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Coronavirus: Complacency Is Not an Option

By Jason Skyles, MD, President, St. Louis Metropolitan Medical Society 2020

The coronavirus pandemic is without precedent in our lifetimes. The last pandemic that affected our daily lives to this magnitude was the influenza pandemic in 1918. Unlike today, medical care was much less developed than it is now. But then and now, there is no vaccine for the virus. Other pandemics of the last century have occurred in 2009, 1968 and 1957.1 Recent years have brought serious epidemics (Ebola, SARS), though they did not reach the level of pandemic.

In 1918, St. Louis Health Commissioner Dr. Max Starkloff and Mayor Henry Kiel—with the support of the St. Louis Medical Society—were credited with saving lives and reducing the spread of influenza in our region by enforcing large-scale shutdowns of public events. St. Louis had the lowest death rate among the 10 largest U.S. cities.2,3

Why is the COVID-19 disease so serious and so feared by infectious disease experts? First, coronavirus is showing a slightly increased death rate compared to typical influenza. This rate varies greatly depending on age and overall health. Early data estimates a death rate of around 3%, which compares to .1% for typical influenza.4 The 1918 influenza was estimated to have had a death rate of 2-3%.5 Secondly, researchers found a high reproduction rate of 2.28,4 compared to around 1.5 for the 1957 and 1968 influenzas.5

When the virus first started becoming a major issue in the United States, I reflected upon what my role was going to be. As a radiologist, I struggled at first, as I’m sure many sub-specialty physicians also have. Then the deluge of questions started from patients, friends and family. None of them cared that I really didn’t have any particular expertise in infectious disease.

I came to the realization at that point that as physicians, all of us can play an important role in education. Most of us are not infectious disease or public health experts, but as physicians our patients look to us for guidance and assurance. When questioned by an older individual, there is usually a tinge of fear. The same question from a younger individual usually revolves around why there is so much hysteria about the virus (after all, “it’s just like the flu,” they say).

Advice to Patients and Families

At the time I’m writing this, as a society we are moving past the containment stage and beginning to implement measures that aim to slow the infection rate. This is a critical time for the health profession to unite in our message. If the virus is allowed to go unchecked, we run the real risk of overloading the medical system. This could mean that patients who need advanced supportive care may not receive it.

We need to provide assurance to those who are anxious and remind them that four of five infected with the virus will show only mild cold and flu symptoms. More importantly, for the dismissive we need to provide education on the seriousness of the disease and stress the importance of adherence to the control measures put in place by our public health officials. We need to remind those who seek to diminish the seriousness of the disease, that these measures are being put in place not only to protect them, but also to protect our mothers, fathers and grandparents. Symptoms may be mild for them, but can be deadly for our seniors or for someone with an underlying serious health issue.

Yes, this will be an inconvenience for many, but it will save lives. Social distancing is imperative. This means no kid playdates, parties, sleepovers or families/friends visiting each other’s homes. We need to remind our vulnerable populations to be extremely cautious around children (yes, even grandchildren).
As school cancellations become more frequent, the job of caring for our children is often shifted to grandparents. So far, younger individuals have predominantly shown only mild symptoms of the disease but yet are fully capable of transmitting it. If you or your children are even mildly unwell, do not go out and do not have the grandparents watch the children. I know how hard this is. I have four young children, but it will help protect your parents and grandparents.

More importantly, for the dismissive we need to provide education on the seriousness of the disease and stress the importance of adherence to the control measures put in place by our public health officials.

Advice to Medical Practices

As physicians, how the pandemic affects us and our practices varies widely. Primary care and emergency medicine are seeing heavy caseloads. Other specialties may see little effect or a slowing of patient volume. We all need to think of ways to reduce patient-patient interaction and if possible patient-physician interaction. Consider rescheduling or canceling non-essential appointments. Limit the number of people in the waiting areas. Insist that patients use hand sanitizer before or upon entering the office.

The CDC has extensive recommendations regarding health care facilities, which can be found at https://www.cdc.gov/coronavirus/2019-ncov/healthcare-facilities/guidance-hcf.html.

We all have a unique opportunity to educate and assure our patients, family and friends. We need to reinforce that we cannot be complacent if we want to limit the infection rate. Basic hand hygiene and social distancing measures are imperative—to control the rate of spread and limit the risk to our most vulnerable population. The reports from Italy are a disturbing look at what could be our future if we as a society do not start taking preventative measures seriously.

Thank you to our public health department and St. Louis County Executive Dr. Sam Page for leading the local response and keeping us informed. Thank you also to our physicians, nurses and allied professionals in primary care, emergency medicine and urgent care who are treating coronavirus cases. The St. Louis County website http://stlcorona.com/ is a good resource to direct our patients to for up-to-date information from the county and the CDC.

During this time of crisis, we need to pull together as a community. Complacency is not an option.

Help Ease the Protective Equipment Shortage

As the frightening spread of COVID-19 unfolds around us, another crisis is emerging—the shortages of personal protective equipment and other supplies for physicians and other health care providers. Health systems are reporting that since the outbreak they have experienced a ten-fold increase in use of facemasks and other supplies necessary for health care workers to take adequate precautions. Many hospitals across the nation are now facing the possibility of severe supply shortages.

Through the media it is clear that our leaders, both locally and nationally, are aware of these shortages and are taking steps toward resolving them. But developing new sources and ramping up production will take time. In the meantime, we have seen pleas from the World Health Organization, the Centers for Disease Control, the U.S. Surgeon General, and major hospital systems to be mindful of resources.

It is not my role nor my intention to tell medical professionals not to use certain supplies, particularly personal protective equipment. Instead I ask you to honestly assess your risks and try to limit such usage so that necessary materials are available to those at the highest risk. By being mindful of others, we can all hopefully help keep our colleagues and friends in the emergency departments, ICUs and other high-risk locations a bit safer. In times of crisis such as now, we all need to not only come together, but to work smartly and efficiently for the benefit of all.

Jason Skyles, MD, is a diagnostic radiologist with West County Radiology at Mercy Hospital St. Louis.

References

Rising Above a Pandemic
By David M. Nowak, Medical Society Executive Vice President

What a fast-moving and quickly-changing world we live in. This fact has been perfectly illustrated over the past few weeks as the United States has dealt with the coronavirus (COVID-19) pandemic.

As I write this column during the third week of March, in recent days six Bay Area counties in Northern California have been placed under quarantine for three weeks; the community of New Rochelle, N.Y., identified as an “epicenter” of cases, has been operating as a containment zone with the National Guard standing by; communities across the country are being told to prepare to shelter in place and here in St. Louis, schools are closed, retail stores are shutting down, and employees are being asked to work from home in order to prevent exposure and ultimately, slow the virus. Amidst it all, there is a feeling of uncertainty and wondering what is going to happen next.

As we appear to be moving into more of a coronavirus lockdown of sorts, one thing is certain: This crisis will be as bad as we allow it to become, and the size and duration of the outbreak will depend on our collective actions as a society over the coming weeks and months.

When school closures and event cancellations were initially announced, many people were questioning the magnitude of the response to a virus that had not yet impacted that many people in our community. I’ll admit that I was disappointed that my favorite annual sporting event, the NCAA’s March Madness, was canceled. But social distancing is imperative. We need to applaud the actions of the Centers for Disease Control and our own local government officials and county health departments. Here in the U.S., we have the opportunity to learn from what happened in China, Italy and other countries when not enough measures were put in place initially to curb the spread of infection. If these actions protect the most vulnerable in our population from the illness, they will be more than worth the sacrifice.

As alienating as the effects of a quarantine can be, social distancing and isolation are crucial to bringing this outbreak to its end. Because there are no vaccines or treatments at this time, staying clear of one another is key to “flattening the pandemic’s contagion curve.” Biostatisticians have observed that the measures some communities are taking in terms of quarantine “may sound extreme when you look outside and everything seems normal. But they’re appropriate.”

Flattening the curve is paramount to our success in containing the virus, as it will slow the spread and number of cases over time and reduce the impact of the pandemic on our health care system. Relaxed attitudes toward the virus will impede the progress of containing it, especially since asymptomatic carriers can pass it along.

A data analysis by USA TODAY concluded that public health data demonstrates “those that fare well at suppressing the outbreak’s spread have done so through a combination of easy access to testing, rigorous contact tracing, clear and consistent science-based messaging, and a commitment to studiously abide by quarantines while clamping down on socializing no matter how tempting it may be to stray.”

Then, despite all the fear and uncertainty, emerges the human spirit. It was heart-warming to see posts on the community social networking site Next Door from younger, healthy adults volunteering to bring groceries or medicines to older, more vulnerable neighbors. A much beloved retired former co-worker of mine who lives alone posted on Facebook that she was worried about venturing out into crowds given her health concerns, and a number of friends...
stepped up with offers to help. Concerned that she was feeling isolated, another group of friends sent flowers to brighten her day. And how cool is it that a local television news anchor who is immune-compromised has been set up to provide news reports from her home? In a crisis, we rise and we adapt, and it often brings out the best in people.

As leaders in the community, our physicians have the opportunity to tackle the challenge as well. Our own SLMMS members have shared the measures that have been put in place in their practices, while educating and assuring their patients. And we should all be practicing good hygiene and hand washing all the time, not just during a pandemic. Perhaps new habits and improved infection control will emerge from this crisis—let’s hope so.

Social scientists and historians have already gone on record proclaiming that when this staggering global outbreak finally ends—and it will end—we will be judged by how we responded as a nation, as communities, and as friends. COVID-19 is already being compared to Pearl Harbor and 9/11 as a massive shock to the national system, writes Rice University history professor Douglas Brinkley.1

At a time when many of us feel so divided as a nation, maybe it takes a crisis such as this to pull us back together with a new perspective, and perhaps change our nation for the better, as previous disasters and global events have demonstrated throughout history. So right now, there is no timeline for when COVID-19 might end, but there is hope and there is resolve. Let’s all come together and rise above it.

References
2 Hjelmaaard, Kim, and Sergent, Jim, “USA TODAY analysis: America’s coronavirus ‘curve’ may be at its most dangerous point,” USA TODAY, March 19, 2020.

SLMMS Members Can Purchase Discounted Muny Season Tickets

Another benefit of your SLMMS membership is access to The Muny’s Corporate Advantage Program (MCAP). Again this year, The Muny is offering SLMMS members significant discounts on new season ticket subscriptions.

The program allows members to purchase season tickets at the lowest price available, and obtain huge savings (22-54%) when compared to purchasing single tickets. This outstanding benefit is available to members and their families. The 2020 schedule includes seven great musicals, including classics like “Chicago,” “Mary Poppins,” “The Sound of Music” and “Seven Brides for Seven Brothers;” plus Muny premieres of “Sweeney Todd,” “Smokey Joe’s Café,” and “On Your Feet.”

With the MCAP program, you’ll receive guaranteed same seats for all seven shows in Terrace A or Terrace B only. Subscribers have ticket exchange privileges, and the first option to renew the same seats for future seasons. To obtain your savings, use the Medical Society’s promo code CA20SLMMS when ordering tickets by phone, online or in person at The Muny box office. This code is good only on new season ticket subscriptions purchased between April 6 and May 3, 2020. The discount is not retroactive to prior season ticket purchases or renewals, and may not be used for individual ticket purchases. Tickets subject to availability at time of purchase.

Visit www.muny.org to view the 2020 season, show dates and ticket prices. For complete details, download the SLMMS MCAP program flyer at www.slmms.org. If you have questions about the discount program, contact Jane Schell at The Muny at 314-595-5708 or jschell@muny.org.
COVID-19 Q&A with Emily Doucette, MD, Acting Co-Director, St. Louis County Department of Public Health

The St. Louis community is fortunate to have SLMMS members Sam Page, MD, and Emily Doucette, MD, among physicians in senior leadership positions in this time of crisis. Dr. Doucette, acting co-director of the St. Louis County Department of Public Health, took a few minutes from her long and intense days to update physicians in this Q&A with the Medical Society.

What type of pandemic response plan did your department have in place prior to COVID-19?

The Department of Public Health (DPH) maintains an influenza pandemic response plan which has been updated to be responsive to the latest guidelines from the CDC. It covers a variety of pandemic pathogens. We are providing the community with guidance that matches this plan.

Are there community-wide pandemic response exercises?

DPH regularly conducts St. Louis County-wide exercises. The last was this past fall, in which we held a regional Point of Dispensing (POD) exercise. We also provide training and consulting service for private businesses and other entities.

Describe your epidemiology staff at St. Louis County DPH working on COVID-19.

We are fortunate at St. Louis County to have a team of highly trained epidemiologists and nurses dedicated to communicable diseases. All have degrees including nursing, MPH and epidemiology. Their skill sets include strong quantitative skills, biosecurity and disaster preparedness.

From your vantage point today, what may be the next steps in containment measures?

DPH has implemented aggressive mitigation efforts mandating social distancing in a variety of ways. We will monitor community disease and determine if additional measures to tighten social isolation are necessary, and when they might be triggered. At the moment, it is important to practice social distancing in all situations possible and take care of each other physically and emotionally, even if it is remotely.

Do you have any estimate as to how long we might be dealing with mass event closures and social distancing?

We cannot predict the timeline at this point. Much will depend if there is any seasonal component of this disease; this is yet to be known.

From a public health perspective, who is most at risk for COVID-19?

The most vulnerable populations include the elderly, pregnant women, anyone with other significant health issues affecting the cardiopulmonary system, and anyone with a compromised immune system.

How can physicians be of support to the DPH public health effort?

Promote good respiratory and hand hygiene. Practice environmental cleaning. Maintain moderate social distancing within clinical settings as you can. Consider limiting elective medical care. Use evidence-based criteria to test patients. Provide support and accurate information to patients about the disease.

Is there anything else you would like to add?

It is important for physicians and health care facilities to recognize that emergency preparedness planning is necessary regularly so we are prepared when pandemics hit. While the work of developing plans for continuity of operations and community education may seem superfluous or onerous between pandemics, this work is necessary for all health care organizations.

Emily Doucette, MD, MSPH, has been acting co-director of the St. Louis County Department of Public Health since October 2018. A family medicine physician, she previously was chief medical officer in the department. She obtained her medical degree from the University of Missouri-Columbia and completed her residency at University of Missouri Healthcare where she was chief resident. She obtained her master’s degree in public health from Saint Louis University. Dr. Doucette has been a member of the SLMMS Council since 2019.
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Commentary

Public Health, Emerging Threats and Society’s Preparedness

Lack of investment in public health has hindered response to COVID-19

By Elie Azrak, MD, MHA, FACC, FSCAI

Amid the cacophony of messages—mostly inaccurate—around the novel coronavirus (COVID-19) pandemic, the misplaced panic among the public has been epitomized by the store shelves emptied of hand sanitizer and, of all things, toilet paper! Messages even from relevant government agencies have been incoherent at best. Against this backdrop, one may ask: what is the role of government and how effective are public health efforts in containing both the virus and the message?

It was in 1950 that Columbia University economist Eli Ginzberg cautioned of an antigovernment attitude in the United States and a resultant neglect of the functions and provision of public health services. Since then, advances in medical science and in concepts such as epidemiology, controlled trials and economic evaluation have well served health research and policy, but have mostly concerned themselves with temporal proximity to the individual, with the short-term impact of medical interventions, and with the immediate economic value to the population, respectively. In contrast to medical care, public health is concerned with “preventing disease, prolonging life and promoting health through organized efforts of society.” To an extent, therefore, the misalignment of the medical care “complex” designed for acute sickness care and the compressed timescales of delivering policy have led to the slow starvation of public health and preventive activities.

In his March 10 testimony before the House Appropriations Subcommittee on Labor, Health and Human Services, Education, and Related Agencies, Centers for Disease Control Director Robert Redfield, MD, admitted that public health labs lack the infrastructure and the human capital to conduct scaled testing for COVID-19 within their communities, and submitted that the private sector corporations LabCorp and Quest are bringing online large-scale testing capability and already possess the distribution and collection networks to achieve effective operations to that effect.

Perhaps the emerging threat of COVID-19, and government’s response to it, are again a reminder of the complex political and social fabric of the United States. If LabCorp and Quest (used as an example, not as a target), corporations primarily driven by the profit motive, are uniquely suited to provide the needed scaled testing for the infection, and public health departments and laboratories, which are statutorily responsible for the health of their communities, are not in a position to deliver those services, then the belief that the public sector is inept may be a self-fulfilling prophecy in a political system that does not consider public health—preventing disease, prolonging life and promoting health through organized efforts of society—worth the investment.

Dealing with pandemic threats to society is one major reason for government to exist, and the likelihood of success in staving off these threats hinges on the ability of our government—and of our public health authorities—to deliver a succinct and coordinated message, coupled with public health action based on a solid foundation of education, policy making, proper budgeting and concerted execution. All of these are wanting today!

Perhaps our political system does not consider public health worth the investment, but that is the case only because we will it so!

References


Elie Azrak, MD, MHA, FACC, FSCAI, is an interventional cardiologist with SSM Health. He also is a past president of the St. Louis Metropolitan Medical Society. He can be reached at eazrak@earthlink.net.
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The COVID-19 pandemic has radically altered daily life around the world. Physician practices are experiencing major changes as well. These vary widely by specialty. Yet several common themes run through all practices. Non-essential appointments and procedures are being postponed. Consultations are being done by phone when possible. Protections are being instituted against infected patients.

St. Louis Metropolitan Medicine reached out to several SLMMS members to find out how their practices are being impacted. These comments are as of Monday, March 16 through Wednesday, March 18.

Primary Care

Family practice physician Mark Pelikan, DO, says his practice at Esse Health “is developing protocols for phone triage to determine which patients really need to come to the office to be treated.” Many patients are canceling; follow-up appointments for chronic conditions are being postponed, he added. Esse also has a service through which patients can receive text updates on COVID-19.

He noted that patients with COVID-19 symptoms are having difficulty getting tested because they don’t meet the screening criteria set by the public health departments. “We are left without knowing what to do except isolate,” Dr. Pelikan said.

Internal medicine and geriatric physician Mark Gunby, DO, with BJC Medical Group, said besides many cancellations, “We are restructuring office schedules to see well patients in the morning and ill patients in the afternoon. We also are limiting to one the number of family members or caregivers who can accompany the patient.”

He continued, “BJC has set up a nurse triage call system along with e-visits and video visits to help handle potentially infected patients’ questions regarding the risk of COVID-19 and the appropriate testing if needed. This provides a uniform approach to these at-risk individuals, making sure they get the appropriate answers to their questions and testing if needed. We will likely be using more telemedicine visits for Medicare patients as we get further instruction.” (CMS on March 17 announced it was expanding Medicare coverage of telemedicine.)

In ob-gyn, birthing is obviously not going to stop, but the hospital environment is changing. Robert A. Brennan, Jr., MD, hospitalist ob-gyn at SSM Health St. Clare Hospital, said, “We are wearing a mask for each patient encounter. We have limited the number of visitors to two. And there is no entry through the ER. We also have increased hand washing. There is a nurse screening everyone at the entrance.”

Behavioral Health

In child psychiatry, Pearl Serota, MD, described what she is experiencing: “We are screening patients for symptoms and travel history. We are keeping people seated at a distance. In the waiting room, we’ve removed toys and children’s books. We are asking only one parent to accompany the patient. We also are looking at telehealth options.”

Psychiatrist Luis Giuffra, MD, has had many cancellations. But he also is making greater use of telepsychiatry visits.

“We are also postponing long-term follow-ups and cosmetic appointments. We are communicating with patients electronically instead of in-person when possible. We are minimizing waiting room time”

— M. Laurin Council, MD

Specialties

At the office of dermatologist M. Laurin Council, MD, part of Washington University Physicians, she said patients are being aggressively screened prior to coming in, then again at check-in. She added, “We also are postponing long-term follow-ups and
cosmetic appointments. We are communicating with patients electronically instead of in-person when possible. We are minimizing waiting room time by rooming patients quickly, and we generally keep a distance from each other. As this situation evolves, we are very likely to tighten our protocols further.”

Independent dermatologist Erin Gardner, MD, said his office basically shut down on March 19, “for what will be likely the rest of March. Many staff are afraid to report to work, in part because of concerns for their own health. Many dermatology visits are for non-urgent services, so rescheduling is often a reasonable approach.”

Also in dermatology, George Hruza, MD, said his office is following policies including social distancing of at least six feet, no visitors accompanying patients, screening patients on the phone and at the front door for potential COVID-19 exposure, and frequent cleaning of high-touch surfaces.

At the Mercy Hospital South acute rehabilitation unit, rehabilitation medicine physician Jennifer Page, MD, gives this update: “We have changed our 49 rooms to all-private, thereby cutting our census in half to decrease the risk of infection. We have limited access to our therapy department and have closed the dining rooms to visitors. Visitors are limited to participating caregiver or immediate family member.”

She added, “We are all in this together.”

In nephrology, kidney dialysis must continue. Nephrologist Inderjit Singh, MD, said, “Our dialysis units have instituted a mandatory policy for all patients and staff including nurses, technical staff, dieticians and social workers to wear masks and appropriate personal protective equipment while inside the unit. No visitors are allowed in the waiting area of the dialysis unit at any time. We also emphasize to patients that there is NO evidence as of yet that the COVID-19 virus directly affects kidney function.”

He noted they are exploring telemedicine options both in the office and dialysis units.

Plastic surgeon Edmond Cabbabe, MD, said his practice has seen a severe slowdown, due to most plastic surgeries being done on an elective basis.

**Radiology**

In radiology, David Pohl, MD, of SSM Health St. Joseph Hospital-West, shared his observances: “We are seeing increased demands from the ER for imaging. The critical question being addressed at this point is room cleaning between suspected or positive cases. We are considering a general ban on all routine or follow-up evaluations.”

He added, “We are preparing our home computers so we would be able to do at least preliminary review and readings from our homes if several members of our group must undergo quarantine.”

Nuclear medicine radiologist Christopher Swingle, DO, with West County Radiology at Mercy Hospital St. Louis, has seen less impact due to the nature of his cases. “There’s been a bit of a decrease in elective scans, but PET/CT numbers have stayed about the same. Cancer patients are less likely to want to defer staging and restringing exams,” Dr. Swingle said.

Regarding staffing, he shared, “My group is encouraging anybody who thinks they have been exposed to work from home. In a radiology practice, we are largely prepared to do that. I think there’s a good collective sense that we are all in this together and colleagues have been very good about schedule flexibility.”

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**PROPHETIC WORDS FROM 1918—AND SO TRUE TODAY!**

During the 1918 influenza pandemic, the St. Louis Medical Society was a strong supporter of swift and broad restrictions on public gatherings ordered by St. Louis Health Commissioner Max Starkloff, MD. The following was written in the St. Louis Medical Society *Weekly Bulletin* in its October 10, 1918, issue, pictured at left. The same words could be repeated today!

“The actions of Mayor Henry Kiel in issuing a proclamation closing schools, theatres, moving picture shows, churches and large assemblages is a move which will go a long way toward preventing a rapid spread of the epidemic which is now involving not only this country, but practically the whole world. … That this edict of the Mayor’s may work a hardship on a great number of people is undoubtedly true, but the greatest benefit to the largest number of people is after all the best precaution, all the more so as it is a matter of life and death as we as physicians should back up the city officials in their effort to control the disease.”

(See more about St. Louis’ response to the 1918 pandemic in the article starting on page 14.)
Research Centers at WU, SLU Seek COVID-19 Treatment, Vaccine

Will St. Louis researchers produce the cure? It’s possible.

Our community is home to two major infectious disease and vaccination research centers at Washington University and Saint Louis University. Both are hard at work on research to develop a vaccine against COVID-19 as well as treatment to help save the lives of infected patients.

Saint Louis University

The Saint Louis University Center for Vaccine Development is among an elite group of research facilities that investigates vaccines and treatments for infectious diseases. SLU is one of nine Vaccine and Treatment Evaluation Units (VTEUs) around the country overseen by the National Institute of Allergy and Infectious Diseases (NIAID).

Last fall, the NIAID approved $29 million per year in funding over the next seven years for the VTEUs and a companion leadership group. SLU has been a VTEU member since 1989.

The new VTEU leadership group responds rapidly to public health emergencies by launching clinical trials and prioritizing vaccines and therapies to be studied in clinical trials. Currently, SLU is coordinating with the other eight VTEUs on COVID-19 response. SLU is one of 75 sites worldwide conducting trials investigating the safety and effectiveness of remdesivir, an investigational intravenous anti-viral medication, in treating COVID-19. In addition, a Phase 1 clinical trial evaluating an investigational vaccine designed to prevent infection with the SARS-CoV-2 virus that causes coronavirus disease has begun at another VTEU, Kaiser Permanente Washington Health Research Institute in Seattle, Wash.

Daniel Hoft, MD, PhD, principal investigator of SLU’s VTEU and director of the Division of Infectious Diseases at SLU, serves on the scientific and operations governance committee of the leadership group and leads SLU’s vaccine research efforts.

“SLU’s Center for Vaccine Development is internationally recognized as a leader in the development of vaccines—from the bench to the clinic,” Dr. Hoft said. “We are proud to be part of an unparalleled NIH consortium capable of urgently developing vaccines to protect the U.S. public and the world.”

As a VTEU, SLU can conduct Phase 1 through 4 vaccine and treatment trials, including clinical studies in collaboration with partners from industry.

At its Extended Stay Research Unit, SLU can conduct human challenge trials, which are tightly controlled studies that expose healthy volunteers to infectious diseases such as influenza and malaria. SLU participated in a recent influenza human challenge study that studied how a person’s immune system responds to flu infection. Other human challenge studies will look at the ability of new vaccines, therapies and drugs to protect against infectious diseases.

SLU researchers have extensive experience developing vaccines and treatments for infectious diseases such as influenza, RSV, parainfluenza, tuberculosis, Zika, dengue fever, malaria and Chagas disease. Through research on pandemic influenza, smallpox, tularemia, anthrax and plague, they have been on the forefront of protecting the public from bioterrorism and other emergent threats. SLU’s work has supported the development and licensure of multiple vaccines that currently are in clinical use.

SLU’s vaccine research has wide support from the community. To recruit for its studies, SLU pulls from a database of more than 15,000 previous volunteers or those who have expressed interest in vaccine research.

Besides SLU and Kaiser Permanente in Seattle, the other seven VTEUs are Baylor College of Medicine in Houston, Texas; Cincinnati Children’s Hospital Medical Center in Cincinnati, Ohio; Emory University in Atlanta, Ga; University of Maryland School of Medicine in Baltimore, Md.; University of Rochester in Rochester, N.Y.; University of Washington in Seattle, Wash.; and Vanderbilt University Medical Center in Nashville, Tenn.
On March 23, Washington University School of Medicine announced it is part of a national group at Johns Hopkins and other universities that is testing the use of blood serum from recovered COVID-19 patients as a treatment for those in the midst of infection. This resurrects a century-old technique and could possibly be implemented quickly since clinical trials would not be required. Major work still to be done is to determine the proper dosing.

In addition, a Washington University research team is looking for other ways to treat COVID-19 or reduce its spread. The team is analyzing the structure of the virus’s proteins to find possible targets for drugs or vaccines, looking for antibodies that might protect against disease, creating potential vaccines using multiple strategies, and developing a mouse model that can be used to test potential drugs and vaccines.

The group is led by Sean Whelan, PhD, the Marvin A. Brennecke Distinguished Professor and head of the Department of Molecular Microbiology, and Michael S. Diamond, MD, PhD, the Herbert S. Gasser Professor of Medicine. Both have extensive backgrounds in influenza research including Ebola and Zika.

“The speed of research on coronavirus has been extraordinary,” Dr. Diamond said. “Chinese scientists identified the virus, sequenced its genome, identified the probable animal source, and released the genomic sequence to the public in a matter of weeks. Groups around the world have been creating and sharing the tools we need to interrogate this virus. But even so, these things take time. Every day, the U.S. is seeing new cases. We are racing against the clock.”

In addition, the group is carrying out work on a $3.4 million grant from NIAID to investigate why flu vaccines elicit such a short-lived immune response, and how to extend their effectiveness. This work is part of NIAID’s strategic goal to develop a universal flu vaccine.

Across campus, members of the Washington University Department of Infectious Diseases in January began preparing for the response within the School of Medicine and the BJC HealthCare system. A virtual incident command center was established. Drawing from a 2002 SARS response plan, the team prepared a coronavirus outbreak response plan for all BJC hospitals, including hospitals and clinics staffed by Washington University physicians.

“Communication is one of the most important tools at a time like this,” said Hilary Babcock, MD, a professor of medicine and medical director of the Infection Prevention and Epidemiology Consortium for BJC HealthCare. “We needed to make sure that our front-line clinicians can very quickly recognize that someone might be infected, and that they know what to do if a potentially infected person presents at their clinic.”

Besides education within BJC, Dr. Babcock along with Steven Lawrence, MD, have made frequent media appearances to educate the public about how to respond to COVID-19.
The 1918 Influenza in Missouri: Centennial Remembrance of the Crisis

Social distancing actions taken in both St. Louis and Kansas City led to demonstrably reduced peak and overall excess influenza mortality rates

By David S. McKinsey, MD; Joel P. McKinsey, MD; and Maithe Enriquez, PhD

Reprinted with permission from Missouri Medicine July/August 2018. An excerpted version of the article is printed here. The full article, including a discussion of Kansas City during the pandemic, is available at https://bit.ly/mm-1918.

Introduction

The year 2018 marks the centennial of the 1918 influenza epidemic, the worst medical crisis in Missouri’s history. Although influenza decimated each of the state’s eight regions, Missouri’s military personnel and its cross-state sibling cities, St. Louis and Kansas City, absorbed the epidemic’s worst blows. This article, second in a two-part series, will chronicle the experiences at Missouri’s Army base, Jefferson Barracks and its World War I field hospital staffed by St. Louisans, Base Hospital 21; review the brutal impact of influenza on the populations of St. Louis and Kansas City; and discuss the effectiveness of public health responses in these cities.

Flu Hits Military Barracks

In the St. Louis area, the first cases of influenza were reported at Jefferson Barracks, the nation’s oldest military installment west of the Mississippi River, 17 miles south of downtown. Two hundred thousand enlisted men passed through the base during World War I. On October 1 the first influenza cases were identified; within a week 800 soldiers were hospitalized. Assistance was requested from the Red Cross in St. Louis, and women received hurried training at Barnes Hospital as nurses’ aides. Fortunately, despite its initial rapid spread the epidemic was controlled quickly. In total there were more than 2,000 influenza cases at Jefferson Barracks, a much lower figure than at many other military bases in the country. Dr. C. E. Freeman, the Barracks’ chief military officer, attributed this better-than-expected outcome to emergency aid from the Red Cross nursing staff.

Missourians also valiantly battled influenza “over there.” At the onset of World War I the Army and the American Red Cross created 50 base hospitals, designated as official military units, utilizing personnel from university medical centers. Physicians and nurses from Washington University immediately agreed to staff Base Hospital 21, one of the first six base facilities mobilized in the war. The unit was stationed at a 1,350 bed hospital in Rouen, France. Base Hospital 21’s medical services were directed by Lieut. Col. Walter Fischel, brother of Dr. Ellis Fischel who later established a cancer center in Columbia. Patient volume was brisk: there were 500-600 admissions daily. The 61,000 admissions during the war were evenly divided between surgical and medical cases. The most common diagnoses were gangrene or nerve gas poisoning, but Base Hospital 21 also served as a treatment center for influenza patients. (Figure 1) In October, 1918, the hospital’s daily census crested at an astonishing 1,950 patients, coinciding with the peak of the influenza epidemic in Europe.

In 1918 St. Louis, population 687,000, had a distinctly different heritage and culture than its cross-state rival 340 miles upriver,
On September 21, facing the inevitable arrival of the epidemic, Starkloff advised the public to avoid crowds, to get as much rest as possible, and to abstain from alcohol.

St. Louis

In late September, St. Louis hoped to avoid the devastating experiences recently reported in eastern cities. The City Health Commissioner, Dr. Max Starkloff (Figure 2), son of a Civil War surgeon and great grandfather of the founder of today’s Starkloff Disability Institute, was a clear-headed, effective and forceful leader during the emergency.6,7,8 Mayor Henry Kiel granted unprecedented authority to Dr. Starkloff to implement closures of public places. On September 21, facing the inevitable arrival of the epidemic, Starkloff advised the public to avoid crowds, to get as much rest as possible, and to abstain from alcohol. Once cases were confirmed in the city, he was authorized to “issue public health edicts and impose heavy fines on physicians who fail to report influenza cases.” On October 7, Starkloff sprang into action and, as described by Appel, began “shutting down the city”6 by closing schools, theaters, moving picture houses (in the parlance of the day) and places of amusement (Figure 3). Public gatherings of more than 20 persons were prohibited. The next day closure orders expanded to include playgrounds, library reading rooms, fraternal lodges, pool halls and Municipal Court. Even churches were closed, for the first time in the city’s history. The use of streetcars was limited. Hours for busy downtown department stores, including Famous-Barr, were restricted. A staggered work schedule was implemented at factories to reduce streetcar crowding.7

The epidemic continued for weeks longer than had been expected. In the face of intense pressure from business interests, restrictions were relaxed.

The church closure order was protested by Archbishop (later Cardinal) John J. Glennon to no avail, leading him to suspend temporarily the obligation of Catholics to attend Mass weekly. Eventually churches were allowed to reopen, with strict attendance limits. Father Frederick Holweck, pastor at St. Francis de Sales Church, was turned in to the St. Louis police after 200 parishioners were seen in his church, a violation of the city’s anti-crowding ordinance. Father Holweck explained that many worshippers had snuck in through the church’s side windows out of his view. Charges were not pressed. Ironically, despite the severe restrictions placed on houses of worship, saloons were allowed to remain open throughout the epidemic (in both St. Louis and Kansas City), three months before the Volstead Act established prohibition.

The epidemic continued for weeks longer than had been expected. In the face of intense pressure from business interests, restrictions were relaxed. On Armistice Day, November 11, when the streets were filled with exuberant citizens celebrating the war’s end and “church bells ran nonstop,” Starkloff allowed merchants to sell American flags, but only on the sidewalks outside their stores.8

continued
Throughout the darkest days of the epidemic, public health authorities received critically important assistance from the American Red Cross (ARC). Surgical dressings, influenza masks, clothing and hospital supplies were produced by ARC volunteers. The ARC women’s motor corps transported health care personnel and patients, including ill cross-country travelers who were picked up at Union Station and taken to nearby hospitals (Figure 4). More than a million four-page informational pamphlets, containing such pithy advice as “cover up each cough and sneeze, if you don’t you’ll spread disease,” were distributed to the public. The St. Louis Red Cross chapter was so effective during the 1918 influenza epidemic that almost a century later it was described as a “model chapter.”

Outcomes

Abundant available epidemiological data paint a clear, if grim, picture of influenza’s toll in Missouri’s two largest cities (Table 1). St. Louis reported 31,693 influenza cases and 2,883 deaths. In Kansas City, 11,431 cases of influenza and 1,724 deaths were reported. The actual numbers of influenza cases undoubtedly were much higher, as many cases were not reported. Both St. Louis and Kansas City had higher rates of excess mortality than other areas of Missouri. Despite these dreadful mortality figures, the two cities fared relatively well in comparison to many other large metropolitan areas. In St. Louis the mortality rate ranked 32nd highest among 49 U.S. cities with populations above 100,000 and was the lowest of the 10 largest cities in the country; Kansas City had the 17th highest mortality rate (Pittsburgh, Pa., ranked first; Grand Rapids, Mich., had the lowest mortality).

What factors explain the widely variable death rates among American cities in the 1918 epidemic? In hindsight through the lens of 21st century epidemiologic analysis, insight is gained by assessment of several metrics: time from the first reported cases to the peak of the epidemic; overall excess mortality compared to baseline; excess mortality at the peak; and weekly mortality curves over the duration of the epidemic. Figure 5 shows the epidemic curves of St. Louis and Kansas City in comparison to Boston, a typical hard-hit eastern city which had the fifth-highest mortality in the country. Boston experienced one dominant early autumn wave with an early peak and exceedingly high excess mortality. The epidemic curves in the two Missouri cities, which were comparable, had important distinctions from Boston: later onset of the epidemic; longer time from onset to peak; much lower peak mortality; and two autumn/winter waves with highest mortality in the last wave. Several factors accounted for these differences.

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<th>Figure 4. American Red Cross workers, St. Louis, 1918 (St. Louis Post-Dispatch and Missouri Historical Society)</th>
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<th>Figure 5. Weekly excess death rate per 100,000 population in Kansas City, St. Louis, and Boston during the 1918 influenza pandemic.</th>
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Cities that implemented what are now known as social distancing interventions earlier had much lower peak mortality rates than those which delayed action. The flattened epidemic curves in St. Louis and Kansas City, as compared to Boston, indicate that control measures were effective and were implemented early enough to reduce mortality. In retrospect only a handful of the many “nonpharmaceutical interventions” used in 1918 worked: early closures of schools, churches and theaters, and bans on public gatherings. Each of these measures were enforced in both Missouri cities. The duration of implementation of nonpharmaceutical interventions also had a salutary effect on mortality. Both Missouri cities maintained social distancing policies longer than many other cities. The net result was that in hindsight, both St. Louis and Kansas City, despite the latter’s political missteps, were among the four large U.S. cities, of 17 assessed, with the most effective interventions. In both cities, disease transmission was 30-50% lower than expected. Modern policy makers have used these findings to refine public health approaches for contemporary pandemic influenza preparedness.

Two other findings are notable. First, in both Missouri cities the higher second autumn/winter waves occurred after social distancing restrictions had been eased prematurely. Second, influenza mortality in Kansas City was consistently above that in St. Louis: from the onset of the epidemic in early October 1918 until its conclusion six months later, mortality rates were higher in Kansas City in 24 of 26 weeks.

In summary, from the vantage point of a century, we now recognize that social distancing actions taken by public health authorities in both St. Louis and Kansas City led to demonstrably reduced peak and overall excess influenza mortality rates. However, in both cities, premature easing of school closures and other epidemic control measures resulted in higher mortality in the second autumn/winter waves. History has given high marks to public health and volunteer organizational responses to 1918 influenza for both of Missouri’s major cities, especially St. Louis, which benefitted from stronger leadership and a much less politicized public health approach than its sibling Kansas City.

Acknowledgments

The authors thank Dave Lowry; Kate Holdener; Mikall Venso, Jefferson Barracks Museum Curator; Gary Cox, University of Missouri Reference Archivist; Dr. Yates Trotter and Kitty Serling, MLS, for their assistance with this project.

References

ACO Sparks Care Innovation

Team helps elderly patient locate affordable medication source

By Karen Gallagher

"It takes a village to raise old people, too," says 81-year-old Valura Massey as she sits in her primary care physician's office in west St. Louis County, her cane close at hand. She has been dealing with diabetes for many years and recently switched to a new physician, Nathan Moore, MD, with BJC Medical Group.

Massey had been good about keeping up with the insulin she needed for her condition but had started buying only enough to last for a short time. She had come to a point where she had reached her coverage gap with Medicare and was now having to cover costs herself. "I am on a fixed income. I asked myself what was I going to do? I thought I might have to go without," she says.

"Helping patients transition home from the hospital has been particularly successful. ... The care partners make sure the patients don’t bounce right back.” — Dr. Doug Pogue

But Massey found strong support in Lara Kerwin, a clinical pharmacist with BJC Accountable Care Organization (ACO). Massey is a member of the ACO through Dr. Moore. This gives her access to special programs that provide her help, at no charge, in reaching her health goals. Pharmacist Kerwin got to work researching Massey’s insurance coverage and searching formulary lists for medications that could work.

“Having an ACO allows us to do valuable, innovative things we weren’t able to do previously," says Dr. Moore. “As in the case of Ms. Massey, we can work one-on-one with patients using staff such as Lara to educate them on their conditions and medical options and any side effects. And Lara can then work with physicians to help take better care of patients with appropriate medications they can afford.”

“The point of BJC ACO is to make sure we are there to help our patients succeed in their health care journey, and to remove barriers to the care they need," says Sandra Van Trease, BJC group president. “We have been working with different approaches, mindsets and behaviors to create a care model that will improve health outcomes for our patients.”

BJC ACO Now Covers 60,000

In 2012, BJC became the first health care provider in the St. Louis area to form an Accountable Care Organization to better care for seniors. The ACO program was developed by Medicare to help physicians and other care professionals take even better care of people. The Medicare Shared Savings Program rewards ACOs that lower health costs while delivering high quality care based on numerous quality measures relating to care coordination and patient safety, appropriate use of preventive health services, improved care for at-risk populations, and the patient and caregiver experience of care.

BJC’s ACO provides care for about 60,000 seniors in the St. Louis area who have either traditional Medicare coverage or Medicare Advantage plans. BJC’s 14 adult hospitals, as well as the home care program, medical group and affiliated providers, form a network to care for seniors in a more coordinated, transparent way via the ACO.

The program has been working. BJC ACO quality scores are high—an average of 92 percent in 2018—and the organization has saved Medicare, and taxpayers, $26 million in the last three years.

Doug Pogue, MD, BJC Medical Group president, attributes these savings to some recent changes in how patient care is handled. “We have been working to reduce our hospitalization numbers, and we have seen a decrease in unnecessary testing, particularly with MRIs. We are providing physicians with monthly reports to help them identify any gaps in care or patients that need follow up. Physicians can then develop plans of care for their patients and share them with every single doctor and clinician involved in the patient’s care.”

Dr. Pogue also points to a team of 26 care partners who follow patients by phone and help with physician orders, medications, education about their health condition, and other needs such as transportation to doctor appointments. “Helping patients transition home from the hospital has been particularly successful,” he says. “The care partners make sure the patients don’t bounce right back.”

Karen Gallagher is director of corporate communications for BJC HealthCare. She can be reached at Karen.Gallagher@bjc.org.
Keeping patients from the hospital is also on the mind of Kerwin as a clinical pharmacist, especially those with chronic conditions such as diabetes. She serves as a bridge between patients, physicians and nurses, working both in person and by phone. She may educate a patient on how medicines change over time, help them gain access to affordable medications, and help them reach their health goals.

**Finding Affordable Insulin**

Thanks to some detective work on behalf of Valura Massey, including looking into Massey’s insurance coverage, pharmacist Kerwin calculated that switching insulins wouldn’t help her with the price of the drug, but switching from insulin provided in a vial to insulin provided in a pen would lower the cost. She used a computer data base to determine how many units per day of insulin Massey needed, how the pens were packaged and how many were mailed at a time.

“I had thought it was just my time to die when I couldn’t afford my insulin. But thanks to Lara, we have things together now.” — Valura Massey

But Massey needed some convincing—she had never used pens for insulin and had always had her son pick up her medications at a pharmacy. “I talked with her to explain that it comes priority mail with temperature protocols and is very safe,” Kerwin says.

Working with patients like Massey within BJC Accountable Care Organization, Kerwin has embraced one of the organization’s tenets—better care for their patients. She consults with patients to help them reach their goals by finding out how much they are willing to spend, their preferences, religious beliefs and more. With Kerwin’s help, Massey could now get her insulin and, as a result, get her diabetes under control again.

“Meeting for the first time in person was meaningful to both Massey and Kerwin. “This is my very best friend now,” Massey says, pointing at Kerwin. “I had thought it was just my time to die when I couldn’t afford my insulin. But thanks to Lara, we have things together now.”

“We are going to have a good long-term relationship,” Kerwin says. “We will keep in touch to talk about all of her concerns, even food choices and other medications. I like stepping out from behind a counter and working in the patient care process to prevent any problems before they happen. I was happy I could help.”

“When you throw a pebble in a pond, the circles continue to expand,” says Van Trease. “The ACO vision is like that. We are taking these opportunities and learnings and applying them to how we care for patients even outside of the ACO. It is the vision of how care will one day be delivered for all of us.”

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**Washington University Building Major Neuroscience Research Hub**

Washington University School of Medicine is beginning construction on what will be one of the largest neuroscience research buildings in the country. Located on the School of Medicine campus and in the Cortex district, the 11-story, state-of-the-art research facility will merge, cultivate and advance some of the world’s leading neuroscience research.

The $616-million, 609,000-square-foot facility and interconnected projects initially will bring together over 100 research teams focused on solving the many mysteries of the brain and the body’s nervous system. Those teams, comprising some 875 researchers, will come from a wide array of disciplines, including the medical school’s neurology, neuroscience, neurosurgery, psychiatry and anesthesiology departments.
The U.S. health care system is in the process of shifting from traditional fee-for-service payment to value-based alternative payment models (APMs). APMs are one of two methods under the Quality Payment Program (QPP), in which providers may achieve positive payment adjustments based upon the achievement of various quality and performance measures.

APMs may provide an alternative to physicians and small medical groups in a similar geographic area that seek to remain independent (i.e., not employed by hospitals or medical groups), while providing them the opportunity to band together to take advantage of the larger economies of scope and scale inherent in bigger organizations, as well as allowing them to potentially increase their reimbursement. There are a variety of APM options from which to choose, which range as to the required level of shared savings, shared loses (i.e., risk) and covered beneficiaries, among others. This article will briefly discuss some of these options available to physicians.

1. Accountable Care Organizations (ACOs)

The ACO model holds groups of health care providers responsible for the quality and cost of health care delivery provided to a patient population. ACOs that achieve spending and quality targets designated by payers then receive a share of the savings (or share in losses if they surpass the spending target). ACOs are organized in a variety of legal and governance structures and can have varied contracts with payers (both federal and private), depending on the size and members of the ACO.

Medicare Shared Savings Program (MSSP). The most widely used ACO program, the MSSP is in the midst of a paradigm change. All new or renewing MSSP contracts had to shift to either the Basic Track or Enhanced Track beginning July 1, 2019. Under the Basic Track, eligible ACOs participate in a “glide path” along five track levels, wherein they incrementally shift from a one-sided (upside risk only) model to a two-sided (upside and downside risk) model. There are some inducements for ACOs to move to higher-risk models, including:

- The SNF three-day waiver, which waives the requirement for an inpatient hospital stay prior to receiving SNF services;
- The Beneficiary Incentive Program, which allows ACOs to directly furnish incentive payments to Medicare beneficiaries to ensure access to primary care resources.

 Advanced APM status is only available to MSSP ACOs assuming the most downside risk. Providers who participate in an Advanced APM do not have to participate in the Merit-based Incentive Payment System (MIPS), and those providers are eligible for an additional 5% incentive bonus.

Next Generation ACOs. The Next Generation ACO (NGACO) model, established in 2016, aims to build upon the experience of the Centers for Medicare & Medicaid Services (CMS) in operating the Pioneer ACO Model and the MSSP. While this model is generally similar to the MSSP, its primary differences are listed below:

- The minimum number of required beneficiaries is 10,000 (in contrast to the MSSP minimum of 5,000)
- The potential shared savings (rewards) and losses (risks) are greater than in the MSSP:
  a. Arrangement A allows shared savings/losses up to 80% for the first three-year contract, then up to 85%
  b. Arrangement B allows shared savings and losses up to 100%
- A minimum savings rate/minimum loss rate is not utilized
- The benchmark is configured utilizing a “hybrid approach” that takes into account historical and regional costs (instead of just historical costs).
2. Direct Contracting Models

The directing contracting model builds upon both MSSP and the NGACO model, e.g., by introducing capitation, a new financial methodology with advanced benchmarking and an enhanced beneficiary alignment methodology. Commencing in 2021, the new model may be appealing to a variety of providers, as it is more primary care focused and allows smaller entities to participate. Moreover, the model aims to offer beneficiaries with complex chronic conditions more options and higher quality care.

Unique to the model is the structure of the value-based arrangements. Entity participations, referred to as direct contracting entities (DCEs), operate under a common legal structure, wherein one group contracts with CMS and effectively serves as a health plan administrator to its providers. The model focuses less on quality measures and more on outcomes and beneficiary experience. There are currently two DCE participation options:

- **Professional**: The lowest risk-sharing arrangement, with 50% shared savings/losses. This option also requires participation in Primary Care Capitation, a risk-adjusted monthly payment for enhanced primary care services.

- **Global**: The highest risk-sharing arrangement, with 100% shared savings/losses (full risk). This option also requires participation in either Primary Care Capitation or Total Care Capitation, a capitated risk-adjusted monthly payment for all Medicare services provided by participants.

3. BPCI Advanced Model

On January 9, 2018, CMS launched BPCI Advanced, which qualifies as an Advanced APM. In this program, participating providers can earn incentive payments for 35 different clinical episodes (31 inpatient and 4 outpatient) if all of the beneficiary’s expenditures during that episode and the subsequent 90-day period fall below a specified spending target, while concurrently maintaining or improving upon seven specific quality measures. The initial version of BPCI Advanced runs through December 31, 2023.

4. Other CMS Models

There are a number of other voluntary CMS payment models, for specific episodes of care, which qualify as Advanced APMs, including:

1. Comprehensive End-Stage Renal Disease Care (CEC) Model – “designed to identify, test and evaluate new ways to improve care for Medicare beneficiaries with…ESRD”

2. Comprehensive Primary Care Plus (CPC+) – “a …primary care medical home model that aims to strengthen primary care through regionally-based multi-payer payment reform and care delivery transformation”

3. Oncology Care Model (OCM) – “payment arrangements that include financial and performance accountability for episodes of care surrounding chemotherapy administration to cancer patients”

4. CJR Payment Model – “aims to support better and more efficient care for beneficiaries undergoing the most common inpatient surgeries for Medicare beneficiaries: hip and knee replacements.”

Conclusion

The shift to value-based reimbursement, upon which APMs rely to incentivize providers to achieve better outcomes at lower cost, has caused independent physicians to experience tightening reimbursement at the same time they are being required to heavily invest in information technology that aggregates the requisite data required to report to payers. Those providers that want to remain independent are seeking to relieve these financial and administrative burdens, in part, through teaming up with competing physicians in similar circumstances. Through APMs, those physicians who want to remain independent have a viable option going forward. To decide what is best for a particular physician or practice, CMS offers a number of technical assistance resources on their website. CMS suggests that those interested in joining an APM:

(1) “Learn about specific [APMs] and how to apply;” and,

(2) “Apply to an [APM] that fits your practice and is currently accepting applications.”
Elie Azrak, MD, Honored by SLMMS Alliance

Elie C. Azrak, MD, MHA, FACC, FSCAI, was honored by the SLMMS Alliance as its 2020 Doctor of the Year. The award was presented at the Alliance’s annual dinner on February 7. Dr. Azrak is an interventional cardiologist with SSM Health.

The Doctor of the Year Award recognizes a Medical Society member who has been an advocate for the profession of medicine, an advocate for quality health care, a role model for future physicians, and a supporter of the Alliance.

Dr. Azrak served as SLMMS president in 2009. He previously held the offices of president-elect, vice president, secretary and councilor. He has represented local physicians at the national level as a Missouri delegate to the American Medical Association since 2018 and was an alternate delegate from 2012 to 2018. At the state level, he has been a Third District councilor to the Missouri State Medical Association since 2011 and was a vice councilor from 2009 to 2011.

A native of Syria, Dr. Azrak obtained his medical degree from Aleppo University Medical School in 1992. After completing an internship at Aleppo University Hospital, he came to Saint Louis University for residencies in internal medicine, cardiovascular disease and interventional cardiology from 1994-2001. He added a master’s degree in health administration from Saint Louis University in 2019.

He is board certified in nuclear cardiology, interventional cardiology, adult echocardiology, cardiovascular disease and internal medicine. He is a fellow of the American College of Cardiology and the Society for Cardiac Angiography and Intervention.

He is fluent in English, Arabic and French. He has been a principal investigator on several research studies and has published in national cardiology journals.

“It is truly with sincere gratitude that I accept this award,” Dr. Azrak said. “I became involved in organized medicine following the example of Dr. Ed Cabbabe. I thank my many mentors, teachers and role models who have helped me build my clinical knowledge and shape my vision and values.”

Besides his service with SLMMS, MSMA and the AMA, he served as 2013 president of the National Arab American Medical Association. He also is active in the American College of Cardiology.

Also at the dinner, the Alliance honored Saint Louis University’s Health Resource Center, a student-run free clinic for the underserved. A cash donation was presented.
John F. Donovan, Jr., MD

John F. Donovan, Jr., MD, a thoracic surgeon, died February 3, 2020, at the age of 77.
Born in Boston, Mass., Dr. Donovan received his undergraduate degree from Boston College and his medical degree from Saint Louis University. He completed his internship and residency at Saint Louis University Hospital. In addition to a faculty appointment at Saint Louis University School of Medicine, he served as vice president of medical affairs at the former St. Anthony’s Hospital, with additional responsibilities for Alexian Brothers Hospital as well as St. Clement Health Services in Red Bud, Ill. Dr. Donovan joined the St. Louis Metropolitan Medical Society in 1976.
Dr. Donovan was predeceased by his son James P. Donovan, MD, SLMMMS extends its condolences to his wife, Louise A. Donovan; his children John Francis Donovan III, Matthew R. Donovan; and his eight grandchildren.

Donald T. Behrens, MD

Donald T. Behrens, MD, a general surgeon, died February 28, 2020, at the age of 94.
Born in Mt. Olive, Ill., Dr. Behrens received his undergraduate and medical degrees from Washington University. He completed his internship and residency at St. Louis City Hospital. Dr. Behrens served in the U.S. Air Force Medical Service Corps in Caribou, Maine, before returning to St. Louis to establish his private practice in general surgery. He became known nationally for pioneering the BCIR procedure that drastically improved the quality of life for colostomy patients. In retirement, he enjoyed a second career as an artist, and his metal sculptures can be seen at the City Museum, Missouri Baptist Medical Center, and other locations throughout St. Louis. Dr. Behrens joined the St. Louis Metropolitan Medical Society in 1949.
Dr. Behrens was predeceased by his daughter Carolyn Behrens. SLMMMS extends its condolences to his wife, Audrey Behrens; his children Barbara Behrens, Gary Behrens, Julie Behrens, Mark Behrens and Chris Behrens; and his eight grandchildren.

Jack T. Steele, MD

Jack T. Steele, MD, a family practice physician, died March 6, 2020, at the age of 93.
Born in Lynn, Ark., Dr. Steele received his undergraduate and medical degrees from the University of Arkansas. He completed his internship and residency at St. Louis City Hospital. Dr. Steele served as a U.S. Navy physician from 1954-1956, then established his family medicine practice in North St. Louis County, where he practiced for more than 50 years. He joined the St. Louis Metropolitan Medical Society in 1949.
SLMMMS extends its condolences to his children Dr. Mark Steele, Dr. Mike Steele, Dr. Jeff Steele, Dr. John Steele and James Steele; his 26 grandchildren; and his three great-grandchildren.

Medicare Alternative Payment Models … continued from page 21

References
The Medical Society is mourning the loss of Robert Bondurant, RN, LCSW, former executive director of the Missouri Physicians Health Program (MPHP), who passed away on February 20, 2020 after an eight-month battle with non-Hodgkin's lymphoma. Bondurant passionately served the program for over 25 years, retiring at the end of 2019 following a distinguished career committed to improving physicians' health.

Bondurant was a familiar face to doctors throughout Missouri as he was tireless in traveling across the state to provide educational presentations to medical staffs. Under his direction and leadership, the program grew exponentially. Hundreds of Missouri physicians as well as medical students have benefited from his knowledge, commitment and compassion.

The relationships he established and maintained with medical staff leadership and health care administrators were vital in sustaining the program and securing necessary donations. The MPHP is a 501(c)(3) not-for-profit organization that operates independently of the State Board of Registration for the Healing Arts. Bondurant firmly believed in the organization maintaining its independence so the clinical staff could advocate for their clients without concern for any repercussions.

In addition to authoring numerous articles on physician health, Bondurant contributed countless volunteer hours for the Federation of State Physician Health Programs, serving on committees spearheading efforts for national policy and support of the profession. In 2018, he presented at the American Medical Association Interim Meeting on the evolution of physician health and the role of physician health programs (PHPs) in creating awareness and access for physicians in need.

Memorial contributions in honor of Bob's years of dedicated service to physicians may be made to the MPHP, 1023 Executive Parkway, Suite 16, St. Louis, MO 63141.

For the past 15 years, SLIMMS has shared office space with the MPHP. The Medical Society extends condolences to Bob's wife Marley Ann Herzog; his children David Bondurant, Melissa Wright, Nicole Bondurant, and Stephen Bondurant, and his three grandchildren.
Thank you for your investment in advocacy, education, networking and community service for medicine.

Ashley H. Ali, MD
12639 Old Tesson Rd., #115, 63128-2786
MD, Saint Louis Univ., 2013
Born 1986, Licensed 2019  Active
Sports Medicine

Cheryl R. Herman, MD
510 S. Kingshighway, 63110-1016
MD, Meharry Medical College, 1990
Born 1964, Licensed 2008  Active
Nuclear Medicine

Joshua M. Sappington, MD
3635 Vista Ave. FDT-6, 63110-2539
MD, Saint Louis Univ, 2010
Born 1983, Licensed 2017  Active
Certified: Otolaryngology

Jason B. Amato, MD
522 N. New Ballas Rd., #203, 63141-6819
MD, Saint Louis Univ., 1997
Born 1970, Licensed 1998  Active
Active
Sports Medicine

Michael R. Lasky, MD
3635 Vista Ave. FDT3rd Fl, 63110-2539
MD, Univ. of Missouri-Columbia, 1992
Born 1966, Licensed 1997  Active
Anesthesiology

Robert H. Sigmund, MD
12639 Old Tesson #115, 63128-2786
MD, Saint Louis Univ., 1996
Born 1966, Licensed 1999  Active
Certified: Orthopedic Surgery

Steven W. Baak, MD
3440 DePaul Lane #113, 63044-3546
MD, Saint Louis Univ., 1989
Born 1960, Licensed 1994  Active
Certified: Dermatology

Audrey K. Montooth, MD
1031 Bellevue Ave. Suite 300, 63117-1857
MD, Univ. of Kansas, 1997
Born 1969, Licensed 1999  Active
Certified: Family Practice

Leah C. Silver, DO
3009 N. Ballas Rd. #B100, 63131-2322
DO, Univ. of New England, 2006
Born 1975, Licensed 2009  Active
Certified: Family Practice

Rhonda K. Cooke, MD
3015 N. Ballas Rd., 63131-2329
MD, Univ. of South Florida, 2006
Born 1967, Licensed 2015  Active
Certified: Clinical Pathology

Seema Najam, MD
2870 Netherton Dr., 63136-4649
MD, Univ. of Karachi, Pakistan, 1990
Born 1966, Licensed 2001  Active
Certified: Internal Medicine

Kenneth S. Smith Jr., MD
12639 Old Tesson #115, 63128-2786
MD, Univ. of Alabama 2013
Born 1987, Licensed 2019  Active
Certified: Orthopedic Surgery

Ralph G. Dacey, MD
660 S. Euclid Ave., Campus
Box 8057, 63110-1010
MD, Univ. of Virginia, 1974
Born 1948, Licensed 1989  Active
Certified: Neurological Surgery

Paul A. Oberle, MD
10010 Kennerly Rd., 63128-2106
MD, Saint Louis Univ., 1987
Born 1960, Licensed 1989  Active
Certified: Diagnostic Radiology

Daniel J. Watson, MD
900 N. Highway 67, 63031-2919
MD, Loyola Univ.-Chicago, 2014
Born 1987, Licensed 2017  Active
Certified: Ophthalmology

Francesca M. Dimou, MD
425 S. Euclid Ave. Box 8109, 63110-1040
MD, Univ. of South Florida, 2011
Born 1984, Licensed 2019  Active
Certified: Neurological Surgery

Randall Otto, MD
12639 Old Tesson #115, 63128-2786
MD, Univ. of Missouri-Kansas City, 2005
Born 1980, Licensed 2012  Active
Certified: Orthopedic Surgery

Christian Wessling, MD
7979 Big Bend Blvd., 63119-2703
MD, Medizinische Fakultaet Duesseldorf, Germany, 1981
Born 1955, Licensed 1983  Active
Certified: Family Practice

Gia M. Patel, MD
1120 Shackelford Rd., 63031-4369
MD, American Univ. of Antigua, 2011
Born 1981, Licensed 2017  Active
Certified: Dermatology

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Saint Louis University School of Medicine
Fanghua Lou
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