

# HealthKentucky<sup>2016</sup>

A Report on Medical Research, Innovation, Life Sciences, Facilities and Healthcare Providers



A Special Advertising Report Published by

The Lane Report<sup>®</sup>

PRST STD  
U.S. POSTAGE  
**PAID**  
Permit #327  
Lebanon Junction  
KY 40150

201 E. Main St. Ste. 1402, Lexington KY 40507  
ELECTRONIC SERVICE REQUESTED



We know HealthCare IT  
because we know HealthCare.

**integrity**  
www.integrityky.com

3080 Harrodsburg Rd. Suite 104, Lexington, KY 40503  
Contact us for a Free consult **859-253-4284**

- Experienced Multi-disciplinary Clinical Team
- HIPAA Compliance Roadmap
- Custom HL7 Interfaces
- PHI Security Program
- EMR Neutral



# HealthKentucky<sup>2016</sup>

A Report on Medical Research, Innovation, Life Sciences, Facilities and Healthcare Providers

## CONTENTS

### Health Care Updates

- 2** University of Louisville Health Sciences
- 6** KentuckyOne Health
- 8** LifePoint Health

### Wellness Updates

- 12** Superfoods
- 14** Hospice Penetration Rate
- 16** Tobacco Residue's Effects on Children
- 17** Company Wellness Program



Dick Kelly

### From The Publisher

*Health Kentucky* is an annual statewide publication that presents an overview of key elements the commonwealth's healthcare sector, with a focus on important research, technology and innovation in the life sciences, and the economic impact of medical services on Kentucky. It focuses on major healthcare realignment and strategic

alliances designed to provide enhanced service to a larger number of patients. Included are reports about medical services providers, hospitals, telehealth, the regionalization of services and commercialization initiatives.

With increased focus on wellness, especially for today's executives, *Health Kentucky* includes a series of features on stress reduction, the value of regular exercise, weight control, diet and even "superfoods" with anti-aging properties.

The increasing priority on population healthcare is rapidly changing the scope and quality of medical services in the state, and providing a higher quality of life for all Kentuckians.

– Dick Kelly

## HealthKentucky<sup>2016</sup>

A Report on Medical Research, Innovation, Life Sciences, Facilities and Healthcare Providers

The Lane Report's Health Kentucky 2016 is a special advertising publication published by Lane Communications Group. Health Kentucky is also published digitally at [lanereport.com](http://lanereport.com).

Publisher  
Executive Editor  
Associate Editor  
Digital Editor  
Associate Publisher

Dick Kelly  
Mark Green  
Karen Baird  
Jonathan Miller  
Donna Hodsdon  
Melissa McGarry  
Jessica Merriman  
Paul Blodgett/PJB Marketing  
Nicole Conyers  
Josiah White  
Publishers Press Inc.

Creative Director  
Design  
Business Director  
Circulation  
Printing and Pre-Press

©2016 Lane Communications Group

No part of this magazine may be reprinted without the permission of the publisher. Colleges, universities, state agencies and other advertisers are responsible for the accuracy of their content.

(859) 244-3500  
201 East Main Street, Lexington, Kentucky 40507

The Lane Report®

# UofL Making Kentucky Healthier

The University of Louisville strives to improve the lives of the people of Kentucky. Through research, education and clinical care, UofL improves the health of communities across the Commonwealth. Our faculty, staff and students work ceaselessly to seek answers to some of our most difficult health challenges. At the same time, UofL educates the next generation of health care workers to achieve better outcomes, such as improved experiences and vitality for new mothers and their infants, for the youngest heart patients and for dental patients.

## Delivering Robust Maternal Services

**“If I don’t know my options, I don’t have any.”**

Author-journalist Diana Korte on childbirth

**Luckily, women expecting a child or getting ready to deliver a baby have many options** through the University of Louisville Center for Women & Infants (CWI). The health care providers at CWI offer the most comprehensive set of options in the region.

“We want all women to understand everything available to them as they prepare for delivering their baby,” said Dr. Sean Francis, chair of the department of Obstetrics, Gynecology and Women’s Services at the University of Louisville. “In the past 18 months, we have added a number of services and options that women find enhances their experience of delivering their babies.”

### Tub Labor

An inflatable tub is brought into the patient’s room and filled with warm water. The mom-to-be can sit or kneel in any position

in the tub to help alleviate pain during labor. The natural buoyancy of the water helps support the mom-to-be, while the warmth soothes and comforts her. Warm water immersion can diminish pain and expedite labor. It can ease tension, lower blood pressure and enhance relaxation during and between contractions. In addition, use of a larger tub increases mobility so that a woman

may change position to aid the progress of labor as she becomes tired. When it is time for baby to be born, the mom leaves the tub; this is not a water birth, but use of warm water during labor to help alleviate pain.

### Use of Nitrous Oxide Gas During Labor

The mom-to-be may opt to self-administer nitrous oxide gas during labor to alleviate pain. According to the Journal of Midwifery & Women’s Health, “Nitrous oxide labor analgesia is safe for the mother, fetus and neonate and can be made safe for caregivers. It is simple to administer, does not interfere with the release and function of endogenous oxytocin, and has no adverse effects on the normal physiology and progress of labor.” Nitrous oxide does not affect infant alertness during the early bonding period between a mother and her newborn. Women who use nitrous oxide during labor may still be aware of labor pain, but many women find it helps them relax and decreases perception of labor pain. Because it is self-administered, not only can a woman decide how much nitrous oxide to use, but she can also decide if she wants to stop using it and try another method of pain relief.



A range of services including having access to a Certified Nurse Midwife, family-centered Cesarean Sections, Tub Labor and nitrous oxide during delivery are just some of the services that make the UofL Center for Women & Infants one of the most comprehensive centers for women’s health in the region.



## Family-centered Cesarean Section

While still ensuring a sterile environment, the family-centered c-section helps families achieve a gentle, family-centered birth experience. A clear drape is attached to the opaque (blue) drape that is placed over the mom during cesarean delivery. When it is time for the baby to be brought into the world, the opaque drape is peeled away, leaving the clear drape in place. Mother and family are able to view the

born — dressed only in a diaper and hat — rests and recovers from birth on the mother's chest, skin to skin, so that he or she can smell mom's scent, hear her heartbeat and voice and be safe and warm. Fathers or the significant other are also encouraged to “Kangaroo” their newborn after the first four hours of life.

Kangaroo Care stresses physical contact to provide a sense of safety for the infant, promote bonding and encourage the natural instinct of breastfeeding. Babies transition better after birth by being close to mother, hearing

midwifery. CNMs provide care for women during pregnancy and the postpartum period. However, they also provide medical care to women from puberty through menopause, encouraging women to become active, knowledgeable participants in their health care. They prescribe medications, treatments, medical devices, therapeutic and diagnostic measures. CNMs practice in hospitals, private practice medical clinics and birthing centers, and they may also attend at-home births. Some work with academic institutions as professors.



The University of Louisville Center for Women & Infants provides mothers-to-be with a variety of delivery options designed to fit the experience each woman hopes to have while delivering.

baby being born and witness its first breath and cry thanks to the large viewing window. The clear-drape cesarean section allows the family to have a more active role in childbirth, even when that birth comes via surgery. Moms who have experienced family-centered c-section say it makes their birthing experience “less like surgery and more like giving birth to my baby.”

## Kangaroo Care

The practice of mother holding baby “skin-to-skin” is called Kangaroo Care because it is similar to how a baby joey is carried by the mother kangaroo. Kangaroo Care is begun immediately after birth, providing infant and mother are stable. During this time, the new-

born's heartbeat and voice, and feeling her touch. Babies stay warmer through the “skin-to-skin” contact, may take the first feeding of mother's milk easier and cry less and sleep more when held skin-to-skin. Babies will not notice pain as much when held skin-to-skin for shots or minor painful procedures. Mothers produce more breast milk when holding babies skin-to-skin, and both mothers and fathers feel more confident caring for their baby if they practice Kangaroo Care. Kangaroo Care also aids in the development of the baby's brain.

## Certified Nurse Midwives

A certified nurse midwife (CNM) is an advanced practice registered nurse in nurse

midwifery. CNMs give expectant families more choices in the birth experience, empowering women to be even more a part of the decision-making process surrounding their labor and delivery. They build a personal relationship with the mother, so she has a more relaxed and less stressed birthing experience. They encourage a natural birth for mothers with low-risk pregnancies. CNMs can order pain medication if it becomes wanted or needed, and perform episiotomies only if necessary. They help minimize labor pain and stress on the baby. CNMs also consult with general obstetricians or maternal-fetal specialists, so patients can rest assured that the full range of obstetrical services are available.

# Cause for Kentucky Kids to Take Heart

**Little Bonnie Gandee** likes to be the boss. Even her four-year-old brother, Wyatt, does what the two-year-old says. “She’s a ball of energy,” her mother, Anna, said.

But Bonnie wasn’t in command of life right away. She was diagnosed with a congenital heart problem before she was even born. A routine ultrasound for Anna revealed something might be wrong with her baby’s heart, so she was referred to University of Louisville Physicians for a fetal cardiac scan.

“At first it wasn’t real,” Anna said. “We thought they were just being overly cautious.”

With no specialists near her hometown of Pedro, Ohio, she drove to UofL Physicians’ pediatric cardiology office in Ashland, KY, where a telemedicine conference determined that additional testing and consultation with a fetal cardiology expert was needed.

Anna was then scheduled to see pediatric cardiologist Dr. Brian Holland in Louisville, where he diagnosed Bonnie with complicated congenital heart disease. He told the family she would need several surgeries to try to correct the problem.

“It was at that point we realized this is really happening,” Anna said. “It took my husband a little while to come to terms with it.”

Bonnie’s heart lacked the four chambers a normal, healthy heart has, and hers was essentially functioning with only one of the two main pumping chambers. With the very abnormal chambers in her heart, the blue blood in her heart mixed with the red blood, and the main artery leaving the heart was too narrow to carry the blood to the rest of her body. Soon after birth, she would need immediate and complex bypass surgery, to be followed by two other surgeries later in infancy and young childhood, to correct these abnormalities.



Bonnie Gandee is one of many children throughout Kentucky who have had their heart conditions repaired by University of Louisville Physicians.

“It was a serious condition. It’s not the same as being born with one of the simpler and more common heart problems,” said Dr. Brad Keller of UofL Physicians, who is Bonnie’s regular pediatric cardiologist.

To help her better understand Bonnie’s condition, Anna said Dr. Holland made sketches for her. “It was a lot to take in, a lot to handle,” she said. “They can tell you everything is going to be fine, but it’s still scary.”

Bonnie was born at Norton Hospital in Louisville and taken across the street to Kosair Children’s Hospital\*, where she was under the watchful eye of pediatric specialists and nurses in the neonatal intensive care unit. At just two

weeks old, she was scheduled for the first of her three surgeries with UofL Physicians cardiothoracic surgeon Dr. Erle Austin at the Kosair Children’s Hospital Heart Center.

The Heart Center at Kosair Children’s Hospital, working with specialists from UofL Physicians, offers a full range of services for congenital heart defects as well as acquired heart disease, including everything from fetal cardiology to pediatric cardiac catheterization, electrophysiology and open heart surgery, including transplant. It is the only pediatric heart failure and transplant program serving Kentucky and Southern Indiana.

Bonnie’s first surgery was a big one, ensuring she would be stable and healthy enough to undergo other surgeries as she got a bit older.

“When they put the IV in, when it was time to take her back to surgery, that was the worst part,” Anna said. “It was harder than seeing your newborn afterward with all the tubes and medicine and IVs.”

And with more surgeries needed, it wasn’t over for Bonnie or her family.

“At night was my worst fears, afraid that I wouldn’t hear her breathing,” Anna said. “There were a lot of long and restless nights.”

At age six months, Bonnie had a second surgery at the Heart Center to again redirect the blood flow in her body to prepare her heart and lungs for the third and (hopefully) final surgery. When she was almost two, she had the third surgery, which finally allowed the red and blue blood in the body to stay in separate paths and not mix. The surgeries were a success.

“In the 1980s, the chance of survival for a child such as Bonnie would have been 20 to

*\*As of Nov. 10, 2016, the hospital will be named Norton Children’s Hospital.*



30 percent,” said Dr. Keller. “Now, because of evolvments in technique, anesthesia and other factors, these types of surgeries can be up to 95 percent successful. We have a whole new group of patients that never survived before.”

Not only did she survive, she is doing “extremely well,” said Dr. Keller.

Bonnie now takes only baby aspirin for her heart and is able to enjoy normal activities like other children. “Though she might get tired faster, overall children like Bonnie are typically very active,” Dr. Keller said.

That’s great news for Bonnie, who lives on a horse farm, where her mother races barrel hors-

es and she wants to play T-ball like her brother.

“While her long-term prognosis is unknown, we have many children who have had this kind of procedure who are very healthy into their 20s, 30s and 40s,” Dr. Keller said. “Sometimes something else will need to be done if the heart begins to fail, but Bonnie is doing great.”

Bonnie was the second child in Ashland to be diagnosed with congenital heart disease before she was born. While Anna could have gone to a congenital heart program in Ohio for treatment, she said the Ashland office was convenient and “we liked Dr. Holland. We liked Louisville, and we liked Kosair Children’s

Hospital and Norton Hospital, as we could be at same hospital with her when she was born.”

“Everyone at the hospital was amazing, especially the NICU nurses - they did everything they could for us,” she said.

Now that Bonnie’s surgeries are complete, she only has to go back and see Dr. Keller every six months.

“Living in Ohio, it’s great that we can see him in Ashland, which is just 25 minutes away. There is not really anything around here,” Anna said. “It’s less stress on the family.”

And for Bonnie, “She’s something else. She gives the nurses a run for their money.”

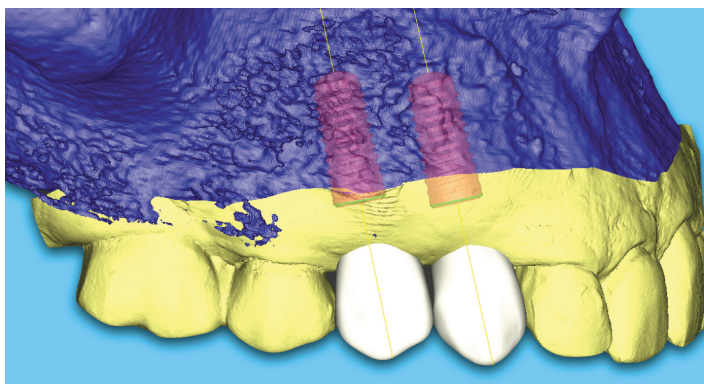
# Easier, More Comfortable Dental Implants

**Dental implants can be completed with fewer office visits and less recovery time for patients,** thanks to a protocol

developed by faculty members, residents and implant fellows at the University of Louisville School of Dentistry. In an article recently published online by the Journal of Prosthetic Dentistry, members of the Department of Oral Health and Rehabilitation describe a case in which they used a fully digital approach to computer-guided surgery and immediate placement of temporary restoration teeth in the school’s patient clinic.

The traditional process for dental implants requires numerous office visits with a restorative dentist (prosthodontist) and dental surgeon for oral impressions and surgical preparation, with weeks between treatment visits to allow healing time. By using a digital workflow, the clinician can typically obtain all the information needed to plan the surgery in a single visit. Then, using software to plan the surgery and generate virtual and 3D-printed models, implants can be placed with temporary restoration teeth in a single surgical visit.

“This protocol skips a lot of steps and makes it more efficient,” said Bryan T. Harris,



University of Louisville School of Dentistry faculty are using three-dimensional printing to better plan the complex process of dental implant surgery.

DMD, associate professor of prosthodontics at UofL and a coauthor on the publication. “The patient benefits from reduced chair time, minimal surgical exposure, more efficient appointments and more predictable results.”

In the case described in the article, the group used a completely digital workflow to replace two teeth for a woman at the UofL School of Dentistry’s patient clinic. First, the clinicians obtained digital information for the patient’s teeth, jaw and gums with intraoral digital scanning, replacing traditional impressions. They then input the patient’s information into planning-and-design software to prepare for the surgery. Computer-aided design and computer numerical controlled (CNC) milling were

used to design and manufacture the temporary restoration teeth. Next, computer-aided design and 3D printing technology were used to create models and an implant placement template for the dental surgeon to use during the surgery. The template allowed the surgeon to place the implants without opening flaps in the gums, providing less disruption of tissue and faster recovery time.

“The software can provide a template to guide the surgeon in placing the implant, so you save a lot of time during the surgery,” said Wei-Shao Lin, DDS, associate professor of prosthodontics at UofL and a publication coauthor. “The dentists can plan everything ahead of time instead of making decisions on the spot.”

Postgraduate students in advanced specialty certificate programs at the UofL School of Dentistry provide patient services utilizing digital workflow and other developing techniques, overseen by faculty members, in the school’s specialty clinics.

“We are setting the trends and developing the protocols ahead of the curve to allow our dental students and postgraduate students to be trained in the latest dental technology,” Harris said.

# Providing Leading-edge Cardiovascular Care

PROVIDING COMPREHENSIVE AND HIGH-QUALITY HEART AND VASCULAR CARE IS ONE OF THE MAIN PILLARS OF BEING A CARDIOVASCULAR LEADER.

**HOWEVER, THERE ARE OTHER** components of KentuckyOne Health Heart and Vascular Care that make it the critical statewide resource it is today. Research, community outreach and support of advocacy organizations are all important aspects of our mission to be the state's leader in cardiovascular care.

## Innovative Care

KentuckyOne provides patients with a full spectrum of cardiovascular care, with treatments for common problems as well as complex cardiovascular conditions. Our surgeons, nursing staff and other health care professionals utilize the latest diagnostic and therapeutic techniques to treat any type of patient with any type of condition.

Whether you're in need of heart attack care; heart rhythm care for cardiac arrhythmia; transplant (Louisville only) or mechanical device care for advanced heart failure; minimally invasive treatment for a disease like aortic stenosis or mitral regurgitation; vascular care for an aneurysm or artery disease; cardiac rehabilitation at one of our Healthy Lifestyle Centers; or some other type of heart and vascular service, KentuckyOne Health is the place to go.

"Having access to the best equipment and newest treatments is only part of the equation," said **Nezar Falluji**, MD, MPH, interventional cardiologist with KentuckyOne Health Cardiology Associates and director of cardiovascular services for the KentuckyOne Health Lexington market at Saint Joseph Hospital. "The teamwork and collaboration between cardiologists, cardiovascular surgeons, anesthesiologists, nurses and other staff and physicians is what sets us apart."



## Groundbreaking Research



Mark Slaughter, MD

Through a partnership with the University of Louisville and its physicians, KentuckyOne Health, and specifically Jewish Hospital and University of Louisville Hospital, is the site

for groundbreaking research across many disciplines. Jewish Hospital is the primary site in Louisville for cardiovascular research.

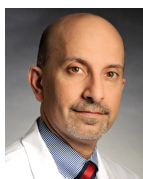
"The University of Louisville offers access to academic research and innovation that may be effectively applied in clinical settings," said **Mark Slaughter**, MD, professor and chair of the Department of Cardiovascular and Thoracic Surgery at the University of Louisville and executive director of cardiovascular services for the KentuckyOne Health Louisville market. "Through this research component, Jewish Hospital, the University of Louisville and KentuckyOne Health are leading the way in developing next-generation cardiovascular therapies."



Roberto Bolli, MD

**Roberto Bolli**, MD, chief of the Division of Cardiovascular Medicine at the University of Louisville, is a renowned researcher whose stem cell therapy work has garnered worldwide attention.

Dr. Bolli has become a world leader in using patients' own stem cells, growing them in tissue culture and then infusing them back into the injured heart, as a way to repopulate the heart with cardiac cells that will grow and heal. He is doing truly leading-edge cardiac stem cell work right here in Kentucky.



Nezar Falluji, MD, MPH, FACC

**"KentuckyOne Health has a longstanding tradition of delivering the highest quality of cardiac care. Our integrated network ensures that patients have access to the services they need when they need them, which reflects our mission to improve the health and welfare of the populations in our community."**

— **NEZAR FALLUJI, MD, MPH, FACC**



# Staying Healthy, In Vein

**KEEPING YOUR BLOOD FLOWING PROPERLY  
IS CRUCIAL TO GOOD HEALTH.**



**YOUR VASCULAR SYSTEM** carries blood to and from the heart. Vascular disease can take many different forms. It ranges from diseases of the veins, arteries and lymph vessels to blood disorders. Poor vascular health can cause arteries to become thick and stiff — a condition known as atherosclerosis — create blood clots that can block blood flow to the heart or brain and weaken blood vessels to the point of bursting.



Stephen  
Self, MD

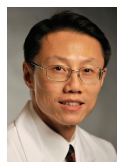
“Many of the vascular diseases are silent and often go unnoticed until they eventually lead to major problems,” said **Stephen Self**, MD, vascular surgeon at KentuckyOne Health Vascular Surgery Associates. “It’s crucial that people are aware of the risk factors and become proactive about their health.”

## Knowing the Risk Factors

Despite the sly nature of many vascular diseases, there are some controllable and uncontrollable risk factors you should know about, including:

- Age — People 50 and older are at greatest risk.
- Smoking — Smoke inhalation increases vascular damage.
- Lack of exercise — Contributes to fat storage, muscle loss and low energy.
- Obesity — A common sign of poor vascular health
- Unhealthy diet — Poor diets can increase bad cholesterol levels and high blood pressure.
- Genetics — Your family medical history can help define your risk.

## Protecting Yourself



Steve Lin, MD

“I recommend people with increased risk of vascular disease, such as those who smoke or have high blood pressure or high cholesterol, and anyone over the age of 50, get vascular screenings,” said **Steve Lin**, MD, who specializes in vein care at KentuckyOne Health Cardiology Associates. “They are completely painless, inexpensive and can ultimately save your life.”

**To talk with a vascular expert, call KentuckyOne Health Vascular Surgical Associates in Louisville at 844.871.7125. To schedule a diagnostic vascular screening in the Louisville area, call 844.871.7126. To reach a specialist in the Lexington area, call 859.276.4429. Find a list of our screening locations at [KentuckyOneHealth.org/VascularScreenings](http://KentuckyOneHealth.org/VascularScreenings).**

**To speak with someone at KentuckyOne Health Vein Care Associates, call 844.871.7130.**

# Making Communities Healthier in Kentucky



**LifePoint Health is proud to provide quality healthcare close to home in 10 communities in Kentucky.** Through our affiliate facilities and providers, we contribute significantly to the economic success of our communities.

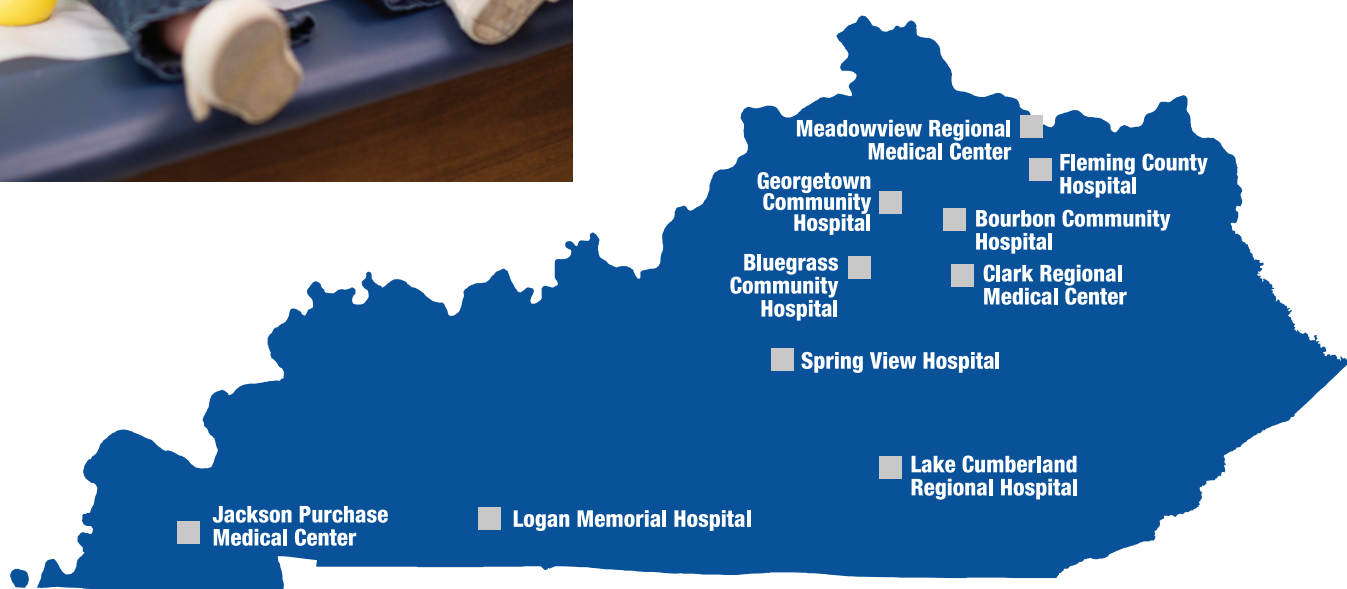
Since 1999, LifePoint Health has been committed to providing the best possible care to communities across the United States. We address vital, comprehensive needs across the continuum of care through hospitals, regional health systems, physician practices, post-acute services, outpatient services, and wellness and prevention programs.

## LifePoint's Kentucky Hospitals by the Numbers

**Approximate number of employees: 4,200+**

**Annual payroll: \$252.9 million+**

**Facility investment: \$29.1 million+**







LifePoint Health is committed to strengthening and enhancing the services that will benefit and improve the communities we serve. We make capital investments in state-of-the-art technology, facility improvements and talented staff to give our hospitals, physician practices, post-acute facilities and outpatient centers the resources they need to help make their communities healthier.

Local community involvement is at the center of our philosophy of care. LifePoint's facilities are among the largest employers, local taxpayers and centerpieces for business development. Each LifePoint facility and provider is dedicated first and foremost to serving the healthcare needs of its community.

## About LifePoint Health

- Founded in **1999**
- Focuses on **non-urban communities**
- Owns and operates **70+** hospital campuses in **20+ states**
- Relationships with **7,600+** physicians
- **46,000+** employees

# LIFEPOINT HEALTH®

**LifePointHealth.net** • 330 Seven Springs Way • Brentwood, TN 37027







SPECIALISTS IN EVERYTHING FROM

# prevention to pilates.

When you come to Norton Cancer Institute, you'll get more than a doctor. You'll get a team. A united team of the region's top cancer physicians, researchers and alternative therapists. So whether you need a specialist in chemotherapy or art therapy, a clinical trial or nutritional counseling, we've got you covered. And we have dedicated patient navigators ready to guide you, one-on-one, every step of the way.

To learn more about our holistic approach to cancer care, call (502) 629-HOPE or visit [NortonCancerInstitute.com](http://NortonCancerInstitute.com).



**NORTON**  
CANCER INSTITUTE

Caring for the body. And the person within.



# Add Super Health Powers to Your Life with Superfoods

By Denise Bradford

Achieving greater energy, vitality, physical strength, mental clarity and the avoidance of chronic disease starts with incorporating 'Super-foods' into the daily diet. So what are 'Super-foods' and how are they important allies in helping us achieve greater health and wellness?

## What are Super-foods?

Super-foods are quality foods that are denser in nutrition and have a greater bio-availability of that nutrition to our bodies. Most but not all, are plant-based foods, tonics, algae and extracts chosen to enhance energy levels and encourage greater states of health and well-being. Many of them contain unique and highly concentrated substances not present in everyday foods that we typically consume.

These include elements such as:

- Polysaccharides
- Chlorophyll
- Minerals
- Omega-3s
- Enzymes
- B vitamins
- Adaptogenic constituents
- Triterpenoids
- B-glucans
- Anthraquinones
- Isothiocyanates
- Phycocyanin
- MSM and algin

These and many more constituents go to make Super-foods full of the magical components that nourish the body in condensed doses on deep levels.

## Do you mean 'organic'?

### Aren't organic foods more expensive?

Super-foods may or may not be organic in origin, but do note that organic is always better than non-organic for the simple reason there is less chance of pesticides and other chemicals. When it comes to cost, it is worth considering that we either 'pay now, or pay later' when it comes to good nutrition. As we age we either spend more on quality food or prescriptions



drugs that bring with them a host of complications and side-effects.

If organic isn't available, it is still better to consume a non-organic but reliably clean super-food than not eat that food at all. Some foods are safer to eat non-organic than others due to the way in which they are grown and harvested. Some fruit for example is heavily sprayed with chemicals to prevent pests and mold, then when it is dried the chemicals are concentrated too. Blueberries and cranberries are not heavily treated crops. But strawberries and grapes (thus raisins) are more likely to be exposed to pesticides, so when possible those ought to be bought organically.

## Wouldn't it be better to eat what I liked and just take supplements?

While supplements have their uses, especially in times of increased stress on the body, it is far better to make natural foods part of our daily lifestyle rather than depending on pills and capsules. Many foods provide multiple benefits to our body, so a wide variety of them will greatly enhance our overall health.

People were educated about food in a simplistic manner by the "food pyramid." In fact, we can eat according to the food pyramid and still be below optimal levels of health nutrition. We need high quality foods from a broad variety in our diets.

If you take supplements consider teas or infusions rather than pills. Many of the more exotic ones come

in powdered form and can be added to smoothies or other recipes. In general, the closer it is to looking and acting like food, the better your body will respond to it like a food.

Take for example a handful of nuts. What better source of natural supplement do you really need? Walnuts, pistachios and other nuts are tasty and ready to eat at any time of the day. Better yet, eating nuts a few times a week can reduce your risk of getting a heart attack by at least 15 percent and possibly 51 percent!

Nutritious whole foods must be at the center of your nutrition plan; you can't rely solely on supplements to do the job!

## Are you promoting veganism or vegetarianism? Should I give up eating animal products?

Not all super-foods are plant based, but the majority are. While shifting to a more plant-based diet has some very definite benefits, not everyone is willing to cut out all meats and animal products. It is still very possible to include the 'super-foods' as a part of your meal regime. In fact, once you start finding out how delicious some of these are, you may find the amounts of 'super-foods' in your diet will naturally increase anyway.

## The term 'super-food' sounds fattening; I don't want to put on more weight!

Super-foods are in no way more fattening than other foods on a weight for weight basis. Many pack a lot of nutrients in a very small space, and that is one of their greatest benefits. Small quantities eaten regularly over a week offer more long-term benefits than large quantities eaten in a short space of time. As you become more familiar with what foods contain greater levels of nutrition, you will start to see combinations that not only taste good but pack a big punch in meeting your long-term nutritional needs.

We need to get as much nutrition from as few calories as possible, and with super-foods this is very easy to achieve.



## Food is food, how can some be better than others?

Not all foods are created equal. Some so called foods that are commonly eaten contain very little nutrients. For example, Sugar provides high calories and no minerals or vitamins. Super-foods are higher in nutrition and can actually change the course of your biochemistry; they help to stop damage at a cellular level that, left unchecked, can develop into disease.

Incorporating super-foods into your diet helps stop incremental changes in your body that can lead to disease and/or dysfunction. The delightful side effect is that you feel better, have more energy, look better, and can embrace all that life has to offer you with greater optimism.

### Question: What health conditions benefit from a change to eating more super-foods?

The foods you choose to eat each day determine whether you develop chronic disease or a vigorous extended life. They can prevent or greatly reduce risk of vision problems, stroke, heart disease, diabetes and a host of killers. More people have become aware that

the best way to treat disorders such as adrenal fatigue, malnourishment, neurotoxicity, auto-immune disease and obesity is with better choices in the foods we eat. Super foods also help to improve adrenal strength, vitamin-mineral uptake, digestive fortitude, libido, immune response, neurological capacity and/or vital organ functioning.

These statements are supported by a wide range of impressive and irrefutable research over the last 20 to 30 years. According to some reports, scientists argue that a minimum of 30 percent of cancers are related to diet and maybe 70 percent.

### Do I have to eat ALL these foods? Some of them I dislike; will I be nutritionally deficient if I don't eat them?

Every food provides something different: Some are a rich source of protein or fiber but void of many vitamins and minerals. Other super-foods contain disease-fighting phytonutrients, vitamins and minerals but no protein. The secret to obtain what we need from our food is consuming a variety in our weekly diet.

And not ALL super-foods are suitable for you and your constitution. Whereas some individuals

can eat foods rich in oils, other individuals, depending on their dosha type, need to eat dryer, less oily foods. Having a greater understanding of your dosha type and the foods to enhance your energy levels is worth pursuing.

There is also the 'personal like and dislike' factor to consider. Looking at the types of super-foods available and the benefits we get from them means we can conveniently choose between them to find those that are good for us and suit our taste buds.

*Denise Bradford is a Wellness Coach student with the International Association of Wellness Professionals; visit [iawpwellnesscoach.com](http://iawpwellnesscoach.com)*

*Wellness professionals, holistic health practitioners, coaches or other health-minded, heart-centered entrepreneurs who want to learn the business and marketing tools to create lasting success can get a FREE Wellness Professional's Success Starter Kit at [iawp-connect.com](http://iawp-connect.com) to jumpstart a wellness practice today. Suzanne Monroe is a Holistic Business Coach and the Founder & CEO of the International Association of Wellness Professionals, where passionate practices become thriving businesses.*



**She's one reason  
Passport is the  
top-ranked  
Medicaid MCO  
in Kentucky.**

## We can give you 23,483\* more.

Passport Health Plan is the only provider-sponsored, community-based Medicaid plan operating within the commonwealth. So, it's no coincidence that Passport has the highest NCQA (National Committee for Quality Assurance) ranking of any Medicaid MCO in Kentucky.

### Our providers make the difference.

\*Passport's growing network of providers now includes 3,720 primary care physicians, 14,014 specialists, 131 hospitals, and 5,619 other health care providers.

Ratings are compared to NCQA (National Committee for Quality Assurance) national averages and from information submitted by the health plans.



MARK-51677 | APP\_11/16/2015

**PASSPORT**  
HEALTH ★ PLAN 

# Hospice Penetration Rate By County

Admissions = Unduplicated Hospice Admissions Utilizing Data Published In The Three (3) Most Recent Editions Of The *Kentucky Annual Hospice Services Report*.

Deaths = Deaths From All Causes (Excluding Deaths Resulting From Suicide, Homicide, Or Unintentional Injuries) As Reported In The Three (3) Most Recent Editions Of The Kentucky Department For Public Health, *Vital Statistics Report*

County	Admissions			Deaths			HPR*
	2015	2014	2013	2015	2014	2013	

## Area Development District 1 – Purchase

Ballard	21	31	32	90	94	93	28.54%
Calloway	146	132	154	373	385	350	38.55%
Carlisle	13	18	17	74	54	61	23.39%
Fulton	20	29	18	73	90	108	26.20%
Graves	145	164	167	396	414	419	38.20%
Hickman	26	25	14	51	70	58	40.10%
Marshall	134	125	113	372	408	348	33.62%
McCracken	436	400	368	746	730	783	54.98%

## Area Development District 2 – Pennyriple

Caldwell	43	43	41	152	168	158	26.96%
Christian	125	130	122	490	524	568	24.41%
Crittenden	25	16	17	122	112	113	17.66%
Hopkins	150	128	151	602	538	541	25.17%
Livingston	35	26	36	114	118	123	27.78%
Lyon	30	28	40	126	112	115	26.25%
Muhlenberg	121	99	66	369	372	344	28.34%
Todd	43	42	42	108	117	117	37.78%
Trigg	52	43	56	141	142	185	33.38%

## Area Development District 3 – Green River

Daviess	576	565	469	939	972	946	58.01%
Hancock	25	16	20	81	65	82	27.88%
Henderson	156	250	228	494	477	470	41.02%
McLean	20	28	33	102	125	118	22.30%
Ohio	65	57	65	276	254	257	23.57%
Union	56	36	61	156	159	142	33.10%
Webster	42	70	72	166	160	141	35.43%

## Area Development District 4 – Barren River

Allen	32	49	36	209	206	190	18.55%
Barren	177	172	134	457	507	421	35.91%
Butler	26	37	42	116	135	143	25.57%
Edmonson	27	20	16	133	126	118	17.75%
Hart	72	77	69	197	209	189	36.63%
Logan	95	99	57	296	303	276	30.13%
Metcalfe	47	31	27	130	104	118	31.89%
Monroe	24	20	12	154	137	140	13.96%
Simpson	40	51	25	163	189	148	24.02%
Warren	215	395	379	936	827	886	33.78%

County	Admissions			Deaths			HPR*
	2015	2014	2013	2015	2014	2013	

## Area Development District 5 – Lincoln Trail

Breckinridge	65	54	40	230	204	198	26.27%
Grayson	109	91	110	289	276	283	36.56%
Hardin	298	270	266	869	829	786	33.70%
Larue	55	58	53	143	161	151	37.00%
Marion	57	64	50	171	198	179	31.93%
Meade	62	72	64	228	217	185	30.26%
Nelson	152	122	122	368	336	361	38.38%
Washington	38	27	32	134	119	107	26.99%

## Area Development District 6 – Kentuckiana

Bullitt	137	124	145	556	508	501	25.39%
Henry	77	85	58	164	149	160	47.64%
Jefferson	3,441	3,164	2,924	7,127	6,945	6,723	46.55%
Oldham	71	101	109	376	406	322	23.41%
Shelby	95	101	109	312	369	311	30.28%
Spencer	32	36	38	136	129	107	26.85%
Trimble	32	25	24	112	72	86	29.85%

## Area Development District 7 – Northern Kentucky

Boone	422	396	372	787	719	689	54.11%
Campbell	432	484	428	753	779	732	59.05%
Carroll	65	47	29	152	113	98	40.46%
Gallatin	60	63	54	83	97	88	67.69%
Grant	129	92	97	235	211	197	50.64%
Kenton	784	748	755	1,400	1,318	1,312	56.52%
Owen	49	36	42	109	90	115	41.82%
Pendleton	75	59	50	149	141	131	45.59%

## Area Development District 8 – Buffalo Trace

Bracken	41	53	39	89	99	92	47.73%
Fleming	83	87	72	175	165	183	47.24%
Lewis	70	65	51	153	153	136	43.25%
Mason	134	133	129	200	229	216	62.62%
Robertson	34	23	20	35	42	34	75.61%

## Area Development District 9 – Gateway

Bath	51	59	57	126	119	126	44.07%
Menifee	19	20	18	90	73	59	24.27%
Montgomery	74	78	67	276	242	213	29.15%
Morgan	37	48	45	149	135	136	29.47%
Rowan	144	103	87	217	196	207	57.64%



County	Admissions			Deaths			HPR*
	2015	2014	2013	2015	2014	2013	

#### Area Development District 10 – Fivco

Boyd	283	249	291	538	546	583	49.95%
Carter	124	138	136	298	279	266	45.68%
Elliott	34	31	35	55	69	71	53.37%
Greenup	218	214	245	433	430	440	51.26%
Lawrence	65	62	67	171	204	180	35.30%

#### Area Development District 11 – Big Sandy

Floyd	127	124	112	501	416	436	26.62%
Johnson	81	92	104	253	261	273	34.27%
Magoffin	23	31	17	143	156	122	16.96%
Martin	38	37	38	121	109	126	31.84%
Pike	235	278	317	742	754	719	35.67%

#### Area Development District 12 – Kentucky River

Breathitt	51	79	60	171	202	176	33.76%
Knott	39	47	26	176	168	178	22.30%
Lee	20	32	36	72	101	91	31.72%
Leslie	47	51	38	120	145	148	34.86%
Letcher	90	112	99	281	278	301	34.64%
Owsley	18	13	31	75	68	75	26.20%
Perry	251	260	299	378	345	366	72.00%
Wolfe	59	39	66	97	99	87	56.90%

#### Area Development District 13 – Cumberland Valley

Bell	106	97	77	381	337	317	27.46%
Clay	85	91	79	239	218	216	37.53%
Harlan	118	128	139	381	356	448	32.36%
Jackson	44	48	52	150	120	143	33.52%
Knox	96	96	70	365	387	292	25.43%
Laurel	165	171	152	564	503	492	30.91%
Rockcastle	72	62	62	181	190	186	36.28%
Whitley	179	143	157	460	428	454	36.46%

County	Admissions			Deaths			HPR*
	2015	2014	2013	2015	2014	2013	

#### Area Development District 14 – Lake Cumberland

Adair	52	42	43	172	170	177	27.38%
Casey	57	50	61	178	168	167	32.23%
Clinton	33	39	30	144	123	117	25.85%
Cumberland	20	20	15	101	98	98	19.10%
Green	56	34	36	147	113	137	33.68%
McCreary	48	42	60	191	178	184	26.17%
Pulaski	525	504	455	746	771	742	67.05%
Russell	91	76	98	219	211	199	41.35%
Taylor	89	105	82	281	267	250	34.15%
Wayne	82	81	99	212	245	231	37.70%

#### Area Development District 15 – Bluegrass

Anderson	97	79	93	193	196	190	46.97%
Bourbon	73	68	70	199	188	178	37.02%
Boyle	181	161	160	291	303	279	58.45%
Clark	198	205	193	384	388	388	51.58%
Estill	56	69	71	185	186	190	33.76%
Fayette	1,303	1,166	1,408	2,113	2,093	2,006	61.51%
Franklin	251	251	203	503	472	480	49.36%
Garrard	73	69	63	158	166	150	43.95%
Harrison	114	106	115	209	202	216	53.67%
Jessamine	256	290	197	438	437	376	59.82%
Lincoln	92	112	101	293	281	251	35.52%
Madison	374	359	347	692	667	648	53.88%
Mercer	94	94	97	260	233	219	38.82%
Nicholas	44	43	41	96	91	98	45.42%
Powell	74	63	53	157	151	148	43.35%
Scott	171	171	128	350	312	285	49.88%
Woodford	89	93	76	231	207	190	40.63%

**Statewide** 19,490 17,557 16,955 | 42,286 41,328 40,273

\*Hospice Penetration Rate



# Kentucky Initiative a Model for Addressing Environmental Tobacco Residue's Effects on Children

The health of Kentucky does not rank high when compared to other states. Kentucky has the second-highest smoking rates for adults and pregnant women, rising obesity rates and the highest lung cancer rate in the U.S.

However, it is refreshing to discover that the Tobacco Program at the Lexington-Fayette County Health Department has become a national leader for third-hand smoke initiatives.

Providing education about ways to reduce the harmful effects of third-hand smoke has become a focus for Angela Brumley-Shelton, certified tobacco treatment specialist with the Lexington-Fayette County Health Department.

Third-hand smoke is the residue that remains on surfaces in areas where people have smoked. It is sticky and resists normal cleaning, and cannot be removed by air conditioners or fans. Cigarettes contain more than 7,000 harmful chemicals, including formaldehyde, arsenic, benzene and hydrogen cyanide, all of which are known to cause cancer. Many of these harmful chemicals can also be found in third-hand smoke. Exposure increases risk of childhood asthma and aggravates existing asthma and allergies.

Third-hand smoke clings to the clothes, skin and hair of a caregiver who smokes. It is particularly dangerous for infants because they are held close and then put their hands in their mouths after touching contaminated surfaces. Brumley-Shelton and her colleagues chose to focus on child care centers because if caregivers smoke, children are exposed to third-hand smoke throughout the day.

Brumley-Shelton's first encounters with third-hand smoke was not only in scientific literature, but at her son's child care center.



"When I picked up my son, he smelled like smoke," she said. "Smoking wasn't allowed in the day care, but teachers went to a picnic table behind the building to smoke. My son was having frequent breathing issues, sore throats and ear infections – I finally connected the dots."

**Third-hand smoke is the residue that remains on surfaces in areas where people have smoked. It is sticky and resists normal cleaning, and cannot be removed by air conditioners or fans.**

The innovative program she now leads is funded by state grants from the Kentucky Department for Public Health Tobacco Prevention and Cessation Program with a goal of increasing awareness of third-hand smoke and encouraging parents to seek 100 percent smoke-free child care.

The grant funds cessation classes and nicotine replacement therapy for staff from child care centers that become 100 percent smoke-free. Smoke-free centers have policies stating no smoking is allowed on center property, and employees may not leave the property or go to vehicles during breaks to smoke. All of these regulations must also apply to e-cigarettes.

The health department is providing 100 percent smoke-free signage to child care centers who have changed their policies. They are also creating an online list of these 100

percent smoke-free centers so parents and grandparents can be informed on choosing safer environments.

The "gold standard" for reducing third-hand smoke in child care policy is to include regulations that employees may not come to work smelling of smoke. However, the team from Lexington-Fayette County Health Department found that very few centers were 100 percent smoke free. They decided increasing the number of smoke-free centers was a better starting goal for the project.

Brumley-Shelton and her colleagues from the health department have presented their findings and experiences at local and national conferences. She explained that the more research about third-hand smoke is being done, but California and Maine are the only two states other than Kentucky that have attempted to address how it affects the health of children in child care.

Child care centers, parents, health department representatives and health care providers interested in more information may contact Angela Brumley-Shelton at (859) 288-2457 or visit [lexingtonhealth-department.org](http://lexingtonhealth-department.org)



# Company Wellness Program ROI is \$4-5 Per Dollar Spent

Company Wellness programs are a long-term investment. But how long should you wait for results? Plan on at least two years for the return to start becoming apparent and three or more for the serious savings, which experience shows will be \$4-5 per buck invested.

Finance departments and the CEO want hard numbers to show return on investment ROI, and wellness ROI is tougher to calculate than, say, a 401(k).

## ROI: 18-month guideline

Recent studies have established some benchmark data on wellness ROI you can use as a guideline. It's useful whether you already have a company wellness program or are thinking about beginning one.

It generally takes at least 18 months from the launch to see any leads to your healthcare plan bottom line. For a lot of firms, 18 months is the point at which workers' bettering health begins to cancel out the cost of sponsoring and administering the company wellness program.

Long-term cost savings will be driven by how much you're willing to spend. Generally, businesses get what they pay for – in time and money invested.

As a rule of thumb, the average cost to the business is about \$3 to \$5 per participating staff member per month. Within three years of launch, you ought to be seeing meaningful savings.

The typical ROI tends to be about \$4 to \$5 saved for every dollar spent. So how can you manage the costs in the short-term in order to achieve the long-term savings? And how can you maximize the long-term payoff?

## Budget-neutral programs

For many companies, the most effective way to manage the cost in the start-up phase is to make it a budget-neutral expense – the program neither adds to healthcare costs at the outset, nor reduces them.

For example, you plan to roll out a company wellness program effective Jan. 1, and the program will cost

the company \$5 per staff member. You can roll the \$5 per month cost into the employee's share of their health-care premium. Most employees are used to seeing small increases in their monthly contributions each plan year.

Do make certain you're not hitting folks with a big hike on top of that \$5. Comparably designed wellness programs pay off about the same – meaning staff members purchase in and participate at the same rate – whether they're budget neutral or the company absorbs the cost.

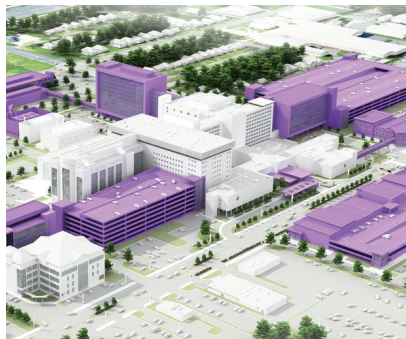
When staff members get clobbered by large contribution hikes at the outset, they often resist the wellness program, and the long-term ROI for these programs is often disappointing.

If you're faced with a situation where achieving a budget-neutral program would cause push-back, your firm is better off absorbing most or all the wellness costs. The largest hurdle is to get over the hump for those first 18 months or so.



TEG ARCHITECTS

Architecture | Planning | Interior Design



 **PRODUCTIVE CARE**  
EFFICIENT DESIGN®

| Innovative Facility Solutions | Exceptional Visualization

Health Care | Commercial | Educational

[www.teg123.com](http://www.teg123.com) | 502.561.8440



Good health begins  
with being well informed.



Turn to KET for health news, in-depth reports and more.

**HEALTH**  
THREE 60

**KENTUCKY**  
**HEALTH**



@HealthKET

[KET.org/health](http://KET.org/health)

**KET**