REDUCING DISPARITIES IN MATERNAL AND CHILD HEALTH

Ensuring Equal Care to Ethnic and Minority Groups
Unsafe Sleeping Practices
Mother & Child Health Coalition
WIC: Access to Nutritious Foods
Maternal Substance Use Disorders
Using a Trauma-Informed Approach

FEATURES
Surgeon General to Address Annual Meeting
Viewpoints: KC’s Center for Practical Bioethics
KCMS Retired Physicians
U.S. Surgeon General Highlights
KCMS Annual Meeting

NOVEMBER 28, 6:00 – 8:30 P.M.
MARRIOTT KANSAS CITY OVERLAND PARK
10800 METCALF AVE., OVERLAND PARK, KAN. 66210

FEATURED SPEAKER
U.S. Surgeon General Jerome M. Adams, MD, MPH

KCMS is most honored to have Dr. Adams as our featured speaker. A board-certified anesthesiologist, he served as Indiana state health commissioner before being sworn in as surgeon general.

~ plus ~

TWO AMAZING STORIES OF OVERCOMING HEALTH CHALLENGES

**Jenna Bell**, mother, Army wife and heart health advocate, lived with a life-threatening heart condition while she gave birth to her daughter and adopted her son, then in 2016 had a heart transplant, all while residing in the Kansas City area.

**Wesley Hamilton** of Kansas City was paralyzed from the waist down after being shot in 2012. To set a positive example for his two-year-old daughter, he realized the importance of fitness and became an adaptive athlete. He also works to encourage others with disabilities to exercise.

PRESENTATION OF KCMS ANNUAL AWARDS

- Lifetime Achievement Awards
  - Randall B. Hudson, MD, and George E. Stamos, MD
- Innovation Award – Daniel S. Durrie, MD
- Rising Star Award - Christine Parker White, MD
- Patient & Community Advocate Award
  - Nicholas Comninellis, MD, MPH, DIMPH
- Community Service Award - North Kansas City Hospital
- Exemplary Leadership Award
  - Richard B. Warner, MD and Arthur D. Snow, Jr., MD

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ON THE COVER: Pediatrician Elizabeth Simpson, MD, with a mother and infant at Truman Medical Center. Photo by Truman Medical Center.
There is increasing evidence that neighborhood exerts a powerful influence on those who are raised in or live in an area. Childhood trauma changes not only behavior, but tissue. Neighborhood can limit opportunity to achieve financial and educational success. The evidence for neighborhoods limiting or contributing to success is now represented nationally in the Opportunity Atlas. I encourage the readers to look at the Opportunity Atlas and perhaps even venture into the Dartmouth Atlas detailing the uneven outcomes and expenses associated with medical care across regions.

In this issue of Kansas City Medicine, our authors have provided us with insights about environmental and social forces affecting maternal and child health. Those writing have focused on pregnancy, neonatal period and childhood. There is discussion not only about neighborhood, but the institutional responses to those living in particular neighborhoods.

The importance of physical and social environment is summarized by Marian F. MacDorman, PhD, of the University of Maryland, in a well-done review of perinatal mortality: Fetal mortality, infant mortality, and preterm birth share many similarities in etiology, risk factors and disease pathways. Risk factors for poor birth outcomes include teen or advanced maternal age, multiple pregnancy, low socioeconomic or educational status, maternal smoking, lack of prenatal care, and unmarried status, among others. However, these risk factors do not explain many adverse outcomes. Of the factors MacDorman lists, most are related to the physical and social environment of the pregnant woman. Those environments facilitating adverse outcomes clearly are not equitably benefitting from medical knowledge and societal advances.

Elsewhere in this issue of Kansas City Medicine are several letters from colleagues responding to articles in recent issues of this journal. Concern is expressed by a family physician about a reference to family medicine as a residency choice versus surgery. The summer issue on the opioid crisis refreshed memories of years past when some in our community fervently promoted pain relief using opioids while misunderstanding the quality of evidence for the use of these powerful drugs. Two viewpoints on the role of Kansas City’s Center for Practical Bioethics are presented.

Editorials and letters to the editor are not necessarily the opinions of the Medical Society or the editors of Kansas City Medicine. Your letters and comments about what you read in Kansas City Medicine are deeply appreciated. They show your willingness to engage in dialogue about what is best for patients and the profession. Thank you to those who take time to respond to and critique the articles in this journal.

Your Editor, Dr. Michael O’Dell

Michael O’Dell, MD, MSHA, FAAFP is chair of the Department of Community and Family Medicine at the University of Missouri-Kansas City School of Medicine, and associate chief medical officer for the Truman Medical Centers Lakewood campus. He can be reached at michael.oddell@tmcmed.org.

REFERENCES
The Kansas City Medical Society is honored to have as our guest speaker at the 2018 Annual Meeting U.S. Surgeon General Vice Admiral Jerome M. Adams, MD, MPH. The Annual Meeting will be held Wednesday, Nov. 28, starting at 6:00 p.m., at the Marriott Kansas City Overland Park, 10800 Metcalf Ave., Overland Park, Kan. 66210.

Dr. Adams was sworn into office as the 20th Surgeon General by Vice President Mike Pence on Sept. 5, 2017. A board-certified anesthesiologist, he served as Indiana state health commissioner from 2014 to 2017. Dr. Adams, a Maryland native, has bachelor's degrees in both biochemistry and psychology from the University of Maryland, Baltimore County, a master of public health degree from the University of California at Berkeley, and a medical degree from Indiana University School of Medicine.

In addition, Dr. Adams was an associate professor of clinical anesthesia at Indiana University School of Medicine and a staff anesthesiologist at Eskenazi Health in Indianapolis. He has served in leadership positions at a number of professional organizations, including the American Medical Association, the Indiana State Medical Association and the Indiana Society of Anesthesiologists. He is the immediate past chair of the Professional Diversity Committee for the American Society of Anesthesiologists.

As Surgeon General, Dr. Adams has made the opioid crisis a priority. In spring 2018, he issued a health advisory on naloxone that explained the drug’s benefits and urged those at elevated risk of an opioid overdose or close to someone at high risk to talk with their doctor or a pharmacist about obtaining naloxone, learning the signs of opioid overdose, and getting trained to administer naloxone. In his speech to the AMA House of Delegates in June, he emphasized the need to remove the stigma associated with substance-use disorder, increase access to medication-assisted treatment, and to widen the availability of opioid overdose antidote naloxone.

During his tenure as Indiana state health commissioner, Dr. Adams presided over Indiana’s efforts to deal with the state’s unprecedented HIV outbreak. He is credited with taking swift action to declare a public health emergency and implementing a multi-tiered response that included access to health insurance and HIV care and treatment. He also helped with the successful launch of Indiana’s state-based, consumer-driven alternative to Medicaid expansion and worked with the state legislature to secure more than $10 million to combat infant mortality in high-risk areas of the state.

Dr. Adams’ motto as surgeon general is “better health through better partnerships.” As Surgeon General, Dr. Adams is committed to maintaining strong relationships with the public health community and forging new partnerships with non-traditional partners, including business and law enforcement.

He has pledged to lead with science, facilitate locally led solutions to the nation’s most difficult health problems, and deliver higher quality health care at lower cost through patient and community engagement and better prevention.

The Surgeon General oversees the operations of the U.S. Public Health Service Commissioned Corps, which has approximately 6,700 uniformed health officers who serve in nearly 800 locations around the world to promote, protect and advance the health and safety of our nation and our world.
Congratulations 2018 KCMS Honorees

The Kansas City Medical Society will present its 2018 awards to the following physicians and organization at the Nov. 28 Annual Meeting. See the next issue of Kansas City Medicine for full profiles of the honorees.

Randall B. Hudson, MD, Lifetime Achievement Award. During his 28 years at Saint Luke's Hospital, including 13 as medical director of the cardiovascular intensive care unit, he pioneered the concept of dedicated critical care of the post-operative cardiac surgery patient.

George E. Stamos, MD, Lifetime Achievement Award. Regarded as an excellent physician and leader, he is one of the founders of Quivira Internal Medicine at Overland Park Regional Medical Center. He has practiced internal medicine in Kansas City for over 35 years.

Daniel S. Durrie, MD, Innovation Award. He founded Durrie Vision and is a pioneer in refractive surgery technology and procedures.

Christine Parker White, MD, Rising Star Award. A pediatrician with Johnson County Pediatrics, she serves as treasurer of the Kansas City Medical Society board of directors.

Nicholas Comninellis, MD, MPH, DIMPH, Patient & Community Advocate Award. He is the founder and CEO of the Kansas City-based Institute for International Medicine which trains health care professionals to serve in underdeveloped countries.

North Kansas City Hospital, Community Service Award, for donating services to more than 1,500 Metro Care patients over the past 10 years. Hospital CEO Peggy Schmitt and Vice President Becky Fisk will accept the award.

Richard B. Warner, MD, psychiatrist in Overland Park, and Arthur D. Snow, Jr., MD, family medicine doctor in Shawnee Mission, Exemplary Leadership Award, for over 20 years of service as delegates to the Kansas Medical Society and American Medical Association.

Jenna Bell, most recently of Leavenworth, was diagnosed with cardiomyopathy in 2008, putting her at risk of sudden cardiac death. She was told she would never have children and would live with heart disease for the rest of her life. During this time, her fiancé Dan was on a 15-month U.S. Army deployment in Iraq. The couple stood up to the challenge and married in 2009. Under the supervision of Saint Luke's cardiologist Anthony Magalski, MD, she gave birth to their daughter in 2011. The couple adopted their son in 2014. In February 2016, she received a heart transplant at Saint Luke's by Michael Borkon, MD. Since then, she is enjoying raising her two children and has become an advocate for heart health with the American Heart Association.

Wesley Hamilton was born and raised on the east side of Kansas City, Mo., where it was difficult for a young African American male to find opportunity outside of the streets. By the age of 16, he was on his own and too much for his mother to handle. At age 22 he saw the birth of his daughter, Nevaeh. He started working a full-time job and fought for and obtained sole custody of her. In January 2012, then age 24, life changed. He was shot multiple times by people he did not know, leaving him paralyzed from the waist down. Initially fighting depression and weight gain, he realized he had to set an example for Nevaeh. He adopted a fitness and nutrition regimen, losing 100 pounds and leaving behind the dark cloud of depression. Today he is an adaptive athlete, succeeding in bodybuilding, wheelchair sprinting and cross-fit. He also started the Disabled But Not Really Foundation to encourage people with disabilities to exercise. He also shares his inspiring story with youth and community groups around the area.

Annual Meeting Speakers to Share Their Amazing Stories of Overcoming Health Challenges

Will inspire audience as they describe experiences with heart condition, disability
November 11, 2018, will be the 100th anniversary of the armistice which ended World War I. Of course, until 1939, they called it the Great War, not the First World War. They didn’t know that it was just the start of the bloody 20th century. That November of 1918, there was great celebration across the world. Armistice Day became a national holiday here and in many other countries. We celebrate it to this day, although we’ve changed the name to Veterans Day.

It was a brutal war. All across Europe, a third of a generation of young men died, killed by one another or dead from disease. In the now-hackneyed phrase, it changed everything. It ended the Pax Britannica, 100 years of world peace. Well, sort of peace, anyway. Except for the American Civil War. And the Crimean War. And others. It ended four empires—Russian, German, Austro-Hungarian and Ottoman. It was the beginning of the end for the French and British empires. Across Europe, it ended government by aristocracy. Lastly, the peace treaties completely re-drew the map of Europe to much as we know it today. They failed utterly to resolve the causes of war. As soon as a new generation of young men reached military age, 20 years later, Europe plunged back into a worse war. Or, as Churchill and others have called it, the Thirty Years’ War of the 20th century. It was even more destructive than the Thirty Years’ War of 1618 to 1648, which devastated central Europe.

The Great War ushered in the influenza pandemic, which killed literally countless people around the world in 1918-19. Initial estimates were 20 to 30 million. Currently, historians think that 50 to 100 million died. No one is sure, save that the number was very large. More people died of the epidemic than from the Great War itself. Ever since, epidemiologists have worried that it could happen again. True, medical treatment of pneumonia and of pulmonary failure has greatly improved. The conditions at the end of the Great War may be unlikely to recur. But the worry of another great flu epidemic is always with us.

And so is the fear of another Great War. World War III. Could it happen again? In the years before the war, a British author, Norman Angell, wrote The Great Illusion (1910). He argued that war among the great European powers was unlikely. His reasoning was that the economies of Europe were highly interdependent. War would be catastrophic. No national leaders would take their countries into war. He was, as we know now, half right. It was indeed catastrophic.

ENTHUSIASTIC SUPPORT FOR WAR

But at the outbreak of war, both national leaders and the people they led went into war enthusiastically. Even intellectuals wanted war. To paraphrase a sentiment attributed to the great German socialist writer Thomas Mann, “War would be a purifier, a great hope.” In 1914, 93 of Germany’s leading intellectuals, artists and writers signed a manifesto supporting and justifying the war. And the militarists, who were strongly for the war, were typified by Colmar Freiherr von der Goltz, a German general and military writer, who wrote, “a long and bitter war was necessary for the sake of Germany’s ‘health.’” In August 1914, large crowds gathered in Berlin, Vienna and other cities of the German and Austro-Hungarian empires to celebrate the beginning of the war.

Perhaps the French and British were less enthusiastic than the Germans? But there were demonstrations in support of war in London, Paris and many other cities. This may have been simply patriotic fervor. Still, the British dived into war with enthusiasm. They had no compelling reason to go to war, only a vague conviction that Germany would be an uneasy neighbor across the English Channel and a desire to protect “Brave Little Belgium,” based on a 75-year-old treaty obligation. Belgium, it should be noted, was internationally notorious for having made the Belgian Congo into a living hell over the previous 30 years. Yet, British popular support for the war was so great that until 1916, the British army of millions was made up entirely of volunteers, both from the British Isles and from the entire British Empire.
France had been spoiling for revenge ever since their humiliating loss in the Franco-Prussian war of 1870-71. Their war plans envisioned attacking the Germans south of Verdun to regain the lost territories of Alsace and Lorraine. Defense was not a priority. Popular support for the war was universal. Even the Socialists, just as in Germany, abandoned their pre-war pacifism to support the war. Indeed, Georges Clemenceau, who was French prime minister in the latter part of the war, was a pre-war socialist.

**COULD IT HAPPEN AGAIN?**

So, could it happen again? After the Cold War, Frances Fukuyama wrote *The End of History and the Last Man* (1992). He contended that we now lived in a world dominated by liberal democracies, which would never make war on one another. At the time, this view was immensely popular. A quarter century later, it seems both naïve and irrelevant. The spread of democracy has become a retreat, and a third of the world is now governed by autocracies.

We lived from 1945 to 1990 under the nuclear shadow of the Cold War. Through a combination of good judgment and luck, the world avoided World War III. Since the fall of the USSR, we’ve now had nearly 30 years of peace. OK, relative peace. Somewhere in the world, people have been killing one another pretty much constantly. But we’ve avoided a general conflagration. So far.

The unending wars of the Middle East look uncomfortably like the wars in the Balkans which preceded the First World War. Otto Bismarck said in 1888, “One day the great European War will come out of some damned foolish thing in the Balkans.” Will the next world war come out of some equally foolish thing in the Middle East?

The most discouraging aspect of international affairs today is that no one really believes that a world war could happen again. Now, I came of age during the Vietnam War. Even at the height of that conflict, everyone knew that the greatest risk was escalation to a world conflict. And for all the misery of that war, it was successfully contained. But there was no doubt about that risk. One presidential campaign, in 1964, was heavily influenced by a video of a child followed by a mushroom cloud. No narration, no captions. Everyone knew, or thought they knew, that one candidate seemed more likely than the other to escalate the Cold War. Unfortunately, the winner went on to escalate the Vietnam War. But we didn’t get Armageddon.

Do we have the same awareness today of impending catastrophe? It’s a generation after the end of the Cold War. No doubt that our political leaders, many of whom are over 60, remember the risk. But there is little evidence today that they are paying any attention. Other countries play with fire, with little apparent understanding that they might touch off a conflagration. We speak of the North Atlantic Treaty Organization (NATO) as if it were some kind of optional alliance. It is not. It was and is a guarantee that we would deter aggression, in order to prevent a general war. The United Nations seems to be fanning the embers rather than dousing the flames. Leaders of the European Union appear oblivious, squabbling over Brexit, bouncing among issues from immigration, to finance, to populism. And the U.S.? Without descending to partisan politics, are there any adults left in Washington? Amidst the partisan squabbles, there seems little recognition that we live in a very dangerous world, and at a critical time.

Could the iron dice roll once again? Twice in the last 100 years, they have rolled across the world. No one wants a third world catastrophe. Yet, the danger is that someone will risk too much, not understanding the dangers. On the eve of the Great War, all sides were convinced that it would be a short war, decided by one or two big battles. “Over by Christmas,” they said in August. Today, our military leaders, at least, know better. And so far, the 21st century has been one of small, limited wars, involving the great powers only minimally. But the U.S. has tens of thousands of troops in combat. More than that, some 450,000 are deployed overseas. The world is awash with conventional weapons, with poison gas and the atomic bomb available to too many countries. Some world leaders threaten others, in apocalyptic terms, and seem unaware of the risk. Nobody has pushed too far. Yet.

Charles W. Van Way, III, MD, is editor emeritus of *Kansas City Medicine and is emeritus professor of surgery at the University of Missouri-Kansas City. He can be reached at cvanway@kcr.com.*
Nearly 175,000 people in the Kansas City metropolitan area—8.4 percent—are uninsured. That means when a medical crisis arises, they are likely to have to delay care or take on potentially crippling debt.

You can help meet this need by donating a few hours a month to the Medical Society’s charitable care programs, Metro Care in Missouri and Wy Jo Care in Kansas. Both programs operate under the Kansas City Medical Society Foundation.

Often, those without health insurance are working in one or more low-wage jobs without health benefits. They earn too much to qualify for government programs such as Medicaid, but not enough to afford health insurance and meet essential needs for food, clothing and housing.

Joe suffered from chronic hip pain and was concerned about his ability to continue working. He did not have health insurance through his employer. His family physician referred him to Metro Care which connected him with Robert Haas, MD, and Liberty Hospital. He received a hip replacement with no out-of-pocket expense. He returned to work. “Metro Care, Dr. Haas and Liberty Hospital gave me my life back,” he said.

While Kansas City has a network of safety-net clinics for primary care, the community relies largely on the donated services of individual physicians for specialty care. Metro Care and Wy Jo Care are designed to help meet this need.

ORGANIZED APPROACH

- Physicians who donate services through Metro Care and Wy Jo Care have the peace of mind of knowing their commitment to community service will be managed in an organized way.
- Patients are referred to the programs by safety-net clinics and individual primary care physicians. Participating specialists also can refer patients.
- Each participating specialty care physician pledges a number of new charitable patients they will accept.
- Metro Care and Wy Jo Care serve as a centralized entry point for referrals. They assign patients on a rotating basis, so cases are distributed evenly within specialties.
- Patients are pre-screened for eligibility before being referred to the specialist.
- The programs continue to help coordinate care throughout the case. Program staff will schedule the patient’s first appointment, then can help connect patients with ancillary services and tests if needed. The programs also can facilitate additional assistance such as medical interpreters.
- Area hospitals have been generous in their support of Metro Care and Wy Jo Care patients.
- Medications typically are funded through assistance programs available from safety-net clinics.

**Metro Care, Wy Jo Care Success Stories**

For the past several years, Oscar had been living with pain in his right knee. He is uninsured and did not have the resources to find a private doctor for his knee problem. Swope Health Wyandotte, where Oscar receives primary care, referred him to Wy Jo Care to see a specialist. Wy Jo Care arranged for interpretation at his appointments before, during and after surgery. Wy Jo Care also helped to coordinate care along the way. Oscar said, “I want to thank the Wy Jo Care program and staff from El Centro for having supported me for my surgery on my right knee, helping me pay the cost of the surgery and medicine. I give thanks to the surgeon and his team; may God bless you and shower you with blessings.”

Maria was facing an emergency as her uterus had prolapsed, leaving her in pain and discomfort. Wy Jo Care provided care coordination and arranged for medical interpreting. Over the next few months, Maria had two operations and many follow-up appointments. After her final appointment she said, “Estoy mucho mejor!” (I’m much better!)
PATIENT ELIGIBILITY

Metro Care and Wy Jo Care have four basic eligibility standards:
• Must be resident for at least three months of Clay, Platte or Jackson counties (Metro Care), or Johnson or Wyandotte counties (Wy Jo Care). Service in north Kansas City is coordinated with Northland Health Care Access.
• Family income of less than 200 percent of federal poverty level
• Have no health insurance
• Not eligible for any government programs such as Medicare, Medicaid, VA or workmen's compensation

REFERENCE
1. MidAmerica Regional Council website.
   www.marc2.org/healthinfo

FOR MORE INFORMATION
about becoming a charitable care volunteer through Metro Care and Wy Jo Care, contact Natalie Lynch, provider relations director, at (913) 526-8231, nlynch@kcmedicine.org.

“Navigator” Neurons Play Critical Role in Sense of Smell

Researchers at the Stowers Institute for Medical Research have identified “navigator” neurons that are key to setting up connections in the system responsible for the sense of smell. The new study builds on a breakthrough 2014 report from the laboratory of Stowers Investigator Ron Yu, PhD, which showed a critical period in olfactory wiring using mice as a model system.

The discovery of navigator neurons is the culmination of five years of research conducted in the Yu lab, aimed at distinguishing early-born neurons from later-born neurons. In their follow-up report published online October 25, 2018, in Neuron, the researchers detail the unexpected discovery of a group of olfactory sensory neurons, or navigator neurons, that play an essential role in establishing the olfactory map and correcting faulty connections.

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DON’T SETTLE FOR LESS.
Center Promoted Opioids While Having Ties to Drug Companies

By John C. Hagan III, MD, FACS

The summer 2018 issue of Kansas City Medicine on the opioid crisis was superb. The opioid crisis shows no sign of abating. Drug overdoses have become the leading cause of death of Americans under 50, with two-thirds of those deaths from opioids.

The Center for Practical Bioethics (CPB) in Kansas City, Mo. has on several occasions been investigated for its financial ties to the pain pill-opioid industry. In 2012, the United States Senate Finance Committee investigated CPB former president-CEO Myra Christopher.1 Christopher is a long-time acerbic critic of physicians for allegedly not recognizing and treating chronic pain. Christopher and CPB have had longstanding financial ties to numerous pain drug companies. The CPB has received substantial financial support from a variety of pain medication companies including Purdue Pharma, manufacturer of OxyContin. Christopher herself held a Chair funded with a $1.5 million dollar “gift” from Purdue Pharma.1

Justifiable criticism of CPB continues. U.S. Sen. Ron Wyden (D-Oregon) questioned in 2016 whether members of the Interagency Pain Research Coordinating Committee (IPRCC) with financial ties to the pharmaceutical industry should be allowed to continue to serve.2 Sen. Wyden specifically singled out CPB for concern stating that Christopher (now retired) and Richard Payne, MD, both employees of CPB, receive a disturbing variety of funding from drug manufacturers.2

Such conflicts of interest are not unusual and are frequently non-disclosed or inadequately disclosed. The Milwaukee Journal Sentinel found that 9 of 19 “pain experts” on a pain panel organized by the National Institute of Medicine organized in 2011 had connection to manufacturers of narcotic painkillers.3 Myra Christopher was named by the investigative reporter for her conflicts. During the time period 2009-2011 drug companies were providing 14% of the Center for Practical Bioethics operating budget.3

In my opinion, the Center for Practical Bioethics and its former CEO Myra Christopher have seriously undermined their credibility and objectivity by accepting so much financial support from the pain medicine industry whose opioid products they shilled. I personally sat through lectures, circa 2010, in which Christopher stated physicians ignored patients’ pain; did not know about the wonderful new opioid pain medications; that physicians ignoring patients’ pain might be guilty of malpractice possibly even committing a felony. CPB and other “pain management experts” receiving monies from the opioid industry must accept and admit some culpability for the current opioid overuse crisis.4 Russell Portenoy, MD, the leading proponent of opioid use, has publicly admitted regret and culpability.5

It’s past time for other pain management experts and organizations, especially those receiving monies from the opioid industry, to do the same, eschew conflicting pain medicine industry income and direct more resources to the opioid abuse epidemic. According to the Center for Practical Bioethics website6 dealing with the massive opioid crisis, some of which they helped create, this is not a major objective. It should be!

John C. Hagan III, MD, FACS, is an ophthalmologist with Discover Vision Centers. He is editor of the Missouri State Medical Association journal, Missouri Medicine, and a board member and past president of the Kansas City Medical Society. He can be reached at jhagan@bizkc.rr.com.

Disclosure: This is a modification of a sidebar to an opioid abuse article that appeared in Missourri Medicine, July/August 2016. The author does not receive any monies from industry or have any financial conflicts.

REFERENCES
5. http://www.spine-health.com/blog/former-opioid-use-advocate-admits-he-was-wrong
Thank you for publishing the summer 2018 Kansas City Medicine edition highlighting the impact of the opioid crisis. The Center for Practical Bioethics recognizes that the lives ravaged by addiction and the lives destroyed by pain are both major U.S. health concerns. The moral obligation to serve and protect the interests of persons whose lives are devastated by the misuse of opioid medications weighs heavily upon society as do our duties to serve the millions of those who live with debilitating chronic pain.

We need better care and more safeguards. We need more effective evidence-based approaches to treatment. We need more compassionate and comprehensive care, including effective alternative therapies and options not currently covered by insurance. We need sound and scientifically supported health care policy. These tenets have been the foundation of the Center’s advocacy and policy work over many years.

For nearly a decade, the work of the Center has been instrumental in highlighting the tragic consequences of inadequate public policy and lack of comprehensive clinical support for the 100 million Americans who live with pain on a daily basis. For much of that time our work has been focused in leadership of the Pain Action Alliance to Implement a National Strategy (PAINS)—a national alliance of professional societies, consumer advocacy organizations and others working collaboratively to promote the recommendations called for in the 2011 Relieving Pain in America report published by the then-Institute of Medicine (now the National Academies of Sciences, Engineering, and Medicine).

Since 2011, our efforts in developing the National Pain Strategy led to our convening seven national meetings attended by hundreds of collaborators from diverse fields to address comprehensive aspects of care, essential to the development of a comprehensive patient-centered response for dealing with chronic and high impact pain. From the beginning of the Center’s PAINS project, as cited in its first policy brief, we defined and cited the need for “Integrated Pain Management” and “Biopsychosocial” models emphasizing “Interdisciplinary and multidisciplinary nonpharmacological” approaches to the treatment of chronic pain.1

We have produced a series of reports and nearly a dozen policy briefs that have responded to and adopted the priorities identified by the Departments of Health and Human Services and Veterans Administration.2 These briefs and reports have been widely distributed to care providers, policy experts, professional associations, and consumer and patient advocates. They remain available online at www.painsproject.org. This repository of studies and recommendations on dealing with America’s pain crisis reflect the Center’s work and is now hosted by the Academy of Integrative Pain Management.

The Center publicly acknowledged early funding of this work that came from pharmaceutical companies. At no time did any funder direct the course of our work or influence the outcomes of our projects. It should also be noted that primary funding during this period came from non-pharma foundations including multi-year grants totaling more than $1 million from three funders: the Millbank Foundation, the U.S. Cancer Pain Relief Committee Inc. and the Mayday Fund. All work was directed...
at collaborative solutions with various stakeholders including those involved in abuse prevention, drug diversion and risk reduction. Dozens of groups were convened by the Center to seek common ground in exploring and promoting solutions to the pain crisis with a goal of creating long term, comprehensive, collaborative and interdisciplinary approaches to evidence-based pain intervention strategies.

Over the course of the last decade, the Center has been the recipient of a number of grants and gifts from pharmaceutical and device manufacturers that has brought significant scrutiny and public press attention. All gifts were publicly acknowledged. Projects were designed and directed by Center staff without funder input, influence or direction. All activities of the projects were periodically reviewed by our Board of Directors through staff updates and reports.

In 2012, the Center was one of nearly a dozen entities, including the American Geriatric Association, The Joint Commission and Federation of State Medical Boards, who were required to submit extensive information to the Senate Finance Committee detailing support from opioid manufacturers from the period of 1996-2012. The Center complied with the request, providing extensive documentation—much of it having been available through our publicly available reports.

In conclusion, we would like to reiterate our concern and support for those whose lives are ravaged by opioid addiction. Overwhelming evidence has documented inappropriate behavior by opioid manufacturers. Misleading claims about safety, efficacy and improper marketing and distribution strategies have caused undue harm to thousands of patients and families. Unfortunately, those who live with chronic debilitating pain have also suffered, often marginalizing them and stigmatizing them because of their conditions. Cancer pain is especially troubling and in need of a solution. The injustices need to be corrected, and the work of establishing sound policy to adopt comprehensive, inter-disciplinary and integrative pain management throughout the U.S. must continue.

John G. Carney, MEd, is president and CEO of the Center for Practical Bioethics. He can be reached at jcarney@practicalbioethics.org. The center’s website is www.practicalbioethics.org.

Sukumar Ethirajan, MD, is an oncologist in private practice in Overland Park. He is a board member of the Center for Practical Bioethics and past president of the Kansas City Medical Society. He can be reached at kancer@me.com.

REFERENCES


3. NIH Committees appointments occur only after thorough vetting by governmental entities to determine expertise, validate credentials, examine potential conflicts of interests (including personal investments) and affiliations. Full disclosure of the Center’s support from opioid manufacturers was available to HHS and Dr. Richard Payne’s personal affiliation with opioid manufacturers was included with the information he submitted.

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Retirement usually brings time for travel, grandchildren and hobbies, along with new ventures such as second careers or nonprofit volunteering. But perhaps in retirement you miss collaborating with medical colleagues, and would like to interact with other physicians about current medical issues or other matters of interest. If so, the Retired Physicians of the Kansas City Medical Society have something for you.

The Retired Physicians, formerly the John Locke Society, provide a variety of activities for retired physicians of all specialties. Any retired or partially retired physician is encouraged to participate in any or all of our activities. Here is a summary.

SPEAKERS BUREAU
Retired Physician members enjoy giving educational presentations to groups around the metropolitan area. Since 2011, the group has offered “Talking With the Doctor,” a speakers bureau of member volunteers. So far in 2018, over 50 health topic presentations have been given to approximately 1,250 participants in multiple community venues in the Kansas City area.

People with the greatest health care needs often have difficulty communicating with their physician or other health care professionals. The “Talking With the Doctor” program helps individuals broaden their understanding of health issues and develop their abilities to make the best possible health care decisions. The program also advises them on how to seek appropriate medical, financial and social service assistance.

The Retired Physicians plan to expand their speakers bureau to meet the increasing number of requests for health topic presentations. If you would like to participate in our program by offering to present talks on medical subjects in your area of expertise, feel free to contact us to volunteer your services. You will find speaking to groups to be an enjoyable experience, and you will be giving back to the community.

MUSEUM TOURS
Guided monthly tours at the Nelson-Atkins Museum of Art provide an intellectually stimulating cultural experience for our retired doctors. Tours usually occur on the third Wednesday of the month with an optional lunch in the museum prior to the tour. Our docent guide provides insight into different artistic genres as we view various works in the Nelson-Atkins collection. Significant others and guests are welcome and there is no charge. Every session leaves us more enlightened and appreciative of fine art.

Occasionally, we may tour other museums like the National World War I Museum, the Kemper Museum of Contemporary Art, the Truman Library, the National Museum of Toys and Miniatures, and others. As a group, we are able to obtain guided tours which provide extensive and valuable insight into the collections viewed. We welcome any retired physicians to join us for these stimulating visits to some of our local treasures.

FINE DINING
Are you ready to sit down with fellow physicians of about your same age and enjoy conversation over a good meal or a nice glass of wine? This is where retired physicians can enjoy socializing with others while dining in some of Kansas City’s finer restaurants. Every month or two, we get together at a chosen restaurant for lunch or dinner with a glass or two of wine and some light conversation.

Our dining groups usually range in size from 15-25 and are composed of physicians from a wide variety of specialties along with their spouses or significant others. Meet some old friends and former colleagues and catch up on each other’s activities or just reminisce about the “good old days of medicine.”

OTHER ACTIVITIES
Retired Physician members are represented by Keith Jantz, MD, on the newly formed Kansas City Medical Society Leadership Council. Representation on the Council contributes the retired physician perspective to the direction of KCMS, and helps retired members remain abreast of Society activities and policies.

The group also supports the Osler Society and its engagement with medical students on the University of Kansas Medical Center and University of Missouri-Kansas City campuses. By offering strong support of the Osler
Members of the Retired Physicians on a tour of the National Museum of Toys and Miniatures.

Society through continued dialogue with administrations of both medical schools, Retired Physicians strive to ensure the continuation of the Osler Society as a benefit to active medical students.

If you are interested in joining in Retired Physician activities, or if you know a retired physician in the metropolitan area who would like to join us, please get in touch with us through KCMS. The Retired Physician board meets on the first Tuesday of each month, and non-board members are welcome to attend meetings and planning sessions for future activities, as well as all activities of the organization.

For more information on the Retired Physicians group, contact Jesse Osman at josman@kcmedicine.org, or visit the KCMS website at www.kcmedicine.org and look for “Retired Physicians” under the “Community” main menu item.

Through participation as Retired Physicians, members benefit from cultural improvement and gain a connection with the medical careers all have enjoyed.

Keith Jantz, MD, is a retired internist from Overland Park.

Jesse Osman is director of membership for the Kansas City Medical Society. He can be reached at josman@kcmedicine.org.

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**Physician News Briefs**

**Steven Kaster, MD, MBA,** board-certified in gastroenterology and fellowship-trained in gastroenterology and hepatology, has been appointed chief medical officer at Menorah Medical Center.

**Joseph McGuirk, DO,** division director of The University of Kansas Cancer Center’s Hematologic Malignancies and Cellular Therapeutics program, will lead a national initiative to advance the use of CAR T-cell therapies. Established by the Association of American Cancer Institutes (AACI), the goal of the initiative is to develop and disseminate best practices that will guide AACI centers in providing more patients access to these groundbreaking immunotherapies.

**Roy A. Jensen, MD,** director of The University of Kansas Cancer Center, began a two-year term as president of the Association of American Cancer Institutes.

Shawnee Mission Health welcomed nine physicians: **Henry Arst, MD, FACEP,** emergency medicine; **Cara Goodell, MD,** family medicine; **Ingrid Keleti, MD,** internal medicine; **David Kennedy, MD,** internal medicine and pediatrics; **Karen Levin, MD,** neurology; **Charlie Matteson, MD,** family medicine; **Marjon Monfared, MD,** family medicine; **Ramon Nichols, MD,** occupational medicine and **Jee-hyon Park, MD,** internal medicine.

**Michael W. Farrar, MD,** a cardiologist with Meritas Health Cardiology on staff at North Kansas City Hospital, was appointed medical staff president for a one-year term.
Objection to Family Medicine Residency Reference

I have really enjoyed the new look of Kansas City Medicine and the expanded coverage. However, I was appalled by Charles Van Way’s derogatory and insensitive comment about family medicine (“Unemployed Physicians,” summer 2018). Until now, I have appreciated Charles’ articles, and even his sometimes acerbic comments. However, when discussing the number of applicants for residency slots vs. the number of available positions, his statement was “Someone whose dream it was to be a neurosurgeon at Harvard has to settle for a family medicine residency in Omaha” (italics mine).

It’s faculty members like him who should be considering some of the narrower specialties. Indeed, many other specialists have stated they were not qualified to be family doctors because of the huge breadth of knowledge it takes to become a good one.

Actually, training in a family medicine residency (even in Omaha which has excellent programs) might just be the best thing that happened to that resident when (s)he experiences the ability to adequately care for the huge number of conditions, ailments and injuries that show up in the office every day. Or when (s)he delivers a newborn into the arms of the mother and hears her heart-felt thank you. Or when (s)he sits with a severely ill child because it’s understood the family needs their doctor at that critical time.

Or when a small child comes up to him or her in church and puts his arm around his or her leg, turns to surrounding friends and says, “This is my doctor.”

Very few things are as satisfying to a family physician as accurately diagnosing an unusual disorder, especially after others had missed the diagnosis.

I believe Dr. Van Way owes an apology to every family physician for his ill-considered words.

Donald A. Potts, MD
Professor Emeritus
University of Missouri-Kansas City Department of Community and Family Medicine

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Michael O’Dell, MD, Editor.

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Reducing Disparities in Maternal & Child Health in Kansas City

HOW CAN WE GIVE ALL BABIES A HEALTHY START?

African American babies in greater Kansas City are more than twice as likely to die before their first birthday than their white counterparts. The disparities also correlate to geography and poverty—the region’s highest infant mortality rates are in Wyandotte County and eastern Kansas City, Mo.

How can we work to reduce these disparities and provide better outcomes for all mothers and children? This special section of *Kansas City Medicine* explores these issues and what we can do as a community.

• When serving low-income, increasingly diverse populations, physicians should be aware of language, culture and the social determinants of health such as lack of quality education, safe housing, supportive families, access to healthy food and more. *Traci Johnson, MD,* offers suggestions on how to overcome these barriers, and discusses ways physicians and other health care providers can overcome unconscious bias.

• Unsafe sleeping practices and other issues put infants at risk in the inner city. *Elizabeth Simpson, MD,* discusses how to promote safe sleep, along with other community efforts to improve infant health.

• The Mother & Child Health Coalition brings together community resources to improve infant health. Executive Director *Susan McLoughlin, MSN, RN, CPNP,* gives an overview of the group’s work including fetal and infant mortality review, help for new mothers and more.

• Good nutrition is essential for mothers and children. *Brenda Hilboldt, RD, LD,* from Truman Medical Centers explains the benefits of the Special Supplemental Nutrition Program for Women, Infants and Children (WIC), and ways to promote nutrition among high-needs families.

• Substance abuse among pregnant women is a growing concern, with the number of women with opioid use noted at the time of delivery increasing five-fold between 2000 and 2009. *Patricia Stilen, MSW,* and two colleagues from the Mid-America Addiction Technology Transfer Center, discuss evidence-based tools to address maternal substance use disorder, along with promising approaches being undertaken in Kansas City.

• Individuals who have grown up in poverty often develop the effects of trauma and toxic stress, which have dramatic effects on behavior. *Kathleen Harnish McKune, MBA,* and *Marsha Morgan, MPA,* give an introduction to the study of Adverse Childhood Experiences and how physician practices can incorporate trauma-informed care.
“Too Many Mothers are Dying After Childbirth”

“The Shocking Rise in Maternal Mortality”

“U.S. Has the Worst Maternal Mortality in the Developed World”

“Exceptionally Deadly—Maternal Mortality.”

The media’s focus on disturbing trends in maternal mortality and racial disparity create havoc and fear in the minds of pregnant women and their providers alike. The dilemma, however, surfaces in the statistics illustrating a gradual worsening in outcomes right before our eyes. As physicians, we now find ourselves grappling for ways to turn back time, dig deeper, re-visit protocols, and read between the lines. The answer may be in plain sight.

In 1985, a landmark report of the Department of Health and Human Services Secretary’s Task Force on Black and Minority Health detailed differences in mortality and morbidity among minority groups in the United States. Due to the consistency of findings in the research produced after this assessment, the U.S. Congress commissioned a 700+ page report in 1999 on understanding and eliminating racial and ethnic disparities in health care.\(^1\) Since then, multiple examples have been well-documented in the literature, including among care delivered to women of child-bearing age (see Table 1).\(^2\)

As the headlines continue to report, maternal mortality in the African American population is among the most alarming of findings, with this ethnic group having the worst outcomes. But now that the alarm has sounded, how can physicians respond to this national crisis?

<table>
<thead>
<tr>
<th>Disparities in Health Outcomes</th>
<th>AI/AN</th>
<th>Asian</th>
<th>Black</th>
<th>Hispanic</th>
<th>White</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infertility in last 12 months (% of women)(^{b})</td>
<td>N/A</td>
<td>10</td>
<td>12</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>Unintended pregnancy (% of pregnancies)(^{b})</td>
<td>N/A</td>
<td>N/A</td>
<td>10</td>
<td>50</td>
<td>42</td>
</tr>
<tr>
<td>Preterm birth (% of live births)(^{b})</td>
<td>13</td>
<td>10</td>
<td>17</td>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td>Fetal death (1,000 live births + fetal death)(^{b})</td>
<td>N/A</td>
<td>N/A</td>
<td>11</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Maternal death (100,000 population)(^{b})</td>
<td>N/A</td>
<td>9</td>
<td>26</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>Gastroesophageal reflux (100,000 population)(^{b})</td>
<td>96</td>
<td>18</td>
<td>570</td>
<td>N/A</td>
<td>24</td>
</tr>
<tr>
<td>Cervical cancer (100,000 population)(^{b})</td>
<td>7</td>
<td>7</td>
<td>10</td>
<td>11</td>
<td>7</td>
</tr>
<tr>
<td>Breast cancer deaths (100,000 population)(^{b})</td>
<td>15</td>
<td>11</td>
<td>31</td>
<td>13</td>
<td>22</td>
</tr>
<tr>
<td>Diabetes-related deaths (100,000 population)(^{b})</td>
<td>22</td>
<td>11</td>
<td>33</td>
<td>13</td>
<td>24</td>
</tr>
</tbody>
</table>

Table 1: Select Examples of Disparities in Obstetric and Gynecological Health and Health Care Source: American College of Obstetricians and Gynecologists\(^{1}\)

1. Increase and utilize services available that overcome the barriers in language among foreign-born patients.

Differences in language are becoming more commonplace as our population becomes increasingly diverse. Historically speaking, except for Native Americans, nearly every person currently residing in the U.S. descended from immigrants or slavery. According to the U.S. Census Bureau, by 2050, it is
expected that the Latino population will increase from 16% to 30%, and the Asian and Pacific Islander population will grow from 4% to 9%. The black population is expected to remain at 12%. Furthermore, the non-Latino white population is expected to decrease from 65% to 46% of the U.S. population.3

This numerical data supports a clear and consistent need for employed on-site interpreters, increased utilization of interpreter services via phone or telehealth screens for rarer languages, and cultural awareness training of staff to strive for full understanding during each physician-patient encounter.

Locally, the Kansas City metropolitan area is populated by 2.34 million people and is home to an ever-growing multicultural society. Our region’s Wyandotte County in Kansas has been championed by local officials as the second-most diverse county in America, second only to Broward County, Florida, which includes Fort Lauderdale.4 Interestingly, Wyandotte County has no majority ethnicity, with 40% of the population composed of non-Hispanic white, 29% Hispanic and 23% black.5 The remainder of Wyandotte’s populace is mixed and includes its vibrant refugee community. This county also supports the second-largest Sudanese population in the U.S. as well as the second largest Somali population in the U.S., and Asian refugees destined here from Burma and Bhutan.4,5

In many ways, the migration and growth in Wyandotte County is reflective of future national trends. Unfortunately, current paradigms do not adequately accommodate or address this evolving and growing diversity within the patient population, especially in regards to language barriers. In Wyandotte County alone, 12.7% of families reported speaking English “not well” or “not at all,” and 29.9% of the inhabitants speak Spanish as their first or only language.4 Per Kansas City, Kan., School District documentation, 74 languages are spoken within the public school system. Data for Kansas City, Mo., shows diversity of languages (see Table 2).

As physicians in this community, it is imperative that we address this need, seeking multiple approaches to ensure adequate communication alongside a continuing medical curriculum that facilitates cultural literacy and culturally-congruent care.4,5

2. Openly acknowledge the role social determinants of health play in pregnancy outcome.

The social determinants of health are defined as conditions in which people are born, grow, live, work and age that are shaped by the distribution of money, power and resources at global, national and local levels.7-8

The U.S. Department of Health and Human Services (HHS) and its component agency, the Health Resources and Services Administration (HRSA), have submitted numerous reports detailing the effect social determinants such as education, affordable housing, access to healthy nutrition, provision of health services and transportation play on achieving health, including favorable maternal and infant outcomes. These conditions are always at play and have powerful influences on overall well-being and are mostly responsible for health inequities.7-9

According to Kansas City’s Community Health Improvement Plan (CHIP), nearly half of all Hispanic mothers in Kansas City did not receive prenatal care in the first trimester in 2016. Only 56% of African American women in Kansas City received care in the first trimester compared with 78.88% of their white counterparts.10 Identifying co-morbid conditions or fetal abnormalities in the second trimester rather than the first trimester can contribute to a delay in intervention or worsening of risk factors and outcomes. (See Table 3.)

Consider the negative effect of unreliable transportation or the cost of medical supplies. Often, patients with diabetes in pregnancy refuse frequent antenatal testing or insulin initiation due to financial barriers. This does not only affect the mother, but also the future of her offspring.11
to cost of supplies, transportation to and from indicated appointments (sometimes even to ensure well-being of their unborn child). The perceived noncompliance and delay in care precipitated by these social determinants of health often result in exacerbation of medical conditions such as diabetes with far-reaching, long-term implications to both the mother and the fetus.\textsuperscript{11}

Hyperglycemia is a known teratogen; thus, it is well-known that failure to initiate prenatal care in women with diabetes increases the likelihood of congenital anomalies.\textsuperscript{12} Poor glucose control increases the risk of pregnancy complications which can impact maternal morbidity long after delivery. In these difficult situations, we have been conditioned to obviate risk of noncompliance, and it is customary to provide a patient informed consent of refusal of care through a hospital form documenting awareness of risks for refusal.\textsuperscript{13}

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To this end, rather than ensuring a patient signs forms accepting risks associated with refusal of care or intervention, stepping back to directly address potential gaps in access or resources may provide a bridge in care, rather than a chasm of further isolation\textsuperscript{13}

The American College of Obstetricians and Gynecologists suggests regularly screening for social determinants of care by using questionnaires, electronic medical record prompts, or history questions to assess.\textsuperscript{13} (see Table 4.) Screening may help color objective data collected at a routine visit in a different light.\textsuperscript{13}

3. Use evidence-based guidelines or approaches as often as possible.

Many medical providers often believe they are using evidence-based practices in their daily delivery of care. However, as products of the environment in which we live and practice, we each harbor bias. Implicit bias, and occasionally explicit bias, is responsible for less incidence of interventional cardiology procedures among African American patients. Implicit bias resulted in Latino patients in Los Angeles with long bone fractures receiving pain medication only half as often as non-Latino patients, as well as a higher rate of bilateral orchiectomy that is 3.2 times the rate in African-American men that it is in white men.\textsuperscript{14,15}

To combat our innate, biological tendency to recognize patterns, i.e. stereotype, we should look to use evidence-based guidelines as often as physically possible. The National Academies’ 2003 report, Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care refers to these natural physiologic responses as “cognitive shortcuts” and urges each physician to increase awareness of their own tendencies.\textsuperscript{14,15} In doing so, protocol-based medicine has emerged as one of the most revolutionary ways to decrease morbidity and mortality in medicine, particularly in maternal and child health.

The California Maternal Quality Care Collaborative is a consortium of health care professionals who have pooled together evidence-based guidelines in order to streamline care. Maternal morbidity was reduced by 20.8% between 2014-2016 among the 126 hospitals participating in the partnership, spurring a push for safety bundles throughout California and the U.S. Similar quality improvements have been noted in the incidence of postpartum hemorrhage, primary cesarean delivery rate and elective early deliveries.\textsuperscript{16} Due to these changes, Californians have also celebrated decreased morbidity in the form of lower preterm birth rates and decreased incidences of venous thromboembolism in pregnancy, and they have one of the

Table 3: Kansas City, Mo., Mothers Receiving Prenatal Care in First Trimester by Race/Ethnicity, 2016

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>56.6%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>51.2%</td>
</tr>
<tr>
<td>Native American</td>
<td>59%</td>
</tr>
<tr>
<td>Asian</td>
<td>67.6%</td>
</tr>
<tr>
<td>White alone, not Hispanic</td>
<td>78.8%</td>
</tr>
</tbody>
</table>

Source: Kansas City Health Department, Community Health Improvement Plan 2016-2021\textsuperscript{10}
lowest state maternal mortality rates in our country at 4.5/100,000 live births.\textsuperscript{16} This example should inspire other states like our own to consider a similar infrastructure that can better serve all mothers who rely on our care.

No one believes that differences in health care delivery among demographic groups in our nation are due to overt prejudices or racism. But it is prudent to remember that the beautiful country in which we reside is a culmination of our past and present. Adherence to evidence-based protocols, acknowledgment of our diverse social systems, recognition and mitigation of bias, and effective communication strategies will help us clinically narrow the discrepancies in quality of care so we can truly ensure every patient receives equal treatment under the law. \textsuperscript{2}

Traci N. Johnson, MD, FACOG, is assistant professor in the Department of Obstetrics and Gynecology at the University of Missouri-Kansas City. She can be reached at traci.johnson@tmcmed.org.

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4. Montgomery R. This Kansas county has no ethnic majority, but is it one of the most diverse in U.S.? Kansas City Star. Nov. 6, 2017. https://www.kansascity.com/news/local/article183060491.html


Table 4: Sample Screening Tool for Social Determinants of Health Source: American College of Obstetricians and Gynecologists\textsuperscript{13}

<table>
<thead>
<tr>
<th>Domain</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food</td>
<td>In the last 12 months, did you ever eat less than you felt you should because there was not enough money (or food)?</td>
</tr>
<tr>
<td>Utility</td>
<td>In the last 12 months, has your utility company shut off your service for not paying your bills?</td>
</tr>
<tr>
<td>Housing</td>
<td>Are you worried that in the next 2 months, you may not have stable housing?</td>
</tr>
<tr>
<td>Child care</td>
<td>Do you have enough day care for your children?</td>
</tr>
<tr>
<td>Financial resources</td>
<td>In the last 12 months, have you needed to see a doctor but could not because of cost?</td>
</tr>
<tr>
<td>Transportation</td>
<td>In the last 12 months, have you ever had to go without health care because you did not have a way to get there?</td>
</tr>
<tr>
<td>Exposure to violence</td>
<td>Are you afraid you might be hurt in your apartment building, home, or neighborhood?</td>
</tr>
<tr>
<td>Education/Health literacy</td>
<td>Do you worry about reading materials you get from your doctor, clinic, or the hospital?</td>
</tr>
<tr>
<td>Legal status</td>
<td>Are you scared of getting in trouble because of your legal status? Have you ever been arrested or incarcerated?</td>
</tr>
<tr>
<td>Next steps</td>
<td>If you answered yes to any of these questions, would you like to receive assistance with any of those needs?</td>
</tr>
</tbody>
</table>

Opens Neuroscience ICU Unit

Research Medical Center opened a neuro-dedicated Intensive Care Unit (ICU). The unit will have more than 40 specialists, including neurologists, neurosurgeons, pulmonologists, neuro-interventional radiologists, pharmacists, critical care nurses, respiratory therapists, rehabilitation therapists, pastoral care, social workers and more.

Other Neuroscience ICU features include advanced thoracic, respiratory, lab and imaging expertise; bariatric capabilities; a family visiting room; and on-campus family accommodations.
Forty years ago, I fell in love with pediatric medicine partially because I was death averse. Over these many years I have faced my fair share of perinatal deaths and have worked with families facing the death of their children from short- and long-term illnesses or accidents, but the percentage of these cases in my practice has, thankfully, been small. I have never mastered the art of separating myself from these families. So, a few years ago when I found myself sitting in a mortality review for my newborn patient, I was heartbroken.

Jennifer (not her actual name) was an extremely personable young mom who was successfully attempting to regain control of her life by participating in a methadone program. Her new baby girl, Hanna (also not her actual name), was born full term and perfect. We had watched Hanna for several extra days in the hospital to make sure she had no symptoms of withdrawal and she had done great. While Jennifer had no family or partner support, Jennifer was very committed to being a great mom! She was doing an exemplary job of caring for Hanna, and the state child welfare agency had evaluated her living conditions and found she had the necessary supplies to care for the baby. She had transportation arranged to her treatment facility and support from colleagues in drug recovery programs. This should have been a success story.

According to the Mother & Child Health Coalition, the infant mortality rate for greater Kansas City in 2011-2013 is 8.3 infant deaths per 1,000 live births. In 2016 there were 6,986 live births in Kansas City, Mo. alone, and 47 of those infants died. The majority of my patients at Truman Medical Center Health Sciences District (TMC HSD) are African Americans; the rate of death in this group is even higher at 10.6 per 1,000 (Table 1). Like Hanna, 16% of the infants who die in the Kansas City area are due to sleep-related deaths. Work to improve the safety of newborn sleep is not new. With the American Academy of Pediatrics (AAP) 1993 Back to Sleep campaign, the rate of death from unsafe sleep decreased by 56%. Still our national infant mortality rates are high, and even higher than the national average in our region. More solutions are needed.

The majority of my patients at Truman Medical Center are African Americans and the rate of death in this group is even higher at 10.6 per 1,000.

The majority of my patients at Truman Medical Center are African Americans and the rate of death in this group is even higher at 10.6 per 1,000.
Maternal & Child Health

a child care center, the Missouri Legislature in 2015 supported safe sleep efforts by requiring licensed child care centers to have safe sleep training and to develop sleep safety plans that comply with the recommendations of the AAP. In Kansas, child care health and safety training requirements also exist; well-organized educational programs through the Kansas Department of Health and Environment are available free of cost through the KIDS Network.

Still, the safe sleep message may be difficult to communicate with families. In a 2008 study in an inner-city setting, mothers were queried about co-sleeping. Most wanted to co-sleep and reported cultural traditions of co-sleeping. They also felt that they and their babies got better sleep when co-sleeping and that it was beneficial to themselves and to their babies emotionally. Instead, these parents rejected physician advice to not co-sleep but asked for information on how to co-sleep safely. Unfortunately, infant mortality reviews document that this is not possible.

I have long told the tired parents of my newborn patients that caring for a new baby is so exhausting that they will have amnesia about how much work it really is. Otherwise, each family would only have one child! Even the most attentive parents—who know the dangers of co-sleeping and are committed to avoid this—may fall asleep while holding their infants. Holding a sleeping baby is fun and relaxing, making their sleep state contagious!

We must minimize co-sleeping by spreading the message of the ABCs of safe sleep to everyone—babies must sleep Alone, on their Backs, in their own Cribs and we must repeat this message again and again. We must particularly work with our immigrant communities where the culture for co-sleeping is nearly universal and resources may be scarce. Our message of ABCs does not directly translate into something memorable and catchy in other languages. We must work with our translation services to come up with phrases to distribute the message in an effective way in other languages.

AAP RECOMMENDATIONS

The AAP published a 2016 policy statement on SIDS and other sleep-related infant deaths with 19 key messages. Recommendations at the “A” level include many items such as back-to-sleep on firm sleep surfaces in their parent’s room but in a separate sleep surface with no soft objects or loose bedding. In addition, SIDS is more common when infants are in the care of non-parents, so attempts should be made to educate grandparents, friends and other support people. As with any educational effort, repetition is important. Physicians and other health care providers must talk about this during the newborn hospital stay and at every outpatient visit at least during the first six months of life.

A 2016 AAP clinical report focuses on best practices for skin-to-skin care and positioning during the birth hospitalization. In addition the report notes that behaviors modeled in the hospital after birth, such as sleep position, are likely to influence sleeping practices at home after discharge. In a recent study from Baltimore, the impact of a hospital safe sleep educational project was evaluated. A comprehensive sleep safety culture changed the average death rate from 1.08 infants per 1,000 births pre-intervention to 0.48 infants per 1,000.

OTHER INFANT HEALTH ISSUES

Reducing exposure to second-hand smoke is also a focus of the AAP recommendations. Higher rates of SIDS in
We must minimize co-sleeping by spreading the message of the ABCs of safe sleep to everyone—babies must sleep **Alone**, on their **Backs**, in their own **Crib**s.

POSITIVE INITIATIVES IN KANSAS CITY

In the Kansas City region, we have many reasons for optimism in this arena. Initiatives like Every Child to One spearheaded by Children's Mercy Hospital in partnership with the Mother & Child Health Coalition, are working to address our highest mortality rate areas using innovative tactics including faith-based partnerships. The Kansas City Perinatal Recovery Coalition is another great group working in a multidisciplinary way with some of our highest-risk populations to improve outcomes for families dealing with substance abuse like my patient Hanna’s.

Unfortunately, Hanna has not been my only patient who has died from unsafe sleep. Critical resources like cribs are important, but public education and support for new families is, I believe, the key. We must attack the problem addressing all known factors of causation, including reducing exposure to second-hand smoke, encouraging breastfeeding and sleeping with the infant in the parent’s room for at least six months.га The ABCs are not enough.

Join one of the area coalitions, engage with your professional societies or feel free to contact me for more information as we continue this important work to decrease infant mortality. Let’s work together because all babies’ lives matter!

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Mother & Child Health Coalition: Working to Reduce Kansas City's Infant Mortality Problem

On average, every month 11 babies born in the metro area die before their first birthday. While the Centers for Disease Control's Healthy People 2020 goal for infant mortality is 6.0 deaths per 1,000 live births, rates in the Kansas City region range from 4.4 in Johnson County, Kan., to 7.9 in Wyandotte County, Kan. (Fig. 1)

Although there have been some improvements, these losses are not shared equally across racial and economic lines. In Wyandotte County, an African American woman is almost three times as likely to lose her baby as her white counterpart, even though early prenatal care, one of the most important factors in reducing preterm birth and infant death, increased from 2006 to 2015. Jackson County, on the other hand, has seen a decrease in early prenatal care during the same time period.

JOINING THE EFFORTS OF MANY ORGANIZATIONS

“The problem of infant mortality in Kansas City cannot be addressed by medical interventions alone. This problem demands a community response. The highest priority for Kansas City should be to lower infant mortality.”

– Howard Kilbride, MD, director, Division of Neonatology, Children’s Mercy Kansas City

Although the data is alarming, there are things that can be done to improve outcomes for families. Mother & Child Health Coalition (MCHC) believes that a collective impact approach can significantly reduce infant deaths by joining the considerable forces of the many organizations that are currently working on maternal and child health issues throughout the region.

The collective impact approach is a four-step process. First, the community must be at the table to co-design solutions that will be effective. Second, we must leverage the right evidence-based approaches that move our region forward. Third, we need to build momentum by joining forces across sectors focused on our collective results. Lastly, we need to share data and learnings across state lines, because we will only succeed together.

Mother & Child Health Coalition serves as a catalyst for bringing together resources to promote maternal/child health and community planning that leads to better lives for women, children and families. Membership includes individuals and groups from over 200 organizations and agencies. Members work to address such problems as infant mortality, breastfeeding, immunization, low birth weight, access to health care, childhood obesity, teen pregnancy, injuries, substance abuse and child abuse.

MCHC activities focus on education, advocacy, collaboration, assessment, networking and resource sharing. The Coalition serves the needs of women, children and families in the five-county metropolitan area, but focuses particularly on those low-income families who reside in traditionally vulnerable “hard to reach” neighborhoods. Kansas City Healthy Start, Safe Kids Metro Kansas City and Mid America Immunization Coalition are major programs of MCHC.

FETAL AND INFANT MORTALITY REVIEW

One way MCHC is specifically working to decrease Kansas City’s fetal and infant mortality rate is through the Fetal and Infant Mortality Review (FIMR) program, which is an action-oriented community process to reduce infant mortality. The program continually assesses, monitors and works to improve service systems and community resources for women, infants and families. A fetal or infant death is the event that begins the process.

The FIMR program became a priority in this region due to the high infant mortality rate. From 2012 to 2016, our community lost 662 babies who were born and did not live to their first birthday. Those losses very clearly show that the health of our region is suffering. While the rates of infant mortality are highest in Kansas City, Mo., and Wyandotte County, Kan., the loss of these precious lives affects the entire community.

The FIMR program consists of two parts: the Case Review Team (CRT) and
The problem of infant mortality in Kansas City cannot be addressed by medical interventions alone. … The highest priority for Kansas City should be to lower infant mortality.

~ Howard Kilbride, MD

Jean Craig, PhD, Kansas City Healthy Start Initiative project manager, with a baby whose mother is served by the program.

The Community Action Team (CAT). Mother & Child Health Coalition has oversight of the Jackson County Mo., CRT, and the Kansas City, Mo., Health Commission has oversight of the CAT. The CRT is a multidisciplinary team of experts chaired by David C. Mundy, MD, perinatal services chief at Truman Medical Center and associate professor of obstetrics and gynecology at the UMKC School of Medicine.

The group meets bi-monthly to review deaths of infants less than one year of age and fetal deaths greater than 20 weeks gestation. Cases are from 10 ZIP codes in KCMO with the highest infant mortality. Medical record review is confidential and each case is de-identified. Team members include obstetricians, neonatologists, certified nurse midwives, social workers, nurse educators, doulas, nurses and representatives from health insurance groups. The CAT is part of the Birth Outcomes Monitoring Committee, one of the committees of the Kansas City Health Commission. The CAT is responsible for planning and implementing action steps based on recommendations from the CRT.

During this process, 251 cases were reviewed over the past 12 years and four health risks have been identified:

- Late or no prenatal care
- Obesity
- Addiction to alcohol, tobacco and drugs
- A high rate of asthma in the FIMR ZIP codes

MCHC created a report, From Birth to One, Infant Health in Greater Kansas City, earlier this year. The report gathered data from across the five-state metro area, which includes Platte, Clay and Jackson counties in Missouri, and Wyandotte and Johnson counties in Kansas, as well as the city of Kansas City, Mo. The data reveals the most common causes of fetal/infant deaths, and who is suffering disproportionally.

The majority of infant deaths (50%) were due to preterm births. The second most common reason relates to birth defects (21%); third is sleep-related issues (16%); and the remainder (13%) are due to other causes such as accidents, homicides and various diseases (Fig. 2). The full report can be accessed at www.mchc.net.

Because of the high rate of infant mortality in Wyandotte County, Mother & Child Health Coalition advocated for a FIMR program to be started there. The new Wyandotte County Case Review Team, based at the Unified Government Health Department, has found that preconception health, morbid obesity, smoking and poor management of health conditions contribute to poor pregnancy and infant health outcomes in the FIMR cases studied.

They have also seen an increase of methamphetamine use in 2017 compared to cases reviewed in 2016. The age of the mother is a common component when looking at the FIMR cases from Jackson County and Wyandotte County. Wyandotte County reported three cases in 2017 where the mother was just 17 years old. The Jackson County FIMR program continues to work with the Wyandotte County CAT on these issues, with an emphasis on mothers who smoke.

HEALTHY START:
HELP FOR NEW MOTHERS

Another way MCHC is addressing the infant mortality issue in the metro area is through the Kansas City Healthy Start Initiative (KCHSI). This program focuses on eliminating disparities in perinatal health throughout greater Kansas City, in certain ZIP code areas with the highest infant mortality rates. In Missouri these include 64106, 64109, 64110, 64124, 64127, 64128 and 64132.
In Kansas, it includes 66101-66106.

KCHSI is a federally-funded program which provides services to pregnant women and women with babies up to the age of 2 years, to help them access the services they need to have a healthy pregnancy and a healthy baby. During 2018, KCHSI Community Health Worker teams will serve at least 720 program participants. Of these, 50% will be pregnant women, 25% will be interconception women and 25% will be children under the age of 2 years.

LOOKING AHEAD

The Coalition is continuing the conversation with our many partners to co-design solutions that will work. It is only through the power of our combined knowledge, skills and efforts that we can affect real change in outcomes for families in our community.

During a May 2018 brainstorming session on infant mortality convened by MCHC, nearly 100 diverse representatives of the health care community came up with a broad range of recommendations to address infant mortality. Some of these include:

- Increase education about cultural competency and implicit bias
- Establish prenatal care concierge-style services
- Include high-risk women in the assessment and action-planning activities
- Increase safe sleep education and public awareness activities
- Involve businesses in high-risk ZIP codes, such as beauty parlors, grocery stores, etc.
- Increase utilization of Community Health Workers to reach more families
- Support health care providers with clinically-proven tools to help pregnant women quit smoking

Children are truly our future. Together, we are all working hard to improve the health of mothers and babies in our community. At this point in time, we are poised to take our collective efforts to the next level and achieve a significant reduction in infant deaths in our communities. 🌟

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**Fig. 1:** Infant deaths per 1,000, 2012-2016**

**Analysis of FIMR data from Clay, Platte and Jackson counties in Missouri; Johnson and Wyandotte counties in Kansas.

**Fig. 2:** Cause of Infant Death 2012-2016

*Missouri Department of Health and Senior Services; Kansas Department of Health and Environment; City of Kansas City, Missouri Health Department; City of Kansas City, Missouri Health Department
The Special Supplemental Nutrition Program for Women, Infants and Children (WIC) has been part of the nation’s nutrition safety net for nearly 45 years. This federally funded, time-limited program targets the health and nutrition needs of pregnant and postpartum women, breastfeeding women, infants and children under the age of 5. Nationally, WIC serves approximately 7.6 million women, infants and young children across the country each month.

Truman Medical Center’s (TMC) WIC program is the largest WIC provider in Missouri, serving approximately 10,000 participants each month at nine clinic locations across the Kansas City metro area. TMC WIC has 20 nutrition professionals (Registered Dietitians or Nutritionists) that provide individualized counseling to families, encourage development of healthy eating behaviors and assist with reaching wellness goals.

PROMOTING GOOD NUTRITION

Why WIC, and how does it help? There is clear evidence that good nutrition during pregnancy and in the first few years of life has long-term positive impacts on health. WIC plays an important role for low-income families by providing access and availability to nutritious foods, nutrition education, breastfeeding support and referrals to health care and social services.

The WIC food package provides a wide range of healthy foods to supplement the diets of WIC mothers and young children. The WIC food package includes a variety of healthy options to help pave the way for a lifetime of nutritious eating and is tailored to meet the specific needs of each woman, infant or child. Since the introduction of improved WIC food packages that better align with current dietary guidance, WIC participants are purchasing and consuming healthier foods.

- WIC supports a more nutritious diet and better infant feeding practices. WIC participants are now buying and eating more fruits, vegetables, whole grains and low-fat dairy products.
- Improvements to the WIC food packages have also contributed to healthier food environments in low-income neighborhoods, enhancing access to fruits, vegetables and whole grains for all consumers regardless of whether they participate in WIC.

HEALTH BENEFITS

Nutrition influences health at every stage of life. Good nutrition during pregnancy is especially important to support fetal development and protect mothers from pregnancy-related risks of gestational diabetes, excessive weight gain, hypertension and iron-deficiency anemia. Numerous studies have shown that women who participate in WIC give birth to healthier babies than eligible non-participants. Studies have also shown that participation in WIC during pregnancy is associated with longer gestations, higher birth weights and generally healthier infants, and that these effects tend to be largest for children born to the most disadvantaged mothers.

- Prenatal WIC participation lowers the risk of infant mortality by connecting...
expectant mothers to essential prenatal health care, promoting healthy eating through nutrition assessments and counseling, offering breastfeeding education and support, and providing healthy foods tailored to the specific needs of pregnant women and their babies.

• WIC helps mothers give birth to healthier infants. WIC supports healthier pregnancies and births by offering the education, resources and support needed for women to adopt healthy habits and behaviors (such as not smoking during pregnancy).

• WIC reduces the likelihood of adverse birth outcomes, including prematurity and very low birth-weight babies. Pre-term births cost the United States over $26 billion a year, with average first-year medical costs for a premature/low birth-weight baby of $49,033 compared to $4,551 for a baby born without complications.

GOOD NUTRITION IN EARLY CHILDHOOD
WIC also holds an important role in working with low-income children. It is known that these children lag behind non-poor children on a wide range of indicators. Low-income children are more likely to be food insecure. Food insecurity in households with children is associated with inadequate intake of several important nutrients, deficits in cognitive development, behavioral problems and poor health. Good nutrition in early childhood can promote physical and cognitive development as well as foster healthy behaviors that may carry over into adulthood. For over four decades, researchers have investigated WIC’s effects on key measures of child health and have demonstrated the program’s success.

• Low-income children participating in WIC are just as likely to be immunized as more affluent children, and are more likely to receive preventive medical care than other low-income children.

• Children whose mothers participated in WIC while pregnant scored higher on assessments of mental development at age 2 than similar children whose mothers did not participate. In addition, they later performed better on reading assessments while in school.

There is clear evidence that good nutrition during pregnancy and in the first few years of life has long-term positive impacts on health. The nutrition counseling provided by WIC dietitians and nutritionists is participant-centered, focusing on meeting each participant where they are, and building on their strengths. WIC nutrition counseling has been shown to help increase the consumption of healthful foods.

Establishing healthful eating habits along with a healthy diet early in life can help prevent the onset of diet-related disease. When children have a healthy start, their prospects are brighter. WIC’s mission is to improve the health and nutritional well-being of low-income women and their young children by intervening at critical times of growth and development. WIC has the potential to improve the lives of millions of infants and children.

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Maternal substance use disorders (SUD) are a treatable, chronic health condition that can and should be addressed by physicians. According to the 2017 National Survey on Drug Use and Health (NSDUH), 1.4% of pregnant women between the ages of 15 and 44 reported using opioids in the past month.1 Data from 2000-2009 indicates that the national rate of women with opioid use noted at the time of delivery increased almost five-fold, with the rate of NAS incidence also tripling during this time.2 These growth trends are reflected locally as well: between 2006 and 2016, the rate of NAS increased from 1 per 1,000 births to 8 per 1,000 births in the state of Missouri.3 Ample research has shown that neonatal exposure to opioids is associated with increased risk of low birth weight, preterm birth and potential adverse health outcomes for both women and infants.4

While the current national focus on the opioid epidemic is clearly warranted given the complex risks opioid use disorder (OUD) poses to both maternal and child health, 2017 NSDUH data also shows that 8.5% of pregnant women reported using other illicit drugs, including marijuana, cocaine, heroin and methamphetamine within the past month.5 In 2017, approximately 15% of pregnant women reported consuming tobacco products in the past month, and 11.5% reported alcohol use.5 In total, almost 25% of pregnant women reported using illicit drugs, alcohol or tobacco in the past month.5

In addition to increasing the risk of adverse birth outcomes, children whose parents use substances are at higher risk of experiencing maltreatment and child welfare involvement than children whose parents are not using substances.6 Parental substance use can impede an adult's ability to:
- Identify and respond to a child's cues
- Develop positive attachments with their children
- Manage household finances to meet basic needs
- Appropriately express and control emotions 6

Despite the prevalence of substance use among pregnant women and the existence of numerous evidence-based interventions, the Kansas City metro area experiences a dearth of accessible treatment options and supports for families seeking recovery. A recent community needs assessment conducted by the University of Kansas School of Social Welfare found that the current continuum of care within the metro area does not effectively meet the present demand for treatment and recovery services.7

Families with children and individuals without insurance face additional barriers in obtaining SUD services due to a paucity of family-centered treatment and recovery settings. For example, the needs assessment found that in Kansas, there are no recovery housing options that can accommodate parents with children.7 Given the complex ramifications of substance use on family well-being, providing evidence-based, family-centered interventions and recovery supports—both in and out of clinical settings—is paramount to improving community health in the Kansas City area.

EVIDENCE-BASED TOOLS TO ADDRESS MATERNAL SUBSTANCE USE

Media coverage on maternal substance use often stigmatizes mothers and focuses heavily on the negative effects on children and families. However, as the Substance Abuse and Mental Health Services Administration (SAMHSA)
promotes “treatment works and recovery is possible.” There are many evidence-based tools health care providers and their communities can leverage to support the prevention, treatment and recovery of mothers with SUD.

Family-centered care is a useful framework to understand the breadth of evidence-based services that a family facing substance use might need. Family-centered care is defined as “providing services for the whole family to make recovery possible; although the mother is the entry point, the family becomes the client.” It is inclusive of the mother-infant dyad, as well as older children and partners/fathers. Family-centered care:

- Provides space for family healing
- Actively engages family members
- Respects individual and family choice
- Builds on family strengths
- Focuses on prevention and early intervention for children
- Is culturally responsive and trauma-informed
- Is supported by peers and recovery support services
- Recognizes that family and community are essential sources of strength and support

Providing this continuum of care is costly and difficult in what is often a fragmented service system. One important resource to help support family-centered care in Missouri is new legislation that went into effect on Aug. 28, 2018. This ruling “expands MO HealthNet (Medicaid) benefits for pregnant women to provide substance abuse treatment for up to one year after giving birth.” This legislation is a significant achievement in a state without Medicaid expansion.

An important first step in addressing maternal substance use is identifying patients who can benefit from a referral to specialized addiction treatment. However, perinatal substance use can go undetected due to a lack of standardized screening procedures and familiarity with referral sources, stigma surrounding maternal substance use, and uncertainty about mandatory reporting laws.

Screening, brief intervention and referral to treatment (SBIRT) is an evidence-based approach to universal screening and intervening for risky substance use that has been utilized across a number of medical settings, including primary care, ob-gyn and emergency departments. SBIRT combines the use of validated, self-report screening tools with a motivational interviewing-based brief intervention focused on educating patients about risky/harmful substance use and motivating behavior change. SBIRT is an important early intervention tool that can be readily utilized by physicians and is a billable service of Kansas Medicaid and many private insurers.

To learn more about how to implement SBIRT, a free, self-paced online course (with CME for $5/hour) is available at http://sbirt.care/training.aspx.

A number of resource guides are also available to learn more about evidence-based practices that health care providers and communities can use to address maternal substance use. Clinical Guidance for Treating Pregnant and Parenting Women With Opioid Use Disorder and Their Infants provides information on best practices for prenatal care, infant care and maternal postnatal care.

Sample clinical guidance topics include prenatal screening and assessments, addressing polysubstance use during pregnancy, initiating pharmacotherapy for opioid use disorder, screening and assessment for NAS, breastfeeding considerations and maternal discharge planning.

A Collaborative Approach to the Treatment of Pregnant Women with Opioid Use Disorders provides guidance on how communities can build a coordinated, multi-system approach to optimize care for pregnant women with opioid use disorders and their families. It identifies best practices that intersect a number of systems, including the mother’s medical care providers, the infant’s medical care providers, substance use disorder treatment, child welfare and dependency court. Some best practices include ensuring the existence of policy and protocols that facilitate access to medication-assisted treatment, creating a formalized system of care coordination between systems, implementing universal screening for substance use, providing ongoing care and monitoring for infants who were prenatally exposed to substances, and ensuring that priority and preferred access to treatment for pregnant women is enforced.

PROMISING APPROACHES AND RESOURCES IN KANSAS CITY

A local resource for the health care community is Mid-America Addiction Technology Transfer Center (ATTC) Regional Center, a partnership between Truman Medical Centers and the University of Missouri-Kansas City School of Nursing and Health Studies’ Collaborative to Advance Health Services. Funded by SAMHSA, Mid-America ATTC serves the states of Iowa, Kansas, Missouri and Nebraska, by:

- Providing intensive technical assistance to support organizations’ and systems’ efforts to implement EBPs and improve quality of care
- Sponsoring online and in-person trainings and supporting state conferences
- Disseminating resources through exhibiting, e-newsletters and our website
- Developing curriculum and other products
For more information on Mid-America ATTC, visit www.attcnetwork.org/midamerica.

KANSAS CITY PERINATAL RECOVERY COLLABORATIVE

The Kansas City Perinatal Recovery Collaborative (KC PRC) was formed in June 2018 in response to the growing impact substance use was having on pregnant and parenting mothers and their families in the bi-state metropolitan area. Substance use disorders during motherhood affect the whole family and require a comprehensive, compassionate and family-centered response. However, the service system is often disjointed, resulting in families being separated without receiving the resources to sustain recovery and improve the family’s health and wellness. KC PRC’s aim is to keep parents and their children together with the necessary treatment and supports so they can experience the recovery journey as a family.

Formed as a project of the Mid-America ATTC Regional Center, the KC PRC is working to develop, grow and nurture a coordinated, multi-system network of services and programs to support pregnant and parenting mothers as they navigate the dual journey of parenting and recovery. KC PRC is a collective of professionals from child development, child welfare, housing, social services, health care, criminal justice and substance use disorder treatment and recovery. Following a kickoff event in June 2018 that attracted more than 125 attendees, the KC PRC steering committee has significantly moved the project forward.

The KC PRC is now working in tandem with Missouri’s state leaders in the Departments of Health and Senior Services and Social Services to prioritize best practices and begin action planning. The group is focused on immediate ways care can be improved during three major time frames: during pregnancy, time of delivery and postnatal period including childhood and adolescence. The steering committee has identified six best practices on which they will focus their efforts:

Prenatal Period (during pregnancy)
1. Early identification and screening for all pregnant women, ideally every trimester
2. Outreach and engagement to ensure women using substances receive prenatal care and are connected to appropriate assessment and treatment

Time of Birth
3. Consistent hospital policies for screening pregnant/postpartum women and their infants
4. Consistent hospital notifications to Child Protective Services (CPS)

Postnatal Period and After (including childhood and adolescence)
5. Ongoing care plans for families that include home visitation, early intervention services and recovery supports
6. Coordinated Plans of Safe Care that are of sufficient duration to ensure a greater likelihood of family stability and well-being

The group is leveraging the latest research along with building a broad stakeholder network. The goal is to increase the Kansas City metro area’s capacity to provide compassionate and high-quality care across all the sectors that interact with mothers who have substance use disorders and their family members.

KC PRC has garnered attention in local and national media, including a two-part series on KCUR, articles in the Kansas City Star and Associated Press, and segments on local news.

The KC PRC Steering Committee convenes on a monthly basis and welcomes new members. For more information on how to join, contact Sarah Knopf-Amelung at knopfsm@umkc.edu.

"TOOLS FOR TREATMENT" WEB-BASED TOOLKIT

Mid-America ATTC also hosts Tools for Treatment (www.attcppwttools.org), a comprehensive web-based toolkit that houses training and technical assistance resources related to perinatal SUD. This mobile-friendly site serves as a clearinghouse of training curricula, online training resources, clinical tools and guidelines, a searchable resource library and opportunities to hear from experts and innovative family-centered treatment organizations. The site is continuously updated as new resources become available. Some featured products include:

• Easier Together In-Service Curriculum: This free downloadable curriculum describes a family-centered approach to treatment, care and supervision of pregnant and postpartum women (PPW) with a substance use/mental health disorder(s) and their families. It contains six modules designed for delivery in 45-minute in-service sessions by a clinical supervisor or similar professional. The primary audience is addiction treatment providers and the secondary audience is their community partners (mental health, health care, child welfare, child development, housing/vocational services and others). The curriculum contains trainer and participant manuals (with slides, worksheets and other resources referenced in the modules) and PowerPoint slides with presenter notes.
• **Bring Them All Documentary:**
  Addiction is a family disease. Yet mothers are often treated in isolation from their children and partners, having to choose between getting treatment and keeping their families together. One revolutionary program in Compton, California lets women bring them all—fathers/partners and children of all ages—to experience the recovery journey together. *Bring Them All*, a brief documentary, tells the story of family-centered care through the perspectives of clients and staff at SHIELDS for Families, proving the seemingly impossible can be done: to move forward a generation of children who never experience—or even remember—the challenges of growing up with family addiction. Watch the full documentary and topic-specific vignettes at [www.BringThemAll.org](http://www.BringThemAll.org).

• **On-Demand Training Videos:**
  The ECHO Didactics and Webinette pages contain a variety of video presentations by national experts on topics such as medications for addiction treatment, fetal alcohol spectrum disorders (FASD) and parenting for women in recovery.

• **Resource Library:**
  This database contains over 300 reputable resources that can be searched by topic and resource type. For more information on the Tools for Treatment site, contact Sarah Knopf-Amelung at [knopfsm@umkc.edu](mailto:knopfsm@umkc.edu).

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When communities pay attention to the impact of trauma, they are able to affect positively some of the toughest challenges facing both policymakers and providers. When communities have been intentional about addressing adverse childhood experiences (ACEs) by becoming trauma-informed, they report outcomes including lower suicide rates, reduced numbers of children entering the juvenile justice system, decreased dropout rates, fewer suspensions and expulsions from schools and fewer behavioral issues with children, along with drops in emergency room visits and reduction in substance abuse.

Physicians are uniquely positioned to:

- Raise awareness about the impact of trauma knowledge on neuroscience.
- Lead the way in implementing evidence-based practices, like attachment bio-behavioral check-ups.
- Infuse trauma-informed approaches into their own practices.
- Influence policies that can help children and their families heal from the impact of trauma.

I. NEUROSCIENCE, BRAIN DEVELOPMENT AND TRAUMA – WHAT WE KNOW

In 1998, Vincent Felitti, MD, Robert Anda, MD, and colleagues published a study that sparked a national conversation about the importance of understanding the long-term impact of trauma on brain development. “Relationships of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The Adverse Childhood Experiences (ACE) Study” was their work that appeared in the American Journal of Preventive Medicine.¹

Known as the “landmark ACE study,” it examined 17,337 Kaiser health plan members (70% Caucasian, 39% college educated with health care insurance). The study determined each patient’s exposure to ACEs by asking if they had experienced any of the following before age 18:

1. Emotional abuse (recurrent)
2. Physical abuse (recurrent)
3. Sexual abuse (contact)
4. Physical neglect
5. Emotional neglect
6. Substance abuse in the household (e.g., living with an alcoholic or a person with a substance-abuse problem)
7. Mental illness in the household (e.g., living with someone who suffered from depression or mental illness or who had attempted suicide)
8. Mother treated violently
9. Divorce or parental separation
10. Criminal behavior in household (e.g., imprisonment)

For every ACE identified, one point was assigned to arrive at the individual’s ACE score.

Drs. Felitti and Anda correlated the ACE scores with health-risk behaviors and health outcomes and found there is a link between early life adversity and well-known chronic diseases as well as risky behaviors and life potential.¹ Their work has been validated many times. As
the number of ACEs increases, so does the risk for poor health outcomes.

A later study conducted in urban Philadelphia identified additional community issues that contribute to trauma and toxic stress for individuals. Among these are living in poverty and residing in an unsafe neighborhood. Others include having experienced discrimination, witnessed violence, been subject to bullying, and lived in foster care. These indicators represent the social issues that affect each person’s health. Physicians can help address these factors by developing strong referral networks and creating health care partners so their patients can receive necessary and basic services.

Positive experiences with a parent, relative, teacher, etc. can help buffer the effects of ACEs, according to research by Erin Hambrich, Ph.D., of UMKC and other fellows of a national university-based consortium on child trauma. Child medical providers, such as nurses, nurse practitioners, and pediatricians, who typically see infants and their caregivers frequently during the first year, can play a strong preventive role by inquiring about living conditions, domestic violence, caregiver depression and caregiver drug use.

ACEs in Metro Kansas City

In 2017, Resilient KC conducted an “expanded ACEs” study in the metro Kansas City area in cooperation with the University of Missouri–Kansas City. The study covered nine counties including Cass, Clay, Jackson, Platte and Ray in Missouri, and Johnson, Leavenworth, Miami and Wyandotte in Kansas. In our region, adverse childhood experiences are common:

- Three in ten adults during their childhood experienced sexual abuse by an adult at least five years older than them (30.2%, n = 1,058).
- Over half of adults experienced emotional abuse while growing up (55.6%, n = 1,945).
- Four out of ten adults experienced emotional neglect (39.9%, n = 1,384).
- Kansas City regional adults witnessed a parent or adults in their home being physically or emotionally battered four times the rate of the Kaiser study of individuals (49.5% compared to 12.7%).
- Approximately four in ten (40.8%) adults living or working in the Kansas City region grew up in a household where someone abused alcohol or drugs.

The Impact of Trauma

To understand the ways adverse childhood experiences shape long-term physical and mental health as well as behaviors and development, an understanding of the human brain, its development and the stress-response system is essential.

When the stress response (fight, flight, freeze) is chronically activated, sometimes to the extreme, the neural connection patterns of the stress response become stronger. The emotional center of the brain becomes overactive and overpowers the ability of the executive center to think or decide rationally. The brain is stuck in a reactive mode. The stress-response system becomes dysregulated (aka chronic dysregulation). This is especially true for children, whose brains are developing rapidly (and therefore most vulnerable) from birth to age 18. This is when adverse childhood experiences can have their most devastating and long-lasting impact.

Chronic dysregulation causes the body to produce too much cortisol. Over long periods of time, high cortisol levels take a toll on the body by: raising blood pressure and blood sugar, inhibiting clear thinking, destabilizing mood, disrupting sleep, stimulating fat accumulation, and triggering the body to crave high-sugar and high-fat foods.

Chronic dysregulation can be either easy to see (someone who constantly overreacts which neuroscientists call hypersensitivity) or harder to see (someone who has dissociated or checked out, known as hyposensitive). The latter often cause no problems until one day, the person just explodes—the proverbial “last straw.”

Realizing that adversity in childhood harms the development and regulation of the stress-response system throughout someone’s life helps explain how powerful the ACE science can be in combatting some of the leading causes of disease, mental illness and death. In addition, studies have found that sustained trauma can physically change the brain and how it functions and can even change the way DNA is read. This may explain the frequency of inter-generational sustained trauma.

II. NEUROSCIENCE, BRAIN DEVELOPMENT AND TRAUMA—MOVING INTO ACTION

In an ideal world, all childhood trauma would be gone. But realistically, it is not going away. The gift of neuroscience is that it not only points us to the root cause impact of trauma but it also begins to help us understand how the brain can at least partially heal from the impact of trauma.

1. Teach Emotional Regulation

What We Know: Dysregulated stress-response systems are toxic to the brain and the body.

Moving into Action: The optimal time to teach emotional regulation is ages 3-30 months. However, at any age learning to
self-calm and self-regulate is important for moving from the emotional center (fight, flight, freeze) to the executive center (better thinking). Telling someone to calm down doesn’t work. Teaching someone a set of emotional regulating skills they can use when they feel themselves overreacting does work. 

**How:** There are many options for creative and natural ways to enhance what we already do naturally to self-calm (repetitive motions or sighing)—all are based on rhythm and repetition which resonate with neural patterns, e.g. the birth mother’s heartbeat and breathing that the developing fetus experiences.

- Breathe slowly and deeply—notice your breath.
- Repeat in your mind positive affirmations or mantras.
- Think of something funny or think of someone you care about.
- Stop and notice things around you such as colors, sounds, textures.
- Visualize calm places and favorite things.
- Put on lotion/hand massage.
- Touch each finger to your thumb on each hand repeatedly.
- Have something small in your pocket that you touch—a touchstone.
- Dance, walk or stretch.
- Engage in musical activities—singing, humming, listening to music.
- For infants, the power of play is critical (with play being purposeful, voluntary, pleasurable in a non-threatening, low-duress context). Swaying and rocking are other rhythmic and repetitive regulating activities.

2. **Test Cortisol Levels and Provide One-on-One Interventions**

**What We Know:** Early trauma increases cortisol levels. Cortisol in excess damages your long-term health.

**Moving into Action:** Implement ABC or attachment bio-behavioral check-ups (an evidence-based practice from the University of Delaware). ABC tests cortisol levels in children and their caregivers and intervenes with one-on-one coaching and parenting skills. Catching high cortisol levels in caregivers (many of whom likely experienced childhood trauma) and providing emotional regulation skills as well as teaching attachment parenting skills can help mitigate the inter-generational nature of ACEs. Many states now have a Medicaid code to pay for this. Kansas does not.

**How:** Five pilot sites in Kansas are now trying the ABC intervention and seeing reduced cortisol levels in both caregivers and parents. This practice should be expanded, including implementing policy and billing codes that support this early intervention treatment.

3. **Provide Safe Relational Experiences**

**What We Know:** One strong meaningful relationship with a supportive parent, coach, teacher, caregiver or other adult can make a difference in a child’s neural development even in the face of sustained trauma.

**Moving into Action:** Provide safe relational experiences for everyone in our communities. All organizations having contact with children and parents must implement trauma-informed practices. Go beyond the referral to a community agency or a set of services and treat the child and parent together in a holistic approach.

**How:** Often the youth who most need safe, relational experiences don’t have them at home and they also find themselves isolated in “normal” social situations. This is a lose-lose-lose situation (loss for the child, the family and our community.) Communities can create multiple pathways to safe relational experiences for our most vulnerable citizens.

- Provide connections to youth organizations that promote resilience, leadership and align with the trauma-informed principles of safety, trustworthiness, choice, collaboration and empowerment while embracing equity.
- Encourage interaction with older school peers who know about and are skilled in resilient practices.
- Advocate for no-fee youth sports teams that promote positive play, competition and sportsmanship.
- Champion community centers that offer resilience-building activities.

4. **Build Resilience**

**What We Know:** Building resilience in individuals can help mitigate the impact of trauma.

**Moving into Action:** We all possess resilience—it can also be taught and further developed. Research on resilience indicates that there are multiple intersecting factors including having a supportive community, feeling valued, having a sense of belonging and being able to engage with others and having access to basic necessities such as food, housing, education, employment and transportation.

**How (for Individuals):**

- Promote healing practices such as mindfulness, yoga, exercise, nutritious foods, and healthy sleep routines.
- Use historical, cultural rituals that promote well being.
- Implement restorative practices in all child-serving organizations.
- Create safe space in organizations for individuals to go to when they are dysregulated.
• Provide economic opportunities for all citizens that promote quality of life.

5. Raise Awareness of the Neuroscience of Trauma

*What We Know:* Supporting healthy, resilient people requires trauma-informed and resilient practices throughout families, communities and organizations. Cultural changes occur based on the trauma-informed principles of safety, trustworthiness, choice, collaboration and empowerment while embracing equity. Effective community and organizational practices are well established.

*Moving into Action:* Raise awareness in your family, teams, organizations and communities about the neuroscience of trauma.

*How:* Explore, implement and adapt available resources and add to the wealth of knowledge through publications, seminars, extensive and certified training and learning collaboratives. The efforts of Alive & Well Communities in Kansas and Missouri are a good place to start: https://www.traumamatterskc.org/. Share this article and our full paper with others: https://teamtechinc.com/, click on At the Forefront.

III. USING THE NEUROSCIENCE OF TRAUMA IN PHYSICIAN PRACTICES

Physicians who wish to bring trauma-informed care into their practices can work on the following five approaches to patient care and interaction.

Assure Physical and Emotional Safety

• Provide and clearly identify washrooms.
• Take time to familiarize the patient with the physical environment.
• Ask about comfort.
• Share control.
• Show respect.

• Use a warm and compassionate manner to build rapport.
• Meet with the patient before he/she disrobes.
• Ask the patient to disrobe only if necessary or only as much as needed.

Collaborate

• Share information.
• Allow time for questions.
• Provide opportunities for the patient to teach back home interventions.
• Support the patient to make decisions about their treatment.
• Include the patient’s family when the patient requests family be present.

Promote Choice

• Ask permission to close the door.
• Ask before another person is invited into the room.
• Ask permission to touch.
• Allow the patient to decide where to sit in the room.
• Explain rationale for the procedure and obtain consent.

Empowerment

• Ask “What happened to you?”
• Take time with the patient so they feel genuinely heard.
• Ask if the patient has preferences related to or has had difficulty with a particular procedure.
• Ask the patient what you should know before you begin the procedure.
• Ask if there is a way you can make the procedure easier for the patient.
• If the patient is having difficulty with a procedure, ask if there is a way you can help the patient relax.
• Pay attention to body cues; look for signs of distress and dissociation.

Build Trustworthiness

• Explain all procedures in terms the patient can understand.
• Tell the patient what to expect and how long it will take.
• Ask the patient what they want.
• Stop the procedure if the patient shows signs of distress.

CLOSING

Our hope is that the physician community will play a leading role in both raising awareness about this important topic and in implementing evidence-based practices to help our citizens heal. If you wish to join the trauma-informed movement in the Kansas City area, there are efforts you can support. Contact either co-author for more information. Together we can build healthy brains, which builds healthy communities.

Kathleen Harnish McKune, MBA, CEO and co-founder of TeamTech, a Kansas City-based facilitation firm, has helped organizations and collaboratives move their people and ideas into action for over 27 years. Her particular interest in the neuroscience of trauma was sparked in 2017 facilitating efforts to formalize this movement in the Kansas City metro area. Combining her systems background and study of root cause analysis with TeamTech’s implementation methods, TeamTech has added moving trauma-informed care into action to its portfolio of client services.

Marsha Morgan, MPA, founded Resilience Builders, LLC, after retiring from Truman Medical Centers in 2016. She has provided multiple trainings and facilitated learning collaboratives on toxic stress, trauma and resilience for health care providers, schools, nonprofit organizations and communities. Marsha’s passion for this work is a result of more than 40 years serving people with mental illnesses and substance use disorders.

(See page 33 for references.)
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