Taking A Stand Against Sepsis

The sepsis leadership team includes Chief Medical Officer Gregory Argyros, MD, and Chief Nursing Executive Sue Eckert, MSN, RN, and (standing) Katie Cameron, PA-C; Michael Foley, RN; Seife Yohannes, MD and Susie O’Mara, MD.
Reach for the Stars

the CMS Hospital Compare Star Rating System, which rates hospitals in a variety of categories, including mortality, safety of care, hospital readmission and patient experience. When the program was initiated in April 2015, CMS declared, “The Star Ratings spotlight excellence in health care quality, and make it easier for consumers to use the information on the Compare website.”

Historically, we have been paid for each episode of care, known as “fee for service.” Increasingly, reimbursement for care is being influenced by the outcomes of that care, and avoidance of harm. These “pay for performance” programs include Value Based Purchasing, the Hospital Acquired Condition Reduction Program and the Hospital Readmission Reduction Program. These programs look at outcomes in clinical care, safety, patient engagement and efficiency and cost reduction, to withhold up to four percent of payment due for services rendered.

You might be surprised to hear that there are more than 110 metrics that contribute to our Star Rating and pay for performance penalties, and each of these metrics is tracked by a group at MedStar Washington Hospital Center. Our focus this year is to organize our efforts around tracking performance for the metrics that carry the most weight, improving efficiency and minimizing redundancy of effort, and ensuring there is visibility at the President’s Council level to identify roadblocks that negatively impact results.

We’re spotlighting these metrics for this fiscal year:

- Safety of Care, including hospital acquired infections, surgical site infections and C. diff
- Patient Experience, including communication, responsiveness and cleanliness
- Hospital Readmissions, including all causes, MI, heart failure and pneumonia
- Mortality, including MI and pneumonia

Executive oversight of these efforts will be provided by the Clinical Business Council, chaired by President John Sullivan and including members of the President’s Council. Groups that will report to the Council include:

- Clinical Quality Improvement and Safety Council
- Quality Finance Committee
- Readmissions Committee
- Mortality Review Committee
- Patient Experience Committee
- Hospital Acquired Infection Executive Committee
- Regulatory Readiness Steering Committee

The charter and membership for each group is being reviewed, to ensure alignment and appropriate engagement. We’ve made considerable strides in our goal of providing the highest quality and safest care for our patients, and the best experience for patients and their families. This fine-tuning of our efforts will ensure continued movement in the right direction, and we are assigning necessary resources to achieve our goals.

We are positioned to grow in our Star Rating, but it will take all members of the Medical & Dental Staff to lead our teams to success. I hope we can count on all of you, our clinical leadership, to help move our rating forward. Please contact my office if you have any questions. Thank you for all you do every day, for our patients and their families.

Gregory J. Argyros, MD, MACP, FCCP is sr. vice president, Medical Affairs/Chief Medical Officer and Designated Institutional Official at MedStar Washington Hospital Center. Contact him at 202-877-6038 or gregory.j.argyros@medstar.net.
Micheal Pistole, MD, immediate past president of the Medical & Dental Staff and long-time member of the Department of Medicine, died in late September after a brief illness.

After receiving his medical degree at the University of Maryland at Baltimore, Dr. Pistole’s career became intertwined with the hospital, where he completed his internship, residency and fellowship. He was board certified in Internal Medicine, and joined the Medical & Dental Staff in July 1982.

Most recently, he served as the President of the Medical & Dental Staff, and as such, became an ex-officio member of the hospital Board of Directors. Current President Arthur West, MD, first met Dr. Pistole in 1984.

“He was always a very lively and gregarious man. I remember that it was in the early 80s that we were seeing some of the first cases of AIDS. It was such a devastating disease; young people were dying within a few months of the diagnosis. Dr. Pistole quickly became involved in the care of these very sick individuals. I remember being very impressed by his courage and compassion, at a time when other people were very scared of being in contact with anyone who might have AIDS. Even to this day, he devoted his time in taking care of an underserved population. He always had his patient’s welfare at the forefront. He was one of the many stars that make up the Hospital Center.”

Dr. Pistole was a strong advocate for Advanced Practice Clinicians at the hospital, states Sharon Taylor-Panek, MScN, ACNP-BC. “He was instrumental in helping develop the Credentialed Peer Advisory Leadership Council. Dr. Pistole attended our meetings in his role as President of the Medical and Dental staff, and ensured that it was recognized as an official committee of the Medical Dental Staff. He worked with the bylaws committee, to change the APC status to full voting members of the Medical & Dental Staff. His support will be missed.”

Dr. Pistole was also the vice chair of the Department of Medicine for many years. “When I think about Micheal,” says Interim Chair Carmella Cole, MD, “I think of somebody recognized for his care and devotion to the patients at Unity Health Care. I also think most people who knew him would consider him an exuberant and colorful person. If he was in the room with you, you knew it; if he had an opinion, you heard it. His absence will be felt for a long time to come.”

For many years, Dr. Pistole was part of the Connections Editorial Board, and enjoyed hosting the board’s summer off-campus meeting at his home, Hidden View Farm. Connections editor and Radiology Chairman James Jelinek said, “Micheal was unique. He loved life, and he passionately cared for his patients. We have lost a long-time friend.”

Colleagues have reported Dr. Pistole loved scuba diving, gardening, photography and travel. He also enjoyed knitting, and agreed to be interviewed for an article called, “Doctors Who Knit,” and modeled a sweater he created, along with demonstrating his technique.

A celebration of Dr. Pistole’s life will be held in the spring, his favorite blooming season, to allow friends and family to remember him in the beautiful gardens he created with his husband, Richard Bradshaw, reports his colleague, former intensivist Maria Gavaria, MD. Details will be announced through the weekly enewsletter, STAT Update.

In Memoriam
Micheal Pistole, MD
Internal Medicine/Gastroenterology
Taking A Stand Against Sepsis

Of the many challenges hospitals tackle in delivering quality health care, sepsis may well be the most prevalent, and the most frustrating.

With little warning, a patient who appears stable can suddenly be in desperate need of treatment. Unless the condition is identified and addressed quickly, the patient is at risk of becoming a statistic: one of the thousands of sepsis-related hospital deaths recorded each year.

Physicians, nurses and other caregivers are far from helpless when it comes to treating sepsis, yet hospitals across the U.S. continue to struggle with controlling and reducing infection-related patient mortality.

“What do know, is that early intervention is associated with a better chance for survival,” says Gregory Argyros, MD, MACP, FCCP, senior vice president of Medical Affairs and Chief Medical Officer at MedStar Washington Hospital Center. “The first few hours are critical for recognizing and confirming sepsis, initiating the proper treatment—blood cultures, IV fluids and antibiotics—then continually reassessing the patient’s condition.”

Susan Eckert, MSN, RN, NEA-BC, CENP, senior vice president of Nursing and Chief Nursing Executive, adds that while the Hospital’s Center mortality pattern for sepsis is typical for large facilities of its type, “we know we have room for improvement.”

Along with being inherently large with multiple clinical areas, for example, the Hospital Center serves a generally older patient population that is less tolerant of sepsis infections. What’s more, many of those patients have co-morbidities that might preclude the use of conventional treatments.

Still, simply accepting that only so much can be done to control sepsis mortality was not acceptable. “We felt an urgency to examine all elements of our sepsis response practices, and how to improve,” Eckert says.

Those concerns led to last year’s formation of the Hospital Center’s Sepsis Performance Improvement (PI) Group, charged with identifying ways to improve sepsis response and treatment throughout the organization. Seife Yohannes, MD, Critical Care Medicine, the group’s co-chair, notes that it was clear early on that while the medical staff wants to do the right things for their patients, “system inefficiencies and competing interests can, at times, stand in the way of doing what is right, on a timely basis.”

The fact that sepsis defies easy identification was also potentially costing patients precious response time.

“You have to rely on your senses, and determine that nothing else can explain what’s going on,” says Katie Cameron, PA-C, Critical Care Medicine. “We want to be early and proactive, but also recognize that we might not always be right.”

What was needed, the PI Group determined, was greater awareness of sepsis among Hospital Center staff—knowledge that could be conveyed through proven measures, such as training and other communication tools.

But the group also saw the need to augment existing response practices for patients showing signs of sepsis, especially since primary care team members might not always be immediately available, thereby reducing the time between alert and action.

Adapting a proven strategy

Drawing on the model of Critical Care’s successful Rapid Response Team, the group laid the foundation for a Sepsis Response Team—designated caregivers who could be mobilized immediately when key vital signs indicate deterioration in a patient’s condition, and with the primary care team on identifying the exact cause and appropriate treatment.

Because of the inherent complexities of hospital infections, the Sepsis Response Team includes an advanced practice clinician, who Cameron says, “provides an extra measure of critical thinking and decision-making to consider all possible reasons for the change in the patient’s condition, and risk factors for treatment.”

The PI Group also collaborated with the Hospital’s various medical services, to develop a collaborative workflow to screen patients for sepsis and sepsis-like conditions, and protocols to complement the work of the primary care team. A key outcome was the decision to augment the team with a pharmacist, who would help ensure the time-critical administration of proper sepsis medication appropriate to a patient’s existing condition.

Since April, the Sepsis Response Team has been fully staffed across all shifts. Along with gaining experience with handling sepsis alerts, the PI Group has also identified opportunities to refine workflows and protocols for identification.

“Of the 15 to 20 patients screened each day for the presence of an infection, only a third turn out to have sepsis,”
Dr. Yohannes says, “We have found that a collaborative decision-making with the primary teams improves our recognition of the patients with sepsis. We are also actively evaluating the role of a combined Lactate and Procalcitonin blood test on improving sepsis identification.”

The PI Group also initiated an extensive training effort for both sepsis responders and caregivers who may be the first to spot a potential sepsis case. A sepsis-specific Simulated Training and Education Lab (SiTEL) module for nurses will be mandatory in 2018, to help improve their overall awareness.

“We remind our nurses that patients may be sicker than they look, and that it’s critical to quickly move those patients into more urgent pathways, so that we can complete the core measures for sepsis within the three-hour window,” says Susie O’Mara, MD, vice chair of Emergency Medicine, who collaborated with Nicole Noga, RN, on the Emergency Department’s sepsis effort. It includes screening out non-septic patients who may still trigger an alert. “We don’t want to administer tests that they don’t need,” O’Mara adds.

Susie O’Mara, MD

Turning outcomes into enhancements

The PI Group’s work is generating valuable data about the response to suspected and actual sepsis cases, the analysis of which is the responsibility of program manager and nursing lead Michael Foley, RN, BSN, MBA. Since the program was fully implemented in April, Foley says the efforts are showing positive results, with a nearly eight percent decrease in sepsis mortality.

“There’s also been a subtle and gradual improvement in recognition, and completion of required response steps,” he says. “We’re identifying sepsis and implementing treatment sooner, and capturing more cases.”

Yet as the volume of sepsis case data grows, Foley admits that some critical information gaps remain.

“Because our providers record sepsis cases differently, we may not be capturing all the relevant data regarding identification, diagnosis and outcome,” he explains. “A successfully treated sepsis case may go unreported, because the data wasn’t entered properly. One of our goals in the coming months is to stress the need for accurate, consistent documentation of all sepsis cases, including those cases where sepsis was not appropriately ruled out.”

Improving communication about the role of the Sepsis Response Team likewise remains a challenge, one Cameron says is to be expected, given the Hospital Center’s size.

“Sometimes collaborating has been a challenge, but it’s also been a pleasure,” she says. “As we meet more of the primary care teams on the floor, we’re getting to know what we’re doing and why, and advance what they’re doing to help patient.”

What’s most important, all agree, is that the sepsis initiative is making a difference.

“The results show that we’re saving lives,” Eckert says. “It feels wonderful.”
What to Do When Injured on the Job

MedStar Washington Hospital Center
Urogynecologist Cheryl Iglesia, MD, was between cases. As she was hurrying down a stairwell, she encountered a wet area that had just been mopped, and she slipped and fell. When she attempted to stand up, she knew she was in trouble, and would need immediate medical attention.

“All of a sudden, I became a patient,” she says. “I didn’t know what to do.”

Her first thought was for her patients. She knew that she would not be heading back to the operating room for her next case. She called her office, and asked her staff to cancel the upcoming surgery and the rest of her patients for that day.

Her next thought was to seek care. With the help of an associate who had also been in the stairwell, she hobbled to the Emergency Department. An orthopaedic surgeon was called to consult, with the resulting diagnosis as a high sprain on her shin, splitting the membrane between her tibia and fibula.

“The surgeon wanted to operate right away,” Dr. Iglesia remembers, “but I wanted another opinion. I wanted to try to avoid surgery, since I knew I could have it later.”

A member of her office staff advised her to call Occupational Health.

“We’re a full-service resource until you’re back to full duty,” says Karin Myerson, assistant vice president, Occupational Health. “It’s important to report workplace injuries for three reasons: to initiate medical attention, to obtain help to pay for medical care, and to notify the employer to remove the hazard, so other workers will not be injured.”

“We don’t want our associates to worry about anything,” Myerson explains. “We’re here to navigate the process for them. This is a benefit we provide to all employed associates.” Physicians who are not employed by the hospital should still notify Occupational Health, which will in turn notify the hospital’s Risk Management team.

Physicians who are injured at the Hospital Center should immediately report to OccHealth, on the East Building first floor, Myerson says. A nurse performs an initial evaluation, and the injured physician fills out the First Report of Injury Form.

OccHealth initiates the report of injury to the Worker’s Compensation administrator (Gallagher Bassett), reviews the process and resources available to assist the physician with medical, salary and leave of absence questions. Each injured provider is assigned a nurse case manager and a GB resolution manager, to coordinate the recovery process, authorize payment for appointments and to schedule follow-up care and treatment. If the injury results in lost time from work, GB will coordinate salary payments.

“OccHealth was very helpful, each step of the way,” Dr. Iglesia says. Her nurse case manager assisted with getting a referral for a second opinion. The second surgeon thought that a boot to stabilize the injury, accompanied by extensive physical therapy, would work for Dr. Iglesia, who opted for this less-invasive alternative.

Her nurse case manager coordinated her rehabilitation services. Dr. Iglesia’s treatment plan included rehabilitation on a treadmill to build strength, with time on the Alter G® Anti-Gravity Treadmill® to reduce swelling and allow her bones to heal. OccHealth also arranged for orthotics, including a boot, crutches and knee stroller.

“I had four more cases that week, and other surgeons covered those cases for me,” Dr. Iglesia says. “I had to cancel all patients for another week.”

Her recovery went well, but the process made an impression on her. “I know the pros and cons of medicine,” she says. “Yet, it was still very hard to be on the other side. It was very eye-opening.”

She has a special piece of advice for other physicians. “We’re all human. It takes us as long to heal as it takes everybody else.”
According to reports from the Centers for Disease Control, people in America are dying in unprecedented numbers from opioid-related overdoses. The latest statistic is 100 deaths each day, rivaling the number of suicides or highway traffic fatalities. What is happening that we have arrived at such a problem?

Sadly, we can start by saying four of five new heroin users started on prescription opioids. In 2014, the prescriptions written for opioids in America equaled our present-day population, such that every American would have had a bottle of narcotic pills. Huge numbers are being exposed.

But clearly, pain is a symptom that must be treated. Well-meaning physicians are prescribing for good reasons. The problem lies not with the intent of doctors, but with the patient’s biological nature. One in five people have a genetic vulnerability to addiction. For the vulnerable person, taking an opioid may quickly trigger powerful addictive urges. For that person, after a couple doses of PERCOCET®, the brain is hijacked, and an addict is made.

The opiate pill user quickly finds out that there is a much less expensive form of illegal opiate available on the street. It costs only $5 or $10 for a “hit,” and using it by smoking or the intravenous route is more efficient, to get an opiate effect. This leads to addiction even more quickly.

The federal and state governments are aware of the problem, and have earmarked many millions of dollars to address the issue. The CDC has promulgated new guidelines for opioid prescribing, and has put out funds to enhance prescription monitoring programs and to reduce overdose, misuse and addiction. Medical schools and nursing schools are training for safe prescribing.

Hopefully, these efforts will impact our behavior as physicians. We also have new tools to treat those who have become addicted, including medication-assisted treatment, using agents such as methadone to block the euphoria response of narcotics, buprenorphine/naloxone to both replace and block the opiate receptors, and the use of naloxone to reverse overdose effects of opioids. The medication naltrexone can be used either orally by tablet, or as a once-a-month injection, to prevent any opiate intoxication.

In spite of these efforts, the rate of overdose deaths is increasing. The addicted find it almost impossible to resist the promise of a better high, especially when powerful synthetic opioids, such as fentanyl or super powerful “elephant” fentanyl, are added to heroin. There are a number of different types of synthetic narcotics that have been legally or illegally manufactured and diverted to drug dealers to potentiate their products. Mixing benzodiazepines and other pain medications, in addition to the doctor prescribed medications, can cause fatal overdoses. For this reason, the FDA has strongly advised that all patients on narcotics should not be on benzodiazepines.

Efforts are underway to make naloxone widely available to first responders, families of the afflicted and even personnel in schools, to rapidly reverse overdosed patients.

Treatment of pain works if we get it to those in need. But we have to be ever mindful of the patient’s vulnerability to addiction.

For those patients who do get addicted, they need treatment. We need to use everything in our arsenal to combat the problem of pain and addiction. The judicious use of our pen and prescription pad is the start. With the help of government, the states and society, we doctors can meaningfully impact the scourge of addiction and death created by this witch’s brew.
Educating the Clinical Educator: The “Teaching Essentials” for Clinical Faculty

**MedStar Washington Hospital Center** is a major academic medical center, home to more than 300 residents and fellows, supported by a robust clinical faculty. With such a strong emphasis on education, one clinical faculty member realized that others—and their students—would greatly benefit from formal instruction in education practices.

Jeffrey Love, MD, an Emergency Medicine physician and founding program director for the Emergency Medicine residency program for MedStar Georgetown University Hospital and MedStar Washington Hospital Center, decided to meet that challenge.

“I’ve been involved in education for a long time, but I didn’t have any formal education in education,” he notes. “Ultimately, I pursued a Masters degree in Education and numerous faculty development opportunities, and wanted to share those experiences with the faculty of our institutions.”

As a member of the Council of Emergency Medicine Residency Directors, he came into contact with colleagues who had the same goal. “As clinical faculty, we give feedback and provide mentoring. We want students and residents to be able to develop life-long learning skills, so they can continue to develop throughout their careers.”

Working with a colleague at the University of Michigan, the two of them—with support from a number of clinical leaders from the Hospital Center and MedStar Georgetown—created a program modeled on a seven-module skill-based program called “Teaching Essentials for Clinical Faculty.” The program was developed under the auspices of Georgetown University’s committee on faculty and development. The coursework is available online, through a site that provides links to university courses.

“One of the biggest hurdles is that clinical educators have limited time to commit to faculty development initiatives,” Dr. Love says. This seven month program requires a formal time commitment of three hours per month, with flexibility in when to access learning materials. Much of the learning takes place when working clinically, by applying what has been learned.

Each month begins with a review of a single online video workshop (module) that takes one to one-and-a-half hours to complete, and can be completed when participants have time. Participants have the next three to four weeks to practice what they have learned. At the end of the month, there is a group discussion, with videos and feedback. These meetings occur simultaneously, virtually connected at the Hospital Center and at MedStar Georgetown. “The basic format is to introduce, practice and then discuss each skill,” Dr. Love says. “These sequenced and multi-faceted authentic educational experiences increase the breath and depth of what is learned.”

The course began three years ago, with 20 participants. This year, 30 faculty are registered, including clinical faculty from both sites. “Each participant brings his or her own perspective,” Dr. Love says. “The traditional silos are gone. We’re all educators, regardless of our clinical specialty.”

Constructive feedback is critical, Dr. Love emphasizes. “You need to find a quiet space, and sit down with your learner. It’s important to ask them how they think they did, and see if it dovetails with your perception.”

This program teaches the participants the process of reflective observation, he explains. “After they finish the course, hopefully, they’ll incorporate this into their teaching practice. Teaching and modeling reflection for our learners is an essential step, in learning how to improve one’s clinical skills throughout our career.”

For more information on “Teaching Essentials,” contact Dr. Love, at jeffrey.n.love@medstar.net.
Modules for Teaching Essentials for Clinical Faculty

- **Orienting Your Learner**: How to help learners set expectations
- **RIME or Direct Observation**: How to identify learners who are Reporters, Interpreters, Managers and Educators, and help them use those strengths
- **BID Teaching Procedures**: How to introduce cases to learners: Briefing, Inter-case and Intra-operative Debriefing
- **Evidence Based Teaching**: How to teach best practices to learners
- **Bedside Feedback**: How to give feedback to learners at the patient bedsides
- **Entrustment and Autonomy**: How to determine the amount of autonomy learners can handle

Alena Lira, MD
Critical Care Medicine
Completed Teaching Essentials this year

“I took the course to continuously improve my educational practices,” she notes. “We spend so much time teaching, that we want to make sure that it’s effective. We need to follow residents’ needs as learners, rather than our needs as teachers. I felt like I learned how to balance the curriculum with the needs of individual learners. There was a lot of teamwork and discussions. Hearing others’ experiences really helped. Now, I hold myself more responsible for feedback, and find my own practice to be more focused.”

Brian Bello, MD
Colorectal Surgery
Completed Teaching Essentials this year

“The course allowed me to reflect on how I teach. I’m always trying to be a better educator. That’s why I’m at a teaching institution. The program’s strength lies in the number of strategies it pulls from. It’s taught me how to teach in the operating room setting. It reinforces what to cover before the surgery, how to teach skills during the surgery and then how to provide feedback after the surgery. Learners really appreciate this approach.”
The Electrophysiology Pioneer Down the Hall

Seth Worley, MD, brings his groundbreaking expertise in treating cardiac patients to MHVI

Eighteen years ago, Seth Worley, MD, began developing new tools and technique that makes it easier for cardiac physicians to implant electronic pacing leads in the heart’s left ventricle (LV) to treat congestive heart failure. Known as interventional device implantation for cardiac resynchronization therapy, Dr. Worley’s custom-designed tools and techniques have since been hailed as a breakthrough method for inserting LV leads for treating patients with chronic heart failure.

Physicians who have embraced Dr. Worley’s tools and techniques can implant LV leads more quickly and with less fluoroscopy time, substantially reducing patient’s and physician’s radiation exposure. The procedures also enjoy a higher success rate, thereby improving the patient’s quality of life while also cutting hospital stays and nearly eliminating the need for more invasive surgical LV lead implantation procedures.

Though Dr. Worley himself has called interventional device implantation a “disruptive innovation,” he considers the technique the end-result of a focused effort to solve a problem, not unlike the many others he tackled over the years in the hospitals and EP labs where he’s worked, or at his workshop at home.

Dr. Worley joined MedStar Heart & Vascular Institute at MedStar Washington Hospital Center in July as senior consultant, Cardiac Rhythm Device Management. He recalls how his knack for building began by watching his father, Pittsburgh-area plastic surgeon Carl M. Worley, MD, invent devices to reduce a patient’s risk of nerve injury during complex facial reconstruction.

“As a kid, I had this natural curiosity to see what my Dad was doing during all those hours in the basement,” he says. “As I went from watcher to helper, I got used to the idea that if there’s a problem, you try to figure out a way to fix it.”

A variety of other device types emerged from the Worley’s workbench—radios, models, even a Van de Graaff electrostatic generator. That hands-on experience gave the younger Dr. Worley a high comfort level with both electricity and electronic devices as he entered Temple University Medical School in the mid-1970s, sparking his interest in what at the time was the emerging field of electrophysiology (EP).

“For me, cardiology represented the right combination of cerebral and surgical skills, and at the time EP was also the most ‘surgical’ area within the discipline,” he says. “The leaders in the field were no-nonsense, dynamic and often outspoken, which somehow felt attractive. As a new discipline, EP offered many opportunities for innovation. It really was a natural fit.”

Indeed, Dr. Worley proved to be a prolific researcher. During his subsequent 30-year career at Lancaster General Hospital in Pennsylvania, he led dozens of studies and clinical trials, analyzing the viability and effectiveness of new treatment approaches, some of which challenged the then-current thinking of his peers.

“It usually comes down to people being hesitant and even a bit suspicious of change,” Dr. Worley says. “Challenging those ideas is sometimes the only way we can improve the way we care for patients.” That included forgoing certain complicated procedures, unless he was absolutely certain they would be effective.

“That personal connection with the patient and what he or she would experience is what keep me going,” he says. “I decided to do whatever was necessary, to provide that level of benefit to the patient.”

One of the thousands of patients who would eventually receive the benefits of Dr. Worley’s expertise was his father-in-law, who had fallen ill, following a procedure to implant a traditional pacemaker.

“The physicians who put it in didn’t understand why he was having so many problems,” Dr. Worley says. “I was able to figure out the cause, so we brought him to our hospital and corrected the problem.”

Trial, error and success

Cardiac resynchronization therapy for congestive heart failure would prove to be the culmination of Dr. Worley’s personal and professional commitment to improving patient care. He says that while the concept itself was not new, implementing it had proven more difficult than expected. Tapping those innate problem-solving skills honed during the many hours spent with his father, he repeatedly shaped and reshaped the tiny tools he felt would overcome anatomic challenges that long made optimizing the placement of the LV electrode tricky, if not impossible.

There was no “aha!” moment upon hitting upon the precise design, Dr. Worley recalls. “It was all trial and error, just a process aimed at getting around problems.”

As interventional device implantation techniques were proven and accepted, Dr. Worley found himself in demand as a teacher, a role and responsibility he eagerly embraced.

“It’s important to disseminate what I do with other physicians, so that these techniques will be perpetuated,” he explains. “Otherwise, they might be lost, particularly among more experienced surgeons who must first ‘unlearn’ old habits and practices. Having the support staff see the benefit is crucial as well, for they, too, can be reluctant to accept and learn new things, without seeing the actual benefit to the patients.”
Realizing that a model of the heart was necessary to help demonstrate the techniques in a classroom setting, Dr. Worley again applied his builder’s instincts. That meant frequent trips to The Home Depot, where, with the assistance of his nephew Ben, he picked out the plastic tubing and other materials that would be crafted into valves and ventricles.

For the last several years, Dr. Worley’s monthly training program has attracted implanting physicians from around the world, to watch him demonstrate the tools and techniques on patients who have had a failed implant attempt at another center. A session in mid-August, for example, brought together patients from across the Northeastern U.S. with physicians from as far away as California. Often physicians attending the program will accompany their own patients for the procedure.

In addition, Dr. Worley often travels to the physicians’ home institutions, to critique their implementation of the tools and techniques.

“I don’t consider myself a particularly ‘skilled”surgeon,” he says. “Many of the physicians I teach are technically better than I am, but just haven’t mastered this particular approach. That why there is nothing more rewarding than watching colleagues successfully implant LV leads using my tools and techniques, especially if they’d had difficulty with the procedure beforehand.”

A new home, and new opportunities
Dr. Worley insists that whatever praise he’s received over the years for his work is secondary to the benefits patients have received, not unlike what his father sought to achieve with the inventions he designed. And though cardiac resynchronization therapy has spread around the world, Dr. Worley has been equally focused on the welfare of patients in his own community. In addition to launching the Electrophysiology program at Lancaster General Hospital, for example, he developed the institution’s codes R and S, ensuring quick access to lifesaving treatment for heart attack and stroke patients.

Dr. Worley also founded the Lancaster Heart and Stroke Foundation, which supports community-based clinical trials as well as community service programs, such as CPR training for high schools, medications for low-income patients and efforts to place defibrillators in ambulances and police cars.

But when the opportunity arose to come to join MHVI, the convenience of the patients he treats and physicians he trains outweighed the many personal and professional connections forged over the past three decades.

“Lancaster is a wonderful place, but the closest major airport is two hours away in Philadelphia,” he explains. “Here in D.C., you have three airports close by, which provides better access for everyone, including me, given all the teaching-related travel I do. In addition, the area also has a larger population of physicians with whom I can share the implant tools and techniques. It works out for everyone.”

Dr. Worley’s new home in Maryland also affords easy access to the Chesapeake Bay, where he enjoys water-borne relaxation pursuits, such as sailing and windsurfing. But when something needs fixing around the house or a new building project catches his fancy, Dr. Worley the EP pioneer becomes a screwdriver-wielding household first-responder.

“I’m still chief technical officer of the house,” he says with a laugh.

Dr. Worley joins an extensive team of MHVI Electrophysiology physicians:
Zayd Eldadah, MD, PhD, director, Section of Cardiac Electrophysiology
Margaret Bell Fischer, MD
Sarfraz Durrani, MD
Michael Goldstein, MD
Jay Mazel, MD
Glenn Meininger, MD
Sung Lee, MD
Susan O’Donoghue, MD
Edward Platia, MD
Ahmed Rafique, MD
David Schamp, MD
Manish Shah, MD
David Strouse, MD
Athanasios Thomaides, MD
Allison Warren, MD
Upcoming CME Conferences

MEDSTAR CONFERENCE HIGHLIGHT

Diabetic Limb Salvage Conference 2018
April 5-7, 2018 | JW Marriott | Washington, D.C.
Conference Chairs: Christopher E. Attinger, MD | John S. Steinberg, DPM
Course Directors: Cameron M. Akbari, MD, MBA | Nelson L. Bernardo, MD
Karen F. Kim Evans, MD | J.P. Hong, MD, PhD, MBA | David H. Song, MD, MBA

The Diabetic Limb Salvage conference is intended to better equip each member of the healthcare team with the education and resources needed to heal wounds and prevent amputations. It features a prominent multidisciplinary faculty that promotes the importance of every member of the team. The course is designed for healthcare practitioners of all specialties and promotes an evidence-based approach. The meeting format will include didactic lectures, hands-on workshops, specialty symposia, and live surgical case demonstrations for the purpose of providing a live interactive learning experience.

Save $100 with Early Bird Registration! For more information and to register, visit www.DLSconference.com

WEEKLY ACTIVITIES
Numerous continuing medical education opportunities, including Regularly Scheduled Series, take place each week at MedStar Washington Hospital Center.
For a complete list of CME activities, please visit: medstar.cloud-cme.com

UPCOMING CME EVENTS

Lung Cancer 2017: Progress and Future Directions
November 4 | Renaissance Dupont Circle Hotel | Washington, D.C. | cme.medstarhealth.org/LungCancer
Course Directors: Deepa S. Subramaniam, MD, MSc | Giuseppe Giaccone, MD, PhD

Advances in Gastroenterology for the Primary Care Provider
November 11 | The Ritz-Carlton | Washington, D.C. | cme.medstarhealth.org/GIPCP
Course Directors: James H. Lewis, MD | Caren S. Palese, MD | Nadim G. Haddad, MD | James C. Welsh, MD, MBA, MPH

Breast Cancer Coordinated Care 2018
Conference Chairs: Shawna C. Willey, MD | David H. Song, MD, MBA

Abdominal Wall Reconstruction 2018
June 7-9, 2018 | Grand Hyatt | Washington, D.C. | www.AWRconference.com
Conference Chair: Parag Bhanot, MD, FACS

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The Academic Health System: 
A New Paradigm for Advancing Health and Improving Care at MedStar

By Stephen R.T. Evans, MD, Executive Vice President for Medical Affairs and Chief Medical Officer, MedStar Health; and Neil J. Weissman, MD, President, MedStar Health Research Institute

Academic medicine generates the knowledge every physician uses today when practicing contemporary, evidence-based medicine. To meet today’s challenges in health care, however, academic medicine must broaden its focus to include the science of how we improve the delivery of care. To unleash the full potential of academic medicine on real-world operational problems, we first need to relinquish our conventional image of an academic medical center.

Traditionally, academic medical centers have had three silos: research, education and clinical care. While this approach has its virtues, including a great degree of independence for investigators, it may lack alignment between health system leadership and researchers. No longer can the academic entity stand apart from the health system enterprise.

The answer is an integrated Academic Health System where investigators use their talent and creativity to work on real-world healthcare challenges. In an Academic Health System, research includes creating knowledge that can be immediately applied toward improving outcomes, safety, quality, accessibility, and efficiency. Investigators see their work resulting in meaningful improvements for patients, the community, and their hospital. Leaders see an immediate return on the work of engaged academicians. Most importantly, patients see the benefits in their care.

How is this accomplished? First, patients must be at the center of all activities, including academics. This concept is the genesis of patient-centered outcomes research and is becoming increasingly accepted by clinical investigators. Next, we must recognize the value of health services research (HSR), or research on the delivery of care and the outcomes from that care. While many medical researchers embedded in clinical departments devote their efforts to developing new drugs or devices to improve our ability to diagnose or treat disease, HSR focuses on how we apply our care and improve its effectiveness. HSR studies methods to make health care safer, more affordable, more accessible, and more efficient.

One sector of this research is implementation science, which focuses on how change occurs and applies a framework, using scientific methodology, to study and intervene in a step-wise fashion. The premise is that different care delivery environments will have different barriers to change. Therefore, implementation science must be applied and tested in different environments and not be constrained to a single medical condition nor a single medical setting. This method can move us away from reactionary medical care to proactive health and wellness care.

At MedStar Health, we have set the foundation for an Academic Health System. With more than 280 diverse sites of care and aligned physician governance over 24 system-wide service lines, we are able to align our research and operational needs. We have also maximized our academic and clinical partnership with Georgetown University with a unified clinical trial management system (CTMS) that will standardize conduct of clinical trial research.

MedStar has fully embraced health services research and implementation science as part of our system-wide strategic plan. MedStar’s National Center for Human Factors in Healthcare is a prime example. With more than a dozen human factors engineers and other professionals, this group is actively examining usability of new equipment, the design of electronic medical records, root causes from safety events, and the effect of team interactions and distractions.

Medical investigators can align with healthcare leadership by focusing on research that can be immediately applied in a healthcare system and can inform policy makers and academic peers. Working together, system leaders and academics can transform stand-alone, traditional Academic Medical Centers into Academic Health Systems to improve how we deliver care to patients today and tomorrow.
Michail Mavros, MD
Surgery

For Michail Mavros, MD, research has always been a central part of his journey in medicine. As a medical student in his homeland of Greece, he began a focus on evidence synthesis, the compiling and evaluating existing data on a particular topic with the intent to clarify both current knowledge as well as gaps in evidence.

That work brought him to the United States and The Johns Hopkins University School of Medicine, where his focus was surgical oncology, and later, to Massachusetts General Hospital and Harvard Medical School, where he researched health services outcomes.

“I’ve always been very curious,” says Dr. Mavros, chief resident for Surgery at MedStar Washington Hospital Center. “I want to find answers to the questions that come up every day.”

As a surgeon, Dr. Mavros says that he was drawn to the ability to more or less quickly, and usually permanently, find an answer to a patient’s problem, not only as a surgeon in the operating room, but also a doctor, who can care for a sick patient from top to bottom.

Informed in part by his time at JHU, as well as the loss of close friends to cancer while in medical school, Dr. Mavros found that surgical oncology offered the perfect dovetail of clinical practice and research, allowing him to continue in his quest for answers.

“I started doing my research in surgical oncology, and I found the advancements fascinating. It deeply affected me,” he says. “You see that the standard of care changes every few years, and that patient outcomes are better. There’s a lot of research happening in this field that has an actual impact on outcomes. I can’t wait to be a part of this trend.”

Dr. Mavros will be part of that trend soon enough. Following his chief year, he will start a fellowship subspecialty, training in surgical oncology and hepatobiliary surgery at the University of Toronto, which will allow him to blend both his clinical and research passions.

“While the fellowship is primarily clinical, for the research part, I’ll be focused on outcomes and health services research,” Dr. Mavros says. When asked if there’s a particular research area that he’d be most interested in combing for trends and gaps, he is quick with an answer: “Generally, what I find interesting is how the body reacts to the stress of surgery. What are the factors that we can influence in the immediate pre-and-post-operative period, and how do those factors affect outcomes? Is the cancer going to come back? Will there be an infection?”

Dr. Mavros says that already knowing his fellowship match has allowed him to focus on giving his best during this chief year, and tailoring his focus to best prepare him for his upcoming fellowship, including more training in oncology and robotics.

“I’m excited about the autonomy that we’ll continue to attain this year. It signals a deep trust by the attendings of our assessments and opinions. The opportunity is something that we’re looking forward to,” Dr. Mavros says of his fellow chiefs for surgery.

“It’s a long journey, especially for surgery residents,” he says of his time at Hospital Center. “It’s very hard work, but, as they say, the hours are long, but the years are short.”

With his scheduled move to Toronto next summer, Dr. Mavros says, “I enjoy exploring the DMV area, both the restaurant/bar scene and the parks/landmarks, and also the nearby Virginia vineyards. I also love playing soccer, and try to play every week, if my schedule allows. I am trying to take in all the D.C. I can, before I move.”
“What should I hope for?” As a neurologist working in critical care, that’s the question that Jason Chang, MD, hears most often.

The question usually comes not from the patient, but from a family member or loved one who is grappling with a world suddenly shifting underneath his or her feet. Whether those loved ones are able to fully hear Dr. Chang’s prognosis often comes down to trust, something he realizes can be hard to muster, when the patient’s neurological health has quickly and dramatically changed.

“You basically have a patient who was walking and talking one minute, and the next is filled with tubes. So it’s a heartbreaking revelation, and a new reality for family members,” he says. “The change of status is so instantaneous that some people will believe you, but some people don’t.”

Dr. Chang waxes philosophical about this life-and-death relationship; a hazard, he says, of his specialty.

“It’s inherent in our personality,” he says of neurologists. “Neurology is a very esoteric and compelling topic for anyone who wants to dive deeper into understanding why we humans are what we are. We’re a little bit wacky,” he jokes. “We’re in our own world.”

His outlook is also informed by a unique combination of experiences prior to becoming a doctor. He spent a year teaching English in South Korea, another working in adolescent dispute resolution in Los Angeles as an AmeriCorps volunteer, and one year as a researcher at the National Institutes of Health.

Prior to joining the MedStar Washington Hospital Center Critical Care team, Dr. Chang spent two years at the University of Tennessee Health Science Center in Memphis. For Dr. Chang, joining the Hospital Center served a crucial need. “You might have a very basic life-and-death struggle, and loved ones are looking to you for guidance, regarding a prognosis.”

He says that no other hospital offers that fusion in quite the way that the Hospital Center does. “It has a trauma center that you’re not going to see in other hospitals, and there’s a great critical care team that is truly multi-disciplinary.”

As he settles into his role on the Critical Care team, Dr. Chang hopes to continue to pursue his interest in neuroprotection, stemming the loss of neurons in order to prevent or slow disease progression and secondary injuries, following neurological trauma.

Dr. Chang returns to the District after a ten-year hiatus. He graduated from George Washington Medical School and completed his residency with the Virginia Commonwealth University Health System, before moving back to his home state of California for a neurocritical care fellowship at the University of Southern California. Dr. Chang now lives in Falls Church, Va., with his wife and child.

While the District marks a return for him, after a decade away, Dr. Chang marvels at how much has changed. “D.C. has changed exponentially,” he says. “The growth here is staggering, compared to other places.”

That observation seems to also hold true for his view of the Hospital Center: “It’s basically the center of the District. There’s tremendous potential to continue to establish itself well beyond the nation’s capital.”
Physicians’ Perspective

From the Desks of…

James Tozzi, MD and Oliver Tannous, MD

MedStar Orthopaedic Institute Spine Program at MedStar Washington Hospital Center

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We specialize in minimally invasive and motion-preservation spine surgery, complex revision and deformity spine cases, such as failed back syndrome and scoliosis. Common procedures are minimally invasive thoracic and lumbar spine fusion, cervical disk replacement to maintain range of motion, and microsurgical minimally invasive decompression. If a minimally invasive approach is not the right answer for a patient, we perform standard open surgeries. Patients hospitalized after surgery are cared for by nurses who specialize in orthopaedics, with physical therapy on site and across the street at MedStar National Rehabilitation Hospital.

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