How are we doing? See for yourself!
New UMHS Quality & Safety website launches

The University of Michigan Health System has launched a new website that makes clinical quality and patient safety data as well as patient satisfaction ratings openly available to the public.

“Transparency is a crucial aspect of quality and safety,” says Darrell A. Campbell Jr., M.D., UMHS Chief Medical Officer and Henry King Ransom Professor of Surgery. “Our goal is to become the national leader in health care quality and safety, and this is one of the ways we’re accomplishing our goal. We’re already reaching or exceeding many quality and safety measures. For others, we have concrete plans to improve. This website clearly and openly shows both aspects of how we’re doing.”

The new website is an easy-to-use, easy-to-view compendium of quality and safety reports on adult and child patient care for many conditions. More data will be added in coming months. The site also includes how patients rate UMHS, a list of quality and safety programs that UMHS leads or participates in, and quick links to health care reporting organizations such as Hospital Compare.

Many measures on the site have not been publicly available until now. For those that are, the site is more current than other public online sources of quality, safety and patient satisfaction data.

Visit www.uofmhealth.org/quality for a preview of this new site and share the site with patients you refer to UMHS for care.

FOR MORE INFORMATION
@ www.uofmhealth.org/quality

IN THIS ISSUE...

Treatment helps twins with syndrome that affects placenta-sharing fetuses ......2
Early detection and intervention key to rehabilitating infant hearing loss......4
Study suggests black women should begin mammograms earlier...............5
U-M Transplant Center performs 500th lung transplant; one organ donor saves two lives......................6
Study will examine earlier use of heart pumps in growing group of heart failure patients....................8
The earlier, the better: Study suggests better outcomes for kidney patients seen early by a nephrologist ..........10
Study: Cancer pain common among survivors.............................11
UMHS clinical guidelines for common medical conditions.............12
Amnioreduction may improve the symptoms but does not treat the underlying problem.

— Marcie Treadwell, M.D.

The Fetal Diagnosis and Treatment Center at the C.S. Mott Children’s Hospital is now offering treatment — and the opportunity for better outcomes — for a syndrome that can affect twin fetuses who share a placenta. If left untreated, it’s often fatal to both twins. Before U-M began offering this therapy, most expectant parents of twins with this syndrome traveled out of state for help.

“Twin-to-twin transfusion” syndrome is a rare complication that develops in up to 15 percent of identical twin pregnancies when the fetuses share a common placenta. It may begin in the second or third trimester and is related to an abnormality in the placenta itself. The disorder involves communicating blood vessels in the placenta causing a disproportionate flow of blood between the twins.

The imbalance in blood flow can lead to polyhydramnios (an excess of fluid) in the amniotic sac surrounding one fetus and oligohydramnios (a deficiency of fluid) in the amniotic sac surrounding the other twin. This difference in the fluid volumes is required for the diagnosis.

As a result of the condition, the fetus that is essentially “donating” blood to the other may become smaller, while the twin receiving the extra blood, called the “recipient,” may grow normally. The syndrome puts the health of both twins at risk. The donor twin has less blood flow, which may not only lead to poor growth but also kidney damage. The recipient twin has increased blood flow that may result in cardiac and neurological problems.

There are vascular communications with an uneven distribution of blood,” says Marcie Treadwell, M.D., director of the Fetal Diagnosis Center at U-M and professor of obstetrics and gynecology at the U-M Medical School.

The syndrome is diagnosed through ultrasound monitoring of these high-risk pregnancies. A fetal echocardiogram is recommended to assess heart function for twins that are affected. Left untreated, the mortality for both twins is more than 90 percent.

There are two main therapies for the syndrome. One, amnioreduction, removes extra fluid from around the recipient fetus to improve the balance of blood flow. This therapy is effective but may require frequent and multiple procedures, Treadwell says.

“Amnioreduction may improve the symptoms but does not treat the underlying problem,” she adds.

The others, selective fetoscopic laser therapy, is offered between 16 and 26 weeks gestation. This treatment uses a small medical telescope, called a fetoscope, and a laser to occlude the connecting blood vessels on the placenta. The fetoscope is placed through the maternal abdomen and into the amniotic cavity. The fetoscope allows identification of communicating blood vessels on the surface of the placenta.

“We carefully map the vessels that are causing the flow imbalance and use a laser to interrupt the communications,” says fetal surgeon George Marcie Treadwell, M.D. director of the Fetal Diagnosis Center and professor of obstetrics and gynecology
We carefully map the vessels that are causing the flow imbalance and use a laser to interrupt the communications.

— George Mychaliska, M.D.
Early detection and intervention key to rehabilitating infant hearing loss

Delaying treatment may hinder speech and language development, U-M audiologist cautions

ANN ARBOR, Mich. — Early intervention and close follow-up are key to rehabilitating hearing loss in children, says Paul R. Kileny, Ph.D., director of the University of Michigan’s Audiology and Electrophysiology program.

“Timely treatment is crucial,” says Kileny, who specializes in hearing problems in newborns and infants. “If treatment is delayed, children can start falling behind in critical milestones for speech and language development, and they may never catch up.”

Kileny is concerned that recent national media coverage highlighting auditory neuropathy might cause parents to delay treatment in the hopes that their child will recover naturally. One headline proclaimed, “Don’t let a doctor destroy your baby’s hearing” and the coverage prompted several calls to Kileny’s clinic from concerned parents.

Auditory neuropathy is a relatively rare condition thought to be caused by a malfunctioning auditory nerve or by problems affecting synaptic transmission between inner hair cells and the nerve. Rather than a specific clinical entity, it is a configuration of test results suggesting a post-synaptic or neural etiology of hearing loss, but the pattern does not necessarily indicate a specific site of lesion or pathophysiology.

A small number of children whose test results are consistent with auditory neuropathy do recover their hearing naturally, but most share health histories that include low birth weight, significant jaundice or respiratory distress syndrome, Kileny says. Many of them pass an initial hearing screening, but develop hearing loss during the first two weeks of life.

Despite some of the popular attention it has received, parents need to understand that auditory neuropathy is responsible for only a relatively small fraction of hearing loss among infants — up to about one in ten congenitally hearing-impaired infants, Kileny notes.

Nonetheless, treatment for auditory neuropathy and more common forms of hearing loss often follow a similar course.

Today, newborns are screened for hearing loss in the majority of hospitals and birthing centers. U-M has tested at-risk newborns since 1985, and all newborns since 2001.

If a problem is suspected, an audiologist or pediatric otolaryngologist can run a number of tests to determine the nature of the problem, including diagnosing auditory neuropathy. The battery should include behavioral hearing testing, Kileny stresses. Diagnostic imaging may also be necessary.

Treatment frequently begins with a closely observed trial period using hearing aids. If the child rejects the hearing aids or they seem to cause discomfort, parents should follow up with their doctor or audiologist.

With proper adjustment and close follow up, parents shouldn’t worry that hearing aids will permanently damage their child’s hearing, Kileny says.

If hearing aids are not effective, the child may be a candidate for a cochlear implant.

Published data shows that the majority of infants and children with auditory neuropathy symptoms can benefit from hearing aids or cochlear implants.

FOR MORE INFORMATION:

U-M Audiology: www.med.umich.edu/pediatricaudiology

U-M Pediatric Otolaryngology: www.med.umich.edu/pediatricotolaryngology

— Paul R. Kileny, Ph.D.
New government guidelines say mammography screening should begin at age 50 instead of the longtime suggestion of age 40. But a new study suggests that black women would benefit from screening at an earlier age.

The study looked at 375,761 women diagnosed with breast cancer in California between 1988 and 2006. It found that black women were on average seven years younger than white women when diagnosed with breast cancer. Further, among women younger than 44, breast cancer occurred more often in black women than white women.

The researchers also found that black women had higher rates of more advanced cancer upon diagnosis. Advanced disease tends to be more difficult to treat and survival rates are lower.

Black women also were more likely to have an aggressive form called triple-negative breast cancer. This means the tumor is negative for the estrogen, progesterone and HER2-neu markers and will not respond to treatments that target those markers. Among women ages 40–49, twice as many black women as white or Hispanic women had triple-negative breast cancer.

“Recent challenges to the traditional recommendations that women begin annual mammography screening at age 40 could disproportionately affect African-American women. Early detection of breast cancer is the most powerful determinant of outcome, especially for triple-negative tumors,” says study author Lisa A. Newman, M.D., M.P.H., FACS, director of the Breast Care Center at the University of Michigan Comprehensive Cancer Center.

“Our study suggests the need to continue intensive breast cancer surveillance among African-American women ages 40–49,” she adds.

The study appears in Cancer. Data was collected from the California Cancer Registry, a population-based cancer registry that monitors cancer incidence and mortality in the state.

In November 2009, the U.S. Preventive Services Task Force recommended women have mammography screening every other year from age 50–74. The American Cancer Society, the National Comprehensive Cancer Network and other organizations continue to recommend annual screening beginning at age 40.

“The task force’s recommendations that routine screening mammography should not begin till age 50 has the potential to widen the magnitude of breast cancer outcome disparities between African-American and white-American women,” says Newman, a professor of surgery at the U-M Medical School.

In addition to Newman, study authors were Kathryn C. Amirikia, M.D., FACS, and Paul Mills, Ph.D., both from the University of California San Francisco, and Jason Bush, Ph.D., from California State University.

FOR MORE INFORMATION

Our study suggests the need to continue intensive breast cancer surveillance among African-American women ages 40–49.”

— Lisa A. Newman, M.D., M.P.H., FACS
The University of Michigan Transplant Center celebrated a milestone in January, performing its 500th lung transplant. But as with every organ transplant, there’s much more to this story than a number.

U-M surgeons performed both transplant No. 499 and No. 500 almost simultaneously on January 3. Both recipients were saved by a single organ donor.

No. 499 is Jack Wagner, a 64-year-old from Brighton, Mich. No. 500 is Dan Roy, a 64-year-old from Brownstown Township, Mich. Both men have idiopathic pulmonary fibrosis. A diagnosis of IPF is not much better than a death sentence: There is no treatment, and the survival rate is less than three years.

Roy’s older brother died of the same disease before he could get a transplant.

Jules Lin, M.D., assistant professor of thoracic surgery at U-M, performed the 500th lung transplant for Roy on Jan. 3.

“The surgery itself was like others we’ve done, but it is remarkable that 500 have been done here. For me, it’s rewarding to be a part of that,” says Lin. “To see the patients come in here on oxygen and see them go home off oxygen is very rewarding.”

Lung transplant patients have good survival rates and can often return to the activities they loved. Both Wagner and Roy were already very dependent on oxygen and as the disease progressed rapidly, were getting close to becoming homebound. Both were facing setting aside an active lifestyle — in fact, Wagner routinely played softball and had gone to see his physician about a shoulder injury when he found out he had IPF.

Jack Wagner, left, and Dan Roy now call themselves lung brothers. They received the 499th and 500th lung transplants at the University of Michigan Health System almost simultaneously in January 2011. Both men, 64-year-old residents of Michigan, were saved by a single donor.

“...The whole family knew this disease was a death sentence, and I was not destined to see my grandchildren grow up. The gift of this lung, this second chance at life, was enormous. People tell me ‘We’ve got our old Dan back’.”

— Dan Roy
“Patients with IPF tend to decline very quickly, so when you have that diagnosis, you want to think about lung transplant,” says Lin.

U-M transplants more lungs than any other hospital in Michigan. The program has been around since 1990. About 1,500 lungs are transplanted annually in the U.S. each year, and U-M ranks among the top third of lung transplant programs based on the number of operations.

“Just improving a person’s life and allowing them to have a productive life again — being able to eat, sleep and live without thinking of their lung disease — it’s very rewarding. It’s a great story to highlight the tremendous need for organ donation,” says Kevin Chan, M.D., U-M’s medical director of lung transplantation.

“Lungs are very fragile organs. We have a very short timeline to transplant them,” says Chan. “There are only 1,500 of these transplants done nationwide each year— so for us, this milestone of 500 is extremely significant.”

The two transplant recipients actually met each other as they rushed to University Hospital after getting the call that a lung was available. Seeing each other’s oxygen tanks, they asked each other what brought them to the hospital. Roy said he was getting a new left lung. Surprised, Wagner replied he was getting a right lung.

“We were both elated. We haven’t come down from that high,” says Roy. The two men have since found out they share many things in common — they are both Vietnam veterans who served in the U.S. Army in the same small town in Vietnam. Both are 64, retirees from the auto industry, had three children and have been married more than 40 years.

“The whole family knew this disease was a death sentence, and I was not destined to see my grandchildren grow up,” says Roy. “The gift of this lung, this second chance at life, was enormous. People tell me ‘We’ve got our old Dan back.’”

Every year, 30,000 Americans die from IPF, a disease that often affects older people. Its cause generally is unknown, although cumulative injuries like exposure to environmental toxins and pollutants in genetically susceptible individuals could contribute to causing fibrosis.

There are 5 million people worldwide affected by this disease, according to the Pulmonary Fibrosis Foundation. In the United States there are more than 100,000 patients with pulmonary fibrosis.

“The diagnosis shook me to the core. I exercised a lot and never thought this would happen to me,” says Wagner, who adds that his good physical condition did help him qualify for the transplant and survive the procedure.

Both Wagner and Roy waited only about a month before they received the new lungs. At U-M, the waiting period for lungs is about seven months on average.

Every day, 19 Americans die while waiting for an organ transplant and another 138 people are added to the national waiting list. More than 100,000 people are on that waiting list — enough to fill Michigan Football Stadium.

“I think organ donation is a very simple gift that anyone can make. And the more people that do it, the more people who can have this better lease on life,” says Rishindra M. Reddy, M.D., assistant professor of surgery at U-M, and the thoracic surgeon who performed Wagner’s transplant.

The U-M Transplant Center provides ongoing opportunities for transplant recipients, including support groups. Both Wagner and Roy and their wives participate in a regular group meeting.

Both men are progressing well and trying to return to their normal activities.

“That donor helped out tremendously, allowing two people or more to carry on their lives a lot longer than 64 years of age. We’re hoping it is 84, 94 years of age.”

— Jack Wagner

FOR MORE INFORMATION
@ U-M Transplant Center: www.med.umich.edu/transplant

MAIN INDICATIONS FOR LUNG TRANSPLANT
- Emphysema (COPD)
- Emphysema due to alpha-1 antitrypsin deficiency
- Pulmonary Fibrosis
- Sarcoidosis
- Cystic Fibrosis
- Bronchiectasis
- Idiopathic Pulmonary Arterial Hypertension (Primary Pulmonary Hypertension)
Implanted heart-assist devices are viewed as a last resort to help patients with failing hearts, but the U-M Cardiovascular Center is gearing up to examine earlier use of the devices for the large and growing group of Americans with heart failure.

The National Heart, Lung and Blood Institute and HeartWare, a maker of left ventricular assist devices, will provide up to $14.6 million for the U-M and the University of Pittsburgh to study earlier access to LVADs.

In the study, called REVIVE-IT, researchers will compare whether non-transplant-eligible patients with heart failure less advanced than that of current LVAD recipients do better with implanted devices than with current medical therapy.

Principal investigators at U-M include Keith Aaronson, M.D., medical director of the heart transplant program and the Center for Circulatory Support, and Francis A. Pagani, M.D., Ph.D., surgical director of the heart transplant program and the Center for Circulatory Support.

“The new study allows us to examine the use of heart devices earlier in the cascade of heart failure.” — Keith Aaronson, M.D.
The new study allows us to examine the use of heart devices earlier in the cascade of heart failure,” says Aaronson, associate professor of medicine at the U-M Medical School.

For most patients, either a past heart attack or certain conditions, such as hypertension, diabetes, abnormal heart valves, dilated cardiomyopathy, hypertrophic cardiomyopathy or myocarditis, have lead to heart failure.

LVADs are currently approved for use in patients with very advanced heart failure to help them survive the wait for a heart transplant or to serve as a permanent alternative to heart transplantation.

In REVIVE-IT researchers will test the theory that heart failure patients whose condition impairs their daily lives, but who have not suffered serious consequences such as organ damage, malnourishment or immobility, would benefit from earlier implantation of an LVAD.

The study device will be HeartWare’s left ventricular assist device, the HVAD pump, a miniaturized, battery-operated continuous blood flow pump that’s surgically placed within the heart and the pericardial space.

The pilot study will include 100 patients from selected hospitals across the United States, including the U-M and Pittsburgh. Site selection for the study will begin later this year. The U-M’s Michigan Institute for Clinical and Health Research will coordinate the study.

“Our work may advance the treatment of heart failure by evaluating whether technology now reserved for very severe heart failure is ready for application to a broader group of patients in need,” says Pagani, a cardiac surgeon and professor of surgery at the U-M Medical School.

U-M’s Center for Circulatory Support is a multidisciplinary team of physicians, surgeons and allied health care providers dedicated to the care of patients with advanced heart failure or cardiogenic shock. Center clinicians and researchers have provided leadership in the clinical investigation of most of the implantable circulatory support devices in use today.

FOR MORE INFORMATION

@ U-M Cardiovascular Center
Heart Failure program:
www.uofmhealth.org/heartfailure

@ U-M Center for Circulatory Support:
surgery.med.umich.edu/cardiac/patient/adult/ccs/

@ Michigan Institute for Clinical and Health Research: www.michr.umich.edu/

“Our work may advance the treatment of heart failure by evaluating whether technology now reserved for very severe heart failure is ready for application to a broader group of patients in need.”

— Francis A. Pagani, M.D., Ph.D.
Kidney disease patients who receive earlier care from a nephrologist are less likely to develop end-stage renal disease (ESRD) and are at lower risk of death during their first year on dialysis, according to a study presented by U-M researchers at the American Society of Nephrology’s Annual Meeting and Scientific Exposition.

Although confirmatory studies are needed, increasing the number of patients who receive nephrologist treatment for advanced chronic kidney disease could have a substantial impact on U.S. ESRD rates and outcomes, according to the research by epidemiologist Elizabeth Hedgeman, M.S., M.P.H., and her colleagues.

The researchers analyzed Medicare data on more than 260,000 patients who started treatment for ESRD between 2005 and 2007. Just under one-fourth of patients were treated by a nephrologist for at least 12 months before their kidney disease progressed to ESRD, as recommended by current guidelines.

“Nephrologists can systematically focus on the complications of kidney disease more so than a primary care doctor would have time for. It’s a partnership between primary care and nephrology care that’s critical for improving the outcomes of patients,” says study co-author Rajiv Saran, M.B.B.S., M.D., MRCP, M.S., associate professor of internal medicine at U-M and associate director of the U-M Kidney Epidemiology and Cost Center.

Patients who had been treated by a nephrologist for at least 12 months were in better health and more prepared for dialysis, and were better-informed about their transplant options. In the first year after developing ESRD, the risk of death was about 40 percent lower for patients receiving recommended nephrology care.

States varied widely in terms of the proportion of patients receiving recommended nephrology care. “On a national level, states with larger percentages of patients receiving 12 or more months of nephrology care had correspondingly decreased rates of ESRD incidence and first-year mortality,” says Hedgeman.

“Six months of care was better than no care, and 12 months of care was still better than six months,” says Hedgeman. “There was no indication that the benefits of nephrologist involvement waned.”

National ESRD rates have risen steadily over the past two decades, and recent data suggest that 25 million to 30 million Americans may have chronic kidney disease — many of whom will eventually develop ESRD.

“We already know that nephrology care increases patient preparedness for ESRD onset and decreases first-year mortality in those who already have ESRD,” says Hedgeman. “In our new study, we wanted to view the state of affairs for the nation as a whole.”

The new study provides tantalizing evidence that seeing a specialist earlier in the course of chronic kidney disease could have a significant impact on patients’ health — not only improving outcomes for patients with ESRD, but also reducing the number of patients who progress to ESRD in the first place.

“It is imperative that we identify and implement measures to stop the development of chronic kidney disease and its progression to ESRD,” says Hedgeman.

FOR MORE INFORMATION

@University of Michigan Health System Nephrology Division:
www.med.umich.edu/intmed/nephrology

---

“On a national level, states with larger percentages of patients receiving 12 or more months of nephrology care had correspondingly decreased rates of ESRD incidence and first-year mortality.”

— Elizabeth Hedgeman, M.S., M.P.H.
Study: Cancer pain common among survivors

Surviving cancer may also mean surviving pain. But new research suggests that ongoing pain management is important — and should be made available — to the more than 40 percent of cancer survivors who said they experienced pain at some point since their diagnosis and the 20 percent who had cancer-related chronic pain.

The pain experience was worse for blacks and women, according to the U-M study of more than 200 black and white patients who experienced breast, prostate, colorectal, or lung cancer, or multiple myeloma.

Patient and physician knowledge and attitudes may lead to poor pain management. For instance, worries about side effects such as addiction — or fears that pain is a sign that the cancer had gotten worse — may lead patients and their doctors to minimize pain complaints.

“When necessary and appropriate there are a variety of therapies available to address pain complaints and improve well-being,” says study author and U-M pain medicine specialist Carmen R. Green, M.D.

Other findings:

• The most significant source of pain was cancer surgery (53.8 percent) for whites and cancer treatment (46.2 percent) for blacks.
• Women had increased pain, more pain flares, more disability due to pain, and were more depressed than men because of pain.
• Blacks with pain reported higher pain severity, expressed more concern about harmful pain treatment side effects, and had greater pain-related disability.

The study, published in the American Cancer Society’s journal Cancer, gives new insight on issues in cancer survivorship among the growing number of U.S. cancer survivors.

According to the National Cancer Institute, more than 60 percent of people diagnosed with cancer will be alive in five years. As society ages, study authors say, pain complaints and cancer issues will grow as significant health concerns and health policy issues.

“All in all, the high prevalence of cancer and pain and now chronic cancer pain among these survivors, especially blacks and women, shows there’s more work to be done in improving the quality of care and research,” says Green, a professor of anesthesiology, obstetrics and gynecology and health management and policy at U-M.

Adults ages 18–90, who experienced breast, prostate, colorectal, or lung cancer, or multiple myeloma at least two years prior were part of the study data. Participants were recruited from the Michigan State Cancer Registry. Participants were defined as survivors from the moment of diagnosis, in accordance with the NCI and the Lance Armstrong Foundation.

FOR MORE INFORMATION

@ Read the Journal Abstract: www.canceronlinejournal.com/details/journalArticle/1054939/Cancerrelated_chronic_pain_.html

@ University of Michigan Back and Pain Center: www.uofmhealth.org/pain

@ University of Michigan Comprehensive Cancer Center: www.cancer.med.umich.edu/

“...When necessary and appropriate there are a variety of therapies available to address pain complaints and improve well-being.”

— Carmen R. Green, M.D.
Introducing the UMHS Physician Liaisons

The University of Michigan Health System is pleased to introduce a Physician Liaison Program dedicated to providing personalized service to community-based physicians. A physician liaison is available to visit your practice; inform you of new services, treatment options and clinical trials; work to understand your needs, and discuss outreach opportunities by our clinical faculty.

If you would like a physician liaison to contact you, please call M-LINE at 800-962-3555 or email PhysicianLiaisons@umich.edu.

UMHS CLINICAL GUIDELINES FOR COMMON MEDICAL CONDITIONS

Referring physicians and others can access practical, evidence-based clinical guidelines for common medical conditions on the UMHS website. U-M primary care physicians and specialists have worked together to create 25 guidelines to help clinicians provide optimal care in a cost-effective manner for common chronic conditions (e.g., asthma, chronic pain), common infections (e.g., rhinosinusitis), and preventive care (e.g., cancer screening).

Each guideline was written with the busy primary care provider in mind — with an overview of key points, followed by commonly referenced information (e.g., tables of recommended drugs and their costs). The guidelines are also self-study CME activities for credit.

FOR MORE INFORMATION

@ The guidelines and related materials can be accessed at www.med.umich.edu/clinicalguidelines.

@ UMHS guidelines are also available on the U.S. National Guideline Clearinghouse at www.guideline.gov.