

Palliative Care Expanding at Beacon Non-Opioid Techniques for Total Joint Replacement

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Welcome, New Physicians

Big Plans for Our Smallest Patients

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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.

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Palliative care, hospice care, comfort care, is there a difference? Indeed.

Hospice and comfort care concentrate on symptom management during the last weeks or days of life. Palliative care, on the other hand, aims for the best quality of life at any phase of a disease and may last from months to years. Palliative care initiated early in the disease process can help patients live a better quality of life longer, while decreasing cost of medical care, especially at the end of life.

Who can benefit from early palliative care? Cancer, COPD, CHF, ALS, AIDS, dementia and renal disease negatively affect quality and length of life. Any chronic disease is appropriate for palliative care.

Working with the primary physician, the palliative care team addresses the following concerns:

- Physical symptom management
- Psychological and social concerns
- Spiritual concerns
- Education: risks and benefits of procedures/treatments

In addition, palliative care helps the patient and family articulate their values regarding what makes life enjoyable and worth living or what happens when symptom burden overwhelms quality of life? The family can make well-informed treatment decisions to meet their personal goals. Help is given for advance directives and discussions with the physician on the hopes and goals of treatment.

In addition, Elkhart General has as a part-time social worker, Roger Hershberger. Currently, Memorial is actively recruiting a full-time physician and planning the expansion of its program.



Michael White, M.A., R.N., CHPN, Care Coordinator

Palliative care initiated early in the disease process can help patients live a better quality of life longer, while decreasing cost of medical care, especially at the end of life.

The palliative care team is interdisciplinary: physician, nurse, social worker, chaplain, pharmacist and nutritionist.

Currently, Elkhart General and Memorial are building their multidisciplinary teams for each facility. Amberly Burger, M.D., is certified in palliative care and helping to develop programs for Beacon. Both hospitals have full-time registered nurses: Paula Simpson, R.N., at Elkhart General and Michael White, R.N., at Memorial.

There is much palliative care can do for physicians by providing an interdisciplinary team approach to manage complex symptom management.

For more information, contact your palliative care team:

Elkhart General Hospital: 574.296.2924

Memorial Hospital: 574.647.2088



ORTHOPEDIC UPDATE

Surgeons Explore Non-Opioid Techniques of Total Joint Replacement By Stephen Mitros, M.D.

Joint replacement surgery is a field that generally advances at a modest pace with only the occasional moment of rapid advance. One of those moments occurred 10 to 15 years ago with the advent of "so-called" minimally invasive surgery. Smaller incisions and less soft tissue dissection left the patient with less to heal and seemingly overnight led to shorter periods of recovery and earlier return to full function.

As this article appears in print, a similar milestone is occurring for joint replacement patients in Michiana, as local surgeons are mastering the technique of non-opioid joint replacement. Joint replacement operations — especially knee replacements — are painful procedures and over the decades have required reasonably liberal doses of narcotics for early pain control. However, narcotics bring with them numerous side effects such as nausea, vomiting, constipation, confusion and urinary retention, leading to Foley catheters, leading to infections. These side effects are common, unpleasant and often result in increased lengths of stay in the hospital. With these newer non-opioid techniques, these side effects are almost uniformly avoided. The technique allows patients to undergo joint replacement with minimal to oftentimes no opioid consumption while in the hospital, yet patients are reporting pain scores far lower than we've seen in the past.

The technique came about as the result of the development of a novel delivery platform that allows for the very slow release of a long-acting local anesthetic injected around the new joint at the time of its insertion. Patients began receiving this technique in Michiana in April of 2014, and in my opinion the results have been profound.

Most patients now receive a multi-modal analgesic cocktail in the holding room, consisting of some combination of gabapentin, Tylenol® and an NSAID. The anesthesiologist will then, in the case of a total knee replacement, use an ultrasound unit to perform an adductor canal block with local anesthetic. Femoral nerve blocks have been done for a few years now but they are blocks that take out not only the sensation around the knee but activity of the quadriceps muscle. Deactivating the quadriceps muscle leads to difficulty ambulating the patient in the early postoperative period, the occasional fall that in the literature has been associated with hip and ankle fractures and the need for knee immobilizers to protect the patient during early attempts at mobilization. With the adductor canal block, quadriceps strength is preserved and the risk of falls is avoided.

The operation itself is then performed under a spinal anesthetic administered in the operating room and the surgeon will intraoperatively administer the slow-release local anesthetic via multiple slow injections at various times during the case. The successful use of the intraoperative drug is very dependent upon the technique of administration, so there is a learning curve for the surgeon early on, and it does add 5 to 8 minutes to the length of the case.

The adductor canal block, the spinal, and the drug injected intraoperatively are ALL local anesthetics. The spinal wears off in the recovery room but by then the adductor canal block has kicked in and is bridging the patient until the slow-release drug given intraoperatively kicks in. (Generally, the longer-acting a local anesthetic, the longer it takes to set up.) Most patients now stay only one half-hour or so in recovery and are sent to the floor pain-free — yet they have not received any opioids.

On paper, the drug injected intraoperatively is detectable in the patient for up to 96 hours, but in my experience has significant clinical impact for generally the first 24 to 48 hours post-op. During this period, patients' calls for nurses are markedly reduced. Instead of being informed that it isn't yet time for their next dose of needed pain medication, patients simply don't call as frequently. Patients are generally so comfortable that they tend to want to be up and about more than is good for them and therapy staff have identified this as a bit of a problem. The more the patient is up early postoperatively, the more the knee is down and this results in more knee swelling and oftentimes more pain than is necessary once the drugs wear off. With these newer techniques patients are strongly encouraged to slow down.

So what happens when the drugs do wear off? The modern understanding of pain control is that while a narcotic soothes the pain receptor as it is exposed to a painful stimulus, the narcotic sensitizes the receptor to the next painful stimulus. This is why surgeons don't like to operate on patients who have been on narcotics preoperatively — their pain is harder to control post-op. If we throw a wet blanket of pain control over what has historically been the most painful period (postoperative days 1 and 2), the intensity of the pain that eventually develops tends not to be as severe as what we saw previously. My own office staff tells me that they believe they field fewer phone calls for pain pills post-op with these new techniques.

The bottom line is that these newer techniques indeed lead to happier patients and happier doctors. When I see these patients in my office at two weeks out from their procedure to remove their sutures, if they've had a prior joint replacement using the "traditional technique" and I ask them which technique was "better," across the board they respond, "there's no comparison." I'm certainly delighted — as is a growing number of patients — to say that I was around to see this profound advance in perioperative care firsthand.



Radiology Departments at Elkhart General and Memorial Hospital have been working increasingly together to deploy the best system-wide solutions possible. The greatest example of this took place last year when Elkhart General, Memorial and Beacon Medical Group LaPorte collaborated on the installation of four new CT scanners in three counties. The goal is to reduce CT dose and protocol variation by deploying standardized imaging protocols across the system. By working hand-in-hand with administrators and Radiologist Samir Patel, M.D., these low-dose protocols were successfully implemented across Beacon.

RADIOLOGY DEPARTMENT HIGHLIGHTS

Elkhart General Hospital

Administrative Collaboration: Key to the successes of the department has been the close working relationship between Radiology Incorporated and Radiology Department staff. The department has achieved national recognition by the ACR for transitioning from volume-based imaging to value-based imaging through their Imaging 3.0 campaign.

CT Technology: Siemens Corporation named Elkhart General a "Low-Dose Center of Excellence." Other highlights include being the first to market in the area with Coronary CTA and the first with low-dose lung screening, with over 400 patients completed to date.

Experience Suite MRI: Patient safety issues were addressed in compliance with new industry standards, including installing of MRI safe zones and electronic metal detection systems. The scan room was aesthetically appointed with a patient selectable lighting and music system.

Breast Care Center: The Center is in the 99th percentile in patient satisfaction as reported by Press Ganey. It was one of the first to market with Breast MRI; the first regional facility with full-field digital mammography; and one of 50 facilities nationwide to be a Certified Breast Center Quality of Excellence and ACR Breast Imaging Center of Excellence.

Memorial Hospital

Nuclear Medicine & PET/CT: The Nuclear Medicine Program enjoys being in the 99th percentile for patient satisfaction as reported by Press Ganey. The PET/CT scanner at Day Road in Mishawaka is the widest bore scanner in the region. The program also boasts the highest-resolution scanner in the region.

PACS: The Memorial PACS system stores all patient images and reports done at Memorial Hospital, Navarre Radiology and Lighthouse Imaging Center. The PACS team has worked diligently to create connections so that images can be sent electronically from hospital to hospital in an efficient and secure manner. This allows physicians to receive images before the patient arrives, which can help reduce the potential need to rescan a patient.

Clerical Staff and PowerScribe: The diligent work of clerical staff coupled with PowerScribe voice recognition system has ensured an extremely quick report turnaround time. The average turnaround time for all radiology reports is less than one hour.

Lighthouse Imaging Center: Lighthouse Imaging Center in Granger is located on the south end of the MedPoint24 campus and provides service 24 hours a day, seven days a week.

BEACON Health System Welcomes New Physicians

(January – March 2015)

CARDIOLOGY/INTERVENTIONAL Szabolcs Szabo, M.D.

CARDIOVASCULAR DISEASE

Pravin Pratap, M.D.

FAMILY MEDICINE

Jason Ransom, M.D.

GYNECOLOGIC ONCOLOGY

Gregory Sutton, M.D.

NEUROLOGY

Kathryn Hanlon, M.D.

Aisha Shareef, M.D.

OBSTETRICS/GYNECOLOGY

Zhiquan Zhao, M.D.

OPHTHALMOLOGY

Kuumba Long, M.D.

ORTHOPAEDICS/HAND SURGERY

Adelbert Mencias, M.D.

PEDIATRIC CARDIOLOGY

Michael Johansen, D.O.

PEDIATRIC CRITICAL CARE MEDICINE

Harun Fakioglu, M.D.

Fabio Savorgnan, M.D.

RADIOLOGY

Nicholas Abel, M.D.

SPORTS MEDICINE

Jennifer Brake, M.D.

For more information about the new physicians, visit either EGH.org or QualityOfLife.org.

ICD-10-CM: Don't Get Left Out



Ken Elek, M.D. Memorial Chief Medical Information Officer

Well, April 15 has come and gone and ICD-10-CM is still on for October of 2015. Here are a few of the implications physicians need

If we want to get paid correctly for the work we do, the correct codes must be placed on our billings. Most of us don't directly input the codes but employ a trained biller to look at our records and input a code based on our documentation. Although most of us are also somewhat familiar with ICD-9-CM (International Classification of Diseases, version 9 with Clinical Modification), as this has been used for a long time in the U.S., we will not be as familiar with ICD-10-CM for guite some time. Therefore, we will need training on the

documentation requirements which differ from those required for ICD-9-CM.

One of the big differences between the two versions is the level of detail required in the documentation to qualify as a valid specific ICD-10-CM code, which was not required for ICD-9-CM codes. If our biller couldn't find specific information in our documentation, there was usually a nonspecific or not otherwise specified code to fall back on. In ICD-10-CM the number of specific diagnoses has been increased from about 13,000 to about 68,000, making it much less likely that correct payment will be made for a nonspecific diagnosis resulting from inadequate documentation. Since the code used is strictly dependent on the documentation, we all need to know the requirements so we can document appropriately, leading to appropriate coding, leading to appropriate payment.

Beacon Health System will be requiring physician education to help us all get up to speed. We have been collaborating with the Saint Joseph Regional Medical Center Mishawaka campus to facilitate physician education. So make sure you get signed up so you're not caught unaware and miss out on the correct payment you deserve!

Additionally, online ICD-10-CM provider education modules are available through the computer-based NetLearning program. These are web-based modules developed by JA Thomas physician consults and are specialty specific. Providers are encouraged, at a minimum, to review the module of their specialty.

IDC-10 Education – Upcoming Events

Tues., August 18, 2015 | Hilton Garden Inn, South Bend, IN Session One - 12:30 - 2:30 p.m. Session Two - 5:30 - 7:30 p.m.

REGISTRATION IS REQUIRED BY THURSDAY, JULY 30, 2015.

Contact MWeaver@BeaconHealthSystem.org or **574.647.7920** for more information.

BEACON Bulletin

Trauma Symposium Celebrates 15th Year

The 15th Annual Trauma Symposium, held on March 14 at the Jordan Hall of Science on the University of Notre Dame, brought together more than 300 individuals from the regional trauma care community.

Once again, a group of dynamic speakers from across the country presented recommendations for care based on current evidence. The keynote speaker was David Feliciano, M.D., Chief of Surgery for Indiana University Medical Center in Indianapolis. Other speakers included Martin Schreiber, M.D., Professor of Surgery from the Oregon Health and Science University and Samir Mehta, M.D., an orthopedic surgeon from the University of Pennsylvania.

Nationally Recognized Sociologist at Mary Morris Leighton Lecture

Oct. 14, Hilton Garden Inn South Bend, 7 to 8:30 p.m.

A sociologist and happiness expert at UC Berkeley's Greater Good Science Center, Christine Carter, Ph.D., is the author of The Sweet Spot: How to Find Your Groove at Home and Work and Raising Happiness. Dr. Carter is a soughtafter keynote speaker, "translating" psychology, sociology and neuroscience into simple start-here strategies. Blending the outcomes of research with anecdotes from her own hilarious, realworld adventures—as a working mother with four kids and three jobs-Dr. Carter brings lab science alive in talks that have been called "transformative," "lifechanging" and "phenomenal."

Memorial Earns Baby-Friendly Designation

Memorial Hospital of South Bendreceived the prestigious international recognition as a Baby-Friendly Designated birth facility. This designation recognizes birth facilities that offer breastfeeding mothers the information, confidence and skills needed to successfully initiate and continue breastfeeding their babies. Baby-Friendly USA, Inc. is the U.S. authority for the implementation of the Baby-Friendly Hospital Initiative, a global program sponsored by the World Health Organization and the United Nations Children's Fund. There are 246 active Baby-Friendly hospitals and birth centers in the United States.

Cutting-Edge Clinical Study Presented at International Conference

Four Beacon Medical Group psychiatrists have been administering an antidepressant study locally that was presented at the Society of Biological Psychiatry Meeting in Toronto on May 14.

They include the following: Suhayl Nasr, M.D., Medical Director of Beacon Medical Group Behavioral Health and Epworth Hospital; Ahmed Elmaadawi, M.D., Beacon Medical Group Director of Interventional Psychiatry and Child and Adolescent Psychiatry; Narendra Singh, M.D., adult psychiatrist; and Jagadeesh Reddy, M.D., MPH, child and adolescent psychiatrist. The annual meeting was a chance to meet peers and present the most up-to-date data in biological psychiatry.

The study compared the three newest antidepressants (levomilnacipran, vilazodone and vortioxetine) with the aim of helping clinicians to use an evidence-based approach in choosing the right anti-depressant for their patients. Dr. Nasr noted that it could be two to three years before the results of their study are integrated into mainstream psychiatry.

N. Stacy Lankford, M.D., Director, Medical Education, Elkhart General Hospital, received the Edithe J. Levit Distinguished Service Award from the National Board of Medical Examiners (NBME). The award is presented to recognize individuals retiring from the NBME or others who have provided unusually valuable service to the organization.

Dr. Lankford served in the NBME Membership as a Test Committee Representative from 2004 2011, when he was elected to the Executive Board. His service on many committees since 1997 includes the Step 3 Item Modeling Task Force, Committee to Evaluate the United States Medical Licensing Examination (USMLE) Program, USMLE Composite Committee, USMLE Committee for Individualized Review, and USMLE Step 3 Committee, which he chaired. His recent contributions include service on the Collaboration for Veterinary Assessments Governance Committee Clinical Skills Evaluation Collaboration Operations Oversight Group, both of which will continue to include him as a member.

CONTINUING MEDICAL EDUCATION

Memorial Hospital of South Bend Hospital Auditorium

unless noted otherwise 12:10 to 1:10 p.m. Lunch available at 11:30 a.m. Registration is not required. Call **574.647.7381** with any questions.

September 9

Mohan Gundeti, M.D.

Director, Pediatric Urology/ Associate Professor of Surgery, Pediatrics and Obstetrics/Gynecology The University of Chicago Children's Hospital

Updates in Pediatric Urology

September 23

No presentation in observance of Yom Kippur

October 14

Christine Carter, Ph.D.

Mary Morris Leighton Lecture – "Helping Others Find Their Sweet Spot"

A sociologist and happiness expert at UC
Berkeley's Greater Good Science Center,
Dr. Carter is the author of The Sweet Spot:
How to Find Your Groove at Home and Work.

October 28

Mark Toth, M.D.

Urinary Tract Infections

November 11

Thomas Akre, D.O.

Innovations in Total Hip Replacements: Anterior Minimally Invasive Surgery

December 9

Luke White, D.O.

Update for Advanced Cardiac Life Support

PHYSICIAN SPOTLIGHT:

Meet Michiana's Only Female Gynecologist Oncologist

One of just a handful of gynecologic oncologists in Indiana, Dr. Nonyem Onujiogu is passionate about her work and is eager to serve women in our community. Specializing in the treatment of ovarian, uterine, cervical, vulvar and vaginal cancers, she is experienced in robotic, laparoscopic and complex gynecologic surgeries. Dr. Onujiogu recently opened her practice at 100 Navarre Place in South Bend.

Making a Choice

While Dr. Onujiogu was enamored with her obstetrics/gynecology rotation in medical school ("It didn't matter how early I came to work or how late I stayed, I never felt like I was working."), selecting a specialty for her fellowship was a bit challenging.

"When I rotated on the gynecologic oncology service, I felt a great connection with the patients and their families," she says. "I formed so many bonds — it was very natural for me to connect and work with them."

"I feel very honored and humbled to be able to participate in patients' lives in such a serious and important way."

– Dr. Nonyem Onujiogu

And while she felt pulled to caring for this patient population, she needed to be certain she could also handle the prospect of losing patients to cancer. Ultimately, her dedication to her patients and her captivation by the specialty's intricate surgical procedures swayed

"I couldn't talk myself out of it," Dr. Onujiogu explains. "I feel like it's a calling because I didn't really have a choice but to become a gynecologic oncologist — this is my life's work."

Clinical Notes

In addition to providing surgical interventions for gynecologic cancer, Dr. Onujiogu also administers chemotherapy to patients, either before or after surgeries. She is enthusiastic about one promising development in chemotherapy that could one day potentially help her patients — targeted therapy.

"This approach uses chemotherapy agents that target specific types of cells or molecular pathways in different types of cancers," says Dr. Onujiogu. Clinical trials for targeted therapy are currently underway and may be offered to local patients

"Memorial Regional Cancer Center is a partner with Mayo Clinic," she explains. "We will work to open some clinical trials here in conjunction with the Mayo Clinic as they become available and if we feel that they would be beneficial to our patients."

Best Practices

As she follows her patients well into survivorship, Dr. Onujiogu develops a strong and often lifelong relationship with them and their families.

"I feel very honored and humbled to be able to participate in patients' lives in such a serious and important way," she says.

"I treat my patients as if they are my family members," Dr. Onujiogu continues. "Whatever you would do for your mom or your aunt, do it for your patient. I think if you do that, you'll never go wrong. That's my motto."



Nonyem Onujiogu, M.D. **Gynecologic Oncology**

Beacon Medical Group Gynecologic Oncology Memorial Regional Cancer Center

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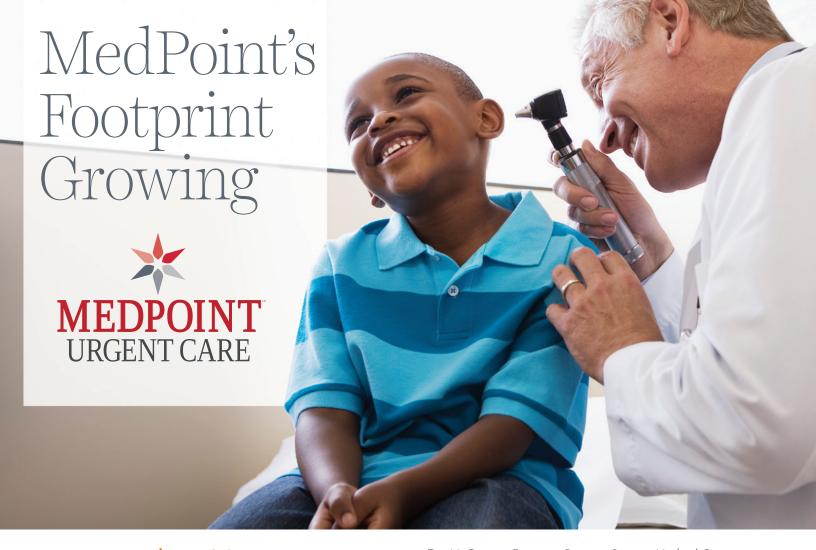
Obstetrics & Gynecology

EDUCATION

Medical School: University of Chicago Pritzker School of Medicine Residency: University of Chicago Medical Center Fellowship: University of Wisconsin School of Medicine and Public Health

PROFESSIONAL MEMBERSHIPS

Society of Gynecologic Oncology Fellow of The American Congress of Obstetricians and Gynecologists



For more than 30 years, MedPoint and its urgent care capabilities have shaped a familiar, comforting presence in St. Joseph County.

Buoyed by its patient-care convenience, low-cost alternative to the emergency room and expanding services, MedPoint has been growing across the region. Beacon Health System operates three urgent care clinics under the brand name of MedPoint in St. Joseph and Elkhart counties—often serving as the "entry point" for new patients to Beacon. MEDPOINT express is also available in Elkhart, Goshen and South bend for minor health issues.

MedPoint, interconnected with all Beacon primary care clinics and a network of Beacon occupational health services, is strategically located to take care of their patients when they are unable to do so due to vacations/conferences or when they are fully booked.

The first MedPoint clinic opened in August 1984 and is the longest operating urgent care center in St. Joseph County. MedPoint at Main Street was expanded to 24-hour service in July 2010 (now MedPoint24) and remains the only 24-hour urgent care location in northern Indiana.

Ongoing MedPoint initiatives include the use of a rapid treatment protocol designed to facilitate turnaround times for those with very minor illnesses such as UTI, strep screens, flu vaccines and suture removal.

Tim McGovern, Executive Director, Beacon Medical Group Primary/Ambulatory Care, has directed MedPoint to explore the use of existing technology to enhance clinical processes that further decrease wait times and improve patient satisfaction.

The following technology initiatives will be rolled out at MedPoint sites:

- Self-registration portals in the lobby: This will facilitate front desk registration and enhance patient privacy.
- Self-service app: Patients can review wait times, use GPS for directions and can access the different MedPoints.

Current MedPoint Locations

Ireland Road MedPoint 1815 E. Ireland Road South Bend, IN 46614 8 a.m. to 8 p.m. 574.647.1700

MedPoint24 6913 N. Main St. Granger, IN 46544 24 hours/day 574.647.1550

Elkhart MedPoint 3301 County Road 6 East Elkhart, IN 46514 8 a.m. to 8 p.m. 574.264.9635



Tim McGovern, Executive Director of Primary/Ambulatory Care Beacon Medical Group

Samir Patel, M.D., will be the first to tell you that he thrives on a sense of order, discipline, structure, self-improvement and goal setting. So it was no surprise when the board-certified diagnostic radiologist at Elkhart General took up the Korean martial art of Tae Kwon Do in 2005.

project. He saw a real opportunity for improved efficiency and savings in Elkhart General's ER. Using a diagnostic algorithm he developed and establishing a standard order of work for adult patients undergoing abdominal/pelvic CT, Dr. Patel helped oversee a \$300,000 annual savings for

A MAN OF TWO WORLDS

Dr. Patel has his oldest daughter to partially thank for his entrance into the highly disciplined and structured system of a sport more than 1,000 years old. After taking her to Tae Kwon Do for two years, he decided it was his turn to learn about a combat sport that helps refine the mind and body. Two years later, Dr. Patel and his daughter were honored for their hard work by receiving their first-degree black belts together. The sport's contagious – Dr. Patel's wife and youngest daughter have since earned black belts.

"I enjoy everything about Tae Kwon Do, particularly how it's helped grow the bond between my daughters and me."

In 2010, three years after earning his Tae Kwon Do black belt, Dr. Patel came across an opportunity to get a belt of different sorts.

Elkhart General's Total Value
Management Department offers instruction
in Toyota's Lean System, a philosophy
focused on reducing waste and continually
improving performance. A three-day
Lean System course, administered through
Simpler Healthcare, allowed Dr. Patel the
opportunity to meet a variety of Elkhart
General directors and managers and learn
about their experiences.

"It was one of the best professional experiences of my life and that's because it connected me with so many people and I was able to better understand the operations of the hospital."

For his efforts, Dr. Patel and the others were awarded a LEAN Healthcare Green Belt Certification.

But it wasn't enough to get a LEAN Healthcare Green Belt, just like it wasn't enough to get a green belt in Tae Kwon Do. Dr. Patel was aware the Institute of Industrial Engineers offered a two-week course with the opportunity to earn his Black Belt Certification in LEAN Healthcare. Participants learn how to measure a process, analyze the results, develop process improvements and quantify the resulting savings.

After completing a portion of the training in fall of 2012, Dr. Patel was required to apply what he learned to an actual

Elkhart General. These protocols have since been applied to the ERs at Memorial Hospital and Goshen Hospital.

In late 2012, Dr. Patel received a Lean Black Belt for Healthcare Certificate from the Institute of Industrial Engineers. Other organizations that can boast of having physicians who have achieved such an accomplishment include Mayo Clinic, Cleveland Clinic and Denver Health.

In fact, taking it a step further, Dr. Patel may be the only board-certified diagnostic radiologist in the United States with a black belt in Tae Kwon Do and a Lean Black Belt – a unique distinction characterized by a harmony between Tae Kwon Do and Lean.

"It's amazing the many similarities between Tae Kwon Do and the Lean System. They both offer skills for life: one promotes physical fitness and the other promotes process improvement in your professional career."

Dr. Patel, who has been the only Beacon physician so far to earn LEAN Healthcare Green and Black Belts, is hopeful more physicians will become engaged in the Lean System to help improve the efficiency of their own practice while at the same time benefiting the health system.

Back at Star Martial Arts, Dr. Patel is training in hopes of competing in the Tae Kwon Do World Championships next year in the categories of forms and weapons. Until then, you can be sure to find Dr. Patel hard at work improving the health system and himself.



Two of a Kind – What Tae Kwon Do & Toyota's Lean System Have in Common

Both originated in Asia

Both observe a focus on performance improvement (belt system)

Both follow a strict sense of order, structure and methodology

Both feature instructors

Both require a sense of self-discipline to be successful

A Closer Look at Dr. Patel

Former Chairman of the Radiology Department at Elkhart General Hospital

Radiology, Inc. Value Management Program Founder and Director

American College of Radiology Value Based Payment Models Committee

Elkhart General Hospital Board of Directors

New Life in Guatemala

Elkhart General orthopedic surgeon helps with life-changing surgeries





Mark A. Klaassen, M.D. Orthopedic Surgeon

If someone is suffering from a serious joint condition brought on by injury or osteoarthritis they have a number of good choices available locally: intensive rehab, surgery, even joint replacement if that's the best solution. And the chances of a positive outcome are excellent.

But what if a person lives in a developing country like Guatemala? There the options aren't so good. Because the level and quality of

medical care available is limited, a person is likely facing a life of debilitating pain and misery.

Consider these facts according to the World Pediatric Project:

- More than half of Guatemala's population of more than 14 million lives below the poverty line.
- Half live in rural areas beyond the reach of extensive critical medical care.
- The per capita health expenditure is 40 times less than it is in the United States.
- Guatemala has one of the highest rates of neural tube defects in the world, and the country's incidence rate of spina bifida is 10 times that of the U.S.

There is a significant disparity in the level of medical care between the United States and developing countries, but thanks to the kindness of Elkhart General physicians like Mark Klaassen, M.D., a nationally renowned orthopedic surgeon and University of Notre Dame professor, the people of Guatemala have reason for hope.

Dr. Klaassen was part of an 80-person medical team from the U.S. that traveled to Guatemala from Feb. 20-27 to provide free surgical care as part of Operation Walk, a non-profit, volunteer medical organization.

It was the first time Dr. Klaassen performed such a medical mission, but it won't be his last. The weeklong trip, which included 14-hour workdays in the OR in the capital of Guatemala City, was truly a gift to Dr. Klaassen, who found the opportunity to serve those in such great need rewarding.

"We were able to not only improve their quality of life, but in many cases, it was life changing," he says.

In just one week, the team of Operation Walk surgeons and support staff performed 113 surgeries on 76 patients. They replaced 72 knees, 26 hips and performed five ankle and 10 foot surgeries. One ankle surgery was a total ankle replacement, believed to be the first in Guatemala.

All supplies – the orthopedic implants, instruments, sterilization and radiology equipment, antibiotics, drugs and dressings – were donated, along with the time and talent of the medical team. Their work was coordinated through partnership with local doctors who provided logistical support, arranged hospital stays and staffing and participated in patient care.

While it was certainly a productive week in helping so many people, the level of hospital resources and the complexity of the surgical work tested the world-class expertise of Dr. Klaassen and the others. Against a backdrop of operating rooms that were "primitive but adequate," the surgical teams operated on major deformities, performed significant surgical revisions and conducted surgeries tied to longtime chronic conditions like arthritis.

"These people needing surgery have been crippled or in pain or disfigured for so long. Despite less-than-optimal conditions, we had to do the best we could to still deliver world-class care," says Dr. Klaassen.



That's why it was so critical to prepare a plan for each surgical case. "These people are extremely poor and have nowhere else to turn for medical care. No matter how difficult the surgery, we had to figure out a way to help them, because you can't put their surgery off."

Born in Colombia, Dr. Klaassen is a son of missionaries. He felt a real kinship with the people of Guatemala. Fluent in Spanish, he was able to communicate with his patients before and after surgery. He hopes to be part of Operation Walk in 2016 when a medical team travels to Nicaragua.

Surgery Photo by James W. Brown

Big Plans for Our Smallest Patients

The new Memorial Children's Hospital will be more than a new structure, it will help expand innovative ways of caring for our area's most critically ill and injured infants and children. With a skybreaking event planned for later this summer to begin construction, excitement is growing both in the community and among staff members.

FORM, FUNCTION AND BEAUTY

During the design phase of the new Memorial Children's Hospital, attention was given not only to how the spaces will look and feel, but also how they will function for both families and staff.

"The general pediatric rooms and Pediatric Intensive Care Unit rooms will be acuity adaptable — we will have the ability to flex the spaces as patients' conditions change," says Jen Tonkovich, R.N., BSN, CPN, Pediatrics Unit Director.

Diane Freel, B.S., R.N., NICU Director, adds, "One thing that is very important to us is the comfort of the family." Each patient room will include a private bathroom and a shower, for example, as well as truly comfortable furniture for two parents to stay overnight.

Large windows and a central atrium will allow natural light to suffuse patient rooms, and garden views will enhance experiences for patients, families and staff. Welcome lobbies, play spaces and gathering rooms will offer the opportunity for respite from patient care rooms.

"I am looking forward to how surprised and pleased people will be with how different everything is — so much quieter, warmer, relaxing and welcoming," says Robert White, M.D., NICU Medical Director. "I want to see those smiles on the faces of parents and nurses and, eventually, our graduates."

STAYING TOGETHER – FOCUSING ON FAMILIES

Dr. White believes the new Newborn Intensive Care Unit will be the first one – perhaps globally – built with the extra space and special design needed to offer couplet care for even the most critically ill babies. The practice of keeping families and babies together throughout their hospital stay originated in Sweden and is thought to enhance bonding via skin-to-skin contact, among other benefits. Some couplet care is now available at Memorial and, once the new NICU is in place, Dr. White anticipates conducting research on the practice with colleagues from the University of Notre Dame.

"We will see if couplet care reduces parental stress, improves parental bonding, enhances breastfeeding with all of its benefits, and leads to reduced infections and improved growth in the babies," Dr. White explains. "I expect that if our model of couplet care for virtually all NICU babies is successful, it will become the standard of care throughout the developed world within the next 20 years."

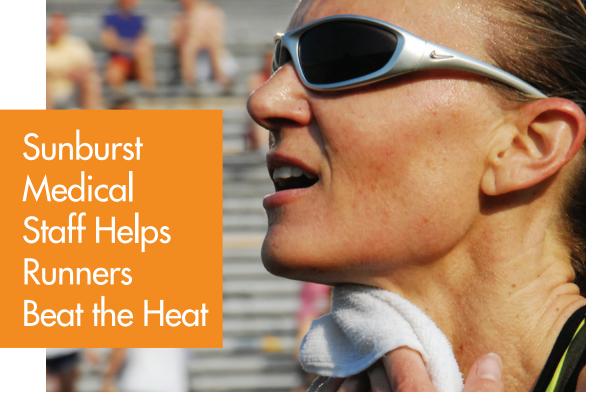
Giving Opportunities

For information about Shine: The Campaign for Memorial Children's Hospital, please contact Memorial Health Foundation at **574.647.6613**. Online gifts may be made at **Foundation.QualityOfLife.org/Give-Online**.

At-a-Glance: The New Memorial Children's Hospital

- 9 pediatric hematology/oncology infusion rooms
- 23 general pediatrics patient rooms
- 12 pediatric intensive care unit patient rooms
- 9 NICU couplet care rooms
- 21 private, single family rooms
- A two-story atrium providing natural light to patient rooms
- A roof garden and terrace
- The Butterfly Room, a sanctuary for families to gather with their critically ill child during the final hours of his or her life's journey







Linda Mansfield, M.D. Director, Beacon Medical Group Sports Medicine Medical Director, Sunburst Races

Sunburst - the one day of the year when thousands of runners come to South Bend to walk, run and enjoy the festivities. Much work goes on behind the scenes to ensure that these runners safely return home. Part of this process includes planning for and staffing a medical

tent to handle issues that arise along a spectrum, from the blister that needs a Band-aid to a lifethreatening episode of heat stroke.

Nearly every year the races have occurred under precariously hot and humid conditions that put the runners at risk of heat illness. The medical tent is set up to handle these conditions on-site. Volunteers include sports medicine and family physicians from our system, family medicine residents, nurse practitioners, nurses, EMTs and Red Cross volunteers, along with others to help the process of the medical tent run smoothly.

During the 2014 Sunburst Races a total of 79 runners sought medical attention at the medical tent. Twenty-four of these were evaluated by our physicians. Four of these people had symptoms of heat illness with core body temperatures that warranted ice bath immersion. (Of course, this number was lower than the race of 2011, which ultimately was "black flagged" or stopped due to highly dangerous environmental conditions.) In 2014 there were 7 musculoskeletal complaints evaluated, 8 less-severe heat illness symptoms treated, 4 liters of IV fluids administered for dehydration and a laceration requiring suture repair. In 2015, the total number of medical tent volunteers was 38, including 10 physicians. The team of volunteers provided medical attention to 41 race participants for everything from heat illness and musculoskeletal complaints to nausea and dehydration.

In addition to the staff in the medical tent, there are numerous ambulance rigs and crews throughout the course and at the finish line to pick up injured runners along the way and to transport more critically ill athletes to the emergency department.

With regard to the temperature, there is an established, validated system that is used for races and other mass participation events. The Wet Bulb Globe Temperature index is used. It takes into account the ambient temperature, the humidity and the radiant heat to determine the suitability/safety of the environmental conditions. A flag system is used to alert runners to these conditions. Green flag indicates that conditions are such that all should proceed with running the race and enjoy themselves. Yellow flag indicates that the conditions are such that extra caution should be taken to ensure proper hydration and to be aware of signs/symptoms of heat illness. A red flag warns that conditions are in a dangerous range and that continuing running activity could be dangerous. A black flag is called when the conditions become too dangerous to continue, and the race is called off and timing of the race ceases. This is an unfortunate situation and disappointing for the runners when it occurs, but the safety of the runners is the top priority at the Sunburst. The 2011 race was the only race in the history of the Sunburst to be black-flagged.



Neurohospitalist, Director of the Neurology and Stroke Program



Michael Hall, M.D. Interventional Radiology



Andrew Losiniecki, M.D. Neurosurgery



Robert Yount, M.D.

STRIKING OUT STRE

NEUROCOILING A GAME CHANGER

The neurovascular and stroke program at Memorial Hospital didn't happen overnight – it has been a long time in the making, evolving methodically over the last several years.

Several key components have come together to enable Memorial to provide comprehensive stroke care, including the addition of specialists and cutting-edge equipment.

The neurointerventional biplane angiography system, part of the \$7.5 million hybrid surgical suites that opened in Memorial's OR in the summer of 2013, has been instrumental in the diagnosis and treatment of stroke, brain aneurysms, brain and neck tumors and other neurological problems.

In preparation for the new technology, Michael Hall, M.D., a Beacon Medical Group interventional radiologist, underwent fellowship training in neurointerventional radiology at Central DuPage Hospital in Chicago. The impact of his advanced training was felt almost immediately. The number of aneurysm coilings jumped from 10 in 2013 to 20 in 2014. Previously, hemorrhagic stroke patients were transferred to Chicago rather than treated locally. But now, thanks to Dr. Hall's expertise and the hybrid surgical suites, nearly all stroke cases are treated at Memorial.

More options

Neurocoiling is in addition to the longtime practice of surgical clipping, performed by Beacon Medical Group neurosurgeons Robert Yount, M.D., and Andrew Losiniecki, M.D.

"It's wonderful that we can offer both treatments so patients and their family members can remain close to home," says Dr. Losiniecki.

Aisha Shareef, M.D., Director of the Neurology and Stroke Program, wants Memorial to continue to provide additional resources so it can eventually become the regional referral center for stroke care.

There is increasing evidence Memorial is on the way to that goal; in March of 2015 the Joint Commission certified Memorial as a primary stroke center.

"It's exciting to see significant progress over the last couple years, and it will be exciting to see more progress with the full complement of the multidisciplinary team," says Dr. Hall.

Beacon Medical Group is recruiting a second outpatient neurologist and a second inpatient neurologist – with the ultimate goal being to offer stroke care on an inpatient and outpatient basis 24/7.



- Aisha Shareef, M.D.

It takes a village

In addition to the outstanding physician resources, Memorial's program wouldn't be as successful without its clinical staff and support services. The stroke team, with leadership from Patti Buss, R.N., BSN, CCRN, Neuroscience Program Liaison, implemented advanced stroke care protocols that have identified potential stroke cases earlier, care planning to manage stroke patients at a world-class level and achieved incredibly high ischemic and hemorrhagic stroke quality over the last six months.

"We have made considerable progress over the last few years, but we have even greater things we are working toward," says Dr. Shareef. "Time is of the essence with stroke management. The faster and more aggressive we can be with treatments, the better the patient outcomes."

Timeline of Neurovascular and Stroke Program

2010

Nicole Riordan, M.D., began working in Memorial Hospital's ER; she is now the medical director of the stroke program in the ${\rm ER}$

North Central Neurosurgery joins Beacon Medical Group

Neurosurgeon Andrew Losiniecki, M.D., joins North Central Neurosurgery

Interventional Radiologist Michael Hall, M.D., begins fellowship training radiology

\$7.5 million hybrid surgical suite opens, including neurointerventional biplane angiography

intensivist Olajide Benson, M.D., joins North Central Neurosurgery

Aisha Shareef, M.D., began working in Memorial Hospital as a neurohospitalist; she is now the Director of the Neurology and Stroke Program

Kathryn Ann Hanlon, M.D., joins Beacon Medical Group as an outpatient neurologist at Beacon Medical Group Ireland Road



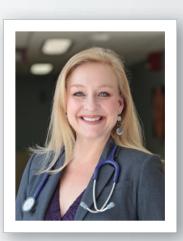


Shelly S. Harkins, M.D. has been named Chief Medical Officer for Beacon Health System

"Through an exceptional mix of approachability, expertise, and active listening skills, Dr. Harkins has a proven track record of encouraging collaboration between patients, families and colleagues, which we know enhances the patient experience at every level of care," says Philip A. Newbold, CEO of Beacon Health System. "These attributes support the Beacon Way of Quality and Performance Improvement, and will help guide us to the future of how care is improved and delivered."

Dr. Harkins will work with Beacon's executive leadership team and medical leaders across all areas of the health system to advance Quality, Safety and an improved experience for patients, physicians and colleagues.

Dr. Harkins comes to Beacon from St. Elizabeth's Hospital in Belleville, Illinois where she served as Chief Medical Officer. She has also served as an Active Duty Faculty Attending Physician and Assistant Professor at Scott Air Force Base Family Medicine Residency Program.



Shelly S. Harkins, M.D.

Medical Degree

Brody School of Medicine, East Carolina University, Greenville, North Carolina

Master's Degree

Healthcare Administration, Saint Louis University, St. Louis, Missouri