WHEN MINUTES MATTER
AirCare Brings UI Health Care to the Roadside and Bedside

Since its first flight in 1979, University of Iowa AirCare has flown over 3.5 million miles, and served more than 30,000 patients. The UI Hospitals and Clinics helipad is Iowa’s busiest, with about 2,500 takeoffs and landings every year. Collaborating with 100 emergency medical services, fire, and law enforcement programs in the region, AirCare was the first Iowa-based air medical service to receive accreditation from the Commission on Accreditation of Medical Transport Systems.

Onboard, the intensity is as high as the altitude with caregivers concentrating all efforts on a single critically ill patient. Limited space and constant movement combine with severe urgency. “You add another degree of austerity,” said Azeemuddin Ahmed, MD, MBA, Clinical Professor of Emergency Medicine, and AirCare Medical Director from 2005 to 2013. “You don’t have four walls and a ceiling or good lighting. You can’t carry all the drugs and all the equipment. It’s a strenuous situation.”

Joshua Stilley, MD, Clinical Assistant Professor of Emergency Medicine and current AirCare Medical Director agrees. “The level of energy, the noise and vibrations, make a one-hour flight feel like eight hours of shift time,” he said. “Three flights in one shift is about the maximum for fatigue.”

In spite of the stress, or maybe because of it, AirCare teams share extraordinary camaraderie. “Medical crews, pilots, mechanics and communicators are all vital pieces of the quality of care,” said Ahmed, who flew for 11 years as a resident and faculty flight physician. “You’re participating with a group of people that make a big difference, and give the best care possible.”

Back in 1979, AirCare was only the 11th EMS helicopter program in the country. The success of the program led to AirCare 2 in Waterloo in 1988. In 2016, AirCare 3 was deployed in Dubuque.

AirCare can now reach any location in eastern Iowa and surrounding communities in Minnesota, Wisconsin, Illinois, and Missouri, in under an hour.

The program has always been on the forefront of transport innovation, implementing state-of-the-art pediatric, stroke, and trauma protocols, among others. The future holds expanded medical capabilities, like video intubation, as well as further geographic extension.

On every flight, AirCare brings more than medical assistance – the reputation of UI Health Care rides along. “We provide an elevated level of care as soon as we make contact,” said Stilley. “When AirCare lands, it’s like the University of Iowa has arrived.”

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Joshua Stilley, MD
Clinical Assistant Professor of Emergency Medicine and AirCare Medical Director
Zika: What You Need to Know

Zika virus testing should be considered for patients with acute fever, rash, conjunctivitis, muscle pain, or joint pain who have traveled in the previous two weeks to an area with ongoing transmission of Zika virus. Asymptomatic pregnant women who have traveled to the affected areas should be tested up to 12 weeks after returning. Only about 20 percent of infected people show symptoms.

Any provider with a suspected case of Zika virus needs to call the Iowa Department of Public Health’s Center for Acute Disease Epidemiology (CADE) at 800-362-2756 to determine if Zika testing is warranted. If it is, CADE staff will give directions on how to collect and submit a specimen to the State Hygienic Laboratory.

On April 27, 2016, the State Hygienic Laboratory began Zika testing for all suspected cases in Iowa using the Trioplex Real-time RT-PCR assay and the Zika MAC-ELISA assay. The Trioplex assay detects the presence of nucleic acid from three different Flaviviruses (Zika virus, Dengue virus, and Chikungunya virus) because individuals infected by any of these viruses can have similar symptoms. The Zika MAC-ELISA assay detects the presence of Zika antibodies in a patient’s serum. If a patient has a positive Zika MAC-ELISA result, additional confirmatory testing must be performed by the CDC.

Women with possible exposure should wait eight weeks and men six months before attempting conception, as the virus lives longer in sperm than in blood.

As of June 10, 2016 there have been no reports of Zika transmission from local mosquitoes in the U.S.; however, 691 people in the United States have been confirmed to have the virus, 206 of them pregnant. The State Hygienic Lab has confirmed seven Iowa residents with the virus (none of whom were pregnant), has one presumptive positive pending confirmation, and in total has processed and/or tested nearly 200 specimens.

Zika is most dangerous for pregnant women because of the risk of microcephaly, other brain and eye abnormalities to the fetus, and loss of pregnancy. It can pass from a mother to her fetus, from a male to his sexual partner, and through blood transfusions.

Additional information and updates:
- Centers for Disease Control and Prevention (cdc.gov/zika)
- Iowa Department of Public Health (idph.iowa.gov/ehi/zika): Iowa Zika cases updated weekly and other information
- State Hygienic Lab at the University of Iowa (shl.uiowa.edu/news/zikaguidanceupdate.xml or 800-421-IOWA [4692]): Instructions and forms on specimen submission

High Frequency Sound Waves Give Tendinopathy Patients A New Option

Tendinopathy is a painful condition that occurs in frequently used tendons; two common forms include tennis and golfer’s elbow. While many patients respond well to conservative treatments—rest, time, and physical therapy—what can be done for the segment of patients who suffer from months of pain?

Patients experiencing chronic symptoms of tendinopathy can be referred to the Tendinopathy and Regenerative Medicine Clinic at UI Sports Medicine, which provides further evaluation of a patient’s structural pathology and contributing factors.

While chronic tendinopathy is commonly thought of as swollen inflamed tissue, the condition is, in fact, tissue that has become damaged or disorganized.

Tendinopathy is not an inflammatory condition, and anti-inflammatory medications, such as steroid injections and NSAIDs, are often not effective long-term treatments.

“We do not recommend multiple steroid injections in these cases, as they have been associated with worse long-term outcomes. A trial of physical therapy is often the recommended first line treatment,” said Dr. Mederic Hall, a specialist with UI Sports Medicine.

If conservative treatments fail, a majority of patients are candidates for a procedure that uses ultrasonic energy created by high frequency sound waves to break down damaged tissue and stimulate the growth of new, healthy tissue.

The minimally invasive procedure is performed in an outpatient clinic setting and requires only local anesthetic and a small incision. UI Hospital and Clinics is one of the first medical centers in Iowa to perform this relatively new procedure that mimics open surgery while allowing patients a faster recovery with less down time.
Distance Makes No Difference
Real-Time Management of Diabetes During Pregnancy

Diabetes during pregnancy can complicate everything, leading to high blood pressure and cesarean section, as well as increased risk of birth defects and stillbirth. A new cellular-enabled blood glucose meter can help simplify the situation, connecting patients to care no matter where they are.

“The Telcare® meter is an FDA-cleared device that allows us to see the patient's blood sugars in real time,” said Janet Andrews, MD, Clinical Associate Professor of Obstetrics and Gynecology and Director of the Perinatal Diabetes Program. “It helps us restructure care delivery through an integrated team approach – and we can impact outcomes for both mother and baby.”

Traditionally, patients would log their glucose levels manually, then call in to the clinic to report results. The new Telcare meter transmits glucose readings immediately and thus allows for more timely feedback. In response to data received, the care team can text the meter itself, call the patient, or send messages through MyChart. The Telcare® meter does not require the patient to have a cell phone or data plan.

At UI Hospitals and Clinics, Endocrinology piloted the use of the device in the non-pregnant population, and in 2014 saw significant reductions in ER visits and hospitalizations. Since the pregnancy program only started in November 2015, there is no long-term data showing similar results. However, short-term data does show that no patient using the Telcare® meter showed an increase in hemoglobin A1c levels, even with increasing insulin requirements.

Patient adherence rates are as high as 90 percent, and the new technology doesn’t just facilitate physician/patient communication. Family members can also get involved. “My meter is set up so my dad gets texts with my blood sugars,” said one patient, “and he calls if he is concerned.”

This level of patient engagement is crucial as our health care system shifts from volume to values, and the population health model takes hold.

Welcome New UI Physicians

Please join us in welcoming the newest members of UI Physicians!

RAVIJOT CHAWLA, MD
Clinical Associate Professor of Internal Medicine
Specialties or specific procedures: Hematology/Oncology

MATTHEW NWANERI, MD
Clinical Associate Professor of Internal Medicine
Specialties or specific procedures: Heart Failure Cardiologist

TAMEEM SHOUKIHK, MD
Clinical Assistant Professor of Emergency Medicine
Specialties or specific procedures: Pediatric Emergency Medicine

UI Sports Medicine

The UI Sports Medicine Clinic is located at 2701 Prairie Meadow Drive in Iowa City. Appointments can be made by calling (319) 384-7070.
Announcements

Fick Named Director of Primary Care

Daniel Fick, MD, has been named Director of Primary Care for both University of Iowa Physicians (UIP) and University of Iowa Health Ventures (UIHV), a University of Iowa Health System company.

For the UIP, Dr. Fick will serve as the chief contact for primary care issues for the departments of Family Medicine, Internal Medicine, and Pediatrics, championing initiatives on clinical quality, safety, and patient satisfaction. For UIHV, Dr. Fick will act as the Physician Director of UI Quick Care and UI Health Care ambulatory clinics managed by the University of Iowa Community Medical Services.

Dr. Fick will also lead primary care recruitment and retention activities for both organizations, and will work to implement Population Health and Clinic Transformation initiatives. Dr. Fick will continue to serve as the Vice Chair for the Department of Family Medicine as well the UI Campus Health Officer.

A Clinical Professor of Family Medicine here since 1993, Dr. Fick received his medical degree from the University of Iowa. He served his residency and fellowship at UI Hospitals and Clinics in Family Practice and Sports Medicine, respectively.

Service Excellence Event September 14 and 15

The next Service Excellence event will be held at the Sheraton Hotel in downtown Iowa City. Choose a morning or afternoon session of “The Iowa Experience: Excellence Every Time” on Wednesday, Sept. 14, or Thursday, Sept. 15. Every UI Health Care employee is expected to attend a Service Excellence event. If you have not already attended, please register through Employee Self Service on The Point. Click on the “Personal” tab, then “My Training” and enter “Service Excellence” in the search box. Then click “View Course.”

Family Medicine Expands to New Location

Family medicine care has expanded to a brand new location: UI Health Care–Iowa River Landing–East is now home to Dr. Glenn Abernathy, Dr. Hussain Banu, and Dr. Shalina Shaik. IRL–East is adjacent to and shares parking with the main IRL building. IRL-East family medicine office hours are 8 a.m. to 5 p.m. Appointments can be made through the main IRL appointment line at 467-2000.

Speeded Decision-Making Research Study

Physicians are invited to participate in a research study on speeded decision-making and medical judgments in health-care professionals. Participation involves one half-hour visit to the Iowa Neuroimaging Consortium within UIHC. Compensation of $30 provided. Please contact the laboratory at (319) 335-2718 or via email at stephanie-mckee@uiowa.edu.