HE COULD HAVE GONE ANYWHERE, BUT HE CHOSE THE UNIVERSITY OF ILLINOIS
THE SUPERSTAR’S SURGERY

ALSO IN THIS ISSUE:
LEADING THE WAY FOR THE ACA
CARDIO STUDY UNCOVERS RISKS FOR LATINOS
MEDS? CHECK. AND DOUBLE CHECK.

international music star Vicente Fernández
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WELCOME
Patient-centered care is the focus of UI Health's new leaders

HEALTH SYSTEM NEWS
UI Health makes a difference down the block and around the world

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Vicente Fernandez put his career in the hands of UI Health surgeons

LEADING THE WAY FOR THE ACA
UI Health hopes its pilot program helps health systems and patients throughout the U.S. thrive under reform

SAFE AT HOME
New RxCARES program ensures patients and prescriptions are a good mix after they leave the hospital

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MY PASSION
Giving back to the community isn’t optional

FIRST BEST MOST
Fast facts on UI Health’s accomplishments as a national leader
Joe G.N. “Skip” Garcia, MD

They could have gone anywhere, but they chose to come here. In this issue I would like you to meet four additions to our leadership team who came to UI Health because they wanted to make a difference and one individual who came because he needed the difference we could make in his life.

As we work together here at the University of Illinois Hospital & Health Sciences System to deliver personalized health and eliminate healthcare disparities among ethnic and racial groups, these are five individuals who illustrate the bold mission of UI Health.

If you haven’t already met them, I’d like to introduce four new appointments to our leadership team; Jodi Joyce as associate vice president for quality and patient safety, Jaewon Ryu as associate vice president for professional practice and chief medical officer, Robert Winn as associate vice president for community-based practice and director of the UI Health lung cancer program and Karl Kochendorfer, assistant vice president and chief health information officer. These are all extremely accomplished leaders in their respective fields who have had the opportunity to work at some of the most highly accomplished academic medical centers and health systems in the country. Each of them has chosen to come to the University of Illinois expressly because of our unique vision and mission.

We are attempting to reduce health disparities in an urban setting, hoping that our work can be a road map and an inspiration to other like-minded institutions around the country. From our neighborhoods to the nation – that’s our goal.

Let me tell you a bit about our new leaders – you’ll be hearing from them directly in the months and years to come.

Jodi Joyce holds BSN, RN and MBA credentials and began her career as a neonatal intensive care unit nurse. A Robert Wood Johnson Foundation Executive Nurse Fellow in 2011, Jodi has a well-established track record of leadership excellence within the healthcare setting and tremendous accomplishments in developing clinical quality programs that demonstrate effectiveness in delivering better health and healthcare. At UI Health, Jodi will lead system-wide healthcare quality and quality improvement strategies and initiatives designed to improve the integration of care across the clinical continuum.

Jaewon Ryu is an attorney and physician specializing in emergency medicine. Jae most recently served on the executive leadership team at Kaiser Permanente (Mid-Atlantic) where he led initiatives driving higher quality and more efficient care and shaped strategies related to government programs and health reform. Jae will be leading our strategies focused on advancing and developing professional practice initiatives geared toward expanding UI Health clinical volume and regional market share, establishing clinical service lines and clinical programs of excellence, and improving overall clinical outcomes.

Robert Winn is an MD specializing in pulmonary and critical care with a primary interest in lung cancer. He previously was a physician-scientist at the University of Colorado Health Sciences Center and the VA Medical Center in Denver. Rob’s focus will be the development of system-wide community health strategies and initiatives including responsibility for overseeing community-based health programs aimed at the prevention of disease and promotion of health.

Karl Korchendorfer is a practicing family medicine physician and graduate of the University of Illinois’ College of Medicine (MD 2000) and Family Medicine residency-training program. Prior to joining UI Health, Karl served as Medical Director and Director of Clinical Informatics for the University of Missouri Tiger Institute for Health Innovation. Karl will lead the development of system-wide clinical information systems that assist in the delivery of patient care, support operational performance, and facilitate clinical research activities.

We are very fortunate to have recruited an outstanding leadership team to focus on patient satisfaction, quality and patient safety, and the needs of our community to accomplish our goals. You will learn more about some of their expertise in this issue of Illinois Health, as Dr. Winn shares the importance of giving back to the community in the “My Passion” column.

You will also read about our efforts to pro-actively position UI Health for the implementation of the Affordable Care Act, beginning with a new initiative stemming from our Emergency Department.

Additionally we cover a groundbreaking study led by UI Health researcher Martha Daviglus on the startling health risks faced by Latino populations living in the United States. It was published in the Journal of the American Medical Association and is another example of an effort where we believe the University of Illinois can lead the way for a nation searching for solutions.

Finally, we’d like to introduce you to a grateful patient with an incredible story who may be familiar to some of our readers. When health problems posed a threat to the career of popular Hispanic music performer Vicente Fernandez (nicknamed “El Rey de la Canción Ranchera” – the King of Ranchera Music), he turned to UI Health for help. Now, he’s back on the road doing what he does best, entertaining crowds of loyal fans. Mr. Fernandez’ story is like one of many that happen throughout UI Health everyday. We are grateful for the opportunity to serve him and all of our patients who depend on us for care; continuing to do doing what we do best, focusing on addressing health disparities, making sure our patients have the best care available, and changing medicine... for good. Thanks for reading.

Joe G.N. “Skip” Garcia
Vice President for Health Affairs, University of Illinois
Earl M. Bane Professor of Medicine, Pharmacology and Bioengineering
Nearly a third of the women who deliver their babies at the University of Illinois Hospital & Health Sciences System give birth without a physician’s care. Instead, these women receive their care during pregnancy and childbirth from UI Health’s nurse midwives service, the largest practice of its kind in the country.

Now, the midwives are bringing their expertise to the UI Health’s efforts to achieve “baby-friendly” status, a highly sought designation offered by the World Health Organization and UNICEF for health systems that support breast feeding, rather than the use of infant formula, which increases risk for childhood obesity and diabetes. Midwives are members of the UI Health’s baby-friendly committee.

“Right after we perform a delivery, we put the baby on the mom’s chest, and we promote breast feeding within the hour,” says Kathleen Harmon, RN, APN, MS, CNM, interim director of the service. “We’ve been doing it for years. Before it was called ‘baby-friendly,’ we were already there.”

In all, the midwifery service has overseen approximately 12,000 births since midwives received delivery privileges at UI Health in 1992. The service currently includes 16 nurse midwives, all of whom have received advanced training that includes master’s degrees, certification as an advanced nurse practitioner and, in some cases, doctoral degrees.

GROUNDBREAKING NURSE MIDWIVES PROGRAM HELPS UI HEALTH CLOSE IN ON ‘BABY-FRIENDLY’ STATUS

FROM LEFT TO RIGHT: Kathleen Harmon, Kim Jezek-Tisch, Tracey Abraham, Tina Mingo, Kirby Adlam, Pam Pearson, Charity Cooper, Hayfaa Aldasooji, Ariene Wallace, Erin Farah, Catherine Schoenfeld, Katherine Erbe, Penny Feldmann, Mike Villwock (not pictured: Carla Burdock)

Photos: Hoss Fatemi & Mike McCafrey
The midwives also are clinical faculty for the College of Nursing Midwifery/Women’s Health Practitioner program, which is ranked fifth (of 37) in the nation by *U.S. News & World Report*. They not only precept student nurse midwives and women’s health nurse practitioners, but also UI Health Family Medicine residents, medical students and nursing students, and work very closely with obstetrics and gynecology residents in labor and delivery.

“We’re trained to provide care for normal, low-risk pregnancies and deliveries, as well as postpartum care and well woman care for a lifetime,” says Penny Feldman, RN, APN, MS, CNM, interim associate director of the service. This care includes the same evaluations women receive from obstetricians, such as blood work, pap smears, physical exams, genetic screenings, and ultrasounds.

The service provides this care at seven locations within the UI Health System. Through their work in these locations, the midwives make care available to a population that includes underserved, socioeconomically disadvantaged women, who are provided care regardless of their ability to pay. “We don’t turn anyone away,” Feldman says.

The midwives act as patient advocates, seeing to it that, whenever possible and medically safe, each woman has the birth experience she wants, whether it’s an all-natural birth, a tub birth or a delivery with full use of anesthesia. In particular, the service is expert in providing care for women who want to have vaginal deliveries after a prior birth by Cesarean section, which is considered a high-risk procedure. In all, more than 70 percent of these patients ultimately are able to deliver vaginally.

“We have women who come from all over the Chicago area seeking us out because we do that,” Harmon says.

Such pregnancies are co-managed by UI Health’s outstanding ob-gyn physicians, who are experts in high-risk pregnancies. The collaboration between the midwives and these doctors is another strength of the service.

“It’s the best of both worlds,” says Erin Farah, RN, APN, MS, CNM, interim associate director. “Patients can have that natural experience, but if something were to go wrong, we have a team of experts right down the hall who can step in and help.”

At the same time, the service goes beyond most ob-gyn prenatal care in the extent that it educates patients about their pregnancy and delivery. “That education empowers women to believe in their bodies. Women’s bodies know what to do, and we help them let their body do it,” Harmon says.
As part of its ongoing mission to eliminate health disparities, the University of Illinois Hospital & Health Sciences System in February opened a health center in Brighton Park, a socio-economically disadvantaged, predominantly Latino neighborhood on Chicago’s Southwest Side. Located in Davis Elementary School, the Davis Health and Wellness Center serves adults and preschool-age children in the community as well as the children who attend Davis and two other Brighton Park schools.

The Davis center is the fourth school-based health center (SBHC) located in underserved communities operated as part of UI Health’s Mile Square Health Center. In all, these school-based health centers see far more people for mental health, illness prevention and health education than other Mile Square locations.

“It’s going to be a high-volume clinic, because there’s nothing else around it,” says Cynthia Barnes Boyd, PhD, RN, UI Health senior director of community engagement and neighborhood health. “This is yet another example of UI Health’s commitment to providing high-quality, cost-effective care to our community and our efforts to eliminate health disparities,” added Robert A. Winn, MD, associate vice president for community-based practice.

These centers place UI Health at the forefront of the nationwide school health center movement. “School-based health centers are a new breed of safety-net providers that provide services to disadvantaged families,” Barnes Boyd says. “They not only address health, but also increase academic achievements by making sure that children, particularly those with chronic illness such as asthma, are well, ready to learn and in the classroom.”

Staffed by advanced practice nurses, a social worker, a nurse educator and a nutritionist, all in collaboration with a UI Health physician, the center provides primary care and management of acute and chronic illnesses. Patients in need of specialty care are referred to UI Health or another provider of their choice.

The center is funded with grants from the U.S. Health Resource and Service Administration and the Blue Cross Blue Shield Foundation of Illinois. It makes its services available on a sliding fee schedule that ensures that care is provided to all people regardless of ability to pay.

“It has been well-documented that SBHCs are an excellent way to meet the health needs of children. They eliminate the barriers...
that parents often encounter in getting to a provider for regular pediatric care,” Barnes Boyd observes. “We have expanded the model to serve the entire family.”

In order for their child to receive care, parents register the child with the center, giving permission for the center to provide care in their absence when necessary. This is often done when the child registers at the school and school personnel are actively involved in encouraging families to register. The center staff communicates with parents whenever a child is seen in the parents’ absence. “It’s an easy way to address illness,” Barnes Boyd says. “Children get sick all the time and, rather than get an appointment and having to take off work, parents can trust us to take care of their kids right where they are.”

She adds that the center also puts health providers in contact with parents, who may not seek out care for themselves. “While they won’t go to a doctor, they do come to schools for many reasons. We take advantage of these opportunities to address their health care concerns as well.” In addition to the health screening and care they receive, these families also benefit from the counseling services, nutrition and health education offered through the Davis center.

Martha Valdez is one of many Brighton Park residents who have responded enthusiastically to the center’s opening. “I think it’s wonderful,” says Valdez, whose 7-year-old son attends Davis Elementary School.

Valdez used to have to travel 20 minutes to reach a health care provider outside her neighborhood. “Now that this center is close, I don’t even have to show up for the little coughs or sniffs,” she says. “This past week, there was a stomach flu going around and he wasn’t feeling well. I walked him in after school and, 25 minutes later, we were walking out the door again. That was convenient and fast.”

ROCKFORD CAMPUS GETS $3 MILLION GIFT TO STUDY CELL REGENERATION

A transformational $3 million gift to the University of Illinois will help fund a multidisciplinary center for cell regeneration research at the College of Medicine at Rockford. The gift from the CWB Foundation, a Rockford-area philanthropy, combined with matching university funds, also will be used to create two named professorships to direct the research program.

The gift was announced in January. The college will seek additional funds in support of the center’s programs. “The center could yield cures or pioneering innovation that will enhance quality of life for people with spinal cord injuries, lost limbs or debilitating diseases,” says U of I President Robert Easter. “It will bring in top researchers who will partner with our experts in medicine, technology and other fields to pursue breakthroughs to improve the lives of people with disabilities.”

The center also will train clinicians, students and scientists in the study of regenerative medicine, a growing field that seeks to regenerate cells, tissues or organs in the laboratory for use in medical treatments.

“This endeavor could lead to an improved quality of life, something we all strive to achieve for ourselves and our community members,” says Mark Blazer, CWB Foundation board member. “I am excited to see what is to come.”

The CWB Foundation was established by Mark Blazer’s father, the late Cedric W. Blazer, president of Zenith Cutter Co. and a leading Rockford philanthropist. The foundation supports projects that benefit people with disabilities, as well as other Rockford-area organizations.

One of the professorships being established by the gift will be named for Cedric W. Blazer. The other will be named for Michael A. Werckle, MD, an assistant clinical professor of family and community medicine at the College of Medicine at Rockford, longtime supporter of the college and personal friend of Cedric Blazer.

“This key gift provides the impetus for amazing research and development at the college,” says Martin Lipsky, MD, recently retired regional dean at the College of Medicine at Rockford.

According to a report from the U.S. Census Bureau, in 2010 approximately 56.7 million people (18.7 percent) in the civilian, noninstitutionalized population in the U.S. had a disability, including 38.3 million people (12.6 percent) with a severe disability.
In January, a 38-year-old woman and her husband flew from their home in Uruguay to Chicago to receive a second opinion from physicians at the University of Illinois Hospital & Health Sciences System about a lesion that had formed in a cavity of the woman’s lung. Every aspect of the trip—including the couples’ visas, transportation, accommodations and the woman’s care—was arranged by the new International Program-South America that UI Health launched last December.

“Although we receive occasional patients from other countries, Uruguay is the first country that has a dedicated program,” says Jeff Finesilver, assistant vice president for operations.

The South American program provides second opinions for patients with complex medical conditions and, when needed, arranges for them to travel to Chicago to receive care at UI Health. In addition, the program is establishing educational partnerships with South American medical schools.

The scope of clinical care the program offers includes internal medicine, robotic surgery, organ transplant, neurology, oncology, orthopaedics, infertiltiy, pediatrics and pulmonary medicine. Litvan provides an initial point of contact for patients, and then consults via email and teleconferencing with UI Health specialists to determine if they can manage the patient’s condition remotely or if a trip to Chicago is needed. In the latter case, the UI Health International Program handles all aspects of the trip.

Litvan notes that UI Health’s leadership in adopting an electronic medical system years ago enhances the program’s abilities by allowing for an immediate exchange of each patient’s clinical information between Uruguay and Chicago in a secure, protected way, allowing a unique local follow-up.

He is establishing relationships with local medical schools and hospitals, and in partnership with the Center for Global Health, also plans to establish educational partnerships that will include online seminars, video conferences and streaming grand rounds via video. As the program grows, he expects to expand it to other Latin American countries. Most international and local Latin American medical insurances are accepted through the program.

The response to the program so far has been highly favorable. “The patients we already have seen are really excited,” Litvan says. “They are our best calling card.”

“Patients in Latin America normally don’t have access to the kind of care that patients in the U.S. have, but now they can receive it through the University of Illinois,” says Juan Litvan, MD, clinical assistant professor of emergency medicine and director of Latin America Health.

Dividing his time between the Uruguayan cities of Montevideo and Maldonado, Dr. Litvan is uniquely suited to head the international program. A native of Uruguay who speaks Spanish and Portuguese, he trained at Northwestern Memorial Hospital and Illinois Masonic Medical Center and worked as a hospitalist at St. Luke’s Hospital in New Bedford, Mass., before joining UI Health.
EXCHANGE PROGRAM BENEFITS UI HEALTH, CHINESE DENTISTRY STUDENTS

The University of Illinois at Chicago College of Dentistry is conducting educational exchanges with two dental schools in China, enabling participants to learn from the differences in clinical care, medical education and culture at the institutions.

Last year, the college entered into formal agreements with the two schools, the Guanghua School of Stomatology at Sun Yat-Sen University in Guangzhou and the West China School of Stomatology in Szechwan. Stomatology is a branch of medicine that focuses on the mouth and mouth disease.

As part of the agreement, UI Health dental students have the option of performing one of their fourth-year clinical rotations at the schools. “They may see cases that students here would never see,” says Christine Wu, PhD, professor of pediatric dentistry, who was part of the team that created the collaboration with the Chinese schools. “In China, dentistry is not just about the mouth, it’s about the whole head. They have patients who have oral cancer, tumors of the face, facial reconstruction.”

Four Illinois students spent a four-week rotation at the Guanghua school in April 2012. “We saw lots of cleft palate cases and other types of cases we only see in textbooks in the U.S. Here, we would use a huge team for cleft palate, but there, the oral surgeon did it all himself,” says one of the students, Stefan Bergeron, who graduated last year.

A contingent of leaders from the Guanghua school visited the UIC College of Dentistry on Sept. 19, 2012. The group included Dean Ling Junqi, Vice Deans Cheng Bin and Huang Hongzhang (vice president of the Chinese Stomatology Association) and several other officials. They met with Dean Bruce Graham, DDS, MS, MEd, and other college officials to discuss dental education, dental clinics and research.

Plans call for UI Health to host faculty leaders from the West China School for at least half a year in the near future. “They’ll come here to learn about our education system and curriculum,” Wu says. “We welcome the collaborative relationship, from students up to faculty and deans.”

From left, the College’s Cheon Joo Yoon, Tayyabba Athar, Amanda Henry, Stefan Bergeron, Dr. Darryl Pendleton, Dr. Indru Punwani, and Dr. Christine Wu were on hand with Guanghua School of Stomatology Faculty including Dean Ling Junqui (center, holding packet) when the two schools signed a cooperation agreement in China.
With support from a four-year, $1.7 million grant from the National Institutes of Health, a UI Health study is examining whether an instructional dance program for Latino seniors can improve their level of physical activity, and with it, their balance, mobility and cognitive function.

Latinos ages 65 to 74 are twice as likely to report difficulty walking as are non-Latino whites and develop symptoms of Alzheimer’s disease an average of seven years earlier. These health disparities are likely due in part to Latino seniors’ having a lower level of physical activity than other older adults, according to David Marquez, PhD, an assistant professor of kinesiology and nutrition, who is leading the study.

“Older Latinos are also at high risk of developing disabilities, and one of our long-term goals is to prevent disability among this disadvantaged group,” Marquez says.

Dance is widely accepted among Latinos, but seniors have few opportunities for dancing, Marquez says. Nightclub dancing is often too fast-paced and too late at night for older adults, he adds. In a pilot study of his dance program, Marquez found that there was a great deal of interest in dancing among this population.

Marquez teamed up with Miguel Mendez, an accomplished dancer and founder of the Dance Academy of Salsa and Latin Dance in Chicago. With input from focus groups, they developed an instruction program of Latin dances for older adults called BAILAMOS (“we dance”).

The four-month, twice weekly dance classes will be offered in senior centers, community centers and park buildings. Half of the 332 older Latinos who will be recruited will be assigned to the dance instruction program, and the other half will serve as a control group for the study.

Participants will be followed for an additional four-month maintenance program to see if they continue to participate in physical activity and whether any other positive physical or cognitive outcomes, such as improved balance or increased social interactions, are derived. The maintenance program includes a training program for leaders at each site to encourage people to continue to dance together.

If you would like to learn more about this research, please contact David X. Marquez at 312.996.1209 or marquezd@uic.edu.
TAKING THE PULSE OF A COMMUNITY IS TOUGH TO DO FROM A DISTANCE.

A healthier city starts with healthier neighborhoods. That’s why the University of Illinois’ Mile Square Health Centers have grown roots in the communities that need us most. Providing comprehensive healthcare throughout the city of Chicago, UI Health believes that getting the care you need should be as easy as walking next door. It’s one way we’re changing medicine. For good.

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BACK OF THE YARDS | CICERO | ENGLEWOOD | NEAR WEST SIDE | SOUTH SHORE
When a tumor threatened the life and career of Hispanic music legend Vicente Fernández, he put his trust in the physicians at UI Health.

By Gisela Orozco

Reprinted from Hoy, a Spanish-language publication of Tribune Co.
On Nov. 6, on the fifth floor of the University of Illinois Hospital & Health Sciences System, in the administration offices of the division of transplantation, Vicente Fernández, Vicente Fernández Jr. and three Mexican doctors held a decisive meeting in total secrecy with UI Health surgeons.

They had to act. And fast. Fernández had a mass in the liver, a tumor of 2.7 centimeters, partially obstructing the left bile duct. The mass had been detected last October, in a routine examination.

On Oct. 22, Fernández stated that he would be treated in Houston, Texas. There were several questions surrounding the illness of the well-known Spanish music star: Was he treated in Houston? Did he have cancer? No one knew the truth since the family was handling the situation in private.

On Nov. 22, Vicente Fernández confirmed in a press conference at his ranch Los Tres Potrillos, in Guadalajara, Jalisco (Mexico), that he did have cancer.

It was in Chicago that he underwent surgery to have the tumor removed in the liver: it could not have been done in any other part of the world in the same way, according to the specialists in Chicago.

But what was the reason Fernández decided to undergo surgery in Chicago and not anywhere else in the world?

“A man who has three private jets, who can be treated anywhere in the world, who had been in a very famous hospital, Houston Methodist Texas, came to Chicago for one reason: for Dr. Pier Cristoforo Giulianotti,” Enrico Benedetti, MD, head of surgery at UI Health, said in an interview. Giulianotti, considered the world’s most prominent specialist in robotic surgery, is the division chief of robotic surgery at UI Health.

“Hehere, we have a unique combination of expertise, technology and people who are dreamers and believers that medicine can change,” said Giulianotti, who is nicknamed “the Beethoven of surgery” and is a pioneer in surgeries and transplants worldwide using the da Vinci surgical system.

This system allows complicated procedures to be performed without “opening” the patient. Tiny incisions are required in the body and everything is performed robotically.

A machine “performing” the surgery does not mean there is no human side in robotic surgery. Quite the contrary.

The machine is only an interface, a channel. The responsibility of the surgical movements is 100 percent vested in the human controlling the machine.

When speaking of robotic surgery, Giulianotti uses an old Chinese proverb: “When one person dreams, it is a dream; when many people share the same dream, it is the beginning of a revolution.” This, he added, “is what we are creating at UI Health with the robotic surgery program.”

“I am very happy with my treatment—the doctors, nurses, staff and translators—everyone has been wonderful,” said Fernández, who returned to the stage in 2013.

For 10 years, UI Health has been able to perform surgeries that no one else has been able to perform. The advantage of robotic surgery is that it respects the body’s appearance, its integrity, avoiding distortion or mutilation.

“I believe robotic surgery has surpassed the human limits. Many people do not fully understand what it is. (The da Vinci) is not a huge toy, or an expensive machine with better tools—that concept is wrong. The actual concept is that the robotic station is an environment that uses artificial intelligence, technology and the human mind. With artificial intelligence we can go beyond the human limits, so you can work better,” said Giulianotti.

He adds that, paradoxically, surgery is one of the medical fields with more resistance to change and innovation in technique.

The precision of the da Vinci’s movements is well-known, Benedetti said, and a liver operation like the one Giulianotti performed on Fernández is very complicated. Instead of using a very long, open surgical incision (extending typically below both rib cages), the robotic operation was performed through a few half-inch holes.

This is how it worked: the robotic instruments were controlled by Giulianotti at the robotic console to resect the left side of the liver containing the tumor. That section of liver was then removed through a small incision.

Fernández’s surgery lasted almost nine hours. “He had virtually no pain, and was ready to go home in five days,” said Benedetti.

UI Health has been a pioneer in these types of surgeries thanks to the surgical team it has.

Benedetti adds that UI Health performed the first kidney transplant in obese patients with robotic surgery and pioneered procedures in the Midwest where the thyroid gland is removed through the armpit instead of making an incision in a patient’s neck.

“We have the world’s largest program for complex procedures; Dr. Giulianotti is the most famous robotic surgeon in the world. So a man like Vicente Fernández, who could go anywhere else, came here.”

“Operation Chente” (“Chente” is Fernández’s nickname) was a well-orchestrated secret mission in which the patient was even given an alias, José M. Valadez.

Fernández was referred to UI Health by Dr. Roberto Esquivel Ruano, who was the one who found the tumor in the liver. First, the singer went to Houston, Texas, where a liver transplant was suggested as treatment. On the recommendation of Federico Mendoza Sanchez, another doctor nearby in Mexico, Fernández learned about the UI Health program and treatment. Mendoza knew José Oberholzer, MD, chief of the division of transplantation at UI Health.
The recommendation of Mendoza was vital: He told the singer and his family he would find the best treatment in Chicago. Fernández then flew Esquivel, Mendoza and Dr. Luis Gutierrez Rodriguez to Chicago to meet at Oberholzer’s home.

On Nov. 6, “Chente” and his family traveled to Chicago. They met with UI Health doctors who explained the difference between open surgery and robotic surgery.

If open surgery was to be performed, Vicente would not be able to sing and his retirement would be scheduled for 2012, not only from the stage, but from music. Traditional surgery would require a huge abdominal incision that would damage the diaphragm and abdominal muscles, necessary for a singer.

But that was only one consideration. The oncological reason for robotic surgery, states Giulianotti, is to minimize blood loss, minimize disturbing tissue and have less of an impact on the immune system.

“The immune system interacts with cancer; somehow its reaction is less negative with robotic surgery. With open surgery, in three or four months there is a type of inhibition of the immune system and cancer can spread throughout the body. Robotic surgery is better for cancer; we get better outcomes,” Giulianotti said.

When Fernández was given all this information, he did not hesitate. The trust had to be mutual; the patient’s trust to the doctors’ and vice versa, Giulianotti said.

“It was possible to establish, from the human side, a fantastic relationship that helped a lot. When you decide to do an operation like this, it is a big responsibility and you feel it not only from a scientific point of view, but also from the human point of view. From the beginning it was a good relationship.”

Two days later, Fernández underwent surgery. On Nov. 13 he was discharged from the hospital. He sang for the doctors, was photographed with them and invited them to his ranch. Fernández was so grateful to the surgeons that he offered to donate a horse to each of them. Instead, Benedetti asked the singer to share his story, since one of the goals of UI Health is to eliminate inequities in medical service between Caucasian and Latino populations.

“That fascinated him;” Benedetti said. “That’s what we try to do for the community, not only for a famous man like Don Vicente. Frankly, we strive to treat any patient at UI Health just like him. We want the Latino community to know that this is the type of care to which they have access; a quality of service that was attractive to everyone.”

With his story, Vicente Fernández has become the voice of robotic surgery.

“We now have his testimony. We told Vicente we were excited to see him sing for many years to come, and to be completely healthy. It has become a testament to the innovation of surgery and of the work at UI Health, a relatively small hospital, but a great university with great traditions,” said Giulianotti.

“I am very happy with my treatment - the doctors, nurses, staff and translators - everyone has been wonderful,” said Fernández, who returned to the stage in 2013.

THE FACTS OF THE OPERATION *

October 22
• In the event, organized in La Villita, Vicente Fernández announces that after a routine examination, doctors detected a “lump” in his liver. He reports that he will undergo a biopsy in Houston, Texas.

November 6
• After being referred by his family doctors, and knowing that he has a tumor in the liver (intrahepatic cholangiocarcinoma), Fernández travels from Guadalajara, Jalisco (Mexico), to Chicago, accompanied by his son and three doctors.
• The doctors explain to Fernández the planned robotic surgery.

November 8
• Fernández undergoes robotic left hepatectomy with the da Vinci surgical system at UI Health. The hospital stay is kept in complete secrecy and he is listed under an alias.
• He is accompanied by 30 family members, in particular his wife, Doña Refugio Abarca; his three sons, Vicente Jr., Gerardo and Alejandro; and his daughter, Alexandra. He meets UI Health physicians Pier Cristoforo Giulianotti, Enrico Benedetti and José Oberholzer.
• The surgery lasts more than nine hours.
• Giulianotti removes the tumor, a central mass of the liver that was partially obstructing the left bile duct, along the left liver lobe.
• The blood vessels of the left lobe of the liver are sealed and divided. The left lobe of the liver is separated from the vena cava and removed; the right lobe of the liver is carefully preserved.
• The biliary system is restored using a segment of the intestine connected to the bile duct of the remaining part of the liver.

November 13
• Vicente Fernández is discharged from the hospital.

(* Source: Department of Surgery at UI Health)
WHAT IS AND HOW DOES THE DA VINCI SURGICAL SYSTEM FUNCTION? *

The Da Vinci Surgical System (named after Leonardo da Vinci) allows the surgeon to perform delicate and complex operations through a few small incisions with greater vision, precision, dexterity and control. It consists of several key components: an ergonomically designed console where the surgeon sits in operation, a table where the patient remains during surgery, four interactive robotic arms and a high-definition viewing in 3D. The system allows movement of the surgeon’s hand through some controls, resulting in precise movements within the patient’s body.

“CHENTE’S” MEDICAL TEAM

These are the doctors who participated in one way or another in the singer’s operation. As a team, each doctor had a special and unique role.

- Dr. Pier Cristoforo Giulianotti performed the robotic surgery. They call him “the Beethoven of surgery.” President of the Clinical Society of Robotic Surgery, he was the first to do robotic kidney transplants in obese recipients and has many other “firsts” to his credit.
- Dr. José Oberholzer, chief of transplant at UI Health, was the contact of Vicente Fernández’s trusted doctors in Mexico.
- Dr. Enrico Benedetti was in charge of organizing the operation. He coordinated the logistics along with the UI Health administration for Fernández and his family’s privacy during his hospital stay, including giving the singer an “alias” during his hospitalization. After surgery, he, Oberholzer and Giulianotti provided medical care to Fernández.
- Dr. Francesco Bianco, assistant professor of surgery, assisted Giulianotti in surgery.
- Dr. Federico Mendoza Sanchez, hepatologist and transplant surgeon, was the doctor who informed the family of Vicente Fernández of Giulianotti’s work.
- Dr. Roberto Esquivel Ruano, Fernández’s personal physician, made the initial diagnosis.
- Dr. Luis Gutiérrez Rodríguez is a urologist and trusted friend of Fernández.
THE WAY FORWARD
Emergency department’s pilot project hopes to help nation’s health systems adapt to life under the Affordable Care Act

By Alice Patenaude
The Affordable Care Act is changing the landscape of healthcare for both patients and health systems across the country. The ACA, passed in March 2010, has already allowed patients to take greater charge of their health by requiring insurance companies to fully cover preventive care and by prohibiting the denial of insurance coverage because of pre-existing medical conditions.

Healthcare organizations, like the University of Illinois Hospital & Health Sciences System, will face both opportunities and challenges as the ACA continues to shape the future of healthcare. They will see an influx of newly insured patients but also lost revenue as reductions in Medicare and Medicaid reimbursements take effect under the provisions of the ACA.

In the next phase of the ACA’s rollout in January 2014, more than 48 million uninsured Americans will have expanded access to health coverage through two primary methods—an insurance exchange, where individuals and small businesses can buy qualified health benefit plans—and an expansion of Medicaid, depending on the state where patients reside.

The new insurance marketplace will allow consumers and small businesses to examine their insurance options and to purchase healthcare plans, with open enrollment beginning in late 2013. In Illinois, Medicaid expansion, which will expand coverage for 342,000 newly eligible residents, passed the Illinois Senate in late February, but as of this publication date—has not yet passed the House. The House was to begin debate on the expansion in late May.

ASSESSING THE COMMUNITY

An initial step UI Health is taking this summer is the UNISON Health survey (see page 17); a community health needs assessment of 1,400 community members. “A lot of people may not understand the ‘language of insurance’ if they haven’t been in the healthcare system in awhile, so we will also be providing information about how people can learn more about the ACA and how to enroll in insurance,” says Nicole Kazee, PhD, director of health policy and programs for UI Health.

“In our primary service area—the ZIP codes around the hospital that have the largest proportion of our patients—just over 25 percent are uninsured right now,” says Kazee “Insurance expansion is good for the community and good for us since there will be less uncompensated and catastrophic care. We need to be ready to accept a lot of new patients.”

UI Health’s Mile Square Health Centers will be a big part of providing care for those new patients. A network of community health centers, Mile Square is the first line of defense for area patients, providing primary care for patients right in the neighborhoods in which they live. A new clinic at the southwest intersection of Wood Street and Roosevelt Road, built in part with a $12 million ACA-funded grant, is slated to open later this year.

“The clinic is an important part of our strategy for managing care for new patients,” says Kazee. “But we also want to make sure that patients understand their eligibility for the new insurance options and how to enroll. We will partner with the state of Illinois as they start to develop their strategies.”

CARE DELIVERY OF THE FUTURE

The ACA also includes funding for demonstration projects to test new ways for hospitals to be paid by Medicare and Medicaid. For example, rather than receiving a payment for each individual service patients receive, these projects will bundle payments so hospitals, doctors and other providers will be paid a flat rate for each episode of care such as a heart attack. Going forward, there will be an increased emphasis on coordinating care throughout the health system as all payers begin to shift to the models of bundled or global payment.

Responding to the cuts in Medicaid and Medicare reimbursement and the changing reimbursement models, UI Health is looking at ways to streamline the cost structure and make it more efficient, while focusing on care delivery changes that will better manage the health of patients. One of the health system’s most innovative initiatives is a recently launched pilot project in UI Health’s emergency department, a site that sees 44,000 patients annually.

Recently named the winner of an internal competition for innovative ideas in care coordination, the Emergency Patient Interdisciplinary Care (EPIC) project brings a unique focus to improving patient care, while reducing costs for inpatient and emergency room utilization.

“The aim of EPIC is to bring interdisciplinary care coordination to the often-complex patients who are ‘frequent visitors’ to the emergency room,” says Terry Vanden Hoek, MD, chair of emergency medicine and EPIC project leader. “Our goal is to leverage the great strengths across the health system to create a personalized care plan for patients, one that transitions them back to primary care, if possible, within 30, 60 or 90 days.”

NATIONAL FREQUENT ER VISITOR COSTS

The “frequent ER visitors” addressed through the EPIC program are among the nation’s 10 percent of patients who account for 70 percent of total health expenditures. Screening criteria for the program will include patients known to be at risk for poor outcomes—those who have had two or more hospital admissions, have two or more chronic diseases, take five or more medications or have had at least four visits to an ER within the previous year.

Using information in a data warehouse, a “pop up” will alert staff of a potential complex patient who meets these criteria when presenting at the ER, prompting a consult from the EPIC team.
These frequent visitors are patients with complex medical problems, fragmented care, lack of access to medical services and often have co-existent psychosocial issues,” says Steve Brown, MSW, LSW, and associate director of clinical practice in the emergency department.

TEAMING UP

To address the needs of these complex patients, the EPIC project concept was developed by a team of clinicians and researchers from the colleges of Nursing, Medicine, Social Work and Pharmacy. When the program is officially launched in the summer of 2013, a core team of a nurse case manager, social worker, pharmacist, two community health workers and program manager will work together with patients who enroll in EPIC and their family members to develop a transition care plan.

What sets EPIC apart is its interdisciplinary nature, bringing together the university resources that these complex patients need in addition to primary medical care—social workers who provide a conduit between the medical system and the family and who are trained to address psychosocial challenges; pharmacy to assist patients taking multiple medications; and other specialists—all supported by community health workers who can interact directly with patients and their families in their homes. “What happens after a visit to the emergency department becomes crucial,” says Kathy Christiansen, RN, PhD, executive director of the Institute for Healthcare Innovation for the College of Nursing. “Our plan addresses what happens after the patient leaves the hospital so the patient is very clear about what to do next.”

Innovative technology is another hallmark throughout the EPIC program. Hospital data will help to initially identify “frequent visitors” to the ER. Since patients often visit multiple ERs, further fragmenting their care and creating additional obstacles to sharing health information, a Health Information Exchange will alert non-UI Health physicians if one of their patients enrolled in EPIC seeks care at one of six Chicago-area hospitals. In addition, telehealth software and iPads will link community health workers to the EPIC team, creating “face-to-face” relationships with patients and pharmacists as they work together to remove barriers to proper medication use. Finally, a crowd-sourced website (www.PurpleBinder.com) will allow the EPIC team to find, track and share community resources.

“We anticipate that patient volumes will increase as the ACA continues to roll out,” says Mark Mackey, MD, vice chair of operations and medical director for the EPIC program. “We have to do a better job of managing patients more cost-effectively and eliminating waste in the system. The interdisciplinary nature of the EPIC program, its innovative technology and the expertise of UI Health will allow us to produce a better coordinated care plan while reducing costs.”

The EPIC team estimates that it will treat 547 patients annually, saving $5.4 million through reduced inpatient and emergency room utilization, while improving care and quality of life for patients.

“The stakes are much higher now if we send patients home and they get readmitted,” says Vanden Hoek. “Under ACA we will be judged on how well we are taking care of our patients. We need to think about more effectively handling the transition of patient care, using community resources to take the best care of our patients. These issues are ones that every emergency department will face. The EPIC program is one that can be replicated in any ER throughout the nation.”

KUDOS FOR EPIC

“EPIC is the type of innovative program we had in mind when we first launched Healthy Chicago, calling on partners to work together to make Chicago the healthiest city in the nation. By empowering repeat visitors to the ER to take more control over their health and well-being, EPIC will help residents across Chicago to live better, healthier, longer lives.”

Dr. Bechara Choucair
Commissioner of the Chicago Department of Public Health

“EPIC is an example of the innovative efforts under-way at Illinois hospitals and health systems as they transform from volume-to value-driven models of care, focused on optimal patient outcomes.”

Dr. Derek Robinson
Executive Director,
Illinois Hospital Association Quality Care Institute
The University of Illinois Hospital & Health Sciences System is planning a comprehensive assessment of the health needs of 24 Chicago neighborhoods in its service area. Expected to begin in late summer, the University of Illinois Survey on Neighborhood Health (UNISON Health) will provide important data that will strengthen UI Health’s ability to fulfill its mission to eradicate health disparities. It also will provide an opportunity to distribute information that will help local residents better understand the Affordable Care Act and their insurance options.

“The local health data available is limited in a variety of ways, so we want to survey our primary service area to see what the health issues are and to what extent people’s health needs are being met,” says Nicole Kazee, PhD, director of health policy and programs for UI Health. She is leading the UNISON Health initiative in tandem with Jerry Krishnan, MD, PhD, professor of medicine and public health and associate vice president for population health sciences. The university’s nationally regarded Survey Research Laboratory will conduct the study.

“We especially don’t have good information in a lot of cases about the health of the most vulnerable patients,” she adds. “We know prevalence and mortality tend to be higher, but we don’t always know why, or the extent to which this is true in our own local communities.”

UNISON Health will survey 1,400 adult residents of the 24 neighborhoods, from Humboldt Park and West Town in the north to West Lawn and Englewood in the southern corners. The survey will solicit information about health-related behaviors, health care access and utilization, prevalence of disease conditions, quality of life indicators and knowledge of the ACA.

The people being surveyed will include 600 UI Health patients with hypertension, diabetes or asthma who also will complete an extended, disease-specific questionnaire. This second part of the survey will establish a clear baseline that the health system will use to evaluate the effectiveness of its clinical programs, healthcare delivery system and university-affiliated community initiatives.

“Part of UNISON is learning more about our community, and part of this is learning about our own patients and what we can be doing better,” Kazee says. “It’s important to understand what’s going on with patients who have these conditions so we can figure out how to help them better manage their conditions.”

In addition, UNISON Health will help UI Health identify the populations that may benefit most from existing clinical programs or new programs that need to be built. The information found in the survey can also provide ideas for innovative student projects or service learning opportunities in the community. It also will help UI Health strengthen and build community partnerships to eradicate health disparities.

“We want to use UNISON to leverage our work in all these areas so we can be a better member of our community and improve health for everyone in the community,” Kazee says.

– Kevin McKeough
MEDS? CHECK. AND DOUBLE CHECK.

New RxCARES pharmacy program helps ensure patients use prescriptions as directed even after they leave the hospital

BY ELIZABETH GARDNER
When University of Illinois Hospital & Health Sciences System pharmacist Adam Bursua started calling his hospital patients a few days after their discharge to see how things were going with their medications, he always—always—found that something wasn’t right.

“Every single patient I called had some kind of problem,” says Bursua, a clinical assistant professor in the College of Pharmacy. “There would be a medication that I didn’t know they were taking, or it would turn out that a medication was too expensive and so they hadn’t filled the prescription. Or they had lost a prescription, or their medication list wasn’t consistent with their discharge plan, or they had talked to their brother who had told them, ‘I would never take that medication,’ and so they decided not to take it either.”

Sometimes, he added, newly diagnosed patients with diabetes, who had learned in the hospital how to give themselves insulin injections, lost confidence in their training once they were home.

While alarming, Bursua’s experience reflects a common state of affairs. The Institute of Medicine has estimated that medication errors injure 1.5 million patients a year and cost the nation’s healthcare system $3.5 billion annually—and that’s just the errors that cause identifiable damage. Millions more go unnoticed, but patients don’t get the full benefit of their medications and may even wind up back in the hospital as a result.

Transitional periods such as immediately after hospital discharge are the most likely times for medication errors to occur.

Bursua had started phoning his patients because he had read many studies showing that such follow-up calls can have a major impact on patients’ well being, sometimes even saving their lives. But the calling was labor-intensive and was difficult to incorporate into his everyday practice. In response, he turned to a new labor pool—pharmacy students—and with colleague Mat Thambi created a six-week rotation called RxCARES, where students follow a specific medication management protocol for patients being discharged from the hospital’s internal medicine service. The protocol includes a full complement of services and assessments such as:

**Reconciliation:** Students create detailed medication histories, resolve medication list discrepancies, review discharge plans and make follow-up phone calls after discharge in order to ensure the patient was able to obtain new medications.

**Drug interaction screening:** Using a computerized tool, students identify possible clinically significant interactions and recommend dosing alterations or alternative medications.

**Continuity:** Students remind discharge patients about all upcoming appointments and forward a medication list, with updates highlighted, to the primary care physician.

**Access and adherence:** During follow-up phone calls, students ensure the patient is adhering to the prescribed plan. Any barriers to adherence (insurance, transportation, education) are identified and resolved.

**Risk reduction:** Students perform medication-specific interventions to reduce risks.

**Evidence-based medicine:** Students identify any opportunities to employ mortality-reducing or disease-modifying therapy.

**Savings:** Students review the indications for high-cost medications to see if there are less costly alternatives that do not sacrifice safety or efficacy, especially when patients have problems affording their medications.
More than 80 percent of patients have at least one change in their medication

Not only do the students perform a vital service, but they also acquire an invaluable education in all the things that can go wrong with medications once patients get home. The rotation made its debut in September 2011 and is now in its second full school year.

RxCARES focuses on patients who are admitted to the internal medicine service and who are at particular risk for medication errors: those who have more than 10 prescriptions, those older than 65 who have five or more prescriptions, those who have been hospitalized more than once in the past year and many patients on high-risk medications such as blood thinners or insulin. So far, the program has helped over 300 patients.

There are two students per rotation. Starting with admission, they work with the patient to develop a “gold standard” medication history. In addition to interviewing the patient and checking with his or her primary care physician to confirm what medications have been prescribed, they do detective work with the patients’ pharmacies and insurance companies to see which prescriptions have been filled and paid for.

“More than 80 percent of patients have at least one change, and the majority have multiple changes in their medication list as a result of this process,” Bursua says.

While the patient is in the hospital, the students primarily keep an eye on any changes in prescriptions. At discharge, they go over the medication list and make sure that it’s consistent with the admission list and any subsequent orders to start or stop medications. Then they make follow-up calls three to five days after discharge.

One novel aspect of the protocol is interaction with outside pharmacies. Patients often leave the hospital with a new list of prescriptions that supersede what they were taking before, but because they still have refills on file at their pharmacy, they go ahead and take their former pills anyway. The students check in with the pharmacy and make sure any potentially harmful refills are cancelled.

“Let’s say a patient comes in with angioedema because of an ACE inhibitor,” Bursua says. “We will stop it in the hospital and take it off the medication list, but then the patient goes to the pharmacy and says, ‘I need my refills.’ They may not have the health literacy to say, ‘Except lisinopril.’ I know my mom is a smart lady but I’m sure she doesn’t list her medications one by one, with the dose, when she talks to her pharmacy. We are trying to include the outpatient pharmacy in a way that influences the patient’s care.”

Roseanne Miksanek, now a first-year pharmacy resident, signed on for the rotation last year. She’s applying its lessons to all the patients she sees, and she’s also studying it as her residency project, looking at 115 patients who received the RxCARES protocol and matching them with 150 control patients who received normal post-discharge care. Early into her project, Miksanek is already seeing the importance of teamwork in preventing medication errors.

“This is definitely something I want to do as a hospital pharmacist, and I’d like to bring this model with me to a smaller community hospital,” she says.
At the University of Illinois Hospital & Health Sciences System our groundbreaking research is creating life changing results. By combining some of the state’s best doctors with the latest research and technology a new path to better care is here for the people of Illinois. With a Neurosurgery program that has treated the most brain aneurysms in Illinois and by implementing pharmacogenetics, the science of analyzing patients’ DNA to prescribe correct drug doses, UI Health is striving to revolutionize patient care with a simple notion: greater research for the greater good. It’s another way we’re changing medicine. For good.

FOR MORE INFORMATION VISIT HOSPITAL.UILLINOIS.EDU OR CALL 866.600.CARE
Cardiovascular disease is the leading cause of death among Latinos in the U.S., and a new multicenter study of more than 16,000 Hispanic/Latino men and women ages 18 to 74—the Hispanic Community Health Study/Study of Latinos (HCHS/SOL)—shows that a large majority of Latinos have adverse levels of at least one major cardiovascular risk factor.

Those risks vary significantly among Mexicans, Puerto Ricans and Latinos of other Hispanic backgrounds, and also between Latino immigrants who arrived more recently compared with those who have lived in the U.S. for a longer period, according to the study, published in the Nov. 7 issue of the Journal of the American Medical Association.

“The study’s most alarming finding was that 80 percent of Hispanic men and 71 percent of Hispanic women had at least one major cardiovascular risk factor,” says Martha L. Daviglus, MD, PhD, the lead author of the study who joined the University of Illinois at Chicago as associate vice chancellor for research, director of the Institute for Minority Health Research and professor of medicine in June 2012. “This was very surprising,” she says. “We were aware that this population was at high risk, but we didn’t know that the proportion at risk would be so high.”

HCHS/SOL showed that 28 percent of men had at least two adverse risk factors, and 21 percent had three or more; among women, 23 percent had at least two, and 17 percent had three or more adverse risk factors. Risk factors were defined using national guidelines for high cholesterol, hypertension, obesity, diabetes and smoking. Study participants were recruited in field centers located in Chicago, San Diego, the Bronx and Miami.

The study was sponsored by the National Heart, Lung and Blood Institute and six other institutes, centers and offices of the National Institutes of Health.

Among the various Hispanic background groups included, the presence of three or more adverse risk factors was most common among Puerto Rican men and least common among South American women. Daviglus believes that the high prevalence of obesity and cigarette smoking among Puerto Rican men and women and high cholesterol levels among Central American men and Puerto Rican women are some of the most salient Hispanic background-specific facts that she and her fellow researchers uncovered when it comes to health care and preventive strategies.

DIVERSITY AMONG LATINOS

Previous studies typically combined Hispanic/Latino individuals into one category, Davilglus says, and have reported high prevalence of obesity and diabetes in this population—but that’s a lot more valid for Puerto Ricans, for example, than South Americans. “They shouldn’t be considered as a single homogenous group with regards to health care needs and disease burden,” she says. “They represent different cultures and exposures depending on the country of origin. They have different levels of education. Not all Hispanic groups have a high prevalence of diabetes and obesity.”

“The study highlights the heterogeneity that exists within the group of individuals that are known as Latinos,” says Joe G.N. “Skip” Garcia, MD, vice president for health affairs at the University of Illinois Hospital & Health Sciences System. “People have been grouping Latinos together for the purpose of defining health disparities and genetic susceptibilities for years.”

But in the “post-human-genome era,” that way of thinking has become increasingly dated, Garcia says. “Being able to compare the genetic sequence of different populations, it’s clear that Latinos from Mexico are pretty different from Hispanics from Puerto Rico. The mixtures of DNA are different. We need to start thinking about how to individualize therapies for Hispanic/Latino populations in a much more specific way than we’ve been currently doing.”

Multiple risk factors were also more common among less-educated Latinos. There is also a negative impact in those considered to be more acculturated compared with those who are less acculturated to U.S. society; that is, those who have lived in the U.S. for a longer period of time and have adopted American diets and lifestyles have a higher risk factor burden, says Davilglus, who conducted the study with Gregory A. Talavera, MD, MPH, of San Diego State University, and other colleagues.

“The study confirmed that with an increasing level of acculturation, Latinos have a higher prevalence of risk factors,” she says. “Hispanics who prefer to speak in Spanish rather than...
English (indicating lower acculturation) are at lower risk, perhaps because they still retain the lifestyles—especially dietary habits—common in their country of origin, where fresh fruits and vegetables may be less expensive and more widely consumed.

The challenge is that three tomatoes in an inner-city grocery store can cost the same as a meal at McDonald’s, Daviglus says. “Are you going to serve only tomatoes to the family? Of course not,” she says. One potential remedy to lower the price of fruits and vegetables could be community gardens, which “should be established in every community. These are solutions that we need to discuss as remedies.”

THE ROAD AHEAD

Going forward, Daviglus sees the need for further research to explore these issues, and she envisions individual papers on each of the major risk factors that examine how the social and economic realities like acculturation, for example, affect each of them.

As the Latino population in the U.S. continues to grow, and as this currently relatively young population group ages, their health will have important implications for the U.S. healthcare system. “We are going to be in trouble in a decade or two if we don’t act now to prevent future cardiovascular and other chronic diseases,” says Daviglus. “One important way we can prevent diseases is through education.” This could involve, among other strategies, educational materials in waiting rooms, brochures from insurance companies and public service announcements, she added.

Daviglus compares those potential efforts to educational campaigns conducted during the last half-century against unhealthy lifestyle factors such as smoking and consumption of red meat, which used to be the hallmarks of prosperity. After studies showed the benefits of healthy eating habits and regular exercise—and the harmful health effects of smoking—unhealthy behaviors became less acceptable. Currently, adverse lifestyles and unhealthy diets high in sugar, fat and salt are more common among those lower on the socioeconomic scale, who have fewer resources and live in neighborhoods that may have few markets selling fresh produce and limited parks and health facilities, all of which impede the adoption of healthy lifestyles.

Disseminating the findings of this study to physicians will, of course, be critical, Daviglus says, “so they are aware of what to expect with regard to risk factors in the Hispanic population, and can effectively address the issues.” With the advent of the Affordable Care Act, Daviglus says she hopes physicians will be able to promote prevention of cardiovascular and other chronic disease among a broader cross-section of the population, even if that’s not why a given patient made an appointment. “It’s going to cost more if we don’t start to address these looming problems now,” Daviglus says. “The longer these risk factors remain uncontrolled by lifestyle changes or untreated when necessary, the greater the damage to the body.”

In keeping with its mission of serving a diverse population, UI Health has led the way in individualizing therapies for specific groups of people, Garcia says. That has included a bio-banking effort across the entire clinical enterprise that provides access to tissue, plasma and serum samples, along with DNA and RNA.

“That will allow us, moving forward, to think about how we can apply and understand modifiers of disease susceptibility and disease severity in much more informed ways,” he says. “A real-time example is our effort to provide genotyping for warfarin metabolism to all patients admitted to the hospital. Genotyping allows us to determine the optimal warfarin dose for each and every patient in the hospital while gaining important new understanding of the unique genetic differences amongst racial and ethnic patient populations that impact warfarin metabolism,” Garcia added. “This will make the tests infinitely more valuable for the patients we serve.”

Daviglus’ research will help to refine these approaches, Garcia says. “I don’t think it’s far-fetched at all to think that within Hispanics/Latinos of different ethnic backgrounds, certain therapies will work well in one group and not another group,” he says. “We will need to individualize heart failure medications in that same way. We’re so lucky to have that kind of research expertise here, to interact with UI Health as we move forward and try to provide the very best, high-quality, personalized health care for the people we serve.”
**EARLY SIGNS OF TEEN SMOKING ESCALATION**

Robin Mermelstein, PhD, professor of psychology and director of the Institute for Health Research and Policy, and her colleagues studied a group of 697 teenagers for four years. This group of teenagers, at baseline, indicated that they had smoked recently, but were not regular smokers.

Teens in this group who showed signs of tobacco dependency (for example, the ones who said they needed to smoke first thing in the morning) were more likely to be regular smokers four years later. This seems to indicate that among light-smoking teens, nicotine dependence may better predict future smoking than smoking behaviors themselves.

**REDUCING THE RISK OF HEART DISEASE AMONG PEOPLE WITH DIABETES**

People with diabetes have a higher risk of dying from ischemic heart disease. This relationship between diabetes and heart disease is particularly pronounced among women. Kirstie Danielson, PhD assistant professor in the UIC College of Medicine, and her colleagues have studied the risk of atherosclerosis among a group of patients with type 1 diabetes (15 patients; 13 were women). Each of the patients received one to three islet transplants and all were followed for several years.

One year post-transplant, the risk of atherosclerosis was decreased significantly, and for those that were followed for more than four years, atherosclerosis began to progress again but still remained significantly decreased. At the end of the study, 11 of 15 patients were insulin-free.

**A STEP TOWARD DEVELOPING THERAPEUTICS TO TREAT ALCOHOL USE AND ANXIETY**

There is a link between anxiety and alcohol use—people who drink a lot of alcohol tend to have more problems with anxiety. Subhash Pandey, PhD, professor of psychiatry, and his colleagues have found that there seems to be a genetic link between anxiety and alcohol use.

They studied rats that had been bred to have either a high or low preference for alcohol. When rats with a high preference for alcohol were given alcohol, their anxiety decreased. These rats also had high levels of HDAC2, which changes DNA’s packing density. In the rats that preferred alcohol, the DNA in their amygdala was densely packed (the amygdala is the part of the brain that is responsible for emotions like fear and anxiety).

When the rats’ HDAC2 levels were reduced, the DNA in the amygdala was more loosely packed and anxiety decreased. This seems to suggest that HDAC2 may play a role in the density of DNA packing, and in turn play a role in anxiety and alcohol use, which may support the development of therapies.

**PERSONALIZED PHYSICAL ACTIVITY INTERVENTIONS TO IMPROVE BONE HEALTH**

Karen Troy, PhD, assistant professor in the College of Applied Health Sciences, received a four-year, $1.6 million NIH grant to study whether exercise may improve bone health. Previous animal research has shown that the structure of bone changes from the application of mechanical forces; however, we don’t yet know if this also applies to humans.

Troy will examine the effects on bone density of light versus heavy pressure applied three times a week over 12 months among a group of women participants. The overarching goal is to support the development of personalized physical activity interventions to optimize bone health.

**STRENGTH TRAINING TO IMPROVE CARDIOVASCULAR HEALTH**

African-Americans have higher rates of cardiovascular disease than Caucasians. In a study of exercise among young men, African-Americans, as compared with Caucasians, showed greater improvements in markers of cardiovascular health.

Jeffrey Woods, PhD, associate professor in the College of Applied Health Sciences at Urbana-Champaign, along with graduate student Marc Cook, found that after six weeks of strength training, two markers of cardiovascular disease decreased among the African-American men, but not among the Caucasian men. This seems to indicate that the health benefits of exercise may differ for African-Americans and that exercise may decrease the risk of the future development of heart disease.
CAN HIGH LEVELS OF STRESS CAUSE COGNITIVE DECLINE?

Christopher Engeland, PhD, assistant professor in the College of Dentistry, received an NIH grant to support a study on the relationship between stress and cognitive decline that is a collaborative project among UIC, Penn State University and Albert Einstein Medical College. The study sample includes 320 economically and racially diverse participants who report their stress levels and complete cognitive tasks daily for two weeks using smart phones. Stress levels are then reassessed every six months for four years.

Researchers are interested in how increased stress may affect cognitive functioning. Engeland also is studying blood and saliva samples from participants in this study to look at inflammation’s role in the relationship between stress and cognition.

IDENTITY PROTECTS AGAINST SUBSTANCE USE PROBLEMS AMONG LGBT YOUTH

Colleen Corte and Alicia Matthews, faculty members at the UIC College of Nursing, found that the personal meaning that one attaches to being a sexual minority may have important implications for LGBT adolescents and young adults.

In a recent study, they found that having a clear and certain identity as a sexual minority that was integrated into the overall self-concept (a person’s total collection of identities) was protective against substance use problems for lesbians and transgender young people. This suggests that fostering the healthy integration of sexual orientation into a person’s overall set of identities may be protective against substance use problems for lesbian and transgender adolescents and young adults.

ALTERNATE DAY FASTING FOR WEIGHT LOSS

Weight loss through caloric restriction may not be the best way to lose weight permanently, as it can be hard to maintain a reduced calorie diet over the long term. Krista Varady, PhD, assistant professor in kinesiology and nutrition, has been looking at the benefits and sustainability of alternate day fasting.

Alternate day fasting means eating a 400- to 600-calorie lunch, and fasting the rest of the day. On the other day, dieters can eat whatever they want. Varady’s research has demonstrated that not only does alternate day fasting lead to weight loss, it also has other health benefits such as improved cardiovascular health, lower total cholesterol and lower visceral fat mass. Varady is currently investigating longer-term adherence to alternate day fasting to see if the diet is possible to maintain over the long term.

IMPROVING TREATMENT ADHERENCE AND MEDICAL SELF-CARE AMONG PEOPLE WITH HIV

Among people with HIV, African-Americans, as compared with Caucasians, tend to report lower adherence to antiretroviral therapy (ART) and are more likely to experience poor health and more infections. Gina Gaston, PhD, assistant professor in the Jane Addams College of Social Work, surveyed 202 African-American HIV-positive patients in the Ruth Rothstein CORE Center.

She found that patients who reported trusting their healthcare providers were more likely to adhere to medical self-care plans. Better adherence was also reported among patients who said that they had good communication with their healthcare providers. This data suggests that adherence to medical treatment can be enhanced by increasing communication and trust within the physician-patient relationship.
Defining and delivering better healthcare to the underserved has always been my passion. Chicago is the right place to be and this is the right moment to do that. With the changes in the Affordable Care Act, more people will have a choice in how they get their care. At UI Health, we have a significant opportunity to change the face of healthcare in Chicago, with a focus on better treatments, better opportunities and better access for care.

As a pulmonary critical care specialist, I want to make a difference for our lung cancer patients. Working within the community-based practice sites that make up the Mile Square Health Center network, we have the best chance of reaching those who are underserved, even more so than other area hospitals.

That’s important to me. I was a Head Start kid born to a teenage mother, and from my undergraduate training at Notre Dame through my fellowship and subsequent work as an associate professor in pulmonary critical care at the University of Colorado School of Medicine, it’s been important to me to give back to the community.

Pulmonary critical care physicians are used to rolling up their sleeves. I came to UI Health with a mission—to build a robust lung cancer program, especially for those who are underserved.

Through the results of the National Lung Cancer Screening Trial, we know that screenings for certain types of populations can reduce mortality in lung cancer patients. Under Joe G.N. “Skip” Garcia’s leadership as vice president for health affairs, we are launching a program offering 1,000 free lung screenings to reach those who need them most. We want to be the first in the country to research whether these screenings will make an impact, particularly among the African-American and Latino populations we serve. If we see a 20 percent reduction of lung cancer in the general population, I estimate we can have an even bigger impact in underserved areas.

From working with patients in the ICU to focusing on the treatment of lung cancer, choosing pulmonary critical care as my specialty gives me an adrenaline rush. Now, I’m bringing my enthusiasm for pulmonary critical care to UI Health and expanding our team to ensure that we have just the right resources to serve our patients.

In my role as associate vice president for community-based practice, my number one goal is to help each of our Mile Square Health Centers reach out to the community more effectively. As a first step, I’ve visited every Mile Square site personally to exchange information and build effective teams.

Two million people reside within the communities served by our Mile Square Health Centers. We’re working to more fully connect the full scope of clinical resources available within UI Health to the Mile Square Health Centers to improve the delivery of care and the health outcomes for those we serve. While we aggressively care for people right in their own communities, we want them to know we really care. We want our patients to know that when they need a hospital, the University of Illinois Hospital & Health Sciences System is their community hospital— their provider of choice.

This is a job with great personal satisfaction. This is what I love. This is my passion.
Our ophthalmologists were the first in Chicago to offer a new, non-surgical treatment for vitreomacular interface disorders (VMA). VMA includes vitreomacular traction and some cases of macular hole, in which the jelly-like substance in the eye, the vitreous, undergoes age related changes causing distorted or decreased vision.

We’ve been recognized for our advanced adoption of electronic medical records technology by Healthcare Information and Management Systems Society. This makes UI Health among the top 10% of U.S. hospitals with paperless patient records.

OHare Airport, one of the world’s busiest, is home to the UI Health’s O’Hare Clinic. As the only medical facility serving the airport’s travelers and employees, the clinic answers immediate care needs as well as providing immunizations and health screenings.
The mission of the University of Illinois Hospital & Health Sciences System is to leverage its unique combination of clinical care, health sciences education and biomedical research in providing high-quality, cost-effective healthcare for the people of the state of Illinois and delivering personalized health in pursuit of the elimination of racial and ethnic health disparities.

You can reach us online at hospital.uillinois.edu/about or via email at uihealthmktg@uic.edu