ST. LOUIS METROPOLITAN
MEDICINE
VOLUME 46, NUMBER 2 SECOND QUARTER 2024

Artificial Intelligence Emerging in Medicine

Page 10

Inside


U.S. AIR FORCE
FOCUS ON YOUR PATIENTS, NOT RED TAPE.
HEALTH PROFESSIONAL CAREERS
TSgt Cody Rosenberger
(618) 606-2150
cody.rosenberger@us.af.mil

ST. LOUIS METROPOLITAN MEDICINE

Patrick Mills, Executive Editor
pmills@slmms.org

James Braibish, Managing Editor
Braibish Communications
editor@slmms.org

Graphic design by Lisa Troehler Graphic Design, LLC

St. Louis Metropolitan Medicine (ISSN 0892-1334, USPS 006-522) is published quarterly by the St. Louis Metropolitan Medical Society, 1023 Executive Parkway, Suite 16, St. Louis, MO 63141; (314) 786-5473, FAX (314) 786-5547. Annual Subscription Rates: Members, $10 (included in dues); nonmembers, $45. Single copies: $10. Periodicals postage paid at St. Louis, MO. POSTMASTER: Send address changes to: St. Louis Metropolitan Medicine; 1023 Executive Parkway, Suite 16, St. Louis, MO 63141.

Advertising Information: www.slmms.org/magazine, or editor@slmms.org or (314) 786-5473. Online copies of this and past issues are available at www.slmms.org/magazine.

Printed by Messenger Print Group, Saint Louis, MO 63122.

ST. LOUIS METROPOLITAN MEDICAL SOCIETY

www.slmms.org

Facebook: saint.louis.metropolitan.medical.society
X (Twitter): STLMedSociety

Artificial Intelligence

Features

Commentary

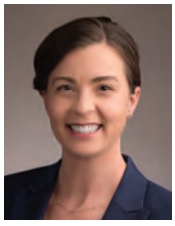
News

Next issue: Aug. 1 | Article and ad space reservation deadline: July 1

Also watch for timely SLMMS news in your monthly Member Update email.

AI Assistance for Better Living and Working

By Kirsten F. Dunn, MD, FACP, President, St. Louis Metropolitan Medical Society 2024



Kirsten F. Dunn, MD, FACP

By embracing innovation with a thoughtful and responsible approach, we can harness the power of AI to help us consider, create and implement at a new level.

I'm always looking for ways to work more productively and efficiently to make time for the other important things in life. In the last several months, it's become clear that large language models, like ChatGPT, have a major role in augmenting home life and work. Large language models are a type of artifical intelligence (AI) that can understand, summarize and generate new content, such as text or even computer code. ChatGPT, which requires a login, is available for free at https://chat.openai.com. It provides immediate, interactive access to the collective expertise of the human written word, synthesized into outputs that feel conversational, approachable and personalized to the inquiry. Requesting information is called prompting and is easy and intuitive. There are also prompt suggestions, one-click ways to start an interaction, which may be useful themselves or inspiring for other conversations.

Thoughtful use of AI technologies like ChatGPT have the potential to save significant time and energy in our personal lives. In today's digital age, we are inundated with information from various sources, sometimes leaving us feeling overwhelmed. ChatGPT offers a personalized and conversational interface through which individuals can seek guidance and engage in meaningful interactions without being advertised to and without needing to spend hours on end trying to take in and compare different versions of similar information.

Free and personalized travel planning becomes accessible to all, including comparisons and follow up questions. As a parent, I use it to draft childcare agreements and routines. It can also give me jokes to tell my kids or we could ask it together to make up a story or poem with certain parameters. For household management, it can draft schedules and provide organizing tips that account for specific needs that would otherwise require reading multiple websites to find the right balance of information. It can also draft emails or help prepare questions that I should ask a contractor or repairman.

Supporting Medical Practice

For supporting clinical medical practice, the large language models are still early and evolving, though evolving rapidly as several medical systems are working with Microsoft and Epic on clinical applications. As a reminder, patient information should not be entered into an unprotected site, and so the current opportunities for work efficiencies are more administrative in nature. For example, if a patient needs a specific or atypical letter from you, such as for medical reasons for accommodations, and you don't already have a relevant template, you can request from the site that a letter be drafted about it (without including the actual patient information) and copy, paste and edit it in your secure location more quickly than writing something from scratch. The output is usually more specific and concise than manual work, and just feels much easier, which I call reduced cognitive load.

For supporting clinical medical practice, the large language models are still early and evolving, though evolving rapidly as several medical systems are working with Microsoft and Epic on clinical applications.

◄ ►

ChatGPT offers a personalized and conversational interface through which individuals can seek guidance and engage in meaningful interactions without being advertised to and without needing to spend hours on end trying to take in and compare different versions of similar information.

Tada Images / Shutterstock.com

Another theme of work-related use is when I'm doing something outside my official scope but still overlapping with my responsibility. For example, if team dynamics are becoming a problem and I am a leader in the office by nature of being the physician, I could ask for quick tips for supporting conflict resolution in a small medical office. The answer, if you're wondering, includes 10 straightforward principles and the closing statement of, "By implementing these tips, you can create a more harmonious and productive work environment in your small medical office."

A human, a physician, will still have an essential role in confirming those diagnoses and partnering with patients in their care journeys. The great power of AI in health care is in augmenting the care team, not replacing it.

The last area I'll highlight for work-related augmentation is brainstorming. The human mind is extremely creative in the right environment. However sometimes I've found myself having trouble getting past the blank page. In these cases, a tool like ChatGPT can respond interactively to a prompt like, brainstorm slogans for a maternal health campaign. Trying this now, I quickly got back 20 options, two of my favorites being: "Strong Moms, Strong Families" and "Every Mother Matters." I welcome you to run with one of these if it's in your scope. Our region and state continue seeing inequity in maternal health, and SLMMS is exploring ways to support the efforts better going forward.

There are some stories online about AI making rare medical diagnoses that have eluded medical professionals. This fits with the strengths of computers and big data. A human, a physician, will still have an essential role in confirming those diagnoses and partnering with patients in their care journeys. The great power of AI in health care is in augmenting the care team, not replacing it.

Immense Promise

Of course, it is imperative that we prioritize human oversight and intervention in AI-driven systems to ensure accountability and mitigate potential risks. While ChatGPT can offer valuable insights and assistance, it should never replace the expertise and judgment of trained health care professionals. Instead, it should complement our skills and augment our capabilities, serving as a trusted ally in our pursuit of excellence and improvement.

In conclusion, the integration of AI technologies like ChatGPT holds immense promise for enhancing both personal productivity and professional contributions. By embracing innovation with a thoughtful and responsible approach, we can harness the power of AI to help us consider, create and implement at a new level. As we navigate the ever-evolving landscapes of life in health care, let us embrace AI as a tool for progress and efficiency, guided by our commitment to serving with compassion and integrity.

(Author's note: This article was prepared with assistance from ChatGPT.)

Kirsten F. Dunn, MD, FACP, is an internal medicine physician with Mercy Virtual Primary Care.

David L. Pohl, MD, FACR, Installed as MSMA President


Dr. David L. Pohl

Congratulations to SLMMS past President David L. Pohl, MD, FACR, on being installed as 2024-2025 president of the Missouri State Medical Association. The installation took place April 6 during the MSMA annual convention in St. Louis.

Dr. Pohl is a board-certified radiologist with Radiologic Imaging Consultants, providing radiology services to SSM Health hospitals and other facilities in St. Charles County. His clinical interests include nuclear medicine and women's imaging.

Besides serving as SLMMS president in 2013, Dr. Pohl was president of the Greater St. Louis Society of Radiologists in 2006-2007 and president of the Missouri Radiological Society in 2018-2019. He also has been a Missouri councilor to the American College of Radiology.

Dr. Pohl holds his medical degree from Washington University School of Medicine. He completed his residency in diagnostic radiology at Saint Louis University. He also holds a master's degree in anthropology from the University of North Carolina at Chapel Hill. He was inducted as a Fellow of the American College of Radiology in 2010.

His goals for his year as President of the MSMA are to expand and increase the active participation of the membership; preserve and protect the importance of the physician-patient relationship; and help prepare MSMA as it grows into the future. ◄

Nominations Now Open for SLMMS Annual Awards

Members are invited to nominate a physician colleague for one or more of the annual awards given by the St. Louis Metropolitan Medical Society. Nominations are now open for the 2024 special awards, and recipients will be recognized at the Society's Annual Meeting and Installation Dinner to be scheduled in early 2025. Nominations are being accepted for three award categories:

Robert E. Schlueter Leadership Award

The Schlueter Award is given, when appropriate, to a member who has been determined to have met the following criteria: demonstrated leadership in organized medicine; demonstrated scientific attitude through excellent clinical practice; advocacy for patients on social, economic and political matters; involvement in community service on behalf of the medical profession. This is the highest honor bestowed by the Society, and it has only been presented 22 times previously.

Award of Merit

The Award of Merit is given, when appropriate, to recognize outstanding and distinguished contributions to scientific medicine in the St. Louis community. The nominee must be a physician; preference will be given to current or former SLMMS members, but the nominee need not be a member of SLMMS.

President's Award

The President's Award is given, when appropriate, for outstanding service to the medical profession or the greater community by a member of SLMMS.

To submit a nomination for any award, provide a brief narrative (two or three paragraphs) explaining why the nominee should be recognized; if possible, include the nominee's biographical sketch or curriculum vitae (although this is not required). SLMMS members may submit more than one nomination for each award. Include contact information of the person submitting the nomination, and forward all materials to Patrick Mills, executive director, in the SLMMS office (1023 Executive Parkway, Suite 16, St. Louis, MO 63141) or email pmills@slmms.org.

The deadline for nominations is Friday, June 28, 2024 at 5 p.m. All nominations will be reviewed by the SLMMS Nominating Committee in July, with a recommendation subject to final approval by the SLMMS Council in September. No materials will be returned, and the award recipients will be notified this fall. ◄

Help Move Medicine Forward by Serving as an SLMMS Leader

Each year, the St. Louis Metropolitan Medical Society invites any prospective leaders from within the membership to volunteer to move our organization forward, to help fulfill our mission to support and inspire member physicians to achieve quality medicine through advocacy, communication and education, and achieve our vision of physicians leading health care and building strong physician-patient relationships.

The SLMMS Nominating Committee will meet this summer to consider candidates for leadership roles beginning in 2025. We need physicians from all specialties and practice settings to serve. Available positions include SLMMS councilors, delegates to the Missouri State Medical Association annual meeting, and appointments to SLMMS committees. SLMMS Council members also serve as trustees for the St. Louis Society for Medical and Scientific Education, our 501c3 charitable foundation.

Your Medical Society recognizes that the time commitment is a concern for many physicians. We work hard to keep meetings to a minimum. Due to convenience and reduced travel time, most Council and committee meetings are continuing to be conducted virtually at the discretion of the chair.

As physicians are challenged from all directions, there are even more reasons to represent your interests. Also consider the social and networking opportunities that also come with SLMMS leadership. Organized medicine benefits you, your profession, your practice and your patients.

To be considered as a potential nominee or a committee role, please contact Ravi Johar, MD, chair of the Nominating Committee, at rkjohar@att.net or Patrick Mills, executive director, at the SLMMS office at 314-786-5473, ext. 105 or email pmills@slmms.org by 5 p.m. Friday, June 28. If you wish to nominate another member for a leadership position, please check with them first to confirm their willingness to serve. All recommendations will be considered.

Per the Society's bylaws, the Nominating Committee will present its slate of officers and councilors at a General Society meeting on Tuesday, September 10, at 6 p.m. All members are welcome to participate in the meeting.

Candidates for office will be profiled in the fourth quarter 2024 issue of *St. Louis Metropolitan Medicine*, and the annual election will take place online during the month of November. This is a great opportunity to provide leadership and direction to the Society, as well as a chance to positively influence the future of medical practice. Thank you to those who are willing to consider serving and representing your fellow physicians and your profession. ◄

SLMMS Leadership Opportunities

- Council member
- MSMA delegate
- Committee member

SLMMS 2024 Committee Appointments

Thanks to those SLMMS member physicians who have accepted appointments to Society committees for 2024. Physicians who have been appointed to the nine standing committees or the two ad-hoc committees have been notified by email. For a full list of the committees and those serving, visit slmms.org under "Latest News." ◄

Medicine Escaping Unscathed from 2024 Legislature

By Rachel Bauer, MPA

As of this May 1 writing prior to the Missouri Legislature adjourning its 2024 session, we are confident that the practice of medicine will come out of session unscathed. This is despite a large number of bills we consider bad for medicine and patients being filed. For the final results of the session, consult the legislative reports available to MSMA members.

With just three weeks to go, the House was still giving initial approval to house bills. The Senate continued with their dysfunction. Progress is broken. The budget was not approved or even worked on in the Senate by this time. A total of six bills were sent to the governor, awaiting to become law.

As has become the norm, a number of bills allowing non-physicians to practice medicine were filed. Far too many legislators believe this to be an answer to the issue of access in health care.

- **APRN Scope Expansion (HB 1773, SB 809).** The APRNs showed their hand this year. They will settle for nothing less than independent practice. Both the House and Senate saw bills filed that would allow APRNs to practice independently. The house bill received a hearing and was given initial approval in committee. The senate bill was yet to be considered. We predict both bills will fail to advance any farther.
- **Optometrist Scope Expansion (HB 1963, SB 956).** The optometrists have been laser focused on passing bills allowing them to perform surgery. Both bills were heard and voted on in their respective committees, however we successfully stopped their progress in committee with the promise to work on the issue after the conclusion of session.
- **CRNA Scope Expansion (HB 1561, SB 910).** While the house bill had its day early in session, the senate bill was never even brought before its committee to be vetted. Both bills should meet their demise at the committee level.

Rachel Bauer

Rachel Bauer, MPA, is director of government relations for the Missouri State Medical Association. She can be reached at rbauer@msma.org.

Photo by Tim Bommel, Missouri House of Representatives

- **Naturopaths (HB 2446).** Naturopathic physicians don't have a practice act in Missouri, they aren't even licensed here. This bill not only created a path to licensure, it also established a scope that is nearly identical to that of primary care physicians. This bill was heard and approved in committee in back-to-back weeks. However, we wore tracks in the marble halls educating legislators on how dangerous this bill could be for patients. We are comfortable this bill will languish in committee like the rest of the bills encroaching on the practice of medicine.

Things seem abysmal for the advancement of much more legislation outside of the budget. However, we may see passage of one health care bill we have been watching closely and supporting as it stands at this time. This session's public health omnibus health bill is HB 2413. It deals primarily with women's health issues including updating mammogram reports to patients, expedited partner therapy, additional blood tests for pregnant moms, and insurance coverage for a 12-month supply of self-administered contraceptives.

Another bill we are excited to see advance this session was HB 1963. This important piece of legislation would reign in the burdensome administrative process we all know and loathe, prior authorization. This bill has passed the House, and we are waiting with bated breath to see if the Senate can function long enough to send it to the governor.

Our effort to reform the use of covenants-not-to-compete gained a surprise lift when the FTC adopted a rule to do away with non-competes for for-profit entities. We are using that progress to help address access by stopping the use of non-compete clauses for physicians at not-for-profit hospitals as well. We are happy for the momentum even if passage is slim. ◄

Are your retirement goals still within reach?

Find out with a complimentary consultation.

We would welcome the opportunity to:

- Help you review your existing retirement portfolio
- Get a second opinion on your financial plan
- Help determine whether it is consistent with current goals
- Discuss your options for creating a plan that's right for you

As independent financial advisors, we can help ensure that you're following a strategy that makes sense—no matter what the market is doing.

TRIAD *financial group, LLC*

Rich Fitzer, CPM
Triad Financial Group, LLC

314.392.6812
rcfitzer@triadfinancialgroup.net
www.triadfinancialgroup.net
425 N. New Ballas Suite 205 & 204
Creve Coeur, MO 63141

Q&A with SLMMS 2024 President Kirsten Dunn, MD, FACP

Tell us about your practice.

I am an internal medicine physician at Mercy in the Virtual Primary Care department. We have recently reorganized to better align Mercy's ambulatory telemedicine teams with traditional primary care offices. As a physician on the team, I collaborate with advanced practice providers (nurse practitioners and physician assistants), nurses and other coworkers to provide clinical care. Our team specializes in chronic disease management, including heart failure optimization, diabetes control, hypertension control and advance care planning.

Why did you choose to go into medicine? Why did you select internal medicine?

I was drawn to the problem-solving aspect of medicine and internal medicine.

What do you find most satisfying in practicing medicine? What is unique about working in virtual medicine?

I still enjoy the problem-solving, although now instead of just seeing it at the patient level, I see the problems and opportunities in the health care model itself. I am grateful to have a position that allows me to work on the care model too. Along with others, I am actively working on ways to make it easier for clinicians to stay updated in and deliver best practice care, even as guidelines change. Virtual medicine is great because I can impact the care of patients across five states. I can also work from home when I need to, without limiting patient access.

Tell us about your family.

I met my husband (Tim Dunn, MD, cardiologist at Mercy Heart & Vascular) during orientation week of medical school at Saint Louis University. We completed medical school and residency together, and we both were at Washington University when we moved back to St. Louis. We now have three children, Aidan, 6; Thea, 3; and Rory, 1. We also have a village of family and babysitters who help so we can keep working.

What are your hobbies and interests outside of medicine?

I like to read and watch comedies. We like to eat out as a family. I hope to get back to yoga but it's been hard to find the time.

What do you see as the primary needs and concerns of physicians today?

I think physicians feel caught in the tensions of an extremely complex U.S. health care system. Many factors complicate the ability to meet patient needs and expectations, including payer requirements, balancing access for new patients with time for existing patients, staying updated, and recommending best practices that may include high-cost treatments.

Also, physicians are regular people who need rest and time off (without being on call) and control over how they work and what they do. That balance can be hard to find especially in traditional care models that have not adequately adapted to today's patient/consumer expectations.

BIOGRAPHY | KIRSTEN F. DUNN, MD, FACP

Positions

- Internist, Mercy Virtual Primary Care

Education

- Internship and residency, Stanford University Hospital and Clinics, 2012-2015
- M.D., Saint Louis University, 2012
- A.B., Psychology, Harvard College, 2007

Certifications

- American Board of Internal Medicine
- Fellow, American College of Physicians

Organized Medicine

- St. Louis Metropolitan Medical Society, President-Elect 2023, Vice President 2022, Councilor 2019-2021
- Missouri State Medical Association, Young Physician Section vice chair 2018-2019, Delegate Young Physician Section 2018
- Missouri Chapter of American College of Physicians, Governor's Council 2018-2023

I am actively working on ways to make it easier for clinicians to stay updated in and deliver best practice care, even as guidelines change.

What are your goals and priorities for SLMMS this year?

I look forward to SLMMS making the transition to MSMA association management services. I believe this will be synergistic for SLMMS impact on state-level membership and lobbying for physician and patient advocacy. I also look forward to more regional physicians doing the free CME from the American College of Lifestyle Medicine and incorporating that into practice for the benefit of ourselves and our patients. Our state and region have real opportunities for healthier populations and this course is a good foundation to start making progress.

What would you ask individual physicians to do this year to support the Medical Society?

Encourage your peers to join in advocacy at the regional and state levels, so this work can be adequately funded. SLMMS is the local physician advocacy organization that represents overall physician interests, which directly and indirectly supports patient interests, too. ◄

Dr. Dunn, center, with her family, from left, Aidan, 6; Thea, 3; Rory, 1; and husband Tim Dunn, MD.

Mercy to Build New Hospital in Wentzville

Mercy in April filed a letter of intent with the Missouri Department of Health and Senior Services to construct a 75-bed, next-generation hospital in Wentzville. With a projected investment of $650 million, the 483,000-square-foot medical complex will be located on approximately 60 acres northwest of the intersection of Interstates 64 and 70. It will be the state's first completely new, acute-care hospital campus built since 2015 when Mercy opened its hospital in Joplin following the 2011 tornado. ◄

SSM Health Assumes Ownership of Visiting Nurse Association of Greater St. Louis

SSM Health and the Visiting Nurse Association of Greater St. Louis (VNA) announced they have completed a transfer of ownership of VNA's health care services as of Feb. 1, 2024. VNA services—including hospice care, advanced illness management, community-based palliative care, private duty care, visit-a-bit, vaccination, wellness, and music appreciation programs—are now operating as part of SSM Health at Home. The VNA has been serving the St. Louis area since 1911. ◄

Artificial Intelligence Emerging as a Part of Medical Practice

Promises to relieve physicians of burdensome tasks and improve patient diagnosis and treatment

By Jim Braibish, St. Louis Metropolitan Medicine

Artificial intelligence—the next wave of technology—is emerging in many ways in medical practices and health systems in the St. Louis area.

From drafting exam notes, to helping detect cancers, to identifying patients at greatest risk for readmission, applications of AI are becoming more prevalent. AI promises to not only improve diagnosis and treatment, but also free physicians from burdensome tasks and allow them to focus on patient care.

Artificial intelligence processes massive amounts of data and uses algorithms, modeled after the decision-making processes of the human brain, to "learn" from this data and generate increasingly accurate results over time.

Dr. Philip Payne

"AI has been around for a long time in medicine—as far back as the late 1950s. What has changed is the technology has finally caught up with the promise of what could be done," said Philip Payne, PhD, the Janet and Bernard Becker Professor, chief data scientist, and director of the Institute for Informatics, Data Science and Biostatistics at Washington University School of Medicine.

Advances in the volume of available data and computing speed make AI more effective today.

Dr. Gautum Agarwal

"Artificial intelligence opens up a fourth dimension of care," added Gautum Agarwal, MD, director of precision medicine for the Mercy system. "First there was just the physical exam, then basic laboratory values, then X-rays, and now we have genomics and artificial intelligence. Because these technologies are relatively inexpensive to deploy, they will make care more accessible to more people."

AI-Based Scribe Function

With the advent of the AI-based writing tool ChatGPT, attention has focused on assisting physicians with one of their most burdensome tasks, clinical documentation. Each of the four area health systems is developing an AI scribe function.

BJC HealthCare and its academic partner, Washington University School of Medicine, are conducting pilots of several AI products to help generate clinical notes. Thomas Maddox, MD, SM, who leads the Healthcare Innovation Lab at BJC and Washington University, described the effort:

Dr. Thomas Maddox

"We installed a product in the exam room that records the clinical encounter. At the conclusion of the visit, it feeds the audio transcription into a large language model like ChatGPT. Then that model transforms the recording into a clinical note following the format that physicians often use. The physician then reviews and edits the draft instead of starting with a blank page."

Mercy is implementing its note generation project in partnership with Microsoft. SSM Health has an AI-based scribe function available to about 50 clinicians now, but hopes to expand the number.

Dr. Ann Cappellari

"Ambient documentation is a game changer," said Ann Cappellari, MD, chief medical information officer for SSM Health. "The physician is focused on the patient instead of the computer because the app is recording the encounter."

The technology also captures greater detail about the patient than the physician may be able to recall later in the day when writing exam notes, she added. This could include personal tidbits. She also noted the importance of obtaining patient consent to record the exam.


Dr. Darren Haskel

At St. Luke's, Darren Haskell, MD, chief medical officer, summed up the benefit of their AI-powered transcription service: "Our hope for this technology is that it will allow our providers to get back to having real conversations with their patients, rather than looking at a computer screen. We feel these tools will improve patient satisfaction and reduce provider burnout."

BJC's pilot has proven popular with patients and physicians, Dr. Maddox said, with 97% of patients expressing a positive response to the technology. One area that still needs improvement is reporting physical exam findings which are done by observation and not conversation. "This underscores how we still need to work on aligning technology and workflows," he added.

A related project in development is auto-generating drafts of responses to inquiries through the patient portal. Dr. Payne explained, "Answering these questions can take a lot of time that our providers don't always have. The provider edits the AI-generated response, so they don't have to start with a blank screen."

Identifying and Prioritizing High-Risk Patients

AI has the ability to process large volumes of data and quickly compare this to established clinical guidelines, noted Dr. Haskell. "These clinical decision support tools have been deployed in our primary care population health efforts, and in some of our specialty practices. AI systems can quickly process a patient chart and identify potential opportunities to improve patient care. These suggestions can then be brought to the attention of the physician at the time of the encounter, or even between encounters."

At SSM Health Saint Louis University Hospital, AI is being used to help radiologists and residents prioritize which cases to read first.

"We have an AI algorithm that reviews our imaging studies and looks for about 10 very important diagnoses that if you catch early, you can do something to change the outcome," Dr. Cappellari said. Examples include stroke and blood clots in the lungs.

Washington University and BJC are using AI to calculate risk assessment scores for readmission, mortality, disease progression and other concerns, said Dr. Payne.

He described a program for preventing sepsis. "We have sepsis risk scores today that allow us to assess a variety of factors including clinical, demographics, how they traverse the health system, and how they were admitted. We put these together using AI and provide feedback to our providers, so they can pay more attention to those patients who are at risk."

continued

STUDY SHOWS AI MAY IMPROVE BREAST CANCER SCREENING

Using artificial intelligence (AI) to supplement radiologists' evaluations of mammograms may improve breast-cancer screening by reducing false positives without missing cases of cancer, according to a study by researchers at Washington University School of Medicine and Whiterabbit.ai, a Silicon Valley-based technology startup. The study was published April 10 in the journal *Radiology: Artificial Intelligence*.

The researchers developed an algorithm that identified normal mammograms with very high sensitivity. They then ran a simulation on patient data to see what would have happened if all of the very low-risk mammograms had been taken off radiologists' plates, freeing the doctors to concentrate on the more questionable scans. The simulation revealed that fewer people would have been called back for additional testing but that the same number of cancer cases would have been detected.

"This simulation study showed that very low-risk mammograms can be reliably identified by AI to reduce false positives and improve workflows," said senior author Richard L. Wahl, MD, professor of radiology. ◄

Another Washington University Medicine and BJC effort is in the area of palliative care, where they are working to build tools to anticipate patients with an acute disease burden and high risk of mortality. "Before the patient is admitted to the hospital or has an invasive procedure, there can be a conversation around their goals for care, thus optimizing clinical decisions and patient preferences," Dr. Payne added.

For the past three years, St. Louis Children's Hospital has used AI to identify recent patients at highest risk of readmission or visit to the emergency department.

Dr. Maddox explained: "The model uses AI to identify kids at high risk for medical complications. Our team of nurses reaches out to them to see if we can help the kids and their families troubleshoot any potential risks. For example, in children with asthma, it might be making sure they have inhalers and know how to use them."

Every day, nurses receive a report that shows patients with moderate to high risk scores, indicating patients who are at most need or might benefit from care management or coordination.

Over 2,200 patients were served in this program in 2023.

Precision Medicine

AI is the foundation for precision medicine, the ability to tailor treatments to the individual patient based on their predicted response or disease. Both Mercy and Washington University have precision medicine programs.

"Through 20 years of electronic health records at Mercy, we have been able to generate massive amounts of really organized de-identified data on our patients that we can then utilize to make earlier and more precise diagnoses," Dr. Agarwal said. "Early diagnosis is the key to preventing the spread of disease and subsequent hospitalization, major surgeries and intense therapies."

To help build a strong foundation of data, Mercy has joined with Mayo Clinic to collaborate to use the most current data science and years of de-identified patient outcomes to develop high-value solutions and algorithms leading to more optimal care for patients.

One element of precision medicine is germline testing that checks for genetic mutations in one's DNA that could lead to cancer.

"We know that 10% of people who have cancer will have some hereditary basis for it, meaning they were predisposed to it from genetics," Dr. Agarwal said. Patients complete an online questionnaire—developed using AI—to see if they might benefit from germline testing.

Another aspect of precision medicine offered by Mercy is pharmacogenomics—an AI-based technology that

"The real win—the places where generative AI will become deeply embedded in medicine—might be areas we are not even working on right now."

AI-DRIVEN TEXTING PLATFORM PREVENTS CHEMO-RELATED HOSPITALIZATIONS

Jiajing Chen

Mercy is using an AI-driven texting platform to predict and flag chemotherapy patients who may be at risk for hospitalization. It is named the Chen Chemotherapy Model for lead data scientist Jiajing Chen, who developed the model but lost her own battle with cancer in 2023.

The Chen Chemotherapy Model creates a risk score for non-leukemia patients. The model predicts the likelihood of outpatient chemotherapy patients experiencing symptoms that may result in hospitalization within 30 days of their chemotherapy treatments. Patients receive a daily text with a list of symptoms. ◄

"AI will move from front and center to something deeply embedded in all aspects of medicine. It can free providers from high-friction tasks such as documentation so we can get back to providing care as human beings."

helps predict how the patient will respond to a particular medication, so the most effective medication can be chosen.

"The genomic profile will show whether the patient is a rapid metabolizer or a poor metabolizer of a particular drug," he said.

Mercy also offers a multi-cancer early detection test that screens for some 52 types of cancers from a blood sample. This Galleri test was developed by a company named GRAIL. Not covered by most insurance programs, the cost is $949.

"We have done more than 2,000 Galleri tests so far and people have tested positive for cancers they otherwise would not detected," Dr. Agarwal said. The test is particularly useful for catching such cancers as pancreatic, ovarian and esophageal, which are not part of standard screenings.

Mercy was involved in the early trials for multi-cancer early detection testing and continues to participate in national trials looking at their use. Washington University is participating in a new clinical trials network launched by the National Cancer Institute to evaluate the effectiveness of the multi-cancer screening.

Educating Medical Students in AI

The newly updated Gateway Curriculum at Washington University School of Medicine focuses on giving future clinicians exposure to fundamental technologies, methods and foundations that will improve quality, safety, outcomes and value of care, Dr. Payne described.

"How do we get our future clinicians to be critical consumers of these technologies? How do we get them to look beyond AI as a black box? They learn to use judgement to make decisions about when and how to apply these tools," he added.

Washington University also offers an innovation track where students focus on evolving technologies. They attend school for an additional year and earn a master's degree in biomedical informatics along with the M.D. degree.

Mercy is incorporating genomics and AI into their residency program, Dr. Agarwal said.

At Saint Louis University, education is focused on appropriate use of AI by students in academic and clinical settings. Johan Bester, MBChB, PhD, associate dean of preclerkship curriculum and professor of family and community medicine and health care ethics, said: "Students must know that not everything that is returned by an AI is necessarily correct, and that students must double-check information and sources. It is also important that students know they may never input protected patient information or identifiable information into an AI. Lastly, we tell students that they may not represent the work of an AI as their own work."

What's Next for AI in Medicine?

The best is yet to come for AI in medicine, according to Dr. Payne.

"The real win—the places where generative AI will become deeply embedded in medicine—might be areas we are not even working on right now. Everyone is focused on generative AI in the exam room so we can get the computer out of the way between the patient and the provider. The question is still very open as to where the very real win will exist," he said.

Getting to those best uses of AI requires involving physicians, other providers and patients in the design process, he added. "If we treat AI like a widget and don't involve providers in designing and evaluating technology, it is likely to fail."

Will AI replace physicians? To the contrary, each of the experts interviewed for this article sees AI as becoming a commonly accepted part of medical practice.

"Clinicians who do not embrace these technologies and understand how to harness them will be left behind," Dr. Cappellari said.

Dr. Maddox expressed: "The real power of AI is that it can be very, very assistive to physicians, nurses and other clinicians. We have already demonstrated this with our projects to generate exam notes and identify patients at-risk for readmission."

Added Dr. Payne: "AI will move from front and center to something deeply embedded in all aspects of medicine. It can free providers from high-friction tasks such as documentation so we can get back to providing care as human beings."

Dr. Agarwal is excited about how AI and genomics can augment the physician's work. "I will be able to leverage these technologies to do things way more efficiently and accurately. Most importantly, it will enable me to focus on the basic tenet that I love most about medicine, which is interacting with the patient. I can understand who they are, what their ailments are, what they feel and what they want out of life. That aspect of medicine will never be replaced. But we will be augmented by technologies that will help me diagnose more precisely." ◄

Generative AI's Disruption of the Health Care Industry

While artificial intelligence offers potential to revolutionize how health care is delivered, concerns about security risks, privacy issues and bias need to be addressed; regulatory efforts are starting

By Todd Zigrang, MBA, MHA, FACHE, CVA, ASA, ABV & Jessica Bailey-Wheaton, Esq.

Generative artificial intelligence (AI) is the utilization of algorithms to create content such as text, code, imagery, videos and even simulations in mere seconds.[1,2] The goal of AI generally is to mimic the intelligence of humans to perform tasks, with generative AI (a type of AI) aiming to learn from data without the assistance of humans.[1] While today's generative AI bots are not yet prepared for widespread utilization in patient care settings, AI is garnering significant interest in the health care industry as providers begin to test the capabilities of AI in clinics and offices.[3] This article will review the role that generative AI is beginning to play in the U.S. health care system, the potential of AI in health care and concerns related to the technology.

Advantages & Disadvantages

In the coming years, AI will likely be critical to the success of quality improvement, risk adjustment and population health management, all key tenets of value-based care.[4] With the rapid growth in the amount and accessibility of clinical data, AI will likely be utilized to analyze this data to reduce inefficiencies and costs while contributing to better patient outcomes.[4] Providers are often time-constrained due to manually entering electronic health records (EHR), increasing chances of burnout.[4] Leveraging AI can streamline workflow, close gaps in care, and allow for risk adjustment and the elimination of delays in reimbursement.[4] Additionally, with a projected shortage of nurses—the gap between nurse supply and demand is expected to surpass 100,000 by 2030—AI can serve as an additional "set of hands" by understanding patient medical records and codifying documents, improving clinician efficiency and patient outcomes, and driving higher reimbursement.[4,5]

With the rapid growth in the amount and accessibility of clinical data, AI will likely be utilized to analyze this data to reduce inefficiencies and costs while contributing to better patient outcomes.[4]

AI is a tool that is likely to transform the health care industry and revolutionize the way patients are treated; however, there are concerns to keep in mind regarding potential bias, security risks and even privacy.[3] Biases have been identified within information technology (IT) applications, which results in possibly exacerbating health care inequities that exist within the health care, such as ethnicity, income, gender or race.[3] While generative AI can provide solutions to biases in health care, there are other challenges that will need to be accounted for.[6] The accuracy of generative AI's outputs is reliant on the data that are utilized to train them, which could include lab results, imaging studies and medical records.[6] Potential errors could put the health of patients at risk, which is why addressing the implications of these challenges, and how they affect patient care, will be imperative.[6]

Generative AI poses a number of risks to providers and patients. There are significant privacy concerns related to generative AI, especially considering the types of information that health care providers handle, including sensitive and


Todd A. Zigrang


Jessica Bailey-Wheaton

Todd A. Zigrang, MBA, MHA, CVA, ASA, FACHE, is president of Health Capital Consultants, where he focuses on the areas of valuation and financial analysis for hospitals, physician practices and other health care enterprises. Jessica Bailey-Wheaton is vice president and general counsel. They can be reached at 314-994-7641. Their website is https://www.healthcapital.com. This article is updated from an article that appeared in the July 2023 edition of their newsletter Health Capital Topics.

Other major risks with generative AI could be security—AI will not solve the susceptibility of medical data to being hacked or stolen unless EHR companies allow their application programming interface to be utilized.[3]

patient identifying information.[3] For example, patient information may be sold to companies for use in targeted ads. However, these types of potential risks are similar to the risks related to social media generally.[3] Other major risks with generative AI could be security—AI will not solve the susceptibility of medical data to being hacked or stolen unless EHR companies allow their application programming interface to be utilized.[3] Organizations that utilize EHRs are known to maintain a certain level of security, ensuring that data is at minimal to no risk, and it will be in the best interest of generative AI software to utilize similar tactics.[3]

While generative AI can make the health care system more efficient by reducing bias, detecting errors and reducing the amount of paperwork, it is very unlikely that they will replace physicians.[7] Generative AI is infamous for not providing appropriate (or any) context, which is necessary in real-world settings, particularly in health care.[7] Physicians can also provide compassion and integrated care more than any AI software or program.[7] Generative AI will certainly be able to complement and augment physician work, by reducing inefficiencies within the health care system, but will likely never be able to replace the physician workforce.[7] Recent reports have shown that 40% of working hours in health care settings could be supported by generative, language-based AI.[8,9] The application of AI in health care will depend on training in the human experience, along with perception and expertise.[8]

Regulatory

The sprint toward AI in all industries has raised concern about risks and a lack of scrutiny, and regulators have been scrambling to modify existing rules to cover issues on data privacy and copyright.[10] While regulatory agencies are in uncharted territory, few have stepped forward with any sort of strategy to address the negative impacts of AI. The Food and Drug Administration (FDA) has developed an action plan to provide reassurance on effectiveness and safety while utilizing AI in the health care industry.[11] The plan outlines five areas

continued

for focus: (1) develop the proposed framework, including guidance on software that learns over time; (2) develop good practices in machine learning to further improve algorithms; (3) ensure a patient-centered approach with complete transparency; (4) advance pilot performances in a real world setting; and (5) develop methods to evaluate algorithms in machine learning.[11]

In addition to regulatory agencies, the rapid implementation of AI will require health care organizations to monitor any risks (e.g., reputational, legal and ethical) emanating from AI use and determine how to address those risks, particularly given the current lack of regulatory framework and oversight.[8] In June 2023, the American Medical Association (AMA) voted to adopt a proposal to protect patients against misleading or false medical information from AI tools.[12] The AMA aims to work with agencies such as the Federal Trade Commission (FTC) and the FDA to mitigate any misinformation, and anticipates the establishment of federal and state regulations in the near future.[12]

Despite the fluidity of regulation, AI companies are starting to face government scrutiny. In July 2023, the FTC opened an investigation and sent a records request to OpenAI, the company behind ChatGPT.[10] In its investigation as to whether OpenAI engaged in practices that resulted in consumer harm, the FTC requested information regarding how OpenAI obtained data used to train their models and descriptions of ChatGPT's abilities.[13] The agency also requested descriptions of OpenAI's testing, algorithms, responses and the company's false information policies.[13]

The AMA aims to work with agencies such as the Federal Trade Commission (FTC) and the FDA to mitigate any misinformation, and anticipates the establishment of federal and state regulations in the near future.[12]

On October 30, 2023, President Joseph Biden signed an executive order to establish new standards for artificial intelligence (AI) in the U.S.[14] The executive order focuses on protecting the privacy of Americans and establishes new standards for security and safety in AI.[14] While the executive order impacts a variety of industries, there are many implications for the health care industry specifically. The order directs the Department of Health and Human Services (HHS) to develop a task force focused on AI within 90 days, which will be responsible for developing frameworks and policies on the responsible use and deployment of AI and AI-enabled technology.[15] Within 365 days of the task force's creation, new guidance must be created related to the monitoring of quality and safety of technology enabled by AI and the incorporation of equity in new AI models.[15]

In addition to the federal government's push to monitor and regulate AI, the rapid implementation of the technology requires health care organizations to monitor any risks (e.g., reputational, legal and ethical) emanating from AI use and determine how to address those risks, particularly given the current lack of regulatory framework and oversight.[8]

While the executive order directs federal agencies to coordinate efforts around the regulation of AI, the agencies can only act within their budget and authority.[16] Another impediment to AI regulation may include any change in presidential administration, where different priorities may result in the executive order being revoked.[16] While many of the executive order's provisions have bipartisan support, the implementation of the policies may not be completed before the 2024 presidential election, leaving the ultimate outcome of these policies vulnerable to changing political forces.[16] The level of development and the pace of clinical AI implementation may be directly influenced by the liability faced by practitioners, designers and health systems, as more liability could discourage the use of AI in health care.[17] As technology develops, new legal pathways need to be established, especially as increased liability would likely repel practitioners, designers and health systems from implementing and developing clinical AI models.[17]

Advancements & Entrants

ChatGPT, the free-to-use generative AI bot developed by OpenAI, has become the preeminent bot in the field, and has piqued interest across multiple industries with its capability to replicate relevant, coherent and human-like responses when prompted by users.[18] These various capabilities have made it ideal for application in health care.[19] The generative AI bot is pre-trained on vast amounts of data and can generate content based on the data on which it has been trained.[18] Other big tech companies, including Microsoft and Google, have also created publicly accessible generative AI bots such as Bing AI, Copilot and Bard.[20]

The rapid evolution of generative AI at large has spurred advancements in AI specifically designed to assist providers in health care settings.[21] Carbon Health, a primary care company, recently launched a proprietary AI-enabled EHR assistant for hands-free charting within its clinics.[21] The company is aiming to reduce provider workload, allowing each provider

more time to see patients, and generally enhance the doctor-patient connection by focusing on the care of patients, rather than typing.[21] Additionally, Tempus, a precision medicine and AI company, recently launched an AI-enabled clinical assistant that helps clinicians seamlessly access patient data.[21] Utilizing Tempus, clinicians can access reports from clinical tests, filter patient incidence by diagnosis, access summarized patient information, and query clinical guidelines for updated standard of care insights.[21]

Generative AI has the potential to revolutionize the health care industry, but industry stakeholders will need to remain up-to-date on the risks and ongoing regulatory changes that affect the usage of generative AI.

In April 2023, Epic, a health care software company, announced a collaboration with Microsoft to combine Microsoft's Azure OpenAI and Epic's EHR software to respond to patient messages, alleviating provider workload.[22] The initial rollout will begin at UNC Health with five to ten clinicians and eventually expand to other health systems.[22] The first iteration of this technology will draft suggested responses to the most common patient questions and messages for physicians to review and send.[22]

Conclusion

While generative AI will continue to disrupt the health care industry, it aims to ultimately increase the efficacy of the health care system. By streamlining clerical work, performing literature searches, and even reducing error and bias within medicine, generative AI has the potential to revolutionize the way health care is delivered.[7] While generative AI has nearly unlimited potential, there are also risks associated with the technology, particularly in health care. Patient data could result in bias by the bot and even be susceptible to hacking or stealing. Generative AI has the potential to revolutionize the health care industry, but industry stakeholders will need to remain up-to-date on the risks and ongoing regulatory changes that affect the usage of generative AI. ◄

References

1. "What is Generative AI." McKinsey & Company, January 19, 2023, https://www.mckinsey.com/featured-insights/mckinsey-explainers/what-is-generative-ai (Accessed 7/21/23).
2. "What is generative AI? Everything you need to know." By George Lawton, *TechTarget*, https://www.techtarget.com/searchenterpriseai/definition/generative-AI?Offer=abt_pubpro_AI-Insider (Accessed 7/26/23).
3. "ChatGPT's Use In Medicine Raises Questions Of Security, Privacy, Bias." By Robert Pearl, *Forbes*, April 24, 2023, https://www.forbes.com/sites/robertpearl/2023/04/24/chatgpts-use-in-medicine-raises-questions-of-security-privacy-bias/?sh=267cb97d5373 (Accessed 5/23/23).
4. Top Three Reasons Why AI is Critical for Value-Based Care." By Jay Ackerman, *Managed Healthcare Executive*, June 27, 2023, https://www.managedhealthcareexecutive.com/view/top-three-reasons-why-ai-is-critical-for-value-based-care (Accessed 7/7/23).
5. "The State of the Nation's Nursing Shortage." By Julia Haines, *U.S. News & World Report*, November 1, 2022, https://www.usnews.com/news/health-news/articles/2022-11-01/the-state-of-the-nations-nursing-shortage (Accessed 7/26/23).
6. "How will generative AI impact healthcare?" *World Economic Forum*, May 12, 2023, https://www.weforum.org/agenda/2023/05/how-will-generative-ai-impact-healthcare/ (Accessed 6/14/23).
7. "Opportunities and risks of ChatGPT in medicine, science, and academic publishing: a modern Promethean dilemma." By Jan Homolak, *Croatian Medical Journal*, National Institute of Health, February 2023, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10028563/ (Accessed 5/24/23).
8. "Generative AI could augment 40% of healthcare working hours." By Bill Siwicki, *Healthcare IT News*, May 11, 2023, https://www.healthcareitnews.com/news/generative-ai-could-augment-40-healthcare-working-hours (Accessed 6/14/23).
9. "A new era of generative AI for everyone." Accenture, March 22, 2023, https://www.accenture.com/us-en/insights/technology/generative-ai?c=acn_glb_largelanguagemomediarelations_13427684&n=mrl_0323 (Accessed 6/14/23).
10. "US FTC opens investigation into OpenAI over misleading statements." Reuters, July 13, 2023, https://www.reuters.com/technology/us-ftc-opens-investigation-into-openai-washington-post-2023-07-13/ (Accessed 7/13/23).
11. "Artificial Intelligence/Machine Learning (AI/ML)-Based Software As a Medical Device (SaMD) Action Plan." U.S. Food and Drug Administration, January 2021, https://www.fda.gov/media/145022/download (Accessed 7/7/23).
12. "AMA adopts proposal to protect patients from false and misleading AI-generated medical advice." By Kristine White, *Healthcare Brew*, https://www.healthcare-brew.com/stories/2023/06/14/ama-adopts-proposal-to-protect-patients-from-false-and-misleading-ai-generated-medical-advice (Accessed 7/6/23).
13. "FTC is investigating ChatGPT-maker OpenAI for potential harm to consumers." By Brian Fung, CNN, July 13, 2023, https://www.cnn.com/2023/07/13/tech/ftc-openai-investigation/index.html (Accessed 7/13/23).
14. "FACT SHEET: President Biden Issues Executive Order on Safe, Secure, and Trustworthy Artificial Intelligence." The White House, October 30, 2023, https://www.whitehouse.gov/briefing-room/statements-releases/2023/10/30/fact-sheet-president-biden-issues-executive-order-on-safe-secure-and-trustworthy-artificial-intelligence/ (Accessed 11/6/23).
15. "Biden focuses on healthcare with AI executive order, industry reacts." By Gabriel Perna, *Modern Healthcare*, October 30, 2023, https://www.modernhealthcare.com/digital-health/biden-ai-executive-order-healthcare?utm (Accessed 11/6/23).
16. "How Will The Executive Order On Artificial Intelligence Impact Health Care?" By Jodi Daniel and Harlan Krumholz, *Health Affairs*, November 17, 2023, https://www.healthaffairs.org/content/forefront/executive-order-artificial-intelligence-impact-health-care (Accessed 11/22/23).
17. "Dr. Watson, A.I.: The Current Approach to Artificial Intelligence Training in the Medical Field and Legal Considerations for AI Diagnosis Dependence." By Allison Newsome and Jasmeet Singh, American Health Law Association, July 6, 2023, https://www.americanhealthlaw.org/content-library/publications/briefings/d88632df-8f1e-48ce-b5f4-066d19b12aa6/Dr-Watson-A-I-The-Current-Approach-to-Artificial-I (Accessed 7/18/23).
18. "What Is Chat GPT? – Everything You Need to Know." *Enterprise DNA*, https://blog.enterprisedna.co/what-is-chat-gpt-everything-you-need-to-know (Accessed 5/23/23).
19. "Revolutionizing Healthcare: The Top 14 Uses Of ChatGPT In Medicine And Wellness." By Bernard Marr, *Forbes*, March 2, 2023, https://www.forbes.com/sites/bernardmarr/2023/03/02/revolutionizing-healthcare-the-top-14-uses-of-chatgpt-in-medicine-and-wellness/?sh=ba393de6e547 (Accessed 7/26/23).
20. "Bing, Bard, and ChatGPT: AI chatbots are rewriting the internet." By Umar Shakir, *The Verge*, June 14, 2023, https://www.theverge.com/23610427/chatbots-chatgpt-new-bing-google-bard-conversational-ai (Accessed 6/14/23).
21. "The latest generative AI efforts in healthcare: Carbon Health, Tempus launch tools for docs." By Heather Landi, *Fierce Healthcare*, June 6, 2023, https://www.fiercehealthcare.com/health-tech/latest-generative-ai-efforts-healthcare-carbon-health-tempus-launch-tools-docs (Accessed 6/14/23).
22. "Epic is going all in on generative AI in healthcare. Here's why a handful of health systems is eager to test-drive it" By Heather Landi, *Fierce Healthcare*, May 25, 2023, https://www.fiercehealthcare.com/health-tech/epic-moves-forward-bring-generative-ai-healthcare-heres-why-handful-health-systems-are (Accessed 6/14/23).

Missouri Medicaid Enrollment Down 167,200 Since June 2023

Since the COVID-19 public health emergency was declared ended in May 2023, Medicaid recipients in Missouri and other states have been required to renew their eligibility for the program. As a result, enrollment in Missouri's program, MO HealthNet, has dropped 167,200, or 11%, since June 2023.

A total of 1.35 million individuals are enrolled in MO HealthNet as of March 2024, down from 1.5 million in June 2023. These figures are from an analysis prepared by the Center for Advancing Health Services Policy and Economics Research (CAHSPER), at the Washington University Institute for Public Health (IPH), using data from the Missouri Family Support Division.

Medicaid eligibility renewals had not been required for three years since the COVID-19 emergency was declared in 2020. The process of recertifying enrollment in Medicaid began again in June 2023, which generally had been done on an annual basis before the COVID pandemic.

Some speculate that the drop in enrollment is due not only to people no longer meeting eligibility requirements, but also in some cases due to failure to file requested paperwork that was never received due to change of address, inability to understand or lack of access to computers.

Of particular concern is that the number of children enrolled has dropped by over 95,500 since June 2023, representing 57% of the drop in enrollment.

Medicaid Expansion Update

In August 2020, Missouri voters approved expansion of Medicaid income eligibility to 138% of the federal poverty level, in alignment with the Affordable Care Act. Implementation of the expansion began in 2021. Currently, 336,693 people are enrolled in the adult expansion group as of March 2024, according to the CAHSPER analysis. Forecasts during the 2020 campaign predicted that some 250,000 additional adults would enroll. ◄

FTC Announces Rule Banning Non-Competes

The Federal Trade Commission on April 23 issued a final rule banning non-competes nationwide. The rule takes effect 120 days after issuance and would ban employers from entering into new non-compete clauses or enforcing existing non-competes. However, legal appeals are expected to delay implementation.

Several questions remain about the rule as it impacts physicians. First, it is unclear whether this would apply to large nonprofit health systems; the FTC traditionally has said it does not have jurisdiction over nonprofits though it indicated it may reconsider for this rule. Secondly, the rule excludes "senior executives." A physician owner or partner in a medical practice may be considered a senior executive.

The American Medical Association has advocated against non-competes. In June 2023, the AMA House of Delegates adopted policies supporting legislation and regulations prohibiting non-competes for all physicians in clinical practice. The AMA estimates that non-compete clauses impact between 37% and 45% of physicians. They can be especially problematic for residents, fellows and young physicians by limiting opportunities for career advancement.

The AMA states, "Removing non-compete clauses is also seen as a way to improve patient access, enhance the availability of specialist coverage in a community and reduce health inequities by allowing physicians to work for multiple organizations." ◄

Medicare Payment Problems Continue

Congress in March approved a 1.68% cut in Medicare physician reimbursement. The cut was an improvement over the 3.4% reduction originally proposed. The American Medical Association continues to advocate for overhaul of the payment system, which has penalized physicians since it was set up in 2001. Physicians are one of few Medicare providers without a payment update tied to inflation. As a result, Medicare reimbursement to physicians has declined by 20% since 2001 when adjusted for inflation. ◄

David Berland, MD

David Berland, MD, a child psychiatrist, died on February 18, 2024, at the age of 76.

Born in St. Louis, he obtained his undergraduate degree from the University of Pennsylvania and his medical degree from the University of Missouri. He completed his internship at C.F. Menninger Memorial Hospital in Topeka, Kan., and his residency at Menninger School of Psychiatry. He then returned to St. Louis to establish the child and adolescent psychiatry training program at Saint Louis University School of Medicine. He later opened a private practice in Clayton. Dr. Berland held leadership positions in the American Academy of Child & Adolescent Psychiatry locally and nationally. He joined the St. Louis Metropolitan Medical Society in 1985.

SLMMS extends its condolences to his wife of 47 years, Elaine; his daughters Kate Shear and Rachel Kiefer; and his four grandchildren. ◄

Alliance

Match Day: Alliance members joined in their annual recognition of graduating medical students at Saint Louis University's Match Day event on March 15. A random drawing was held for cash awards and travel luggage. Angela Zylka, Sandra Murdock and Zoe Cangas represented the Alliance.

Washington University Medicine Rises to No. 2 in Nation in NIH Research Funding

Washington University School of Medicine during 2023 received the second-highest amount of funding from the National Institutes of Health (NIH) of all medical schools nationwide. This represents a growth in total funding of more than $200 million since 2016, the largest increase among the top five U.S. medical schools. Over that same period, the number of NIH-funded investigators at the School of Medicine has risen from 494 to 684, and the average amount of funding per investigator grew 12.7%, from $757,000 to $853,000. The School of Medicine is home to more than 1,000 NIH-funded projects and programs. The top-ranked medical school in NIH funding is the University of California-San Francisco, according to a ranking by the Blue Ridge Institute for Medical Research. ◄

Neuroscience Research Building Dedicated

Washington University School of Medicine in January held a dedication ceremony for Jeffrey T. Fort Neuroscience Research Building. The 609,000-square-foot, 11-story building brings together scientists from some 120 research teams working on subjects including brain tumor biology, psychiatric illness, pain, and neurodegenerative diseases such as Alzheimer's, Parkinson's and Huntington's diseases, as well as amyotrophic lateral sclerosis (ALS). The facility is located at 4370 Duncan Ave., on the eastern edge of the medical campus and in the Cortex Innovation District. Investment in the neuroscience research building was spurred by the expectation that it will become one of the nation's premier neuroscience research hubs, and that situating it in Cortex will create synergy with the many entrepreneurs and startup companies there. At $616 million, the building is the largest and most expensive in the medical school's history. ◄

Medical Aid in Dying

An Indefensible Proposition

By Elie Azrak, MD, MHA, FACC, FSCAI

Ronald Dworkin defines euthanasia as "deliberately killing a person out of kindness" (*Life's Dominion*, 1993). In the medical context, this definition is qualified by requiring the will and consent of the patient whose life is in question. Further, this definition implies that an agent—the physician—accommodates the will of the patient. Suicide, taking one's own life before its natural conclusion, then becomes "physician-assisted."

Proponents of this practice have renamed it "medical aid in dying (MAiD)" and have called for the medical community to embrace it as one end-of-life option among others, invoking the respect for patient autonomy as one of the two guiding principles for such a proposition. The second is compassion. They also have called for wider social acceptance and de-criminalization of this practice.

To the cursory observer, this logic might appear sound. When pain and suffering interfere with quality of life, the sufferer's right of autonomy, a correlate of her dignity, entitles her to determine the time and manner of her death. Impelled by the duty towards the patient's autonomy, a physician should be empowered as agent—so claim the reformers—to aid the sufferer by intentionally ending her life. Many arguments have been proffered to support this "right to die" and "dying with dignity."

But there are deep flaws in the premises of this proposition, and equally deep flaws in its implications.

Dr. Elie Azrak

Elie Azrak, MD, MHA, FACC, FSCAI is chair of the system cardiovascular clinical program for SSM Health. He is board certified in nuclear cardiology, adult comprehensive echocardiography, interventional cardiology, cardiovascular diseases and internal medicine. A past SLMMS president, he is the current treasurer of the Missouri State Medical Association. He is a Missouri delegate to the American Medical Association and a member of the AMPAC board of directors. He is on the adjunct faculty of Saint Louis University School of Medicine. He can be reached at Elie.Azrak.MD@ssmhealth.com.

As to the right of autonomy, it presumes as a grounding principle the dignity, the inherent worth of the human person, which calls for the respect of self-determination. But this premise assumes that autonomy is the only or the principal correlate of a person's dignity. It emphasizes the empowerment aspect of dignity, but neglects the constraints or obligations also embedded in the concept, obligations to self and others (necessary for the law against murder).

The "slippery slope" argument against medical aid in dying rests on the risk that "voluntary" euthanasia would turn into "involuntary" euthanasia. This is not a theoretical risk, regardless of the putative guardrails in place.

◄ ►

In the 1980s, dwarf-tossing emerged as a new form of pub entertainment. In this game, people with dwarfism, wearing padded Velcro costumes, are thrown against Velcro-coated walls in a contest to throw the person farther. Proponents of this practice argue that the right of autonomy entitles willing and consenting dwarfs to make fools of themselves for money and clears the pub patrons of any duty towards the dignity of the individuals concerned.

For physicians the latter point is substantive, considering the ethical boundaries of the profession. Autonomy of the patient evidently is not absolute, and even in the most obvious cases—the terminally ill—assent of the physician to the act of "aiding in dying" requires reducing the judgement to categories of lives "worth living" and lives "not worth living."

The "slippery slope" argument against medical aid in dying rests on the risk that "voluntary" euthanasia would turn into "involuntary" euthanasia. This is not a theoretical risk, regardless of the putative guardrails in place. Physicians already have the power to perform lethal acts. Once those acts are legalized and the intent to kill is decriminalized, a new professional ethic is foreseeable, and a new breed of doctors may follow. Scope expansion (think of off-label use of medicinal or procedural interventions) is ubiquitous in the

practice of medicine—part of its art. "Aid" in dying will not escape this reality, as revealed by the Danish experience—where a significant percentage of euthanasia cases occur without explicit request—and more recently by the Canadian example—where the initial 2016 "reasonable foreseeability of natural death" criterion was rejected as unconstitutional, and eligibility was extended to persons suffering solely from mental illness. Overwhelming potential for harm is the predictable result.

As anyone who has survived suffering, or anyone who has learned vicariously from the experience of sufferers will attest, suffering is not stronger than life itself! There is dignity in simply being, however undignified the circumstance may be.

As to pain and suffering, the right-to-die movement is fundamentally making a case that pain and suffering are stronger than life itself, and that alleviating pain and suffering therefore justifies intentionally ending a life before its natural conclusion. To eliminate suffering, one is justified in eliminating the sufferer.

As anyone who has survived suffering, or anyone who has learned vicariously from the experience of sufferers will attest (read Alexander Solzhenitsyn, Victor Frankl or Elie Wiesel), suffering is not stronger than life itself! There is dignity in simply being, however undignified the circumstance may be.

Should the case be understood otherwise, certain "groups" can be deemed too frail, too old, too disabled, too ill (physically or mentally) to live. They are not human enough.

Here I turn to the second guiding principle for proponents of MAiD: compassion. Proponents of the practice seem to conflate compassion with the dying and mercy killings. The former, necessary to preserve dignity, is almost always possible with today's medical tools (including sedation to unconsciousness for extremes of pain); the latter, intended to terminate the kind of "shame" of an undignified circumstance, seeks to terminate the person and her dignity.

Join the discussion: Send your comments or letter in reaction to this article to editor@slmms.org.

WELCOME NEW MEMBERS

Thank you for your investment in advocacy, education, networking and community service for medicine.

David L. Brown, MD
12855 N. Outer 40 Dr., Ste. 380N, 63141-8622
MD, Vanderbilt Univ., 1993
Born 1968, MO Licensed 2023 ► **Active**
Certified: Plastic Surgery

Julia E. Garza, MD
2340 Hampton Ave., 63139-2935
MD, Univ. of Missouri-Columbia, 2019
Born 1991, MO Licensed 2022 ► **Active**
Family Practice

Tariq Hassan, MD
1772 Stifel Lane Dr., 63017-8047
MD, AGA Univ, Pakistan, 1989
Born 1966, MO Licensed 1999 ► **Active**
Certified: Gastroenterology

Ashley E. McGuinness, MD
1001 Chesterfield Pkwy. East, Ste. 101, 63017-2167
MD, Saint Louis Univ., 2018
Born 1992, MO Licensed 2023 ► **Active**
Certified: Dermatology

Robert A. Petrossian, MD
3 St. Elizabeth Blvd., Ste. 3200, 62269-1281
MD, Oakland University, 2017
Born 1986, MO Licensed 2023 ► **Active**
Urology

Michael J. Reiter, MD
12855 N. Outer 40 Dr., Ste. 125, 63141-8663
MD, Univ. of Missouri-Columbia, 2014
Born 1986, MO Licensed 2019 ► **Active**
Certified: Orthopedic Surgery

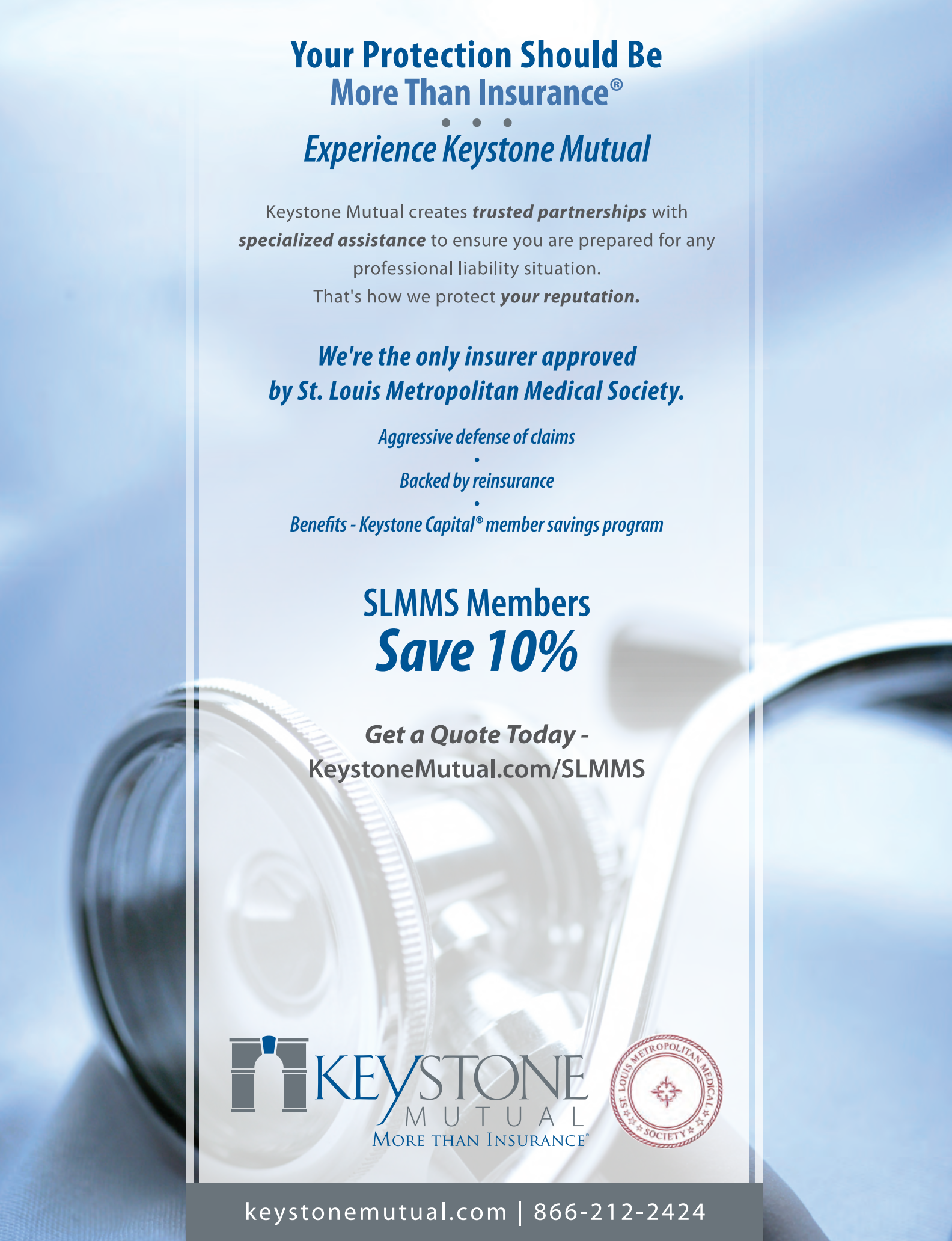
Matthew D. Reuter, MD
13915 Santenay Ct., 63017-8327
MD, Univ. of Nebraska, 2004
Born 1978, MO Licensed 2005 ► **Active**
Certified: Internal Medicine

Corey A. Wagner, MD
621 S. New Ballas Rd., Suite 499A, 63141-8260
MD, Southern Illinois Univ, Springfield, 2007
Born 1980, MO Licensed 2007 ► **Active**
Obstetrics & Gynecology

Eric N. Wittrock, DO
575 Bonhomme Woods Dr., 63132-3402
DO, Kansas City Univ. of Med. and Biosciences, 2011
Born 1985, MO Licensed 2012 ► **Active**
Certified: Psychiatry

WELCOME STUDENT MEMBER

Ponce Health Sciences University, St. Louis
Samantha Kos



Your Protection Should Be More Than Insurance®

Experience Keystone Mutual

Keystone Mutual creates ***trusted partnerships*** with ***specialized assistance*** to ensure you are prepared for any professional liability situation.
That's how we protect ***your reputation.***

We're the only insurer approved by St. Louis Metropolitan Medical Society.

Aggressive defense of claims

•

Backed by reinsurance

•

Benefits - Keystone Capital® member savings program

SLMMS Members
Save 10%

Get a Quote Today -
KeystoneMutual.com/SLMMS

KEYSTONE MUTUAL
MORE THAN INSURANCE®

ST. LOUIS METROPOLITAN MEDICAL SOCIETY

keystonemutual.com | 866-212-2424