

Mark Schmeltz, DO

At the Helm of
Beacon Home Care



PHYSICIAN

QUARTERLY

A
Bundled
Payment
Primer

3

COVER STORY:
At the Helm
of Beacon
Home Care

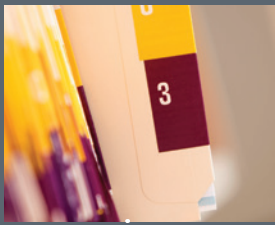
6

Does
Who
Really
Rock

8

Mohs Micrographic
Surgery for
Non-melanoma
Skin Cancer

12



EDITORIAL BOARD

Ken Elek, MD, Faculty,
Memorial Family Medicine Residency Program

Scott Eshowsky, MD, Chief Medical
Information Officer, Beacon Health System

Shelly Harkins, MD, Chief Medical
Officer, Beacon Health System

Vince Henderson, MD, President,
Beacon Medical Group

Genevieve Lankowicz, MD, CPE, Vice President,
Medical Staff Affairs, Elkhart General Hospital

Dale Patterson, MD, Director, Memorial Family
Medicine Residency Program

Cheryl Wibbens, MD, Vice President, Medical
Staff Affairs, Memorial Hospital

Physician Quarterly

is published by Beacon Health System
to connect and educate physicians
and health care professionals in
support of clinical integration, graceful
patient transitions and improved
quality and safety.

Contact Us

Do you have a story idea? Contact us at
MScroope@BeaconHealthSystem.org
or call 574.647.3234.

TABLE OF CONTENTS

3 A Bundled Payment Primer

6 At the Helm of
Beacon Home Care

8 Docs Who Really Rock

10 Beacon Bulletin

11 Continuing Medical Education
Welcome, New Docs

12 Dermatology Update:
Mohs Micrographic Surgery for
Non-melanoma Skin Cancer

13 Advanced Cancer Treatments
at Elkhart General Hospital:
HDR Brachytherapy and
Radioembolization

14 Schwartz Rounds Foster Healing
Among Physicians, Nurses &
Support Staff

15 CMS Observes Local Collaboration
to Learn Best Practices

16 Elkhart General on the Road to
Trauma Center Accreditation

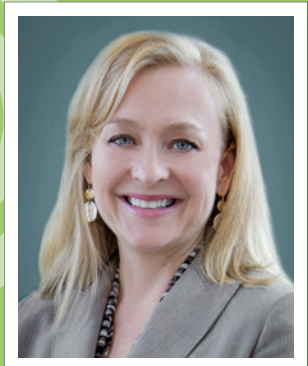
17 Elkhart General Surgery
Center Opens

18 Medical Milestone for Memorial
Hospital: First Hospital in Region
to Implant MRI-Compatible
Cardioverter Defibrillator

19 Case Study: Delayed Delivery of a
Twin Pregnancy for 76 Days

A Bundled Payment Primer

By Shelly Harkins, MD, Chief Medical Officer, Beacon Health System



Shelly Harkins, MD

I've received several questions about the issue of bundled payments. What does it mean? How will it affect physicians, specifically? I've outlined some of my thoughts about where we stand in regard to bundled payments at Beacon Health System and where we're likely to be headed.

To help untangle some of the acronyms, I've included a key of the terminology commonly used when talking about bundled payments and reimbursement issues.

ACA – Affordable Care Act

BPCI – Bundled Payment Care Improvement Initiative

CJR – Comprehensive Care for Joint Replacement bundle

CMS – Centers for Medicare & Medicaid Services

DRG – Diagnosis related group

What is a bundled payment?

A bundled payment is a single lump sum reimbursement for a bundle of service. It's a method of reimbursement that drives quality and cost efficiency. It seeks higher quality at a lower cost. So rather than billing for every piece of a care episode separately as we do under fee-for-service models, we are reimbursed a predetermined amount based on a diagnosis. This incentivizes value over volume.

Beacon hospitals have been receiving lump sum DRG-based payments for years now, right? So why the flurry of activity and focus now?

You're right. We have become accustomed to single diagnosis-based payments from CMS for most of our hospitalized patients. And you've witnessed the host of changes within our hospitals over the last few years to ensure we are delivering high quality and containing cost. But the concept of bundled payments has now been expanded to cover services 90 days after discharge and there is now a risk of having to pay back CMS, or recoup, if we don't meet value targets. So this is distinctly different and deserves new attention and focus.

Where did the idea come from and why did we decide to participate?

Along with the Affordable Care Act in 2010, CMS developed a Center of Innovation to develop creative models of reimbursement and test them out. The Bundled Payment Care Improvement Initiative, or BPCI, is one of those creative ideas. The premise is that hospitals would voluntarily participate by selecting any of 48 diagnoses they preferred and agreeing to take the recoupment risk to help CMS determine effectiveness of this new model. Since there is also the possibility of getting an additional payment from CMS for meeting or exceeding value targets, hospitals were incentivized to participate. Beacon has proudly selected Stroke at both hospitals. And at Elkhart General, we selected Total Joint Replacements as well. The selection of these diagnoses came with a great deal of discernment. It was



based on a variety of factors including sufficient volume, current state of processes, potential impact and resources available. While we didn't have to participate, Beacon intends to be instrumental in guiding the changes in our nation's health care delivery system and to stay on the leading edge of innovation. And because delivering value is our mission, we are proud to embrace the change.

So I get that we selected Stroke and Joints at Elkhart General and only Stroke at Memorial. But I keep hearing we are going to be in the "Joints Bundle at Memorial." What's that about?

This is a great question! Right about the time we were submitting our applications for participation and gearing up for the voluntary BPCI program, CMS announced that it would be mandating a Comprehensive Care for Joint Replacement bundle (CJR) in 75 geographic areas around the country. This is noted by CMS to be distinctly different from the voluntary program. Considering it's mandated, it is fairly obvious this is different, isn't it? Joint replacements are one of the most costly and most regionally variable episodes in health care. So it was a likely target for even more aggressive action by CMS. Our region was selected and as of April 1, 2016, Memorial Hospital will be in the CJR bundle. The substance of the CJR bundle is essentially the same: to deliver high-quality care at a lower cost in a method that puts hospitals "at risk" for the value of care delivered during the hospital stay and 90 days post-discharge. The reimbursement scheme is the same as Model 2 of the BPCI, as well.

How does the new method of reimbursement really work?

The good news for physicians is that their reimbursement for professional services does not change. Beacon selected Model 2 of the four possible models. Under Model 2, Beacon hospitals bill for services after the inpatient chart is coded just as we have always done. For our Stroke and Joint Replacement patients, the reimbursement will come in a single lump sum. Later, a "true-up" occurs. Medicare reviews each BPCI patient's care starting from the initiating day (the day they were diagnosed with either Stroke

or undergoing a Total Joint Replacement in the hospital) all the way through 90 days post-discharge. If our BPCI patient's care met all of the quality metrics and target price, there is no recoupment. If we fall under the targets, CMS pays us the difference. But if our cost of care during the entire episode is above target, we have to recoup CMS the difference. All the while, the physicians and post-acute facilities will still be billing for their services and under no risk themselves. Only the hospital is at risk under this model. But, obviously, we must have every post-acute facility and physician tightly partnered and aligned with efforts to deliver high value through the 90+ days "episode of care" for these BPCI patients to succeed. Eventually, we predict that all diagnoses and all payers will reimburse in a bundle-like manner. And naturally, all providers, including physicians, will be at risk. Model 4, for example, requires any physician involved in the care of a patient during the "episode of care" be reimbursed directly by the hospital receiving the bundled payment. We encourage you to review the CMS website regarding BPCI reimbursement and share your own predictions with us.

This seems like a big risk for hospitals. How prepared is Beacon for bundled payments?

We are moving in the right direction but recognize there is still much work to do. This is relatively new for every health system in the nation. There aren't a lot of experts out there yet to guide us. Some of our physician leaders in the Stroke arena have developed care paths as an infrastructure for stroke patients and are working to implement them as quickly as possible. As you know, new workflows and new processes are not easy to hardwire. We are making strides through accountability in our associates and building awareness in our physicians. For Joints, we are developing similar infrastructure at Elkhart General and we will bring the lessons learned and the framework already established to Memorial Hospital as CJR goes into the "at risk" phase there.

We also know the key to success under this bundled payment model is to have a strong post-acute network of facilities eager and ready to help drive out waste and provide higher efficiency of care to our patients in those 90 days after discharge. And we know we must have all physicians aware of the impact they have on our success both in the inpatient setting and in the ambulatory setting after discharge. We have proudly established

a robust post-acute network of preferred skilled nursing facilities and we are working diligently to communicate to physicians how critical their support and efforts are as we navigate this new culture. There will be some important decisions to make as we look at the true value delivered in our operating rooms, our post-op floors and through the rehabilitation weeks.

What exactly do I need to consider as a physician involved in the care of these patients over a 90+-days episode of care?

This is another great question. This is a "Power of the Pen" issue (power of the key strike nowadays). Physicians drive the care of every patient with orders. Every provider within the Beacon family has an impact. From the surgeon selecting his preferences for the OR table, to the physical therapist providing the recommendations for tomorrow's PT plan, every person is affecting value. From the family doctor receiving a call from the patient's daughter that mom doesn't understand her meds, to the ER physician who is seeing mom later that day because she couldn't get in to her doctor's office, every provider is delivering a level of value. Every order given or not given and every decision made regarding a patient's care delivers a level of value; labs, radiology exams, medications and rehabilitation preferences all must be considered.

The selection of vendors, the utilization of all equipment, hardware and resources, all the way through the care delivered in your offices after discharge must all be evaluated. We must ensure high quality, that we provide care with evidence of improving outcomes. Overall cost for the entire episode of care along with targeted quality metrics must be in line. We ask all physicians to stay abreast of the data Beacon receives on its standings in bundled payments. Be aware of projected risk so that swift changes can be made where we may fall out of national best practice or where we may be especially

costly. But don't wait to hear data to make changes. Physicians know better than anyone in health care where there is waste in the system and where there is opportunity to deliver higher value. Please engage with us by providing ideas and asking questions. But most importantly, take a good look at opportunities you have within your influence and control to drive the overall value of care delivered to your patients.

I understand the drive to be more cost-efficient. But even if I want to change it's going to be really difficult because of all the moving parts and the "way it's always been" syndrome. Changing could even hurt my own profitability. How can we overcome that?

There is not a great answer to that. We don't know how to make this easier or how to protect our physicians entirely. Model 2, in and of itself, protects physicians financially and we purposely selected Model 2. We do have gain-sharing mechanisms supported and encouraged by CMS and we're working on developing contracts right now with some of our surgeon groups who will be instrumental in making Beacon successful. We want to do all we can to make this a win-win. But the reality is that none of us are immune to the high drive to become a more cost-efficient health care delivery system. These CMS bundled payment trials are not likely going away and more will likely come. So getting really good at working collaboratively to ensure we all succeed is ultimately the answer to the question. We are in the business of taking care of patients. That's two important tasks. First, is patients and a close second is business. To provide care for generations of our northern Indiana community, we must get this right — and right now!

For more information, please visit:

Innovation.CMS.gov/initiatives/bundled-payments

Innovation.CMS.gov/initiatives/cjr

or, call:

Shelly Harkins, MD, Chief Medical Officer
Beacon Health System
574.647.7245

Cheryl Wibbens, MD
Vice President, Medical Staff Affairs
Memorial Hospital of South Bend
574.647.6525

Genevieve Lankowicz, MD, CPE, Vice President,
Medical Staff Affairs, Elkhart General Hospital
574.523.7994



At the Helm of BEACON Home Care

Mark Schmeltz, DO

Physician Quarterly recently spoke with Mark Schmeltz, DO, family medicine physician at Beacon Medical Group Bittersweet Commons. In addition to tending to his busy family medicine practice, Dr. Schmeltz has served as Medical Director of Elkhart General Home Care since 2013.

In late fall 2015, Dr. Schmeltz assumed the role of Medical Director for the entire Beacon Home Care division as Vince Henderson, MD, stepped down as Medical Director for Memorial Home Care to fulfill his new duties as President of Beacon Medical Group. Beacon Home Care is the new name and unifying brand of the former Elkhart General Home Care and Memorial Home Care operations.

With his experience in helping to lead efforts with Beacon's electronic health record, his role as patient safety chair for Elkhart General Hospital and his breadth of knowledge as a family medicine physician, Dr. Mark Schmeltz is well-suited as the Medical Director for Beacon Home Care. His experience will be invaluable as the home care industry redefines itself in coming years as technology ramps up for telehealth capabilities and a sharper focus on quality through pay-for-performance standards comes to the fore.

Melding Compliance and Coordination

At the top of his agenda is to find ways to remove barriers referring physicians may experience in establishing home care services for their patients. As a busy family medicine physician himself, Dr. Schmeltz can understand fellow physicians' challenges of ordering home care services for patients, particularly regulatory compliance for Medicare patients under the face-to-face encounter rule. Medicaid will follow suit with the same documentation requirement beginning July 1 this year.

"I want my colleagues to know that I'm their ally, and that I can identify with each office when it comes to interacting with home care," he explains. "I want to be their liaison and really help them to work through any logistics that may have been difficult in the past."

Dr. Schmeltz is part of the electronic health record team pursuing a more streamlined approach for ordering home care, particularly during the discharge process at the hospital. Improving such patient hand-offs and relaying patient statuses between the discharging physician and the attending physician provides many benefits.

"As we look at our population health and Accountable Care Organization goals, home care becomes a very important bridge between that hospital stay and the outpatient follow-up," Dr. Schmeltz explains. "So, wherever we can improve communication as well as coordinate

services between the inpatient and outpatient environments, our patients are going to benefit through improved outcomes and decreased costs. And, ultimately, this benefits the health system as well."

The Future of Home Care

With the increasing number of Americans who will be age 65 or older within the next 30 years or so, the home care industry will likely play a pivotal role in the future of health care.

"Home care is a lot more cost-effective than hospital-based care," Dr. Schmeltz says. "As we have more patients becoming homebound as they age, we expect that our services will be utilized more."

To help manage the potential increase in home care patients — including many patients with chronic and complex medical needs — Dr. Schmeltz expects the field of telehealth to expand rapidly in the near future.

"We're excited about the prospect of bringing telehealth tools into the home care arena," he says. "Ideally, home monitoring options will help to get patients' data to clinicians to help them make care decisions before problems arise, to automatically trigger alerts via the EMR so the provider knows to reach out and contact the patient. At very basic levels, this would include vitals monitoring — blood pressure, heart rate, weight, for example. In a more expanded role, it might include real-time, face-to-face interaction using a tablet."

“I want my colleagues to know that I’m their ally, and that I can identify with each office when it comes to interacting with home care.”

– Mark Schmeltz, DO

Improving patient safety is another initiative Dr. Schmeltz is heading up for Beacon Home Care. Specifically, he’s developing training and will roll out TeamSTEPPS: Team Strategies and Tools to Enhance Performance and Patient Safety. The program, developed by the Department of Defense Patient Safety Program and the Agency for Healthcare Research and Quality, it is an evidence-based program for improving patient care through collaboration, leadership and communication within health care teams. TeamSTEPPS is used by industries across the country and aims to improve team performance and patient safety by teaching four skills: Leadership, Situation Monitoring, Mutual Support and Communication.

“TeamSTEPPS is a patient safety tool for improving communication and facilitating team work among staff in clinical areas,” he explains. “The goal is better interactions

with inpatient staff in these transitions of care. And should any issues arise, we’ll have the same vocabulary to pull from to resolve those.”

Working in tandem with patient safety is an emphasis on patient satisfaction with home care services (see “Beacon Home Care by the Numbers” for recent Press Ganey scores). Dr. Schmeltz finds great value in attending annual advisory board meetings that include community members who are also Beacon Home Care patients or clients.

“We try to maintain transparency and enhance community relations,” he explains. “We do our best to make sure we are meeting the needs of the population we serve by listening to their feedback. It’s an incredibly valuable tool that helps us keep our patients at the center of all that we do.”



Dr. Schmeltz inspects the plane prior to takeoff.

About Mark Schmeltz, DO

Dr. Schmeltz earned his medical degree from the Philadelphia College of Osteopathic Medicine in Philadelphia, Pennsylvania, and completed his family medicine residency at Saint Joseph Regional Medical Center in Mishawaka. Dr. Schmeltz is board-certified in family medicine and osteopathic manipulative treatment. He is a member of the American Osteopathic Association and the American Academy of Family Physicians. Dr. Schmeltz is also an Aviation & Federal Motor Carrier Certified Medical Examiner.

An aviation enthusiast, Dr. Schmeltz flies single-engine planes out of the Goshen Municipal Airport as often as he can, usually once a month. He says his hobby is especially handy for making trips back to see family in his home state of Pennsylvania.

About Beacon Home Care

In January, Elkhart General Home Care and Memorial Home Care became Beacon Home Care. Under this regional brand approach, Beacon Home Care will continue providing comprehensive home care services to individuals in southwest Michigan and northern Indiana, including:

- Compounding pharmacy services in Elkhart and South Bend
- Home health aides
- Home IV therapy
- Home medical equipment
- Medical social worker
- Private nursing care
- Respiratory therapy
- Skilled nursing care
- Sleep therapy

Beacon Home Care by the Numbers

Beacon Home Care continues to achieve top-tier patient satisfaction scores as measured by Press Ganey. The home medical equipment division ended 2015 in the 93rd percentile with an overall satisfaction score of 90.2 percent. The home health agency consistently scored above 90 percent overall in the Press Ganey survey, achieving its highest point in Q4 with a score of 93.3 percent; the year-end score was 91.7 percent.



BeaconHomeCare.org

Docs Who Really Rock

Matthew Teters, MD

To a 12-year-old Matthew Teters, there were few things more valuable than a bicycle – that is, except a guitar. As a sixth grader, he rode his bike to Davenport's Pawn in Prague, Oklahoma, and promptly traded in his bike for his first guitar. It was a seminal moment in his young life, marking the beginning of a world filled with music at the center.

"I have a passion for playing music. I was a musician long before I was a doctor," says the family medicine physician at Beacon Medical Group Main Street.

Just how much music and medicine are connected is easy to see when considering some Beacon Health System physicians who possess a love and a talent for playing music. For several physicians – David Beatty, MD; Jesse Hsieh, MD; John Katsaropoulos, MD, FACC; Raman Mitra, MD, PhD, FACC; Tim Morgan, MD; Robert Riley, MD; Dr. Teters and many more at Beacon – music is part and parcel of who they are.

Growing Up

Growing up in Pennsylvania, Dr. Mitra was enthralled with the idea of becoming the next David Bowie.

"Who doesn't want to be a rock star? It's just a cool thing to do. As fate would have it, I don't think America was ready for an Indian-American rock star."

After six months of practice, Dr. Mitra was capable of playing the rock 'n' roll songs he was listening to in the 1970s from bands like Queen and The Rolling Stones, eventually forming rock-cover bands in high school and college.

Dr. Riley, on the other hand, was carving a different path as someone who "hated every minute of the piano" but found his creative calling with the trombone.

"I played it so much at home that my Dad would get tired of hearing it," says the Wisconsin native.

His gift for music blossomed in high school while in California, where he was drum major of his high school marching band, as well as a participant in the San Jose Youth Symphony Orchestra. Yet, he reached a proverbial crossroads early in his college career: a choice to pursue music as a career as a music major, or to pursue a science major with the idea of going to medical school. As enamored as he was with the trombone, he chose the course that felt most right – and he hasn't looked back.

"I don't have any regrets," he affirms. "Being a professional musician would have been a different kind of life than I wanted to have."

A Welcome Distraction

While the adolescent and teen years permit a lot of time for music, the same can't be said for years in medical school and residency. The following years are then consumed by starting medical practice, marriage and family, leaving little if any time for other interests.

Following a 16-year hiatus from the drums, Dr. Katsaropoulos "fell back in love with it" after he bought a drum set in 2000. He then joined the Ricki Lake Effect (now called Phineas Gage), a band started by

Dr. Teters, in 2005. The weekend gigs at local bars and community events are a vast departure from his day job.

"I play the drums so I get to hit things. I recommend the drums to anyone who has stress," he joked. "It's legal and it doesn't hurt anyone. There are no rules or regulations. No one's telling you what to do. That's the beauty of it."

For Dr. Beatty, who joined Delusions of Granger 11 years ago on the keyboard, the band offers a welcome distraction from the rigors of medicine and offers a needed sense of camaraderie outside of work.

"Being a physician is very intense. It's 50 to 60 hours of work a week. Forty appointments a day, a new person in front of you every 15 minutes – it's a lot of responsibility," Dr. Beatty acknowledges. "But playing music is an excuse to get out and have fun. I have a ball."

For Dr. Hsieh, a member of Vyagra Falls (which includes fellow band mate Dr. Mitra), playing his electric guitar provides stress relief and an outlet for creativity.

"Sometimes, I'll go down to my basement, crank up the tube amp and just wail (on the guitar). It gets loud," Dr. Hsieh admits.

Dr. Mitra views music as an artistic expression that touches at the very core of humanity.

"For patients to do well, you have to be in touch with your own humanity, feelings and emotions. Because of my passion for music, I am more in tune with myself, and as

Raman Mitra, MD, PhD, FACC



Tim Morgan, MD



Jesse Hsieh, MD



David Beatty, MD



Robert Riley, MD



John Katsaropoulos, MD, FACC



a result, I am more in tune with my patients and I empathize with them better – and that's a good thing for physicians."

As a family medicine physician for more than 30 years, Dr. Riley loves the everyday work of building relationships with his patients, a phenomenon similar to connecting with a musical audience.

Physicians freely admit performing on stage elicits such a rush that they keep coming back for more.

"It's infectious and intoxicating. I get a feeling of what it is to be a rock star," says Dr. Teters.

Medicine and Music

The qualities it takes to be a good musician – discipline, focus, hard work, knowledge and training – also apply to being a good physician, explains Dr. Mitra.

"In some ways, learning a new musical skill or technique is akin to performing a complex heart procedure," he says.

"Just like with medicine," adds Dr. Teters, "music has complex formulas – it involves math and there's plenty of problem solving that occurs. Just as I try to find a solution for someone's health problem, so too there's the need to resolve tension in a song."

Dr. Beatty goes so far as to credit music for changing the trajectory of his academic life. As a third grader, he was a "C student at best." But after beginning violin lessons the next year, he became the best student in the fourth grade.

"Learning music helped me to focus, better organize my thoughts and develop the

discipline of practice. This all helps in other endeavors in life," he affirms.

For the Love of It

Music can do more than help a person become a better physician. Dr. Morgan credits the choir at Albion College in Michigan for bringing together he and his eventual wife, Sandra Morgan, MD, a pediatrician with Beacon Medical Group Pediatrics Bristol Street.

Now, as first tenor in the Trinity United Methodist Men's Quartet, Dr. Morgan performs several times a year at his church in Elkhart as well as at community events.

"I just love singing," he says. "I feel sense of achievement when I can add to a person's worship experience."

Just as these physicians were born to help heal people, it seems that they were also born to share their gift of music.

"Playing the trombone," says Dr. Riley, "will always be a great part of my life."

When Dr. Teters thinks back to when he exchanged his bike for the guitar, he has no second thoughts.

"I envisioned a world where I could do both – play music and practice medicine – and I am getting to live out that dream."



David Beatty, MD
OSMC
Band: Delusions of Granger

Jesse Hsieh, MD
The South Bend Clinic
Bands: Vyagra Falls and Jesse Ryan Project

John Katsaropoulos, MD, FACC
Beacon Medical Group
Advanced Cardiovascular
Specialists South Bend
Band: Phineas Gage

Raman Mitra, MD, PhD, FACC
Beacon Medical Group
Advanced Cardiovascular
Specialists South Bend
Band: Vyagra Falls

Tim Morgan, MD
River Oaks OB/GYN
Group: Trinity United
Methodist Men's Quartet

Robert Riley, MD
Beacon Medical Group
E. Blair Warner
Bands: Beacon Innovators,
Terry and the Heartbeats
and LaPorte County
Symphony Orchestra

Matthew Teters, MD
Beacon Medical Group
Main Street
Band: Phineas Gage

BEACON *Bulletin*

BEST WISHES



Elkhart General Hospital President Retires

Greg Losasso, the highly respected and talented president of Elkhart General Hospital, retired in February after 40 years in health care administration. He retires from Beacon Health System with a long list of significant achievements. In 2011, his leadership was instrumental in bringing Memorial Hospital and Elkhart General together to create Beacon Health System. Perhaps his most significant accomplishment was celebrated in January with the opening of the Elkhart General Surgery Center, the hospital's single, largest expansion in its history. His leadership abilities, knowledge, passion and strength of character will be missed.



Andreas J. Deymann, MD, was named Pediatric Intensive Care Medical Director for Memorial Children's Hospital. Dr. Deymann joined Memorial Children's Hospital Critical Kids, a Beacon

Medical Group affiliate, in October 2015. Dr. Deymann is board-certified in internal medicine, pediatrics and pediatric critical care. He is also a Fellow of the American Academy of Pediatrics and a member of the Society of Critical Care Medicine (SCCM); he also serves as a member of the SCCM's task force on pediatric sepsis.



Scott Eshowsky, MD, has accepted the position of Chief Medical Information Officer (CMIO) for Beacon Health System. He will maintain his family medicine practice at Beacon Medical Group Main Street.

To enhance a systemwide approach toward informatics, Beacon executive leadership approved the transition of the program to a single CMIO. The program previously consisted of a CMIO at Elkhart General Hospital (D. Thomas Mellin, MD), Memorial Hospital (Ken Elek, MD), and Beacon Medical Group (Dr. Eshowsky).

Dr. Elek served as Memorial's CMIO since 2010 and was an integral part of launching the use of computerized physician order entry at Memorial to advance the use of the Cerner EMR system. Dr. Elek served on the faculty at the Memorial Family Medicine Residency Program for many years prior to taking on the CMIO role, and has returned to the faculty of that program.

Dr. Tom Mellin, who served as CMIO for Elkhart General since 2012, retired January 1. He was instrumental in the implementation of Cerner at Elkhart General; his vision of advancing patient care through technology still resonates within Elkhart and across the system.



Maliha Iqbal, MD, a hospitalist at Memorial Hospital, recently earned the distinguished designation of Senior Fellow of Hospital Medicine through the Society of Hospital Medicine. This is the highest designation possible through the society.



Ryan Sorrell, MD, was named Memorial Hospital's Post-Anesthesia Care Unit's "Hot Doc" for the past year. He had the most patients with the optimum

body temperature of 98.6 upon arrival into the PACU. Patients heal faster and experience fewer complications when the body temperature is 98.6 after surgery. Dr. Sorrell is an anesthesiologist with Michiana Anesthesia Care.



Cindie McPhie was promoted to Vice President of Operations at Elkhart General Hospital. She joined the hospital in 1995 and most recently served as Executive

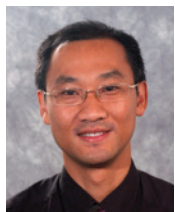
Director of Specialty Services and Exceptional Experience. In her new role, Cindie will oversee 11 departments, including radiology, outpatient oncology and pharmacy.

NEWS YOU CAN USE

New Beacon Website Coming Soon

Beacon Health System will launch a new, more consumer-friendly website (BeaconHealthSystem.org) in late March. Physicians and office staff will find helpful links and medical staff information under "For Medical Professionals" at the top of the new page. The EGH.org and QualityOfLife.org websites will redirect users to the new Beacon website, until they are eventually removed.

KUDOS



Justin Chow, MD, a hospitalist at Memorial Hospital, earned the designation of Fellow of Hospital Medicine through the Society of Hospital Medicine.

ACHIEVEMENTS

EGH Breast Care Center Certification

The Elkhart General Breast Care Center was recognized as a Certified Quality Breast Center of Excellence™ for the sixth year in a row. This distinguished honor represents a commitment by the Breast Care Center to provide the highest level of quality breast health care in the area.

BEACON *Bulletin*, continued

The Elkhart General Breast Care Center is not only familiar with existing standards of care, but is also focused on implementing the latest medical technology for the advancement of breast health. The National Quality Measures for Breast Centers Program™ annually evaluates breast care centers around the country based on the quality of care. Elkhart General Breast Care Center first received the certification in 2010.

National Recognition for Bariatric Program

Elkhart General Bariatric and Metabolic Institute was named a Metabolic and Bariatric Surgery Accredited Center by the American Society of Metabolic and Bariatric Surgeons and the American College of Surgeons. The Institute, led by bariatric surgeons Eric Knapp, DO, and Luis Benavente, MD, has long been recognized as a regional leader in bariatric surgery and weight loss services. In fact, it is the only accredited bariatric surgery center in the region.

The national designation is based on the Institute's quality of care, surgical cases, outcomes and other standards following a rigorous, voluntary evaluation in April that included a site visit from an independent surgeon who reviewed the program standards as well as policies and procedures.

Elkhart General Recognized for Patient Safety

In February, the Indiana Hospital Association (IHA) announced that Elkhart General Hospital was among just 12 member hospitals named to the Women's Choice Award America's Best Hospitals for Patient Safety list.

According to the IHA, the evidence-based designation includes hospitals that have "exceptional performance in limiting a wide range of hospital-associated infections and complications from surgery and medical treatment.

CONTINUING MEDICAL EDUCATION

Memorial Hospital of South Bend Hospital Auditorium

(unless otherwise noted)

12:10 to 1:10 p.m.

Lunch available at 11:30 a.m.

Registration is not required.

Call **574.647.7381** with questions.

March 30

Arif Nazir, MD, CMD, FACP
CMO, Signature HealthCare,
Louisville, Kentucky

Selecting the Best Post-Acute
Setting: Role of Discharge
Teams in Care Continuum

April 13

Aisha Shareef, MD
Director of Neurology and Stroke
Program, Memorial Hospital

Update in Stroke Management

April 27

Douglas Smucker, MD
Director, Hospice and Palliative
Medicine, Cincinnati, Ohio

Palliative Care in a Community
Hospital: Supporting Critically
Ill Patients and Their Families

May 11

Thomas J. Reid III, MD, PhD, FACP
Medical Director, Memorial Regional
Cancer Center

Familial Cancer Syndromes:
What Every Primary Care
Physician Needs to Know

May 25

Stephen Mitros, MD
Mitros Orthopaedics

Implementation of a Non-
Opioid Pain Program for Total
Joint Arthroplasty

BEACON HEALTH SYSTEM Welcomes New Docs

(October – December 2015)

DIAGNOSTIC RADIOLOGY

Irfan Ahmad, MD
Jack Markiewicz, MD
Krishna Pillai, MD
Smari Thordarson, MD

FAMILY MEDICINE

Carol Mann, MD
EmmaLeigh Smith, MD

GENERAL SURGERY

Emily Mitchell, DO

HOSPITAL MEDICINE

Sameer Khalid, MD
Jose Luis Lopez, MD
(Neurohospitalist)

PEDIATRIC CRITICAL CARE

Andreas Deymann, MD

PEDIATRIC NEUROLOGY

Susan Conrad, MD

PEDIATRICS

Puja Whitlow, MD

URGENT CARE

Wendell Garcia, MD
Carol Mann, MD



DERMATOLOGY UPDATE:

Mohs Micrographic Surgery for Non-melanoma Skin Cancer

Fellowship-trained dermatologic surgeon Luiz Pantalena, MD, PhD, and dermatology nurse practitioner Jill Maddox, RN, MSN, FNP-BC, offer Mohs micrographic surgery as well as general and cosmetic dermatology at Beacon Medical Group Ireland Road.

*Submitted by Luiz Pantalena, MD, PhD
Beacon Medical Group Ireland Road*

Non-melanoma skin cancers, including basal cell and squamous cell carcinomas, are the most commonly diagnosed cancers in the adult population. One in five Americans will develop skin cancer in the course of a lifetime, and between 40 and 50 percent of Americans who live to age 65 will have either a basal cell or a squamous cell carcinoma at least once. Each year, in the U.S. alone, over 5.4 million cases are treated.

Basal cell carcinomas are rarely fatal, but can be highly disfiguring if allowed to grow. Even so, as many as 3,000 deaths from advanced basal cell carcinoma occur annually in the U.S. Approximately 8,000 to 10,000 people die of squamous cell carcinomas each year, and organ transplant patients are up to 250 times more likely to develop these skin cancers.

Diagnosis of skin cancers relies on primary care physicians and dermatologists performing skin checks and skin biopsies of suspicious lesions. Once the diagnosis of a skin cancer is made, treatment can take many forms, including scraping and burning, freezing, radiation and routine excision. However, while these remedies may be fine for many cancers, not all treatments are equal. The gold standard for treatment of non-melanoma skin cancer is called Mohs micrographic surgery, and it is now being offered at the Beacon Medical Group Ireland Road Specialties.

Mohs micrographic surgery offers the highest potential cure rate — 99 percent — for non-melanoma skin cancer. With Mohs micrographic surgery, the dermatologic surgeon uses both the scalpel and the microscope to confidently achieve successful tumor clearance. In

addition, by removing the least amount of tissue, this form of “skin-sparing surgery” offers superior cosmetic results.

While Mohs micrographic surgery can be performed by any dermatologist, it is an advanced technique that is best performed by a highly trained and experienced surgeon. Fellowship-trained dermatologic surgeons have taken a one-year specialized course of training, including training on “reconstruction.” This way, the dermatologic surgeon can properly and precisely repair the skin and underlying tissue to eliminate or minimize scarring.

The types of cancer most likely to warrant this treatment are located in cosmetically sensitive areas or functionally critical areas around the eyes, nose, lips, scalp, fingers or toes. In addition, regardless of location, tumors that are large, aggressive, growing rapidly, have ill-defined edges or are recurrent are best treated with Mohs. Finally, transplant patients with non-melanoma skin cancers are best treated with Mohs, as these cancers can behave very aggressively in an immunosuppressed background.

For more information regarding Mohs micrographic surgery or to make a general dermatology referral, please contact Beacon Medical Group Ireland Road Specialties at **574.647.DERM (3376)**.

ADVANCED CANCER TREATMENTS

Implemented at Elkhart General Hospital

HDR Brachytherapy

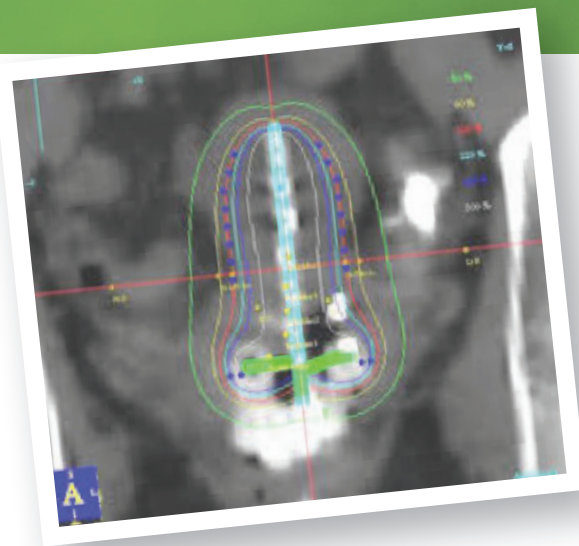
Elkhart General Hospital is implementing the use of a new device for managing cervical cancer that greatly reduces treatment time, helping to prevent patients from developing pressure ulcers and other problems associated with extended time lying on one's back, and reducing staff's exposure to radiation.

The standard of care for cervical cancer has been low-dose-rate brachytherapy, which required patients to lie still in their hospital beds for two days. A new device, the HDR Tandem and Ovoid, purchased in 2015, allows staff to perform the treatment with high-dose-rate brachytherapy, reducing treatment time to approximately 20 minutes. There is no radiation exposure to staff using the new procedure.

The Tandem and Ovoid is inserted into the vagina in an operating room by the radiation oncologist and then stabilized with packing. The patient is then taken to the radiation oncology department for CT scans that are used for generating a 3D radiation therapy plan for treatment. This allows for a more accurate dose representation compared to previous plans done in 2D, and improves ability to protect critical normal structures.

After the physician reviews the treatment plan, the patient is taken for the HDR treatment. The radiation therapist and physicist ensure that the catheters, which will carry the radioactive source into the device, are correctly attached. The physician oversees the entire procedure and treatment.

After the treatment is completed, the device is removed and the patient is able to go home. The physician will usually want the patient to receive another two to five treatments over the following weeks, at which time the whole procedure is repeated.



Radioembolization (Y-90)

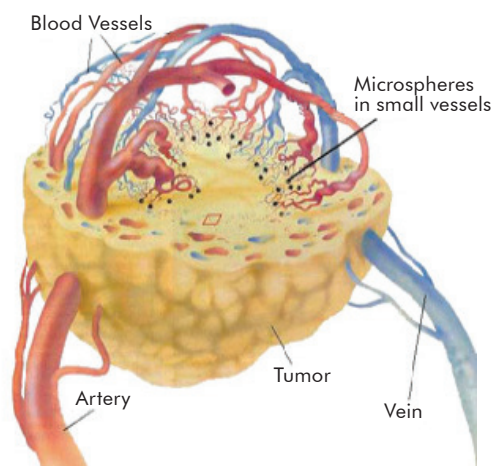


Nazar Golewale, MD
Interventional Radiology

Radioembolization is a minimally invasive procedure that combines embolization and radiation therapy to treat liver cancer. Tiny glass or resin beads filled with the radioactive isotope yttrium Y-90 are placed inside the blood vessels that feed a tumor. This blocks the supply of blood to the cancer cells and delivers a high dose of radiation to the tumor while sparing normal tissue. It can help extend the lives of patients with inoperable tumors and improve their quality of life.

Elkhart General Hospital began performing this procedure under the direction of Nazar Golewale, MD, in late 2014. Since August of 2014, staff have performed nine total procedures on six patients. This is a less invasive and less toxic treatment method to aggressively treat liver cancers with metastatic lesions. This treatment option had not been offered locally in the past and now allows patients the advantage of being treated closer to home.

These procedures add more options to Beacon Health System's robust cancer program to care for patients in our region. Both Elkhart General and Memorial offer HDR brachytherapy for treating other cancers, including breast cancer and other gynecological cancers; Memorial uses the technique to treat prostate cancer. Radioembolization is also available at Memorial for treating liver cancer.



Schwartz Rounds Foster Healing Among Physicians, Nurses & Support Staff



Schwartz Rounds panel members at Elkhart General include (L to R): Roger Hershberger, Cindie McPhie and Michelle Bache, MD.

By the end of the first Schwartz Center Rounds® held at Elkhart General Hospital in November, it's fair to say there were very few dry eyes left in the crowd. But most of the 60 or so audience members in the Patel Family Auditorium were not directly involved in caring for the patient being discussed by the four-member panel on the dais. Universally, however, those physicians, nurses and support staff in the room identified with how the patient's personal story touched each caregiver who spoke. In this supportive and cathartic setting, a singular truth emerged: Providing health care can have a profound and emotional toll on caregivers.

The Creation of Schwartz Rounds

In 1994, at age 40, Boston health care lawyer Ken Schwartz was diagnosed with lung cancer. Inspired by and deeply grateful for the compassion showed to him by his health care team during his course of treatment, he founded the nonprofit Schwartz Center for Compassionate Healthcare just before he died in 1995. Based at Massachusetts General Hospital, the Schwartz Center guides health care institutions — now totaling over 300 hospitals and other facilities across the United States — in conducting multidisciplinary rounds that focus solely on the emotional impact of caregiving. Sessions may focus on a particular patient case or a theme with broad appeal ("There's not enough time to do the things I need to do," for example.)

Cindie McPhie, Vice President of Operations of Elkhart General Hospital, lobbied to bring Schwartz Rounds to the hospital after learning about them a few years ago, believing the program could increase understanding and communication among hospital team members, reduce stress among staff as well as foster deeper connections with patients and their families.

"The fact that the Rounds are a safe and nonjudgmental forum is extremely important," says McPhie. "It's not a medical review in any way. It's simply a way to express the emotions that come out with difficult patient-related situations."

Emergency medicine physician Michelle Bache, MD, Medical Director for the Schwartz Center Rounds at Elkhart General, believes the Rounds are beneficial for addressing the day-to-day stresses that can affect a provider on a personal level.

"This program is unique in the sense that there isn't another opportunity that provides a protected, dedicated time that all the members of a multidisciplinary caregiving team can come together to discuss these emotional, social and spiritual issues that surround patient care," Dr. Bache explains.

Amberly Burger, MD, Medical Director of Palliative Care Services and Chairperson of the Ethics Committee at Elkhart General Hospital, is a panel member for the Schwartz Center Rounds. Even in the program's nascency, she believes the Rounds have already helped to forge stronger bonds among team members and encourages other physicians to attend future sessions.

"I think any time we are able to 'debrief' or be in the moment improves our ability to be invested in the next patient," says Dr. Burger. "We often have multiple stressors placed on our shoulders: paperwork, insurance, politics, external conflicts at work beyond what it means to be present with patients. These rounds reset our mind and allow it to rest in a supportive way that helps to identify the doctor as a person."

Learn More

For more information about upcoming Schwartz Center Rounds at Elkhart General Hospital or to suggest topics or patient cases, contact Cindie McPhie at cmcphie@beaconhealthsystem.org or at **574.523.7895**.

For more information about the Schwartz Center for Compassionate Healthcare visit TheSchwartzCenter.org or [Facebook.com/TheSchwartzCenter](https://www.facebook.com/TheSchwartzCenter).

BEST OF THE BEST

CMS Observes Local Collaboration to Learn Best Practices

When it comes to diagnostic and interventional radiology best practices, there are few in the country that perform better than Radiology, Inc. in partnership with Elkhart General Hospital (Beacon Health System).

That dedication to efficiency, process improvements, quality and patient safety has this collaboration not only making its way onto the national radar, but also potentially into hospitals and medical imaging rooms across the country.

Radiology, Inc. and Elkhart General were given the distinct honor of being chosen by the American College of Radiology as a best practice site interviewed as part of the Transforming Clinical Practice Initiative, set forth by the Affordable Care Act.

The Transforming Clinical Practice Initiative is designed to help clinicians achieve large-scale health transformation, by supporting clinician practices over the next four years in sharing, adapting and further developing their comprehensive quality improvement strategies. The initiative is one part of a strategy advanced by the Affordable Care Act to strengthen the quality of patient care and spend health care dollars more wisely.

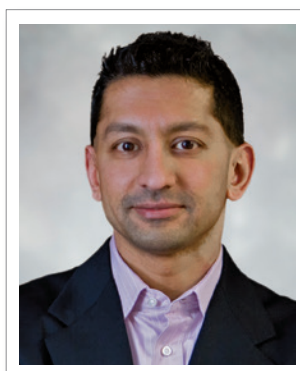
Representatives from the Lewin Group, an entity that consults for Centers for Medicare and Medicaid Services, came to Elkhart General on Dec. 14, 2015, followed by a debriefing with CMS on Dec. 22. Elkhart General was one of four facilities in Indiana chosen by CMS for best practice review.

The accomplishments of Radiology, Inc.'s diagnostic and interventional radiologists were acknowledged in conjunction with Elkhart General, including:

- Applying value-added matrix
- Implementing lean processes
- Tracking population health metrics (breast cancer and lung cancer)
- Reducing radiation dosage
- Reducing unnecessary testing

CMS leaders will use this information and data from other sites to develop processes/programs for utilization by more than 140,000 physicians nationwide.

"It is great for the diagnostic and interventional radiologists of Radiology, Inc. and Elkhart General Hospital to be recognized as a national leader in health care," says board-certified Diagnostic Radiologist Samir Patel, MD, of Radiology, Inc.



Samir Patel, MD
Diagnostic Radiology

Radiology, Inc. and Elkhart General Hospital have worked together for the betterment of patients and the hospital, resulting in improved patient safety and cost savings. Their best practices are now being considered for integration in hospitals on a national level through the Affordable Care Act's Transforming Clinical Practice Initiative.

The Goals of the Transforming Clinical Practice Initiative

Support more than 140,000 physicians in their practice of transformation work.

Build the evidence, based on practice transformation, so that effective solutions can be scaled.

Improve health outcomes for millions of Medicare, Medicaid and CHIP beneficiaries and other patients.

Reduce unnecessary hospitalizations for 5 million patients.

Sustain efficient care delivery by reducing unnecessary testing and procedures.

Generate \$1 to \$4 billion in savings to the federal government and commercial payers.

Transition 75 percent of practices completing the program to participate in Alternative Payment Models.

Going the Distance: Elkhart General on the Road to Trauma Center Accreditation



Charles Peterson, MD, spearheads Elkhart General's journey to becoming a Level III Trauma Center.

There are no trauma centers between South Bend and Fort Wayne — a reality that is changing thanks to Elkhart General Hospital and its effort to become the second trauma center in the region.

For more than 10 years, Memorial Hospital — a Level II Trauma Center — has shouldered much of the trauma caseload in the north central and northwestern half of the state. But that has begun to change over the last year, with Elkhart General gradually keeping more trauma cases as it seeks to become accredited by the American College of Surgeons as a Level III Trauma Center.

Taking Priority

Elkhart General's coordination, efficiency and overall quality of its trauma care are "definitely improving," says Trauma Services Medical Director Charles Peterson, MD.

The program took a big step forward to become an accredited trauma center with the implementation of protocols late last year. Hospital-wide, departments are alerted by an activation code (911 for severe trauma and 912 for less severe trauma) when a trauma case is coming in,

thereby helping to quickly and efficiently coordinate and mobilize resources and manpower.

"Emergency room physicians, nurses and support personnel already do an excellent job evaluating and treating trauma patients, but with the new Level III trauma protocols in place, that makes the process more efficient," says Dr. Peterson.

Level III accreditation requires all trauma doctors and nurses to be certified in Advanced Trauma Life Support. It's a course that teaches how to assess a patient's condition, resuscitate and stabilize him or her, and determine if his or her needs exceed a facility's capacity, as well as covering how to arrange for a patient's interhospital transfer and assure that optimum care is provided throughout the process.

Gaining Momentum

The momentum for becoming a trauma center naturally picked up steam when Memorial and Elkhart General formed Beacon Health System in 2012.

"Historically, Memorial Hospital has been inundated with trauma cases, so it

makes clear sense from the standpoint of patient health to offer another option for outstanding trauma care in the region," says Dr. Peterson.

Trauma Services at Elkhart General and Memorial are working closely together, evidenced by monthly meetings during which medical staffs review cases and work to improve the coordination of care.

Memorial Hospital will continue to handle more extensive neurosurgical cases, specialized orthopedic surgical cases and pediatric cases since the more stable cases can be handled at Elkhart General.

Raising the Bar

Elkhart General's trauma program is greatly enhanced by the new Surgery Center, a state-of-the-art facility complete with 10 operating suites, a hybrid operating suite and a helistop.

"When you take into account the new Surgery Center," he says "the helistop and our rapidly improving trauma program, Elkhart General is taking medicine to a higher level in our region."

TRAUMA CENTER NAME	LOCATION	ADULT DESIGNATION	PEDIATRIC DESIGNATION
Deaconess Hospital	Evansville	Level II	
Eskenazi Health	Indianapolis	Level I	
IU Health Arnett Hospital	Lafayette	Level III	
IU Health Ball Memorial Hospital	Muncie	Level III	
IU Methodist Hospital	Indianapolis	Level I	
Riley Hospital for Children at IU Health	Indianapolis		Level I
Lutheran Hospital of Indiana	Fort Wayne	Level II	Level II
Memorial Hospital of South Bend	South Bend	Level II	
Parkview Regional Medicine Center	Fort Wayne	Level II	Level II
St. Mary's Medical Center of Evansville	Evansville	Level II	Level II
St. Vincent Indianapolis Hospital	Indianapolis	Level I	

Source: Indiana State Department of Health

A Level III Trauma Center

is a hospital that provides prompt assessment, resuscitation, emergency surgery, and stabilization and arranges transfer to a higher level facility when necessary, maintains continuous general surgery coverage, and has transfer agreements and standardized treatment protocols to plan for care of injured patients.

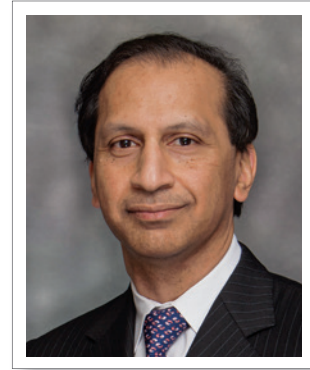
Elkhart General Hospital Surgery Center Opens

- 1 A spacious family lounge where family members can track a loved one's progress via monitors and/or through text messages.
- 2 A hybrid operating suite combines imaging services and surgical procedures in the same space.
- 3 A helistop on the roof speeds the care of critically ill or injured patients in Elkhart County.
- 4 The pre/post surgery bays include sliding glass doors for additional privacy for patients and families.
- 5 L to R: Pamela Goddard-Dunfee, Genevieve Lankowicz, MD, Arthur J. Decio, Cindie McPhie, Lisa MacDonald, Karra Heggen, Elkhart Mayor Tim Neese, Phil Newbold and Kreg Gruber help cut the surgical gauze, officially opening the new Surgery Center on Jan. 6.
- 6 The Arthur J. Decio Pavilion was named in honor of longtime prominent Elkhart philanthropist Art Decio.



MEDICAL MILESTONE FOR MEMORIAL HOSPITAL

First hospital in the region to
implant cardioverter defibrillator
compatible for MRI scans



Raman Mitra, MD, PhD, FACC
Clinical Cardiac Electrophysiology



Memorial Hospital cardiologist Raman Mitra, MD, PhD, FACC, has once again led Memorial to another medical milestone in the region. Dr. Mitra inserted an implantable cardioverter defibrillator (ICD) that can be used during a full-body magnetic resonance imaging (MRI) scan, making Memorial Hospital the region's first to do so.

Dr. Mitra, Medical Director of Beacon Medical Group Advanced Cardiovascular Institute South Bend, is proud Memorial Hospital continues to demonstrate itself as a medical leader in the region.

"Patients at risk for sudden cardiac arrest have depended on ICDs to monitor their hearts, detect dangerous arrhythmias and deliver the lifesaving therapy," says Dr. Mitra.

Every year, more than 300,000 people are implanted with ICD systems to regulate their heartbeat, and studies estimate that 50 percent to 75 percent will need an MRI scan in their lifetime to help diagnose a variety of diseases. The strong magnetic forces applied during MRIs can potentially have a negative effect on both the device and leads, and are usually not recommended for pacemaker and ICD patients.

But now with the medical breakthrough of MRI-compatible ICDs, people across the country who will be at risk for sudden cardiac arrest, including right here in Michiana, can have the assurance they can undergo an MRI, without fear the ICD will malfunction or fail, to deliver lifesaving shocks to correct lethal arrhythmias. ICDs help prevent sudden death in patients with known, sustained ventricular tachycardia or fibrillation.

And when it comes to the treatment of arrhythmias, Dr. Mitra is cutting-edge. He is the first and only cardiologist in the region and one of 20 cardiac electrophysiologists in the nation who does not use X-rays when conducting complex ablations (mapping and cauterizing abnormal electrical activity of the heart) for the treatment of arrhythmias. This allows the patient and staff to avoid any exposure to ionizing radiation.

"To be able to perform ablations without the use of X-rays shows the expertise and ability of Dr. Mitra," says Cheryl Wibbens, MD, Vice President of Medical Affairs at Memorial Hospital.

Dr. Mitra has a history of being an innovative leader: In 2011, Dr. Mitra implanted the first MRI-safe pacemaker in the region.



MEMORIAL CHILDREN'S HOSPITAL

Delayed Interval Delivery of a Twin Pregnancy for 76 Days

Case Study

The mother was a 29-year-old female G4 P1112 with dichorionic diamniotic twin gestation and a due date of late August. She presented to an outside hospital in mid-April, at 22 $\frac{2}{7}$ weeks with symptoms of preterm labor. Upon admission, her cervix was dilated to 7 cm. Her membranes ruptured shortly after admission. One day after admission, she delivered the first twin (Twin A), a male infant who passed away within several hours due to extreme prematurity. The placenta of Twin A was left in situ.

Following delivery of Twin A, the patient requested transfer to Memorial Hospital for ongoing care under the supervision of Beacon Medical Group Maternal Fetal Medicine specialists. Upon admission to Memorial, she was not in active labor and Twin B was doing well. There were no signs of infection. A decision was made to continue the pregnancy and place the patient on hospital bed rest with anticipation of Twin B reaching a viable gestational age.

On the second day in the hospital, she again showed no signs of infection or labor. Her cervix was dilated to 3 cm. The patient was extensively counseled with regard to the risks of pregnancy continuation and was offered a cerclage (stitch to close the open cervix). She gave consent for the procedure. At the time of cerclage placement, the umbilical cord from the first twin was ligated with an absorbable suture as close to the placenta as possible, allowing the remaining cord to retract inside the cervix. The cerclage was performed without incident.

For several days, following the cerclage placement, she was treated with antibiotics and tocolysis (medication to relax the

uterus). She received corticosteroids to enhance fetal lung maturity at 23 weeks gestation. The patient was discharged six days after the cerclage was placed. She was monitored closely on an outpatient basis by the team of Maternal Fetal Medicine Specialists.

In early July, at 33 $\frac{2}{7}$ weeks she presented to Memorial Hospital in active labor. She underwent a repeat cesarean section 11 weeks (76 days) after delivery of the first twin.

She delivered a male infant 4 pounds 13 ounces with Apgars of 8 and 9 at one and 5 minutes respectively. The baby was admitted to the NICU in good condition. The patient was discharged three days after surgery. The baby remained in the NICU for two weeks.

Although a rare event, there are numerous case reports and case series in obstetrical literature on delayed interval delivery of multiple gestations. Multifetal pregnancies are at greater risk for premature delivery either as a result of cervical insufficiency, preterm premature rupture of membranes or spontaneous preterm labor. Frequently, delivery of one fetus will result in all remaining fetuses delivering, but in rare circumstances this is not the case. The longer the interval between delivery, the greater the chances are for a good outcome in the surviving fetus.

The ideal candidates for delayed interval delivery are patients who deliver the first fetus at a previsible gestation. Patients with maternal conditions such as severe preeclampsia or placental abruption are not appropriate candidates for such management. Evidence of infection in the retained fetus is a contraindication to delayed interval delivery.

Delaying delivery increases the risk for maternal, fetal and neonatal complications. An attempt to prolong the pregnancy is not always successful and can result in complications such as serious maternal infection, a subsequent previable infant or an extremely premature infant who may suffer from long-term morbidity related to prematurity.

The optimal approach for the management of these patients is not based on randomized research trials but more so on expert opinion. Most medical experts recommend the use of antibiotics, tocolysis (medication to relax the uterus) and placement of a cerclage. We believe that the best candidates for delayed interval delivery are pregnancies with a multifetal gestation where one fetus delivers at a previsible gestational age (less than 24 weeks) either as a result of cervical insufficiency, preterm premature rupture of membranes or spontaneous preterm labor in the absence of maternal or fetal infection.



Mureena Turnquest Wells, MD
Maternal Fetal Medicine



615 N. Michigan Street
South Bend, Indiana 46601

Happy Doctors' Day

MARCH 30, 2016

A red stethoscope graphic is overlaid on the text. The tubing forms a large heart shape around the word "Doctors'". The chest piece is a white circle with a black dot in the center, positioned to the right of the heart.