mask will drop away and the patient will begin to breathe room air. The patient remains alert, conscious and able to follow instructions. The inhaled analgesic takes effect quickly, has few side effects and wears off quickly.

Nitrous oxide fell out of popularity in U.S. maternity wards after the epidural was introduced in the 1970s, although it was still used in other countries. It has made a comeback since the FDA approved new nitrous oxide systems for labor, and more hospitals across the country are including laughing gas in their list of available pain relief options for women.
Taylor Walker had no plans for a career in healthcare when he graduated from Guntersville High School in 2004 and headed to college. Instead, he planned to build things.

He pursued a civil engineering major at the University of Alabama and through its cooperative education program, Walker worked for Hoar Construction in Birmingham for a semester, went to school the next semester then returned to the construction site. Walker was about halfway through his major when he decided to change course.

“I decided I no longer wanted to pursue an engineering degree and I thought a finance degree would offer many opportunities,” Walker said.

Instead, he switched to business school and once he had his finance degree, Hoar Construction offered him an assistant project manager position on a $105 million hospital the company was building near Austin, Texas. After completion, Walker served as financial analyst and assistant controller before accepting a position as controller at a larger hospital in San Antonio. In 2015, he was lured back to Alabama to serve as assistant chief financial officer at Crestwood Medical Center in Huntsville. He was there when he heard Marshall Medical’s long time CFO, Kathy Nelson, was retiring after 30 years, and he couldn’t resist the chance to come home to Guntersville.

“Of course I was interested,” he said. “Two and a half years in a for-profit, publicly traded company is a challenging environment. I learned a lot and I think it positioned me well to be successful here and to bring new things to the table.”

Walker, 33, started the transition in May to become Marshall Medical’s CFO. He is excited to be in the position and is looking forward to working with Huntsville Hospital Health System after the recent announcement of an integration agreement.

“It’s going to be a huge benefit to the organization and the community,” he said. “Marshall Medical is in a unique situation with this agreement. We’re in a very sound financial position and a very strong cash position. This was a strategic decision to ensure the future of healthcare in Marshall County.”

Walker emphasized the two key takeaways of the strategic integration agreement call for all current services to be maintained, plus a capital commitment of $110 million over 10 years.

“We have big plans in the works for those capital funds,” he said. “This will help with physician recruitment. We will have a pool of resources to attract the brightest healthcare minds in the business.”

Walker predicts the agreement between the two health systems will strengthen the economic impact of Marshall Medical. Huntsville Hospital Health System is the third largest publicly-owned hospital system in the country with more than 13,000 employees and an economic impact that exceeds $1 billion. The two community-owned hospitals have been partners for years in contracting for various services, combining purchasing and co-owning a laundry and medical equipment company, among other things.

The ripple effect of having two hospitals and a cancer center in a rural county is tremendous, extending far beyond providing...
high-quality health care. Walker shared numbers to illustrate just how large the impact is:

• Based on financial projections for 2018, the estimated annual economic impact to the community from Marshall Medical is $315 million.

• Marshall Medical’s employment base of 1,481 generates a total estimate of 3,064 jobs in the community.

• The annual impact of total labor income is $109 million, and $139 million with benefits included.

“That is $109 million that all of these people reinvest in the community,” he said. “Those reinvestments create additional jobs for home builders, real estate agents, electricians, car dealerships, daycare workers and many more. We also provide a large amount of charity care each year for patients that are unable to accommodate their medical bills. We are truly here to provide comprehensive care for the entire population.”

**Strong financial position is key**

“I had high expectations coming in and I will say that my expectations were exceeded,” Walker continued. “Marshall Medical maintains a sound financial position and a strong cash position. Those two items are a must in order to be able to invest in the newest equipment, services and facility upgrades.”

Walker commends the Marshall Health Care Authority Board and CEO Gary Gore, along with administrators Cheryl Hays and John Anderson, and certainly outgoing CFO Kathy Nelson, for that financial stability.

Work life aside, Walker said he’s especially happy to return to life on the lake. He’s a huge fan of wakeboarding and hits the water any time he can. Another hobby is grilling, which delights his parents, Tony and Penny Walker, who usually get to enjoy his culinary efforts. In addition to enjoying hunting, hitting the gym and, especially, Alabama football, Walker will earn an Executive MBA from the University of North Alabama in December.

“This was a long-term move for me. I’m very excited and honored to be here. I’m thankful for the faith Mr. Gore and the team have placed in me.”

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**Marshall Medical also supports community’s economic health**

Hospitals are often one of the largest employers in rural communities, if not the largest. Such is the case in Marshall County. With almost 1,500 employees Marshall Medical is the largest, non-poultry employer in the county, with an economic impact that makes the local healthcare system a significant driver of the local economy.

The impact of hospital system expenditures locally, as well as the expenditures of healthcare employees, creates a well-documented multiplier effect that boosts other industry and commerce throughout the area. The recycling of local dollars and income is seen through expenditures on rent and house payments, groceries, automobiles, clothing, housewares, real estate, taxes and more. This multiplier effect creates new job opportunities throughout the county way beyond the hospital system’s direct employee base. The impact totals in the chart below reflect a standard economic factoring calculation ranging from 1.7 to 2.1 depending on the category, and documents the tremendous local economic impact.

Supporting the health of Marshall County and surrounding areas is Job One for Marshall Medical, but helping the local economy stay healthy is another key benefit of your community-owned healthcare system.

**Economic Impact**

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**Total Employment**

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<td>Part time &amp; Other jobs</td>
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**Total Labor Income excluding Benefits**

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**Total Labor Income including Benefits**

<table>
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<tbody>
<tr>
<td>Total Labor Income including Benefits</td>
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Wakeboarding was a draw when Walker considered a move back home.
Gastroenterologist Dr. Benjamin Shepard offers expertise that was not previously available locally.
A physician specializing in gastroenterology with training in cancer treatment is the latest addition to the Marshall Medical team of doctors providing world-class medical care close to home.

Dr. Benjamin Shepard joined Medical Specialists of North Alabama in July. He will practice gastroenterology at their Marshall South location with Dr. Winter Wilson, Dr. Jeffrey S. Barton and Dr. Allen Goetsch. In addition to seeing patients in that practice, Dr. Shepard will bring his background in cancer care to assist oncologists at Marshall Cancer Care Center in treating gastrointestinal cancer, which include cancers of the colon, bile duct, esophagus, liver, pancreas, peritoneal cavity, rectum, small intestine and stomach.

Rare specialty combination

Dr. Shepard has extensive training with Cancer Treatment Centers of America in Tulsa, Oklahoma. Because of its location, he was fortunate to have the opportunity to do a fellowship in cancer care while he was studying at Oklahoma State University, creating a rare specialty combination.

He plans to work with Marshall Cancer Care oncologists, Dr. Gideon Ewing and Dr. Jonathan Storey, along with pathologist Dr. James Lee, to improve early diagnosis and treatment of gastrointestinal cancer. As a member of the staff of Medical Specialists of North Alabama, Dr. Shepard plans to work as a team with patients, their family doctor and oncologist.

“I like to stay involved with the patient throughout their treatment,” he said.

New technology brings big benefits

Thanks to significant investment by Marshall Medical, Dr. Shepard brings new techniques and equipment to the area, including endoscopic ultrasound and ERCP. Endoscopic ultrasound uses an endoscope with an integrated ultrasound probe to create detailed pictures of internal organs and structures.

“Using this probe I’m actually looking outside of the stomach and outside of the intestine,” he said. “It’s the gold standard for staging esophageal cancers, rectal cancers and pancreatic cancers.”

Also, needle biopsies can be done through the scope. A needle can be passed through the scope while positioned in the esophagus, the stomach, or small intestine to biopsy nearby structures. This provides a way to biopsy things relatively non-invasively, that can otherwise be quite difficult to reach.

“This technology is totally new to this facility,” said Dr. Shepard, who used it during in his first two weeks in Boaz. “The hospital made a significant investment for this.”

Also new is ERCP, a technique used to access the bile ducts and pancreatic ducts. The procedure is done through a scope in the small intestine.

“It’s useful for retrieving gallstones out of the bile duct,” he said. “Also, it can help with strictures or narrowing of the bile duct, often caused by pancreatic or bile duct cancers. I can place stents in the duct to relieve jaundice, which can often allow chemotherapy to continue after a duct has become obstructed.”

Training ensures patient comfort

Having trained in cancer care and seeing patients as part of an oncology team has the added benefit of making Dr. Shepard more at ease with the disease than most physicians.

“Because of the impact on people’s lives, cancer is a major source of stress for physicians,” he said. “It’s so important to be comfortable with cancer care. It brings comfort to the family.”

As a gastroenterologist, Dr. Shepard’s main goal is to improve access to colonoscopy screening in order to facilitate early detection or prevention of cancer.

“It’s our best opportunity,” he said.

People who are uneasy about having a colonoscopy should realize any complication is rare. The worst part of the procedure is the diarrhea caused by the preparation the night before, but the actual exam is typically a breeze and well-tolerated, he said.

Working with oncologists at Marshall Cancer Care Center will be a major focus for Dr. Shepard, leveraging new technology to improve early diagnosis and treatment of gastrointestinal cancer.
And Dr. Shepard is willing to try to help patients get over their fear, or, if possible, suggest an alternative screening modality. There's also a very good side to having a colonoscopy. Seventy-five percent of those screened have no polyps, meaning they are good for the next 10 years.

Statistics show colonoscopies turn up pre-cancerous polyps in 30% of men and 20% of women—which averages to about 1 in 4 patients. The hope is by performing more colonoscopies and finding these polyps early the rate of cancer being found will decrease over time.

Dr. Shepard, 36, was born in northeast Tennessee and grew up in Georgia, becoming a big Bulldog fan. He went back to Tennessee for college and attended the DeBusk College of Osteopathic Medicine at Lincoln Memorial University in Harrogate. He completed his residency in the department of internal medicine at Oklahoma State University in Tulsa. Dr. Shepard also served as a member of the internal medicine teaching faculty at Oklahoma State for a year between residency and fellowships.

Dr. Shepard and his wife, Jennifer, were students at East Tennessee State University at the same time but they didn't meet there. The romance started as a long-term friendship when they met at their part-time jobs at Home Depot. They began dating during his first year of medical school, and married just before moving to Tulsa together for his residency. She left her successful marketing career to stay home with the couple's two toddlers.

The natural beauty in North Alabama and Marshall County helped draw the family to the area. It didn't hurt that Dr. Shepard loves bass fishing. They live in Guntersville.

“We decided to take a look and fell in love with this place,” he said. “We've been eagerly awaiting getting here for nearly two years.”

Dr. Shepard with staff members (L-R) Maegan Justice, RN; Tonya Cornett, RN; Brooke Higgins, RN; and Courtney Wright, RN (in back).
Disaster readiness is no accident

Disaster response involves many different community resources—from police and fire to medical providers, transportation support and emergency management officials. As the epicenter of medical care for the injured, hospitals play a crucial role in planning how to react in time of natural disasters and large-scale emergencies.

Testing those plans is essential in order to know whether they are adequate. Hospital drills are essential components to ensure that health professionals are prepared to face emergencies and disasters.

“While there is significant time spent on these training activities it is crucial that Marshall Medical is prepared to respond to a wide range of situations and key to that preparedness is staff understanding their roles and being able to perform in adverse conditions,” said Bill Smith, facilities and accreditation safety officer for Marshall Medical. “Without this training and time spent in practice we could not be sure of our readiness.”

The Joint Commission requires hospitals to activate their Emergency Operations Plan twice a year, and at least one should include participation in a community-wide exercise.

Marshall Medical has for years conducted drills for severe weather and for the emergency evacuation of patients, which would have to include a means to transport them as well as finding available beds at the planned destination. Measures that have been put in place as a result of those drills include:

- Medical staffs being trained to shelter in place during severe weather. Nurses, doctors, food service, housekeeping and maintenance staffs know their presence is mandatory during an emergency.
- Staff members sleep on air mattresses and cots. They are told to bring towels, toiletries and snacks from home so they are not consuming hospital resources.
- Both Marshall North and South have back-up power sources and fuel supply for at least three days, and likely can last much longer.
- Marshall Medical owns two 4-wheel drive vehicles that are stored at the Marshall County Emergency Management Agency for essential staff transportation or other emergency use.

“Go ahead and prepare for the worst and hope for the best,” said Anita McBurnett, director of the local EMA, which works closely with Marshall Medical in emergencies. “That should be our game plan.”

Different kinds of emergencies occurring in recent years have caused unique types of training to become necessary. Shootings in schools, hospitals and other public places have led to Active Shooter training being required for all Marshall Medical employees.

The opioid crisis has generated its own need for specific training. Local police departments have asked Marshall Medical to train officers to use Narcan, a nasal spray that reverses the effects of opioid overdose. Narcan is not a dangerous medicine, but proper training is required by law.

Marshall Medical staff shown during the “Cold Mountain” emergency drill which tested the hospitals’ plans for a paralyzing snow and ice event.
Caring for local youth, from diapers to diplomas

Marshall Medical embraces community partnerships and invests in local education through programs like the ones below. Hospital leadership believes a community’s investment in education is an investment in its future.

The Marshall County Youth Leadership program encourages high school students to prepare for the professional world by learning leadership skills from communication and teamwork to self-esteem and values. MCYL is operated by the Marshall County Leadership Alumni Association with support from Marshall Medical and Citizen’s Bank & Trust.

Project SEARCH is a program that partners with Marshall Medical North and South to place young people with learning disabilities in internships. Ten interns have been hired to work for Marshall Medical since the hospitals started participating in Project SEARCH in the 2015-16 school year.

SmartStart brings puberty education to hundreds of fifth grade boys and girls in schools across Marshall County. Medical doctors offer frank information and advice to pre-teens about why their bodies are changing and how to manage emotions during this challenging time.

HOSA-Future Health Professionals - Marshall Medical awards scholarships every spring to one HOSA (Health Occupations Students of America) student from each participating high school to help pay costs of attending national competition.

Marshall Sports Medicine - Certified Athletic Trainers employed by Marshall Medical work on high school campuses and at Snead State Community College in Marshall County to provide young athletes with consistent, quality care related to their sports activities. The education and experience of the TherapyPlus athletic training team ensures the community is getting the highest level of service available in this area.
A special thanks to our Partners in Healthcare Philanthropy for taking local healthcare to the next level.

From 4k surgical systems in our operating rooms to the Varian Linear Accelerator at the Marshall Cancer Care Center, the Foundation for Marshall Medical Centers supports dozens of projects and technology enhancements across Marshall Health System.

Our mission is to provide world-class healthcare with a personal touch to everyone in the community, and these partnerships are critical to our success.

Your donation benefits the life-saving work done at Marshall Medical Centers every day. We applaud and appreciate your support and commitment to our mission!

To join hands with us as a future Partner in Healthcare Philanthropy, please contact us at foundation@mmcenters.com or 256-571-8026.
Marshall Medical delivers comprehensive, quality healthcare services close to home. For more details visit mmcenters.com.