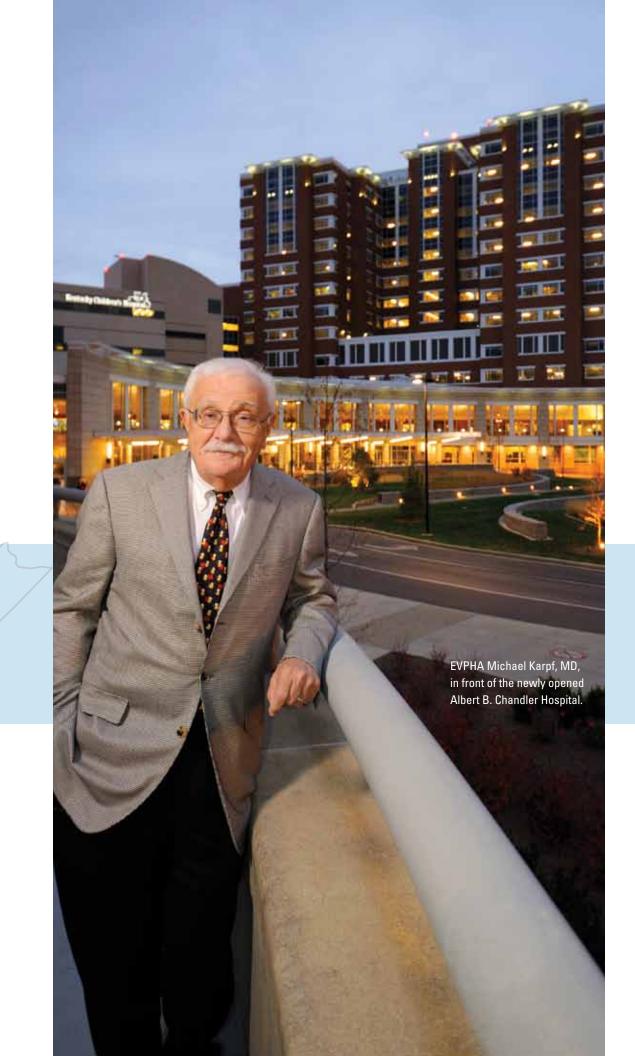


**U**KHealthCare。



# The picture of a transforming medical center

A report on fiscal year 2012 from the Executive Vice President for Health Affairs

During 2012, we have continued to aggressively pursue strategies designed to build a regional referral center at the University of Kentucky. It is our vision to be able to serve the people of Kentucky so that none are forced to leave the state for advanced specialty care. As we reflect on fiscal year 2012, I am pleased to report real progress toward achieving this vision.

#### Strategic focus serves us well

Last year we reevaluated and sharpened our strategies initially created in 2004. Because our original market area was insufficient to provide the cases necessary to fulfill our vision, in 2012 we continued to expand our market boundaries to include Western Kentucky and bordering states and adopted a strategy of becoming a medical destination in select, highly specialized areas.

"We were advised that in order to transform ourselves into a major academic medical center, we should invest about \$800 million....

Nine years later, we have actually invested \$1.4 billion."

We recommitted to a strategy of working with regional community providers. This strategy has served us and the Commonwealth well. Our state's health care system is stronger today as a result.

In 2004, we were advised that in order to transform ourselves into a major academic medical center, we needed to invest about \$800 million over an eight-year time period. Nine years later, we have actually invested \$1.4 billion. When others quit or limited infrastructure investments during the recession of recent years, we maintained a strong balance sheet and continued investing in our future. Not only did we achieve more

than we originally planned to with the capital we invested, we retained our momentum.

Aggressive recruitment of subspecialists has been a real factor in our ability to grow our patient volumes, maintain a healthy bottom line and invest in our future. After filling existing service gaps, our recruitment has become more specific and focused, forcing us to recruit on a national basis and compete against the very best centers for specialists of extraordinary talent. This commitment to recruitment has paid off substantially. As an example, our Gill Heart Institute is now broadly based and able to serve the entire spectrum of cardiac needs. And for us and Gill patients, 2012 was a banner year — 12 received heart transplants, 28 received ventricular assist devices and an additional two are living thanks to receiving mechanic al hearts (firsts of its kind for the state).

Kidney, liver and lung transplants are increasing, as well as our wait lists — a good predictor of continued program growth. And UK Markey Cancer Center sees more patients for specialized cancer treatment than anyone else in the area — the most mature and comprehensive program in the region.

While health care utilization in this market and across the country has been in decline the last couple of years, UK HealthCare has actually grown by more than 80 percent since 2004. I do not know of any other academic medical center that has matched that rate of growth. This speaks directly to the fact that services we have developed are important to the region.

Our ability to make necessary investments and to grow is a direct result of our *relationships, recruitment, and a stringent focus on quality, safety, efficiency* and *service.* As we prepare for an uncertain future where health care reform is the only certainty, our ability to weather change depends in large part on how well we continue to execute our strategies and maintain our emphasis on quality, safety, efficiency and service.

#### Quality, safety, service, efficiency key to success

Last year we made noteworthy improvement in our observed-to-expected mortality rates. This momentum continued in 2012, and we also saw significant improvement in our quality and safety metrics. We benchmark strongly against our academic peers in quality and safety.

Our patient satisfaction scores also substantially improved in 2012 — both quality and service were target areas of achievement for which every eligible UK HealthCare employee was rewarded at year's end.

"Admissions from all markets, all payer classes and in all service lines have increased."

#### **Extraordinary patient volumes**

At the outset of fiscal year 2012, we held measured expectations. By year's end, we were recording unexpectedly high inpatient volumes. We finished 2012 with 34,453 inpatient discharges — approximately a 6 percent increase over last year.

Our inpatient growth is all the more noteworthy when one considers it took place within an inpatient market shrinking locally and nationally. UK HealthCare surgical volumes — from Chandler Hospital, Good Samaritan Hospital and the Center for Advanced Surgery — are also hitting record numbers and increased in 2012 by 6 percent. Admissions from all markets, all payer classes and in all service lines have increased. Key to our ability to benefit from this growth has been an equally strong emphasis on our efficiency and cost management.

#### 2012 becomes a milestone year

Our ability to increase total available beds, especially intensive care beds, made possible by the opening of the new Chandler Hospital pavilion in May 2011, was accomplished extremely well. We have been able to operate at full capacity since January 2012. Nursing leadership team did an excellent job of ramping up nursing staff as well as managing productivity. As we expanded programs and added new information systems, we also added substantial numbers of other skilled employees to our teams.

In January, Good Samaritan nurses earned the Pathway to Excellence designation from the American Nurses

Credentialing Center. That same month, new surgical suites and support areas on Floor 2 of the new Chandler Hospital Pavilion A were opened — including the region's first-of-its-kind hybrid operating room.

In February both the stroke and heart programs gained third-party endorsements as "Gold" programs, while a young 21-year-old Maysville resident became the state's first recipient of the Syncardia Total Artificial Heart as a bridge to transplant thanks to the collaborative work of our heart failure and transplant programs. That same month our commitment to breast-feeding was recognized by an international association of lactation consultants, and the UK Birthing Center could point to metrics showing that women delivering at UK were more likely to breast-feed than those delivering elsewhere in the state — a proven health benefit to both mother and baby.

Early in March, UK HealthCare demonstrated its value in a disaster by serving as a regional trauma referral center following a tornado that carved a 100-mile swath through the state and left severe injuries and badly damaged health care resources in its wake (see profile page 12.

UK HealthCare joined forces in the spring with Louisville-based Norton Healthcare in a Partnership for Quality focused on improving the health of Kentucky's residents, initially in the areas of cancer care, stroke and heart disease. In the area of stroke alone, the partnership creates a network of 20 hospitals striving to improve stroke care in Kentucky.

The gains in quality, safety, service and efficiency are too many to list, and represent hard work on the part of hundreds of staff who have been studying each area and working for improvement. 2012 was also the year we launched the Multidisciplinary Clinical Service model pilot, where a nurse, physician and administrator are jointly responsible for operations and performance in terms of quality, service and efficiency for the pilot areas. We are carefully following the model's outcomes, as it may become a blueprint for how areas are managed throughout UK HealthCare.

#### Focus shifts to the ambulatory environment

Increasingly, we have turned our attentions toward the ambulatory services of UK HealthCare. Cohesive, integrated management of our ambulatory services is increasingly our focus, as we take what have historically been independently managed clinics and work together



to support their ability to operate in a more highly integrated fashion.

Outreach either via UK specialists sent to local communities or via UK specialty practices established in underserved areas in collaboration with local hospitals continues as a core strategy. Today, UK HealthCare is in 150 locations statewide; the precise nature of the outreach always based upon what the community tells us is needed. An example you will read about in this report is that of ob-gyn services provided in Georgetown, Morehead and Hazard (see page 26). We are committed to continued outreach as a way of improving the quality of and accessibility to health care in our region.

#### Well-positioned for future change

UK HealthCare's growth, especially in the ambulatory (outpatient) area, is projected to continue. Growth in patient volumes can reduce some of the pressures on us, as can our strategies of emphasizing subspecialty care and partnering with local providers.

Regardless of its precise form, health care reform will accelerate. As a result of pressures at the federal level, we can anticipate our reimbursement will be less. Financial risk will increasingly be moved to providers.

Our best defense is a great offense; so we remain

committed to efficiency and productivity. We are hardwiring our gains in quality and safety and pressing on for even better patient satisfaction. Efficient, standard, excellent care is what we must achieve; investments in our faculty, staff and programs will secure and extend our gains.

Our years of success leading up to fiscal year 2012 have established a strong platform for future performance. 2012 was an extraordinary financial and operating year for UK HealthCare in spite of a contraction in the health care market locally and regionally and a difficult environment at the federal and state levels. Our improvements in patient outcomes and service paint a picture of an academic medical center that is truly transforming itself.

And that's why we're here, to make good on our covenant with the Commonwealth and ensure Kentuckians have the health care they need and deserve.

Michael Karpf, MD

Executive Vice President for Health Affairs UK HealthCare® / University of Kentucky

Michael Rangh

### Making good on our promise to Kentucky



In 2003, the University of Kentucky made a bold promise to Kentuckians: we will provide health care on a par with the nation's best academic centers so the people of the Commonwealth can receive world-class care, close to home.

In only eight years, as the UK medical center has achieved and even surpassed its goals, this strategic vision has become a reality.

UK HealthCare has become a leader in advanced subspecialty care and, as this region's premier medical center, is now providing complex medical care to Kentucky residents as well as neighbors.

Key specialties such as oncology, cardiology, organ transplantation, trauma, neurology/ neurosurgery and pediatrics are thriving. This year our nationally recognized Markey Cancer Center announced that its patients with certain types of cancer have higher survival rates than patients with the same cancers at other medical centers in the state and nation.

Ever-mindful of our responsibility to deliver excellent care to all Kentuckians, the board has been pleased that UK HealthCare has forged relationships with rural hospitals and physicians. UK is continuing to set up specialized clinics at local hospitals, enabling patients to receive advanced subspecialty care in their own communities.

As a testament to our success, patient volume at UK HealthCare has continued to grow. Over the past 10 years, our discharges have nearly doubled. Amazingly, this growth has occurred in a shrinking inpatient market. Among academic medical centers, this trajectory is extraordinary and as a result, UK HealthCare is now in a strong position to attract top physicians, researchers and staff.

Finally, it is important to note that quality of care and patient satisfaction remain and will continue to remain the top priorities of UK HealthCare. The very successful and patient-popular Arts in HealthCare program assures UK patients they are receiving quality care in the best possible healing environment. In this way, UK HealthCare has raised the bar for all medical centers.

The University of Kentucky is now a medical destination and credit must be given to the foresight and strategic determination of our leaders. The journey has just begun.

Barbara Young, Chair

Barbara loung

University Health Care Committee of the UK Board of Trustees

**University Health Care Committee** of the University of Kentucky **Board of Trustees** As of June 30, 2012

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# Advanced subspecialty care for the Commonwealth





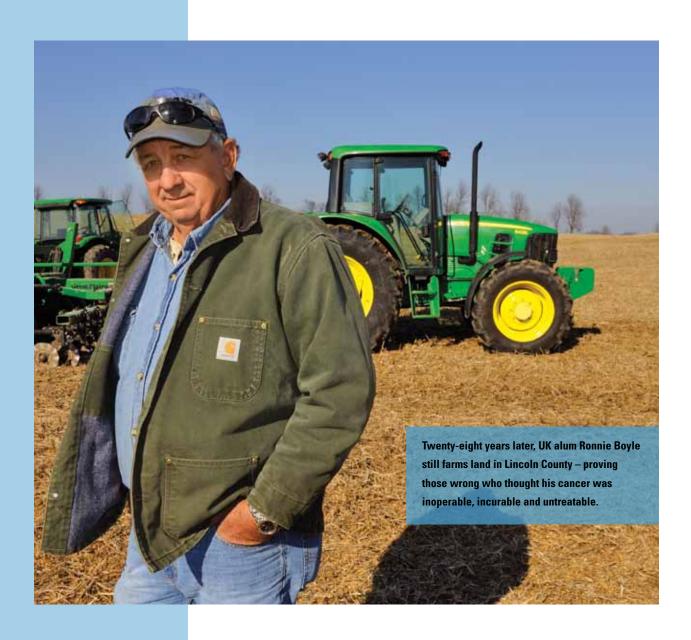
We call it a contract or covenant with the Commonwealth — covering gaps in the state's health care needs, ensuring citizens need not be sent out of Kentucky to find health care of a national caliber, supporting local providers when their patient's needs go beyond what they can provide. Ready at a moment's notice with critical subspecialty care, that's why we're here.

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#### Some of the highest cancer survival rates in Kentucky

When it comes to a cancer diagnosis, few aspects of care matter until the question of prognosis, or survival, is answered. The UK Markey Cancer Center has recruited nationally recognized experts from across the country and focused them as multidisciplinary teams to diagnose, treat and combat cancer. They have a track record that speaks for itself - some of the highest cancer survival rates in the state.

### Celebrating 28 years of beating the cancer odds



In 1983, Ronnie was in his 30s, working full time and raising three young boys — then ages 2, 5 and 8 — when he began to notice back and abdominal pain that just wouldn't go away. These symptoms, coupled with others, sent him to his family doctor for help.

"I had been having trouble for about a year," said Ronnie, "and the doctors just kept telling me it was prostatitis." But it was much more than that. Blood work from Ronnie's family doctor revealed an ominous sign that was soon confirmed — metastatic testicular cancer.

His cancer far advanced, Ronnie's body was being consumed by tumors. Diagnostic images showed 15 on his liver, 15 on his lungs, and one the size of a basketball lying directly on his vena cava and aorta at the back of his abdomen. Ronnie was admitted to UK on January 27, 1984, and began an aggressive regimen of chemotherapy drugs to battle the tumors. Supervising his care was hematologist-oncologist Ed Romond, MD, who had only recently arrived at UK in November 1983 fresh from an oncology fellowship.

"It was one of the worst cancers I had seen, or have seen since then, during my career as a physician," recalled Romond.

Known as choriocarcinoma, the aggressive cancer secretes a protein known as beta hCG, and research indicated that patients with levels over 10,000 were difficult to cure. Ronnie's level was 367,000.

"I was really worried that we wouldn't be successful," Romond remembered. "But Ronnie was a young man, and a father, and we were determined to do all we could." "Dr. Romond didn't want me to have surgery on the tumors until my chemo was done so the scar tissue wouldn't keep the chemo from getting into the cells," Ronnie recalled. So he waited, and endured four rounds of then groundbreaking chemotherapy over a span of 12 weeks without the benefit of today's antinausea medications. He also had bone marrow harvested and numerous blood transfusions.

The combination of four drugs, given at doses only read about in medical journals, showed promise. They lowered Ronnie's hCG levels to a mere 10 – signaling a dramatic reduction in the amount of cancer that remained in his body.

With this positive sign, surgery was scheduled to remove the remaining tumors. Teams from Urology and General Surgery took more than 11 hours working on Ronnie, shelling out the tumors from his liver and spending eight hours alone gently peeling the remaining three-inch tumor from his aorta, leaving him with an 18-inch scar as a reminder. Only a few days later, Ronnie's hCG was zero, and hope began to rise.

Each day Ronnie continued to improve and in the summer of 1984, he left UK Chandler Hospital a cancerfree man. He continued to see Dr. Romond for regular follow-ups the next few years until he and his doctors could finally breathe a sigh of relief.

Now 28 years later, Ronnie's message to others is clear: "Don't put off screenings and push forward until you find the answers you need. Dr. Romond showed great compassion and concern for my family and me, and it saved my life."

It's caring for patients like Ronnie that has shaped the way Romond treats patients even today. "There is a famous quote from a 1927 lecture to Harvard medical students. We try to live by this simple commitment: 'The secret of the care of the patient is in caring for the patient.' In Ronnie's treatment, that's what we all did."







That's why we re here

#### Kentucky's Only Burn Center

Burn care requires specialized training and facilities of a kind found usually only in large academic referral centers. The investment in people, training and treatment facilities is high.

# Standout athlete faces a life-changing moment

The few minutes that changed Jacob Bradford's life happened so fast, he didn't know exactly how bad it was.

He was at a friend's house in mid-September 2009 trying to get a bonfire going. It was a wet night and the friend poured gasoline on the fire to build it up. The paint can they were using to douse the fire in gasoline caught fire and his buddy threw it. The fiery can landed near Jacob, lighting him on fire.

"I got up and started running because I thought I could dodge it," Jacob said. He couldn't. The flames were licking at his legs and back. Friends had to tackle him to try to stamp the fire out.

"They took me into the house and took clothes off before they could melt to my body," Jacob said. "I was sitting in my buddy's living room shaking from the adrenaline and shock of what happened."

He was conscious through it all. It hurt, but Jacob didn't know just how bad it was.

A native of Union, Ky., Jacob was away at Lindsey Wilson College where he is a member of the wrestling team when the accident happened. The ambulance his friends called took him first to the hospital in Adair County, where medical personnel gave him medicine to kill the pain before airlifting him to UK Chandler Hospital.

"I didn't think it was that serious but I guess I was in a state of shock where I didn't realize the seriousness of the situation," he said. "I didn't find out until after I came out of the induced coma that there was a chance I wouldn't live through the night." He was in the hospital five weeks. His prospects weren't good.

"I can remember some of the men who had been athletes that were nurses or doctors looking at him early on and saying he's not going to wrestle anymore," said Alicia D. Carpenter, RN, MSN, a clinical nurse specialist. Fifty percent of his body was burned, much of it deep burns.

Jason Buseman, MD, UK chief resident in plastic surgery, remembers telling Bradford he had a choice. "At the end of the day, this is going to go two ways," Buseman said. "You're a young man, you can let this moment define your life or you can use this event to make your life stronger and better.

"He wasn't going to let this get him down."

In fact, Carpenter said Bradford was discharged in October, and in February 2010, the staff got a newspaper clip about him wrestling again.

Jacob attributes a big part of his attitude for recovery to the staff at Chandler Hospital. He was in an induced coma for the first two weeks of his stay there, and remembers the nursing staff changing his bandages, repositioning him so he wouldn't slide out of bed, and providing all the medical attention he needed.

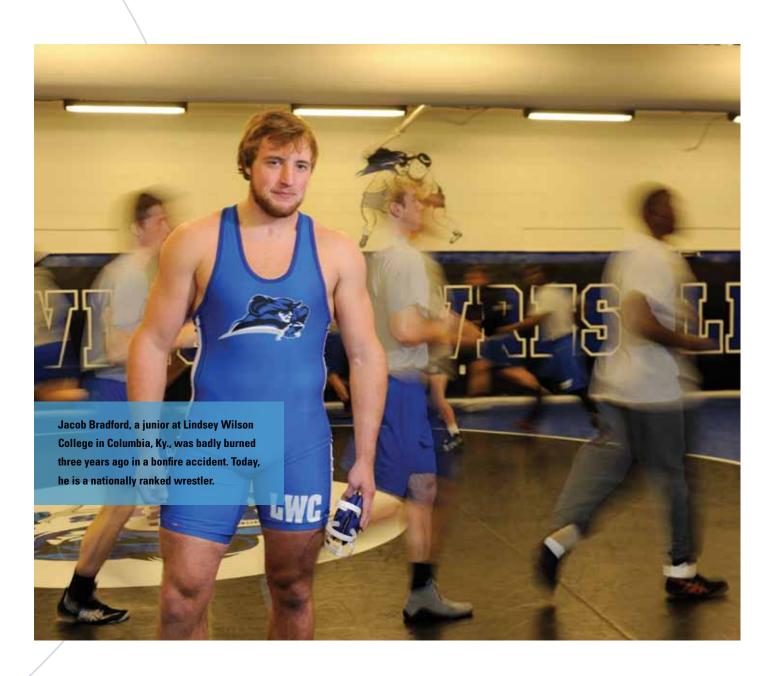
"From time to time they just came in and hung out with me," Jacob said. "That was the biggest thing, I knew I was going to get better. I was lonely, and I couldn't get up and walk around. It really helped having people you could trust help you out when you needed it. I really can't stress how much that meant to me, how it made my stay so much easier and how much it helped the healing process."







That's why we're here.



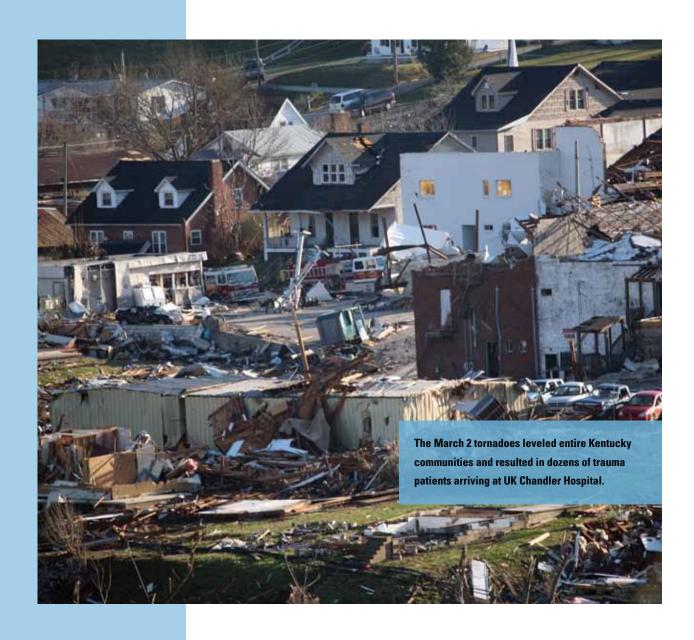


Regional referral center

UK HealthCare physicians, nurses and other staff have the advanced training and specialty expertise to serve as a regional referral center for more complicated care — especially during times of disaster response like that seen in March 2012.

UK Chandler Hospital opened a new state-of-the-art emergency department in 2010 and offers the region's only Level I trauma center for adults and children.

# UK HealthCare has a unique role when disaster strikes



The March 2, 2012, tornadoes showed UK HealthCare's true mettle – giving staff an opportunity to demonstrate skill in handling a disaster, as well as compassion for the people impacted. In the storms' immediate aftermath, UK hospitals cared for about two dozen seriously injured patients from hard-hit areas in Eastern Kentucky.

"They were the most critically injured who needed our intervention guickly in order to survive," said Matt Proud, patient care manager in the UK Chandler Emergency Department (ED). The Chandler ED is also the front door to the UK Level I Trauma Center. UK HealthCare is one of only a few centers nationwide with Level I certification for both adult and pediatric trauma.

With new state-of-the-art emergency facilities, a Level I-accredited trauma program, and an emergency nursing staff recognized with the 2011-2013 Lantern Award by the Emergency Nurses Association, the people of UK HealthCare have taken steps to be ready to serve when needed.

Being able to accommodate a sudden influx of injured patients requires changes to normal operations. "It was nice to validate the work we had done on the front end," said Proud, "to see the new design [of the ED] helped when it really mattered, when the people needed for us to respond."

It wasn't just ED staff who responded; the entire health system was there to help.

To enable emergency staff to address the needs of trauma patients, Chuck Campbell, MD, a cardiologist who happened to be in the ED seeing a patient, volunteered to help care for medically ill patients. "Afterward," he said, "I was asking whether first responders and those establishing aid stations had sufficient manpower and equipment."

### "We're more than just critical care providers; we're also concerned about the human condition and the fact that people's lives were changed."

- Colleen Swartz, UK chief nurse executive

Morgan County EMS was down to its last few bags of IV fluid, and the Morgan County ARH Hospital had been damaged by the tornado. The area was short on medical supplies. UK HealthCare provided 12 cases of IV fluids and IV tubing.

#### Still helping after the initial shock is past

Long after the first response was needed, several nurses and staff members from Eastern Kentucky were looking for some way to support the hard-hit communities. That concern showed "we're more than just critical care providers," said Colleen Swartz, DNP, UK HealthCare's chief nurse executive. "We're also concerned about the human condition and the fact that people's lives were changed."

Many who worked at UK HealthCare were impacted directly or indirectly. A drive was organized among staff to collect back-to-school supplies for Morgan County in conjunction with the local hospital. "For me, it was devastating," said Morgan County native Amberlee Nickell, "because that's where my whole family lives."

Nickell, an employee engagement manager, and others who also felt a personal impact, called for employees throughout UK HealthCare to donate school supplies. "We weren't sure of the response we would get, but it was overwhelming," she said.

And both kinds of care perfectly illustrate UK HealthCare is not only about providing great patient care. We also care deeply about Kentucky and its people.







That's w h y we re

UK HealthCare employees, such as Amberlee Nickell above, reached out to those hurt by donating dollars to the American Red Cross and school supplies worth thousands of dollars to the children of Morgan County.

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### Danger below

#### A hunting accident nearly cost this outdoorsman his life.

For Kinney Noe of Stanford autumn is a time for enjoying the thrill of the hunt. Perched in a deer stand in rural Lincoln County in November 2011, he was waiting for his next shot when the stand suddenly gave way beneath him — sending Kinney plummeting more than 23 feet straight down, impaling the side of his body on a tree limb slightly larger than a baseball bat.

Kinney landed on the ground still conscious but in incredible pain, and reached for the cellphone still in his pocket. His first call was to his hunting partner — his daughter — who was just minutes away on the same farm. Quickly, a rescue crew was summoned and in just over an hour and a half, he landed by helicopter atop UK Chandler Hospital and into the UK Level I Trauma Center and the hands of waiting surgeon Bernard Boulanger, MD, and his team.

"Kinney was critically injured with a small tree protruding from his abdomen. Nonetheless, our team of trauma professionals are prepared for these types of emergencies and it was a very smooth and rapid transition from ER to OR. Everything worked like it was supposed to. Although Kinney's injuries were severe, if an impaled patient makes it to a trauma center such as UK, we usually have a good chance of saving them."

Once in the operating room, surgeons were able to explore the extent of the damage. The section of the tree that entered Kinney's body had found its way through the lower right side of his abdomen near his belt line then angled up slicing into his colon, the middle of his liver, through the diaphragm and into his right lung. Surgeons

had to cut through Kinney's chest to repair his lung, then moved down to address the extensive injuries to his liver and its blood supply.

"The first hours after surgery were touch-and-go," recalls Kinney's wife Rita. "I remember Dr. Boulanger coming to speak with us after surgery and he kept telling us, 'He's alive,' and I knew that if that was the most positive thing he could say, it wasn't a good sign."

Kinney spent the next 69 days in the Chandler Trauma ICU and was cared for by a dedicated team of nurses, therapists, pharmacists and physicians from cardiothoracic, renal, pulmonary and gastroenterology specialties who worked together to manage his complex injuries and complications. Rita left her husband's side only in the evenings and for a stroll around the hospital. "I loved walking through the hospital and looking at the artwork. It was so beautiful. Sometimes I would just go out and look to take a break from sitting in the ICU."

Today, Kinney can't say enough about the care he has received at UK. "The doctors and nurses are fantastic. I have nothing but praises for them and the utmost respect for UK HealthCare."

Dr. Boulanger gives equal credit to Kinney's family and the early care he received. "There were so many people involved that deserve credit including the prehospital care providers who got him here quickly, UK hospital staff and especially Kinney's family. Whether they know it or not, they have been a key part of his recovery and it all combined for a positive outcome for Kinney."

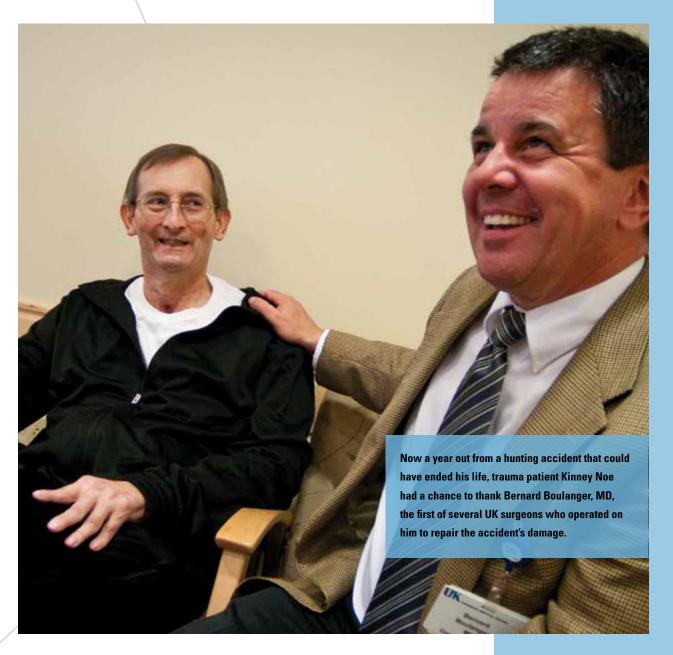






#### Regional Trauma Center

Through UK Albert B. Chandler Hospital, UK HealthCare serves as Central and Eastern Kentucky's only Level I trauma center. In fiscal year 2012, more than 3,579 trauma patients received care.



#### Breadth and depth of subspecialty services

UK HealthCare serves the state's most specialized medical needs. We're nearby with services that rival the nation's best... and that can make all the difference.

### Right doctors, right place, no time to spare

### Young Laurel County woman escapes a devastating condition

Kimberly Simpson was potentially minutes from death. She had been suffering from severe headaches for weeks and had been unable to find answers or relief from nearby medical providers. "Everybody kept telling me there was nothing wrong with me, and there was nothing I could do about it," she said.

Experiencing another severe headache in November 2011, Kimberly, 34, went to a small hospital near her home where medical personnel performed a CT scan. When the scan came back normal but the pain persisted, she asked to be transferred to UK Chandler Hospital.

Early tests at Chandler, too, revealed no major problems. Following protocol, the neurology resident physician in the emergency department (ED) contacted Michael Dobbs, MD, director of the UK Comprehensive Stroke Program, to discuss Kimberly's case.

Dobbs was preparing to leave for the day, but instead of going to his car, he went to the Chandler ED. Kimberly's story heard through his years of experience raised red flags. "I couldn't put my finger on what it was that didn't sound right, but something didn't, and I wanted to see her for myself," he said.

Dobbs performed a few simple clinical tests. He noticed during the eye movement test that Kimberly couldn't look up. "That's an early sign of high intracranial pressure," he said.

Her problem was a venous sinus thrombosis – the veins from her brain were blocked and the blood couldn't drain. The routine procedure in these cases is to put the patient on blood thinners. But there wasn't time for that in Kimberly's case.

"The entire major drainage system in her brain was blocked," said Justin Fraser, MD, one of UK's newest

neurosurgeons. "The pressure was getting out of control. Her scan showed she was already having strokes from the blockage of the veins."

Dobbs had called Fraser down to the ED to examine Kimberly. He had an idea of what needed to be done and hoped Fraser saw the same thing.

"We had to do something to relieve the pressure in her head and give her time to respond to the blood thinners," Fraser said.

The solution was much more interventional than in normal cases of venous sinus thrombosis. "The only option for her was to literally take some of the bone of her skull off and allow the brain to swell outward," Fraser said. "Basically popping the top on the pressure."

Fraser removed both sides of the skull, and Kimberly received blood thinners to deal with the clots blocking her veins. After she recovered, Fraser put her skull back together. Although she experienced some setbacks, including seizures, and faced a very difficult course with serious surgeries, Kimberly is doing much better.

Today she's working at Corbin Health and Rehab helping with patient needs. "I want to pay it forward. I've been where those residents have been," she said.

From the emergency physician who made the initial call, to neurologist Dobbs who trusted his instincts and the clinical signs, to neurosurgeon Fraser who could immediately provide a surgical intervention, to hospital staff who provided after-surgery care, Kimberly's life depended on all working closely together and bringing their best skills to bear on a moment's notice. Dobbs firmly believes Kimberly would have died had Fraser not seen her that night.

As for Sue Simpson, she attributes her daughter's life to one thing: "The right doctors being in the right place at the right time," she said. "They played a huge role in her getting the surgery she needed."



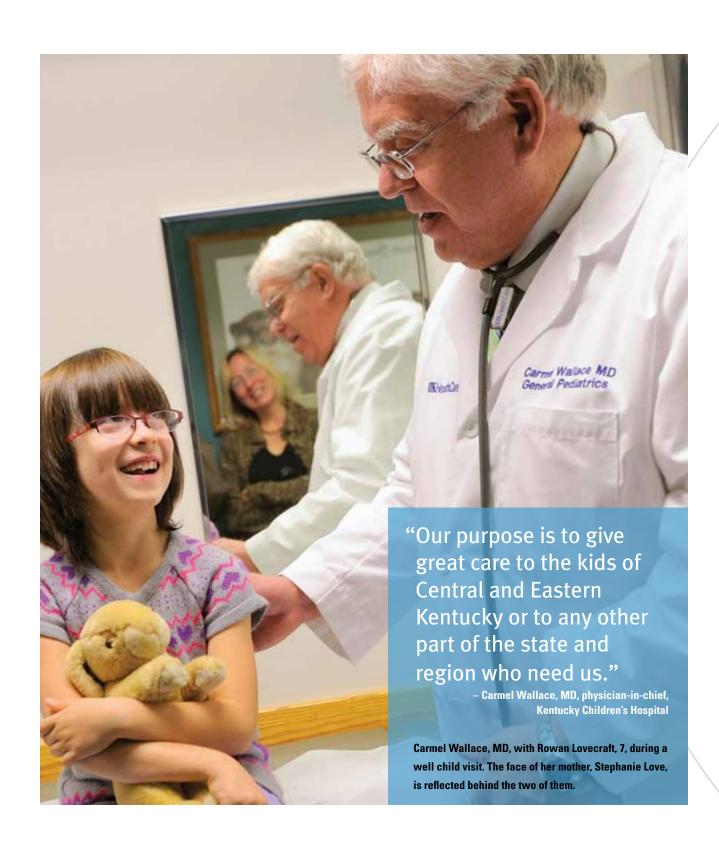




That's why we're here,



### Bridging technology and care for Kentucky's children









For the children and families who come to Kentucky Children's Hospital (KCH) each year, the benefits of being able to see some of the leading specialists in the state make a difference in how they heal and how quickly they return to being children. 2012 has brought refreshed appearances, advanced services and happy smiles to the faces of children and families who benefit from Kentucky Children's Hospital.

Carmel Wallace, MD, chair of pediatrics, transitioned from 14 months as interim chair into a permanent appointment in April. A pediatrician with more than 30 years of experience, Dr. Wallace recognizes what patients and their families are looking for most when they come to the children's hospital - honesty, availability and a willingness to communicate. He is driven to help his staff achieve these qualities while giving the most advanced care possible.

#### New specialists bring unique services

#### HEMATOLOGY/ONCOLOGY

This year saw the development of a variety of new services and specialty care, including the expansion of hematology and oncology services under the direction of Lars Wagner, MD. Dr. Wagner's prior affiliation with Cincinnati Children's Hospital will help bring clinical trials to KCH for treatment of cancers unresponsive to traditional therapies.

New this year, clinicians from KCH, Markey Cancer Center and Chandler Hospital are collaborating on a special sarcoma clinic designed to treat cancers of the bone and connective tissue, plus a neurologic oncology clinic that utilizes a multidisciplinary

approach to treat pediatric cancer patients.

#### CARDIOVASCULAR

In August, Pediatric Cardiology launched a Congenital Heart Clinic. With a multidisciplinary approach, team members treat a variety of cardiac-related needs. Patients can receive all cardiac testing and diagnostics in the clinic.

Anna Kamp, MD, a recent recruit and one of only two pediatric electrophysiologists in Kentucky, has brought valuable skill to the management of childhood heart rhythm abnormalities. And Brandon Fornwalt, MD. awarded the National Institutes of Health Director's Early Independence Award for the study of pediatric dyssynchrony (a condition that causes the heart to beat with uncoordinated contractions), is responsible for bringing almost \$2 million in research funding over the next five years.

#### PALLIATIVE CARE

Also new this year is the launch of pediatric palliative and hospice care services. Dedicated to providing comfort, education and guidance to patients, families and staff, this multidisciplinary approach provides symptom management and much more for terminally ill children. Through an affiliation with Hospice of the Bluegrass, Horacio F. Zaglul, MD, and his team are helping children as inpatients and in the home setting.

#### Recognized for technology, innovation

New awards and recognition in pediatric cardiovascular care have also evolved in 2012. UK HealthCare received accreditation. in fetal, transthoracic and transesophageal

echocardiography (ECHO), all of which are used to evaluate pediatric congenital heart disease. KCH's pediatric and fetal ECHO lab is a component of the Congenital Heart Clinic and inpatient pediatric cardiac care and is the only lab in the state accredited in all areas of imaging.

Additionally, UK HealthCare was designated as a center of excellence in adult, pediatric and transplant uses of extracorporeal membrane oxygenation (ECMO) - making UK one of only six institutions in the country to obtain this triple achievement

Delivering services to patients closer to home is another large initiative of Kentucky Children's Hospital. Pediatric cardiology services can be accessed in a variety of locations in Central and Eastern Kentucky. And nephrology and pediatric gastrointestinal clinics are now located in Frankfort.

For the tiniest patients born at UK, efforts to improve breast feeding and be "Baby Friendly" have made great strides. UK is now the only hospital in Kentucky chosen to participate in Best Fed Beginnings, a national initiative to increase the number of hospitals designated as Baby Friendly. Awarded by the National Initiative for Children's Healthcare Quality (NICHQ), UK's nursery, mother-baby and physician staff is participating in a 22-month learning collaborative focused on making system-level changes in pursuit of designation as a Baby Friendly hospital. This designation signifies UK's commitment to evidence-based practices that provide moms and babies with breastfeeding support while in the hospital and after discharge.



Pediatric cardiology
services can be accessed in a
variety of locations in Central
and Eastern Kentucky.
Nephrology and pediatric
gastrointestinal clinics are
now located in Frankfort.

#### Growth, expansion on the horizon

Growth and expansion for Albert B. Chandler Hospital has opened up a variety of new opportunities as well. With the new availability of rooms on 4 North, Kentucky Children's Hospital has been able to add 12 new beds. This progressive care unit also features an epilepsy monitoring center and will allow physicians and nurses to closely monitor children during their stay.

The second floor of the building housing KCH is also changing as former operating and waiting rooms will soon be converted to the use of pediatric patients. Scheduled to open in January 2013, this space will be invaluable – providing a location for minor procedures, pediatric sedation, imaging services and recovery. Spinal taps, bone marrow aspiration, line placements and IV placement – currently performed in an operating room – can now be performed in a pediatric-focused environment. The new space will also support chemotherapy patients requiring IV hydration before being transferred for therapy – eliminating the need for long waits in the clinics.

As more adult units move into Chandler Pavilion A, pediatric units will be able to acquire additional needed floor space. Currently, there are plans to move the 66-bed Neonatal Intensive Care Unit (NICU) into larger space on the first floor of the KCH building once it is vacated by the existing adult ICU.





#### **Renovations make families** feel at home

"We want visitors to step into Kentucky Children's Hospital and know they aren't on an adult floor. It is our goal to create a relaxing, comfortable space for our patients that helps them heal in an environment that stimulates and encourages who they are," said Wallace.

Updated colors and new themes for the unit will take their inspiration from the Makenna wall. Utilizing the input of child life specialists, Kentucky Children's Hospital leaders are continuing to dedicate time to development of a fresher appearance for both the clinics and patient rooms. Thanks to a donation from The Makenna Foundation, a new welcome center will be taking shape for visitors as they arrive at the fourth floor, current home to most inpatient services.

"We have plans to open the space and make it friendlier for the children who visit here. We hope to add a new interactive wall for

children to play with similar to what is in the pediatric emergency department," said Wallace. Renovations to the welcome center are expected to be complete in 2013.

#### Focused on teamwork and strategy for the future

Ahead are new initiatives and a clear focus for the future of Kentucky Children's Hospital. "We are working as a team to help reorganize Kentucky Children's Hospital and UK Pediatrics to be a more unified management group," said Wallace. "By bringing the clinics and hospital together, we want to merge what have been two separate silos and work together more closely as we build solid relationships."

Due to the lack of hospitals in Central and Eastern Kentucky that care for children, KCH is often viewed as the primary care center for much of the region and as the tertiary care center for even more children of the Commonwealth.

The KCH staff has a clear strategy for success that includes the training and support of a great physician faculty that works together as a team for the children of Kentucky and surrounding areas. At the UK HealthCare enterprise level, there is solid support for meeting technological needs, providing services and recruiting highly trained .

"People who work in pediatrics are special. They truly enjoy the patients they treat, and they enjoy the work," Wallace concluded. "The interaction with the families is just one of the fun parts of pediatrics - like being able to educate a family on a child's complex illness or teach a parent during a baby's first well-child visit. What may seem like an everyday task to us is a big event for our patients and their families, and the type of people we have in pediatrics are exceptional because they know that. They want to be here."



Focus on Services

### **Growth in Ambulatory Services is a key to success**

As UK HealthCare continues to grow and aspires to become a destination for advanced medical care, UK Ambulatory Services is of necessity undergoing its own transformation.

In years past, the outpatient practice has been undersized relative to the size of the inpatient practice, said Jonathan Curtright, MHA, MBA, chief operating officer for ambulatory services at UK HealthCare.

Marc Randall, MD, chief of ambulatory services since 2011, agreed, noting that UK does not generate its own inpatient business to the same degree other academic medical centers do. Instead, inpatient admissions are driven by referrals from outside physicians, patients admitted through UK hospital emergency departments, and transfers from other hospitals.

"What that says is our ambulatory platform needs to grow significantly," explained Randall. "Today we have not reached our full potential as a destination center for ambulatory services, but we're pursuing that because a more successful outpatient service will make the inpatient operation much more successful."

The inpatient side of UK HealthCare has focused on expanding its capacity, improving patient throughput and efficiencies — carrying the growth of UK HealthCare since 2004. Now, for needed growth to continue and for UK HealthCare to meet both its mission and vision, UK HealthCare's leaders are looking for future growth and expansion to be driven by outpatient volumes.

#### Ambulatory growth -The strategic imperative

- UK HealthCare's ambulatory platform will accommodate significant growth.
- · Ambulatory capacity generates a higher return on investment than inpatient capacity.
- New structure includes:
  - Executive management team
  - Clinic management team
  - Clinic-specific performance metrics on access, productivity, quality, service and financials

"Our ambulatory platform needs to grow significantly...a more successful outpatient service will make the inpatient operation much more successful."

- Marc Randall, MD, Chief, Ambulatory Services







To become a destination medical center – one chosen by people who can go anywhere for advanced medical services – UK HealthCare must better develop its outpatient model of care. To Curtright, this means the creation of an integrated multispecialty group practice, what he calls "the cornerstone" of a destination medical center. That effort began a few years ago but really picked up momentum in 2012.

"UK really started as a hospital in the early 1960s with some very limited ambulatory clinics brought on in the backend," said Randall, who also serves as chair of radiation medicine. "As the clinics progressed, they essentially were 'mom and pop' shops typically managed within clinical departments without enough consideration

of how those clinics should be integrated.

"When we thought of the enterprise, historically," Randall continued, "we basically thought of the hospitals. That's changed. Now we say the enterprise involves and includes an organized, cohesive, integrated ambulatory practice."

Evidence of a developing vision of integration, Randall explained, began with Curtright's recruitment in 2009. Then in 2011, Randall was given a role that functions much like the medical director of ambulatory services, serving as a bridge to the hundreds of clinicians who are the backbone of UK Ambulatory Services. In the past year, 2012, leadership teams have been expanded in key areas to improve patient access and quality

of care, as well as to create a seamless transition between the inpatient and ambulatory practices.

#### Triad model of clinic leadership deployed

Curtright created a triad model of leadership in many of UK's clinics, where leadership consists of a physician leader teamed with a practice manager and an ambulatory services director.

"Having a physician leader teamed with an experienced administrator and dedicated practice manager is going to make it so that you have the best thinking clinically and the best thinking from a business perspective," Curtright said. "As a team, it makes for a formidable partnership."

"If it weren't for the University of Kentucky, many people in the Commonwealth of Kentucky would have a very difficult time getting access to subspecialty medicine. It's our job to provide that care in a high quality, safe, efficient system each and every day."

Jonathan Curtright,
Ambulatory Services COO

#### **Systems will support integration**

The past fiscal year also saw the devotion of more than 100,000 staff hours for development and implementation of the ambulatory practice management system (registration and scheduling) leading to the launch of the first clinics on the ambulatory electronic health record (AEHR) in July 2012.

Throughout 2012, more than 600 UK HealthCare staff members were focused on implementing the AEHR in the Georgetown clinic location, the Internal Medicine Group, and in digestive health and pediatric congenital heart clinics. According to Curtright, another 14 clinics are in process and scheduled to be on board using the electronic medical record by the end of calendar year 2013.

The AEHR is just one step toward the integration of ambulatory services that will help improve the quality of care throughout the outpatient system, said Curtright.

Integration of services in the outpatient environment also includes improvements such as aligning UK HealthCare facilities to make them work well together as part of the same enterprise. Integration also includes improved access to services and better patient care.

### **Change is evident throughout Ambulatory Services**

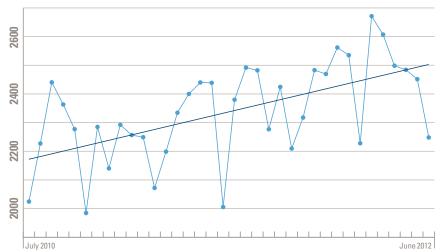
"If we want to be a destination medical center where people are willing to drive hours to get here for expertise in advanced subspecialty medicine, we must provide outstanding access and support a group practice that works collaboratively and effectively alongside our inpatient practice," Curtright said.

Randall uses the Kentucky Neuroscience Institute as an example of an outpatient area that has undergone change, and the success those changes have wrought.

KNI has instituted a concept called 7-2-1. Seven days before a specific clinic day, staff will review the schedule and see what vacancies are available. They'll look again in two days then in one day.

"The idea is to fill those vacancies as much as possible," said Randall. The result has been fewer "no shows," opportunities to fill cancellations with those on waiting lists (improved access), and better utilization of physician time. The bottom line is, these kinds of efficiencies lead to a better experience for patients, physicians and staff alike.

#### **Total Scheduled Attended Visits per Day**



Average ambulatory (outpatient) visits per day are up 29 percent as of June 2012 compared to July 2010. Patient volume was 11.7 percent higher in FY12 over FY11.

Changes such as these and others across ambulatory medicine have resulted in an increased number of patient visits year over year since 2010. The 2012 fiscal year saw a 4 percent increase in ambulatory visits over 2011. New patient visits per business day in FY12 were up more than 11 percent over FY11.

That increased volume and access to services, Curtright believes, is helping UK meet the need for advanced subspecialty medicine among people throughout the Commonwealth and beyond.

"If it weren't for the University of Kentucky, many people in the Commonwealth of Kentucky would have a very difficult time getting access to subspecialty medicine," he said. "It's our job to provide that care in a high quality, safe, efficient system each and every day."

#### **Ambulatory Services Organizational Structure**

UK HealthCare Office of EVPHA
Michael Karpf, MD

Ambulatory Services Chief
Marcus Randall, MD

Ambulatory Services COO
Jonathan Curtright

HR & Community Clinics
John Sampson

KNI, Ortho
Dean Hanlon

Pediatrics
Matt Horn

Ambulatory Services COO
Jonathan Curtright

Cancer, Ob-Gyn
Sue Durachta

Allscripts, Ky. Clinic So.
Kristen Brown

Patient Access Services
Courtney Higdon

New administrators support a new model of integration and several serve within the new triad model of clinic leadership, working closely with clinic practice managers and physician leaders to improve clinic operations.



"We are continuing to cultivate and grow relationships with hospitals in our region that have had no obstetric or gynecologic services for their communities."

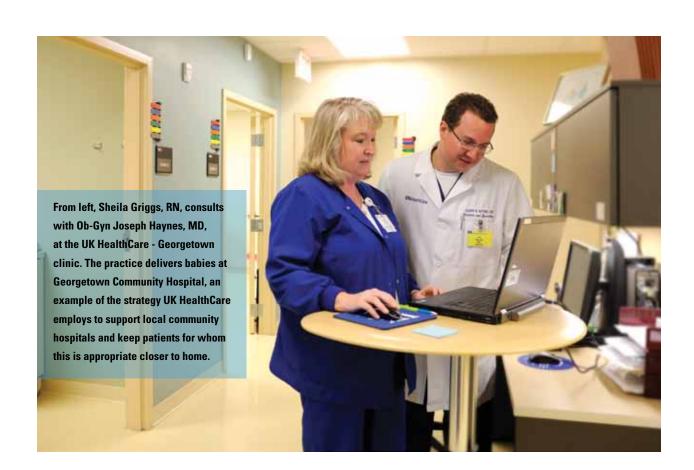


**Ob-gyn outreach locations** 

across the state

Focus on Outreach

### Leading women's health in Kentucky through ob-gyn outreach



UK HealthCare's ob-gyn outreach has been an integral part of reaching women with complex obstetric and gynecologic needs and increasing access to care that would not be available otherwise. Delivering advanced obstetric and gynecologic services like those provided at UK to women around the state is improving clinical outcomes, bolstering the detection of high-risk patients in need of specialized services, and supporting communities in the establishment of women's health services.

A network of patient-centered initiatives is growing across Kentucky as UK physicians from Maternal Fetal Medicine, Gynecology and Gynecologic Oncology branch out to reach patients in the communities where

they live. "It isn't our intention to bring all patients back to Lexington for care. By creating a network of services in other communities, we can help patients remain near their homes and support systems and only bring those with complex needs and conditions here," said Wendy Hansen, MD, chair of obstetrics and gynecology.

Many of these communities have had difficulty attracting and retaining physicians long enough to establish a solid practice, but by joining with UK physicians, advanced services and staffing needs can be met through a team approach.

Full-time, community-based obstetric practices are one component of UK's

outreach. Providing regular ob-gyn services to communities where no services existed previously benefits local hospitals by bringing in patients for surgery, deliveries and diagnostics and provides an on-call physician for obstetric emergencies.

"Right now we are continuing to cultivate and grow relationships with hospitals in our region that have had no obstetric or gynecologic services for their communities," said Hansen. UK has partnered with three facilities to provide full obstetric services: St. Claire Regional Medical Center in Morehead, Georgetown Community Hospital, and Appalachian Regional Healthcare based in Hazard.







#### **MOREHEAD**

Partnering with UK in January 2009, the ob-gyn practice in Morehead is the department's most established community practice. The practice has grown through the shared commitment of UK Women's Health Obstetrics & Gynecology and St. Claire Regional Medical Center and acts as the clinical site for UK third-year medical students on the rural health track. Currently, Steve Mitchell, MD, and Rebecca Todd, MD, UK faculty, provide services and take call at St. Claire Regional Medical Center. Both have made their homes in Morehead and have become part of the community. Department faculty provides back-up services for call and vacations. The practice hopes to add a third physician in the coming year. "It really is two hospitals (UK Chandler and St. Claire) coming together to provide services to women and their babies," explained Hansen.

#### **GEORGETOWN**

The department's community practice in Georgetown works closely with Georgetown Community Hospital. Established in 2011, the practice is located at the UK HealthCare -Georgetown facility and continues to grow. Its close proximity to Lexington presents a different challenge; strong competition from Lexington practices. UK's goal is to help patients receive excellent care in their local community without a commute into the city. Two ob-gyn physicians, Joseph Haynes, MD, and Craig Tilghman, MD, have been seeing patients fulltime in Georgetown.

#### **HAZARD**

Established in 2008, UK physicians work closely with Appalachian Regional Healthcare's Hazard ARH Medical Center. This practice is undergoing a major change this year as it becomes the third community practice housed within UK Women's Health Obstetrics & Gynecology. With two ob-gyn physicians on staff, Misty Thompson, MD, and James Dawson, MD, UK hopes to add a third practitioner this year and move the women's care practice to the ARH Medical Mall.

"It takes a lot of work to build up a practice when there hasn't been a strong program in place previously, but we are working closely with each facility, their existing practitioners and the hospital CEOs to nurture a relationship of trust and respect," said John Allen, Ob-Gyn department administrator. Since the programs began just a few years ago, more than 160 high-risk mothers and 130 sick newborns have been transferred to UK for care, and more than 1,500 babies were delivered last year between the three facilities.

#### Additional clinical network outreach

UK Women's Health Obstetrics & Gynecology is reaching patients through a variety of additional clinics in the region. A physician travels each week to private practice locations in London and Maysville to provide high-risk ultrasound and consultation services. Gynecologic services are offered in Rockcastle and Woodford counties, the Lexington Federal Medical Center, and the Lexington-Fayette County Health Department.

Ovarian cancer screening services are spread across the state and provide access to screening for more than 226,000 women in six health departments last year alone. Since the program's establishment, more than 600 ovarian tumors and 75 ovarian cancers have been detected and women from every county in the state have taken part in the program.

### Measuring success through teamwork and access

"We try very hard to promote a team atmosphere," said Hansen in explaining how outreach physicians are integrated with the rest of the department's faculty. "We teleconference for faculty meetings, visit each site regularly, and stay in close communication. The geographical distance between Hazard, Morehead and UK also presents a challenge for patients. Telemedicine has been especially important to bridge the distance and ensure that patients have access to the same services as if they were at UK." Our intent is that each community practice have access to similar services, patient protocols, and quality and safety initiatives as UK.

Outreach services from UK Women's Health Obstetrics & Gynecology have goals that align with the strategic plan of UK HealthCare as whole. Outreach programs bring services to communities where they have disappeared or would not be available otherwise. By encouraging local patient care and retention and only bringing to Lexington moms and babies who need complex care, this team is focusing on building lasting relationships with providers across the state.



Annual Report 2012

### University of Kentucky College of Medicine







**U**KHealthCare。

# Working together toward national leadership



MISSION OF THE UNIVERSITY OF KENTUCKY COLLEGE OF MEDICINE

The mission of the College of Medicine is to develop knowledge, skills and attitudes that promote professionalism, teamwork, life-long learning, empathy, scholarship, cultural sensitivity and leadership, with the goal of providing excellence in education, health care and research within the Commonwealth of Kentucky and beyond.

High aspirations are not rewarded overnight. They require vision, guidance, teamwork and patience. 2012 was a year of high achievement for the University of Kentucky College of Medicine. We moved closer to our goal of becoming a top-20 research institution. Educational associations, government agencies, funding sources and other academic institutions recognized our progress and validated our efforts. Outstanding clinicians, researchers and students joined us, strengthening our capabilities and our reputation. And countless Kentucky residents had their health and lives improved by our clinical services, our research findings and our community outreach programs.

We are a tier 1 research-intensive university, yet also ranked in the top 20 in an *Annals of Internal Medicine* study in terms of meeting our service-to-community goals. There aren't many places where you can work side by side with both people doing leading-edge research and those aiding underserved populations.

Such achievements are the result of talented individuals *collaborating* at every level for the larger goal of moving the college forward. Identified needs are being met through new curricula, new programs, new hires, new facilities and new funding. Our efforts are producing results, and our results are being rewarded.

#### Leadership in medical education

We are an active part of a national shift in how future physicians are trained. Our greatest achievement in FY12 may have been completing the total revision of the curriculum for the first two years of the MD program. The new curriculum, which is just beginning to be implemented with incoming first-year students, was the work of planning committees on which more than 100 faculty members served.

Students will now be taught every aspect of the body's organ systems, one system at a time. This approach integrates normal function and structure with diagnosis and treatment, and it more accurately reflects how patients present with disease in a clinical setting. In addition, all required courses will be directed by both a researcher and a clinician, giving us exciting, collaborative ways to present material that were not possible before.

The other significant change was making a commitment to increase our class size, as part of our ongoing effort to address the projected future shortfall of physicians in Kentucky during the next decade. Beginning next year, the incoming class will increase from 118 to 136 students. We do not anticipate having any trouble filling the additional slots with outstanding students. The progress we have already made as a medical school has been causing our numbers of applicants to rise for several years. We receive approximately 2,000 applications each year, giving us an excellent candidate pool from which to draw the most promising students.

There were other changes in our educational programs, too. Fourth-year students in the MD program now spend a week working with computerized mannequins that simulate human patients. We integrated a cardiothoracic graduate program to prepare surgeons more quickly. We began new continuing education course sequences to allow online preparation for live classes. And the Center for Interprofessional Healthcare Education Research and Practice, which opened in 2010 and assists us with a variety of cross-discipline initiatives, was honored as one of only seven such centers invited to become part of a national consortium.

#### Leadership in biomedical research

Despite the slow recovery of the nation's economy, research grants and contracts gained slightly in FY12, totaling nearly \$117 million. Of that amount, more than \$66 million was in NIH funding, which was 62 percent of the total granted to Kentucky medical schools.

Increasingly, funding is being tied to translational research - research that has the potential to make the transition quickly from the laboratory to applications in the cure or treatment of human diseases and conditions. These days, that means collaborative research; the complexity of the science requires teams of specialists working together. Collaboration, is not a new idea for us. The College of Medicine has the uncommon advantage of being one of 16 colleges – including six colleges for the health professions - clustered on a single campus. Our researchers in the College of Medicine have access to some of the nation's best minds in related scientific disciplines, giving both breadth and depth to our research capabilities that is rare among medical schools.

Collaborative research has its home at UK's Center for Clinical and Translational Science, which provides infrastructure and core services for our researchers. A \$20 million NIH grant to the center in FY11 - a form of recognition given to no more than 60 institutions – made UK a member of a select national biomedical research consortium. The college's own research centers continue to advance knowledge in their particular fields – increasingly in collaborative efforts.

The increased focus on translational research also gives greater importance to our MD/PhD program. The physician-scientists we train are the link between basic science and clinical practice, and NIH funding priorities are increasingly recognizing the unique role they play. A regional MD/PhD conference that we launched this year with three other medical schools – and that we will host in 2013 with two additional schools participating – was an opportunity for our students and faculty to network with their peers and learn about the related work being done at other institutions.

#### Leadership in community service

In FY12 we maintained our commitment to serving the health care needs of the entire Kentucky community. Our faculty physicians form the largest multidisciplinary medical practice in the region and support its largest academic medical center. Nonetheless, the state's incidence of chronic diseases - one of the highest in the nation - makes our commitment a challenge. So does its mix of population groups – especially underserved rural populations. In fiscal year 2012 we hired 73 new clinical faculty members, which has helped us strengthen our service in a variety of subspecialties.

We served rural populations through our Area Health Education Centers, an eightregion collaboration with the University of Louisville, and through our Center for Excellence in Rural Health, located in Hazard. Programs ranged from clinical services and physician training to health fairs and disease-specific public awareness efforts. We also are recruiting and training physicians interested in rural practice through our Rural Physician Leadership Program. These initiatives are strongest in Eastern Kentucky because of our location in Lexington, but we are committed to increase our presence, and our service, in the western part of the state.

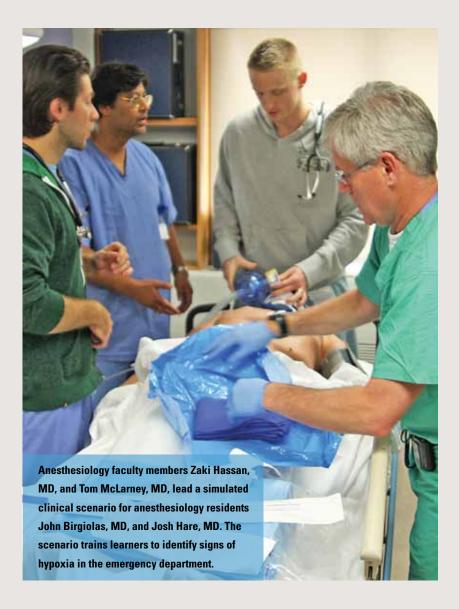
#### **Leadership for the future**

In prior messages, I have written about moving from very good to great. Our achievements in 2012 provided hard evidence that we are poised for the transition from regional leadership to national leadership. I am proud to lead this institution, and I look forward to the exciting future we are all working, together, to build.

Frederick C. de Beer, MD Dean, College of Medicine

Vice President for Clinical Academic Affairs Professor of Internal Medicine

### Leadership in medical education



The UK College of Medicine is a national leader in innovative education and training of physicians at all stages of their career.

Challenges to health continue to develop and evolve, as does our knowledge about prevention and treatment. Regulatory, cultural and economic influences have their own impact. Clinical practice today involves treating patients in the context of many factors beyond how they present in an examining room. Physicians have to be trained — and continue to be trained throughout their careers — to successfully navigate these challenges while maintaining a focus on the best possible outcome for the patient.

"The changes coming in health care, including capitation — placing the provider at risk — increasing pressures for quality and efficient delivery of health care, mandate a team approach," said C. Darrell Jennings Jr., MD, senior associate dean for medical education. "Medical education programs must train the next generation of physicians to practice in that health care environment. This is a direction in which we have been going for some time."

#### A hub of learning

For learners interested in any aspect of medicine, or health care in general, the University of Kentucky's cluster of six health care colleges at one location provides an integrated, collaborative educational opportunity rarely found at other universities. The College of Medicine is well-positioned for interprofessional connections in education and research, as well as through combined degree programs, such as MD/PhD, MD/MBA and MD/MPH.

These benefits continue to be reflected in our students and graduates, who consistently match or outperform their peers nationally in standardized examinations. Another achievement this year has been matching



The college is able to select students with the best prospects from among an outstanding applicant pool. Plans to increase class size are made easier by the fact UK receives 2,000 applications yearly for the current 118 class slots.

100 percent of the college's graduates with residencies and other post-doctoral programs.

### An organ-systems approach to training physicians

The College of Medicine has begun a planned restructuring of the first two years of the MD program. Instead of spending the first year learning discrete disciplines — anatomy, biochemistry, physiology — and the second year learning what can go wrong, incoming medical students will now be trained using a more integrated approach.

"Most courses will now be based on an entire organ system," said Chris Feddock, MD, assistant dean for curriculum. "The first year will be somewhat of a hybrid beginning with some basic discipline principles then moving into a system-by-system approach. This type of integration is a national trend, and the majority of medical schools are moving to this method."

Another change is all courses are now taught by a basic science faculty member and a clinician — a PhD and an MD. "We want to be sure what is taught is clinically relevant," said Feddock. "Students will experience classroom learning but also will be taught what they will encounter with patients in their practice. In addition, everything is going to be very outcome-based. Students will learn about quality and safety, medical errors, transitions of care and topics that help them understand the broader context of medicine."

Fourth-year students are now spending an entire week in simulation, practicing clinical procedures with computerized mannequins that mimic human symptoms and conditions. "We want to make sure they have the necessary skill levels," said Feddock. "A simulator doesn't take the place of a live

patient, but it helps make you more prepared."

The college is also integrating nontraditional teaching methods, such as computerized learning and small-group instruction, to improve knowledge retention. Annual surveys generate feedback from students, and student performance is measured on national exams. Through programs that help them develop their teaching skills, such as using advanced technology in the classroom, faculty members become students again.

### Improving graduate medical education

Board certification examinations are at the end of a long educational road — traditionally three to seven years after completing medical school. The UK College of Medicine, like many other institutions, is developing innovative ways to restructure graduate medical education (GME) for both residencies and fellowships to optimize time spent in training.

"Our newest program is an integrated cardiothoracic surgery program," said Susan McDowell, MD, associate dean of graduate medical education, "that can be completed in six years. Formerly, residents spent five years in general surgery before entering a fellowship in a specialty area. Now they can go right into the specialty field. This allows for more-focused training over a longer period of time. Our plastic surgery program made the same change four or five years ago. It's a national trend, particularly in the surgery subspecialties."

McDowell oversees 50 programs in specialty and subspecialty areas of medicine, with approximately 570 learners, which puts the College of Medicine in the top quarter or third of U.S. medical schools in terms of the size of its GME program. Residents

echoed the excellence in education at UK in the annual survey conducted by the Accreditation Council for Graduate Medical Education (ACGME). Questions deal with duty hours, patient safety, resources, teamwork, educational quality and other issues. House staff responses were equal to or better than the national mean on the majority of questions.

The other change in FY12 was an alteration in duty hours for residents and fellows as part of the new national ACGME requirement. Training adjustments were successfully made by each program without sacrificing quality of education, reported McDowell.

#### **Lifelong learning**

Today, "maintenance of certification" — MOC for short — involves rethinking what it means to assure professional competence.

"The expectation today," said James
Norton, PhD, associate dean for educational
engagement and director of UK HealthCare's
CECentral, "is that the learner will be required
to engage in specific process-improvement
activities." Since 2005, CECentral, has included
an online presence. Its 100,000-name database
contains physicians, pharmacists, nurses
and a variety of other health care providers
worldwide, although a large percentage is in
Kentucky. User-friendly educational content is
offered 24/7 online, but CECentral is ramping
up its development of new material to meet
MOC requirements, said Norton.

"We're now experimenting with combining live meetings with online content," said Norton. "The online programming is used as a prerequisite for attending the live event. That way, everyone comes in with the basic background. It permits the interaction between the learners and the faculty members to be at a much higher level."



## A collaborative approach to biomedical research

"This is a very good place to do biomedical research. We have great facilities, we have the interplay of faculty, and we have the collegiality of the environment."

— Alan Daugherty, PhD, DSc, Senior Associate Dean for Research The lone researcher toiling in the laboratory is now a figure of history. It's team science these days. Funding is increasingly targeted to translational research, but most diseases and conditions are multifactorial, and the science and technologies have become so specialized, the researcher needs to bring in others. With multiple investigators, the odds of success are much better, so they knock down the silos, build bridges and share the mission.

The University of Kentucky, with the College of Medicine in a leading role, embraced this philosophy long ago. With 16 colleges on one campus and significant support both locally and across the state, there is ample opportunity to bring the best minds together to meet any challenge — be it research, clinical or educational in nature. What's more, there is a shared spirit of unity. "This is a very good place to do biomedical research," said Alan Daugherty, PhD, DSc, senior associate dean for research. "We have great facilities, we have the interplay of faculty, and we have the collegiality of the environment."

#### Research funding trends upward

Overall, the struggling U.S. economy continues to have a negative impact on funding for research. Despite that, in fiscal year 2012 the College of Medicine posted a slight gain in grants and contracts. The \$66 million received in NIH funding was down \$4 million from FY11, but gains from other sources brought the overall total above last year's mark.

#### **Research center reports**

#### CENTER FOR MUSCLE BIOLOGY

"We are unique in our research and clinical focus on muscle weakness," said director Karyn Esser, PhD. "If you have heart disease, cancer or liver disease, there is associated muscle weakness, and it can kill you. Our biggest effort currently is identifying new molecular targets and therapeutic strategies to translate our basic science to improve clinical outcomes."

#### MARKEY CANCER CENTER

"We live in a region with the highest cancer mortality rate in the U.S. and the second highest in incidence," said director Mark Evers, MD. "The key is preventing cancer and identifying it earlier. We have one of only six cancer nanotechnology centers in the country and new funding for myelodysplastic syndrome research, and we are working toward an NCI designation that will allow more clinical trials "

#### SAHA CARDIOVASCULAR RESEARCH CENTER

"We are increasingly doing collaborative work across the UK campus," said director Alan Daugherty, PhD, DSc. "The aim is to do research that has good translation from the lab through to humans."

#### SANDERS-BROWN CENTER ON AGING

"We have been an NIH-funded Alzheimer's Disease Center for more than 25 years," said director Linda Van Eldik, PhD. "It is becoming very clear that physiological changes in the brain occur 10 to 20 years before memory problems show up. If we are going to intervene, we will have to do so earlier than we thought."

#### SPINAL CORD AND BRAIN INJURY RESEARCH CENTER

"The spinal cord and brain function together," said director James Geddes, PhD, "and an injury to one often has an effect on the other. Our center is unusual in that we can integrate and share ideas from both fields. Kentucky is now a major player in the field of neurotrauma."

#### CENTER FOR CLINICAL AND TRANSLATIONAL SCIENCE

A \$20 million NIH grant in FY11 recognized the UK Center for Clinical and Translational Science as a national leader in cure-focused biomedical research. Led by Philip A. Kern. MD, the center is a consortium of 16 UK colleges, several UK administrative offices and UK HealthCare, as well as numerous partners from governmental, professional and academic arenas. Its overall goal is to transform the pace, effectiveness and quality of the means by which research discoveries become health care solutions. "Our dual goals are to prime the pipeline of interdisciplinary research and accelerate the translation of scientific discoveries to tangible improvements in health," said Kern.

#### College of Medicine Grants and Contracts Awarded (\$ in the millions)



#### MD/PhD Program

The UK MD/PhD program prepares students for careers as physician-scientists who integrate clinical medicine with ground-breaking research discoveries. The program provides training in the scientific method, critical thinking, leadership and other skills necessary to investigate and apply new biomedical knowledge.

Of more than 100 applications received each year, only 20 applicants are rewarded with interviews on campus, and four are accepted into the program. The academic accomplishments of the MD/PhD students meet or exceed those of the rest of their incoming class. And, they have already contributed to research, with over half publishing in scientific journals before entering medical school.

"By attracting the highest-quality students, we improve both our research and clinical enterprise," said program director Susan Smyth, MD, PhD. "Dean de Beer has expanded the program, and it has paid off."

The students must complete all of the course work for medical school and satisfy the requirements for a doctoral degree. The rigorous course of study takes an average of seven to eight years to complete. The program also provides a venue for the students to meet successful physician-scientists and learn by example.

"A dual-degree program is composed of people and resources, and at UK you truly do get the best of both worlds," said current student Greg Wehner. When they complete their training, the students are uniquely positioned to bridge the gap between basic science and translation in the clinic.

"With NIH steering more funding toward translational research, the role of physician-scientists in academic medicine has become even more important," said Smyth." The MD/PhD students are also future ambassadors for the UK College of Medicine. As program graduates they will represent us and, over time, enhance our reputation."

# A commitment to serving all members of the community

Kentucky is known for its mix of urban, suburban and rural populations, as well as an incidence of chronic diseases that is one of the highest in the nation. These factors present a full range of challenges for health care professionals. The College of Medicine is recognized for its leadership in meeting such challenges, providing leading-edge patient care and the highest-quality education and training for caregivers.

The college's faculty support the state's largest academic medical center, and forms the area's largest multidisciplinary medical practice, offering subspecialties not available elsewhere in the region. Where gaps have existed that inhibit UK HealthCare from offering a full spectrum of subspecialty services, the college's leadership has been committed to recruiting the best and brightest to fill those gaps. "Shortages exist nationwide in many subspecialties, which forces us to recruit against some of the nation's best academic centers," said Robert Means Jr., MD, executive vice dean. "I'm happy to say we were particularly successful in fiscal year 2012 recruiting an excellent group of highly qualified clinicians, researchers and educators." The college welcomed 73 new faculty members during the year.

#### **COMMUNITY SERVICE**

The college is also committed to serving all members of the Kentucky community, including the uninsured or underserved.

Some of those efforts are profiled below.

Under the oversight of the Office of Rural and Community Health are nearly a dozen and a half programs ranging from telemedicine and peer-to-peer information programs to think tanks and practice-based research networks.

Overall, said Kevin Pearce, MD, associate dean for rural and community health, "there is an emphasis on connecting education, clinical care and research in communities across Kentucky."

#### AREA HEALTH EDUCATION CENTERS

The Area Health Education Centers (AHEC) program is a collaborative effort with the University of Louisville, and its eight regional offices receive infrastructure support from partners such as community colleges or local

health care facilities. Core goals include an emphasis on primary care, training of medical students and residents away from university medical centers, improved community health education, and greater collaboration between faculty and local practitioners.

Medical students called College of Medicine Ambassadors make presentations to middle school and older students and attract them to the residential camps held on the UK campus each summer. "The primary focus is to educate students interested in health careers and to prepare them to be competitive applicants to the health profession colleges in Kentucky," said Carlos Marin, assistant dean for community and cultural engagement and AHEC program coordinator.

#### RURAL PHYSICIAN LEADERSHIP PROGRAM

With a College of Medicine study forecasting the need for as many as 1,900 additional

primary care physicians in Kentucky – many in rural areas – by 2020, the Rural Physician Leadership Program is working to fill that gap.

The four-year-old program graduated its first four students last spring. Anthony Weaver, MD, assistant dean at the Morehead regional site where students in the program spend their third and fourth years, believes at least two, maybe all four, will end up practicing in Kentucky. "We do a lot of recruiting, starting in high school," he said. "We mostly get students from rural backgrounds. Through our partnership with Morehead State University, they gain experience in running a practice. We've also designed a year-long family medicine experience. Students follow a patient through an entire pregnancy or illness and recovery, which gives them clinical experience in day-to-day medical practice in a rural community."





#### SALVATION ARMY FREE MEDICAL CLINIC

College of Medicine students gain valuable clinical experience by treating underserved populations through the student-run Salvation Army Free Medical Clinic program. "It's not a typical patient population," said Pete Wallenhorst, a second-year student who acts as one of two clinic managers. "Many are homeless or living in a shelter. They have no insurance; many have chronic conditions."

Approximately 250 students participated in the program in the past year, including all third-year students who are required to be on duty at least once during their internal medicine rotation. The four to five medical students working each night do intake interviews with the patients, then report to one of 20 volunteer attending physicians, most of whom are faculty. This year, 18 resident physicians in the primary care track are also participating in the program.

#### CENTER FOR EXCELLENCE IN RURAL HEALTH

UK's Center for Excellence in Rural Health was established in 1990 in Hazard to address health disparities among rural populations statewide. Students from UK's colleges of Medicine, Nursing, Social Work and Health Sciences receive training at the center, and services in family medicine, pediatric care, ob-gyn, medical issues, dentistry and pharmacy are provided, including home visits, regardless of the patient's ability to pay. Approximately 75 percent of graduates remain after completing their education.

The college supports the largest academic medical center in the state, and its faculty forms the area's largest multidisciplinary medical practice, offering subspecialties not available elsewhere in the region.

"We're trying to improve rural health through service, research and outreach," said Fran Feltner, director at the Hazard site. Among six research studies published this year is one related to the center's Improving Diabetes Outcome (I DO) program, which received a \$150,000 gift from the Anthem Foundation to increase its efforts in 26 Eastern Kentucky counties. In recognition of the program's importance and effectiveness, Anthem Foundation will repeat the gift at the same level in 2013. "Our interdisciplinary team approach is helping us make the public more aware of the importance of selfmanagement of their health," said Feltner.

#### COMMUNITY HEALTH FAIR

This year the College of Medicine held its 12th annual community health fair. The event is organized by medical students but includes participation by all UK health-related schools and colleges. The fair provides basic health information plus a dozen free checkups and screenings ranging from body mass index (BMI) and blood pressure to diabetes and dentistry. The fair was created for the underserved and uninsured populations of Fayette County.

#### SERVICE MISSIONS

Several faculty members devote their "vacation" time to service missions in which they provide free medical treatment to people who otherwise would have none. Two programs, for example, focus on Ecuador, Kentucky's partner nation under the federal government's Alliance for Progress: Medical Mission Ecuador, founded by Henry Vasconez, MD, professor of surgery and plastic surgery, chief of plastic surgery, and a native of Ecuador; and Shoulder to Shoulder Global, founded by Thomas Young, MD, professor of pediatrics.

They don't go alone. Vasconez recently took a team of 91 surgeons, specialists and other health care professionals from 15 states and three countries. In 10 days they saw approximately 1,000 patients, mostly children, and performed nearly 150 operations. "The little you do is so appreciated," he said. Young took a team of 60, half of them students, to a clinic he established that provides yearround care and that he hopes can be linked to UK via a telemedicine connection. After 20 trips that have built strong relationships with the community and with local health care providers, he says the service missions "are almost like going home."





Examples of subspecialists recruited in 2012 include Lowell Anthony, MD, chief of medical oncology; Scottie Day, MD, pediatric critical care; Anna Kamp, MD, director of pediatric electrophysiology; and Johanne G. Dillon, MD, chief of pediatric radiology. In all, 73 new clinical faculty were added in fiscal year 2012.

# By the Numbers

#### **Education**

#### Class of 2015 Mean Scores

As of August 1, 2011

COLLEGE GRADE POINT AVERAGE

Science 3.64 Non-science 3.79 Total GPA 3.71

MCAT SECTIONS (1-15 SCALE)

Verbal Reasoning 9.8
Physical Science 10.1
Writing Samples P (0-Q scores)
Biological Science 10.6

Mean 30.5

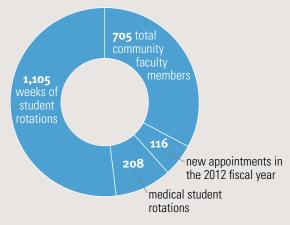
Approximately **96 percent** of all UK medical students receive some form of financial aid, and **45 percent** benefit from scholarship awards.

In 2012, UK medical students matched into **20 different specialties** for residency. **24 percent** elected to stay within the UK HealthCare system, and an additional **7 percent** elected to stay in Kentucky for residency.

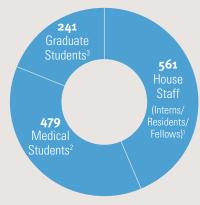
The college has **one of 10 triple-board residency programs** in the nation where residents can train in Adult Psychiatry, Child and Adolescent Psychiatry and Pediatrics.

The College of Medicine is accredited by the Liaison Committee on Medical Education of the Association of American Medical Colleges and the American Medical Association.

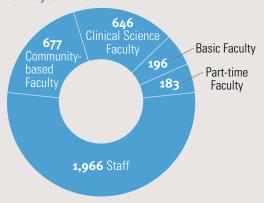
#### Outreach COMMUNITY FACULTY PROGRAM



#### Learners



#### Faculty and Staff<sup>1</sup>



<sup>&</sup>lt;sup>1</sup> As of June 30, 2012.

<sup>&</sup>lt;sup>2</sup> As of start of 2012-2013 academic year.

<sup>&</sup>lt;sup>3</sup> As of 2012 spring semester. Includes students pursuing MS and PhD degrees.

#### Research

Grants and contracts in the College of Medicine reached **\$116.9** million in fiscal year 2012 (July 1, 2011, to June 30, 2012), including in excess of **\$66** million in National Institutes of Health (NIH) funding.

In federal fiscal year 2011 (October 1, 2010, to September 30, 2011), UK received **62 percent** of the NIH research funding granted to Kentucky medical schools.

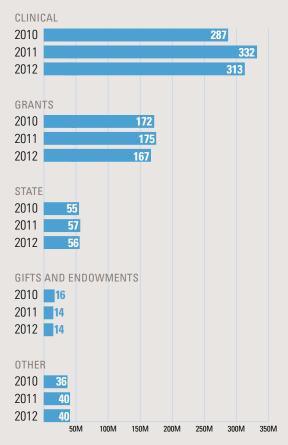
The College of Medicine has **245,000 net square feet** of research space.

In 2011, the NIH awarded UK's Center for Clinical and Translational Science **\$20 million** to move research discoveries to health care solutions more quickly, making the center part of a select national biomedical research consortium.

# The College of Medicine accounts for 42 percent of UK's grants and contracts.

FY10	39.9%
FY11	38.7%
FY12	42.0%

#### **Revenue & Sources (in millions)**



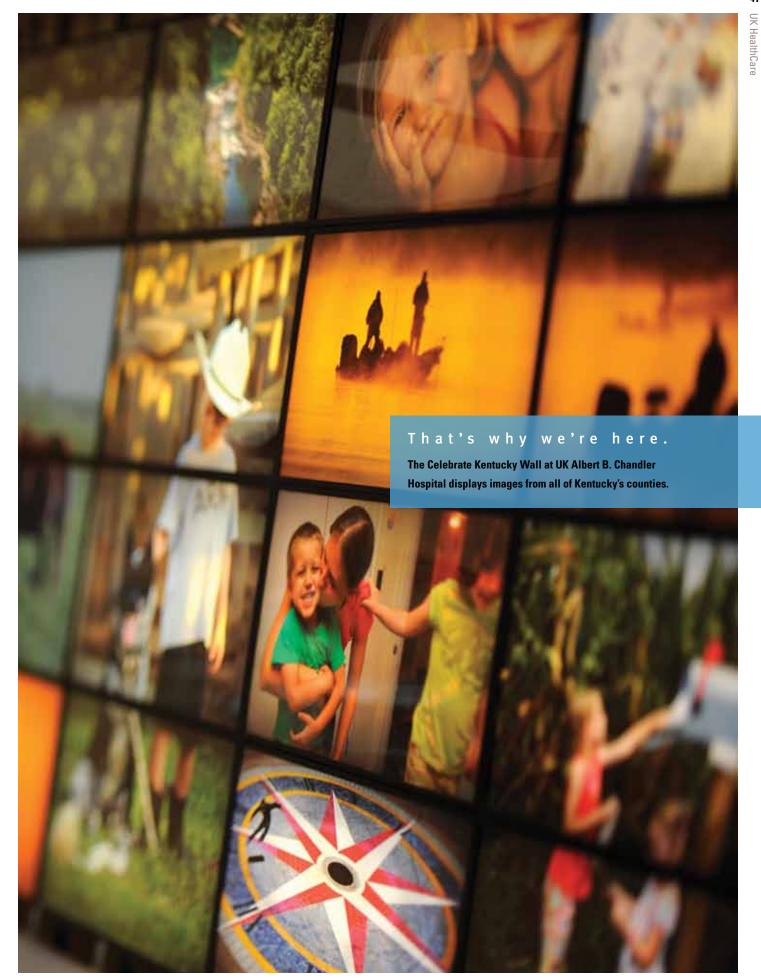
# **U**\*KHealthCare。

138 Leader Avenue Lexington, Kentucky 40506-9983 859-323-6582

mc.uky.edu/medicine







# **Statistics and Trends**

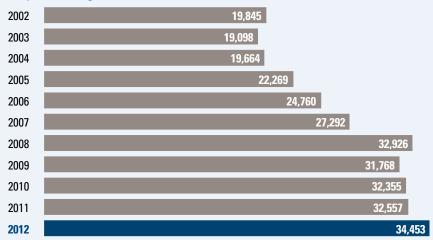
### **Hospital Operating Statistics for Year Ending June 30**

Discharges	2012	2011	2010
Medicare	10,857	10,065	9,478
Medicaid	9,670	9,277	9,146
Commercial/Blue Cross	9,718	9,453	9,955
Patient/Charity	4,208	3,762	3,776
Total Discharges	34,453	32,557	32,355
Licensed Beds	825	791	791
Available Beds	701	650	643
Average Daily Census	560	530	508
Average Length of Stay	5.95	5.94	5.74
Case Mix Index	1.78	1.75	1.73
Surgery			
Operative Cases	27,966	26,245	25,512
Hospital-based Outpatient			
Hospital Clinic Visits	359,011	339,839	319,297
Emergency Visits	89,662	77,205	69,671
<b>Total Hospital Outpatient Visits</b>	448,673	417,044	388,968

## Other Operating Indicators for Year Ending June 30

Ambulatory Services	2012	2011	2010
Ambulatory Physician Visits	625,599	594,361	564,931**
Professional Net Revenue*  *Does not include bad debt; \$ in thousands.  **All years adjusted to reflect scheduled attentions.	\$ 223,688 aded visits	\$ 207,026	\$ 196,754
Other Service Relationships			
Referring Physicians	4,672	4,697	4,630
UK•MDs Physician Calls	171,011	163,181	157,276
Health Connection Consumer Calls	167,283	156,604	145,363
Website Users (Avg./Mo.)  †site under transition most of year	55,526 <sup>†</sup>	94,797	93,436

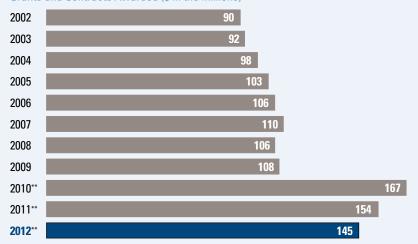
#### **Hospital Discharges**



#### Hospital Operating Revenue (\$ in the thousands)\*



#### Grants and Contracts Awarded (\$ in the millions)



<sup>\*\*2006–2009</sup> College of Medicine only; 2010-2012 includes colleges of Dentistry, Health Sciences, Medicine, Nursing, Pharmacy and Public Health.

# Office of the Executive Vice President for Health Affairs\*

#### Michael Karpf, MD

Executive VP for Health Affairs

#### **Sergio Melgar**

Senior VP for Health Affairs Chief Financial Officer

#### Frederick de Beer, MD

VP for Clinical Affairs
Dean, College of Medicine

#### **Mark Birdwhistell**

Chief of Staff
Associate VP for Marketing
and External Affairs

#### Senior Administrative Team<sup>+</sup>

Mark D. Birdwhistell
Bernard Boulanger, MD
Joseph D. Claypool
Murray Clark
Fred de Beer, MD
Michael Karpf, MD
Sergio Melgar
Marcus Randall, MD
Ann Smith
Colleen H. Swartz, DNP, MBA, RN
Tim Tarnowski
Kim Wilson

+As of June 30, 2012

# Financial Statements For year ending June 30

# Hospital Condensed Statements of Operating Revenues, Expenses and Changes in Net Assets

(\$ in the thousands)

	2012	2011	2010
Net Patient Service Revenue	\$ 888,714	\$ 776,388	\$ 766,437
Sales and Services	24,112	21,065	19,431
Total Operating Revenues	\$ 912,826	\$ 797,453	\$ 785,868
Operating Expenses	870,438	765,081	742,456
Operating Income	\$ 42,388	\$ 32,372	\$ 43,412
Nonoperating Revenue (Expenses)	(11,768)	31,313	19,339
Income Before Transfers to UK	30,620	63,685	62,751
Transfers to UK/Other	(17,490)	(22,378)	(23,303)
Net Income (Loss) From			
Discontinued Operations	(16)	(17)	(14)
Total Increase In Net Assets	\$ 13,114	\$ 41,290	\$ 39,434
Operating Margin	4.64%	4.06%	5.52%
Total Margin	1.44%	5.18%	<b>5.02</b> %

Note: The method for reporting operating revenues and expenses changed in fiscal year 2008 to comply with GASB statements; in the audited statements operating revenue is net of bad debt, which was previously reported as an operating expense.

Statement of net assets and related statements of revenues, expenses and changes in net assets for the year ending June 30, 2012, were audited by BKD, LLP, of Louisville, Kentucky.

## Hospital Net Patient Revenue by Funding Source\*

(\$ in the thousands)

Payor	2012	2011	2010
Medicare	\$ 259,310	\$ 215,078	\$ 198,549
Medicaid	240,351	204,991	192,892
Commercial/Blue Cross	418,509	362,792	325,078
Patient/Charity	105,080	80,829	77,143
Total	\$1,023,250	\$ 863,690	\$ 820,662
Bad Debt	(134,536)	(87,302)	(54,225)
Total Net Patient Revenue*	\$ 888,714	\$ 776,388	\$ 766,437

## **Hospital Condensed Statements of Net Assets**

(\$ in the thousands)

Assets	2012	2011	2010
Current Assets	\$ 186,001	\$ 152,641	\$ 253,039
Capital Asset, Net of Depreciation	812,369	772,163	667,580
Other Noncurrent Assets	249,730	258,176	242,283
Total Assets	\$1,248,100	\$ 1,182,980	\$ 1,162,902
Liabilities			
Current Liabilities	\$ 173,094	\$ 119,686	\$ 114,689
Noncurrent Liabilities	436,782	438,184	464,393
Total Liabilities	\$ 609,876	\$ 557,870	\$ 579,082
Net Assets			
Invested in Capital Assets,			
Net of Related Debt	\$ 377,552	\$ 324,438	\$ 208,407
Nonexpendable Other	118	118	116
Restricted Expendable	14,529	13,086	15,218
Unrestricted	246,025	287,468	360,079
Total Net Assets	\$ 638,224	\$ 625,110	\$ 583,820

# Oversight As of June 30, 2012

#### **COLLEGE OF DENTISTRY**

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Associate Dean for Academic Affairs

**Vacant** 

Associate Dean for Clinical Affairs

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Assistant Dean for Admissions and Student Affairs

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Assistant Dean for Pre-doctoral Clinic Operations

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Mel Kantor, DDS, MPH, PhD

(Interim) Oral Health Practice

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Associate Dean for Research

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Clinical Sciences

Janice Kuperstein, PhD

Rehabilitation Sciences

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Senior Associate Dean for Clinical Affairs

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Associate Dean for Admissions and Institutional Advancement

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Associate Dean for Educational Engagement, Director of UK HealthCare CECentral

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Associate Dean for Rural and Community Health

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(Interim) Graduate Center for Nutritional Sciences Beth Garvy, PhD

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Anatomy and Neurobiology

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Ob-Gyn

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P. Andrew Pearson, MD

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Marcus Randall, MD

Radiation Medicine

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Physiology

Phillip Tibbs, MD

Neurosurgery

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Kentucky Children's Hospital

Joseph Zwischenberger, MD

Surgery

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Saha Cardiovascular Research Center

#### Karvn Esser, PhD

Center for Muscle Biology

#### B. Mark Evers, MD

Markey Cancer Center

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Spinal Cord and Brain Injury Research Center

#### Greg Gerhardt, PhD

Morris K. Udall Parkinson's Disease Research Center

#### Philip A. Kern, MD

Barnstable Brown Kentucky Diabetes and Obesity Center

#### Susan Smyth, MD

Linda and Jack Gill Heart Institute

#### Linda Jo Van Eldik, PhD

Sanders-Brown Center on Aging

#### Sharon Walsh, PhD

Center on Drug and Alcohol Research

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Center for Rural Health, Morehead

#### **Natalie Begley**

Center for Rural Health, Madisonville

#### Richard Crouch, MD

Center for Rural Health, Danville Center for Rural Health, Murray

#### Frances J. Feltner, MSN, RN

Center for Rural Health, Hazard

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#### Patricia B. Howard, PhD, RN, FAAN

Associate Dean for MSN and DNP Studies

#### Terry A. Lennie, PhD, RN, FAAN

Associate Dean for PhD Studies

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#### **Brad Anderson, PhD**

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#### Pamela B. Teaster, PhD

Co-Associate Dean for Research

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Health Behavior

#### Richard J. Kryscio, PhD

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#### David Mannino, PhD

Preventive Medicine and Environmental Health

#### Wayne T. Sanderson, PhD

**Epidemiology** 

#### **Graham Rowles, PhD**

Gerontology

Focus on Philanthropy

# Maker's Mark, Keeneland partner to support advancement of cardiovascular medicine program

Tim Couch felt humbled when Maker's Mark and Keeneland asked him to serve as honoree on the 16th commemorative bottle of the partnership's long-running, charitable series. And, while having his likeness on the bottle was a great honor, it really had nothing to do with his decision to say "Yes." "It's for a great cause and that's the best thing about it," he said.

"The most important thing about this bottle is that the proceeds from it will go to help my fellow Kentuckians fight and win the battle of heart disease."



Tim Couch signs the Maker's Mark commemorative bottle at Keeneland.

Couch was able to combine his love of football and the University of Kentucky with heart disease, a cause he is passionate about and which ranks as the No. 1 killer in Kentucky according to the American Heart Association. An estimated 83 million U.S. adults suffer from cardiovascular diseases.

"The most important thing about this bottle is that the proceeds from it will go to help my fellow Kentuckians fight and win the battle of heart disease," said Couch. "Winning this battle is very near and dear to my heart and more important than any football game. Everyone has a family member that these terrible diseases have affected."

Couch, who lost his father to heart disease in May 2010, feels compelled to help his fellow Kentuckians, especially those residing in Eastern Kentucky. A native of Hyden, Ky., Couch played football for the University of Kentucky where he was selected as an

All-American and No. 1 pick in the 1999 NFL Draft by the Cleveland Browns. During his time at UK - from 1995 to 1998 - Couch set several school records and was a Heisman Trophy finalist. His career totals at Kentucky included completing 795 of 1,184 passes for 8,435 yards and 74 touchdowns. He still holds the NCAA record for completion percentage in one game and for completions per game.

Nowadays, Couch can be seen on Fox Sports South, where he serves as an analyst for the weekly SEC Gridiron Live. His hectic schedule keeps him on the road throughout football season, but home is still here in Kentucky, where his heart is.

UK HealthCare's Gill Heart Institute received. \$150,000 from sales of this year's bottle. These funds will be utilized to grow and develop high-quality clinical heart care services in rural Eastern Kentucky through close collaboration with community partner Appalachian Regional Healthcare.

"We are immensely proud of our partnership with Maker's Mark and how it benefits outstanding organizations such as the Gill Heart Institute," said Keeneland President and CEO Bill Thomason. "We especially applaud Tim's efforts to make a difference in his home community. Giving back is what this program is all about and Tim showcased his generosity with his actions. This contribution will have a major impact in Eastern Kentucky for many years to come."

Through the generosity of Couch, Maker's Mark and Keeneland, UK HealthCare can further advance a program that is one of the most vital to the people of this region.



"Keeneland is a company that is a kindred spirit of Maker's Mark — original, true to its roots and a model corporate citizen that exemplifies what Kentucky can do and is a force to be reckoned with on the world stage," said Rob Samuels, Maker's Mark COO. "UK HealthCare is much the same — a world-class medical facility in the heart of Kentucky, bringing leading-edge research in the field of medicine and bringing advanced medical treatment to all of us."

Although the honorees of the next two years' bottles are still under wraps, Maker's Mark and Keeneland have committed proceeds from those bottles to continue to support UK HealthCare's Gill Heart Institute. Approximately \$500,000 in total will be generated once all three commemorative bottles have been released.

Proceeds from 2013 and 2014 bottles will be used to support completion of a cardiovascular medicine patient care floor in UK HealthCare's new Pavilion A, a crucial need for this region.

The generosity of many individuals and organizations is now at the core of UK HealthCare's effort to become a world-class health care system that's uniquely Kentucky.

Contact UK HealthCare's development office at 859-323-6306 to learn more about how philanthropy is fueling advancement in our patient care, research, outreach and education initiatives for the health and well-being of people of Kentucky and this region. Or make your charitable contribution online at ukhealthcare.uky.edu/giving/.

Maker's Mark COO Rob Samuels announced a three-year commitment to UK HealthCare's Gill Heart Institute, which is projected to infuse approximately \$500,000 into the cardiovascular medicine facilities.

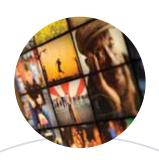


UK-cardiologists Susan Smyth, MD, division chief, and Alison Bailey, MD, joined Heather and Tim Couch for the announcement that Tim's career would be featured on the 16th Maker's Mark commemorative bottle, raising money in 2012 for UK Gill Heart Institute clinical facilities in Eastern Kentucky.

# Clay's second breath







"As I walked into the [hospital] every day, I would look at the big wall of photos. They looked like pictures of home, at the foothills of the Appalachians. The photo wall changed with the seasons – which I realized because I was at the hospital for the year. It brought a piece of home to the hospital."

- Hannah Eaton, Irvine, Ky.

It's said that art speaks to the soul. The "Second Breath" statue in a plaza near UK Albert B. Chandler Hospital spoke so clearly to Hannah Eaton's soul, it took her breath away.

Eaton's days-old baby, Clay, was born with a severe case of congenital diaphragmatic hernia: he was missing half of his diaphragm, which wreaked havoc with his tiny body. His intestines were up in the left side of his chest; his left lung was a small nub; his heart was pushed to his right side; and his right lung was compressed. The newborn's chance of survival was about 10 percent.

Kentucky Children's Hospital gave Clay his only possible lifeline: extracorporeal membrane oxygenation (ECMO). This sophisticated bypass machine took over for his heart and lungs, keeping him alive so he could undergo surgery. His chance of survival was raised to 50-75 percent, but even these odds were terrifying.

Eaton's encounter with the "Second Breath" statue proved prophetic. A year later, Clay celebrated his first birthday at home in Irvine, Ky., with his mom and dad, Eric. A combination of ECMO, eight operations, eight months in the hospital and a steady infusion of love gave him his second breath — and the sweet, smiley, sparkly-eyed baby is taking it from there.

As Clay's lungs slowly but surely develop, and as he learns to breathe on his own, he's gradually being weaned off his home ventilator. Eventually, his feeding tube will come out too. In time, and in baby steps.

"If I had delivered closer to home, he wouldn't have made it," said Eaton. That's because Kentucky Children's Hospital offers the highest level of neonatal intensive care for babies born in crisis like Clay. Eaton also credited surgeon John Draus, MD, and neonatologist Hubert Ballard, MD, director of neonatal and pediatric ECMO, for giving her little "miracle man" his second chance.

"Clay is a happy boy, and it's amazing what he's done in a year," said a grateful Eaton. "There's no telling where he'll be next year."

The "Second Breath" statue is part of the UK Arts in HealthCare Program, which brings comforting, soul-stirring art and music — in many cases, Kentucky-themed — to the patients, families and caregivers at UK HealthCare's hospitals and clinics.

You can read more about baby Clay's second breath at breathingforclay.blogspot.com.



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