“Very much in the middle”
How a military psychiatrist balanced treating Afghan detainees and U.S. troops

“There are certain situations that don’t naturally appeal to what Lincoln called the ‘better angels of our nature,’” reflects Thomas Fluent, M.D., clinical assistant professor of psychiatry at the University of Michigan Medical School and medical director of ambulatory psychiatric services at U-M.

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High on the list for him: the nine months he spent as chief of mental health services for more than 1,000 detainees at Bagram Airfield in Afghanistan — while at the same time caring for the mental wellbeing of the U.S. soldiers tasked with guarding the often violent and dangerous men.

On a recent morning, Fluent, a captain in the U.S. Navy Medical Corps with more than 20 years of active duty and reserve service, reflected on being “very much in the middle” of such a challenging dynamic.

Fluent — a warm, energetic and self-effacing man who prefaces many of his insights with phrases like, “Now this is going to sound corny, but…” explains in a dozen different ways over the course of an interview that for him the key was to never lose sight of the humanity of the people he was dealing with, nor of his own humanity.

Fluent’s job was to help detainees as they struggled with exactly the types of emotions you’d expect: homesickness, loneliness, sadness, trouble sleeping, worry about the safety of their families and uncertainty about what the future might hold.

“A cynic might say, ‘who cares, they’re the enemy,’” he says. “But part of the mission was also to fight the insurgency by demonstrating to these men and their communities that our way was really the better way, our values the better values. In that sense, the mission was ennobling.”

Still, Fluent had a responsibility to his fellow soldiers guarding the detainees, who were often on the receiving end of verbal abuse and, at times, had bodily substances thrown at them. The detainees were there for a reason, often for harming or attempting to harm the soldiers’ fellow Americans.

“My approach was to model that ambivalence, to respect the tension inherent in the situation,” he says.

While doing his best to help the detainees in his capacity as a psychiatrist, Fluent also worked to maintain the respect of the guard force and not seem overly accommodating of the prisoners.

“It’s definitely a fine line,” he acknowledges.

Fluent quickly realized that as a highly visible, high-ranking officer, his behavior spoke volumes to both the detainees and guards.

“I tried to model behaviors that said, ‘This is what we’re all about. This is the kind of behavior that Mom, Dad and everyone back home is going to be proud of,’” he says.

The tour marked his third mobilization since the attacks of Sept. 11, 2001.

After a difficult encounter with a detainee, he would try to demonstrate to other soldiers that it’s perfectly natural to be angry and frustrated — but he also wanted to show that those feeling didn’t have to be channeled into negative behaviors.

“Wow,” he would joke. “That guy was ridiculous! Do we need a bar in here or what?”

Fluent also found himself taking a similar approach to the detainees, telling them things like, “It has to be totally miserable in here for you. I’m sure being here makes you furious. I get it—or at least I’m trying to get it.”
“It helped just to acknowledge the reality of the situation,” he says.

His challenges as a psychiatrist were multiplied by linguistic and cultural differences. Having to speak through an interpreter robbed Fluent of some of the tools on which he frequently relies to put patients at ease: humor, intonation, playfulness, nuance.

“I found I focused a lot on my non-verbal communication, my eye contact and facial expressions,” Fluent says. “I wanted my eyes to communicate warmth and humanity, but not ‘I’m a fool.’ ”

Many of the detainees had very little experience with Western medicine, much less talk therapy. Their attitude seemed to be, the more medication you got, the better the doctor, he notes.

Still, Fluent looks back at the mission with a sense of accomplishment.

“We did good things there,” he says. “I know I made a difference, although it was the kind of mission where that sense was a little harder to wrap your arms around compared to my experience at Landstuhl,” an earlier deployment to Landstuhl Regional Medical Center in Germany. There, Fluent mainly treated physically and psychologically injured Coalition troops fresh from the battlefield.

Fluent says he’s grateful for the support he received while deployed. In July, U-M’s Psychiatry Department received a Patriot Award from the Michigan Committee for Employer Support of the Guard and Reserve in recognition of its support for National Guard and Reserve forces.
After 21 years taking care of congenital heart patients in Chicago, Catherine Webb, M.D., is returning to her Alma mater to bolster U-M’s pediatric heart and telemedicine program, making the U’s care more accessible to those in the farthest of places.

Webb, who completed her residency in pediatrics and her pediatric cardiology fellowship at the University of Michigan Health System in the 1980s, returned to U-M in November 2010 to augment pediatric cardiology services in Northwest Michigan.

Webb is practicing pediatric cardiology for the University of Michigan out of offices at Northern Michigan Regional Medical Center in Petoskey, Munson Hospital in Traverse City, and soon, Metro Health System in Grand Rapids.

Her outreach clinics are designed to extend the services of the University of Michigan Health System throughout the state, and to make the Health System more accessible to patients seeking care here.

A nationally recognized leader in telemedicine, she is in the process of establishing U-M as a hub for telemedicine service delivery to medical centers throughout Michigan. Her work in telemedicine will allow her to transmit echocardiograms over secure internet lines to doctors at U-M, which significantly decreases time-to-diagnosis, minimizes unnecessary transports, decreases hospital length of stay, and more specifically directs patient medical management.

This ultimately saves insurance and patient dollars and significantly improves quality of care. Telemedicine also allows videoconferencing between physicians at U-M and referring physicians as well as between U-M physicians and their patients and families. This allows for improved and timelier communication.

“It will help cut back on patients’ need to travel far and saves money for health care providers, including Medicaid, as it cuts back on transportation of patients to U-M,” Webb adds. “Videoconferencing also helps patients get to know us before they come to Ann Arbor.”

Webb is doubling the number of pediatric cardiology clinics U-M has offered in the area. She collaborates primarily with U-M’s Macdonald Dick, M.D., who has practiced pediatric cardiology for U-M in the area for the last 33 years.

“I have the whole Health System as back-up,” she says. “My presence in Northern Michigan will improve access for our patients and make it an easier and more user-friendly experience for them.”

Webb will hold 12 clinics a year at each site. She visits Munson the fourth Thursday and Petoskey the fourth Friday of the month. Her hours in Grand Rapids are still being determined. She will also collaborate in the care of adults with congenital heart disease with the adult cardiology group at Munson.

Webb will be providing a variety of clinical and educational services, including:

- Emergency transmission of tele-echocardiograms 24 hours a day, 7 days per week for neonates suspected of having congenital heart disease
- Videoconferencing services for physician and family consultation with the pediatric cardiology service at C.S. Mott Children’s Hospital, University of Michigan
- Videoconference links to educational lectures such as pediatric cardiology patient management conferences and weekly Department of Pediatrics and Communicable Diseases Grand Rounds

FOR MORE INFORMATION:

C.S. Mott Children’s Hospital Congenital Heart Center:
http://www.mottchildren.org/congenital/index.html

"I have the whole Health System as back-up. My presence in Northern Michigan will improve access for our patients and make it an easier and more user-friendly experience for them."

— Catherine Webb, M.D.
Introducing Nerve Whiz: an app for your brain

For physicians who need nervous system information on the go, even during patient interactions, U-M has introduced a free mobile app (short for application) created by a University of Michigan neurologist. Nerve Whiz lays out the complex anatomy of nerve roots, plexuses and peripheral nerves in an interactive, creative way.

The application can be used on smart phones such as iPhones and Android phones, as well as on iPads and iPod Touches.

“Just go to the App Store or Android Market, search for ‘Nerve Whiz,’ and download it to your smart phone or other device,” says Nerve Whiz developer Zachary London, M.D., assistant professor of neurology and director of the U-M neurology residency program.

Nerve Whiz aims to provide a better understanding of the peripheral nervous system and its anatomy. Physicians can ask patients where they are feeling weak, conduct a physical exam of the patient, and then enter the relevant information into Nerve Whiz.

Nerve Whiz then provides a list of possible localizations (root, plexus, or nerve) to consider. The application goes beyond simple nerve charts to help medical professionals interpret clinical examinations. It includes relevant pictures, charts and thorough nerve diagrams. The user can choose any localization (root, trunk, cord, or nerve), and see a diagram of that nerve in the context of the brachial or lumbosacral plexus.

The application makes sensory localizations just as easy. A physician can touch a picture of an arm or leg in the spot where a patient complains of numbness, and Nerve Whiz will suggest localizations with graphic representations of the sensory distributions of nerve roots, parts of the plexus, and nerves.

Nerve Whiz also includes a comprehensive inventory of the most clinically relevant muscles in the upper and lower extremities. Muscles can be sorted by root, trunk, cord, peripheral nerve, action, or muscle name.

To date, more than 40,000 users around the world have downloaded Nerve Whiz. Among them are physicians, medical students, physical therapists, occupational therapists, and anatomists. London is surprised and pleased at the application’s popularity.

“I wanted to develop a tool that would assist in localization and diagnosis, and be easy and interactive. I was happy to accomplish that, but I wasn’t prepared for the incredible response it has had,” he says.

London has received positive feedback from clinicians across the country, as well as medical professors in the U.S. and abroad, who are incorporating Nerve Whiz into their neurology curricula. It seems the program is as much of a teaching tool as it is a clinical tool.

The Jerry Isler Neuromuscular Fund at the University of Michigan financed the Nerve Whiz project. Jerry Isler was diagnosed with a painful neuromuscular disease affecting his legs when he came to seek treatment from London. Isler was very happy with the care he received at U-M and with his wife Gussie, established the Fund in late 2009.

“Dr. London’s care, concern, and compassion led Gussie and I to our decision to ‘make a difference’ at U-M,” says Isler. “We started the JINF to support research and education related to neuromuscular disorders, and have been very pleased with the results.”

“Nerve Whiz takes the mystery out of the peripheral nervous system,” says London. M

FOR MORE INFORMATION
University of Michigan Department of Neurology:
http://www.med.umich.edu/neurology/nerve-whiz.htm

Zachary London, M.D., assistant professor of neurology and director of the neurology residency program
While it’s generally known that children with private health insurance have historically faced challenges in accessing primary care, a new study shows just how significantly these children differ from their privately-insured peers.

According to new University of Michigan research, children with public insurance are 22 percent less likely to receive comprehensive primary care than those with private insurance.

Public insurance programs cover one-third of U.S. children, many of whom belong to the most vulnerable groups, including minorities, the underprivileged and those in poor health.

The study, published in Academic Pediatrics, determined how often children with public health insurance reported having a ‘medical home,’ a model for pediatric primary care designed to facilitate partnerships between patients, parents and care providers.

Researchers analyzed data from the 2007 National Survey of Children’s Health phone survey of households with children ages 0-17. To determine whether they were getting medical home services, the survey asked parents about their child’s usual source of care, familiarity with a personal doctor or nurse, difficulty in obtaining referrals, access to family-centered care and communication between care providers.

Only 45 percent of children with public insurance met all five of these components, far less than the 67 percent of children with private insurance.

“Because of their vulnerabilities, children with public insurance are a prime target for efforts to promote the medical home,” says Joseph S. Zickafoose, M.D., clinical lecturer in Pediatrics and Communicable Diseases at the U-M Medical School. “However, until now, we knew very little about how often children with public insurance received care consistent with a medical home.”

The biggest differences between children with public and private insurance were found in family-centered care, with significantly fewer parents of publicly-insured children reporting that their child’s provider spent enough time, listened carefully, displayed sensitivity towards family values and customs, and provided needed information.

However, over 90 percent of children with public insurance reported having a usual source of medical care and a personal doctor. Given that this group has historically faced challenges in accessing and maintaining primary care, the researchers say this was very encouraging.

“Primary care is the cornerstone of health care for children. These results suggest that efforts to improve access to primary care for children with public insurance have been very successful,” says Zickafoose, lead author of the study.

This study is the first to find such associations between a composite measure of the medical home and type of insurance in a broad cross-section of children. The findings provide a national benchmark for state programs promoting the medical home concept for publicly- and privately-insured children.

“While we need to continue to assure adequate access to primary care for publicly-insured children, we also need to pay attention to the care they receive once they’re in the door,” says Zickafoose, “Particularly for family-centered care, we have a long way to go.”

FOR MORE INFORMATION

Child Health Evaluation and Research Unit (CHEAR): http://chear.org/
A type of normal stem cell fuels ovarian cancer by encouraging cancer stem cells to grow, researchers at the University of Michigan Comprehensive Cancer Center have found.

Cancer stem cells are the small number of cells in a tumor that drive its growth and fuel its spread. Traditional cancer treatments do not kill these cells, which is why cancer treatments often fail.

In a study published online in the *Journal of Clinical Investigation*, researchers looked in ovarian tissue at the mesenchymal stem cells, which are normal stem cells found throughout the body. These cells can form different specialized cells such as fat, bone or cartilage.

Mesenchymal stem cells are known to be helpful with wound healing, which has many scientists conjecturing that they may help combat cancer. In this study, the researchers observed that mesenchymal stem cells in ovarian tumors were different than mesenchymal stem cells from healthy ovaries. And in fact, the mesenchymal stem cells in the ovarian tumors were fueling the cancer.

“Cancer is very good at tricking the mesenchymal stem cells into doing what the cancer likes. The cancer takes the cells hostage and uses them to promote the cancer’s growth,” says study author Ronald Buckanovich, M.D., Ph.D., assistant professor of internal medicine and of obstetrics and gynecology at the U-M Medical School.

The researchers used mouse models and human tissue samples of both normal ovaries and ovarian cancer, to look at what happened to the mesenchymal stem cells. They also noticed the cancer-associated mesenchymal stem cells increased tumor size, primarily by increasing the number of cancer stem cells.

At the same time, the researchers saw that a type of protein called BMP2 was prevalent in the cancer-associated mesenchymal stem cells. BMP2 is a master regulatory protein, and is carefully regulated in normal cell function. The researchers found more than three times the amount of BMP in the cancer-associated mesenchymal stem cells than in the normal ones. When BMP was added to cancer cells, it led to an increase in cancer stem cells.

The researchers then used a known BMP inhibitor called Noggin, and found that Noggin blocked the mesenchymal stem cells from triggering this cancer stem cell growth.

“High doses of Noggin might not be tolerated in humans,” Buckanovich says. “Our next step is to figure out how to target Noggin directly to the vascular niche where the mesenchymal stem cells and cancer stem cells live. This would allow us to make it safer to use Noggin as a potential treatment for ovarian cancer.”

This research must continue in the laboratory before it can be advanced to clinical trials in patients.

In the meantime, the U-M Comprehensive Cancer Center expects to open two new clinical trials within the next year testing other therapies aimed at attacking ovarian cancer stem cells.

**Additional authors:** Karen McLean, Yusong Gong, Junjung Choi, Ning Deng, Kun Yang, Shoumei Bai, Lourdes Cabrera, Evan Keller, Laurie McCauley and Kathleen R. Cho, all from U-M

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**FOR MORE INFORMATION**

Reference: *Journal of Clinical Investigation*, doi:10.1172/JCI45273

Cancer’s Stem Cell Revolution: www.mcancer.org/stemcells
The elderly may no longer need to be excluded from undergoing minimally invasive procedures to treat peripheral arterial disease because of their age.

A statewide study from the Michigan Cardiovascular Consortium showed elderly patients were no more likely than younger patients to suffer major complications or deaths after endovascular procedures such as angioplasty or stents to restore blood flow in the lower extremities.

More than 4 million American adults, nearly 15 percent of those over age 70, have peripheral arterial disease, or PAD. PAD affects circulation in the legs, patient mobility and sometimes lead to amputation.

“A patient’s age may not be the significant predictor of whether they’ll experience complications from endovascular procedures,” says study lead author P. Michael Grossman, M.D., an interventional cardiologist at the University of Michigan Cardiovascular Center and VA Ann Arbor Healthcare System, and associate professor of internal medicine at the U-M Medical School. U-M coordinates the Michigan Cardiovascular Consortium, which is funded by Blue Cross Blue Shield of Michigan and includes physicians and hospitals statewide.

The severity and location of blockages may determine whether physicians use a less invasive endovascular procedure or open surgery to treat PAD. But the recent study supports the ‘endovascular-first’ approach that’s emerging in medical care, particularly for older patients who often have other medical conditions that may increase the risk of major complications associated with open surgery.

In addition, there is no drawback to an endovascular-first strategy since typically such an intervention does not preclude surgery later, Grossman says.

“And as we gain experience and work more closely with our vascular surgery colleagues to understand both what we can and what we shouldn’t do — including the vascular beds where we may want to be more careful about implanting a stent that may limit surgical options down the road — I think an endovascular-first approach is quite reasonable,” Grossman says.

In general, the study’s authors write, “the findings may support the notion of using peripheral vascular interventions as a preferred strategy in the treatment of severe PAD in the elderly.”

Data from 18 Michigan hospitals were used in the research published in the Journal of the American College of Cardiology: Cardiovascular Interventions.

Major findings:
- Success rates of lower extremity intervention decreased in the elderly — but were still strong
- Older patients undergoing endovascular procedures are more likely to have vascular access complications
- Most other complication rates, including in-hospital mortality, were similar among older and younger patients

The hospitals in the study are part of the Blue Cross Blue Shield of Michigan Cardiovascular Consortium-Peripheral Vascular Intervention, a statewide collaborative effort focused on improving patient safety and quality of care. The U-M is the coordinating center for the consortium and its registry of patients who have had vascular interventions at Michigan hospitals.

In this study, 7,779 patients with PAD were divided into three age groups: less than 70 years old, 70 to 80 years old, and 80 years and older.
Endovascular interventions were mostly successful despite more severe PAD. Technical success was highest in the youngest age group — 85 percent compared to 82 percent among 70 to 80-year-olds and 78.2 percent in those over 80 years old. But older age was not associated with an increased risk of major complications such as death, heart attack, stroke, transfusion, or amputation.

PAD can develop as a result of smoking, diabetes, elevated cholesterol, hypertension, obesity or a family history of cardiac or vascular disease. Some patients have no symptoms. But for others, PAD can cause severe leg pain and numbness and be a limb- or even life-threatening condition.

“Patients with PAD of the legs can be quite impaired, but after these procedures, these patients can experience improvements in their quality of life,” Grossman says.

For patients like Colbert Smith, 79, it means enjoying family time during his retirement. Even after working for years in factories and spending years cooking in the kitchens of Ann Arbor’s beloved diners, still wanted to be on his feet — this time for walks in the woods on a Rails to Trails path with his wife Thelma.

“But my legs would go numb. I could walk 75 to 100 yards and then I wouldn’t be able to get them to work,” says Smith, who lives in Stockbridge, Mich. Smith knew that his diabetes could affect circulation throughout his body, but members of the U-M Multidisciplinary PAD Program found severe blockages in his leg vessels. Smith had an endovascular procedure by Jon Eliasion, M.D., vascular surgeon at the U-M Cardiovascular Center. The result has been better blood flow in his legs and a return to the woods.

“There’s a trail next to an old railroad tracks where my wife likes to walk. I’m doing all can to be able to take those walks with her,” Smith says.

U-M MULTIDISCIPLINARY PAD PROGRAM

The U-M’s PAD program delivers care with a team of physicians specializing in interventional cardiology, interventional radiology, cardiovascular medicine, vascular medicine and vascular surgery. The U-M uses traditional therapies like lifestyle changes and medications as well as procedures and surgical interventions to provide relief for patients and reduce their risk for heart attack and stroke.

FOR MORE INFORMATION:

University of Michigan Cardiovascular Center PAD program:
http://www.uofmhealth.org/medical-services/peripheral-arterial-disease

Blue Cross Blue Shield Michigan Cardiovascular Consortium
Peripheral Vascular Intervention:
http://www.bmc2.org/

“"There’s a trail next to an old railroad tracks where my wife likes to walk. I’m doing all can to be able to take those walks with her.””

— Colbert Smith

Following a successful endovascular procedure, Colbert Smith enjoys a walk with his wife, Thelma.
Non-verbal clues guide doctor-patient relationships and clinical judgments, U-M study finds

Some doctors are more conscious than others of the messages they tacitly send

Most physicians intuitively understand that they exchange subtle and unspoken clues with patients in the exam room through body language, eye contact, physical appearance, and tone of voice. However, such clues are difficult to observe and evaluate.

A new study by researchers at the University of Michigan Health System sought to help elucidate signals sent and received on both sides of the examination table by analyzing video recordings of routine checkups and conducting follow-up interviews with participants.

The method shows promise for improving medical decision making by allowing doctors to better understand how they make judgments and what messages they may be unwittingly conveying to or receiving from patients, says lead author Stephen G. Henry, M.D., a research fellow at the VA Ann Arbor Healthcare System and the U-M Medical School’s Department of Internal Medicine. The results were recently published in the *Journal of Evaluation in Clinical Practice*.

“Our findings show that both doctors and patients identified tacit clues involving the behavior or appearance of the other, but they were not always able to articulate precisely how these clues informed their medical judgments and assessments,” Henry says.

“Not surprisingly, patients and doctors discussed these clues very differently,” he adds, noting that the study is exploratory and did not examine whether the clues led to better or worse judgments. It is hoped future research will

“Our findings are consistent with research from the social sciences suggesting that doctors’ and patients’ judgments in the examining room are often complicated and take into account many subtle, unspoken clues.”

— Michael Fetters, M.D.
help show how such clues can affect care and medical judgments.

One important study finding was that some physicians appeared to be far more conscious than others of the non-verbal messages they send to patients, says Henry. Just five of the 18 southeast Michigan doctors who participated in the study contributed 64 percent of all the comments, which were given while reviewing a recording of the interaction.

One physician was particularly attuned to how non-verbal communication spoke to patients, the authors note. “I use my body a lot,” the doctor reported. “It’s nice to see that I don’t look rushed in the room. Although in my mind, I’m whirling. Okay, so I sit down, I try to relax and look relaxed.”

Physicians also reported using these tacit clues to aid in diagnosing a patient, says Henry, a researcher in U-M’s Robert Wood Johnson Foundation Clinical Scholars program. They discussed observing the patient in a general way for signs that they might be depressed or that they were not revealing the whole of their concerns. “It’s mostly looking at the patient. Do they look healthy?” one doctor said.

Another doctor noted this ability to put together the puzzle pieces of a patient’s verbal and non-verbal communication becomes intuitive: “How do you know what Aunt Martha looks like? Because you know what she looks like, you’ve seen her lots of times. I can’t detail as to why I know that, but I’ve been down the road long enough to know.”

The way a patient comports himself may give a physician clues as to whether non-specific symptoms like weight gain, fatigue and high blood pressure are signals of depression — or whether something else may be responsible, such as Cushing syndrome, which may indicate an adrenal tumor, the authors note.

Patients in the study, on the other hand, were mainly concerned with clues that indicated their place within the doctor-patient relationship: Did the doctor make the patient feel comfortable? Did the doctor seem like she was in a hurry? Did she put the patient at ease? Was the doctor a good listener? Did he make eye contact?

While doctors and patients keyed in on particular tacit clues in many of the examinations, sometimes they were unsure of precisely how they arrived at an opinion.

“Our findings are consistent with research from the social sciences suggesting that doctors’ and patients’ judgments in the examining room are often complicated and take into account many subtle, unspoken clues,” says senior author Michael Fetters, M.D., M.P.H., M.A., associate professor of family medicine at the U-M Medical School. “In the future, we hope this method of recording and reviewing these types of interactions can inform interventions designed to improve medical decision making and doctor-patient interaction by providing a more complete understanding of the kind of signals upon which doctors and patients rely.”

Additional Author: Jane H. Forman, Sc.D., M.H.S., of VAAAHS

Funding: The research was supported by the U.S. Department of Veterans Affairs and the Robert Wood Johnson Foundation.

FOR MORE INFORMATION:

Citation: “How do you know what Aunt Martha looks like?” A video elicitation study exploring tacit clues in doctor-patient interactions,” Journal of Evaluation in Clinical Practice, DOI: 10.1111/j.1365-2753.2010.01628.x
The University of Michigan Stroke Program is taking a tip from the automotive industry by using “Lean” Thinking — a quality improvement philosophy that removes waste from processes and attacks problems at its roots. Since the creation of the Lean Stroke Project Team one year ago, U-M has finely honed its stroke arrival process to benefit referring physicians, U-M faculty and health care staff and, most importantly, stroke patients.

“Stroke is a complex disease process requiring collaboration from multiple surgical/medical specialties,” says Aditya S. Pandey, M.D., assistant professor of neurosurgery. That’s why physicians, nurses and health care staff in the emergency department, Neurology, Neurosurgery, Neuroradiology, Cardiology, ICU, Anesthesia, Rehabilitation, Physical Therapy — every component of the hospital that works with stroke patients, and even outside entities such as emergency medical services — were brought into the process.

The Lean Stroke Project Team meets regularly, sharing feedback and reviewing statistics that are recorded in real-time to monitor door-to-needle times.

The team identified several key issues including the need for:

- A standard process of accepting emergency department-to-emergency department transfers
- Better communication and standard processes for patients to access our system.

The Lean Stroke Project Team’s goals were:

- To create a standard system approach for all stroke patients
- To implement American Stroke Association Best Practices and
- To create a monitoring system with prompt data feedback.

Results of the many improvements of the team so far:

- Developed new emergency department stroke screening and activation processes, and added the Anesthesia service to the team
- Implemented a Neuro-Interventional Radiology single activation system
- Updated emergency department-to-emergency department transfers to facilitate the acceptance of patients at U-M
- Began pre-hospital activation by working with ambulance groups to have the stroke team meet patients in bay

Our infrastructure for stroke care has become more efficient in allowing early diagnosis and treatment while being able to offer a comprehensive spectrum of medical, neurointerventional and neurosurgical treatment alternatives that simply are not available in most stroke centers.

— Aditya S. Pandey, M.D.
Patients with kidney or blood pressure problems, or history of stroke, are more likely to have a stroke following surgery — even if the operation does not involve the heart or brain — according to a University of Michigan Health System study.

Strokes are known to occur after surgery, but the U-M study is one of the largest and most comprehensive to analyze how often the deadly complication happens and who is most likely to have a post-operative stroke.

“Our study was able to identify the numerous risk factors of postoperative stroke in patients undergoing non-cardiac surgery,” says study lead author George A. Mashour, M.D., Ph.D., assistant professor of anesthesiology and neurosurgery, and director of the U-M Division of Neuroanesthesiology.

“Our study was able to identify the numerous risk factors of postoperative stroke in patients undergoing non-cardiac surgery,” says study lead author George A. Mashour, M.D., Ph.D., assistant professor of anesthesiology and neurosurgery, and director of the U-M Division of Neuroanesthesiology.

Some of the factors included a previous heart attack, acute renal failure, past history of stroke, dialysis and hypertension. We also found that those who suffered a stroke following surgery were eight times more likely to die within 30 days of surgery,” says Mashour.

The study was published in *Anesthesiology*, a publication of the American Society of Anesthesiologists.

Researchers analyzed records from more than 500,000 patients in the American College of Surgeons National Surgical Quality Improvement Program database to determine the incidence, predictors and outcomes associated with post-operative stroke.

More importantly, the authors developed a “risk index classification” to help guide clinicians as to who is at highest risk of postoperative stroke.

Both the authors and editorial writers say physicians need to maintain vigilance for perioperative stroke. Neurologic function can be assessed at the bedside on routine examination, even by simply observing the patient’s movements, speech, and cognition during a brief postoperative visit.

“Neurologic signs or symptoms should trigger stroke codes and stroke teams that can emergently triage patients for acute interventions such as thrombolysis and/or endovascular clot removal,” an accompanying editorial’s writer says. “Immediate treatment is paramount as outcomes worsen with time from ictus; ‘time is brain.’ ”

**FOR MORE INFORMATION:**
- Emergency department-to-emergency department transfers: call 734-936-6666.
- For clinic appointments to the U-M Stroke Program: call M-LINE at 800-962-3555.
Determining when a patient’s sinus problems warrant surgical intervention is more complicated than one might expect. Nearly half of all Americans have allergies, nasal obstruction, colds or frequent headaches that can mimic the symptoms of true chronic sinusitis. And 30 to 40 percent of people without sinus symptoms, if given a CT scan, would have abnormalities consistent with sinus infection.

So, in a random collection of people on the street, roughly 1 in 6 would have symptoms and radiologic findings that might indicate they’re a good candidate for sinus surgery when, in actuality, few of them would actually benefit from it.

“The problem is a lack of specificity of ‘sinus’ complaints — headache, nasal drainage, stuffiness, post nasal drip — combined with a lack of specific findings on a sinus CT scan,” says Jeffrey Terrell, M.D., director of the Michigan Sinus Center and professor of otolaryngology at the University of Michigan Medical School.

Melissa Pynnonen, M.D., associate professor of otolaryngology at U-M, adds, “I always tell my patients that a doctor can’t just look at their CT scan and know whether they need sinus surgery. It requires a thorough workup.”

That would include taking a detailed patient history, carefully reviewing CT films and conducting a physical examination, which might include nasal endoscopy, she notes.

“The most common diagnoses that masquerade as chronic sinusitis are allergic rhinitis, a deviated septum, gastroesophageal reflux disease, and migraine headaches or other headache syndromes,” says Mark A Zacharek, M.D., associate professor of otolaryngology at U-M.

Here are five indications a patient is NOT likely to be a good candidate for sinus surgery:

1. The patient has recurrent sinus infections, but has never been evaluated or treated for nasal allergies or dental infections.
2. The patient’s CT scan is normal when they are symptomatic. Patients with chronic sinusitis simply do not have normal CT scans when they are symptomatic.
3. The patient has severe headaches, but only minimal abnormality on their CT scan. Bad headaches (7 or higher on a scale of 1-10) are more likely an indication of migraine.
4. The patient’s CT scan shows abnormalities consistent with chronic sinusitis, but the patient doesn’t have classic sinusitis symptoms — such as yellow-green discharge, nasal blockage and poor sense of smell.
If you’re considering referring a patient for specialty care at U-M, consider this: For 17 years running, we’ve been named to the national honor roll of “America’s Best Hospitals,” which signifies all-around excellence in multiple areas of specialized medical care for adults, by U.S. News & World Report. Our C.S. Mott Children’s Hospital also ranks in the top tier nationally in all 10 pediatric specialties.

No matter what type of care your patient needs, you can be confident that sending them to U-M means national-level quality and expertise.

Here are all of our 2011-2012 adult rankings from U.S. News:

- No. 1 in Detroit metropolitan area
- No. 14 in the entire U.S. for third consecutive year
- U-M ranked in the top 30 nationwide in all specialties:
  - Cancer 13
  - Cardiology & Heart Surgery 12
  - Diabetes & Endocrinology 17
  - Ear, Nose & Throat 9
  - Gastroenterology 20
  - Geriatrics 11
  - Gynecology 12
  - Nephrology 26
  - Neurology & Neurosurgery 27
  - Ophthalmology 16
  - Orthopaedics 25
  - Psychiatry 20
  - Pulmonology 14
  - Rehabilitation 17
  - Rheumatology 15
  - Urology 15

Of the 4,825 hospitals considered for the rankings, only 140 made the list in even one specialty.

U.S. News determines its “America’s Best Hospitals” rankings based on a mix of care-related factors such as nursing and patient services, on hospital reputation among board-certified specialists, and on mortality rates.

Rankings in ophthalmology, psychiatry, rehabilitation and rheumatology are determined by reputation among board-certified specialists.

For More Information:

University of Michigan Hospitals:
http://www.uofmhealth.org/rankings

University of Michigan Sinus Center:
http://www.uofmhealth.org/medical-services/noseandsinus

For 17 years running, we’ve been named to the national honor roll of “America’s Best Hospitals,” which signifies all-around excellence in multiple areas of specialized medical care for adults.
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Check out the facts and photos at www.mottchildren.org/newhospital