

ANNUAL REPORT 2015

UKHealthCare[®]

Strategic Navigation
of Changing Times



▶ A strategic approach to today's health care challenges

A report on fiscal year 2015 from the Executive Vice President for Health Affairs



Michael Karpf, MD

Throughout fiscal year 2015, leaders of UK HealthCare® were developing a five-year strategic plan that would guide the clinical enterprise into 2020. This plan followed in the wake of strategic plans created in 2004 and 2010 that have succeeded beyond our expectations in responding to the needs of the Commonwealth of Kentucky.

The success of our strategies is evident in:

▶ **Increased investment**

More than \$1.8 billion has been invested in facilities, technology and programs to support the growth of advanced subspecialty programs.

▶ **Volume growth**

Hospital discharges have grown by 88 percent since 2004.

▶ **Case complexity**

Case complexity, based upon the case mix index, has increased dramatically and now ranks well above the 75th percentile for academic medical centers.

▶ **Quality & safety**

Overall improvements in the quality of care and patient safety led to UK HealthCare winning the UHC Rising Star Award in 2013 and becoming a national leader in patient safety in 2015.

▶ **Clinical outreach**

Clinical outreach has grown through the establishment of affiliate networks, relationships and partnerships in and outside of Kentucky.

▶ **Market position**

Market position and payor mix have improved significantly in the last decade.

We began FY 2015 by conducting a current state assessment that included more than 100 interviews with administrative and physician leadership. National, regional and local market trends were taken into account. Kentucky payors, providers and the patient landscape were researched. We looked at local market forces and our ability to meet current and forecast need. An actuarial assessment was conducted with a focus on value-based contracting, valuation and rating.

National key drivers of change

- ▶ Payment reform
- ▶ Changing patient dynamics
- ▶ Access to care
- ▶ Shifting sites of care
- ▶ Shift from volume to value
- ▶ Disease management



National and regional trends

Kentucky's rate of hospitalization is 16 percent higher than the national median. As those paying for health care are faced with ever higher costs, payors are looking for ways to reduce high-cost items such as hospitalization.

Six counties in Eastern Kentucky were ranked by The New York Times Magazine the "hardest place to live" in America based on a combined analysis of education, median household income, unemployment, disability, life expectancy and obesity. Health status in Kentucky is poor in comparison to other states in the region and to the U.S. as a whole. In fact, Kentucky is one of the most complex health care delivery environments in the country due to a high degree of illness.

Kentucky health compared

- ▶ 4th highest mortality rate for heart disease
- ▶ Highest rate of smoking
- ▶ 50th (worst) in cancer deaths
- ▶ 45th in all health outcomes
- ▶ 2nd highest preventable hospitalization rate (Medicare) in the U.S.



The Commonwealth is heavily dependent on federal funding to support Medicaid expansion, and declining Medicaid reimbursement will disproportionately affect Kentucky. At the same time, Kentucky has financial issues impacting its ability to fund Medicaid expansion coverage.

Growth in managed care plans within the state puts UK HealthCare's ability to recoup its costs at risk. Local and regional providers are developing innovative reimbursement and care models using technology, partnerships or mergers, and offering managed care products where the provider system assumes risk.

UK HealthCare has a strong market position and a large outreach network. Academic medical centers need access to a large population base in order to supply their more highly specialized programs with the patient volume needed to maintain program viability. As the health care environment becomes more complex, our continued focus on targeted outreach will enable us to improve our network and the value it brings to UK HealthCare and the Commonwealth.

Operational excellence

UK HealthCare has improved its cost per discharge but is still evaluating opportunities to reduce cost. Thanks to the success of our outreach efforts, patients transferred from other hospitals have become a significant percentage of UK's total volume – the more complex the patient (higher CMI), the more cost-effective for treatment at UK HealthCare.

While UK HealthCare has high patient volumes and occupancy rates compared to our peers, capacity constraints continue to be a challenge for us. One obstacle to operating efficiency is lack of access to facilities providing post-acute care. Going forward it is important for us to develop a post-acute care network with incentives that align with our own.

Capacity and throughput challenges have an impact on patient and referring physician satisfaction. A defined focus on patient-centered care enabled by process improvement, elimination of waste and facility investments represents an opportunity for UK HealthCare to differentiate itself and become a national leader.

Service lines

Our robust and sustained growth is due in large part to our focus on developing advanced, destination acute care services and subspecialties. Service line strengths include:

- ▶ Strong financial and operational performance of the Gill Heart Institute.
- ▶ Strong brand of the Markey Cancer Center, accelerated by National Cancer Institute designation; named one of top hospitals with great oncology programs in FY15.

▶ A new Cardiovascular Services floor opened in Pavilion A at Chandler Hospital in December 2014.



- ▶ Diverse and complex service offerings within the Digestive Health program.
- ▶ Strong, stable, dedicated faculty and clinical team underpinning the Trauma service line.
- ▶ Outreach efforts and community programs that have driven growth for Maternal/Fetal Medicine.
- ▶ Comprehensive scope of services provided by Orthopaedic Surgery.
- ▶ Advanced specialty programs that have driven strong growth in Kentucky Neuroscience Institute and the UK Transplant Center.
- ▶ Quality and family-centered care that define Kentucky Children's Hospital.

Our ability to capitalize on these strengths is affected by our ability to continue to focus on faculty and relationship development, clinical and operational integration, and capacity. In turn, our focus on these will depend on facilities, infrastructure, technology and resources needed to support clinical excellence and service line growth.

Primary/Ambulatory care

The Bluegrass region has a shortage of primary care physicians (PCPs), with three counties neighboring Fayette County – Jessamine, Scott and Madison – exhibiting the largest needs for PCPs. UK HealthCare's primary care presence is concentrated in Lexington (Fayette County) and Hazard via affiliate networks with Appalachian Regional Healthcare (ARH). We must consider how to address primary care needs.

Care coordination

In the future, UK HealthCare will need to expand its medical management to include advanced models of primary, ambulatory and post-acute care either internally or through strategic partnerships. This form of medical management requires robust data and information management.

Value-based contracting

UK HealthCare has done well with its fee-for-service contracting but may face challenges as reimbursement trends shift. Most payors in the Kentucky market have not aggressively pursued value-based care contracts. There is an emerging interest in value-based care and population health management, which are in an early stage at UK HealthCare. An expanded contracting process, enhanced technology and clinical capabilities, and coordination across multiple functional areas will be necessary to prepare for value-based care payment models should those evolve in Kentucky.

An eventful year

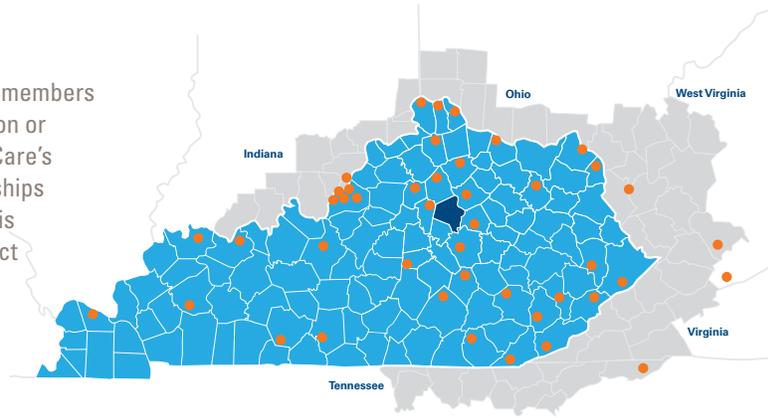
Aside from development of a strategic plan, FY15 was also eventful for UK HealthCare in several other areas. Early on, a \$14.9 million grant was received to study care transitions via the newly established UK Center for Health Services Research.

On December 7, 2014, UK HealthCare opened a new 64-bed Cardiovascular Services floor in Chandler Hospital Pavilion A, and work was underway on two additional floors.

UK Chandler Hospital was named one of the Top 100 Hospitals for Women's Health in January. An example of UK's commitment to keep health care local when appropriate, two Ob-Gyn physicians began providing care in Hazard during the year. And in June, the UK Birthing Center received a Baby Friendly designation, the first and only hospital in Lexington to receive this recognition. UK's Maternal Fetal Medicine program also received recognition for its Blue Angels Program for high-risk obstetric care in rural Kentucky.

In February 2015, the Kentucky Cabinet for Health and Family Services approved a certificate of need application for the addition of 120 patient beds after we experienced consistently greater than 80 percent occupancy, the industry standard for efficiency. Since 2003, the number of licensed beds at UK HealthCare has grown from 463 to 945.

▶ A map showing potential members of a statewide organization or collaborative. UK HealthCare's strategy to build relationships with individual providers is evolving to further connect these providers to each other where beneficial.



In March, the Board of Trustees approved the next phase of Chandler Hospital's Pavilion A, including completion of another 64-bed patient floor (Floor 11) and more operating rooms. Upon completion of this phase, six of the eight clinical floors will be occupied, and the tower will be 81 percent complete.

Also in March, the Shriners Hospitals for Children Lexington broke ground for a new ambulatory center on land leased from UK across from Chandler Hospital, convenient to Kentucky Children's Hospital. UK will lease the top two floors of this new facility as a new home for UK Ophthalmology & Visual Sciences, the state's largest eye clinic.

Early in 2015, Kentucky's first patient was implanted with a NeuroPace neurostimulator to reduce the frequency and severity of epileptic seizures. The Kentucky Neuroscience Institute also once again received the Stroke Gold Plus Award from the American Heart Association/American Stroke Association, while UK HealthCare again received the Gold Quality Achievement Award in Resuscitation from the same organizations.

In May, Eastern State Hospital, under the management of UK HealthCare, received the 2015 Quality Award from the Kentucky Hospital Association.

Continued growth in partnerships

UK HealthCare's strategic commitment to relationships continued in FY15. The Markey Cancer Center Affiliate Network welcomed six hospitals, and two hospitals joined the Markey Cancer Center Research Network.

The Gill Heart Affiliate Network welcomed two new affiliate relationships, and one of UK HealthCare's largest networks – the Norton Healthcare/UK HealthCare Stroke Care Network – welcomed The Medical Center at Bowling Green to its growing statewide network of 25 affiliate hospitals.

UK also announced a groundbreaking partnership in May 2015 with the Kentucky Primary Care Association to provide more than 800 mostly rural care providers access to UK HealthCare support services.

Leadership

Growth in UK HealthCare's ability to provide advanced subspecialty care depends to a great extent on our ability to recruit specialists. This year UK welcomed 87 new physician faculty, among them Gerhardt Hildebrandt, MD, new chief of hematology and blood and marrow transplantation. Larry Goldstein, MD, was recruited as chair of neurology and director of the Kentucky Neuroscience Institute. Peter Morris, MD, returned to UK as chief of pulmonary, critical care and sleep medicine. Gretchen Wells, MD, joined us as director of women's heart health, while John Fowlkes, MD, assumed leadership of the Barnstable Brown Kentucky Diabetes & Obesity Center.

As the UK HealthCare clinical enterprise has grown, so has the need for leadership. During FY15 we welcomed Mark V. Williams, MD, as chief transformation and learning officer; Craig C. Collins, MBA, as associate vice president of finance; and named Robert "Bo" Cofield, DrPH, vice president and chief clinical operations officer.

Growth at UK HealthCare has been truly exceptional – we've grown in volumes, size, quality, patient complexity, employees, salaries and impact. As we enter a new phase of strategic development, we intend to continue our commitment to serve as a regional resource for medical care on par with the nation's best centers. I believe we are well on our way.

Michael Karpf, MD
Executive VP for Health Affairs
UK HealthCare®/University of Kentucky

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Regardless, the cornerstone is always patient care

In my years as a member of the University of Kentucky Health Care Committee I have had the opportunity to participate with the leadership of UK HealthCare in three rounds of strategic planning – in 2004, in 2010 and again in 2015. As a result of this careful process, I have seen UK HealthCare adapt, change and grow to meet the ever-changing medical needs of our state.

First, quality, efficiency, patient safety and satisfaction have served as the guiding principles of all ongoing strategic planning since 2004.

Second, UK's strategy to partner with providers rather than to acquire them has been critical to its ability to go forward without the tremendous capital required for acquisition. Instead, UK HealthCare has been able to grow revenues and use them to fund investments crucial for academic medical center growth.

Third, UK HealthCare's strategy to become an advanced subspecialty care center with the depth and expertise to fully support the health care needs of Kentucky has allowed UK HealthCare to become a major regional referral center. As a result, patient transfers to UK have grown dramatically. UK now cares for some of the sickest patients found at any academic medical center in the country, and thanks to a continued focus on improving the

quality of care provided, the outcomes for these very sick patients is better than might be expected.

UK HealthCare now has an unprecedented demand for its services. Discharges from UK hospitals have nearly doubled since 2004, and the benefit to the Commonwealth has been huge. In the past, extremely sick residents of Kentucky had no choice but to leave the state for advanced medical care. Now these high-acuity patients are being referred to and treated at UK. They are staying close to home.

The medical landscape in the future is uncertain. However, sound strategic planning will give UK HealthCare the ability going forward to maintain a high level of performance in the face of ever-changing market conditions and regulations. UK's focus on patient care will guide us through developments such as the Affordable Care Act, value-based payments, and whatever else the evolving health care marketplace throws our way.

A handwritten signature in black ink that reads "Barbara Young".

*Barbara Young, Chair
University Health Care Committee
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Strategies for Our Future





Foundation of UK HealthCare's Strategy Patient-Centered Care

In exploring strategies that can support UK HealthCare's mission through a changing health care landscape, UK HealthCare (UKHC) leadership decided in 2015 to commit to patient-centered care as the foundation upon which all other strategies would be built.

Given the complexity of an academic medical center, delivering on patient-centered care can be especially challenging. Yet in order to become firmly ensconced as a destination provider of advanced specialty care, it was clear UKHC must further differentiate itself by delivering a leading patient-centered experience.

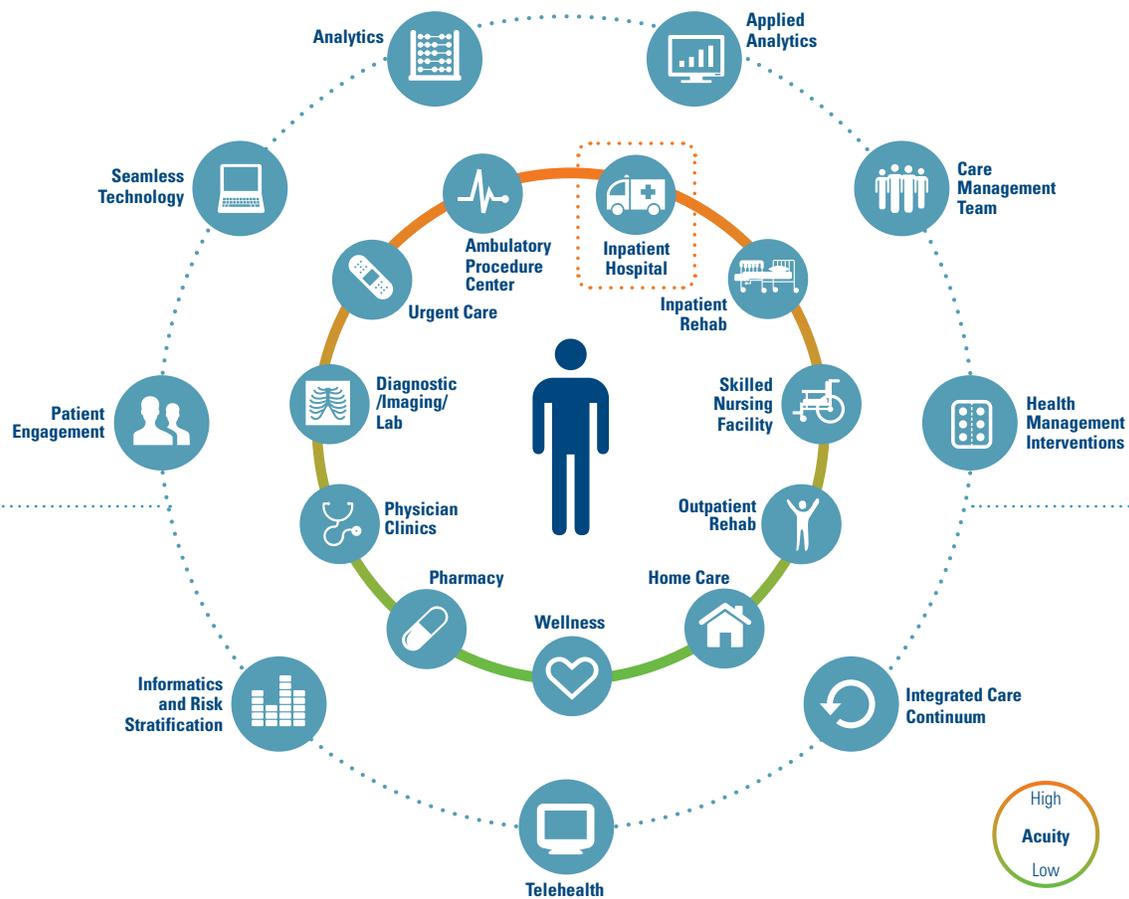
The objective will be to deliver a more connected and personalized experience at key moments in the patient journey (illustrated at right). This more connected, personalized experience will provide value to patients, families and the community. However, such a shift in the culture does not happen organically.

So the decision was also made to build a new governance model based on strong clinical and administrative leadership and to pursue strategies seeking the full engagement of employees and medical staff.

A more connected and personalized patient experience is the logical outcome when patients and their families are placed at the center of key decisions and involved in developing processes, projects and services. Cultural transformation around patient- and family-centered care is critical to UKHC's long-term success.

Strategic Culture Alignment

By taking deliberate actions to build a culture that supports patient-centered care, leaders expect to positively impact employee experience, engagement and retention; patient experience and loyalty; business performance; and community relationships.



► Above, the inner circle illustrates the variety of touchpoints patients experience within the care continuum. For many years most UK HealthCare strategies focused on growth within the inpatient segment of the continuum identified by the dotted orange line. Going forward, 2015-2020 strategies acknowledge and embrace the entire continuum, spreading UK HealthCare’s focus to all touchpoints with a goal of improving the entire patient experience.

Patient- and Family-Centered Care (PFCC)

As UK HealthCare leaders began to discuss what kind of strategies and tactics would grow out of a commitment to patient-centered care, a desire grew to extend the approach to embrace the patient’s family also. According to the Institute for Patient- and Family-Centered Care, an approach to planning, delivery and evaluation of health care that centers on the patient and family “is grounded in mutually beneficial partnerships among health care providers, patients, and families. It redefines the relationships in health care.”

While for many years UKHC has prioritized decisions around what is best for the patient, the inclusion of families

acknowledges the vital role they play in ensuring the health and well-being of infants, children, adolescents and family members of all ages. Such a patient- and family-centered approach also affirms that emotional, social and developmental support are required in providing health care of the highest quality and value.

This approach not only treats disease and injury, it also promotes health and well-being. As the institute states, “PFCC is an approach to health care that shapes policies, programs, facility design, and staff day-to-day interactions.”

Teenager Emily Dawson and her family have been supported by a team geared to deliver advanced subspecialty care.



▶ A very human approach to complex care

In October 2013, 15-year-old Emily Dawson was diagnosed with primary bone cancer. Like all families faced with such news, the Dawsons were stunned.

“When a family gets a new diagnosis of cancer, there is good data that shows the family and patient stop listening,” said Patrick O’Donnell, MD, PhD, a UK surgeon who specializes in orthopaedic oncology. O’Donnell makes a point to deliver information in small pieces. “I try to deliver the information like layers of an onion and give important news up front.”

Looking back, Emily’s mother, Andrea, appreciated the approach. “He didn’t overwhelm us with all of the facts at once. That was one of the things we really loved about him.”

O’Donnell insisted on aggressively treating this rare, very aggressive cancer. He also gave the Dawsons hope: “Emily’s cancer is treatable and beatable.” That phrase became a mantra for the family over the next year.

From late December 2013 to August 2014, Emily was in and out of Kentucky Children’s Hospital as she underwent rounds of chemotherapy, limb salvage surgery and additional chemotherapy. She spent 82 nights hospitalized.

During a nine-hour surgery, any tumor remaining after chemotherapy was removed, as well as a significant margin of bone above and below, both sections replaced with titanium rods. Most of her knee joint was replaced with prosthesis.

The Dawsons marveled at the attention and accessibility they received from O’Donnell and Lars Wagner, MD, chief of pediatric hematology and oncology. A host of people and programs filled important roles to address the entire spectrum of needs created by Emily’s cancer.

In August 2015, Emily elected to have a rare rotationplasty surgery to improve her future mobility. The 15-hour procedure replaced her prosthetic knee with her ankle. Fit with a prosthetic foot early in 2016, Emily has begun to walk again.

And best of all, Emily’s cancer has been in remission for more than 15 months.

“Emily has had an amazing attitude through this all,” said Andrea. “We continue to be thankful for UK and everyone involved in helping Emily heal and thrive!”



Continued Growth in Complex Care

CHAPTER 1

During the strategic planning process in 2015, a decision was made to continue a focus on development and delivery of advanced subspecialty care. First deployed in the original 2004 plan, attention to the growth of advanced subspecialty care has proven to be a successful strategy. This approach has been reaffirmed in each subsequent plan and planners in 2015 believe there is still more left to do to ensure that Kentuckians do not need to leave the state for care on par with the nation's best.

Taking into consideration UK HealthCare (UKHC) strengths and capabilities alongside market opportunities, leaders identified nine service lines – some already in early stages of development and some still aspirational – and set out to develop detailed strategic plans for each.

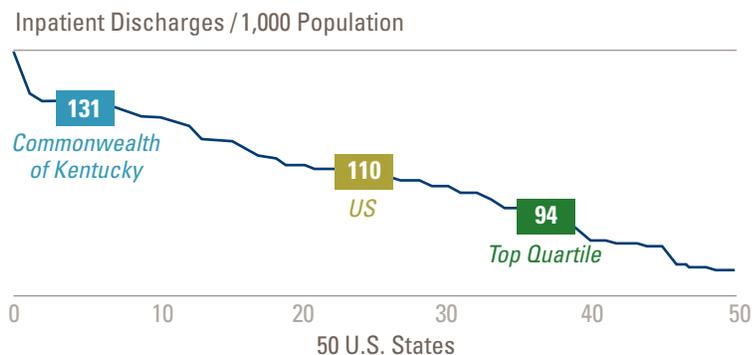
With an objective of developing patient- and family-centered, accessible, streamlined, coordinated and efficient health care services, planning teams went to work to identify service line strategies, each team operating under the assumption that growth in complex care will require collaboration across organizational lines and new models of care.

Service line growth

Even though UKHC has experienced steady growth since 2004, projections indicated there is still room to grow. Modest growth goals have been set as UKHC seeks to help community providers retain patients they are equipped to handle – or can be equipped to handle – while improving access to advanced subspecialty care at UKHC in Lexington. In both cases, operational changes may be required; additional capacity may need to be created.

Strategies acknowledge that market forces are continuing to shift care from the inpatient settings to outpatient and post-acute settings; drivers for population health suggest more attention be paid to prevention. By focusing more on the entire care continuum, strategies will require more collaboration and integration with all touchpoints – for example, breaking down walls separating inpatient teams from outpatient teams or inpatient teams from postacute care teams so that a patient's care can move smoothly and efficiently between the settings.

UKHC's case mix index (CMI) has steadily increased since 2004, one indicator that its strategy to focus more on advanced



► **National trends toward decreased inpatient utilization is a challenge**

Kentucky is an overutilizer of inpatient care compared to other areas of the U.S. We can expect there will be pressure to reduce hospitalization in the state. And naturally, in order to reduce hospitalization, other settings of care – such as ambulatory care – need to play a stronger role in the care continuum.

subspecialty care has succeeded. In the last quarter of FY 2015, CMI reached 1.93. Kentucky appears at or near the top of most national disease mortality and risk rankings. Little wonder then that the average CMI at UKHC has climbed to the point that UK hospitals now receive some of the nation’s sickest patients. Service line strategies acknowledge this fact and will help shape each group’s ability to treat the most complex patients.



CASE COMPLEXITY

Case complexity (based on CMI) has increased dramatically, ranking well above the 75th percentile for academic medical centers.

Strategies that enable growth

Each service line identified the need to develop disease-focused or specific patient population programs that provide a patient- and family-centric experience, streamlined access and coordinated care across the continuum. Common themes included:

- Excellence in quality and operational efficiency
- Redesign of provider-to-UKHC transfer management processes
- Creation of a service line operating model that supports comprehensive, multidisciplinary care

More emphasis on ambulatory specialty care

Given the tremendous growth in transfers to UK hospitals since 2004, most of UKHC’s strategic emphasis has

been on creating more capacity and access within the inpatient settings. Access to specialty care provided in the ambulatory (outpatient) setting, however, has not grown proportionately.



VOLUME GROWTH

Discharges have grown by over 90% since FY 03.

Health care trends clearly illustrate care is shifting from the inpatient to the ambulatory setting. As the region’s referral center and largest academic medical center, streamlined access to ambulatory care is considered critical for UK HealthCare’s continued success. The 2015-2020 strategic plan places greater emphasis on ambulatory specialty care.

- Expanded access to UK specialists
- Coordinated, seamless, patient- and family-centered experience
- Closer working relationships with community physicians

Detailed service line plans were developed with clearly defined goals, objectives, tactics, resource needs and expected benefits. Leaders selected 1) the Gill Heart Institute, 2) End-Stage Organ Failure & Transplantation, and 3) Obstetrics/Maternal Fetal Medicine/Neonatal Intensive Care as the first of the nine areas to receive organizational focus and resources in developing a service line approach.

Health status in Kentucky is poor in comparison to other states in the region and country.



Kentucky has the **fourth highest** mortality rate for heart disease in the U.S.



Kentucky has the **highest rate of smoking in the US** – 28.3% of Kentuckians smoke compared to 19% of all American nationally; this difference is greater among younger population segments.



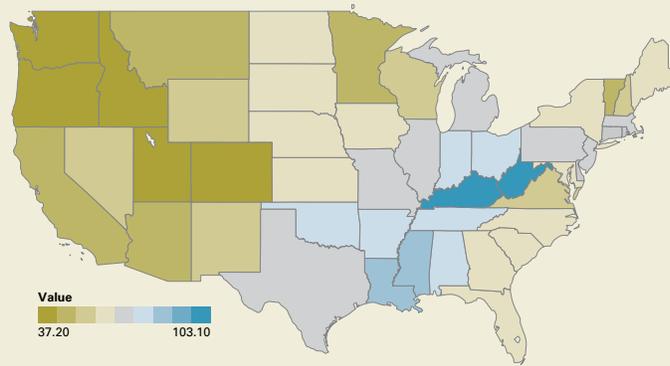
The **prevalence of obesity increased** from 30.4% to 31.3% in 2013.



Those in the Southeast, particularly those living in small cities in **Kentucky**, Alabama, Georgia and Arkansas, tend to **use opioids in greater concentrations** than in other regions of the country, indicating abuse.

Kentucky is one of the most complex health care delivery environments in the country due to its high degree of illness.

Kentucky's preventable hospitalization rate is 102.9 per 1,000 Medicare patients, the second highest in the U.S.



44th

Premature Death

45th

All Health Outcomes

49th

Number of days a person could not perform work due to physical health issues

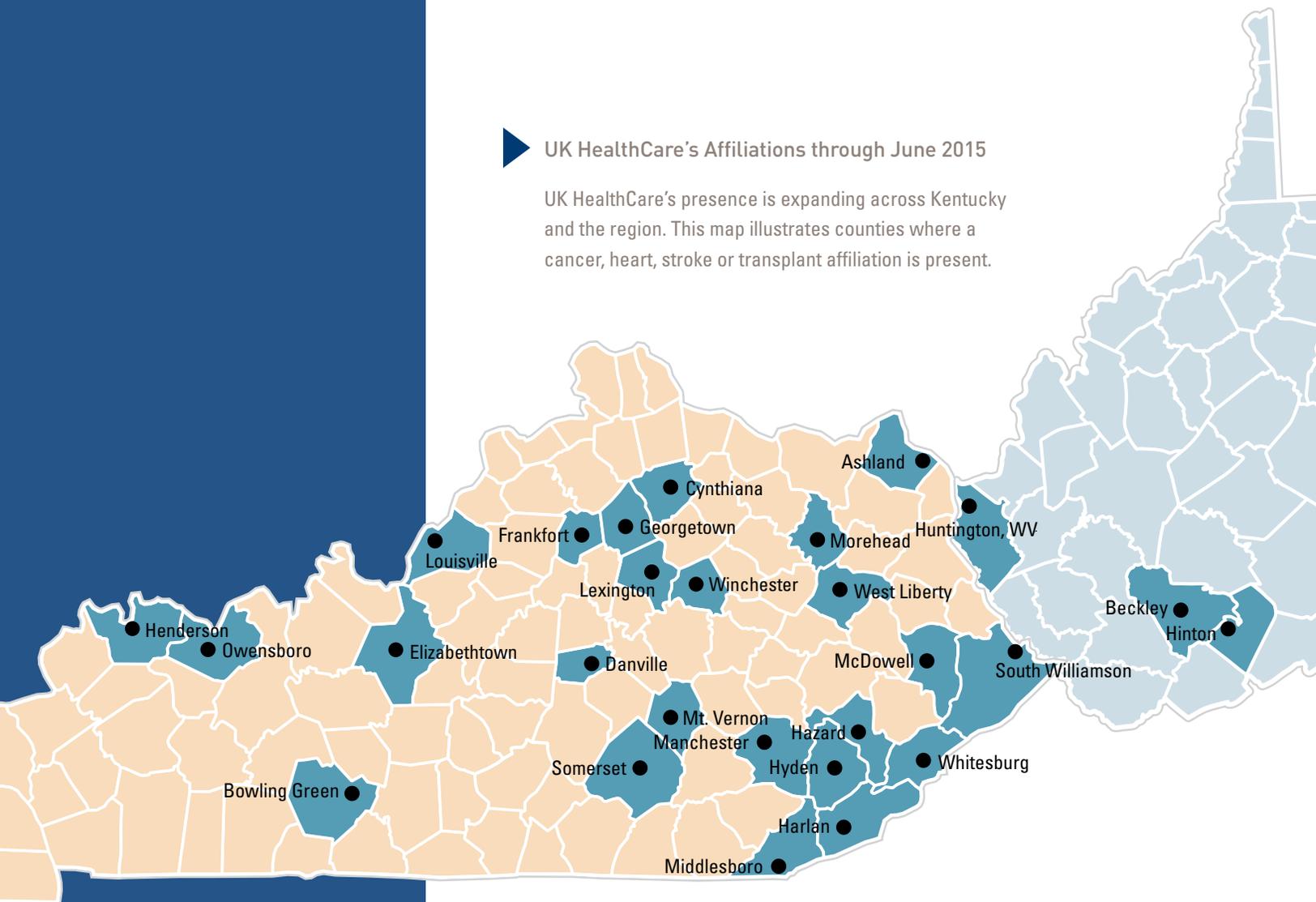
50th

Smoking and Cancer Deaths

Strengthening Our Partnership Networks

► UK HealthCare's Affiliations through June 2015

UK HealthCare's presence is expanding across Kentucky and the region. This map illustrates counties where a cancer, heart, stroke or transplant affiliation is present.





▶ UK's Blue Angels Program has proven both cost-effective and time-saving, dramatically increasing access to high-risk obstetric care among Kentucky's most at-risk pregnant women.

CHAPTER 2 of UK HealthCare's 2015-2020 strategic plan emphasizes the importance of strengthening partnership networks in the years ahead. This emphasis on partnerships and affiliations underscores the enterprise's institutional mission to keep patients as close to home as possible for their treatment and care.

The state's health challenge

The plan calls for expanding UK HealthCare's presence across Kentucky and beyond in three particular ways:

- 1) Collaborating with other health systems to reduce costs and increase efficiency;
- 2) Positioning for population health by building a partnership network that reaches five million lives; and
- 3) Partnering with smaller community hospitals in order to deliver community care close to home and provide seamless complex care at the quaternary or fourth level of specialty expertise found in the largest academic medical centers.

This strategic approach is nothing new to UK HealthCare. In fact, UKHC delivered on that front in dramatic and tangible ways in FY 2015. The enterprise

expanded its cancer, heart, stroke and transplant affiliate networks dramatically in order to better serve Kentuckians across the Commonwealth. As Kentucky's only National Cancer Institute-designated cancer center, UK Markey Cancer Center continues to attract other health centers to join its affiliate network, which was created to provide high-quality cancer care closer to home for patients across the region. New members joining the Markey Cancer Center Affiliate Network in 2015 included: Tug Valley ARH Regional Medical Center, Harlan ARH Hospital, Methodist Hospital, Ephraim McDowell Commonwealth Cancer Center and Hardin Memorial Health.

In FY 2015, UK HealthCare launched the Markey Cancer Center Research Network (MCCRN), an initiative conducting high-priority cancer research through a network of collaborative centers with expertise in the delivery of cancer care and conduct of research studies. Thousands of patients across eastern Kentucky, southern Ohio and West Virginia will have close-to-home access to innovative clinical research studies in the treatment and epidemiology of cancer as well as research studies in the prevention and early detection of cancer.



▶ Technology as a strategic enabler

As the collaborative environment is strengthened, significant investments will be made in technology to improve UK HealthCare's ability to share information across the enterprise and its networks. This has the potential of greatly improving patient care and outcomes by reducing errors, eliminating duplication in treatment and improving patient safety.

A data warehouse, a centralized storehouse of information gathered from across the enterprise will allow for indepth analysis of health issues. Patterns and trends in population health can be identified, leading to strategies that address and manage these trends.

By disseminating Markey's clinical research studies across the region, the collaborative research network will offer better, more progressive treatment options to patients without the burden of traveling away from home and their physicians. In FY 2015, Hardin Memorial Health, King's Daughters Medical Center, St. Clair Medical Center, Hazard ARH Regional Medical Center, Norton Cancer Institute and St. Mary's Regional Cancer Center all entered into agreements to become members of the MCCRN.

UK forged other partnerships and affiliations in 2015. Clark Regional Medical Center joined the Gill Heart Affiliate Network. The Medical Center at Bowling Green joined the Norton Healthcare/UK HealthCare Stroke Care Network, a community-based stroke initiative to provide the highest quality clinical and educational programs to hospital staff and the community. The stroke network now includes more than 25 affiliates.

Perhaps the most shining example of how this approach to care can benefit Kentuckians is UK's Blue Angels Program. In partnership with area health systems, UK HealthCare is leveraging this program in order to reach patients who would normally not have access to high-risk obstetric care. Instead of having patients drive hours for an ultrasound, the Blue Angels program enables UK specialists to review ultrasounds in real time via an Internet connection using a specially designed portable ultrasound machine with a specially trained sonographer.

In April 2015, UK HealthCare and Commonwealth Health Corporation celebrated the opening of a new orthopaedic surgery practice in Bowling Green, Ky. The physician practice was created in affiliation with UK Orthopaedic Surgery & Sports Medicine to expand availability of orthopaedic surgeons in southcentral Kentucky.



Value-Based Care and Payments

CHAPTER 3

Providing “value” includes improving the predictability in patient outcomes and the cost of care. It includes adopting evidence-based practices across all settings of care and building an organizationwide culture of improvement using UK HealthCare’s quality and excellence capabilities. In basing this pillar of the strategic plan on value-based care and payments, UK HealthCare has guaranteed that building “value” will continue to be an imperative through 2020.

The focus on providing “value” will prepare UK HealthCare for new risk-based payment models either as a strategic choice or in reaction to the evolving market conditions. Value-based care is becoming more prominent in the Kentucky market and some providers and payors have begun to experiment with value-based care and population health programs.

Value-based care at UK HealthCare is about providing better quality with smarter spending on care delivery. More specifically “value” includes the components of quality, experience, access and cost from the perspective of patients and other purchasers of health care.

Value-based health care aims to optimize care quality while making wise choices in spending on health care. Insurers are increasingly linking

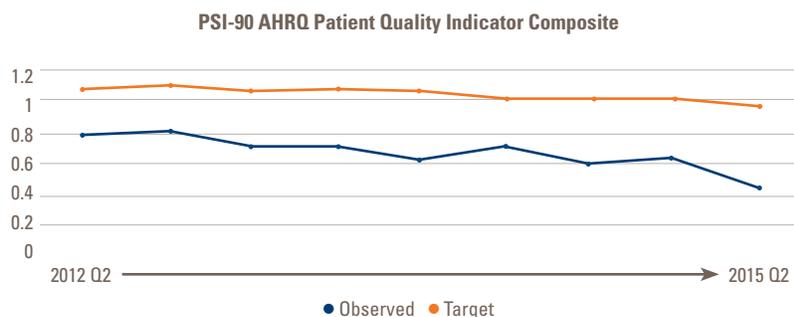
reimbursement payment to value. Improving value requires providing the best evidence-based care, reducing variations in care, and lowering unnecessary spending on care.

A focus on quality in all dimensions

Since the 2004 strategic plan, UK HealthCare has been committed to improvement in the quality of care delivered, patient safety, service excellence and efficiency. With many successful quality programs in place, in FY 2015 UK HealthCare’s quality, safety and service directors turned their focus to eliminating silos, bringing interdisciplinary teams together to encourage collaboration, and building a hub from which successful programs could be offered to all disciplines.

Patient safety reaches “top” rank

In March 2013, an interdisciplinary steering team, UK HealthCare’s Patient Safety Team, was organized with an overall goal to improve patient safety throughout UK HealthCare. The team now serves as a “clearinghouse” for all things patient safety related under the leadership of Eleftherios Xenos, MD, associate chief medical officer and medical director for patient safety, and Kimberly Blanton, RN, enterprise director for infection prevention and control/patient safety.



▶ This composite score of patient safety indicators has steadily declined, evidence that potentially avoidable hospital-based complications have been reduced.

Patient safety indicators (PSIs), a focus for the team from the start, are indicators of the quality of hospital care. PSIs focus on potentially avoidable complications introduced inadvertently by medical treatment or diagnostic procedures. Hospitals can reduce the risk of these serious complications by following safe practices.

PSI-90 is a composite score summarizing eight individual PSI measures. It is considered the serious complications harm score, and a lower PSI-90 number is better. Since 2013, UK HealthCare hospitals have outperformed the PSI-90 target. In FY 2015, the fourth quarter PSI-90 score for UK HealthCare was 0.45 – the best among the 138 academic medical centers participating for the April – June 2015 quarter. Overall for FY 2015, UK ranked fifth among 140 centers.

Payments based on value

A focus on delivering excellent and efficient care prepares UK HealthCare for new payment models as the market dictates. Although timing is unclear, payment shifts are expected to occur in Kentucky. A number of factors could tip the scales towards such a shift.

Factors that could “tip the scale”

- Phasing of payment reform
- Competition among providers
- Commonwealth of Kentucky fiscal requirements
- Increased focus on population health management
- Proliferation of population management technology
- UKHC leadership in care excellence

Other states serve as an example and barometer for this change. Many states have instituted value-based care initiatives, which highlights UK HealthCare’s need to prepare for state- and payor-led payment reform initiatives. Several of UK HealthCare’s payor partners continue to grow their value-based contract portfolios, indicating that UK HealthCare must be prepared to deliver on value-based care in order to maintain reimbursement levels.

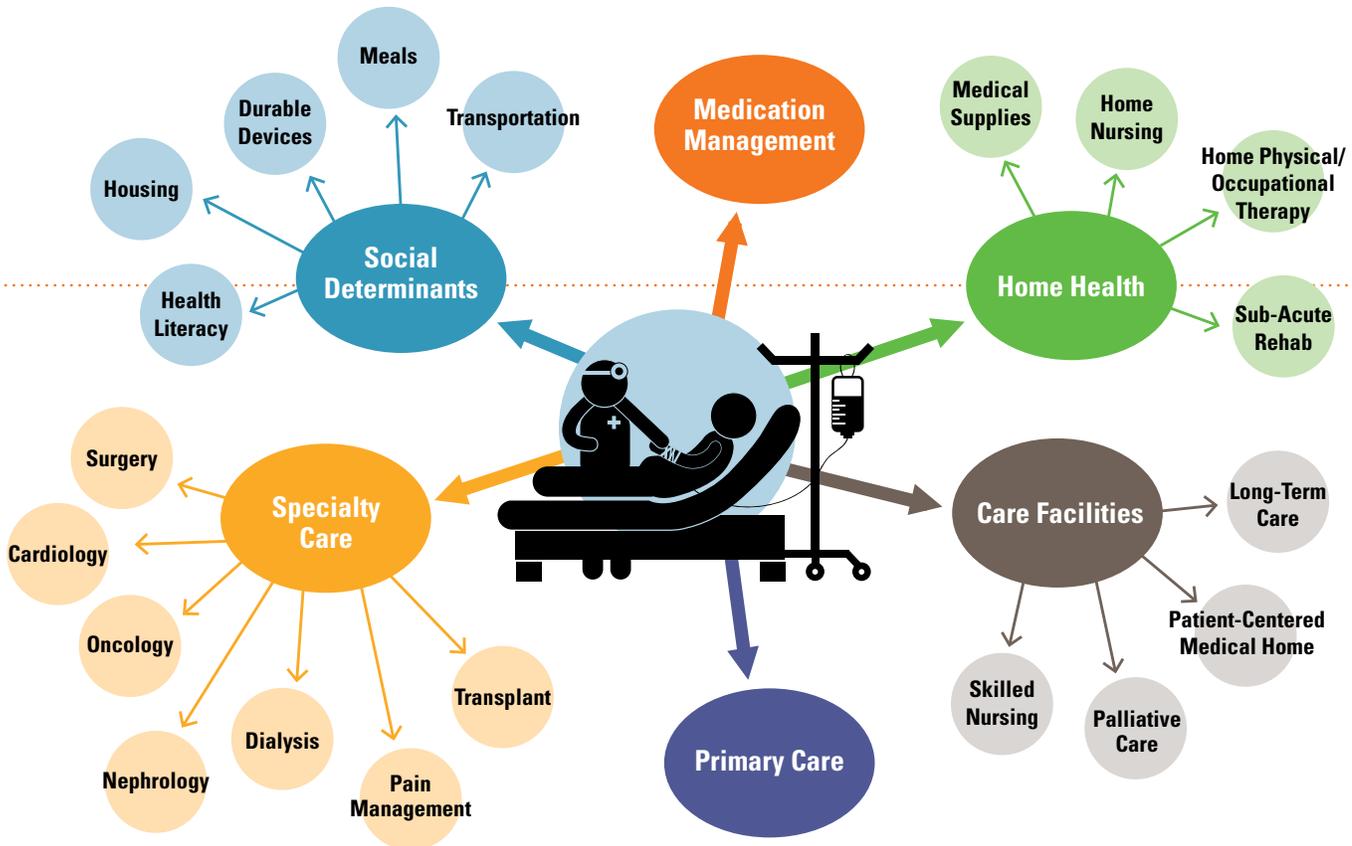
UK HealthCare can do a number of things now to prepare and drive additional value in today’s fee-for-service environment while positioning for future reimbursement models.

Today Kentucky is a high-utilization state for hospitalization, but the state’s utilization will likely decline over the next five to 10 years, moving Kentucky closer to the U.S. average. Government and private payors will be led to rationalize this high-utilization as state and employer budgets for health care become constrained.

$$\text{Value} = \frac{\text{Quality} + \text{Experience} + \text{Access}}{\text{Cost}}$$

UK HealthCare may adopt value-based payment models either as a strategic choice or in reaction to evolving market conditions. By building quality, cost, and contracting measurement and negotiation capabilities, as well as exploring payment model options, UK HealthCare can position itself to assume a leadership position in Kentucky. We intend to be ready to adjust to what the market dictates and to lead in payment reform over time.

▶ Patients with complex, chronic conditions account for a disproportionate share of health care spending. Factors affecting outcomes and costs extend beyond those typically considered part of medical management.



Crafting a different model for the complex, chronic patient

With the emphasis on increasing the value of patient care, new delivery models are needed to enhance how care is provided to patients. In light of this, UK HealthCare is focusing on improving the management of patients with multiple, complex chronic conditions through the development of a high-touch outpatient approach.

Patients with complex, chronic conditions account for a disproportionate share of health care spending. These patients typically have multiple providers, including multiple specialty care providers, and receive care in multiple settings. Medication management is a key component

of their care to treat their multiple acute and chronic conditions. Many medical supplies and various therapeutic services are often required. Transportation, housing, health literacy and access to healthy foods have an impact on patient compliance and engagement, and in turn play a major role in patient outcomes.

Delivering the right care at the right time in the most cost-effective manner requires the cooperation and engagement of the patient. UK HealthCare has an opportunity to reduce costs and improve outcomes among frequent users of UKHC services who have chronic but manageable conditions. UK HealthCare also has an opportunity to assist community providers in their efforts to do the same.

MISSION

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.



University of Kentucky College of Medicine

ANNUAL REPORT 2015



College of Medicine's commitment to Kentucky is producing results

In the UK College of Medicine, our mission is to develop knowledge, skills and attitudes that promote professionalism, teamwork, life-long learning, empathy, scholarship, cultural sensitivity and leadership. We do all that with the goal of providing excellence in education, health care and research. When I consider that mission – and the ways in which we've made that reality for so many in the Commonwealth – I am reminded of just how critical our work here is.

It is why I am pleased to report that 2015 was another banner year for UK HealthCare and particularly the UK College of Medicine. This year added positively to the college's incredible trajectory of growth over the last decade, and this period of progress and outstanding achievement is described in the pages ahead.

Commitment to education

Throughout the past decade, we have been widening our applicant pool and making strides in enrolling more minority and rural students by implementing and operating pipeline programs and other recruiting efforts. These bold efforts have yielded outstanding results by bolstering the college's reputation and attractiveness to students (both in-state and nationally), while equipping them to better meet the Commonwealth's need for more physicians. For example:

- The College of Medicine's applicant pool grew to nearly 3,500 students for the 2015-16 academic year, an all-time high. This number is up dramatically from the approximately 3,000 received the previous year or the 1,000 applications received in 2004.
- The increase in applicants is primarily due to increased interest from out-of-state students, more of whom (32 percent) plan to stay at UK for their residency than ever before.

- Our total enrollment has climbed from 465 in 2011-2012 to a projected 544 for the 2016 academic year.

In addition to attracting more students than ever before, we are attracting higher caliber students as well. The Class of 2018's mean Medical College Admission Test (MCAT) score was 31.9, well above the 30.7 national average. Our students' scores on both Step 1 and Step 2 of the U.S. Medical Licensing Exam are the highest they have ever been in the College of Medicine, with the highest pass rates as well. Our 98 percent pass rate on Step 1 well exceeds the 96 percent national average score. A good deal of this can be traced to our excellent faculty coupled with the recent curriculum change, and I am confident our students are now more prepared for their careers than ever before.

We also initiated new graduate medical education (GME) programs to address our state's evolving need for physicians. The college now offers 51 GME programs: 27 residencies and 24 fellowship programs. For the 2014-15 year, our GME enrollment stood at 521 residents and 93 fellows, which marked increases in both categories from the previous year.

Committed to the full continuum of medical education, in 2015 the College of Medicine contributed further to premedical studies at UK through the establishment of a new neuroscience major and a microbiology minor as well as offering and teaching 15 honors courses.

New research building approved

Perhaps the most impactful achievement we experienced this year was the securing of more than \$130 million in state funding for the construction of a new, state-of-the-art research building on the UK campus.



Frederick C. de Beer, MD
*Dean, University of Kentucky
College of Medicine
Vice President for Clinical
Academic Affairs*

It's a significant accomplishment for so many reasons. Republicans and Democrats across the Commonwealth came to a bipartisan agreement that this building would be a cornerstone of bold, cutting-edge research Kentuckians so desperately need to combat the health problems facing us every day. The new building will allow us to attract and recruit skilled researchers and teams, facilitate their multidisciplinary research, and focus on reducing preventable deaths from the Commonwealth's most common diseases, including cancer, heart and pulmonary disease, stroke and more.

The incredible impact this will have on medical research is also supplemented by the new facility's financial impact. Independent assessments estimate the project should create more than 1,600 jobs and have a \$116 million economic impact on the region.

Meeting the needs of rural Kentuckians

Though we in Kentucky and in the rest of the nation face the looming danger of a physician shortage, this problem is already especially acute in rural parts of Kentucky. It is for this reason that we continue to promote initiatives such as the UK Center of Excellence in Rural Health, the Rural Physician Leadership Program and the college's Western Kentucky Initiative, all of which are aimed at identifying, training and developing physicians to serve in Kentucky's most underrepresented health care regions. The goal is to have students from rural Kentucky educated and trained in rural Kentucky, all with the goal of developing them into not only future medical leaders but civic and community leaders as well.

I've touched on only a fraction of what could be said about the UK College of Medicine and its impact on the Commonwealth. In the pages ahead, you'll read more about our endeavors in medical education, research, outreach and diversity initiatives. I eagerly anticipate the college's continued growth in the years to come, as it carries on with meeting the challenges of our times.

As we move into the next great chapter of UK HealthCare and the College of Medicine, I hope you'll take a few minutes to pause and appreciate the great work accomplished in 2015. It was a year to be proud of, but I truly believe that for us, the best is yet to come.

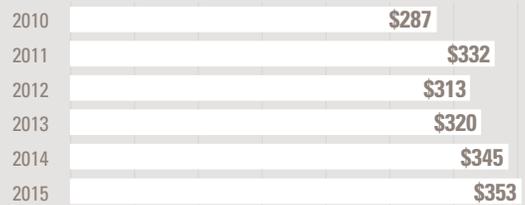


Frederick C. de Beer, MD

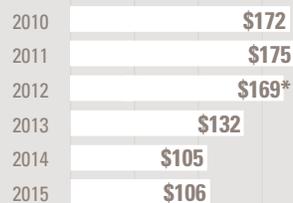
Dean, University of Kentucky College of Medicine
Vice President for Clinical Academic Affairs

Revenue & Sources (in millions)

Clinical



Grants including indirects



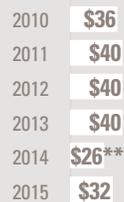
State



Gifts and Endowments



Other



* Funding decrease due to Dept. of Corrections contract sunset beginning in December 2012.

**Previous years included VA faculty salaries of about \$12M; reporting change beginning 2014.



College's initiatives drive growth in medical education

Mirroring the growth experienced in the last decade at UK HealthCare, the UK College of Medicine is growing and benefiting from heightened interest. The college received its largest number of applications ever in 2015 (nearly 3,500), highlighting its increased prominence and attractiveness to prospective students.

As efforts to increase enrollment over the past four years have met with success, the quality of UK medical students has improved as well. Student mean scores on the Medical College Admission Test (MCAT) are higher now than they were four years ago and comfortably higher than the national average (31.9 at UK compared to 30.7 nationally).

Multidisciplinary curriculum producing immediate benefits

Much of this growth in numbers and quality can be traced back to the 2012 curriculum change that has placed a premium on multidisciplinary systems-based courses. College of Medicine students taking the United States Medical Licensing Exam Step 1 collectively produced the college's highest score ever in 2015. Additionally, the 98 percent Step 1 pass rate is the highest the college has had since 1998, while also significantly exceeding the national average 96 percent pass rate.

Medical education & GME expanding

The expansion of academic programs in 2015 is demonstrative of the College of Medicine's continued growth. In 2014-2015 the college secured three new fellowships accredited through the Accreditation Council for Graduate Medical Education (ACGME): neuroradiology, advanced heart failure/transplant cardiology, and critical care medicine. With the addition of these three fellowship programs, the college is offering a total of 24 ACGME-accredited fellowships.

In addition to improvements to MD and GME programs, the college expanded course offerings at the premedical studies level. A new neuroscience major and a microbiology minor have been established for undergraduates with plans to develop additional minors programs in the years ahead. In all, 14 new honors courses were offered in 2014-2015 in conjunction with UK's honors program.

This expansion only further underscores the college's commitment to the continuum of education at UK and to providing a more fulfilling and enriching student experience.

Addressing a physician shortage in rural areas

Rural areas of the Commonwealth of Kentucky are experiencing an acute shortage of physicians and other health care professionals. One of the primary ways the college has attempted to address this is by partnering with health care providers, clinics, hospitals such as St. Claire Regional Medical Center, and public universities such as Morehead State University to develop the Rural Physician Leadership Program (RPLP).

Since the RPLP's initiation in 2009, the program has continued to be a shining success in identifying and training physicians who desire to serve as practitioners and leaders in rural settings that have been most affected by the physician shortage. The program allows our third- and fourth-year medical students to complete their clinical experiences at St. Claire Regional Medical Center and/or other health care providers in northeast Kentucky and to take course work at Morehead State University that focuses on health systems, business practices and health policy. RPLP graduates go into a variety of specialties and are prepared to not only be medical leaders but civic and community leaders



▶ Dr. Brian Adkins shared funny stories with Dr. Parvathi Nataraj and her family following the graduation ceremony in May 2015. Nataraj participated in the college's BS/MD Program and is headed to the UF Health Shands Hospital for a pediatric residency.

as well. Another 10 RPLP students have been accepted into the 2015 M1 class.

Similarly, this year seven students had the opportunity to participate in the Western Kentucky Initiative, a program that places third-year medical students from western Kentucky at medical practices and hospitals in western Kentucky. There, students receive more hands-on opportunities to practice real-life medicine and receive one-on-one mentorship

from practicing doctors

The preceding programs and initiatives provide part of the answer regarding the College of Medicine's growth and increased importance to UK HealthCare and the Commonwealth. 2015's accomplishments have set the stage for an even brighter, more impactful future that will allow the College of Medicine to continue to thrive in the years to come.

Education

Class of 2018 Mean Scores

As of August 1, 2015

COLLEGE GRADE POINT AVERAGE

- 3.60** Science
- 3.76** Non-science
- 3.71** Total GPA

MCAT SECTIONS (1-15 SCALE)

- 10.4** Verbal Reasoning
- 10.6** Physical Science
- 0** Writing Samples (J-T scores)
- 10.7** Biological Science
- 31.9** Mean total MCAT score

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.

Learners

- 242** Graduate Students (As of start of 2015-2016 academic year; includes MS and PhD)
- 709** House Staff (As of July 1, 2015)
- 523** Fellows
- 105** Pharmacy Residents
- 33** Dentistry Residents
- 19** Other (includes IM and Peds Chief Residents, Non-accredited fellows in GME, Path Student Fellowship, Optometry, Hospital Administration, Medical Physics)
- 521** Medical Students (As of start of 2015-2016 academic year)

Faculty and Staff

As of June 30, 2015

- 192** Part-time faculty
- 209** Basic science faculty
- 702** Clinical science department faculty
- 937** Community-based faculty
- 2,905** Staff

Approximately **72 percent** of all UK medical students enrolled for the 2014-15 academic year received federal student loan assistance, and **42 percent** received scholarship awards.

In 2015, UK medical students matched into **22 different specialties** for residency.

Fully **28 percent** elected to stay within the UK HealthCare system. Of those residents (208 total) who completed their residency/fellowship programs in 2014-2015, **45 percent** (93 total) stayed in Kentucky to practice medicine.

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.



Medical research is thriving at UK

When UK unveiled its Strategic Plan for Research in 2015, the College of Medicine tailored its own research priorities to better align with the university's strategic initiatives.

As a result, the College of Medicine has selected three strategic priorities:

- 1) Support thematic research in areas of strength that advance the standard of care and address health problems relevant to the Commonwealth;
- 2) Develop and expand core research facilities utilizing leading-edge technologies that support areas of research strength; and
- 3) Assure that human and physical resources are aligned to maximize impact in addressing research priorities.

These three strategies underscore the importance of developing centralized, systematic processes for recruiting faculty, optimizing existing research space utilization using established metrics, and financing and building/remodeling research space to meet future needs.

legislators, the \$265 million facility is scheduled to open in 2018 and will allow UK researchers to more specifically focus on reducing preventable deaths from the Commonwealth's most common diseases, namely cancer, heart and pulmonary disease, stroke and other preventable illnesses. UK has more than 300 research projects – funded to the tune of \$350 million – currently investigating these challenges.

The 300,000 square-foot building will further allow for the recruitment and retention of talented physicians and teams and will house them in a modern, state-of-the-art space that will facilitate their integrated research. The work done by these researchers will truly be multidisciplinary. Clinicians and public health faculty will work side-by-side with those in fields such as behavioral sciences, agriculture, outreach and extension, economics and engineering – all with the goal of finding solutions to the Commonwealth's most complex health problems.

In addition to the project's game-changing medical impact on the region, it is also expected to bear economic fruit for the Commonwealth – projections estimate the project will generate more than 1,600 jobs and have a \$116 million total economic impact for the region.



Research conducted in this 300,000-square-foot facility slated to open in 2018 will target Kentucky's most pervasive health issues.

Much-needed research space approved in 2015

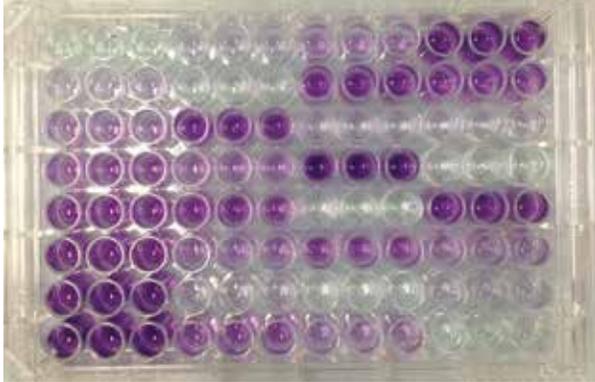
Perhaps the most significant achievement at the College of Medicine this year (and cornerstone of executing these strategies) was the successful campaign to secure \$132.5 million in state funding for construction of a new six-story multidisciplinary research facility.

Approved on March 9, 2015, after having received overwhelming bipartisan support among Kentucky

College's research funding bucks national trend

The College of Medicine also saw dramatic improvements in awarded grants in 2015. In FY 2015, the health care enterprise received \$155 million in sponsored projects, which was a 15.1 percent increase over the previous year and eclipsed the total of all other UK colleges combined (\$129.9 million).

▶ Researchers at the Sanders-Brown Center on Aging are on the hunt for biomarkers of Alzheimer’s disease.



Particularly, UK’s Spinal Cord and Brain Injury Research Center (SCoBIRC) enjoyed a banner year, obtaining more than \$16 million in new multiyear extramural grant support from the National Institutes of Health, Kentucky Spinal Cord and Head Injury Research Trust and other various foundations. SCoBIRC core faculty, associates and predoctoral/postdoctoral trainees published 74 neurotrauma-relevant refereed original publications, chapters and review. SCoBIRC continued development of the Kentucky-Appalachian Rural Spinal Cord Injury Rehabilitation Network (KARRN), organized the Third Annual Kentucky Congress on Spinal Cord Injury, and partnered with the Center for Clinical and Translational Science to co-fund a transitional pilot study.

Research supports community needs

The College of Medicine is committed to sharing its research with the larger UK and Lexington communities, and its thriving body of work is visible through annual events such as Barnstable Brown Kentucky Obesity & Diabetes Research Day, Markey Cancer Center Research Day, “Meet the Researchers Day,” Gill Heart Institute Cardiovascular Research Day and more.

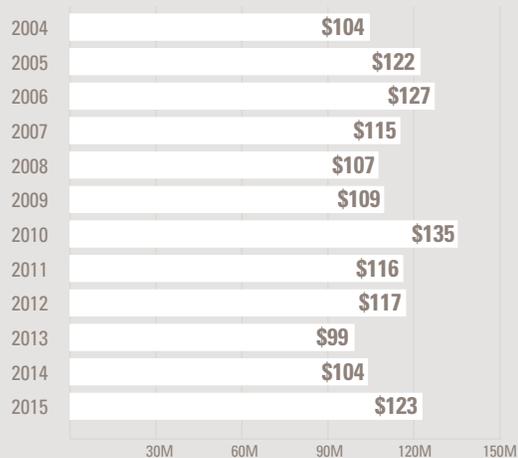
With grants and funding increasing each year, a new research building under construction and continued recruitment of outstanding faculty, the future of the college’s research mission looks extraordinarily bright.

Research

Grants and contracts to the College of Medicine in fiscal year 2015 (July 1, 2014, to June 30, 2015), included in excess of **\$67.8 million** in National Institutes of Health (NIH) funding.

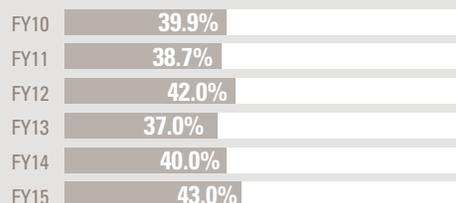
In federal fiscal year 2014, (Oct. 1, 2013 to Sept. 30, 2014) the College of Medicine received **58.19 percent** of the **NIH research funding** granted to Kentucky medical schools. In federal fiscal year 2015, it received **59.9 percent**.

College of Medicine Grants and Contracts Awarded (in millions, including indirects)



The College of Medicine has more than **250,000 square feet** of **research space**. The newly approved research building will more than double the research space currently available to the college.

The College of Medicine accounts for **43 percent** of **UK’s grants and contracts**.





College's impact extends beyond the campus

In a time when community engagement and social responsibility are increasingly essential, the UK College of Medicine believes its mission extends beyond its clinical settings on campus into surrounding communities. The increasing importance of community outreach can be seen in many of the college's activities this year.

Developing the state's future physicians

The college's Area Health Education Center (AHEC) continues to be at the vanguard of its outreach to young Kentuckians. AHEC provides health education services that support young people in pursuit of medical or health careers who come from populations of need.

One of AHEC's chief accomplishments is its provision of clinical rotations for students, residents and fellows at eight regional centers around the Commonwealth. This practice-based education supports not only the College of Medicine, but also extends to UK's colleges of

Dentistry, Health Sciences, Public Health, Pharmacy, Nursing and Social Work as well as the Department of Dietetics & Human Nutrition.

The AHEC also offered plenty of opportunities for high school students to get involved. Initiatives such as the Summer Enrichment Program and the Health Researchers Youth Academy provide an outlet for young Kentuckians to explore their dreams of a medical career

with hands-on learning experiences and increased knowledge in fields of math, biology, chemistry and more. Indeed, around 61 percent of the campers at the AHEC's Summer Enrichment Program have gone on to enroll in a major preparing for a health profession or a "STEM" (science, technology, engineering or mathematics) career track.

In June 2015, AHEC partnered with UK to host its first Northeastern Kentucky Migrant Education Program, which provides educational support programs for migrant students from 37 Eastern Kentucky counties.

Since 2010, an annual program, UK Minority Education Development for Prospective Medical Students (UKMED), is held for the purpose of recruiting self-identified underrepresented minority junior and senior premedical undergraduate students who have a strong interest in attending medical school upon college graduation. UKMED's goals are to:

- Increase interest shown by minority students in the medical profession.
- Increase the number of minority student applicants to the College of Medicine.
- Increase the representation of minority students in the College of Medicine.

In April, three UK medical students working with the UKMED program received the Spirit of Advocacy Award at the UK Health Colleges Student Diversity Office's Inaugural Celebration of Excellence in Diversity Awards Reception. This award honors those who have demonstrated leadership and dedication to the promotion of diversity and inclusion. These students worked to help attract premedical students from underrepresented populations to a career in



▶ AHEC initiatives like the Summer Enrichment Program give high school students interested in health careers the opportunity to observe and learn from UK faculty and health professionals.



▶ AHEC's Health Researchers Youth Academy is a two-week summer program that engages students in hands-on experience. They participate in two academic courses and develop their own research poster presentations.

medicine by meeting with them and allowing them to experience and learn about medical school first-hand, in preparation for the application season.

Reaching out to address health disparities

The college's Center for Excellence in Rural Health (CERH) continues to fight rural Kentucky's health disparities and combat a shortage of health professionals by providing education, health policy research and community engagement. The excellent work of the CERH yielded more than \$4.5 million in grant funding during FY 2015 from agencies such as the U.S. Health Resources and Services Administration (HRSA), Patient-Centered Outcomes Research Institute (PCORI) and the Commonwealth of Kentucky. The center now employs more than 160 faculty and staff and serves as the host site for the UK North Fork Valley Community Health Center, the federally designated Kentucky Office of Rural Health and the East Kentucky Family Medicine Residency Program.

The college's Community Faculty Program has drawn more than 1,800 health care providers from across the Commonwealth to serve an important role in teaching and research. During 2015, community faculty made possible 585 weeks of medical student rotations within their individual practices.

The Kentucky Ambulatory Network (KAN) – comprised of more than 130 primary care providers and 80 clinics statewide – is providing a collaborative research network throughout the Commonwealth. More than seven active research studies and programs involving 1,918 participants were supported by the network in 2015.

And in 2015 the Kentucky Telecare Network increased to more than 100 telehealth sites. This network uses videoconference technology and medical devices to bring patients from rural Kentucky together with UK physicians located elsewhere to help increase access to essential care.

More than ever, UK HealthCare and the College of Medicine are seeing their footprints expand deeper and wider within the Commonwealth. The college's outreach efforts detailed above are just some of the ways it is making a tangible impact on meeting the complex needs of Kentucky's citizens, and those efforts will remain an essential piece of growing UK HealthCare's prominence and importance in the year ahead.

Outreach

- 91** New appointments in calendar 2015
- 197** Medical student rotations in fiscal year 2015
- 973** Total fiscal year 2015 College of Medicine community faculty
- 585** Weeks of medical student rotations



Statistics and Financials



Operational Statistics and Trends

Hospital Operating Statistics for Year Ending June 30

Discharges	2015	2014	2013
Medicare	12,591	11,888	11,322
Medicaid	14,286	11,035	9,911
Commercial/Blue Cross	9,519	9,560	10,278
Patient/Charity	647	2,697	4,000
Total Discharges	37,043	35,180	35,511
Licensed Beds	825*	825	825
Available Beds	816	757	718
Average Daily Census	689	627	577
Average Length of Stay	6.78	6.50	5.93
Case Mix Index	1.93	1.91	1.82

* A certificate of need for an additional 120 beds was approved in February 2015. The licensed beds will increase to 945 with the opening of two patient care floors in summer 2016.

Surgery

Operative Cases	31,200	29,951	28,638
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Hospital-based Outpatient

Charged Hospital Clinic Visits	479,782	428,582	368,223
Emergency Visits	101,395	91,146	88,752
Total Hospital Outpatient Visits	581,177	519,728	456,975

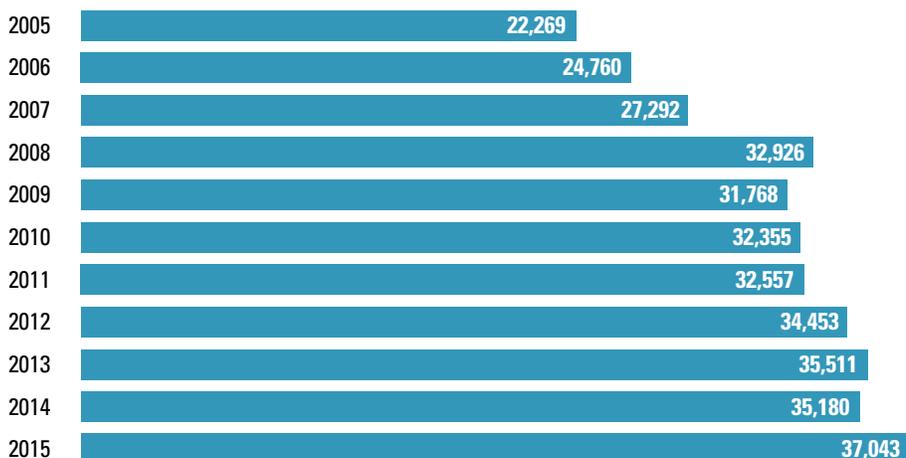
Other Operating Indicators for Year Ending June 30

Ambulatory Services	2015	2014	2013
Ambulatory Physician Visits	709,146	656,535	647,206
Professional Net Revenue*	\$ 208,339	\$ 233,645	\$ 226,014

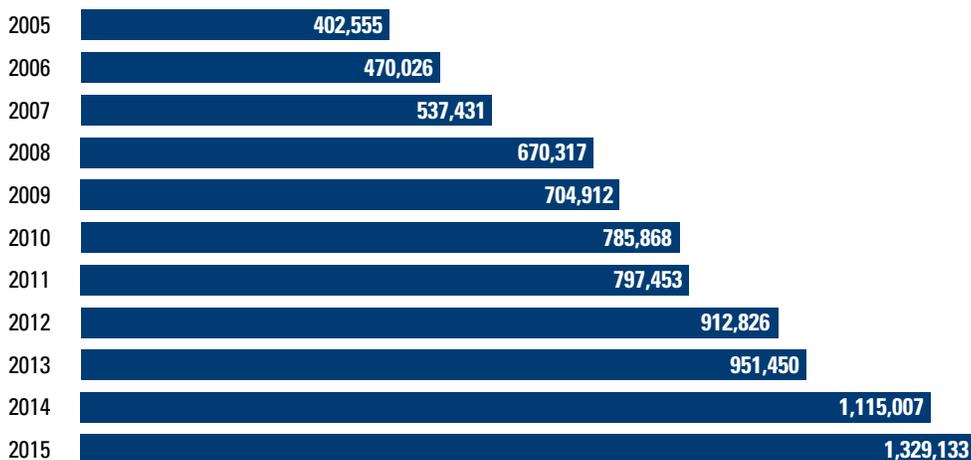
*Accrual based and does not include bad debt; \$ in thousands.

Other Service Relationships	2015	2014	2013
Transfers	12,958	11,339	11,493
UK•MDs Physician Calls	183,315	180,740	171,521
Health Connection Consumer Calls	285,735	199,682	174,203
Website Users (Avg./Mo.)	87,705	64,078	51,948

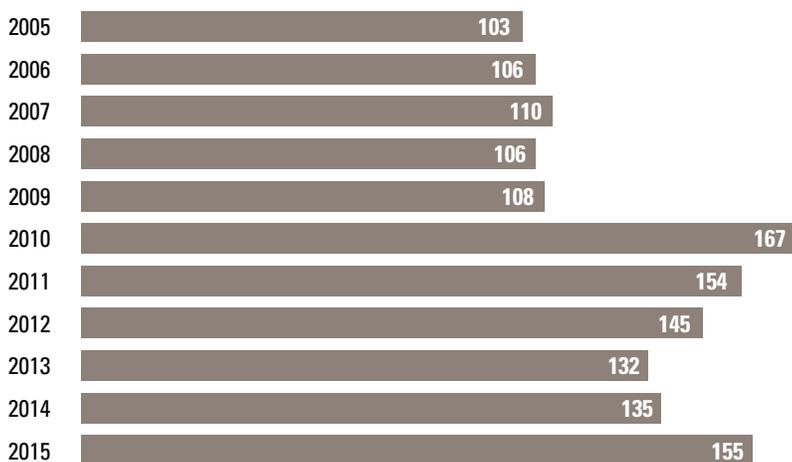
Hospital Discharges



Hospital Operating Revenue (\$ in the thousands)*



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



*Prior to 2008, bad debt was classified as an operating expense; GASB reporting requirements changed in 2008 and bad debt is now reported as a reduction to net patient service revenue; Hospital Operating Revenue 2005-2007 has been restated here for comparison purposes.

**Prior to 2010 reflects College of Medicine only; 2010-2015 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

Murray Clark

Sr. VP for Health Affairs
Chief Financial Officer

Frederick C. de Beer, MD

VP for Clinical Academic Affairs
Dean, College of Medicine

Mark D. Birdwhistell

VP for Administration
& External Affairs

Brett Short

Chief Compliance Officer

Senior Administrative Team*

Mark D. Birdwhistell
Bernard Boulanger, MD
Murray Clark
Joseph D. Claypool
Frederick de Beer, MD
Michael Karpf, MD
Cecilia Page
Marcus Randall, MD
Ann Smith
Colleen H. Swartz
Kim Wilson

*As of June 30, 2015

Financial Statements For year ending June 30

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

(\$ in the thousands)

	2015	2014	2013
Net Patient Service Revenue	\$ 1,238,392	\$ 1,039,264	\$ 926,811
Sales and Services	51,476	39,833	24,639
Management Contract Revenue	39,265	35,910	—
Total Operating Revenues	\$ 1,329,133	\$ 1,115,007	\$ 951,450
Operating Expenses	\$ 1,129,905	\$ 1,013,572	\$ 886,208
Operating Income	\$ 199,228	\$ 101,435	\$ 65,242
Nonoperating Revenue (Expenses)	(5,863)	29,524	14,350
Income Before Transfers to UK	193,365	130,959	79,592
Transfers to UK/Other	(3,142)	(11,128)	(17,373)
Transfers from UK	1,810	1,890	1,675
Net Income (Loss) From Discontinued Operations	—	—	—
Total Increase In Net Position	\$ 192,033	\$ 121,721	\$ 63,894
Operating Margin	15.0%	9.1%	6.9%
Total Margin	14.4%	10.9%	6.7%

Statement of net assets and related statements of revenues, expenses and changes in net assets for the year ending June 30, 2015, were audited by BKD, LLP, of Louisville, Kentucky.

Hospital Net Patient Revenue by Funding Source

(\$ in the thousands)

Payor	2015	2014	2013
Medicare	\$ 384,346	\$ 293,394	\$ 260,470
Medicaid	376,306	279,784	247,313
Commercial/Blue Cross	557,399	502,193	468,165
Patient/Charity	(3,813)	97,105	96,071
Total	\$ 1,314,238	\$ 1,172,476	\$ 1,072,019
Bad Debt	(75,846)	(133,212)	(145,208)
Total Net Patient Revenue	\$ 1,238,392	\$ 1,039,264	\$ 926,811

Hospital Condensed Statements of Net Position

(\$ in the thousands)

Assets	2015	2014	2013
Current Assets	\$ 445,260	\$ 263,486	\$ 197,394
Capital Asset, Net of Depreciation	826,805	808,779	804,938
Other Noncurrent Assets	438,558	296,804	257,664
Deferred Outflows of Resources	12,368	—	—
Total Assets	\$ 1,722,991	\$ 1,369,069	\$ 1,259,996
Liabilities			
Current Liabilities	\$ 180,618	\$ 149,852	\$ 131,052
Noncurrent Liabilities	528,623	397,500	428,948
Total Liabilities	\$ 709,241	\$ 547,352	\$ 560,000
Net Position			
Net Investment in Capital Assets	\$ 437,489	\$ 410,348	\$ 373,346
Nonexpendable Other	119	118	117
Restricted Expendable	10,538	10,331	14,965
Unrestricted	565,604	400,920	311,568
Total Net Position	\$ 1,013,750	\$ 821,717	\$ 699,996

Oversight

As of June 30, 2015

COLLEGE OF DENTISTRY

ADMINISTRATION

Stephanos Kyrkanides, DDS, PhD
Dean

Jeffrey L. Ebersole, PhD
Associate Dean of Research

Vicki Riddell-Peavler
Associate Dean for Administration and Finance

Reny De Leeuw, DDS, PhD
Associate Dean for Academic Affairs

Gregory Zeller, DDS, MS
Associate Dean for Clinical Affairs

Christine Harper, MS
Assistant Dean for Admissions and Student Affairs

CHAIRS

Larry L. Cunningham, DDS, MD
Oral Health Science

Robert Kovarik, DMD, MS
Oral Health Practice

COLLEGE OF HEALTH SCIENCES

ADMINISTRATION

Scott Lephart, PhD
Dean

Sharon R. Stewart, EdD
Associate Dean for Academic Affairs

Charlotte Peterson, PhD
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Philanthropy fuels innovation and patient-centered care

Philanthropy has played an important role in the growth and evolution of UK HealthCare. Our own caregivers, the community and corporate citizens are making important investments to advance our vision of continuous improvement and patient-centered care.

Caregivers

The culture of philanthropy at UK HealthCare starts from the inside and radiates throughout the community. UK HealthCare physicians and staff have led by example, contributing millions of dollars to fund research, endowed chairs and professorships, facilities, art and music.

Last year, the Zwischenberger Rounsavall Fund was created from the vision of surgery chair Jay Zwischenberger, MD. The fund is meant to encourage young trainees and faculty members to explore innovations that advance the discipline of surgery, improve patient care, and attract the very best and brightest surgeons to the University of Kentucky.

This vision quickly became a family affair as Dr. Zwischenberger's sister Cindy Rounsavall developed life-threatening viral myocarditis with severe congestive heart failure. After a remarkable recovery thanks to UK HealthCare's expert cardiac management, Cindy and her husband Hunt helped initiate the fund. Siblings and their spouses Mark and Donna Zwischenberger and Dana Zwischenberger Anderson and Sidney Anderson joined in as donors to make it, truly, a family initiative.

Each year, proceeds from the endowment will be competitively awarded by a committee of academic leaders to the most promising proposals.



Zwischenberger family pictured left to right: Jay and Shelia Zwischenberger, Cindy and Hunt Rounsavall, Donna and Mark Zwischenberger, and Dana Zwischenberger Anderson and Sidney Anderson.

Connect and contribute

Contact UK HealthCare's philanthropy office at 859-323-6415 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.

Community

The UK football team's motto of "all in" expanded into the philanthropic efforts of Kentucky Children's Hospital. Coach Mark Stoops hosts the annual Coaches for the Kids event each summer to raise funds to support the children's hospital. This event has generated nearly \$400,000 to help renovate and improve the acute care floor of the hospital and develop the Hall of Champions, a main corridor featuring local champions that will entertain and inspire children and their families during their visit.

The Lexington community has demonstrated over and over again its commitment to making sure Kentucky's children receive the best care possible in the Commonwealth by hosting special events that financially impact Kentucky Children's Hospital.

Acoustic Jam, a concert featuring country music stars and hosted by iHeart Radio Lexington - 98.1 The Bull, has contributed more than \$200,000



The iHeart Radio Lexington - 98.1 The Bull Acoustic Jam provides Kentucky Children's Hospital patients a fun-filled evening of country concerts and meeting celebrities like Hunter Hayes (pictured) while also raising funds to benefit the hospital.

in two years and has provided patients with opportunities to meet some of their favorite celebrities. A golf tournament hosted by Eddie and John Michael Montgomery, last year, raised more than \$30,000 for the children.

Events and community initiatives have raised more than \$10 million over the last five years to renovate Kentucky Children's Hospital and improve the environment of care for Kentucky's children.



Beautiful equine artwork and a welcoming environment await patients and visitors of the Cardiovascular Services floor thanks to generous gifts from Keeneland and Maker's Mark.

Corporations

The opening of the eighth floor of UK Albert B. Chandler Hospital in December 2014 – a Cardiovascular Services floor dedicated to providing care for patients who have the most complex heart conditions – showcased Kentucky's own "triple crown" of horses, bourbon and world-class health care. Keeneland and Maker's Mark generously provided naming gifts for the floor's two comfortable waiting areas that feature equine art and a relaxed, welcoming environment for visitors.

Generous gifts from corporations and business leaders in the community have helped create a warm and supportive environment of care through areas and art installations in our new patient care pavilion such as the Don and Cathy Jacobs Health Education Center, the Don and Mira Ball Surgery Waiting Area, the James F. Hardyman Family Foundation "Ginkgo" sculpture, the Myra Leigh Tobin Chapel and the Kincaid/Central Bank Celebrate Kentucky Wall.

UK Arts in HealthCare Music Therapy



- ▶ Markey patient Sarah Lister sings and plays along with music therapist Jennifer Peyton, MM, MT-BC, in a session that can last anywhere from 30 minutes to an hour.

“I’ve always been very passionate about music,” said Sarah. “Most of us have turned to music to work out a problem at some time in our lives....This gives you permission to feel. A song can immediately take you somewhere.”

Sarah was hospitalized within hours of receiving a leukemia diagnosis. On that first day, it only took three notes out of Jennifer’s guitar for Sarah and those with her in the room to release their pent-up feelings in the form of tears. She said it helped her understand her feelings and realize just how much she had been holding in.

For Jennifer, the transformation in a patient is gratifying. “We’re singing Natalie Merchant,” said Jennifer. “Sarah’s toes are tapping. I’m thinking, this is awesome!”



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