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Members of the patient-centered medical home team at Truman Medical Center Lakewood, from left, Beth Rosemergey, DO, medical director of the TMC Lakewood Bess Truman Family Medicine Center; Patricia True, scheduling coordinator; Heather Smith, RMA; Susan Bell, LPN; Aaron Neisen, DO, MBA, first-year resident, Community and Family Medicine.
(Photo courtesy Truman Medical Centers)

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“Watch out, you might get what you’re after”

- TALKING HEADS, 2006

Once again, let us take up the subject of burnout. There has been a great deal of talk over the last some years about this, including a piece by your editor. But it’s not going away. It’s getting worse. Some recent publications have focused on intensivists, which is the subject for today. In the most recent Medscape physician lifestyle survey, intensivists scored a 53% burnout rate. This was the highest in the study. Emergency medicine physicians (the former champs!) scored 52%. Overall, physicians scored 46%. The level was 40% only two years ago. In the Medscape survey, burnout was defined as “loss of enthusiasm for work, feelings of cynicism, and low sense of personal accomplishment.” In more descriptive terms, you just don’t give a flip anymore.

Burnout was found to be somewhat age dependent. The peak age range was 46 to 55. Burnout dropped off dramatically above 65. But the important message is this: Burnout symptoms were seen in more than 40% of physicians from 35 to 65. That’s most practicing physicians. Colleagues, if 40% of us just don’t care anymore, we’re in trouble.

Back to intensivists? Besides the U.S. survey, an Australian survey noted very similar findings in 115 intensivists. Some 80% had at least one symptom, with about 40% having all or most of the syndrome. Intensive care medicine shares some characteristics with emergency medicine. Both specialties require shift work, both have frequent (although predictable) night work, and both, apparently, are perceived to be associated with a loss of control over the working environment.

A study from France of critical care physicians and nurses showed a high rate in both. Some 50% of physicians and 33% of nurses showed symptoms. In physicians, burnout was associated with the number of night shifts and time worked since the last vacation. In nurses, it was associated with organizational factors and end-of-life issues. In both, it was associated with the occurrence of conflict situations. It’s not very surprising that a happy workplace reduces burnout. That said, it is very doubtful that “happiness” appears on the list of objectives for critical care administrators. Evidently, it should.

We are moving strongly towards focusing critical care on intensivists, in the expectation that this will improve care. But if we destroy the physicians and nurses giving this care, we will not improve anything. Indeed, we may make things worse. And intensivists are only somewhat worse than physicians in general, 50% versus 40%.

What can we do? How can we make things better for our colleagues, and for ourselves?

There are outside or personal factors which can at least reduce the incidence of burnout. Physicians who do volunteer work were less likely to be burned out than those who do none. Almost any sort of volunteer work seemed to be associated with less burnout. Modest exercise (at least twice a week) was associated with less burnout. Physicians with “adequate” savings, self-reported, were less likely to have burnout symptoms. Attending church services was associated with less burnout. Interestingly, political affiliation (liberal versus conservative) had little effect. So … marriage is good, volunteer work is good, church is good. Getting outside of oneself seems to be a common factor. And financial security is also good. Hardly takes a survey to figure that one out. The advice “take time to take care of yourself” remains sound.

But as good as these things may be, all are simply associations. They do little to get to the causes of the malaise. In the Medscape survey, participants were asked to report things they thought caused burnout. (continued on next page)
BURNOUT (continued)
The top six were “too many bureaucratic tasks,” too much time at work, too little income, increasing computerization (yes, electronic health records), the impact of the Affordable Care Act, and “feeling like just a cog on a wheel.” This last one captures much of the frustration felt by many physicians. It is somewhat disturbing that three or four of these six have been imposed on our profession by outside forces, be they hospital systems or government. Hence, they are outside our control, except as we can influence Congress, Federal bureaucrats, or hospital administrators. As the current saying goes, “Good luck with that.”

Medicine has always been a stressful occupation, and will no doubt remain so. But stress and its effects seem to be getting worse. There are many forces converging to make physicians unhappy with their lot. Is it paranoid if some people are really out to “get” us? More to the point, as the health system is changing, many of the changes are adverse to physicians. These include the increased debt of young physicians, the loss of autonomy, the bureaucratic tasks, electronic health records, and the ceaseless questioning of our judgement. And, of course, the ever-present risk of malpractice suits. Was this intended? Or is it simply a consequence of poor planning and implementation? As sometimes said, “Never attribute to malice that which can be explained by stupidity.” (This is called Hanlon’s Razor, sometimes Heinlein’s Razor, but similar thoughts go back at least to Goethe, and probably further back.) Even if no one was out to “get” physicians, many of the changes were made with little or no physician input, and without considering their effects on physicians.

Truly, we are getting the results to be expected from a badly-designed system. So, in the words of the song above, we have now “got what we’re after.” Neither medicine nor society at large is happy with this. And the term “designed” is definitely a misnomer. Rather, we have something which simply evolved, and been tinkered with for the last 50 years. We may choose to blame “Obamacare,” but the Affordable Care Act introduced nothing new. It simply doubled down on many of the existing flaws of the system. But whether because of the ACA or because of prior factors, the pressure on physicians seems to be increasing. Many of us are frustrated, and burned out.

It shouldn’t be this way. Besides taking care of ourselves as individuals, we need to take care of our profession as well. We need to become more radical, both as individuals and as groups. For example, one cause of stress has been the increasing number of physicians employed by large organizations. But that’s also making it much easier for physicians to change jobs. Frustrated where you are? Get out. You may not have the autonomy of private practice, but you aren’t tied down, either. After all, if you look for a new job, you will look at your present job in a new light. You may find you aren’t so badly treated. Alternatively, you may actually find a better job. But either way, you force your employers to pay a lot more attention to keeping you happy, and productive, and on board.

But our organizations need to be stronger. The biggest criticism I hear about organized medicine is that it “goes along to get along.” (Or is that the other way around?) We often support the status quo, when we should be disrupting it. Our organizations should express our grievances, loudly and often, and try to do something about them. And we should be active not just in our interests. Many patients are ill-served by our health-care system. If we are to be their advocates, we must recognize their grievances. True, organizations must do a certain amount of political log-rolling. Compromise is the way political bodies work. But to compromise, we have to start from a firm position. Too often, our organizations just react, or else fiddle around the edges.

This is the best time to be advocates for ourselves, and for a better health system. Nobody likes Congress. Politicians are neither trusted nor respected. Physicians are more trusted than almost any other group in society. We have a physician, Ben Carson, MD, seriously running for president. (Two, if you count Rand Paul, MD) Does anyone remember the last time that happened? We have the credibility, the public respect, and the standing to clamor for changes. It’s time.

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REFERENCES
Music Therapy with a Side of Midalozam

RESEARCH INDICATES BENEFITS OF MUSIC THERAPY, ESPECIALLY FOR PATIENTS WITH CHRONIC PAIN AND PROGRESSIVELY DISABLING DISEASES

By Ingrid Hsiung, Student, University of Missouri-Kansas City School of Medicine

I signed up for piano lessons at age 5. It seemed prudent. All my friends in kindergarten had begun piano lessons, so I wanted them too. Lessons demanded time, discipline and practice. “Practice makes perfect,” my piano teacher used to say.

Still, even without much practice, I quickly progressed to more advanced pieces. Airy piano melodies soon replaced the dull silence that marked Saturday mornings—a time my parents usually reserved for sorting through the week’s mail. They began requesting songs. My mother was partial to Frederic Chopin’s waltzes. My father’s favorite was Walter C. Stier’s “Sweet Bye and Bye.” After a particularly difficult week at work, he asked me to play it. I tentatively played a few notes of the first stanza. Closing his eyes, he relaxed into the nearby armchair. Music visibly reduced his anxiety. By the end of the song, he smiled, thanking me for the lovely song. That was my first of many experiences with music therapy.

CHANNELING STRESS AND ANXIETY

Over the years, I’ve learned to channel stress and anxiety into piano music. An especially stressful time was preparing for USMLE Step 1 licensing boards. I looked forward to my “study breaks” every night from 7-8 p.m., I’d play the piano keyboard in my apartment. One night, studying ran late. I neglected to play piano during my regularly scheduled break. My next-door-neighbor, another medical student, knocked on my door to ask whether things were okay—my apartment was more quiet than usual. She explained that the walls between our apartments were very thin. Her regular “study break” was also from 7-8 p.m. every night, albeit, to listen to me play piano. She admitted that hearing me play soothed her own boards-related anxiety. And so, I began to contemplate the value of music therapy during medical school.

I started volunteering as a piano player at St. Luke’s Hospice House earlier this year. Hospice care is an option for patients with less than six months to live. It shifts the focus from extending life to preserving quality of life. During my entire time at the Hospice House, I had never seen any hospice patients around the building. Patients mostly stayed in their rooms. One rainy afternoon, I sat down alone at the grand piano and contemplated what to play. There was no visible audience besides the occasional staff member. I settled on Johann Pachelbel’s “Canon in D Major.” Midway through the piece, a patient’s daughter wandered into the room and sat down to listen. As the song came to an end, her eyes were bright with tears. She explained that her mother has Alzheimer’s dementia and spent most of her days in a hazy alternate reality. Yet, hearing Canon brought back memories of her daughter’s wedding day. Sharing this musical experience facilitated mother-daughter bonding during a time when these chances are rare at best. Music therapy provides solace. Sometimes, emotional comfort derived from music surpasses any physical comfort that medicine might provide.

Music therapy is a prime example of complementary and alternative medicine at its best. The American Music Therapy Association claims that music supports wellness and memory while decreasing stress and perception of pain.1 Music therapy programs are gaining popularity. They offer low-cost ways to manage acute and chronic pain.2 Patients with chronic pain and progressively disabling diseases like dementia may particularly benefit from music therapy. Many places employ music therapists, including hospitals, schools, nursing homes and hospice centers. A clinical trial involving terminal cancer patients investigated effects of music therapy on quality of life, among other factors. Hospice Quality of Life Index-Revised (HQOLI-R) quantified patient feedback. Assessments comparing the first and second visits with music therapy revealed major changes in quality of life scores. Subjects receiving music therapy reported significantly higher quality of life correlated with total number of visits over time. In contrast, patients without music therapy noted a worsening quality of life with time.3 Effects of music therapy are congruent with the goals of hospice care. Music can reduce both pain and anxiety.2,4 (continued on next page)
More and more, caregivers are finding that it’s helpful to use music therapy as either a single or adjunctive treatment to medical care.

**STUDIES SUPPORT EFFECTIVENESS OF MUSIC THERAPY**

How effective is music therapy in reducing anxiety? Multiple research studies explore this idea. Anxiety and depression are common in the surgical and intensive care unit (ICU) setting. Subjective anxiety levels are difficult to measure. More convincing evidence comes from assessing vital signs. Changes in vitals may indicate changes in a patient's emotional state. For example, classic signs of a panic attack include sweatiness, flushing, hyperventilation and heart palpitations. Music can reduce these physical manifestations of anxiety. A study on ICU patients requiring mechanical ventilation found, “A single 30-minute music session reduced anxiety and increased relaxation (reduced heart and respiratory rate).” Even small amounts of music therapy can make a big difference. Moreover, pooled studies suggest that music reduces pre-operative anxiety. Efficacy of music intervention in lowering anxiety levels is comparable to efficacy of certain sedatives and anti-anxiety agents. In the case of the sedative midalozam, music therapy is actually more effective in reducing preoperative anxiety levels.

**Efficacy of music intervention in lowering anxiety levels is comparable to efficacy of certain sedatives and anti-anxiety agents.**

Thus, music can serve as non-pharmacologic adjunctive therapy to sedative-hypnotics for helping patients relax. Music therapy is rapidly gaining a place in the evolving world of medicine.

A plethora of anecdotal evidence and increasing number of research studies supports the use of music in the ICU, procedural, preoperative, palliative care and hospice settings. Patients’ family members often report that some of their most precious memories were created through music therapy sessions with loved ones. Survey data and clinical trials measuring vital signs indicate that music can prolong quality of life and aid physiologic relaxation. Hospitals in Kansas City—including Children’s Mercy Hospital and Truman Medical Center—have begun to explore music therapy as an adjunctive treatment.

The biggest step is educating healthcare providers. As medical students, we only learn about pharmacologic and surgical treatment options. Complementary and alternative medicine is rarely taught. The most exposure we receive to physical, speech and occupational therapy is seeing these professionals in the hospital hallways. It’s no wonder that as future physicians, we often doubt the efficacy of alternative treatments like music therapy. Still, I’m grateful for my experiences with it. Through my time volunteering at St. Luke’s Hospice, I’ve learned that music provides a unique and valid therapy option that may go beyond medications into the realm of treating the human soul.

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When asked about the training process a wise surgeon once said, “It’s just like teaching your kid to walk. You pull them up, let them take a few steps, they fall. You hold them up, let them take a few steps, they fall. And pretty soon, you hold them up, then let them take a few steps, and let them go. Some things you have to figure out on your own.”

Although there is some truth to this, training surgeons has become very different and better than it was even when I went through residency and fellowship. The accrediting body for continuing medical education essentially mandates careful documentation of milestones achievements for our trainees. This is not an option. The litmus test of days past is now officially obsolete.

One of the benefits that has come from this scrutiny is the ability to push our trainees to become adept at complex surgical procedures which seem to be invading our specialty more and more. Everything is more risky. Every patient more ill than the previous one. And although we have come across many changes, and will come across many more, one dictum that has not changed is that “you’re only as good as your last case.” Although that’s a harsh reality, it is true and it is something that all surgeons must consider. The buck stops here. As we escalate the wall of teaching, this becomes a task more and more complex and daunting.

It is a part of my life that has brought on much challenge, many second thoughts and some sleepless nights.

But I digress. As luck would have it, I found a niche that has allowed me to combine my drive for minimally invasive surgery and teaching. The rewards have been amazing, sometimes difficult to describe. The look on the trainees’ faces when they first realize that they are actually able to do the work. The look on the patient’s face when they realize that they may not have their chest “cracked open” (I really hate that reference, by the way.)

The list goes on.

Mitral valve surgery has been around for many years. It seemed that for several decades, the modus operandi was to find the diseased portion of the heart valve, cut the heart valve out and replace it with an artificial one. As time progressed, we as surgeons learned that most patients with mitral valve disease were affected by degenerative problems (translation: wear-and-tear.) We learned that most degenerative conditions can be repaired and that this is preferable to a valve replacement because it is less dangerous a procedure, and less maintenance for the patient afterwards. It just so happens that one of the surgeons who pioneered repair of the mitral valve is French. Also, he was thoughtful enough to design an operation which most of us “regular surgeons” could reproduce with good results. That was 1983. I thought: wine, food and mitral valve repair. Dr. Alain Carpentier and I have at least a few things in common. It was a perfect fit from day one. (What you may not know is that I was born and raised in a suburb just outside Paris.) I am a firm believer that your passions find you, not the other way around. And so I embarked on what has become a dominant part of my practice. In 2003, I set out to learn minimally invasive cardiac surgery.

Because robotics was not an integral part of my residency training, I sought further surgical training with the goal of performing robotic mitral valve repair totally endoscopically.

In 2009, we began the robotic mitral valve repair program at The University of Kansas Hospital. It has become a very successful program, and most of the mitral valve repairs are now done completely endoscopically (purists would say thoracoscopically) at our institution. In reviewing our data, it has become very clear that we have decreased our hospital length of stay from 6-7 to 3-4 days, but most importantly to me, we have succeeded in decreasing our patients’ perioperative risk, and have returned them to their families and their normal life much sooner. This, all the while preserving the intricate repair of the mitral valve, which is performed exactly the same way—except for the approach. Although mitral valve regurgitation is (continued on next page)
MINIMALLY INVASIVE (continued) not the most common cardiac condition, we have performed just over 100 repairs robotically since 2009. A look at our data reassured us that for this condition, we have advanced the treatment by reducing the impact of the convalescence from the procedure. Although it took some time, the development of this program is now at a stage where a robotic mitral valve repair feels like a “normal case” to us.

In walks our resident. “Hey Dr. Daon, do you think I could do this case?” Me: “You must be insane. It took me 10 years to learn this and you want me to teach you to do this in three years or less?” That, my friends, is the essence of the difficulty teaching in a progressively more complex cardiac surgery environment. But we must do this.

Otherwise, who will take care of us when we need it? We have to figure a way to teach our trainees complex operations without sacrificing the needs and safety of our patients, all the ways than one, the inexperience of the staff in the medical field is astounding at times. You really do have to cover all the angles. Patient prep, port placement, pericardiotomy, cardiopulmonary bypass machine set up and connections, atriotomy and valve exposure, valve repair and annuloplasty, atrial closure, and postoperative care. There, that sums it up sonny! Slowly, and with careful attention to detail, our very first trainee, who is in his second year (of three), is beginning to learn the intricacies of robotic heart surgery. I am confident that by the completion of his third year of training, he will be competent to perform these complex operations independently. And hopefully, so will all those who follow him. Well that wasn’t so hard! Now the machine is set up and well oiled. We can rest on our laurels, right? Wrong!

What if we could repair the valve without opening the chest at all? Just one little nick in the right groin. Are you serious? Sometimes I wonder if any of my work and calling will be surgical at all by the time I finish my career.

About a year ago, an industry product representative approached us with the concept of carrying out mitral valve repair percutaneously with a specialized device called “Mitraclip” (Abbott Vascular, Abbott Park, Ill.). “No, this is not a new device,” he said. “It’s been around for a while, and it seems that some of the early results look promising.” He continues with what we knew was the centerpiece of the sales pitch, “So what if we could prove to you that the Mitraclip procedure can be performed safely and with low risk of major adverse events at 30 days in high-risk surgical patients with significant degenerative mitral regurgitation and multiple comorbidities? Furthermore, what if we noted significant improvement in mitral regurgi-

![Figure 1. Da Vinci Xi Surgical Robot. (Intuitive Surgical, Sunnyvale, CA)](image-url)
tation grade at one year? And what if we noticed a significant decrease in left ventricular volumes and a significant improvement in New York Heart Association functional quality of life and a decrease in hospitalizations for congestive heart failure?’”

Keep talking! That sounds fantastic and to boot, those are not the patients on whom we would do surgery anyway because they’re too risky! In broad terms, these are the results of the Everest II trial. And in broad terms, what encouraging results! Although I will mention some technical details regarding the repair of the mitral valve using the Mitraclip procedure, you should know that it is not a cure-all. It is at best a temporizing method for reducing mitral regurgitation for some length of time. How long? At least one or two years. It is by no means as effective as surgery at eliminating regurgitation. So, it is reserved for patients who should not have open surgery because of the prohibitive risk of complications.

The device insertion requires a few “items.” General anesthesia, a hybrid catheterization laboratory/operating room outfitted with fluoroscopy, a three dimensional transesophageal echocardiogram machine, a cardiothoracic surgeon, and interventional cardiologist, an echocardiographer and a cardiothoracic anesthesiologist. Oh, and you need the device. We ask the anesthesiologist to induce the patient, prepare the patient as if he or she was about to undergo cardiac surgery. We then puncture the right femoral vein, and with fluoroscopy guidance, perform a trans-septal puncture and locate a guide wire into the left upper pulmonary vein. From there, the atrial septal incision is dilated to allow the passage of the sheath, which will be used as a conduit to deliver the clip device. After the patient is heparinized, the clip is prepared, de-aired and then advanced under echocardiographic guidance into the left atrium.

These days, technology is so advanced that we have the ability to maneuver a device inside a cardiac chamber without opening the heart. We are talking millimeters here! We then direct the device toward the mitral valve orifice, verify its orientation and go for a grasp. This is where the skill of the interventionalist with catheter-based technology, the imaging accuracy of the echocardiographer, and the first-hand visual and tactile knowledge of the mitral valve anatomy of the surgeon come together in synchronous maneuvers to effectively grasp the anterior and posterior leaflet of the mitral valve. All I will say on that subject is that it is easier said than done.

Next, the echocardiographer examines the mitral valve components, such as the amount of residual regurgitation and any inflow restriction. If everyone agrees that this is an acceptable grasp, then the clip is deployed and, at this point, it becomes irretrievable. If, on the other hand, the grasp is deemed suboptimal, the clip can be repositioned at will. If the patient is left with significant mitral valve regurgitation after deployment, additional clips can be deployed so long as the mitral inflow isn’t restricted.

So far, our limited experience at The University of Kansas Hospital with the Mitraclip procedure has been successful. Although our sample size is relatively small, I can attest to the fact that most patients have noticed a significant improvement in their symptoms (continued on next page)
MINIMALLY INVASIVE (continued)
even before they leave the hospital. One more reference to the military: it’s all about the team.

So this is great! But there is one facet of all of this technological amazement that I have not mentioned so far. Cost. And I did so purposefully because this is exactly the way that technology is presented to physicians. I call that the “hook’em and sink’em” plan. Sometimes we still haven’t learned that lesson. Case in point: we now fully take for granted the $3 million machines which we operate every day to complete robotic procedures. Surprising isn’t it? Although most of us embrace advances in technology if they lead to improvement in the care of the patient, no one for a minute believes that our resources are eternal and unlimited.

Somehow, we are still working in a medical world where the costs are “absorbed.” But for how long? And who will do the absorbing in the future?

One of the aspects of our robotic mitral valve repair program which I thought was vital to its sustainability is the cost of performing the procedure. Of course, there are many ways by which such procedures can be completed. But sometimes, one can find creative ways to reduce costs and yet keep quality and results on par. Reusable instruments instead of disposables, standardization of disposable instruments across the operating room, and countless other measures have resulted in a relatively stable and sustainable program.

So as a final point of discussion, I often wonder where that freight train stops. And who gets to decide whether this is too much money? Or who should get this procedure? Even more importantly who should not get this procedure? So many questions, all of them important. Once a device obtains approval from the FDA, it is a free-for-all in some way. Every physician who is trained to use the device can use it if it is available. The only regulatory pressures that appear to directly affect the use of these devices are competition between hospitals (a sort of one-upmanship), and finances.

At this point in time, the difference in cost between a “regular” mitral valve repair and a mitraclip procedure is exponential. Combine that with the potential benefit (lifelong versus end-of-life) when we compare the patient population undergoing each procedure. Have we really done well by society? Have we been good stewards of Hippocrates? Although I’m citing mitral valve disease as an example, it is certainly not the only example. As a matter fact, all of the emerging technologies come with an enormous price tag.

As clinicians, our role more than ever is to recognize each situation as unique, and each patient as special. No one else will do so. That is the way that I would want to be treated as a patient and I’m assuming that it stands true for all of us. To quote Dr. Piehler in one of his last writings before his passing: “[Quality] time is a gift of immeasurable magnitude.” Our mission, should we choose to accept it, is to provide our patients with this precious time (even if it is short) without breaking the bank. We all incur this responsibility.

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LETTER TO THE EDITOR

I just wanted to convey my thanks for the Sept. 22 “Getting 2 Value” seminar which confirmed for me all the reasons why I joined the KCMS. I know that it seems like a bit of hyperbole, but in the brief time that I was there, I did the following:

1. Caught up briefly with Steve Salanski, the President-elect of the Kansas City Medical Society
2. Tony Sun and I had dinner next to each other. We would never have met other than with the medical society, but we seem to chat at least once a month now.
3. Reconnected with KDHE Secretary Susan Mosier who I know well from the American College of Surgeons.
4. Met Sudeep Ross, a primary care physician, who, by chance, we learned is a brother of one of my college and medical school classmates. We have made plans to have dinner in the future.
5. Opportunity to meet Paul Grundy and speak with him at length (we actually closed out the event). We found common connections including both working with Mark Kris (a medical oncologist at Memorial Sloan Kettering), one of the physicians that he referenced in his talk.

Pretty impressive for such a short period of time.

Joshua M.V. Mammen, MD, PhD, FACS
Associate Professor of Surgery and Molecular & Integrative Physiology
Vice-Chair, Division Chief of Oncologic Surgery; Associate Program Director, General Surgery Residency, Department of Surgery
University of Kansas
Change is on the way. With high costs and unsatisfactory outcomes, transformation is needed and is coming in the U.S. health-care system, according to speakers at the Kansas City Medical Society’s “Getting 2 Value” conference on Sept. 22, 2015, at the Intercontinental Hotel. About 85 KCMS members and other interested stakeholders attended.

Headlining the conference were two leaders of the Patient-Centered Primary Care Collaborative (PCPCC), a national consortium of employers, physician associations and others advocating for widespread adoption of the patient-centered medical home (PCMH).

VALUE-BASED PURCHASING

KCMS President Michael O’Dell, MD, opened the program. He is chair of the Department of Community and Family Medicine at Truman Medical Centers and the University of Missouri-Kansas City. The department operates a Patient-Centered Medical Home program.

“Reforms are needed to transition provider reimbursement away from volume and intensity of services and toward quality and value,” he said.

Considering a formula of Value = Quality/Costs, the United States is not doing well compared to other developed nations, Dr. O’Dell commented. He cited data showing the per-capita health-care expenditure as $7,538 in the U.S. in 2008, compared to $2,729 to $5,003 in 14 other countries. Despite the higher U.S. expenditure, the probability of death for men ages 15-60 in Australia and Sweden is much lower than in the U.S., he said.

People want disease prevention and wellness promotion from their physicians, he noted. In over half of U.S. patients, recommended chronic care actions and preventive measures are not being received by the patient, Dr. O’Dell said.

COORDINATION OF CARE NEEDED

Paul Grundy, MD, MPH, FACOEM, FACP, founding president of the PCPCC, and director of global health-care transformation for IBM, described the origins of the PCMH with the (continued on next page)
Further study concluded that the solution needed to be community based, leading IBM to adopt an “advanced primary care” program under the PCMH model. IBM began rolling out its program at pilot sites around the country. Key elements of the PCMH he noted include the use of data and the coordination of care.

“In industry, the expectation is that someone will use the available data,” he said, adding that health care is behind other industries in its use of population data. The PCMH is designed to be a keeper of information and having the ability to act on it, he suggested.

Regarding care coordination, he said, “In the last century, health care was specialized in deep silos with no coordination of care.” He recalled the field of transplant surgery was one of the first to learn the importance of the coordination of care.

Results achieved by the early PCMH pilot that IBM helped drive included, according to Dr. Grundy:

- 36.5% drop in hospital days
- 32.2% drop in emergency room use
- 12.8% increase in chronic medication use
- 15.6% reduction in total costs
- 10.5% drop in inpatient specialty costs

(Results of hundreds of additional PCMH pilots are available from the PCPCC at https://www.pcpcc.org/resources/176.)

Dr. Grundy also noted that recent passage of the Medicare Access and CHIP Reauthorization Act (MACRA) is a step toward value-based care. While the legislation removes the long-disliked sustainable growth rate, it institutes new provisions for value-based compensation. “No longer will we want episodes of care, we will want to manage populations,” he said.

Dr. Grundy discussed trends he has observed in his travels around the world. One is how smartphones are changing health care and can support

~ PARTICIPANT COMMENTS ~

BIGGEST TAKEAWAY FROM THE SEMINAR: Changing compensation models are inescapable. However, there are very useful frameworks being established to make these changes beneficial to both patients and physicians.

BIGGEST CHALLENGE TO PCMH EXPANSION: Fine tuning will be necessary. Just like any new idea, there will be bumps in the road while more practices change to this model. However, as these challenges are identified, they will be worked out to make this a functional idea for all groups. It does take shifting ideas on the part of the physician practice to embrace the changes that come with becoming a PCMH. As a physician in a practice that has already been designated as a PCMH, I can say that I have heard very positive feedback from our patients.

~ CASEY WILLIMANN, MD, INTERNAL MEDICINE AND PEDIATRICS, THE LIBERTY CLINIC
the PCMH, he said. “I was in northern Norway, and most of the patient care was being done via smartphone. We are entering a world where millennials won’t tolerate ‘the doctor will see you now.’ It will be ‘the patient will see you now.’”

Another element of the PCMH is community-wide integration. Innovations he has seen around the world include ambulance crews during idle time going to the homes of the infirmed to provide daily support, or letter carriers making daily calls on the elderly. He called changing the health-care delivery system more complex than launching a rocket to the moon. He concluded, “We need a robust primary care physician at the foundation of any delivery system.”

**TRANSFORMING THE FOCUS OF THE HEALTH SYSTEM**

Our health system needs to focus on keeping people healthy instead of only treating people after they are sick, said Marci Nielsen, PhD, MPH, the CEO of the Patient-Centered Primary Care Collaborative. Previously vice chancellor for public affairs at the University of Kansas School of Medicine, she now works out of Washington, D.C., while also maintaining a home here.

“We need a paradigm shift. Today, most of what we spend is on medical services. Instead, we should spend on what keeps us healthy.”

- Marci Nielsen, PhD, MPH

Some features of the PCMH approach she described include:

(continued on next page)

**BIGGEST TAKEAWAY FROM THE SEMINAR:** Value-based payment reforms are here to stay and Kansas City area providers in general are lagging in their preparedness and practice transformation efforts, although there are some promising pockets of transformation.

**BIGGEST CHALLENGES TO PCM H EXPANSION:** Reimbursement practices and incentives will need to be realigned. Some providers are unwilling to change and are personally and economically invested in other models. As consumer understanding of the PCMH model increases, the demand and expectation of PCMH care will grow. Robust, integrated and interoperable electronic health records will be necessary, along with personnel qualified to manage them. Interdisciplinary medical education and training need to become standard across the country.

~ BRENDA SHARPE, CEO, THE REACH HEALTHCARE FOUNDATION
VALUE-BASED CARE (continued)

• **Person-centered**: supports patients and families in managing decisions and care

• **Coordinated**: care is organized across the “medical neighborhood”

• **Comprehensive**: whole-person care provided by a team

• **Committed to quality and safety**: includes or is connected with resources including a social worker or psychiatrist. In addition, the PCMH practice should be linked with organizations in the community to provide additional supports for patients, families and caregivers.

Nielsen believes the PCMH today is still not well-understood. Some practices attempt to be a PCMH, but don’t have the resources to perform effectively in the role. For example, fewer than 5% of PCMH practices have a patient family advisory council, she said.

She noted that among the building blocks toward PCMH, a sound health IT infrastructure is critical. “Today’s EHRs will not get us there. They are not interoperable and do not provide for population health management.”

Nielsen is working to build support for the PCMH across the country. “The data continue to demonstrate that the PCMH can improve outcomes, improve patient care and reduce health-care costs.”

**THE BLUE KC MEDICAL HOME**

In 2010, Blue Cross Blue Shield of Kansas City piloted a Patient-Centered Medical Home program with just over 10 primary care groups in the Kansas City area. Today the Blue KC Medical Home program includes more than 600 physicians in more than 130 practice locations serving over 170,000 Blue KC members. The program was described by Karen Johnson, consultant to Blue Cross Blue Shield of Kansas City.

The Medical Home program serves as an important foundation to the overall value-based strategy embraced by Blue KC. That requires “re-envisioning our role as a health plan,” Johnson said. “At the heart of the value-based strategy is changing the nature of the plan-provider relationship. The mission of the organization remains the same—to provide affordable access to health care and to improve the health of our members.”

Value-based models include four basic standards, according to Johnson:

- Members are attributed to doctors who are accountable for their care across the full continuum
- Providers are empowered with infor-

**BIGGEST TAKEAWAY FROM THE SEMINAR**:

* Medicine is rapidly evolving and there are lots of pieces to consider in decision making. It also presents incredible opportunities but they can come with real costs in energy and effort.

**BIGGEST CHALLENGE TO PCMH EXPANSION**:

* Payment models that respect the need for patient-physician relationships will enhance the uptake of these approaches. The PCMH is a way to codify what good practices have done for many years. It does provide some guidance for process mapping and improvement that can help a practice focus. It is still important to ask patients what they think makes a patient-centered medical home.

~ Bridgett McCandless, MD, CEO, Health Care Foundation of Greater Kansas City
mation and resources provided by the health plan.
- Ongoing quality and cost measurement is shared with the provider in a constructive, meaningful way to support ongoing performance improvement efforts.
- Doctors are paid in new ways to reward the delivery of high-value services not recognized by traditional fee-for-service arrangements.

This year, Blue KC conducted a “listening tour” with 12 of the practices in its Medical Home program. She said the practices appreciated Blue KC’s efforts to “recognize and improve primary care.” Other positive features are the support given to practices in the form of resources and information, and the partnership with Blue KC.

On the other side, practices expressed concern that there were not more payers financially supporting their efforts to provide patient-centered care. They also were concerned about the impact high-deductible health plans are having on patients’ ability to access the services they need. Another opportunity for change is improving administrative ease such as building practices’ population health management capabilities, she added.

One example of how Blue KC might assist practices in population health management is around the management of chronic conditions. She said, “Can we partner with our Medical Home practices differently by offering the expertise of our disease management nurses?”

She said provider payments should be adjusted to allow for those who care for sicker populations. “Without risk adjustment, it is a real problem. Otherwise providers will fear they will not be paid adequately.”

She described how Blue KC is working to gain greater community acceptance of the patient-centered medical home model and other emerging value-based models, such as Accountable Care Organizations. The health plan has convened a blue-ribbon advisory panel of 22 leaders in the community to identify how this might be accomplished.

“Working under two business models is challenging. We are asking providers to change behaviors based on what is coming, while most payment is still under the old model. The inertia to stay in fee-for-service is strong for the provider,” she said.

**VALUE-BASED INNOVATIONS IN MEDICARE**

Gregg Laiben, MD, medical director (continued on next page)

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**BIGGEST TAKEAWAY FROM THE SEMINAR:** I attended the evening session which had a very interesting discussion of the history of the PCMH and how it developed.

**BIGGEST CHALLENGE TO PCMH EXPANSION:** Some of the requirements for being certified can be difficult for smaller groups without the resources to handle the documentation requirements.

~ DAYNA HODGDEN, CEO, ENCOMPASS MEDICAL GROUP
VALUE-BASED CARE (continued)
for Blue Cross Blue Shield of Kansas City, discussed the growth of value-based innovations in Medicare. Dr. Laiben also is a KCMS past president. Medicare Advantage plans, which are enrolling an increasing share of Medicare beneficiaries, have been on the leading edge of payment innovation, he said. Among payment innovations in Medicare Advantage are aligning reimbursement with quality metrics and with the riskiness of the population. They also are evolving to complete member health management.

He also described the Medicare Access and CHIP Reauthorization Act (MACRA) and how it incentivizes movement from fee-for-service to value-based care. Physicians face a key decision point in 2018 when they will have to determine whether they opt into an alternative payment model and its related incentive payments. In addition, physicians will be subject to the Merit-Based Incentive Payment System (MIPS), which consolidates the Physician Quality Reporting System, Value-Based Modifier and the EHR Meaningful Use.

Dr. Laiben offered his observations on the importance of the primary care physician. “In other developed countries, such as the United Kingdom, Germany and Sweden, they place much greater importance on the primary care physician. They have four primary care physicians for every one specialist. In the U.S., the ratio is reversed, one PCP to four specialists. We need to take the PCP approach.”

CONSIDER THE POOR
Bridget McCandless, CEO of the Healthcare Foundation of Greater Kansas City, reminded the audience that any reforms should consider care to the uninsured and underinsured.

“Today in Kansas City, we have discrepancies of 15 years in life expectancy based on ZIP code,” she said. “The uninsured and underinsured carry not just economic, but enormous societal and personal costs.” She also noted how childhood trauma affects health. “It has a big impact on brain development, and children who have four or more adverse childhood events have a significantly higher risk of disease as adults.”

MAINTAINING PRACTICE FINANCIAL HEALTH
Betsy Green and Leslie Reardon of Commerce Bank offered tips on revenue cycle management to help keep medical practice cash flow strong in a changing reimbursement environment. Among their suggestions are better eligibility verification and capturing more payments at the point of service. Also helpful is improving receivables processing and offering patients additional payment options such as paying online, they said.

FOR MORE INFORMATION
Patient-Centered Primary Care Collaborative
www.pcpcc.org
History of the Patient-Centered Medical Home
www.aafp.org/dam/AAFP/documents/about_us/initiatives/PCMH.pdf
Blue KC PCMH Program
https://providers.bluekc.com/Communications/PCMH
Medicare and CHIP Reauthorization Act (MACRA)
www.ama-assn.org/ama/pub/advocacy/topics/medicare-physician-payment-reform.page

BIGGEST TAKEAWAY FROM THE SEMINAR: The need for the medical community to plan ahead and move towards creating value in their practice. In other words, how can clinics and hospital systems lower costs without compromising good care?

BIGGEST CHALLENGE TO PCMH EXPANSION: There must be a pooling of resources in order to provide the structure that is necessary for this model to succeed, such as a working EHR, patient portals and onsite support staff such as nutritionists, psychologists and social workers. I think the model is a work in progress and providers must be able to adapt to specific patient populations. The key is to create a team environment for which disease management and prevention are top priorities.

~ ALEXANDRIA LARSON, DO CANDIDATE 2017, KANSAS CITY UNIVERSITY OF MEDICINE AND BIOSCIENCES
The Patient-Centered Medical Home (PCMH) has become the new care model for primary care in the United States over the past decade. The PCMH model is based on the Institute for Healthcare Improvement’s “triple aim”—better quality care, improved patient experience and lower costs.1 More than 10% of U.S. primary care practices, approaching 7,000 altogether, are recognized as PCMHs by the National Committee for Quality Assurance (NCQA), which is the nation’s largest PCMH program.2

Transformation from the traditional concept of care delivery in which the physician has the burden for all of the care delivered, to this more comprehensive team-based approach to care can be very challenging. Implementing these changes in the context of a large family medicine residency clinic can be an even more daunting task. The University of Missouri-Kansas City School of Medicine Department of Community and Family Medicine has transitioned to the PCMH model and achieved a Level Three recognition by the NCQA in December 2013.

Our leadership made the decision early on in this process that the change we were seeking would be transformational, not just checking boxes for compliance with the standards. In early 2011 we began evaluating and measuring our organizational culture while simultaneously implementing leadership development and transitional PCMH operational changes in the Bess Truman Family Medicine Center. The culture change that has occurred in this context has truly transformed our department and our clinical system.

Requirements for being recognized as a PCMH are clear; however, the best way to manage that change is not as clearly defined. “Four Pillars” make up the PCMH: practice organization, health information technology, quality measures, and patient experience.3 The NCQA provides clear standards that must be met for recognition as a PCMH. Many strategies can be employed to meet the standards, including the following:

- Leadership development
- Education
- Team-based care
- Staff engagement
- Protected time and adequate resources
- Patient engagement
- Communication strategies
- Recognition of teams and individuals
- Encouragement of innovation through the use of rapid cycle improvement-such as PDSA (plan, do, study, act)
- Quality measures and data sharing
- Creation of new and better-defined job descriptions and role definition
- Integration of information technology
- Patient satisfaction

Our organization used all of the listed strategies along our journey. Other strategies exist and may be appropriate depending on individual practice settings.

There has been much written about the need to have engaged leadership in order to guide the process of PCMH transformation. However, there is not much evidence about which organizational factors and strategies are best for transforming primary care clinics into PCMHs. A study by Solberg in the Journal of the American Board of Family Medicine in 2014 surveyed 118 PCMH leaders about transformation. They identified 44 specific organiza-

(continued on next page)
tion of factors and strategies used by clinics to achieve transformation. Most of the survey items that were correlated were nearly all from the categories of patients, organizational change and culture.4

The National Demonstration Project also concluded that “the developmental pathways to success vary by practice” and that there needs to be local variations in the development and implementation of the PCMH model.5 Each practice/clinical system must chart its own path to PCMH transformation. To that end, each system must take stock of where they are as an organization and what their current culture is in order to understand what will work best in their situation. While each organization will find specific strategies that will work for them, focusing on those three key areas of culture, organization change and patients can help organize and manage the change.

CULTURE CHANGE

The first key area is culture. Leaders drive change within their organization from the top down and the bottom up. Leaders inspire providers and care teams to re-imagine care delivery and reconsider how the organization interacts with patients.6 Our experience has been that beginning with leadership development was crucial to our success and sustainability over time. At the outset of our transformation we identified champions, beginning with faculty team leaders. Each team leader had the opportunity to develop their leadership skills through Studer Leadership Training7 and James Hunter's Servant Leadership Program.8 The leaders were trained and mentored on leadership and transformational change as well as educated on all of the elements PCMH and its implementation. The next crucial piece in the change process is creating buy-in. Everyone on the team must have a clear understanding of the need for change and where the change will take the organization once the goals are met. We held an all-staff retreat to help facilitate this process. This was a time to educate everyone on the need for transformation to a PCMH model and why it was so important to our patients and our practice. The retreat was a time to reflect on where we were and where we needed to be in order to become a PCMH, thus creating buy-in. From this foundation, we began implementation of organizational factors and strategies that applied to our specific setting.

ORGANIZATIONAL CHANGE

Next, organizations that seek to adopt the PCMH model must commit to organizational change. The organization must structure itself to meet the needs that the PCMH model and change will require. Our organization identified team leaders—faculty change champions—who lead the way for the rest of the team. We engaged and empowered our residents, beginning with the chief residents and gave them new responsibilities in the change process. We hired new people as appropriate, such as a new clinic manager, who possessed the skills needed in that role. We created well-defined roles for each member of the clinic staff. We created a time
We created a Patient Advisory Council to meet monthly. Patients loved the opportunity to interact in this manner with their providers and the staff who cared for them in the clinic. They were empowered to be part of our team.

Additionally, staff members from our entire hospital setting, including the chairman of our department and chief operating officer of our hospital, attended these meetings. Everyone knew our goal was to improve the patient experience and the entire organization was aware of the changes in our clinic and department. Patient satisfaction surveys have become part of our ongoing process to assess how we are doing and to keep our patients involved in the care they receive.

**RESULTS**

Creating culture change and being able to measure that change over time are essential to creating and sustaining a high functioning organization. In 2011, the Department of Community and Family Medicine asked each faculty, resident and staff member of our Bess Truman Family Medicine Center to complete the Denison Organizational Culture Survey (DOCS)9 as an opportunity to get a baseline read of where our organizational culture stood. The results provided a clear picture of where we were and that change was needed (see Fig. 1).

The DOCS is designed to assess an organization's strengths and weaknesses as they apply to organizational performance. The survey has 60 items that measure specifics aspects of an organization's culture on each of four traits: involvement, consistency, adaptability and mission.4 Each of these traits has four subset “change traits” for a total of 12. As we developed leaders and implemented changes toward the PCMH model, we resurveyed our team at one year into our transformation (2012). At this point we were in the thick of organizational and care delivery change (see Fig. 2). With the positive changes in the survey, we could see we were on the right path. We surveyed again in 2014, just after receiving NCQA Level Three recognition (see Fig. 3).

We had excellent response rates to the survey of >50% each time it was presented. The changes were all in the positive direction for each of the “change traits.” Positive change of trait percentiles ranged from +32 to +81 with an average increase of +56. The most significant change was the “creating change” trait which increased by +81. The culture had shifted from one where the thought of an individual being able to create change was basically non-existent to one where that is the norm. Compared to the original 2011 DOCS, with little of the color wheel filled in, the last survey in 2014 shows the color wheel to be nearly completely filled in.

**PATIENT ENGAGEMENT**

Patient engagement in the process is the third key area to address during the PCMH change. We included patients from the beginning of our change process. Patients were a central part of our all staff retreat, and their voices were clearly heard about where we were and how they thought we could be better. As the process moved forward, for all the clinic staff, residents and team leaders to meet, initially on a weekly basis, now monthly, to drive the changes required in the clinic. The team named this meeting the “MOB” meeting—Making Ourselves Better.

This protected time was a crucial part of our organizational change. It provided the opportunity for all members of the team to become part of the change and have their voices heard. During the MOB meetings, we brainstorm new ideas, solidify process and quality improvement teams, report data, review successes and failures, and have designated time to recognize individual team members for outstanding work from the previous month.
sustained at the “official end” of our PCMH transformation. However, achieving NCQA Level Three recognition is really just the beginning of the work to transform a practice so we will need to continue to have a high level of engagement on the part of our leaders, residents and all staff. Cultural change is also difficult to sustain over time, especially at a high level of engagement. The organizational structure that is in place helps to keep the process moving on track. Continuous patient satisfaction surveys and feedback keep us patient-focused. We continue to use the Denison Organizational Culture Survey annually to measure our culture for sustainability as a higher-functioning organization over time. Transitioning to the PCMH model presents a unique opportunity for organizations to move beyond the status quo, “because we have always done it that way” frame of mind, to a new cultural context in which to move their organization forward.

Beth Rosemergey, DO, is assistant professor and vice-chair for outpatient care at the University of Missouri-Kansas City School of Medicine Department of Community and Family Medicine. She can be reached at 816-404-7000, email beth.rosemergey@tmcmed.org.

REFERENCES
Reducing the Burden of Prediabetes and Diabetes Mellitus in the Kansas City Metropolitan Area: A Call to Action

By Betty M. Drees, MD, FACP, FACE, University of Missouri-Kansas City School of Medicine

BACKGROUND

Diabetes mellitus is a major national health concern due to the burden of disease in terms of prevalence, complications, increased mortality and cost. The Kansas City metropolitan area is no exception, with diabetes mellitus being identified as a high priority for prevention and treatment across the community by public health departments, elected officials, health-care providers, health-care payers, faith communities and employers, in both the minority and majority populations. Prevalence of diabetes varies across individual communities and counties, but both Kansas and Missouri have an overall prevalence of diagnosed diabetes mellitus in adults of 8.8% and 8.7%, respectively.¹

We know that over 25% of people with diabetes are not diagnosed,² and thus the actual prevalence of diabetes in adults in our community is over 10%. Furthermore, over a third of adults have prediabetes (blood glucose higher than normal, but not high enough to diagnose diabetes). For the 2.1 million residents³ in the metropolitan area’s 14 counties, that equates to nearly 200,000 individuals with diabetes (of whom 50,000 are undiagnosed) and another 550,000 with prediabetes (of whom 90% or more are unaware of their condition). This burden of diabetes mellitus and prediabetes in our region is staggering in terms of impact on health and health-care costs. This burden is even heavier in some racial and ethnic groups and older age groups. Both diabetes mellitus and prediabetes increase with age, such that a quarter of the population over age 65 have diabetes mellitus, and half have prediabetes.

Although progression of prediabetes to diabetes mellitus rates vary by age, race/ethnicity and degree of impaired glucose metabolism, it is estimated that between 15% and 30% will develop diabetes within five years if left untreated. Using a more conservative estimate of 20% progression of prediabetes to diabetes mellitus over 10 years⁴ and the estimated prevalence of prediabetes in the metropolitan area, approximately 100,000 adults in the Kansas City region are at high risk for this progression to diabetes mellitus.

ECONOMIC COSTS

Nationally, the economic burden of diagnosed diabetes mellitus⁵ is $245 billion, with $176 billion in direct costs and an additional $69 billion in indirect costs due to reduced productivity (missed days of work, lower productivity while at work, inability to work, etc.). Health-care spending on people with diagnosed diabetes accounts for over one in five of health-care dollars. Most of the health-care expenditures are on inpatient hospital stays and diabetes medications and supplies. Spending on physician office visits accounts for less than 10% of health-care spending on diabetics. The average cost of care for an individual with diabetes is over twice that of one without diabetes.

The cost of care for people with diagnosed diabetes is only part of the cost of elevated blood glucose.⁶ Individuals with undiagnosed diabetes, prediabetes and gestational diabetes also have increased direct and indirect costs. Nationally, in 2012, the annual burden of excess cost averaged $10,970 per person for those diagnosed with diabetes, $5,800 for those with gestational diabetes, $4,030 for those with undiagnosed diabetes, and $510 for those with prediabetes.

This makes the total annual cost of care for elevated blood sugar $322 billion ($244 billion direct costs and $78 billion indirect costs), which is $77 billion over the excess cost of care (continued on next page)
DIABETES (continued)
for just those with diagnosed diabetes. Part of this additional cost is due to the fact that complications of elevated glucose—especially cardiovascular complications—start at glucose levels below the threshold for diagnosis of diabetes. The estimated total excess costs of care for people with elevated glucose levels in Kansas and Missouri are just over $2.6 and $5.9 billion, respectively (see table for details).

HEALTH IMPACT
In regard to the health complications of diabetes mellitus, the microvascular (retinopathy, neuropathy and nephropathy) and macrovascular (stroke and myocardial infarction) complications are well known. Lower extremity amputations result from a combination of micro- and macrovascular processes. Diabetes mellitus is present in over half of the adults who have non-traumatic lower extremity amputations, and is the primary cause of nearly half of new cases of renal failure. Rates of myocardial infarctions, strokes and death from cardiovascular disease are one-and-a-half to two times more common in people with diabetes mellitus than those without. Diabetes mellitus is the seventh leading cause of death, both nationally and locally, but is likely underreported on death certificates as a contributing cause to mortality. Cause of death is more likely to be hyperglycemia crisis (i.e. ketoacidosis) or hypoglycemia in type 1 diabetes (T1D), and more likely to be due to cardiovascular disease in type 2 diabetes (T2D). Individuals with T2D have a high prevalence of co-morbidities that contribute to cardiovascular morbidity and mortality, specifically hypertension, hyperlipidemia and tobacco use. Seventy-one percent of adult diabetics have elevated blood pressure and 65% have hyperlipidemia.

Hypertension management deserves special mention, since it is a contributing cause to both microvascular and macrovascular complications. Hypoglycemia also deserves special mention as it is increasingly recognized and tracked as a complication. Hypoglycemia accounted for over a quarter of a million emergency visits in 2011 and is the major limitation to tight control of glucose levels, especially in individuals on insulin therapy, the very young, the very old, and those with a longer duration of diabetes.

IMPROVING OUTCOMES
Despite the dramatic increase in obesity and T2D over the past 25-30 years, there is reason for hope that the burden of diabetes can be effectively addressed in our community. Based on research over the past two to three decades, we have good evidence-based approaches to both prevention of T2D, as well as treatment of T1D and T2D to reduce complications. Much of this research was publicly funded, especially by the Centers for Disease Control and Prevention (CDC) and the National Institutes of Health (NIH). The evidence-based practice guidelines that have resulted provide an excellent example of how federally funded research can impact important health issues that affect a large segment of the population. Furthermore, this research spans both population health approaches as well as clinical care.

MEDICAL CARE IMPROVEMENT
In regard to improving clinical care of diabetes, the Diabetes Control and Complications Research Group and the U.K. Prospective Diabetes Study Group provided definitive evidence that good glucose control reduces the rate of microvascular complications in both T1D and T2D. Despite the strong correlation between elevated glucose levels and cardiovascular disease there is limited evidence that glucose control impacts cardiovascular outcomes, especially in relation to the impact of other risk factor interventions. Lifestyle modification, hypertension management, lipid-lowering therapy and tobacco cessation are the most critical interventions in reducing cardiovascular morbidity and mor-

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Hypoglycemia is suspected in contributing to cardiovascular deaths in older individuals with more severe atherosclerosis.
tality, and there is good evidence of success in these approaches. Although certainly multifactorial causes are at work, diabetes complications dropped dramatically from 1990 to 2010, especially in acute myocardial infarction which decreased over 65%. The good news is that implementing standards of care makes a difference in outcomes. Unfortunately, nearly half of adult diabetics are not at treatment goals. Thus, there is significant opportunity to improve care and outcomes even more.

There is also good news in regard to prevention of T2D. Adults at increased risk of T2D and prediabetes can be predicted based on good screening tools, including simple questionnaires from the CDC (http://www.cdc.gov/diabetes/prevention/pdf/prediabetestest.pdf) and the American Diabetes Association (http://www.diabetes.org/are-you-at-risk/diabetes-risk-test/?loc=a-trisk-slabnav). Prediabetes is defined as a glycated hemoglobin of 5.7%-6.4%, a fasting glucose of 100-125 mg/dl, or a two-hour oral glucose tolerance test of 140-199 mg/dl. The diabetes prevention program (DPP) demonstrated that lifestyle modification can reduce the risk of progression to T2D by 58% through 150 minutes of physical activity weekly and modest weight loss. The effect is even more pronounced in older adults, with a 71% reduction in risk in those over age 60. Recent reviews of combined physical activity and diet programs by the Community Preventive Services Task Force for individuals at risk for T2D provide evidence that these programs are both clinically effective and cost effective.

The U.S. Preventive Services Task Force (USPSTF) now recommends (Grade B) behavioral counseling on diet and exercise to reduce cardiovascular disease in those at higher risk (including obesity, hypertension and diabetes). A draft update on screening for prediabetes and T2D from the USPSTF is expected to be finalized soon, and supports screening for prediabetes and T2D for individuals at high risk. The USPSTF recommendations are of great importance to the clinical practice community, payers and the public, as they form the basis for the required full coverage of preventive services by private plans under the 2010 Patient Protection and Affordable Care Act. The current list of required coverage for preventive services includes screening for T2D in individuals with hypertension and diet counseling for those at “higher risk for chronic disease.” (The full list of required preventive services is available at https://www.healthcare.gov/preventive-care-benefits/.)

The median costs of behavioral intervention programs are approximately $500 per person, and vary by location and setting. The CDC certifies DPP programs that are year-long, intensive behavior modification programs. In the Kansas City area, the YMCA is currently the only CDC-certified DPP provider, with programs available throughout the metropolitan region. With the increasing evidence of effectiveness of behavioral interventions, an increasing number of payers are covering behavior modification programs for prevention (including the YMCA DPP and other programs), and employers are increasingly providing programs in the workplace and incentives for lifestyle modifications. A bipartisan bill, the Medicare Diabetes Prevention Act of 2015 (S.1131/HR 2102), has been introduced in Congress (https://www.congress.gov/bill/114th-congress/senate-bill/1131), and would support Medicare coverage for the National DPP program established by the CDC if passed into law.

PUBLIC HEALTH IMPACT

Public health departments are increasingly addressing chronic disease prevention and management, including diabetes mellitus. Some regional health departments provide clinical services, including screening for diabetes and prediabetes, as well as self-management education programs and nutritional counseling. A recent survey of local health departments in Missouri reveals that our local health departments are very engaged in diabetes prevention through implementation of evidence-based practices in nutrition education, access to healthy foods, promotion of physical activity and workplace initiatives for their own employees. Nutrition counseling deserves special mention with the increasing evidence that drinking sugar-sweetened beverages over time increases risk of T2D independent of obesity. Health departments are also engaged in addressing the upstream social and environmental factors that influence development of prediabetes.
DIABETES (continued)

diabetes mellitus and the related obesity epidemic.

There is increasing evidence that the surge in these conditions goes well beyond the individual, and are driven by socioecological conditions in communities, workplaces and schools.\textsuperscript{23} Poverty is a predictor of lower health status, and there may be multiple factors in low-income neighborhoods that contribute to obesity and diabetes, but environments that support physical activity may be especially important,\textsuperscript{24} and simply moving from a neighborhood with a high level of poverty to a lower level of poverty may reduce obesity and diabetes.\textsuperscript{25}

THE ROLE OF PHYSICIANS IN A COMBINED MEDICAL/PUBLIC HEALTH MODEL

Reducing the burden of diabetes in our community will require continuing both public health and clinical approaches.\textsuperscript{26} Physicians have a critical role in reducing this burden, both on the clinical side with the care of individual patients to screen, diagnosis and treat both prediabetes and diabetes, but also in collaboration with health departments, the public and elected officials on health policy and promotion of neighborhoods and communities with socioecological environments that support public health at the local, state and national levels.\textsuperscript{27} The efforts to reduce tobacco use over the past 50 years are an example of a successful partnership between physicians and public health to address an important health issue.\textsuperscript{28} In the Kansas City area, many local physicians partnered with health departments, multiple associations and foundations to promote the passage of “clean air” acts in multiple municipalities and the State of Kansas. These efforts are continuing, and are especially important in reducing cardiovascular complications, since tobacco use and abnormal glucose are additive in cardiovascular risk.

In the Kansas City area, there are an estimated 750,000 individuals with diabetes mellitus and prediabetes, combined, including both diagnosed and undiagnosed. Effective diabetes prevention and treatment programs could potentially reduce morbidity and mortality through decreasing risk of complications, as well as prevent progression to diabetes mellitus in up to 100,000 of adults with prediabetes. The health and economic impact of improving prevention and treatment is profound. The specific actions physicians can take are in screening, treatment, assessment of quality, public health and policy:

**Screening.** Patients at high risk for diabetes and prediabetes should be screened. There are effective behavior intervention programs in the community for prevention of progression of prediabetes to diabetes, and there is a good toolkit for physicians for screening and referral developed by the CDC and the American Medical Association, Prevent Diabetes STAT (www.preventdiabetesstat.org). The behavioral approaches are increasingly available in the community and in the workplace, and are increasingly covered by payers. It is especially important to screen patients with other cardiovascular risk factors, including hypertension, hyperlipidemia and tobacco use.

**Treatment.** Each patient with diagnosed diabetes mellitus should have an individualized treatment plan to prevent risk of complications based on evidence-based guidelines, such as those from the American Diabetes Association (www.diabetes.org) or the American Association of Clinical Endocrinology (www.aace.com). Use of evidence-based strategies to prevent complications has proven to be effective over the past two decades, but there is still ample room to improve quality of care.

**Assessment.** Quality of care for both individuals and populations of patients should be continually assessed, so that care can be continually improved. Electronic health records and clinical registries can be helpful in assessing quality of care outcomes. Physicians must participate in the development and implementation of appropriate quality measures, and we must evaluate approaches to quality in the context of pragmatic, scalable and sustainable clinical care.

**Public health.** Physicians, health departments and other community agencies need to partner on access to community services for health, nutrition and activity. The diabetes epidemic and related obesity epidemic cannot be resolved by clinical treatment of individuals alone, and must include meaningful, sustained partnerships with public health and utilization of community resources for broad community behavior changes around nutrition and activity. Physicians should support and advocate for health departments in their mission to address the socioecological environment for health at the local, state and national levels.
Policy. Physician participation in policy development is essential and is a key responsibility of physician professionalism. This participation can occur through the legislative process, through work with associations, and through serving as experts. It includes not only direct health policy, but also policy related to economic development, education, transportation, housing, safety, etc. Hospitals, payers, health departments and the public are our partners in advocating for policies that support healthy communities broadly defined.

In summary, diabetes mellitus places a staggering health and economic burden on communities across the United States, including the Kansas City region. Based on good evidence from publicly and privately funded research, there is much that has been done in the past two decades to understand treatment and prevention of diabetes mellitus. There is also much left to be done to apply that understanding. Physicians are critical to devising and implementing solutions that will work in our own region. Public health departments, employers, hospitals, payers and the public are eager to work with us toward those solutions.

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REFERENCES


Point-of-care ultrasound (POC-US) is rapidly advancing in medicine to potentially rival the stethoscope as the primary extension of the physical examination. POC-US improves patient outcomes by providing immediate diagnostic information, eliminating radiation exposure, lowering medical costs,1,2,3 enhancing accuracy of therapeutic injections4 and increasing patient satisfaction.5 As a result, many medical universities are incorporating POC-US into their four-year medical student curricula.6 While there are many potential benefits to the physician and the patient, accurate diagnostic US scans are highly operator dependent, so competency is an important pre-requisite for quality care.

At the University of Missouri-Kansas City (UMKC) Sports Medicine Fellowship program at Truman Medical Center-Lakewood, we just completed our first year using a sports ultrasound (S-US) curriculum.7 The goal was for our sports medicine fellows to acquire the necessary knowledge and skills needed to become accomplished musculoskeletal ultrasonographers. In addition to completing our curriculum both fellows will take a national exam to earn Registered in Musculoskeletal Sonography (RMSK) credentials awarded through the American Registry for Diagnostic Medical Ultrasonography (ARMDS). Below is a brief synopsis of our journey into using S-US.

Our curriculum is a hybrid model of formal faculty directed didactics and self-directed learning using multiple different formats. At the beginning of the academic year, we outlined resources for the fellows to use, including textbooks, websites and cellular phone apps. The first didactic sessions with the fellows included the basic science of ultrasound technology and an introduction on how to scan the joints. A key part of each session was allowing each fellow to do hands-on practice scanning with faculty supervision. This year we subsequently taught the wrist, shoulder, ankle, hip, knee and elbow. The order worked well for the fellows.

One proven benefit of S-US is increased accuracy of joint injections. The fellows’ injection skills were “jump started” after practicing on homemade phantoms made of Jell-O and Metamucil.8 We also scheduled a session at the UMKC School of Medicine Clinical Training Facility where the fellows practiced ultrasound-guided injections on fresh-frozen wrist and ankle specimens (Figure 1). They then began US guided injections on real patients in the Sports Medicine Center at TMC-Lakewood under the immediate supervision of experienced clinicians.

Self-directed study was accomplished using electronic resources9 and Jon A. Jacobson’s Fundamentals of Musculoskeletal Ultrasound, second edition. The fellows liked using the templates provided by the European Society of MSK Radiology9 as their initial exposure for diagnostic scans. During the first month of fellowship, we incorporated time for the fellows to practice scanning each other during normal clinic hours so they did not have to use their free time. However, the fellows were encouraged to take the US unit home on weekends to practice scanning on family members. The fellows’ US skills increased dramatically after these weekend scanning sessions.

The use of S-US has greatly impacted our practice this past year. We have particularly enjoyed diagnosing partial or full thickness rotator cuff tears and then verifying our results with the MRI findings. Since July 2014, each of our fellows has completed over 50 diagnostic US guided injections and over 150 diagnostic scans. While POC-US has a steep learning curve, the return on investment has been the opportunity to provide rapid, more effective and lower-cost health care to our patients.

CASE REPORT USING POC-US

An 18-year-old female elite gymnast presented to the sports medicine clinic with lateral left ankle pain after “landing short” three weeks prior during a competition. Initially she had mild to moderate lateral ankle swelling, but denied instability or any popping sensation. She had a competition in 10 days and in one month was competing...
to make the USA Gymnastics World Championship Team.

She walked unaided with no identifiable antalgic gait. Inspection revealed mild swelling over the anterior talofibular ligament (ATFL) without ecchymosis. Mild tenderness to palpation was present over the ATFL and peroneal tendons without distinct malleolar or deltoid ligament tenderness. Range of motion and strength were normal in all directions. Her anterior drawer test had mild increase in laxity compared to the contralateral side. Squeeze test, dorsiflexion-external rotation test and calcaneal squeeze test were negative. Radiographs were negative. POC-US revealed a shallow peroneal groove and a small, hyperechoic density directly postero-lateral to the distal lateral malleolus indicative of an avulsion fracture (Figure 2). Dynamic testing with weight-bearing plantar-dorsiflexion demonstrated near subluxation of the peroneus brevis tendon at the lateral malleolus.

The final diagnosis was a mild lateral ankle sprain with Ogden Type III superior peroneal retinaculum injury and partial subluxating peroneal brevis tendon. The patient was treated with a CAM boot between practice and competition, initiating a rehabilitation program, and modifying her workouts accordingly. The patient was able to continue competing at the elite level, and one month later served as an alternate for the USA Gymnastics World Championship Team in China. She is currently competing for a Division I university.

This case illustrates the great benefits of POC-US. The patient left the office with a clear diagnosis and treatment plan. Dynamic testing allowed the physician and patient to “see” what was causing her symptoms. Advanced imaging at a higher cost was not needed. The physician did not need to worry about follow-up phone calls or confusion about the best treatment options while awaiting more imaging during a time-sensitive period of training for the athlete. We plan to continue to use S-US to improve patient care and will work to improve our curriculum for our fellows so they can make a great impact with this tool.

Jon D. Schultz, MD, is assistant professor and Margaret E. Gibson, MD, is associate professor in the Department of Community and Family Medicine at the University of Missouri-Kansas City School of Medicine. They serve at the Truman Medical Center-Lakewood in the UMKC Primary Care Sports Medicine Fellowship program. They can be reached at 913-404-7100, jon.schultz@tmcmed.org or margaret.gibson@tmcmed.org.

REFERENCES


The Kauffman Center for the Arts provided a spectacular backdrop as members and friends of the Kansas City Medical Society gathered for the 2015 annual meeting, themed “Inspiring Health Together.”

Society 2015 President Michael O’Dell, MD, welcomed the audience and highlighted the past year. “We focused on our mission of leadership, advocacy and innovation. Our membership stands at 3,400, one of the largest local medical societies in the nation,” he said.

In this “age of innovation,” where much is changing in health care, physicians should act to understand and help shape the new payment models evolving, he said. The Medical Society’s recent “Getting 2 Value” conference explored these.

Executive Director Angela Bedell reported on accomplishments for the year. Membership has grown from 650 in 2013 to 3,400 today. The Society adopted a new name and new brand this year, Kansas City Medical Society. Through a special program with Keane Insurance Group, members have access to a discount on professional liability insurance. Members will soon be able to access experts about such issues as contracts during “office hours,” beginning in January. A community service program connects children in foster care with physician appointments. The Society’s publication, Kansas City Medicine, has been re-launched and upgraded. The Medical Society has developed a cooperative arrangement with the Wyandotte-Johnson County Medical Society.

The Medical Society’s overall goal is to provide a “professional home” where physicians can access a variety of resources supporting career development, patient care, practice management and the medical profession as a whole, she added.

Also at the meeting, Lifetime Achievement Awards were presented to Ali Arbab, MD, and Michael Montgomery, MD, FACC. Dr. Arbab is a retired surgeon, surgical oncologist and educator. Dr. Montgomery is a cardiologist with Meritas Health and is past board president of North Kansas City Hospital. The Friend of Medicine Award was presented to Charlie Shields, president and chief executive officer of Truman Medical Centers. See pages 31-37 for more on these award recipients.

For the first time, the Medical Society honored four members with Achievement Awards: Scott Kujath, MD, FACS, Patient and Community Advocate Award; Rebecca Hierholzer, MD, MBA, FACEP, Community Service Award; Eleanor Lisbon, MD, MPH, CPI, Rising Star Award, Hellman & Rosen Endocrine Associates, Innovation Award.

Blue Cross and Blue Shield of Kansas City Vice President Brian Burns accepted the 2014 Friend of Medicine Award. He recalled how Blue KC was started by the Jackson County Medical Society in 1938. “We are rooted with physicians, hospitals and the community,” he said.

Sponsors of the annual meeting were Blue KC, Keane Insurance Group and Tesla. (continued on next page)
Tom Allen, MD, and Theresa Allen.

KCMS President Michael O’Dell, MD, gives his report.

KCMS Executive Director Angela Bedell discusses the past year’s accomplishments.

Attendees from Blue KC.

Marna Courson Gasperino, MSMA President John Stanley, MD, and his wife Kath.

Missouri State Medical Association President John Stanley, MD, gives a welcome.
Brian Burns of Blue KC accepts the 2014 Friend of Medicine Award.

Sarada Katragadda and Sukumar Ethirajan, MD.

KCMS President-Elect Stephen Salanski, MD, with Lifetime Achievement honoree Ali Arbah, MD, and his wife, Minou.

Tom McNeill, left, and John Keane, right, of event sponsor Keane Insurance, with KCMS Executive Director Angela Bedell.

Artists drew caricatures of the guests on their iPads then printed copies for pickup.

Stephen Reintjes, MD, with Lifetime Achievement honoree Michael Montgomery, MD.
Charlie Shields has been a friend of medicine over the past 25 years, both in the Missouri Legislature and in hospital and health-care administration. He was recognized with the Kansas City Medical Society Friend of Medicine Award at the 2015 Annual Meeting.

Shields currently serves as president and chief executive officer of Truman Medical Centers. He joined Truman in 2010 as chief operating officer of Truman Lakewood, and was appointed system president in July 2014.

For 20 years, Shields represented St. Joseph in the Missouri Legislature. He was a member of the House of Representatives from 1990 to 2002, then served in the Missouri Senate from 2002 to 2011. He was president pro-tem of the Missouri Senate from 2009 to 2011.

As a member of the Senate leadership, he helped pass tort reform legislation in 2005 protecting physicians from excessive lawsuits and rising insurance costs. Shields also fought for legislation to protect physicians against unfair billing and reimbursement practices by managed care and insurance companies. He worked to assure stable Medicaid funding throughout his legislative service, especially federal reimbursement allowance funding, and wrote the Missouri Medicaid Reform Commission report after more than two dozen hearings across the state.

Shields pushed for laws in 2008 that created the Time Critical Diagnosis (TCD) System to provide medical care for patients requiring time critical diagnosis and treatment for trauma, stroke and STEMI. His work in the Senate ensured funding for Missouri’s Area Health Education Centers. Missouri’s AHEC help train future physicians by enhancing access to quality health care by growing and supporting Missouri’s health-care workforce.

His support of physicians has continued throughout his career in health-care leadership. He began his career in health care and spent 17 years with Heartland Health (now Mosaic Life Care) in St. Joseph, where he served in a variety of leadership roles, including chief marketing and communications officer.

Since joining Truman Medical Centers, Shields has made physician engagement a strategic priority. As part of that process, each physician is asked to weigh in on organizational strengths and weaknesses and physicians become leaders in enacting change. He also included Truman’s medical staff as an integral partner in Truman’s strategic planning process.

Shields has emphasized two-way communication with physicians, making sure that physician concerns are heard and addressed, and works diligently to ensure physicians are included in outgoing information. He began a process to feature the work of medical staff at Truman board meetings, highlighting their successes. Finally, he helped to support the inclusion of Truman’s entire medical staff into membership of the Kansas City Medical Society.

During his tenure at Truman Lakewood, Shields oversaw significant change and growth. His accomplishments included opening the Lakewood Family Birthplace, developing an integrated program of behavioral health services for older adults including a geriatric psychiatric unit, creating the Eastland Breast center, and completing construction of an outpatient primary center in Independence.

Shields is active in the Missouri Hospital Association, Missouri Higher Education Partnership, the Independence Chamber of Commerce, the American Board of Medical Specialties, the Lee’s Summit Economic Development Council, Starlight board of directors and 12 Blocks West. He was appointed to the Missouri Department of Elementary and Secondary Education – State Board of Education by Governor Jay Nixon in August, 2012. Shields and his wife Brenda have two grown sons, Brandt and Bryce.
When cardiologist Michael A. Montgomery, MD, FACC, was elected chair of the board of directors of North Kansas City Hospital in April 2012, he didn’t expect his life to change much. “I told my wife we’d just have a few more functions to attend.”

Then, in June 2012, the city council of North Kansas City announced its desire to sell the hospital. They would try to replace the current board members with others more favorable to the idea of a sale.

But Dr. Montgomery and others at North Kansas City Hospital had a different idea. They were determined to keep the hospital independent and locally controlled. Eventually, legislation was passed by the Missouri Legislature that required a two-thirds approval of the North Kansas City Hospital board, a majority of the North Kansas City council and a majority of the voters of North Kansas City in order for the hospital to be sold. The new board members only made a simple majority. The new legislation gave the hospital more control of its own destiny and the sale was effectively prevented.

Dr. Montgomery was recognized for his accomplishments with the hospital and his 40 years of service as a cardiologist, with the Kansas City Medical Society Lifetime Achievement Award, presented at the 2015 Annual Meeting.

“Through Dr. Montgomery’s leadership, the entire board, physicians, leadership and nursing staff joined together to work to keep the hospital independent. … He exemplified the role of the physician-leader.”

“My contributions span far beyond just the effort to keep North Kansas City Hospital independent. He has been a practicing cardiologist in the North Kansas City area for over 30 years, serving with Meritas Health Cardiology since 2004. Earlier in his career, he practiced in the U.S. Air Force.

“Dr. Montgomery has shown extraordinary leadership,” said Peggy Schmitt, president and CEO of North Kansas City Hospital. “His contributions to the clinical practice of cardiology, our hospital and our community have been transformative and it is wonderful to see him recognized with this award.”

“Dr. Montgomery is an excellent physician in this community. He is very passionate and down to earth,” Dr. Gates said.
Dr. Montgomery was born in Manhattan, Kan., but grew up in Sabetha, Kan., where his father was a general practitioner. “He was a great role model,” Dr. Montgomery said.

Dr. Montgomery obtained his undergraduate degree from Kansas State University in 1967. As a member of the ROTC, he was commissioned as a 2nd Lieutenant in the U.S. Air Force upon graduation. Through a special Air Force program, he was one of 50 individuals nationwide allowed to continue on to medical school with tuition paid by the Air Force, rather than fulfilling a military service obligation immediately. He attended the University of Kansas School of Medicine and graduated in 1971, then completed his internship there in 1972.

Then, the military obligations began. He went to flight surgeons’ school in San Antonio, Tex., and was then assigned to RAF Lakenheath, England, for three years with a fighter squadron. Although accepted for a residency in internal medicine at Emory University, the Air Force no longer allowed civilian residencies. After the Air Force determined it had no residency openings, it sent his application to the Army and he was accepted to William Beaumont Army Medical Center in El Paso, Tex., in 1975.

Two years later, Dr. Montgomery was accepted for a cardiology fellowship at Brooke Army Medical Center in San Antonio. After serving as a consultant to the Surgeon General of the Air Force at the Air Force School of Aerospace Medicine, he left the Air Force in 1981 as a Lieutenant Colonel.

He joined the Penn Valley Medical Group in Kansas City, where he was on the medical staff at the former Trinity Lutheran Hospital and North Kansas City Hospital. Dr. Montgomery was elected medical staff president at Trinity Lutheran Hospital in 1991. In 1992, Dr. Montgomery and four partners formed Northland Cardiology which joined Meritas Health in 2004.

Dr. Montgomery and his wife Karen have a blended family of two sons and two daughters; a third son was killed in an auto accident in 2013. They enjoy traveling to visit their children and eight grandchildren who live across the country.
Ali Arbab, MD, FACS, served the Kansas City community for 33 years as a general surgeon and surgical oncologist before his retirement in 2001. Specializing in breast and colorectal cancer treatment, he advanced the level of care, support and education available for patients of these disorders. He also helped train many surgical residents at several area hospitals.

For his contributions, Dr. Arbab was presented with the Kansas City Medical Society Lifetime Achievement Award at the 2015 Annual Meeting.

Kansas City Medical Society President-Elect Stephen Salanski, MD, who trained under Dr. Arbab at the former Baptist Medical Center, said in announcing the award, “Dr. Arbab is truly a gentleman physician, a gentleman in all respects. A Kansas City resident most of his life, he brought his training at Memorial Sloan Kettering to benefit patients in the Kansas City area for over 30 years.”

Dr. Arbab obtained his undergraduate degree from Kansas State University in 1955 and graduated from the University of Kansas School of Medicine in 1960. He completed his internship and three years of surgical residency at Menorah Medical Center and Saint Luke's Hospital. From 1964 to 1968, he trained in a surgical oncology fellowship at Memorial Sloan Kettering Hospital in New York. He achieved American Board of Surgery certification in 1968 and became a Fellow of the American College of Surgery in 1970.

In 1968, Dr. Arbab returned to Kansas City and established his general surgery and surgical oncology practice. In building the practice, he was fortunate to receive referrals from many of his former teachers, he said.

Patient education became an interest. Working with the local American Cancer Society chapter, he participated in support groups for cancer patients, regularly giving informational presentations on colorectal cancer and breast cancer. The Cancer Society honored him with a certificate of service.

Dr. Arbab also was involved in patient education through a special free informational service the Kansas City Medical Society provided for cancer patients. “Anyone with a cancer diagnosis could come to us by arrangement with their own doctor. Member physicians would hold individual discussions with patients to help them better understand their cancer and treatment options,” Dr. Arbab said.

While patient education remains important today, the increased pressures on physicians today make practicing medicine more difficult, he said. “The relationship between the patient and the physician is sacred.”

Dr. Arbab trained many surgical residents. From 1970 to 1975, he was on the volunteer surgical staff of the former Kansas City General Hospital, where he supervised the surgical residents and the head and neck surgery clinic. He was an associate clinical professor of surgery at the University of Missouri-Kansas City School of Medicine.

In addition, he was assistant clinical
professor of surgery at the University of Kansas School of Medicine. There, he was involved in the training of second-year medical students. Dr. Arbab was one of the early surgical teaching staff of the Goepert Family Practice Residency at the former Baptist Medical Center, now Research Medical Center-Brookside. He was a preceptor for first-year medical students at Surgical Office Practice.

Medical education should remain a priority, Dr. Arbab said. “We have to support those who are willing to enter medicine. This is very hard work. You live and die with your patients. The cost of education now is so prohibitive.”

On the 50th anniversary of his medical school graduation, Dr. Arbab and several of his classmates established a scholarship fund for current medical students at KU.

Besides his Kansas City Medical Society membership, Dr. Arbab was president of the Kansas City Surgical Society from 1983 to 1984. He also has been a member of the American Medical Association, the Missouri State Medical Association, the Kansas City Southwest Clinical Society, the Midwest Trauma Society and the Missouri State Surgical Society.

He was on staff at Truman Medical Center, St. Joseph Hospital, the former Baptist Medical Center, the former Trinity Lutheran Hospital, Menorah Medical Center, Saint Luke’s Hospital and Research Medical Center. Hospital committee memberships included Education Commission, Cancer Commission, Surgical Audit, Utilization Review and Quality Assurance. He also was on the KCMS Third-Party Payor Relations Committee, the American College of Surgeons Fellows Selection Committee and the Blue Cross Blue Shield of Kansas City Surgical Grievance Committee.

Dr. Arbab and his wife, Minou, have three grown children. Eada teaches English at KU; Lily is an attorney; and John is an attorney with the U.S. Department of Justice in Washington, D.C. They have two grandchildren. He enjoys flying, traveling, gardening, reading and cooking on his grill. Dr. and Mrs. Arbab are members of the Friends of Art Society and continue to support and enjoy the performing arts.

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Congratulations to the following Kansas City Medical Society members for their outstanding contributions to the community and the practice of medicine in greater Kansas City. They were recognized with Member Awards at the 2015 Annual Meeting.

SCOTT KUJATH, MD, FACS
Patient and Community Advocate Award

Scott Kujath, MD, FACS, is a board-certified vascular surgeon with Kansas City Vascular, PC. In addition to his practice, he is involved extensively in community service activities and in medical missions overseas.

Dr. Kujath presently serves as chief of vascular surgery at Truman Medical Center and the University of Missouri-Kansas City. He is chair of the Department of Surgery at North Kansas City Hospital, and is a clinical associate professor at the University of Missouri-Kansas City, the University of Kansas and Kansas City University of Medicine and Biosciences. Dr. Kujath also is board certified in undersea and hyperbaric medicine.

In the Kansas City community, Dr. Kujath is medical director and chair of the board of directors of Mission of Hope Clinic in Raytown, which utilizes volunteer physicians and dentists to provide medical and dental care to uninsured individuals. He also is a board member of MetroCARE of Greater Kansas City, which links uninsured residents with physicians providing charitable care in their practices.

In medical mission work, Dr. Kujath travels to Harmons, Jamaica, every two to three years as part of teams providing basic medical care in a rural community with a 70% unemployment rate. Dr. Kujath travels to Kenya each year to work in a hospice as part of Living Room Ministries International, an organization he also supports by serving on the board of directors as treasurer.

A graduate of the UMKC School of Medicine, Dr. Kujath is a member of the Kansas City Medical Society board of directors.

ELEANOR LISBON, MD, MPH, CPI
Rising Star Award

Eleanor Lisbon, MD, MPH, CPI, is senior medical director in the Hematology and Oncology Division of the Medical Strategy and Science Therapeutic Science and Strategy Unit of Quintiles. In this role, she serves as chief of vascular surgery at Truman Medical Center and the University of Missouri-Kansas City. He is chair of the Department of Surgery at North Kansas City Hospital, and is a clinical associate professor at the University of Missouri-Kansas City, the University of Kansas and Kansas City University of Medicine and Biosciences. Dr. Kujath also is board certified in undersea and hyperbaric medicine.

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A graduate of the UMKC School of Medicine, Dr. Kujath is a member of the Kansas City Medical Society board of directors.

Eleanor Lisbon, MD, MPH, CPI, is a board-certified family physician, she volunteers with several organizations throughout the metropolitan area.

As assistant clinical professor at the University of Kansas School of Medicine for 10 years, she contributed to the adolescent medicine curriculum for family medicine residents and medical students. She holds her medical degree from the Howard University College of Medicine and her Master’s in public health from the University of Kansas. Dr. Lisbon also owns Exhale, L.L.C., a physician-led fitness studio and wellness team in Mission, Kan.
REBECCA HIERHOLZER, MD, MBA, FACEP

Community Service Award

Rebecca Hierholzer, MD, has been serving sexual assault victims for the past 15 years as the founder, CEO and medical director of COVERSA (Collection of Victim Evidence Regarding Sexual Assault).

A nonprofit 501(c)(3) organization, COVERSA provides quality, compassionate post-sexual-assault patient care, and works to improve community collaboration related to sexual assault education and prevention.

Before COVERSA, a victim’s only option to receive treatment and guidance after being sexually assaulted was to go to an emergency department. In many instances, these individuals had to wait several hours in busy, congested waiting areas and in some cases be examined by doctors and nurses not specifically trained in sexual assault, and who lacked the proper sensitivity to handle sexual assault patients. Consequently, many victims opted not to go through with the exam. Their physical care and emotional needs were left unmet.

HELLMAN & ROSEN ENDOCRINE ASSOCIATES

Innovation Award

Richard Hellman, MD, FACP, FACE, has been providing patient-centered comprehensive diabetes care and endocrine services for over 30 years. In 1981, after nine years on faculty of the University of Missouri-Kansas City School of Medicine, he started his private practice to design and direct the first comprehensive adult diabetes care program in Kansas City. Howard Rosen, MD, FACE, ECNU, joined the practice in 1989.

Hellman & Rosen Endocrine Associates, located in North Kansas City, provides both consultative services and, upon request, primary care for patients with diabetes or other endocrine disorders. The practice emphasizes a patient-centered integrative approach. Education is linked with medical care, and support including behavioral health services is provided to help maintain healthy lifestyles.

The practice is highly acclaimed nationally for its work in improving diabetes outcomes and patient safety. Its diabetes education program has been recognized by the American Diabetes Association for more than 12 years, and is approved by Medicare for reimbursement. Dr. Hellman has led the practice in their widely cited research to improve the quality of care, patient safety and technology. Dr. Hellman and Dr. Rosen have been awarded recognition by the National Committee for Quality Assurance Diabetes Recognition Program.

Dr. Hellman is a graduate of The Chicago Medical School, and a member of the Alpha Omega Alpha Honor Medical Society. In 2009, he received the Distinguished Alumnus Award from the Chicago Medical School Alumni Association. In 2015 the American Diabetes Association chose Dr. Hellman as a Distinguished Reviewer for their journal, Diabetes Care. He is past president of the Kansas City Medical Society, and of the American Association of Clinical Endocrinologists. Dr. Rosen is a graduate of the Pennsylvania State College of Medicine, and has received Endocrine Certification in Neck Ultrasound.

COVERSA and its sexual assault nurse examiners also have sexual assault outreach centers in Cass, Clay, Jackson, Johnson, Lafayette and Ray counties in Missouri and Johnson County, Kansas.

Dr. Hierholzer is a graduate of the University of Missouri-Kansas City School of Medicine. She is serving as an American Medical Association delegate and member of the Kansas City Medical Society board of directors. She was named a Rising Star in 2013 by Nonprofit Connect.
BUILDING A PROFESSIONAL HOME

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