



The Future of Healthcare in Minnesota

LISA DEMUTH AND
AMY KLOBUCHAR

In the days before the election, *Minnesota Medicine* polled the two major gubernatorial candidates on their plans for improving healthcare in Minnesota. PAGE 6

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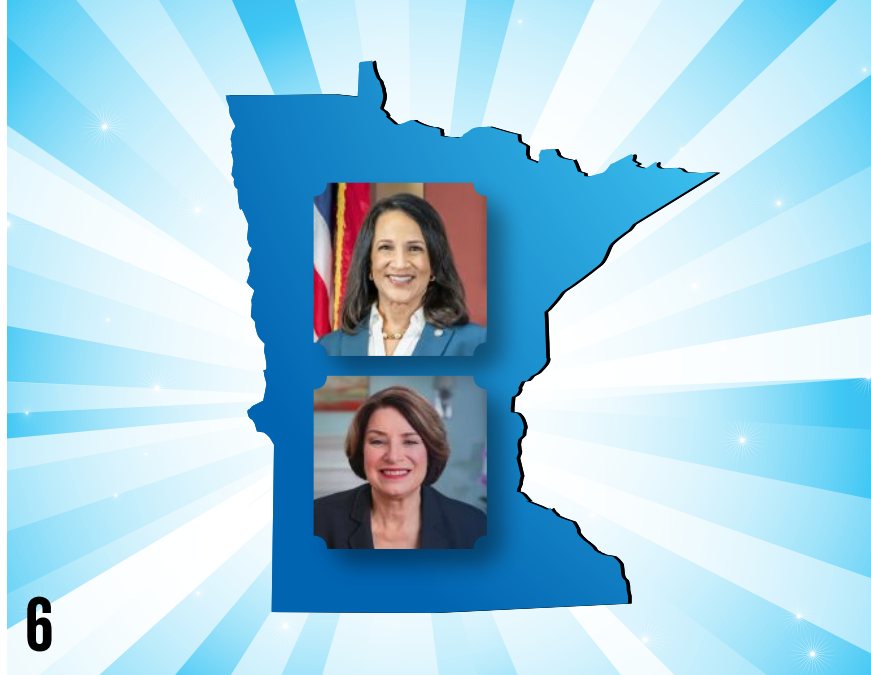
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It is GLP-1s, erectile dysfunction, and hair loss drugs today, statins and antihypertensives tomorrow, hormone replacement therapy next week. Prescribing—rubber-stamping—should not be conflated with good medicine, which involves dialogue, context, and the discussion of nonpharmaceutical treatments.

Virtual prescriptions undercut primary care

BY CHRISTOPHER J. WENNER, MD

I do not fear AI taking my job; it is already helping me provide better care with ambient transcription and real-time diagnostic-treatment guidance. Physicians working in tandem with AI, with appropriate guardrails, will enhance patient care.

I do fear the virtual practices that are rapidly increasing medical services provided to a significant portion of the population with minimal oversight. Unlike AI, these entities do not augment care; rather, they strip it of the essence of principled primary care.

Said “practices” are exploiting loopholes in the law allowing patients to obtain desired prescriptions—with the ease of shopping online as for any other commodity. This work-around allows compounding pharmacies (owned by the virtual practices) to dispense compounded, generic medicines that have a “significant difference” for an individual patient who would otherwise have access only to mass-produced, branded pharmaceuticals. Glucagon-like peptide 1 (GLP-1) receptor agonist drugs comprise a large share of these prescriptions. Indicating that the patient needs 0.2 mg as opposed to a commercially available dose of 0.25mg of tirzepatide completes the bypass of usual prescribing practices.

These organizations are pill mills. A *JAMA* study of virtual practices indicated that over 90% of requests for prescriptions for GLP-1s were filled—some in 5 minutes. Over half of these prescriptions were given without a face-to-face visit. The study suggested the patient questionnaires were leading, designed to demonstrate the need for a “significantly different” prescription. Even without the compounded work-around, these companies have publicized relationships with drugmakers—providing the illusion of exclusive discounts on branded drugs with membership. There is no discount, just a recurring membership fee.

The CEO of one of the largest online prescribers indicated his company has 15,000 patient encounters a day, on par with the biggest healthcare systems in our state. Patients are clamoring for easier access to care and eschewing the need for a primary care physician for oversight. It is GLP-1s, erectile dysfunction, and hair loss drugs today, statins and antihypertensives tomorrow, hormone replacement therapy next week. Prescribing—rubber-stamping—should not be conflated with good medicine, which involves dialogue, context, and the discussion of nonpharmaceutical treatments. The foundational aspects of primary care, connection and continuity, are conspicuously absent, fragmenting care, increasing costs, and diminishing health outcomes.

I’m concerned about the viability of primary care in this environment—for-profit corporations skimming the noncomplex, easily quantified, highly remunerative care while legitimate primary care providers get the rest. I can’t seem to find any advertisements offering a quick Rx for “fatigue/stress/can’t exercise/diabetic foot ulcer.” Primary care is hard, margins are thin.

Our patients deserve a better experience. We can do better. We need to meet the patients where they are, and improved price transparency is paramount. Disruption is needed and should be welcomed. However, our lawmakers need to urgently establish patient and medical practice safeguards along with a ringing primary care endorsement (read: comprehensive payment reform). To allow continued unfettered access to pseudo-primary care is certain to have negative consequences for the health of our state and country. **MM**

Christopher J. Wenner, MD, is the founder of Christopher J. Wenner, MD, PA, an independent family medicine practice in Cold Spring. He is one of two medical editors for *Minnesota Medicine*.



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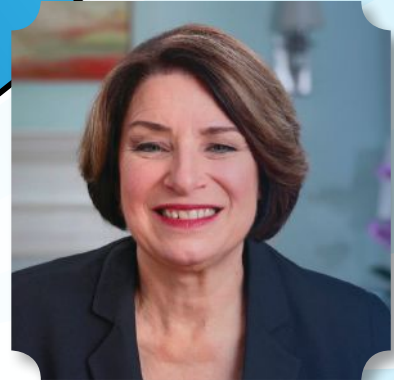
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The Future of Healthcare in Minnesota

LISA DEMUTH AND
AMY KLOBUCHAR

In the days before the election, *Minnesota Medicine* polled the two major gubernatorial candidates on their plans for improving healthcare in Minnesota.



With the November election just weeks away, *Minnesota Medicine* wanted to provide MMA members with a closer look at the Minnesota gubernatorial candidates' views on healthcare. The following questions were sent to the two main campaigns in August.

Minnesota Speaker of the House Lisa Demuth, running without the state Republican Party endorsement, won the GOP primary by 11 points. Her running mate is Ryan Wilson, an attorney and GOP candidate for state auditor in 2022.

Sen. Amy Klobuchar, who is DFL endorsed, joined the race in late January after incumbent

Gov. Tim Walz dropped out. Klobuchar easily won the DFL primary by 84 points. Her running mate is Ben Schierer, who served as mayor of Fergus Falls from 2017 to 2025.

Because of space constraints, the candidates' responses were edited for length. Find full-length answers at www.mnmed.org/MNgov26. For more information on the individual candidates, visit their websites: <https://lisaformn.com/>, <https://www.amyklobuchar.com/>.

Be sure to make plans to vote on Election Day, Tuesday, November 3.

What specific actions will you take to make healthcare more affordable in Minnesota, and how will you measure success?



DEMUTH: As governor, I will make healthcare more affordable by increasing competition and plan choices, continue bipartisan work to support hospitals, and continue to root out fraud in state programs. With unnecessary insurance mandates, excessive regulations, and other administrative costs, it's no wonder that Minnesotans are struggling to afford their healthcare.

Republicans spent this biennium fighting for the successful reinsurance program, which keeps insurance premiums and out-of-pocket costs low, and I will continue to advocate for this program as governor. I will also support plans to increase competition in healthcare to lower costs naturally through the market, including insurance alternatives for preventive care, like aligning the newly established Direct Primary Care programs with Health Savings Accounts to reduce costs, and the removal of the hospital bed moratorium, to boost competition between hospitals to ensure the lowest prices for patients.

Supporting our hospitals will be an important part of making Minnesota affordable again, too. As speaker of the house last session, I supported plans to help save rural critical access hospitals and Hennepin County Medical Center.

The bipartisan agreement that was reached will increase affordability for Minnesota residents by helping keep hospitals open in their communities, reducing the impact of uncompensated care costs and low reimbursement rates for medical assistance programs for local hospitals, and supporting critical access hospitals in need with funds and rate increases to help them stay competitive with larger hospitals. Finally, fighting fraud in state programs is necessary to lower the costs of healthcare in Minnesota, and I am the only candidate in the race with a real plan to do it.

As governor, I vow to tighten oversight of programs in the Department of Human

Services (DHS), including through replacing agency leadership who have enabled fraud through a culture of silencing whistleblowers, and adding new penalties for people convicted of fraud. One of the most devastating impacts of fraud in Minnesota's Medicaid program is that it has caused substantial disruptions to the operations of good providers who have not engaged in fraudulent activity, risking access for real patients who rely on these services.



KLOBUCHAR: As governor, my priority will be to make healthcare more affordable and accessible so families can get the care they need. I have a record of taking on these fights and winning. In the Senate I led the fight to end the sweetheart deal that banned Medicare from negotiating lower prescription drug prices—a law both the Biden and Trump administrations have used—which has already saved seniors and taxpayers an estimated \$12 billion.

As governor, I will reduce health insurance premiums. I will direct the Minnesota Department of Commerce to weigh affordability as a factor in the rate review process to deny excessive hikes. I will extend and strengthen Minnesota's bipartisan reinsurance program by securing renewal of the waiver before it expires at the end of 2027. I will advocate for the extension of the federal premium tax credits, and if Congress and the Administration will not act, I will create a state tax credit targeted at the small business owners, self-employed workers, and farmers hit hardest by the federal tax credit expiration. And I will give small businesses a state tax credit to help cover their employees' health insurance.

I will continue to fight to lower prescription drug costs by using the full authority of the executive branch to expand Minnesota's bulk purchasing of drugs through MMCAP, the largest multistate public purchasing pool in the nation.

I will also bring transparency to the system with a "What's it Cost?" tool so families can compare the cost of procedures before they set foot in a clinic. And I'll promote a "one-form" standard for billing,

insurance, hospital assistance, and prior authorizations, so doctors spend more time with patients, while enforcing zero tolerance for healthcare fraud, so every healthcare dollar goes to care.

I will measure success the way Minnesota families do: more affordable premiums, lower prescription drug costs, more Minnesotans covered instead of losing coverage, and fewer hours spent by patients and physicians on paperwork.

What will you do to recruit, train, retain, and support Minnesota's healthcare workforce?



DEMUTH: I support efforts to make Minnesota more competitive so that providers from other states choose to come to Minnesota to practice, either short-term or long-term, to provide hospitals, providers, and patients with relief from the burdens of operating in such a severe labor shortage.

As speaker of the house, I supported extending temporary provider permits to lengthen the amount of time someone can practice under a temporary license. I also supported multistate compacts, including joining the Nurse Licensure Compact and expanding the Interstate Medical Licensure Compact to other providers, and other interstate reciprocity agreements to maximize license portability to help medical professionals come to Minnesota.

I would support additional legislation, including universal license recognition, to make it easier for qualified medical professionals to transfer their previous credentials to Minnesota. I also support efforts to allow providers to practice at the top of their licenses to ensure that their time is spent serving patients in Minnesota, rather than dealing with increased paperwork.

I also want to make it easier for future providers, including students, to choose to practice in Minnesota. I support cutting red tape for these up-and-coming providers to make it easier for them to enter their fields of interest, including the use of incentives to enter healthcare, such as loan forgiveness. This includes specific

opportunities for those with an interest in working in Greater Minnesota.

In the last legislative session, I was part of a bipartisan group of legislators that helped reach an agreement to prevent the closure of Hennepin County Medical Center (HCMC). This bipartisan initiative wasn't just to save HCMC, but it was written so that any similarly positioned hospital, with a comparable amount of uncompensated care and high rates of patients on Medical Assistance, would also have access to the Hospital Stabilization Fund.



KLOBUCHAR: We need more doctors, nurses, clinicians, medical technicians, pharmacists, dental hygienists, and dentists, so Minnesotans don't have to drive two hours or wait two months to get care.

My administration will launch Minnesota Healthcare Future to recruit and train the workers we need. We will work with the University of Minnesota, the state college system, and private colleges; hospitals and health systems; community health centers and research centers; physician and nursing associations; and employers and unions to develop specialized recruitment campaigns and training pathways. One of the programs I would like to expand is the University of Minnesota's NXT GEN MED three-year degree program in Rochester, which gets students into the workforce a year sooner with less debt.

I will expand other pathways to the workforce, including working to waive initial application fees for nurses, doctors, and med techs, and streamlining credentialing so graduates in other fields can transition more easily into classrooms and clinics. I have committed to doubling the number of apprenticeship and skills training opportunities in our state, and that must include healthcare workers. That means bringing the Minnesota Apprenticeship Initiative to additional industries like healthcare and biotech, and connecting high school students directly to high-demand careers such as nursing.

Often overlooked but essential components of our healthcare system are primary care and maternal care. I will change

that—working with employers and schools to train and recruit the primary care providers Minnesota needs, including family doctors, nurses, dentists, and community health workers.

The One Big Beautiful Bill Act is projected to cut Medicaid spending by more than \$900 billion. In Minnesota, it will result in an estimated loss of \$1.4 billion per year and lead to as many as 140,000 Minnesotans losing health insurance. What actions will you take to preserve Medicaid coverage and reverse the loss of insurance coverage already experienced by Minnesotans?



DEMUTH: This year, every state was tasked with statewide implementation of federal requirements for Medicaid. As speaker of the house, I supported implementation of this policy in Minnesota, which included policy provisions that were designed to minimize the impact of the Medicaid changes to Minnesotans and prevent unnecessary loss of coverage.

These policy provisions included notification requirements from the Department of Human Services to give guidance on who must qualify for the new community engagement requirements, how to comply with them, exceptions for these requirements and how to apply for an exception, and the consequences of not complying.

In addition, I supported a definition of work and community engagement requirements that ensured that healthy adults are working, but carves out requirements for those who can't, including anyone who cares for a dependent child below the age of 13 or a disabled person; veterans with disabilities; participants in drug or alcohol rehabilitation programs; inmates in public institutions; anyone who is medically frail with a disability, substance abuse disorder, disabling mental disorder, or with a serious or complex medical condition; and anyone who receives benefits from the Minnesota family investment program or the Supplemental Nutrition Assistance

Program and already meets the work requirements for these separate programs.

I also supported short-term hardship exceptions for anyone who is traveling for medical treatment for themselves or a dependent when treatment is not available where they are, anyone experiencing inpatient medical care, or anyone living in a county where there is a high unemployment rate or a declared emergency or disaster. Finally, I supported a broad definition of work requirements to ensure that there are multiple ways to fulfill these new Medicaid requirements.

I support work requirements to ensure that healthy adults are working when they can, but I also support exceptions for those who cannot.

As written, I believe the new requirements will help prevent fraud and abuse in Minnesota's Medicaid program, and protect people who can't fulfill these requirements due to short-term or long-term hardship from loss of coverage.



KLOBUCHAR: I led the fight against these federal cuts in the Senate, and I will keep fighting them as governor. Several hospitals and clinics across Minnesota, many of them in rural areas, risk closing or reducing services because of the national Medicaid cuts in Trump's Big Beautiful Bill. After these cuts fully kick in, more than 140,000 Minnesotans could lose their health coverage. That's unacceptable. As governor, I will work to protect access to care that is under threat because of this bill.

First, I will do everything in my power to protect Minnesotans and the care they depend on. That starts with advocating to restore Medicaid funding cuts made in Trump's Big Beautiful Bill. My opponent supports the cuts. I will continue to fight to reverse them.

Second, I will provide support for Minnesotans who qualify for Medicaid, so red tape and paperwork don't take away their coverage. My administration will modernize the health systems Minnesotans rely on, so applying for and keeping coverage is streamlined and seamless. That includes completing the state health insurance

portal upgrades, expanding data-driven automatic renewals, and moving toward one-stop enrollment.

Third, I will strengthen the safety net that Medicaid patients depend on by providing targeted grants to help hospitals and clinics modernize facilities and upgrade aging infrastructure, protecting the 340B discounts that keep rural and safety-net hospitals open, and securing funding for rural emergency medical services.

Fourth, I will work to expand coverage by reversing coverage losses on the individual market. If the Trump administration won't extend the federal premium tax credits, I will work to create a state tax credit through MNsure. I'll also support small businesses that help cover their employees with a per-employee tax credit.

Minnesotans should be able to count on healthcare that keeps their families healthy and their communities strong. I will always fight to protect access to healthcare.

How can Minnesota adapt to new and developing medical technology in order to continue to lead the nation in healthcare?



DEMUTH: I'm proud to be from Minnesota, where we have led the nation in healthcare and medical advances. I support eliminating excessive regulations for medical providers to allow them to spend less time on unnecessary paperwork and more time on creating and implementing new technology. I also support additional policies and programs to make Minnesota more competitive across state lines, such as interstate compacts, which allow Minnesota residents to practice in other states, enable skilled practitioners from other states to bring their talents to Minnesota, and help lifelong Minnesotans stay in Minnesota for their careers. Patient health and safety are of the utmost importance.

I support expanding "Minnesota's Right to Try" laws to cover individualized investigational treatments to give patients an opportunity to treat rare diseases, rather than waiting for federal approval for an urgent medical need, when every moment

counts, and federal delays can be time-consuming and costly.

As Minnesota patients benefit from the creation of emerging medical technology, it's important to keep Greater Minnesota in mind for these conversations to make sure that lifesaving technologies are also available for rural residents.



KLOBUCHAR: Minnesota does big things and nowhere is that more true than in medicine. We are home to leading hospitals, world-class research universities, and one of the largest medical technology hubs in the world. Minnesota has always been where the future of medicine is built. But we can't take that leadership for granted.

In the Senate, I led the successful fight to repeal the medical device tax that threatened thousands of Minnesota medtech jobs, and I have championed the federal research investments that fuel our hospitals and universities, fighting cuts to NIH funding and research grants that have put cancer trials and cures at risk.

As governor, I will launch a Minnesota Innovation Network, a coordinated statewide system connecting researchers, entrepreneurs, and health systems, so a discovery made in a Rochester or Twin Cities lab or a rural startup becomes a treatment or a company providing Minnesota jobs.

We will also put technology to work for patients directly. I will expand telehealth access by guaranteeing that it is covered and paid at the same rate as in-person care, making audio-only coverage permanent, and finishing the job on universal broadband so residents in every ZIP code can see specialists from home.

Minnesota Medicaid payment rates for physician services are below the national average, ranking 35th compared to other state rates, and are critical to preserving local access to physician services. What actions will you take to increase Medicaid

payment for physician services to preserve local access to care?



DEMUTH: It's no secret that reimbursement rates for many medical specialties are too low in Minnesota. Especially for primary care services, it's important for Minnesota to have competitive reimbursement rates so that physicians are not losing money on services they are providing, especially in Greater Minnesota, where there are fewer physicians.

As governor, I would be open to a pathway to raise reimbursement rates for physicians, and I would support a task force or study group to determine where in the budget we could make space for rate increases, including reviewing existing Medicaid funding to determine where funds could be reallocated to support rate increases, without any associated tax increase. I'm also willing to utilize existing programs, like the provider tax or hospital surcharge, to support these initiatives, in conjunction with an in-depth review of the HHS budget to find unused or unnecessary areas of funding.

There is also too much waste in government spending, and as part of my fight against fraud in Minnesota, I will make sure that funds in the Medicaid program are being used properly and that any extra funds can be used for programs like this, rather than seeing those funds support fraudsters who have stolen from Minnesota taxpayers. I will change the culture of fraud in Minnesota and be a proper steward of tax dollars, ensuring that hardworking Minnesotans' dollars are going toward real services that provide relief for those in need, rather than fraud.



KLOBUCHAR: Medicaid payment rates are critical to preserving local access to physicians, who cannot keep their doors open when payments don't reflect the cost of delivering care.

As governor, I will work with physicians, the MMA, and the Legislature to ensure Medicaid payments for physician services are fair to patients, providers, and taxpayers and to prioritize primary care

and rural and safety-net providers. I will also make primary care the foundation of Minnesota healthcare by continuing to reward providers for getting and keeping people healthy, rather than waiting for an emergency.

I will also address the problems Minnesota and states like us face because of Trump's Big Beautiful Bill. The new federal law not only cuts Medicaid, but it also makes it harder for states to appropriately pay physicians. I led the fight against these cuts in the Senate, and I will continue advocating to restore Medicaid funding and the tools we need to strengthen Medicaid payments as governor.

Under my administration, there will be zero tolerance for Medicaid fraud. I will transform state government across health programs, so every healthcare dollar goes to care, not to unrendered services. My administration will screen providers before they receive funding against a state "Do Not Pay" database; freeze suspicious payments before money goes out the door; prosecute fraud to the fullest extent of the law; use modern payment systems to catch billing anomalies in real time; and implement the recently passed bipartisan legislation to stand up the independent Office of Inspector General.

Rural access to hospitals and clinics continues to diminish, as fewer doctors practice in rural areas and hospitals consolidate services. What would your administration do to address this issue?



DEMUTH: I want to help make it easier for providers to practice in rural Minnesota and help future providers choose to practice in rural Minnesota. To do this, we must make Minnesota more competitive, with interstate agreements, flexible licensure requirements, and fewer administrative burdens to make it easier for talented providers to stay in rural Minnesota.

As speaker of the house, I supported federal efforts to provide more dollars for rural health in Minnesota when Republicans fought to secure more funds for the

Rural Health Transformation Program. As governor, I would support additional funding for Greater Minnesota hospitals, including programs that encourage people to practice in rural areas, like loan forgiveness programs or supporting existing teaching opportunities like rural residency programs.

During this session, I worked with a bipartisan coalition of legislators to support rural hospitals, creating an agreement that supported every critical access hospital in the state of Minnesota with grant funds and increased reimbursement rates. This agreement gave critical access hospitals access to a program that other hospitals in the metro already had, and it will help offset the costs of uncompensated care. I also supported a proposal that would have eliminated the hospital surcharge tax, which would have returned \$300 million to hospitals to use those funds to offset their costs of uncompensated care and low reimbursement rates.

In Greater Minnesota, emergency medical services play a unique role in patient care. In the last biennium, I supported legislation to create an ambulance operating deficit grant program to ensure that when you call 911, EMS is there to help.

Finally, I supported the creation of a rural EMS uncompensated care pool. When EMS is called in Greater Minnesota, they may drive a long way to help a patient in need. However, if they don't end up transporting anyone to the hospital, they cannot bill insurance. This program will help keep rural EMS services in business.



KLOBUCHAR: As I go around our state, visiting all 87 counties every year, I hear it directly from Minnesotans in rural areas: safety-net and rural hospitals are on the brink, and local leaders can't find enough healthcare workers. With my lieutenant governor, Ben Schierer, who served as mayor of Fergus Falls, I will work to keep care close to home, including in Greater Minnesota.

First, I will strengthen rural hospitals, clinics, EMS, and pharmacies. I will provide targeted grants to modernize facilities and upgrade aging infrastructure, protect

the 340B discounts that keep rural and safety-net hospitals open, and secure funding for rural emergency medical services, including rapid-response emergency vehicles statewide, so help comes fast, no matter your ZIP code. And because the Medicaid cuts in Trump's Big Beautiful Bill put several Minnesota hospitals and clinics, many of them rural, at heightened risk of closing or reducing services, I will fight to reverse those cuts.

Second, I will bring care to where people live. I will expand telehealth by guaranteeing it is covered and paid at the same rate as in-person care for all services and all plans, making audio-only coverage permanent so seniors and rural Minnesotans without reliable broadband aren't left behind, and finishing the job on universal broadband so residents in every ZIP code can see specialists from home.

Third, I will expand the rural workforce. Through Minnesota Healthcare Future, we will develop recruitment campaigns and training pathways that encourage medical professionals to live and work in the communities that need them most. We'll waive initial application fees, streamline credentialing, and train the primary care providers rural Minnesota needs—including family doctors, OB-GYNs, and midwives—so seeing a provider doesn't mean a three-month wait or a three-hour drive. I will also focus on the rural mental health workforce, with dedicated rural counselors and social workers, and expand rural addiction treatment capacity in partnership with counties, towns, and tribal nations. **MM**

Email interview by Dan Hauser, MMA director of communications and education.

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The end of an era— and maybe a specialty?

BY DOMINIK S. DABROWSKI, MD, MPH, CPH

On June 30, the last resident of a small Twin Cities program graduated. She is undoubtedly qualified, and the U.S. healthcare system will be better off for having her as a practicing physician. But she is just the final sentence of the story (ironically placed at the beginning here), about a medical specialty only a fraction of the readers will have heard of, and a training program that closed on her final day.

The program was HealthPartners Occupational and Environmental Medicine (OEM) residency. It was administered by Regions Hospital and had clinical sites at HealthPartners offices on Blaisdell Avenue in Minneapolis, Wabasha Street in St. Paul, St. Louis Park, and Stillwater. I am a former chief resident of the program.

HealthPartners' OEM residency averaged between two and three graduating residents each postgraduate year (compare that to the biggest internal medicine residencies in the country where it is normal to have 35 residents per graduating class). The residency saw approximately 100 graduates over 40 years. It created several generations of workplace safety and environmental exposure physicians who have practiced throughout the country in a variety of settings.

The HealthPartners OEM residency taught its residents how to see the very real hazards of working in many industries from an individual level all the way up through the company level.

Some of the rotations we participated in included pulmonology, hospital employee health, medical directorship at nearby

3M, toxicology, OSHA site visitations, and workers compensation insurance. This went along with outpatient clinic rotations and workplace site visits for safety evaluations. The cherry on top was our master of public health from the University of Minnesota, Twin Cities, which we completed primarily in our first year alongside clinical duties.

Additionally, what was unique about our program within this specialty was that we were able to become dual board certified in lifestyle medicine, complimentary to our other obligations, through the Lifestyle Medicine Residency Curriculum.

For those of you scratching your heads about why occupational therapists need a medical residency, they don't and that's not what we are; it is just an unfortunately similar name. Occupational and environ-

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mental medicine is a medical specialty focused on prevention, diagnosis, and treatment of workplace related injuries as well as environmental exposures.

Our governing body, the American College of Occupational and Environmental Medicine, administers their board examination through the American Board of Preventive Medicine, as the specialties overlap in scope and have complimentary overarching philosophies. At times when I explain OEM to people, I will explicitly mention that we are “similar to preventive medicine” as a way to help bridge the gap of understanding.

Because our roles as OEM physicians are not always patient facing, there is a tendency for us to go unnoticed. While some physicians are clinicians in the classic sense, we tend to have a variety of roles. Some of my colleagues work for government agencies. Many medical directors for larger companies are OEM-trained. We have a larger-than-average contingent among physicians in active duty military (two of my coresidents were naval officers), as well as civilian military personnel. My immediate previous job was in

medical surveillance with the World Trade Center Health Program, which dealt with first responders and survivor health issues due to exposures from 9/11. This is a short list, but it is very much a “choose-your-own-adventure” specialty.

The other reason that we tend toward obscurity is because of our funding source. Whereas your typical pediatrician, OB-GYN, and neurosurgeon (among others) get their residency training funded by the Center for Medicare and Medicaid Services in full, OEM typically finds their dollars from the National Institute for Occupational Safety and Health or the Human Resources Services Administration, or other smaller funding sources. We actually weren't even part of the National Resident Matching Program until a couple of years ago.

Furthermore, there are far fewer OEM programs than most specialties. We are actively shrinking as a specialty. HealthPartners was one of two OEM programs that closed at the conclusion of the past academic year. In 2000, OEM had 40 residency sites; we are now down to just 18. With so few graduating seniors, our annual board exam administrations is under 75 applicants at present.

With the closing of Minnesota's only OEM residency, our regional component is uncomfortably sparse. The Central States Occupational and Environmental Medicine Association now has only one remaining residency program—at the University of Illinois Chicago. There is no doubt that there is a primary care physician shortage in America, but it pales in comparison to the shortage of OEM physicians. With the loss of this training program, there will be even fewer healthcare providers trained going forward.

(For a great deep dive of this problem, I recommend Christopher Martin's “The Slow-Moving Crisis of Training in Occupational and Environmental Medicine,” published in October 2024 in the *Journal of Occupational and Environmental Medicine*. See? We even have our own journal!)

While there are individual efforts in several states for residency programs to secure funding and expand their training

slots, these endeavors are decentralized and have generally struggled to see meaningful gains.

There are numerous individuals calling for action within our specialty, and I support them fully. However, that is not what my piece is about. As someone who had never been to Minnesota before I moved there for residency training (in the post-COVID world, I interviewed virtually), I found my two years there enjoyable. I learned a high quality of medical practice, experienced a unique cultural landscape, and met some remarkable doctors, both in and outside of my specialty. I was lucky enough to get involved in my community, being the Minnesota Medical Association's AMA meeting delegate back in 2023–2024, a one-time advocacy champion, going to the Physicians' Day at the Capitol, and even testifying in front of the state's House of Representatives with Rep. Sydney Jordan on an environmental lead-monitoring bill. Without HealthPartners, I never would have had these fantastic opportunities. And now, no one else will; at least not as an “OccDoc” in training. I am saddened by this and feel like I owe the institution that gave me so much a proper goodbye.

The expertise all the OEM residents from Minnesota have learned over the years will help patients and will be transmitted to the next generation of OccDocs more informally. The impact of their collective training is and will continue to be felt. What about that resident from the first sentence? She was accepted into her first-choice addiction medicine fellowship. (I, too, was accepted to my first-choice addiction medicine fellowship a couple of years prior.) So while the story has to have a sad ending, it can also represent a happier beginning. Occupational and environmental medicine is going through a similar strain now. We will persevere and find our happier new beginning in the future, hopefully soon. MM

Dr. Dominik Dabrowski completed his residency training in occupational and environmental medicine at HealthPartners in Minneapolis between 2022 and 2024. He met his wife while in Minnesota and they now live with their two daughters in Albany, New York, where he is the medical director of the Naval Nuclear Laboratory.



Readiness comes in its own season

BY ANGELA A. CAO, MD

I make my way through the unfamiliar hallways, scanning the signs on the hospital walls to find the correct room. I take a deep breath and knock, feeling my knuckles create a harsh yet dull sound against the glass door. I feel the heavy resistance of the door as I push it aside. Are they always this heavy? I proceed to introduce myself the way I had been taught when I was nervous: “Hello, I’m Angela, the medical student with the ICU team who is taking care of you.”

He does not open his eyes. Instead, he lies motionless in the bed, his body faintly trembling with the steady hum of the mechanical ventilator. Perhaps he did not understand me. I retrieve the iPad and request a Hmong interpreter. I repeat my introduction. Still nothing. I proceed with a neurological exam, moving methodically through each step as I have done dozens of times before. The nervousness sits in the pit of my stomach like a weight.

Days turn into weeks, and his persistent encephalopathy becomes a central obstacle to his recovery and transfer out of the ICU. We discontinue his sedation medications and repeatedly perform thorough evaluations, determined to find the source of his unresponsiveness.

“When will my father wake up?” his eldest son asks, interpreting for the rest of the family, who speak only Hmong. His voice is rooted in concern and earnest curiosity. Sharing the same uncertainty, I answer honestly: “We’re doing everything we can to understand what

is happening. His recovery can take time, but it’s hard to predict how long it will take or how much he’ll recover.” We perform a brain MRI, multiple video EEGs, and a head CT scan. Nothing.

“How much longer will he be in the ICU?” his son asks. I notice the hopeful sparkle in his eyes, dimming each day as he hears the same answer. I tell him that we are consulting the neurocritical care team. Nothing.

Each morning on ICU rounds, I try to offer a new idea, hopeful that one of them might ignite an eventual diagnosis: toxic metabolic derangements, thyroid abnormalities, ICU delirium, polypharmacy, prior cerebrovascular insult. As a team, we critically debate each hypothetical diagnosis, trying to find an answer but instead continue to face a constellation of possibilities as to why he does not wake up.

“When can we take him home?” his son asks. With each update I give his son, I feel as though I am handing him a single broken puzzle piece in the form of a new imaging result, a new lab value, or an outcome of a new intervention. The complete puzzle remains frustratingly unknown. I remain outwardly hopeful, but inside, my confidence in his recovery erodes with the repetition of his questions. I find myself returning to the first day I met the patient. In my mind, the puzzle pieces assemble into a quiet, unsettling image: him leaving the ICU with the same stillness we have seen day after day. I try to forget this image, but it lingers stubbornly.

His family also gives me pieces of him. His oldest son tells me, “What my dad loves most is being outside in the sun and gardening. He loves to give away his produce, especially his green peppers. He collects them in big baskets and delivers them to family and friends with a smile.”

I wish I could see that smile. I imagine him in the garden, stooped over piles of dirt with soil under his fingernails and the sun shining brightly on him. I picture him carefully inspecting each green pepper, deciding whether it’s ready to pick.

Ready? In the ICU, readiness has a different meaning. It is the subject of daily discussions on rounds. Our team is constantly asking if he is ready to start enteral feeds, ready to be extubated, ready to stop antibiotics, or ready to transfer off the unit. The answer always seems to be, “Not yet.”

Amidst the uncertainty in the ICU, his family’s stories of his green peppers give me a new perspective. As a child, I lived with my grandmother and spent many hours gardening alongside her. She taught me that green peppers are harvested while still immature—not necessarily because they are ready, but because removing them from the vines encourages the plant to produce more fruit. I never liked their bitter taste and asked if we could grow sweeter peppers. I learned that when green peppers are given more time, they ripen to become yellow, orange, or red, naturally progressing towards full sweetness. A green pepper picked after it reaches full size may even continue to ripen. In contrast, if picked before then, it might never ripen at all.

In medicine, we approach waiting as a luxury we cannot afford given our training to efficiently investigate, intervene, and treat. Our productivity in medicine is often measured in obscure metrics

that fixate on time: days, hours, minutes, or even seconds. We bear the mental and emotional burden of our decisions when improvement does not come quickly.

And yet, despite our urgency, the body maintains its own clock.

My ICU rounds become routine. I easily find my way through the hallways to his room, and my knuckles grow accustomed to the texture of the sliding door. My hope becomes overshadowed by realism as I step into his room every day. I try to convince myself—maybe today will deliver a different result.

As weeks turn into a month, small changes start to emerge. One morning, I notice a slight movement of his eyelids to a sternal rub. My eyes widen. Did I imagine it? The following day, the bedside nurse notes a slight twitch of his left hand during deep suctioning. We document each observation closely. By the final week of my ICU rotation, he remains encephalopathic but shows significant improvement: reduced oxygen requirements, responsiveness to commands, and spontaneous eye opening.

As I look into his dark brown eyes, I reflect on the peppers he used to grow. Perhaps, he was handing us a green pepper all this

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time. Had we met him at the earliest, greenest phase of recovery? My stomach tightens as I realize I was too quick to mistake his stillness for something that defined him. Despite a month of diligent effort, we did not find a correctable cause or cure. However, I grew to believe what he needed the most was time. I felt grateful for the time I shared at the bedside with him and his family. In medicine, we are trained to respond quickly. Yet I learned that not every patient's journey follows our timelines.

Green peppers are not failures of ripening but merely an early stage in the continuum of development. He has not yet turned yellow, orange, or red. His recovery is incomplete and uncertain; however, he is no longer purely green. For the first time since meeting him, I allow myself to believe that we are meeting him where we are meant to: in a season of his own recovery. **MM**

Acknowledgement: I thank Anthony D. Williams, MD, with the University of Minnesota Center for the Art of Medicine, for editorial feedback.

Angela A. Cao, MD, is a first-year pediatric resident at the University of Minnesota.

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THE AI ERA

Physicians and healthcare organizations are navigating the challenges and opportunities of using artificial intelligence in medicine.

BY SUZY FRISCH

Physicians have gotten used to patients entering the exam room equipped with information from Dr. Google.

Now they are adjusting to patients consulting Dr. AI, a more conversational and authoritative voice serving as a resource for people with questions about their health.

Patients aren't alone in their increasing use of artificial intelligence. Physicians also have been accessing a variety of tools more frequently, aiming to provide more efficient and effective care. An American Medical Association survey of doctors in March found that 81% of respondents use AI for tasks like charting and consulting medical research. When the AMA first polled physicians in 2023, 38% reported using AI.

Options for AI-based technology are proliferating rapidly. It's creating a challenge for clinicians and their employers as they seek to evaluate, test, and roll out the tools to their workforce. The pace of change and abundant AI options continue to expand, far outstripping regulatory bodies' ability to set parameters for safe use in medicine, says Saam Dilmaghani, MD, MPH, a gastroenterologist at MNGI Digestive Health.

"We're in this difficult situation where the tools might, and in some cases already have, become more available faster than we can understand how to best utilize them," Dilmaghani says. "There are a lot of people doing research to develop ideal use cases and best processes for these tools, but it's very slow. I think it's reasonable for us to have some guardrails so that as we move forward, we do so conscientiously, in a safe and effective way."

Physicians are taking advantage of AI technologies vetted and overseen by their employer, as well as those that aren't. Known as shadow AI, these unofficial tools offer many uses, including free mobile scribes or creating patient visit summaries by uploading notes to an external chatbot. A recent Wolters Kluwer Health survey found that 17% of clinicians have used an unauthorized AI tool, while 40% encountered an unauthorized AI tool in their organization but didn't use it.

Using shadow AI can open the door for security breaches, says Genevieve Melton-

Meaux, MD, PhD, a colon and rectal surgeon and senior associate dean for health informatics and data science at the University of Minnesota Medical School. She recently chaired the Minnesota Department of Health Artificial Intelligence Work Group, which is developing AI resources, literacy, and potential policies.

"It's relatively common for folks to use AI in their everyday life. There is definitely a risk, especially if patient information is involved. If it's a personal tool, we're worried about privacy and data leakage," Melton-Meaux says. "When folks are using their own tools, there are questions about the quality of the tools, how sophisticated people are when interacting with the technology, and potentially relying on something that's less accurate."

Healthcare employers can try to prevent clinicians from using shadow AI, but that's daunting. At the Medical School, "what we've tried to do—because the area is moving so quickly—is empower everyone with foundational knowledge about how to use these tools responsibly and how to look at the tools with a critical eye," Melton-Meaux says.

Sameer Badlani, MD, chief digital and AI and chief new markets officer at Fairview Health Services, says that Fairview has come across only limited use of shadow AI. "Physicians are not trying to be irresponsible. If there is a tool out there that makes a difference, they may try it," Badlani says. "We can restrict access to certain tools within the Fairview environment, but technology controls alone are not enough. Education and providing secure, effective alternatives are the best approach."

AI options

A popular AI option among physicians is OpenEvidence, a medical search engine that pulls its knowledge from guidelines and medical journals like *JAMA*. OpenEvidence estimates that 40% of physicians use its platform daily, utilizing it to answer questions, confirm a diagnosis, or summarize research on conditions or medications.

Many physicians turn to OpenEvidence for clinical decision support after seeing a patient, Dilmaghani says, such as getting

MONITOR



a back-up opinion on what tests to prioritize. “In that situation, it’s quite a helpful tool,” he adds. “I would encourage physicians to use it and make sure they aren’t missing anything or that they don’t have blinders on about something dangerous.”

In gastroenterology, a common way doctors engage with AI involves reading



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SAAM DILMAGHANI, MD, MPH
GASTROENTEROLOGIST
MNGI DIGESTIVE HEALTH

images from procedures like colonoscopies or endoscopies. They use it to identify whether polyps are presenting, augmenting physicians’ initial assessment, Dilmaghani says.

Thanai Pongdee, MD, an allergist and immunologist at Mayo Clinic, has been researching different applications of AI in his field. In one project, a research team at Mayo is working to improve asthma diagnosis in adults and children. One tool uses diagnostic algorithms to search longitudinal electronic health records, seeking to predict who might have undiagnosed asthma. It would then notify a patient’s caregiver that asthma should be something to consider based on certain criteria.

“People don’t always get to see their regular doctor or they don’t see a healthcare provider on a routine basis, so something like that can be missed,” Pongdee says about patients with undiagnosed asthma. “We’re trying to identify them better.”

Pongdee’s other research involves using AI to diagnose people with rare diseases in immunology, a process that can take many years. By mining large data sets from years of electronic health records, AI might be able to detect symptomatic evidence from the past and identify a hard-to-diagnose disease. This could help millions of people with rare diseases of all kinds, he says.

In radiology, where there is a severe shortage of personnel, AI systems are helping clinicians streamline processes, says Kushal Parikh, MD, MBA, who practices at Midwest Radiology and serves as director of AI. The tools help radiologists work more efficiently when acquiring images, completing reports, advising referring clinicians, and arranging for follow-ups.

“Radiology is drowning in image volume. The main thing that AI helps us with is making sure our radiologists are not burned out,” Parikh says. “With the follow-ups and impression generation, they are allowing us to improve our turnaround times. We are able to get reports out faster and pace ourselves better so that we can take breaks. We’re reading scans in a more efficient matter.”

Critical care physicians at the University of Minnesota are using AI to identify patients who might develop sepsis or are at



“What we’ve tried to do—because the area is moving so quickly—is empower everyone with foundational knowledge about how to use these tools responsibly and how to look at the tools with a critical eye”

GENEVIEVE MELTON-MEAUX, MD, PHD
COLON AND RECTAL SURGEON AND SENIOR
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risk for deterioration while in the hospital, says Christopher Tignanelli, MD, MBA, an acute care surgeon and codirector of the Medical School’s Program for Clinical Artificial Intelligence. The tools also predict which patients are high risk for readmission, allowing physicians to have a richer discussion with them about complication prevention before discharge, he says.

Roli Dwivedi, MD, family medicine physician and CEO of the Community-University Health Care Center, has been piloting the use of AI with other clinic physicians. They are testing AI scribes and pre-generated responses to patients’ MyChart questions. So far, technology isn’t saving Dwivedi time. It requires heavy editing to ensure that transcripts reflect the visit and sound like a doctor-written clinical note. She also notices that the scribe doesn’t work

as well when patients' have complex health histories. Still, she finds that the technology is reducing her cognitive load.

Some of Dwivedi's concerns about AI are that it can lead to poor patient experiences and increase the cost of care. Whether it's trainees or patients entering information about a case into AI, it can convince users that they need a CT scan, MRI, or other unnecessary care. She reminds trainees that AI "will give you the answer based on what you feed it. You have to think beyond that and



"Physicians are not trying to be irresponsible. If there is a tool out there that makes a difference, they may try it. We can restrict access to certain tools within the Fairview environment, but technology controls alone are not enough. Education and providing secure, effective alternatives are the best approach."

SAMEER BADLANI, MD
CHIEF DIGITAL AND AI AND
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FAIRVIEW HEALTH SERVICES

MMA recommendations on artificial intelligence in healthcare

When it comes to artificial intelligence and healthcare, laws and regulations aren't keeping up with the pace of change. There is a patchwork of federal policies, yet they often are not medicine specific. Currently, the government is moving more toward deregulating AI than adding more rules.

Physicians in Minnesota want things to unfold differently. To shape potential guardrails around AI use in Minnesota, the Minnesota Medical Association Board of Directors created its Task Force on Artificial Intelligence in Healthcare in late 2024. Meeting throughout 2025, the task force assessed how AI is being used in healthcare in Minnesota and identified and recommended policies at the state level. The task force focused on four areas: impact on clinical decision-making, transparency, the potential for bias, and liability.

The 15-member task force released its report this spring. Rebecca Thomas, MD, MHSc, an independent medical oncology consultant and task force chair, says that it's important to balance safety for patients and physicians with the potential AI innovations that could improve care and medical practice.

"The MMA wants to foster innovation, but at the same time we know that there needs to be guardrails as we have with medications and devices," Thomas says. "Minnesota is one of the states that is looking at this. We're trying to stay ahead of the game."

Some of the task force's policy recommendations include:

- **Physician preparation for the AI landscape.** The task force recommended including comprehensive AI education in medical school, postgraduate curricula, and continuing professional development. There should be a state-sponsored advisory committee to review and improve regulation of AI in health care.
- **Transparency and clinical uses.** The MMA champions policies such as the disclosure of the use of AI in clinical decision communications that have not been reviewed and approved by a healthcare professional. It encourages facilities to share detailed information with clinicians about the AI tools they use. It also advocates for AI developers to promote transparency and accountability by providing detailed information about the AI tool, including intended uses, training data, data collection practices, and risk and discrimination mitigation strategies.
"When an AI tool has the potential to impact patient care or physicians' clinical decisions, that should be disclosed to patients," Thomas says. "We are seeing more and more communication between patients and AI chatbots. Patients may assume the interaction and recommendations are from their doctor or nurse. The task force recommends that patients be made aware when information or an exchange has not been reviewed by a physician or member of the medical team and that it is instead coming from an AI chatbot."
- **Preventing bias and worsening social inequities.** A concern about AI tools is that they might be built with data that is embedded with bias, such as research that underrepresents women, low-income patients, or underrepresented racial groups. The information it provides then can perpetuate these biases. The MMA encourages policies that require rigorous and continuous evaluation of AI models for healthcare. AI model design, training, and use should account for bias and take immediate action to correct or mitigate encountered bias.
- **Liability.** The MMA supports policies that hold physicians liable for their own clinical decision-making. It also encourages employers to have governance structures that monitor and evaluate the performance and use of AI within their system while providing transparent information to clinicians.
- **Protecting clinician independence.** AI should not replace physicians' healthcare recommendations. The MMA backs efforts to ensure that clinicians always make the final healthcare decisions. It opposes processes that deploy AI to deny coverage for healthcare services without the meaningful input of a healthcare professional. It also opposes requirements that mandate the use of AI tools for clinical decision-making as a condition of licensure, participation, payment, or coverage.



Scan to read the MMA's full report

what it can be missing. It's still a machine," Dwivedi says. "So many things can go wrong if they don't process the information and make decisions based on their own thinking.

"Are researchers actively measuring how AI impacts the direct cost of clinical care, particularly in high-volume areas like diagnostic imaging and lab testing?" Dwivedi asks. "With U.S. healthcare infrastructure straining under unsustainable

spending, tracking AI's net financial impact on clinical workflows is essential to ensuring these tools stabilize the system rather than drive up costs."

Vetting the offerings

An essential part of rolling out AI is developing ways to assess technology options and monitor the tools after implementation. Before expanding its use of AI, Fairview established a responsible AI framework and later created its AI Center of Excellence to coordinate how tools are selected, tested, integrated, and monitored, Badlani says. "Leadership in the AI era will be very different than previous eras when we had significant changes in technology," he says. "As a physician leader or management leader, you really can't delegate [oversight and decisions about AI] to others on the team."

Fairview's approach includes maximizing AI capabilities of existing tools, such as Epic, evaluating new tools from other vendors, and building solutions in-house when existing products don't meet the organization's needs. One example is Nabla, an ambient AI tool that drafts clinical notes during visits so care teams can focus more fully on patients.

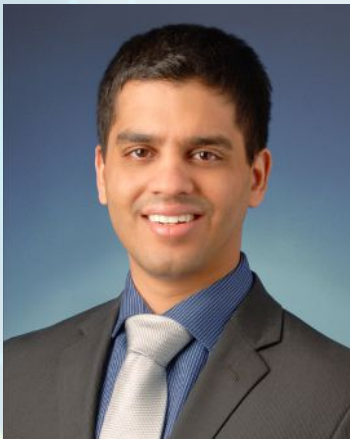
Another tool assesses whether an MRI image was captured correctly. If there were errors, technicians can correct them immediately with new images instead of calling the patient back in. Badlani says the technology has cut nearly \$1 million in waste while also preventing delays and repeat visits for patients.

Radiology is a big focus area for AI, with vendors regularly pitching their products, says Parikh of Midwest Radiology. The practice has an AI governance committee of employees from varied disciplines, including physicians and those in IT, compliance, quality, business operations, and insurance. The team evaluates potential new products and its existing AI technology to ensure that they live up to the sales pitch and work as promised, Parikh says.

"It's been a very good approach. We have people from different specialties and backgrounds providing their input," Parikh says. "It's things we might not know as physi-

cians, like it's nice to have but it's not easy to implement, or it sounds great, but it violates our contract with a hospital system."

Health systems and practices need to be cautious because companies often highlight that their products are FDA approved, yet "we believe the hurdle to get clearance is really low," Parikh says. "We're seeing products come in that are supposedly good at what they do. But when we look at the real-world data that's published, it is not as good."



"Radiology is drowning in image volume. The main thing that AI helps us with is making sure our radiologists are not burned out. With the follow-ups and impression generation, they are allowing us to improve our turnaround times. We are able to get reports out faster and pace ourselves better so that we can take breaks. We're reading scans in a more efficient matter."

KUSHAL PARIKH, MD, MBA
RADIOLOGIST
DIRECTOR OF AI
MIDWEST RADIOLOGY



Critical care physicians at the University of Minnesota are using AI to identify patients who might develop sepsis or are at risk for deterioration while in the hospital. The tools also predict which patients are high risk for readmission, allowing physicians to have a richer discussion with them about complication prevention before discharge.

CHRISTOPHER TIGNANELLI, MD, MBA
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Having an AI oversight committee is key to vet vendors' claims for their technology, which often are inflated or based on inappropriate studies, Tignanelli says. The committee should include a chief AI or informatics officer and physicians from various departments to have specialty-specific expertise. Health organizations also should institute methods to monitor AI



“Are researchers actively measuring how AI impacts the direct cost of clinical care, particularly in high-volume areas like diagnostic imaging and lab testing? With U.S. healthcare infrastructure straining under unsustainable spending, tracking AI’s net financial impact on clinical workflows is essential to ensuring these tools stabilize the system rather than drive up costs.”

ROLI DWIVEDI, MD
FAMILY MEDICINE PHYSICIAN AND CEO
COMMUNITY-UNIVERSITY HEALTH CARE
CENTER

technology because models drift or change over time, making them less accurate.

Patient conversations

Patients are using AI in many ways, such as entering their symptoms in chatbots to get a diagnosis or relying on them as health coaches. Melton-Meaux says it’s common for people to come to appointments with an AI-generated diagnosis or list of questions. “We often see the use of AI to support things like wellness and self-management and navigating healthcare decisions,” she says. When patients come in with self-diagnoses, “I’ve had some really good conversations about something being a good idea or that something else doesn’t necessarily make sense. I often think patients come in even more informed.”

However, there are times where a patient’s information just isn’t accurate, or they have drawn incorrect conclusions based on what AI told them. “Generally, it’s really important to acknowledge that the patient is a person who is engaging in their own health and being proactive. I think that’s a positive thing, and I usually lead with that,” Melton-Meaux says. “Then it’s having a frank conversation about a difference of opinion or an inaccuracy in a conclusion.”

Dilmaghani estimates that a quarter of his patients have entered their symptoms into a chatbot and have self-diagnosed their condition. The issue is that “patients don’t have a very good appreciation for which differential diagnosis is realistic and which ones are technically possible but highly unlikely,” he says. “I think that’s where the physician-patient relationship and establishing rapport as quickly as you can is quite important. You don’t want to just write off people’s concerns but try to help them navigate the answers they are getting.”

Dwivedi finds that visits where patients arrive with AI-generated information tend to run long because she needs to spend extra time going over it. If the AI details don’t match Dwivedi’s assessment, she reviews the research and evidence with patients to clear their doubts. This increases the likelihood that they will follow her recommendations. “That all takes time,” she says. “It can be very challenging.”

Many of Pongdee’s patients bring in information from AI. Their questions are definitely more sophisticated than when they used traditional search engines. “I usually think patients are asking great questions. There is education on both sides because sometimes I had not thought of something,” he says. “I find the conversations to be productive. It’s good for patients because they leave feeling more confident that they are on the right path, and they feel like they’ve been heard.” MM

Suzy Frisch is a Twin Cities freelance writer.



“I usually think patients are asking great questions. There is education on both sides because sometimes I had not thought of something. I find the conversations to be productive. It’s good for patients because they leave feeling more confident that they are on the right path, and they feel like they’ve been heard.”

THANAI PONGDEE, MD
ALLERGIST AND IMMUNOLOGIST
MAYO CLINIC



A community-based approach to mobile colorectal cancer screening

A program to bring screening to underserved communities was only the beginning. Real progress required community partnership, tailored education, and patient navigation.

BY YIDAN WANG, BS; SHAHID JAFFER, MD; SHAHNAZ SULTAN, MD; AMNA HUSSEIN, MBS; ESSA A. MOHAMED, PHD; JONATHAN D. KIRSCH, MD

No one in my family has colorectal cancer. And I feel fine. Do I really need to get screened?

This is a sentiment we often hear at community health events across Minnesota, rooted in a common misconception: that screening is unnecessary without symptoms or a family history of the disease.

When the Minnesota Cancer Assessment Program (MCamp) was established in 2024, we started with a simple idea: If patients were not being screened, we needed to bring screening to them. MCamp is a collaboration between the University of Minnesota's Mobile Health Initiative and the Masonic Cancer Center's Office of Community Outreach and Engagement, focused on improving access to cancer screening. But in meeting

with community members, we recognized that access was only a small part of the conversation, and that other factors—including limited awareness and knowledge of colorectal cancer, mistrust, language barriers, low health literacy, and hurdles in navigating the screening process—represented additional and critical barriers to screening completion.

Our communities taught us that simply making screening available was not enough. It needed to be paired with a more personalized approach that helped people understand why screening was important and shared that information through trusted community messengers. Ultimately, what began as a plan to bring screening to underserved Minnesotans grew into something more, with MCamp

now working alongside community groups, tailoring its educational outreach to each population it serves, and supporting patients through every step of the screening process—from consultation to follow-up.

A preventable cancer with gaps

Colorectal cancer is the second-leading cause of cancer-related death in the U.S. It is also one of the most preventable cancers. Screening can lead to the detection and removal of precancerous polyps before they become cancer and also facilitate early detection of colorectal cancer when treatment is most effective.¹ Current guidelines recommend screening for average-risk adults ages 45 to 75 using either stool-based or visualization testing.² However, nearly one in three eligible adults nationwide is not up to date with colorectal cancer screening.¹ Even more concerning, colorectal cancer is now the leading cause of cancer-related death among men under 50 and the second leading cause among women under 50, reflecting a troubling rise in early-onset disease.¹

Across our state, approximately 69% of eligible Minnesotan adults are up to date with screening. However, statewide averages mask persistent disparities based on race and ethnicity, as screening rates remain substantially lower among Hispanic (41.1%), Asian (51.4%), Black (63.7%), and American Indian (66.8%) Minnesotans.³ According to estimates by Minnesota Community Measurement, more than 25,000 additional Minnesotans would need to be screened to eliminate this disparity statewide.⁴

Survey on colorectal cancer knowledge, attitudes, and beliefs

In 2025, the MCamp team conducted a community assessment across the Twin Cities to better understand awareness, perceptions, and knowledge gaps regarding colorectal cancer screening and prevention. We engaged 148 community members attending various community health events across the Twin Cities. The mean age of participants was 49.5 years (median 47 years), and 68 participants (55%) were age 45 or older,

meeting screening eligibility guidelines. The cohort included participants identifying as Black/African American (57%), white (14%), Hispanic/Latino (12%), American Indian/Alaska Native (7%), and Asian (3%). This distribution reflects MCamp's intentional focus on reaching communities with greater unmet screening needs rather than representing the broader makeup of Minnesota's population.

Individuals not up to date with screening were (as compared with those who had been screened)—

- Less likely to know that colorectal cancer can develop without symptoms (55% versus 76%).
- Less likely to recognize that risk exists even without a family history (56% versus 80%).
- Less likely to believe that early detection improves survival (67% versus 91%).

Familiarity with colorectal cancer screening options also varied significantly based on prior screening exposure (Figure 1). While 50% of previously screened participants were familiar with noninvasive stool-based screening tests, among those not screened, only 23% reported a similar familiarity.

How community partners informed our work

Working with community partners at health events and integrating conversations about colorectal cancer screening into broader preventive health services, including blood pressure screening, A1C and lipid testing, vision and dental care, and vaccinations, created opportunities to provide cancer prevention education.

Two early community partners, the Power of the People Leadership Institute (POPLI) and the Islamic Association of North America (IANA), played an important role in shaping the foundation of MCamp.

POPLI is a Minnesota-based nonprofit organization serving people of color with a focus on leadership development, human rights, human services, and community health. Its founders, Brother Shane Price and Verna Price, helped MCamp build trust, tailor messaging, and introduce

colorectal cancer education during existing community programming.

IANA serves a predominantly Somali Muslim community through its network of mosques across Minnesota. Its leadership helped MCamp navigate cultural and religious considerations, including privacy, gender concordance, and the best approach to communicate screening information.

Together, these early partnerships helped shape MCamp's approach to outreach, education, screening consultations, and follow-up navigation, while reinforcing the importance of addressing fear, mistrust, cultural considerations, and beliefs about preventive care alongside access to screening.

Screening as an act of faith

Somali-speaking Minnesotans experience some of the state's lowest colorectal cancer screening rates. Only 30.1% are up to date with screening, compared with 68.7% of English-speaking Minnesotans.⁴ The MCamp team consulted with community members and leaders from IANA and the Community Health Advisory Collaborative (CHAC) to develop a culturally tailored colorectal cancer education video for Minnesota's Somali community. Community members helped identify common misconceptions about colorectal cancer, and our partner organizations helped shape the language, messaging, and

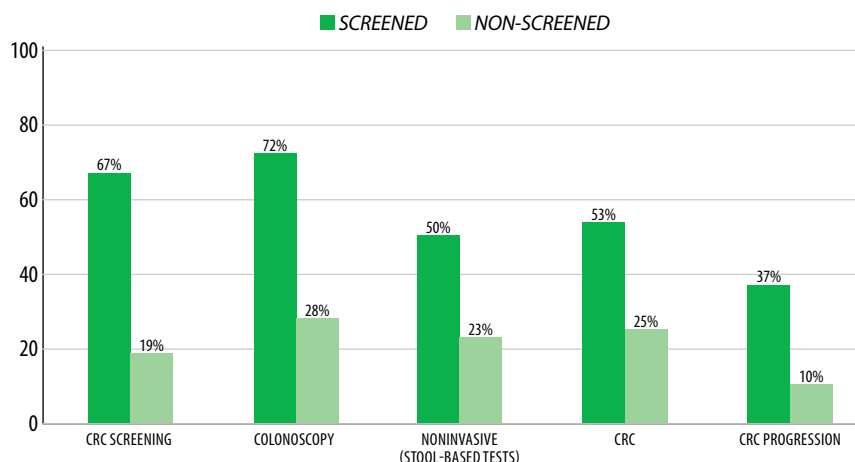
educational content included in the video to ensure it was relevant and resonated with the community. The video features Sheikh Yusuf Abdulle, executive director for IANA, who discusses colorectal cancer prevention through the concept of caring for one's body and faith (Figure 2).

Intisar Mohamed, outreach coordinator at IANA, described how fear and uncertainty often shaped conversations about colorectal cancer for the Somali community. "At first, people were hesitant to even talk about colorectal cancer," she said. "One of the missing pieces was helping people understand that it's actually one of the most preventable cancers." The video addresses this hesitation by presenting screening as a way to take care of one's health, rather than something needed only when a person is sick or experiencing symptoms. As Abdulle explains in the video, "Screening isn't about being sick; it is about taking care of our body."

For Mohamed, the trusted messenger was essential to making the message resonate with the community. "Representation matters in minority groups. When people hear the delicate health message from someone who looks like you, speaks your language, and shares your faith, it carries a different level of trust and credibility. It helps people overcome doubts, making them more willing to ask questions and take their health seriously," she said. She

FIGURE 1

Familiarity with colorectal cancer screening among participants with and without prior colorectal cancer screening



explained that, among Somalis, conversations about health are often connected to their faith, worship, and caring for their body. Hearing Abdulle discuss colorectal cancer through this lens helped community members view screening not as something to fear or something only needed when sick, but rather as a proactive step toward protecting one's health.

During the video's first community viewing, participant responses on a post-viewing survey reinforced the importance of using a trusted religious messenger. More than 82% (n=46) agreed that hearing the message from a religious leader increased their trust in the information. MCamp plans to continue sharing the video through community health events, online social media platforms, local cultural media, and other community-based channels. Our goal is to expand the video's reach, helping more community members understand the importance of screening and feel informed and confident about the screening process.

Mohamed also hopes to see this work continue to expand beyond one community. "I hope more communities can have access to information like this," she said. "When people can engage with health information in their language, it's easier to internalize the information. The more we normalize talking about colorectal cancer, the less scary it becomes."

A focus on education and navigation

While healthcare systems and providers often view cancer screening as a straightforward process, from a patient's perspective the screening process is often daunting. It requires trust in both the test and the person recommending it. It also requires understanding, particularly when results are received and when follow-up is recommended. At every step, patients can fall through the cracks, particularly those who already face barriers to navigating the healthcare system.

MCamp was designed to ensure wrap-around support throughout the screening process, from initial consultation through test completion, results, and any needed referrals. To support this approach, we em-

FIGURE 2

Screenshot of the colorectal cancer education video cocreated by MCamp, CHAC and IANA



Video features Sheikh Yusuf Abdulle and uses culturally relevant messaging to address common misconceptions about colorectal cancer screening. The QR code and URL link to the video.

bedded a community health worker and nurse navigator within the mobile health team as central components of the program. The process begins with an onsite consultation with a healthcare provider, during which conversations focus on each person's health history, risk factors, screening preferences, and individual circumstances. Community members aged 45 and older who are interested in screening are counseled on colorectal cancer screening options, including colonoscopy and stool-based testing, with high-risk patients referred directly for colonoscopy. For average-risk adults, MCamp offers on-site stool-based screening, providing a noninvasive screening option that reduces barriers to participation. Through a donation program (provided by a grant from Exact Sciences), Cologuard test kits can also be provided to uninsured participants on-site.

Our community health worker helps individuals feel comfortable completing the test by providing demonstrations, answering questions, and offering follow-up support after the event. When results are available, our nurse navigator communicates the findings in the participant's preferred language and helps coordinate any necessary next steps. For participants who are high-risk or have a positive result on a stool-based test, MCamp helps coordinate follow-up colonoscopy through partner-

ships with Fairview and MNGI. These partnerships include access to free or reduced-cost procedures for uninsured or underinsured patients. The program also helps insured patients identify in-network options and continues providing navigation support until follow-up is completed.

MCamp's community impact

Since launching the program in November 2024, MCamp has participated in 23 community health events across Minnesota (Figure 3). Through these events, the program completed 109 screening consultations and enrolled 57 participants. Of those enrolled, 74% returned their screening kit, and three participants received positive stool-based test results. Fifteen participants were ultimately lost to follow-up, primarily due to changes in geographic location and loss of contact. Among the 63 eligible participants, 90% enrolled in the program, indicating strong programmatic uptake. While not directly comparable, this exceeds the colorectal cancer screening rate of about 39% reported across the U.S. federally qualified health centers (FQHCs), which serve similar underrepresented communities.⁵ Data from MCamp participants who completed a feedback survey (n=30) have been overwhelmingly positive: 100% said they would participate again, and 96% said they would recom-

mend MCamp to a family member or friend.

From one community to many

Reducing the burden of colorectal cancer in Minnesota will require a multipronged approach. In addition to screening, community health events also represent an opportunity to address the modifiable risk factors that drive colorectal cancer risk, such as diet, physical inactivity, and tobacco and alcohol use.⁶ Our experience working with IANA, CHAC, and POPLI demonstrated that prevention education is more meaningful, culturally relevant, and accessible when communities help shape the approach. We invite clinicians committed to improving community colorectal cancer screening rates, community organizations seeking to bring preventive services to their members, health systems working to reduce disparities, and public health leaders focused on scalable, evidence-based interventions to join this work. Together, we can build a more coordinated approach to colorectal cancer prevention and ensure that every person can benefit from screening.

Please contact crcscreening@umn.edu for more information and collaboration opportunities. **MM**

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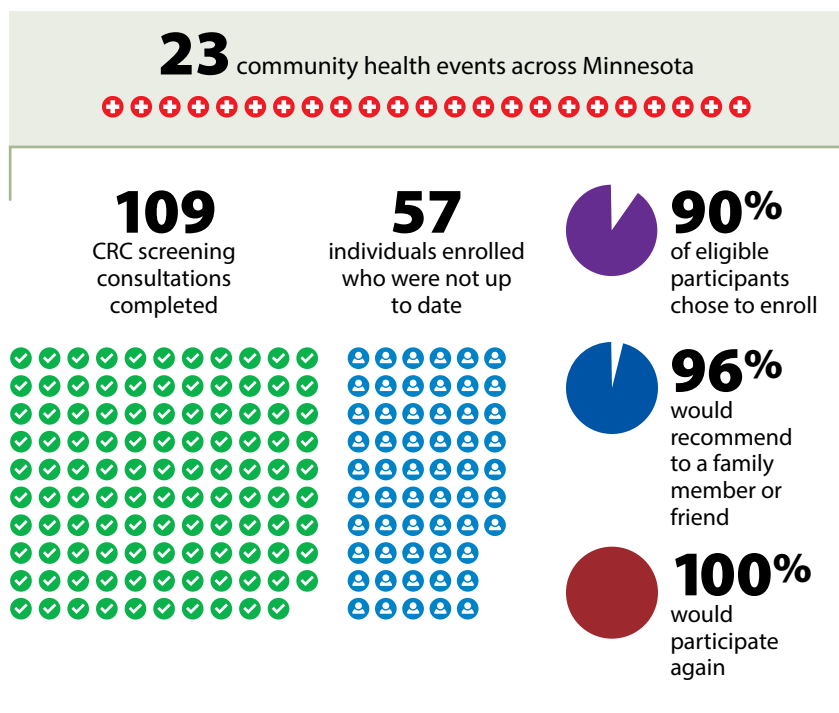
Amna Hussein is the community outreach and engagement manager at the Masonic Cancer Center, University of Minnesota, where she leads community-centered initiatives focused on advancing cancer prevention, screening, research engagement, and health equity.

Essa Mohamed, PhD, assistant professor of medicine at Mayo Clinic, is a biomedical researcher committed to advancing health equity, addressing health disparities, and improving the inclusion of underserved and diverse populations in clinical research and healthcare.

FIGURE 3

Impact of the MCamp pilot program since its launch in November 2024

Through community partnerships, MCamp has expanded colorectal cancer education, screening consultations, and patient navigation in underserved communities across Minnesota, resulting in high screening enrollment and participant satisfaction.



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those of the authors.

IRB Approval

This work was approved by the University of Minnesota Institutional Review Board (STUDY00026331 and STUDY00023139).

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The new drug scourge plaguing rural Minnesota

An addiction physician describes how kratom and its potent derivative 7-hydroxymitragynine have become popular—and problematic.



The recent increase in poisoning symptoms and overdoses from kratom and kratom-related compounds such as 7-hydroxymitragynine—known as 7-hydroxy or 7-OH—have alarmed addiction specialists in the state, especially in rural Minnesota, where problems are most apparent.

Kratom is not a traditional opioid derived from the opium poppy, but its active compounds act on the brain's opioid receptors. Kratom and its derivatives are commonly sold in head shops and gas stations throughout the state.

The compounds are addictive, and according to the Minnesota Department of Health, “Kratom has been linked to a range of health effects, from mild side effects to more serious harms such as liver toxicity, seizures, and substance use disorder. At lower doses, mitragynine may have stimulant-like effects, such as increased alertness. Whereas low doses of 7-OH may have more opioid-like effects. At high doses, both compounds may lead to opioid- or sedative-like (pain relief) effects.”

According to the CDC, “Analysis of 2015–2025 National Poison Data System data found an increase of approximately 1,200% in kratom-related exposure reports

(from 258 to 3,434), including a marked surge in 2025.”

Minnesota Public Radio reports the Minnesota Regional Poison Center has “received at least two-and-a-half times the number of calls from 2024 to 2025, and we’re on a similar trend in 2026.”

To get further insight into the scale of the problem, *Minnesota Medicine* asked Kurt DeVine, MD, an addiction and family medicine physician at CentraCare St. Cloud Hospital Addiction Services, to discuss addiction and medical problems associated with kratom, 7-hydroxymitragynine, and other kratom-related compounds.

Currently 10 states outlaw kratom or its active chemical components, such as 7-hydroxymitragynine, or both. An 11th state, Kentucky, is scheduled to ban sales beginning next year. In July, the U.S. Drug Enforcement Administration announced plans to place 7-hydroxymitragynine and three related substances into Schedule I of the Controlled Substances Act.

Minnesota recently increased the legal age for purchasing kratom products from 18 to 21, but DeVine says, “that’s like putting a band-aid on an amputation.”

The interview has been edited for brevity and clarity.

Let’s start at the beginning because I’m sure there are many people who have no idea what 7-hydroxymitragynine or kratom are.

Kratom has been around for hundreds of years. Kratom is from mostly three different species of tree, but originally was from Malaysia. And in the old days, people would walk by, chew on a leaf of this tree, and it would kind of help them get through the day because at low doses, it would actually cause some stimula-



Kurt DeVine, MD
Addiction and family medicine physician
CentraCare St. Cloud Hospital Addiction Services

tion or kind of wake people up, like coffee in a way.

Kratom has about 50 different alkaloids in it. Until a few years ago, we thought mitragynine, plain mitragynine, was the most active ingredient in kratom. We thought that was also the one that if people took a lot of kratom, it gave it the opioid effect.

In fact, we were not exactly right. In the last two years we've discovered that mitragynine in our body is metabolized to 7-hydroxymitragynine in very tiny amounts. As it turns out, that's what gives the opioid effect of kratom. So if you take kratom, there's going to be a very small amount of 7-hydroxymitragynine in your blood, but not really enough to cause huge problems unless you take a huge amount of kratom.

So two years ago, they started semisynthetically making 7-hydroxymitragynine, which is vastly different than regular mitragynine and kratom.

And who is they?

These companies that make 7-hydroxy.

So there's probably 200 or 300 products on the market roughly that have either kratom, or both kratom and 7-hydroxy, or just 7-hydroxy. There's hundreds. I work in an addiction clinic at CentraCare, and so all we see is people with addiction. Probably 16 months ago we saw our first cases of 7-hydroxy, and at the time there was really no research on it. But what we know now from rat studies and things is that 7-hydroxymitragynine is roughly four times stronger than morphine. [Other sources say even stronger; see sidebar.]

Kratom has been around for hundreds of years.

Kratom is from mostly three different species of tree, but originally was from Malaysia. And in the old days, people would walk by, chew on a leaf of this tree, and it would kind of help them get through the day because at low doses, it would actually cause some stimulation or kind of wake people up, like coffee in a way.

How did you know back then what you were even dealing with? And did the people who were addicted to it or using it—did they know what they were dealing with?

Nobody knew what they were dealing with because part of the issue is packaging. So if you think about what was going on at the time, this just all of a sudden started to show up, and a lot of the packages that people were bringing me said that they had kratom and 7-hydroxymitragynine in them, and you didn't know how much of each.

I can remember when I first started digging into this, when we saw a couple of cases of this, they clearly had an opioid withdrawal. It looks like an opioid withdrawal. In people that use a lot of kratom, they could actually have opioid withdrawal, and it was really pretty rough. And so suddenly, we're seeing 7-hydroxy, and then kind of figuring out from rat studies that in fact that was a metabolite of regular mitragynine, but the withdrawals from it were substantially worse than mitragynine or kratom.

We started seeing this really being sold everywhere. It was being sold in

gas stations, in convenience stores, in smoke shops. It was in drinks. It was just everywhere. We went from seeing almost nobody with this a year and a half ago to now seeing, I would say, on average one or two a day in our clinic in withdrawal from 7-hydroxy.

Does that suggest that the number of people using this stuff has vastly increased or that the potency of it because of the addition of 7-hydroxymitragynine has increased?

In a year's time I have only seen two people having a problem with kratom. But I have seen dozens and dozens of people having problems with 7-hydroxy. It's almost like everybody that was taking kratom, a lot of them transitioned to 7-hydroxy because it was better, right? And they kept taking more and more. And one of the problems that we've seen with 7-hydroxy is that people build a tolerance to it really fast. And so I had patients—many almost a year ago now—who went from taking 10 or 15 milligrams a day to 2,000 milligrams a day in just four months. I have seen people taking 2,000 to 3,000 milligrams in a day, which could cost them a couple hundred bucks a day.

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How is 7-hydroxymitragynine used recreationally? As you mentioned, it comes in drinks, it comes in gummies, and you can buy it almost anywhere.

And I don't know that it's so much recreational. People take it because when they go into the smoke shop—and we hear this a lot—they will say, "Well, I have chronic

pain,” and they’re taking gummies of marijuana. The salesman will say, “Oh, you should try the 7-hydroxy. Everybody says it’s really good for pain, or it’s really good for anxiety, or it energizes you.” So, I would tell you the majority of patients I’m seeing started taking it, not understanding that it was an opioid, that it had opioid effects.

So, sort of a pseudo medical motivation.

And everybody felt it was natural. Okay, now kratom comes from a leaf, and that’s natural, but it’s in my opinion not a great thing. But 7-hydroxy is semisynthetic. Yeah, this is not like it’s coming from a plant.

So if we look forward to the feds potentially making this a scheduled thing, so it’s taken off the shelves, how many people do we have taking it? We have no idea. But I’ll just tell you that here’s what happened because of that. The smoke shops, one in particular in our area in St. Cloud, cut the price because they’re trying to get rid of it because they think they’re going to stop selling it. So I had a person who had actually gotten off of it and was on medication for it. We used buprenorphine just like we would if it was heroin. And he relapsed because it was so cheap.

CentraCare is a very large rural system. We’re just seeing this horribly out here. In the metro they see some, but we’re just seeing one after the other. Last week I had a day that I had five 7-hydroxy patients, two of them new. It’s that common.

I think some of the rural problem is that you don’t have to drive to the Cities to get your fentanyl. You can go to a smoke shop and get 7-hydroxy. So we’re just seeing it every single day. It’s been just a scourge to be honest.

Tell me how people get referred to you. I mean, what happens that they decide they need to go see a doctor? How do you identify that 7-hydroxy is the problem?

I get phone calls from all of the emergency departments that we have rurally. I’ve had referrals as far away as Redwood Falls. There are two different kinds of patients

I look at scheduling these substances as probably the way out because we need to get them off the shelves, and it’s just overwhelming. And I don’t think again we’re going to have any idea how significant this is until we see how many people show up in emergency rooms and clinics withdrawing. I think the biggest concern I have is that if you’re taking a lot of 7-hydroxy, the only thing that’s going to fix it that’s easily available is going to be fentanyl.

on 7-hydroxy. There are patients on small amounts where they might be on maybe 50 or 100 milligrams, and in general, those patients are really pretty easy to transition to buprenorphine, much like we would somebody who is on fentanyl or heroin.

And then there are the people that I refer to as super users, where they’re using 1,000 milligrams or more. They have a lot of symptoms of withdrawal that are different. Sometimes these patients are just much more challenging.

Talk a little bit about the range of symptoms of withdrawal from those patients you were talking about who are have been using relatively small amounts to those that are, as you describe, super users.

If you think about people that maybe had surgery and they had three or four weeks of opioids and maybe oxycodone, and when they stop that, even though they’ve been prescribed it, they may still withdraw from it. And the common withdrawal symptoms are being kind of anxious, getting a little bit of diarrhea. They might feel chilled or cold, and it might last a day or two. A lot of times people just get through it. So the smaller doses can act kind of like that. To be honest, I don’t see a lot of the low-dose people, and I think it’s more selection. The ones that get sent to me typically are the harder ones, the high-dose people. But the higher-dose people seem to have much worse agitation. I had a guy the other day—he was taking about 1,500

milligrams a day—he said, “I’ve got this buzzing in my head that I can’t get rid of unless I take more 7-hydroxy.” I’ve had two or three people describe it as buzzing or humming that they can’t get rid of. We’ve looked at other adjunct medicines to help. But we’ve kind of tailored it a little bit to the higher-dose people. We have kind of a certain way of doing it now, just to help them through it a little easier. It has certainly been a learning experience. It’s like building the plane as you fly it.

What’s the long-term treatment like? Somebody comes in and you have to deal with the symptoms as an acute event. But over the course of the next week, two weeks, month, will you see them again and again? How does that play out?

Yeah, we do, and you know, we follow these patients just as we would if they had an opioid use disorder. A lot of these people end up on long-term buprenorphine. Interestingly, if you look at this group, a pretty big percentage of them have had previous troubles with opioids, whether prescribed medications, heroin, or fentanyl. So sometimes, they see this particular substance in a smoke shop and think, if this helps my pain, that’d be great. They have no idea it’s an opioidlike substance, right? So they just fall into it again, and then they end up right back having a problem. But I’ve also had grandmas taking this stuff who thought it was really good for their arthritis and then couldn’t stop.

What are kratom and 7-hydroxymitragynine?

The drug kratom has been sold in Minnesota for some time. Its more potent and addictive metabolite, known as 7-hydroxymitragynine, is also barely regulated and has exploded in sales in the last two years. What are kratom and 7-hydroxymitragynine and how dangerous are they?

Kratom is a Southeast Asian tree, principally *Mitragyna speciosa*. People there have traditionally chewed or steeped its leaves to release compounds with psychoactive effects. Powders, extracts, and capsules derived from the kratom tree are sold throughout much of the U.S. According to the National Survey on Drug Use and Health, 1.7 million people in the U.S. ages 12 and up have used kratom recently. Kratom produces variously, at different quantities, a pick-me-up, relief from anxiety, pain relief, and sedation.

Mitragynine, one of about 50 alkaloids in the kratom plant, is the main psychoactive ingredient. It binds to the body's μ -, δ -, and κ -opioid receptors. The μ -opioid receptor is the trigger "that leads to, that can lead to, an opioid use disorder," says Robert "Cole" Pueringer, MD, CTropMed, a medical toxicologist and addiction specialist at Essentia Health in Duluth. Kratom and mitragynine appear to be addictive only when used in large quantities.

Among the other compounds in kratom is a tiny amount of 7-hydroxymitragynine, which is also produced—and in far great quantities—as a metabolite of mitragynine. According to the NIH, studies in mice show that brain concentrations of 7-hydroxymitragynine "are sufficient to explain most or all of the opioid-receptor-mediated analgesic activity of mitragynine."

"One of the things that happens when there's regulation of a drug, say in this case kratom, the drug suppliers or dealers or whoever's making it usually develop a more potent alternative. So as kratom regulation increased, they started to concentrate some of the more potent derivatives," says Pueringer.

Companies began fortifying their kratom products with synthetically produced 7-hydroxymitragynine or selling 7-hydroxymitragynine as a stand-alone product. According to Health Affairs Publishing, 7-hydroxymitragynine "demonstrates approximately 13 times the potency of morphine and 46 times that of mitragynine in functional assays." Consequently, these 7-hydroxymitragynine products are more addictive than kratom itself.

Fortunately, while 7-hydroxymitragynine is addictive, it is a "partial agonist" of μ -opioid receptors, says Pueringer, and cannot cause a fatal overdose by itself. "Like buprenorphine, it has what we call a ceiling effect as a partial agonist," he says. "It doesn't cause the same degree of respiratory depression or CNS depression. It doesn't kill people in toxicity."

But "we rarely see just pure 7-hydroxymitragynine," Pueringer says. "These aren't like 3M-level laboratories that are doing these separa-

tions." The 7-hydroxymitragynine is often found with other, more dangerous substances. "We find fentanyl, we find methamphetamine, we find pretty much everything in it, and it's wholly unregulated."

In addition, the FDA has warned about seizures, liver toxicity, and substance-use disorder linked to the use of kratom and derivatives, which may also be related to the alkaloid content or adulterants in kratom. The National Institute on Drug Abuse warns that "rare but serious effects have been reported in people who use kratom, including psychiatric, cardiovascular, gastrointestinal and respiratory problems."

There is also a danger when kratom or 7-hydroxymitragynine is combined with other sedatives, including alcohol.

"If you combine a bunch of sedatives, doesn't matter what the sedatives are, you're going to get CNS [central nervous system] depression or sedation," says Pueringer. "And the more potent those sedatives are that you combine, the more likely you're going to have these effects. And it's the same thing with 7-hydroxy. If you combine 7-hydroxy with other sedatives, like a benzodiazepine or something like alcohol, there's a much higher chance that you're going to cause the CNS depression and possibly respiratory depression."

Although addiction specialists are just now developing treatments for 7-hydroxymitragynine addiction and withdrawal, "we manage based on the pharmacologic principles. Kratom and mitragynine are opioids, and so we treat them like other opioid use disorders. Buprenorphine can be considered a substitution therapy that keeps people alive and allows them to live a normal life. Although there's not yet a large evidence base to support it pharmacologically and anecdotally, it forms the backbone of any pharmacologic treatment," says Pueringer. "Buprenorphine is used for withdrawal management and for maintenance treatment."

Like other addiction specialists, Pueringer is concerned that if the U.S. Drug Enforcement Administration follows through with its announcement in July to place 7-hydroxymitragynine and three related substances into Schedule I of the Controlled Substances Act, heavy users will look for relief to illegal and more dangerous drugs such as fentanyl.

"I think that if regulation is to happen, that cutting something off quickly is potentially dangerous without education to providers and to the public that we have legitimate treatments for this, like buprenorphine," he says.

—GREG BREINING



Robert "Cole" Pueringer, MD, CTropMed
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addiction specialist
Essentia Health, Duluth



This whole thing has been a fascinating kind of event where we see something that's clearly a public hazard that's on shelves, where people can just walk up and buy it. It's shocking to be honest with you.

I look at scheduling these substances as probably the way out because we need to get them off the shelves, and it's just overwhelming. And I don't think again we're going to have any idea how significant this is until we see how many people show up in emergency rooms and clinics withdrawing. I think the biggest concern I have is that if you're taking a lot of 7-hydroxy, the only thing that's going to fix it that's easily available is going to be fentanyl.

That may become their drug of choice after the 7-hydroxy becomes unavailable?

I think that's a possibility, and I think that's concerning. It's so much more potent than kratom that it's not like you can say, "Oh, geez, I can't buy 7-hydroxy anymore. I'm going to get kratom and try and cover this withdrawal." It won't. Kratom is not on the list to be scheduled.

Are there other aspects to an appropriate public health response?

There are actually other things that you can get right now that are related to 7-hydroxy, and if those were not also scheduled, it'd be like whack-a-mole, a new one would pop up. Those are something called MPI, which is mitragynine pseudoindoxyl. Then there's something called MGM-15, dihydro-7-hydroxymitragynine, which is for research only, but it is flavored, just in case you want to try it, and you can buy those online right now.

And so the question is: Are we going to get a federal response that makes sure that none of those things is available, or are we just going to get one of them?

I'm just so shocked that people keep selling it. We've had a number of overdoses on this because it does cause pretty significant respiratory depression. When you overdose on 7-hydroxy, it's treated just like heroin overdose. You get Narcan. So why

I think the most important thing for primary care, especially in our rural areas, is when people show up and they talk about using kratom or 7-hydroxy, you have to have a conversation with them about how we need to get them off. These things are horrifically addicting. They really are.

would you be selling something in a smoke shop that potentially could kill somebody?

Are they legally liable?

That's where I'm going with this. I can't believe they're not. I went to the smoke shop and I asked the guy behind the counter, "You realize that that right there can cause overdose and death." He goes, "Oh yeah, I've had a patient tell me he got Narcan after he used it." And I said, "Doesn't that scare you? Like this guy could sue." And he's like, "Well, it's legal." Just because it's legal doesn't mean there's not liability. I was shocked by his response, knowing that people had overdosed but came back in and bought more.

It would be one thing if the substance were approved for a particular use by, for example, the Food and Drug Administration or some other government agency, and you sold it. It seems like the approval would absolve you of some liability. But if you're just taking a substance and packaging it as an edible and saying here it is. You might as well be packaging bleach as an edible and giving it to people.

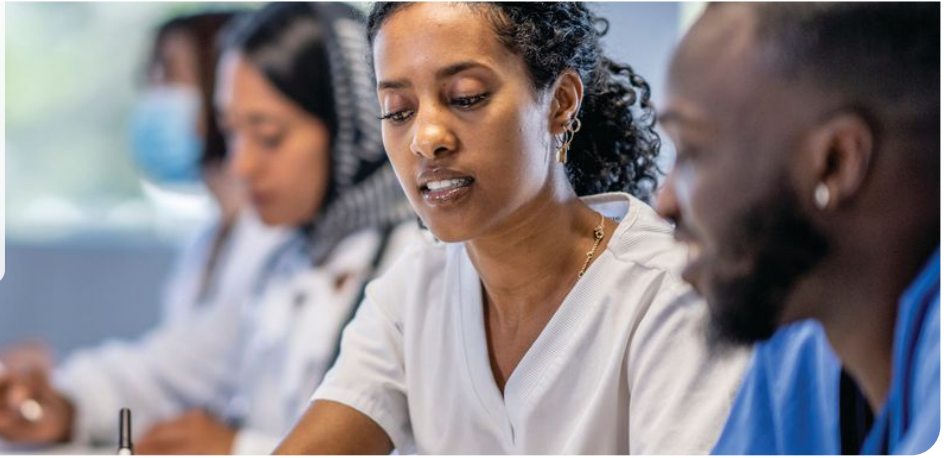
And the reality is, if you look at the packaging—I have patients bring it in because I want to see exactly what's tested. It doesn't tell you how much this is. It doesn't tell you potency. It doesn't tell you if there are other things in it. It doesn't really say anything. And so you're taking something and you really have no idea what.

So what should physicians be aware of?

I think the most important thing for primary care, especially in our rural areas, is when people show up and they talk about using kratom or 7-hydroxy, you have to have a conversation with them about how we need to get them off. These things are horrifically addicting. They really are. People develop tolerance to them very quickly, and I think the potential risks of overdose and death are there with 7-hydroxy. So it's really about treating this like any other opioid. And if they don't know exactly what to do with this, they need to call one of the systems that has addiction people working there, such as Hennepin or CentraCare or Sagent Behavioral Health in Duluth. I just think it's important to get the right information so that you can treat these patients quickly, right, and get them help. MM

Interview by Greg Breining, editor of Minnesota Medicine.

IMPROVING CARE FOR ALL: TOOLS & RESOURCES



The Minnesota Health Equity Community of Practice (CoP)

The CoP brings together health equity leaders and professionals from Minnesota medical practices to exchange expertise, resources, and ideas. It provides an opportunity for networking, cross-organizational communication, and collaboration. The CoP also guides the work of MMA by providing input on health equity priorities and identifying opportunities for collective action in support of health equity. The CoP meets quarterly and interested physicians may join at any time.

To attend a CoP meeting, contact Haley Brickner.

Intercultural Development Inventory

The Intercultural Development Inventory (IDI) is a developmental assessment which provides in-depth insights on individuals' and groups' levels of intercultural competence. The IDI process empowers participants to increase their intercultural capability.

The IDI can be used by individuals to receive feedback and recommendations and by organizations for baseline assessments, organizational development, or as a pre-post assessment in program evaluation.

The MMA now offers this valuable resource, including:

- IDI Assessment
- Individual Profile Report
- Group Profile Report
- Customized Intercultural Development Plan
- 1:1 Debrief/Coaching sessions with a qualified IDI Administrator

Learn more at www.idiinventory.com and contact Haley Brickner to start your IDI process.

Best Practices for Inclusive Communications – Training and Guide

The words we use can either promote a culture of respect and inclusion or perpetuate harm toward marginalized individuals and communities. As we work to promote an anti-racist culture in medicine, we must also examine the way we speak about people and groups. As language and culture change over time, it is our responsibility to stay up to date on best practices for communicating about health equity. The MMA offers training for organizations on Best Practices for Inclusive Communication, enabling participants to use more inclusive communication by providing suggested language, guidance, and explanatory context, and encouraging them to think critically about the words they use, the meaning conveyed, and the potential impact.

The training accompanies the free Inclusive Communication Guide, which can be found at www.mnmed.org/healthequity

Implicit Bias Training (CME available)

Research suggests that implicit biases contribute to health disparities by affecting patient relationships and care decisions.

The MMA offers health care providers several ways to learn about Implicit Bias:

- Public workshops: Our live, virtual 2-hour Understanding and Mitigating Implicit Bias in Healthcare Workshop is offered to the public twice a year.
- Private workshops: Bring workshop to your organization at a time and place that works for you.
- Recorded workshops: Our Implicit Bias Workshop is available on-demand

Explore Implicit Bias resources at www.mnmed.org/IB

Racism in Medicine: Truths from MN Physicians (CME Available)

In this powerful video series, physicians of color share their stories of practicing medicine in Minnesota. Efforts toward making medicine more inclusive require an understanding of the experiences of these physicians. This project is a step toward addressing the harmful effects of racism, microaggressions, and implicit bias within the culture of medicine. Also available is a 90-minute workshop featuring critical reflection on, and discussion of, the video series.

View the videos and symposium at www.mnmed.org/racismtruths

Conversations on Race and Equity (CME Available)

The Conversations on Race and Equity (CORE) series is a virtual space for physicians to discuss topics that relate to health equity and inclusion in healthcare.

Each session is 1 hour and includes facilitated dialogue based on curated content. The topics include:

- Session 1: Anti-racism
- Session 2: Cultural Humility
- Session 3: Implicit Bias & Microaggressions
- Session 4: Racism in Medicine
- Session 5: Allyship

There are two ways to bring CORE to your organization:

- MMA Facilitated: With this option, each session will take place via Zoom with an experienced CORE facilitator
- Self-Guided: The MMA has developed a CORE Toolkit for healthcare organizations to host a CORE series on their own.

To bring CORE to your organization, visit www.mnmed.org/CORE

FOR MORE INFORMATION ABOUT ANY OF THESE RESOURCES

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Health Equity Coordinator
hbrickner@mnmed.org
612-355-9344

VISIT

www.mnmed.org/healthequity



**MINNESOTA
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Beyond the stacks: Medical librarians in a family medicine residency clinic

Medical librarians, working in clinic and hospital settings, can provide clinical staff quick and authoritative answers to their questions.

BY AINSLEE CROSE, MD; ZACH MERTEN, MD; MARK MERSHON, MLIS;
BETSY BARTHOLOMEW, MILS, TMMBA; DEBORAH M. MULLEN, PHD

As medical knowledge expands rapidly, clinicians need trusted resources to support patient care. The University of Minnesota Methodist Family Medicine Residency at Park Nicollet Creekside Family Medicine Clinic program partnered with HealthPartners Park Nicollet medical librarians in both the inpatient and outpatient clinical settings to provide residents and faculty with evidence-based resources to answer clinical questions.

Traditionally, clinicians interact with librarians by going to the medical libraries or electronically asking for help. The intervention moved the medical librarians out of the stacks and into the care-delivery sites. Librarians spend half days in the clinic and rounding in the hospital with residents each week. Librarians tracked the questions asked and which resources were shared to respond to those questions; this information was shared with residents and faculty to enhance training. Resources shared over the first six months of the clinic half days included items such as medical journal articles, vaccine safety documents from the CDC, articles from news media outlets, parenting guides to

share with patients, and even translated Spanish language self-care guides.

Residents and faculty reported in a pre-survey variable levels of comfort utilizing medical librarians and accessing high-quality clinical resources. Common barriers to accessing evidence-based resources included uncertainty in how to ask questions and appraise evidence. After six months of librarian attendance during clinic hours, residents report that direct access to medical librarians in the clinic is very helpful in answering questions that arise through patient encounters. Medical librarians found the partnership similarly rewarding.

While the presence of medical librarians at hospital rounds is well preceded, our partnership with medical librarians in an outpatient clinical setting is unique. This model could be replicated in other residency programs.

Introduction

More than 1 million new manuscripts are added to PubMed annually, doubling medical evidence every 13 years.¹ Clinicians have increased production of RVU expectations leading to less time in clinic visits. At the

same time there are persistently increasing resources in the medical literature, clinical evidence, and research data to inform patient care, which also requires time for review and learning.² In clinic practices, medical librarians can be critical team members whose specialized skills help them to quickly pull relevant articles and online patient-accessible materials, enabling clinicians to use high-quality, evidence-based medical information promptly to support patient diagnosis, care, treatment, and shared decision-making.³

While inviting medical librarians into hospital clinical teams is not unusual, there is little literature examining their work in clinic settings outside of the hospital.⁴ The one place that medical librarians have been studied in outpatient clinics is after providing trainees across medical specialties and licenses with training directed at how the individuals can use medical library databases, rather than having the librarian working alongside the clinicians.⁴ In our suburban midwestern family medicine residency program, the library is conveniently located in the same building, across the hall from the outpatient clinic. The librarians have long been involved in



FIGURE 1

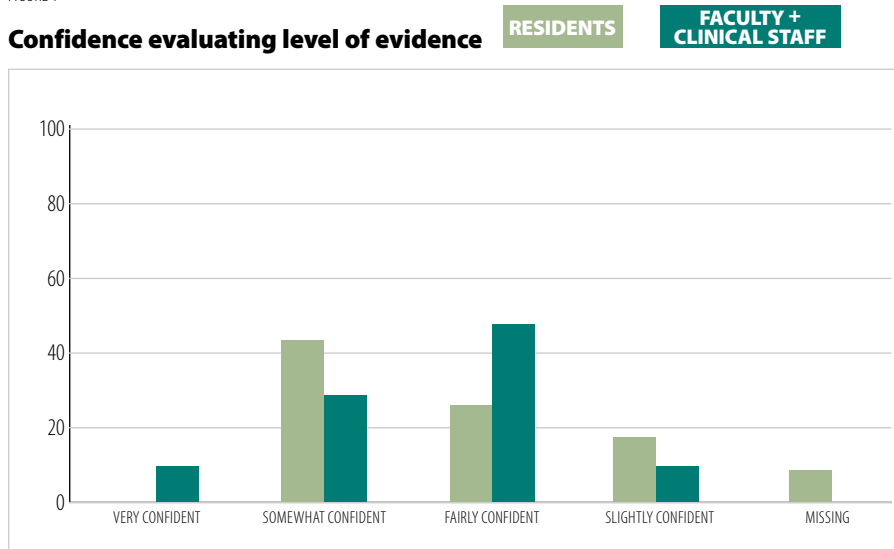
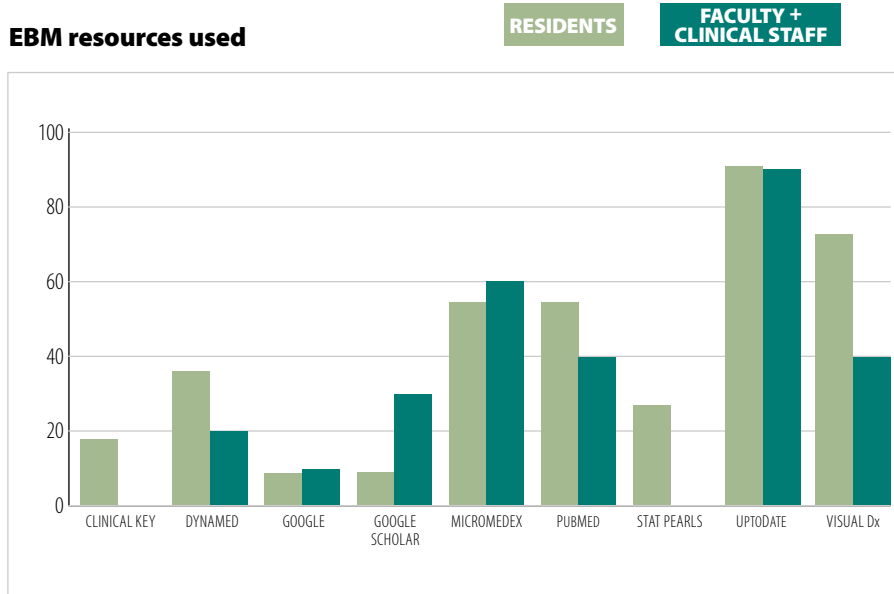


FIGURE 2



residency program scholarly work, leading us to collectively ask: How would having medical librarians sitting in our preceptor rooms change practice? If the librarians are able to listen to sessions where senior attending physicians discuss with residents patient care plans, what new clinical inquiries would they hear first-hand?

By integrating a medical librarian at the clinic point-of-care, we aimed to increase residents' personal research skills when seeking scholarly, clinical resources. In our clinic, all clinicians have access to a strong medical library collection and databases, UpToDate, and a robust patient education printable library. However, these can

be limited when a novel issue is brought forward, evidence is evolving or in conflict with public understanding, or a patient concern is not covered by the existing resources, such as how to deal with sibling rivalry or current vaccine evidence. For residents, the goals of the librarian in the room were to increase their awareness of where to find high-quality, evidence-based information and to hone their abilities to research independently for resources by asking good questions.

Methods

Residents and faculty answered a Qualtrics presurvey in early June 2024. The

survey and project were deemed as educational quality improvement work and institutional review board oversight was not necessary. In late June 2024, medical librarians joined residency preceptors for a half day every other Tuesday. All questions asked to the librarians were logged in a spreadsheet by date, general theme of the request, and resources provided.

Results

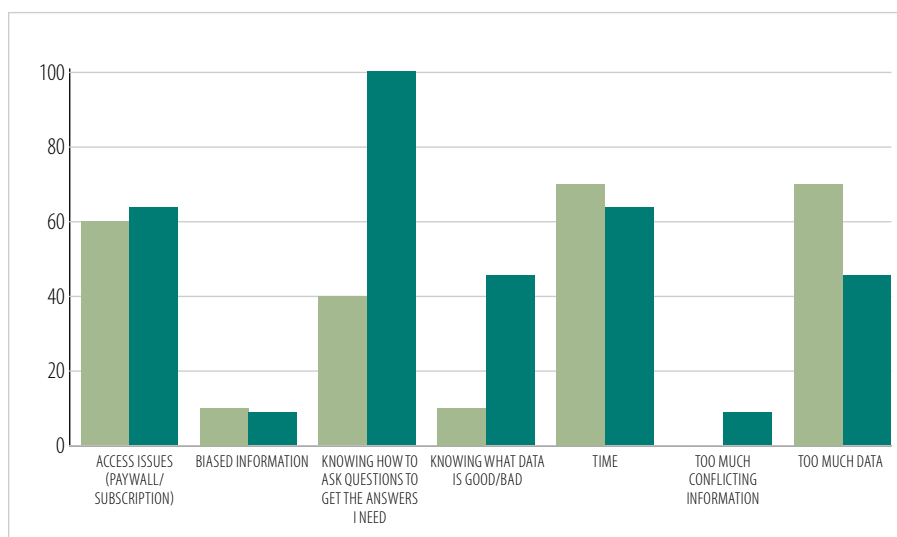
Presurvey

Many respondents—50% of residents and 80% of faculty—had prior experience working with medical librarians. Most felt somewhat to fairly confident evaluating research but mentioned needing more clinical guideline access (Figure 1). Clinical guideline databases such as ECRI National Guideline Trust provide public access to evidence-based care guidelines from medical specialty associations, professional medical associations, clinical practice guideline development organizations, and the U.S. Preventive Services Task Force; however ECRI only include recent (past five years) reviews of the data. For some conditions, especially rare conditions, there may not have been a recent review of the evidence, and these clinical guidelines may still be relevant, but inaccessible due to pay walls. The ECRI no longer includes any university, health system, state-level guidelines and are much more restrictive in their inclusion criteria.

Residents and faculty utilize a variety of evidence-based medicine (EBM) resources, with most relying on UpToDate, Microdex, VisualDx, and PubMed (Figure 2). While UpToDate is technically an online textbook, it is based on EBM resources and thus a trusted clinical resource. Microdex and its partner application Dynamed are also evidence-based references on medications, guidelines, care standards, and toxicology through a searchable electronic database including the pharmaceutical “Red Book.” Several residents (18%) mention use of the MD on Call app, which is intended for medical student and resident audiences that have extensive medical knowledge. It is based on common case scenarios and includes details on how to respond, including treatment and testing.

FIGURE 3

EBM barriers



VisualDx is an evidence-based image and decision-making app focused on dermatological conditions. PubMed is a publicly available search engine for the database of biomedical literature maintained by the National Library of Medicine, which includes Medline, e-books, and other databases. Users for any of these resources should remember that while the authors and organizations creating evidence-based electronic resources state that they are adding and improving content continuously, they are not able to incorporate all medical knowledge (see Figure 2).

The survey identified barriers to EBM resource uses (Figure 3). Residents' most common barrier is knowing how to ask questions to get needed answers (100%),

time constraints (63%), and access issues such as paywalls (63%). Faculty report barriers of too much data (65%) and access issues (60%). Searching PubMed may yield hundreds of articles for even the simplest of topics. During a busy office schedule, it may be impossible for a clinician to sift through the research and determine what information is relevant to their patient concerns, especially for medical research that is contradictory or rapidly changing. The same challenges (contradictory or rapidly changing evidence) may make the application-based tools out of date or contradictory to past knowledge and practice. Complicating the process of determining if information is relevant is the challenge of potentially biased publica-

tions such as those published by predatory journals or skewed by funding sources, and information from public sources that contradicts accepted best practice guidelines such as those from the American Academy of Pediatrics.

Medical librarian interactions—in clinic

In the first six months, all 34 questions posed by residents, clinical staff, and faculty to the medical librarians received resources during the clinical encounter or within 24 hours. Resource requests include research to inform diagnosis and care, updated guidelines, and patient education resources, including self-care apps, translated patient self-care education materials, and even parenting advice about sibling rivalry. Requests predominantly focus on specific conditions or diseases (38%) and medications (26%). Other topics included prescription uses (9%), over-the-counter medication and dietary supplement evidence (9%), and side effects and drug interactions (6%). Patient resources, preoperative management, and vaccines equally constitute another 27% of queries, with the remaining requests covering hospital practices and medical education (8%). Most queries focus on clinic-based care (68%); however, the remaining 32% include many topics related to hospital care for patients seeking pre- or posthospitalization care. The variety of requests was interesting and, per the medical librarians, spanned a much broader range of topics than they were previously asked to provide when available online via email or when clinicians came to the library. Requests for patient-shared materials were perhaps the most surprising request of the librarians, since when the materials are shared with nonclinicians, they need to be useful to the layperson. Resources such as articles from a newspaper about recent research findings, parenting magazines, and even patient advocacy literature (e.g., American Cancer Society or American Diabetes Association) are the best resources for this group of readers.

Resources come from a variety of sources. Librarians most often used PubMed and OVID Medline (Figure 4).

The pace of the clinic practice means that the clinic resource needs are more immediate (within five minutes or at most by the next day) than is usual in our regional hospital. Adding librarians enables clinicians to support patients in different ways. Future plans include expanding the librarian clinic visits to more locations and conducting post-surveys to examine shifts in clinician resource use and confidence in evaluating resources.

The most common resource provided is a primary article (78%), seconded by government resources including CDC and professional guidelines (9%). The remaining resources (13%) consist of case studies, core textbooks, and patient education materials such as lay press articles and apps.

Sources of information vary (Figure 4). Librarians rely on EBM peer-reviewed sources of literature. Residents and faculty use a mix of these same sources augmented by highly reliable clinical decision-making tools such as VisualDx and Stat Pearls which are based on EBM but synthesized into quick references rather than including the extensive data that medical articles include.

Discussion

Medical librarians' query frequency varies among the clinicians (residents and faculty). With different personalities (introverts/extroverts) and professional experiences, some librarians are more apt to interject in the precepting discussions and process. During hospital rounding with residents six months after the initiation of the in-clinic librarian sessions, a lesson we have learned is that it is beneficial for faculty to ask the residents at the end of rounds, "Are there any specific asks of our librarian colleagues?" Overall, residents, faculty, and librarians find this to be a valuable exchange. Clinicians are engaging with librarians more frequently in person and online. Librarians find involvement in team-based care to be rewarding and enjoyable. Librarians report better awareness of trending topics, enabling them to identify and proactively send resources, offer real-time updates, and provide curriculum support via new literature.

Our clinic, as part of HealthPartners Park Nicollet health system, has resources that not all practices have, such as an in-house medication therapy management pharmacist faculty member, multiple full-time librarians, and a robust library collection. For other clinics, a lack of access to in-house embedded librarians and limited collections is a limitation to the spread of this intervention. For residents, learning how to utilize the

FIGURE 4

EBM resources in descending order of frequency by group

SURVEY EBM TOOLS I USE DURING CLINIC DAY		SURVEY EBM TOOLS I USE DURING CLINIC DAY		RECORDED USED BY LIBRARIANS IN CLINIC	
	RESIDENTS		FACULTY		MEDICAL LIBRARIANS
UpToDate	91%	UpToDate	90%	PubMed/ OVID Medline	35%
Visual Dx	73%	Micromedex	60%	Google Scholar	14%
Micromedex	55%	PubMed	40%	CINAHL	11%
PubMed	55%	Visual Dx	40%	Clinical Key	10%
Dynamed	36%	Google Scholar	30%	Other (apps, patient education, translations)	5%
Stat Pearls	27%	Dynamed	20%	Press (NY Times, Parents Magazine, Washington Post)	4%
Clinical Key	18%	Google	10%	Government (ClinicalTrials.gov, CDC)	4%
MD Call	18%	Cochrane	10%	ALT Health Watch	4%
Google	9%	ChatGPT	10%	PsycINFO	3%
Google Scholar	9%	USPSTF	10%	Access Medicine	3%
Pyrls	9%	CDC vaccine schedule	10%	Academic Organizations (AAOS, AAP)	3%
Cochrane	0%	CDC STI tx	10%	NEJM	1%
ChatGPT	0%	Clinical Key	0%	Micromedex	1%
USPSTF	0%	Stat Pearls	0%	ECRI Guidelines Trust	1%
CDC vaccine schedule	0%	Pyrls	0%	Cochrane	1%
CDC STI Tx	0%	MD Call	0%		

library services can be an asset in their future careers which may take place in smaller systems, rural clinics, or stand-alone clinics where the library is inconspicuous and where they may need to have more robust self-research skills using National Library of Medicine (NLM) and the Network of NLM services. Learning how to engage with and ask the librarians questions during residency will help these residents to more effectively query their resources later in their careers.

As library resource costs increase, timely access to resources is in jeopardy due to budget adjustments. Publishers, just like all businesses, are facing increased costs which they pass on to libraries. Libraries pay for access to journals, databases, and reference books by user

and frequency of use. With increasing expenses and decreasing budgets, libraries and their users face increasing barriers to access. Resources are available via interlibrary loan but take more time than the immediate one-click access of a paid subscription.

One might ask why in an age of AI, is this still a problem? AI is increasing the volume of research produced and published. Many AI models utilize only publicly available datasets and thus do not include the medical literature behind paywalls and subscriptions. Even AI tools meant for research are limited in their access and therefore, may produce limited or biased results. In a highly scheduled office setting, AI seems tempting to use as a shortcut to understand the current litera-

ture, but it comes with significant potential blind spots and biases, generating AI hallucinations or worse, relying on literature that looks like credible EBM. Newer medical AI tools are yet to be fully explored and may mitigate these issues.

The pace of the clinic practice means that the clinic resource needs are more immediate (within five minutes or at most by the next day) than is usual in our regional hospital. Adding librarians enables clinicians to support patients in different ways. Future plans include expanding the librarian clinic visits to more locations and conducting postsurveys to examine shifts in clinician resource use and confidence in evaluating resources.

Conclusions

Librarians quickly help clinicians find high-quality evidence-based information resources supporting patient care.

Residents (and faculty) are more aware of and comfortable using the variety of online library resources and requesting help

from librarians than they were before the weekly in-person librarian interactions.

Librarians value this collaboration for the opportunity to build team morale, provide insights for collection development, and deliver more relevant literature search results. **MM**

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Deborah M. Mullen, PhD, is a health services researcher and holds the Vital-Farrow Professorship of Management—Healthcare at The University of Tennessee at Chattanooga, Gary W. Rollins College of Business. She is a longtime consultant with the residency program working on resident research and quality improvement.

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Lisa Mattson, MD - MMA President



"Community physicians and clinical partners are essential to how we educate the next generation of physicians. Their willingness to teach, mentor, and share their expertise ensures our students learn not only the science of medicine, but also the compassion, judgment, and human connection that define exceptional patient care. We are deeply grateful for their partnership and their commitment to our mission across Minnesota and beyond."

Carol R. Bradford, MD, MS, FACS - Interim Dean, Medical School & Interim Executive Vice President for Health Affairs, University of Minnesota



Lisa Mattson, MD, presenting the Tribute to Community Preceptors and the 2026 Exceptional Primary Care Community Faculty Teaching Award to Adrianne Moen, MD.



In 2026, the MMA, in partnership with the University of Minnesota Medical School, once again sponsored the "Exceptional Primary Care Community Faculty Teaching Award" at the Dean's Tribute to Excellence in Education Event.

Community Preceptor Toolbox



The MMA, in partnership with the University of Minnesota Medical School, has created a set of tools and resources to improve the training and support for clinical preceptors. Visit our **Community Preceptor Toolbox** to learn more!

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News Briefs

Moose Lake physician named MMA president

Dania Kamp, MD, of Sturgeon Lake, was installed as the MMA's 160th president on September 25 during the association's Empowering Physicians event in Minneapolis.

Kamp, a family medicine physician at Gateway Family Health Clinic in Moose Lake, has been active with the MMA since she became a member in 2012. She has served on the MMA Board of Trustees, the Executive Committee, the Committee on Governance, and the Awards Committee.

She is also on the board of MEDPAC, the MMA's political action committee. Her term, which began October 1, lasts one year.

Kamp is joined on the leadership team by president-elect, Dionne Hart, MD, who was voted into that position during the August election. Lisa Mattson, MD, will continue on the leadership team as past president. Kimberly Tjaden, MD, will continue as chair of the Board of Trustees, and Amrit Singh, MBBS, will continue as secretary-treasurer.

Other newly elected leaders include: Board of Trustees Magda Bushara, MBBS, Elizabeth Elfstrand, MD (incumbent), Habiba Ikoghode, MD, and Caleb Schultz, MD (incumbent); medical student trustee Alarie Chu; AMA delegates—Andrea Hillerud, MD, and Laurel Ries, MD; AMA alternate delegates—Lisa Mattson, MD.

MMA honors physicians, physicians-in-training, advocates with annual awards

Five physicians, two physicians-in-training, Protect Minnesota, and the Annunciation Light Alliance were all honored with MMA awards. Each year, the MMA honors those in medicine for going above and beyond.

Distinguished Service Award: Marilyn Peitso, MD, a retired pediatrician, received the Distinguished Service Award, for her years of service to the association and medicine.

President's Award: Cindy Firkins Smith, MD, FAAP, and Corey Martin, MD, received the MMA's President's Award, which recognizes those who have given much of their free time to help improve the association. Smith and Martin have been critical players in creating and running the MMA's Minnesota Physician Leadership Institute.

Medical Student Leadership Award: Martiza Steele received the Medical Student Leadership Award, which recognizes physicians-in-training who demonstrate exemplary leadership in



PHOTO BY RICH RYAN

service to medical students, the profession of medicine, and the broader community.

Resident and Fellow Leadership Award: Koushik Paul, MD, received the Resident and Fellow Leadership Award, which recognizes physicians-in-training who demonstrate exemplary leadership in service to residents and fellows, the profession of medicine, and the broader community.

Copic/MMA Foundation Humanitarian Award: Alice Lehman, MD, received the Copic/MMA Foundation Humanitarian Award, which recognizes MMA members who go above and beyond to address the healthcare needs of underserved populations in Minnesota.

James H. Sova Memorial Award for Advocacy: Sen. Alice Mann, MD, received the James H. Sova Memorial Award for Advocacy. Sova was the chief lobbyist for the MMA from 1968 until the time of his death in December 1981. This award is given to a person who has made a significant contribution to the advancement of public policy, medical sciences, medical education, medical care, or the socioeconomics of medical practice. Mann has been an invaluable advocacy partner with the MMA at the state Capitol.

Eric C. Dick Memorial Health Policy Partner Award: This award is given to an individual, group of individuals, a project, or an organization that demonstrates its commitment to pursuing sound public policy, building coalitions, creating or strengthening partnerships with the goal of improving the health of Minnesotans or the practice of medicine in Minnesota. Dick was the MMA's manager of state legislative affairs from 2010 until his death in January 2021. This year's recipients are Protect Minnesota and the Annunciation Light Alliance for its advocacy work on firearm safety.

MMA joins national lawsuit against health systems

The MMA has joined a federal multidistrict litigation against MultiPlan (recently rebranded to Claritev) and major insurers, including UnitedHealth, Elevance, Humana, Aetna, and Cigna, alleging that they conspired to systematically underpay healthcare practitioners for reimbursements for out-of-network services, which often fail to cover operating costs.

MultiPlan goes by many names, including Data iSight, Viant, NCN, ProPricer, and MARS. Plaintiffs allege that MultiPlan facilitated a price-fixing agreement among insurers that artificially suppressed out-of-network payment rates, and cost providers billions of dollars.

The MMA joins the AMA and hundreds of physician practices and facilities nationwide in this growing antitrust litigation.

This lawsuit, filed in the Northern District Court of Illinois in 2024, seeks to end MultiPlan's alleged anticompetitive scheme, which it has operated since at least 2015, and recoup financial damages for practitioners and practices. As of 2024, MultiPlan processes more than 80% of all commercial out-of-network reim-

bursement claims in the United States. Providers may not always know whether MultiPlan, or one of its services like Data iSight, Viant, NCN, ProPricer, or MARS, repriced their claims. Clues can often be found in Explanations of Benefits or remittance advice.

Physician practices and healthcare providers who have been out-of-network with major insurers may be entitled to financial damages for claims dating back 10 years. If interested in learning more, contact one of the lawyers appointed by the court to lead nonclass claims or access resources.

The court has also appointed attorneys to litigate a proposed antitrust class action on the same issues, but a ruling on any proposed class certification is not expected until 2027. Providers who believe they have been impacted by MultiPlan's conduct can choose to pursue their claims individually on a nonclass basis, and do not need to wait for any ruling on a proposed class.

MMA signs onto letter urging enforcement of No Surprises Act

The MMA signed onto an AMA letter urging federal departments to improve enforcement of the No Surprises Act. The act, enacted in 2022, aims to protect patients from unexpected medical bills when they unknowingly seek care from out-of-network providers.

The letter primarily concerns the “independent dispute resolution” (IDR) process, which is initiated when providers and patients disagree on payments for services subject to the act. Specifically, the letter asks federal departments to:

- Stop health plans from, allegedly, increasing patient cost-sharing when IDR decisions are made in the provider's favor (that is, effectively forcing patients to pay the difference).
- Revise June 2025 technical guidance that allows health plans broad ability to re-open closed IDR cases to delay and withhold payments to providers.
- Require health plans to (a) disclose all case information necessary to determine accurate claim eligibility under the IDR process and (b) require health plans to meaningfully participate in the IDR process through the federal portal.

The letter was sent in late April to the Secretaries of the Department of the Treasury, the Department of Labor, and the Department of Health and Human Services.

MMA well-represented at feisty AMA meeting

This year's annual meeting of the AMA House of Delegates, held June 5–10 in Chicago, seemed to carry a defining theme: practicing medicine and advocating at a time of increasing misinformation, distrust in science, and suspicion of policy and research organizations.

Resolutions before the delegates addressed misinformation, patient safety, scope of practice, challenges faced by immigrant patients and physicians, reimbursement, new and potentially onerous definitions of medical frailty, medical student loan caps, and the rapidly expanding role of artificial intelligence in healthcare.

Minnesota co-sponsored a resolution to protect Medicaid beneficiaries from politically motivated or procedurally deficient



Minnesota was well-represented at the AMA Annual Meeting with a combination of members and staff.

federal funding deferrals. The resolution directed the AMA to oppose withholding or deferral of Medicaid funding when such actions are arbitrary, disproportionate, inconsistent with established legal and administrative processes, or likely to cause undue disruption to patient care or state Medicaid program operations.

The national otolaryngology delegation introduced a resolution supporting universal neonatal congenital cytomegalovirus screening. Because Minnesota is one of the first states in the nation to implement this screening, the Minnesota delegation was asked to testify about its experience. With useful information provided by the Minnesota Department of Health, Laurel Ries, MD, offered testimony. The resolution was referred to the AMA Board of Trustees for further study.

The AMA also adopted policy calling for studies of patient outcomes between independent or “autonomous” nonphysician practitioner models and physician-led MD/DO models. These studies are to include measures of patient safety, quality, utilization, access, cost, and health outcomes, with the goal of publication in peer-reviewed scientific journals.

Considering recently released federal guidance, the AMA resolved to work with Centers for Medicare and Medicaid Services, state Medicaid agencies, and state and specialty medical associations to establish clinically grounded medical frailty exemptions from Medicaid work and community engagement requirements.

The AMA also adopted policy affirming that gender-affirming healthcare includes social, medical, and surgical care, guided by a shared decision-making process involving the physician, pa-

tient, and legal guardians when applicable. The AMA further resolved to advocate for new and restored funding and opportunities for gender-affirming healthcare. In addition, the AMA

committed to collaborating with relevant specialty societies and multidisciplinary experts to support education of physicians and trainees on evidence-based, patient-centered, shared decision-making gender-affirming healthcare.

Other key outcomes from the meeting included:

- Greater clarity on medical student and resident/fellow inclusion processes within the AMA.
- Support for a study on recommendations to improve healthcare coverage for people with undocumented status.
- Support for physician rights and authority to decline, modify, or limit administratively determined patient volume expectations, scheduling mandates, and staffing conditions when the physician, using clinical judgment, believes those conditions would harm patients or negatively affect patient-centered care.
- Continued work on guidelines for chaperones during sensitive examinations.
- Progress, with further work needed, on guidelines and principles for physician involvement in collective action and unionization.

Along with policy discussions, the meeting included the inauguration of Willie Underwood III, MD, MSc, MPH, a board-certified urologist from New York, as the 181st AMA president. In his inaugural address, he inspired those in attendance to lead with courage as physicians work to transform healthcare.

The AMA also elected Sandra Fryhofer, MD, as its president-elect. Fryhofer is a board-certified internal medicine physician based in Atlanta. She was elected to the AMA Board of Trustees in June 2018, and served as chair of the board in 2022–2023.

The MMA was well-represented by its delegates and alternate delegates including: JP Abenstein, MSEE, MD, FASA; Andrea Hillerud, MD; MMA President Lisa Mattson, MD; George Morris, MD; Dennis O'Hare, MD; Ashok Patel, MD; Laurel Ries, MD; Cindy Firkins Smith, MD; and David Thorson, MD. Resident section delegates Sheryl Fuehrer, MD; Kate Holder, MD; and Michael Rigby, MD, PhD, also attended, along with Janet Silver-smith, MMA CEO, and Adrian Uphoff, MPH, MPP, MMA manager of health policy and regulatory affairs. Also in attendance at the meeting was Minnesota physician and AMPAC board member, Mary Lawrence, MD.



Minnesota's delegation included Laurel Ries, MD (left); Andrea Hillerud, MD; President Lisa Mattson, MD; and AMA delegation chair Cindy Firkins Smith, MD.

MMA salutes inaugural medical school class at St. Cloud

As a salute to the inaugural class of the University of Minnesota Medical School CentraCare Regional Campus St. Cloud, the MMA held an open house in May at the home of MMA Board Chair Kimberly Tjaden in Sartell.

The evening event included medical students, who are just completing their first year at the new campus, MMA leadership, St. Cloud-area physicians, and leadership from the University of Minnesota Medical School CentraCare Regional Campus St. Cloud.

The first cohort, which included 24 students, began their medical school journey in the fall of 2025.



AMA Alternative Delegate George Morris, MD, talks with former MMA President Marilyn Peitso, MD (center), and current MMA President Lisa Mattson, MD.



Open house attendees included medical students, St. Cloud-area physicians, MMA leadership including host MMA Board Chair Kimberly Tjaden, MD, MPH, FAAFP, and Tiny the Vizsla.



Dionne Hart, MD, DFAPA, FAPA, CCHP-MH

MMA member honored by AMA Foundation

Former MMA Board Member Dionne Hart, MD, DFAPA, FAPA, CCHP-MH, received the AMA Foundation's Dr. Debasish Mridha Spirit of Medicine Award on June 6, during the AMA's annual meeting in Chicago.

The Dr. Debasish

Mridha Spirit of Medicine Award is part of the AMA Foundation's Excellence in Medicine Awards that honor physicians and medical advocates who exemplify the highest values of the profession—volunteerism, community engagement, leadership, and service to underserved populations.

The Dr. Debasish Mridha Spirit of Medicine Award recognizes the work of U.S. physicians who demonstrate altruism, compassion, integrity, leadership, and personal sacrifice while providing quality healthcare to destitute, distressed, or marginalized populations in impoverished communities.

Hart is past president of Zumbro Valley Medical Society, and is an adjunct assistant professor of psychiatry at the Mayo Clinic Alix School of Medicine.

In presenting the award, the AMA Foundation recognized Hart as “a trailblazer in psychiatry and addiction medicine, focused on underserved and justice-involved populations.” As the inaugural chair of the AMA Minority Affairs Section, she authored many policies, including its first policy on the school-to-jail pipeline.

Hart has advanced health equity by ensuring care is clinically excellent and ethically grounded, while bridging medicine and social justice. Her commitment to patient advocacy, including standing up to external pressures at personal cost, defines her leadership and mentorship.

“The spirit of medicine calls upon us to see the humanity in every patient, to advocate for those whose voices are often unheard, to challenge systems that hinder equitable care, and to ensure that science and compassion remain inseparable,” Hart said in accepting the award.

2026 legislative session recap now online

A review of the MMA's work during the 2026 legislative session is now online (www.mnmed.org/2026Review). The report includes information on the MMA's top priorities, as well as other health-care-related legislation.



Shari Bornstein, MD, MPH (right), and medical students from the Mayo Clinic Alix School of Medicine, got a close-up look at health policy at the state Capitol in early June, thanks to the MMA staff.

MMA staff helps Mayo students learn about advocacy

Four members of the MMA staff met with students from the Mayo Clinic Alix School of Medicine at the state Capitol in early June to discuss legislative matters.

Adrian Uphoff, MPH, MPP, Chad Fahning, MPP, Natalie Schmidt-Larkin, MPH, and Juliana Milhofer, JD, were invited by MMA member Shari Bornstein, MD, MPH, an internal medicine physician at the Mayo Clinic, who is hosting a new public health/health policy selective for medical students at the Mayo Clinic Alix School of Medicine. It is a three-day long selective, and they capped it off with a visit to the Capitol.

MMA staff provided the students with an overview of the One Big Beautiful Bill Act; the legislative process; a recap of the 2026 legislative session and what the MMA was advocating for at the Capitol. In addition, the medical students learned about the role they can play as advocates—in medical school and beyond.

MMA updates its OBBBA guide for physicians

In June, the MMA released an updated version of its “The One Big Beautiful Bill Act (OBBBA) Resource Guide for Physicians,” which is designed to help Minnesota practitioners understand how key provisions of the law will affect their practice and patients. Find the updated guide here: www.mnmed.org/resources/one-big-beautiful-bill-act-obbba-resource-guide-physicians.

The updated guide includes six sections that describe the law's impact on:

1. Medicaid.
2. The ACA Individual Market and MinnesotaCare.
3. Medicare.
4. Health Savings Accounts.
5. Medical School Loan Access.
6. The Rural Health Transformation Program.

Within each section, provisions are listed in order of effective date and explained in clear language.

The MMA encourages the sharing of the guide with all who may be interested, including nonmembers and nonphysicians. MM



FROM THE CEO

A true public health physician

I first met Ed Ehlinger, MD, MSPH, in 1997. At that time, he was the director of Boynton Health at the University of Minnesota and served as the designated guest liaison from the Minnesota Public Health Association to the MMA Public Health Committee. He was not an MMA member. In fact, he voiced several concerns about “organized medicine” and questioned whether the MMA really was committed to improving public health.

I’m proud and pleased to say he quickly changed his mind and became an active and engaged member. He most recently completed, in December 2025, his second term as a board member for the MMA Foundation.

Just a few months after a metastatic melanoma diagnosis, he attended a February 2026 MMA President’s Tour gathering at W.A. Frost in St. Paul. He talked about the importance of getting out of the house, being among colleagues, and avoiding social isolation—a topic he helped launch into national discourse. He also wanted to learn more about MMA’s legislative agenda and asked what we were doing to achieve universal coverage. I vividly remember him joyously savoring a warm apple crisp à la mode—granting implicit permission for other attendees to do the same (which we did)! That was the last time I saw him. Ed died August 5.

Improving public health, of course, was Ed’s passion and purpose. To that work, he brought medical expertise, curiosity, kindness, optimism, and a true sense of collaboration. In 2005, Ed became chair of the MMA Public Committee, a role in which he served through 2008. He ran a great meeting. He started each one with a bit of historical trivia—medical or scientific whenever possible—that he masterfully managed to weave into each agenda and discussion.

In 2011, Gov. Mark Dayton appointed him to the role of commissioner of health, an appointment encouraged

and supported by the MMA. In that role, which he held until December 2017, Ed championed health in new and remarkably visible ways. In particular, he accelerated and expanded the state’s understanding of, and dedication to, improving health equity. In February 2014, the department published its landmark report, *Advancing Health Equity in Minnesota*. The report documented not only the known disparities in health among racial and ethnic populations in Minnesota but also highlighted the drivers of such disparities rooted in state policies and structural racism. It was a report signed, remarkably, by 23 other state agency heads—from Agriculture to Veterans Affairs—as an acknowledgment that the responsibility for health is broadly shared across our community.

Much work remains to achieve health equity in Minnesota. The looming cuts and changes to Medicaid coverage and payment, incorporated in the One Big Beautiful Bill Act, are among recent and new challenges. In his introductory letter to the 2014 *Advancing Health Equity in Minnesota* report, Ed wrote, “Our work, the work of public health and the work of creating health equity, is complex, difficult, often frustrating, and will probably never be completed. There will always be challenges and unacceptable problems requiring efforts to assure health for all... I believe we are up to that challenge.”

Ed lived a life that improved health for countless Minnesotans. I’m confident those who had the privilege of knowing and learning from him remain up to the challenge. **MM**

Janet Silversmith
JSilversmith@mnmed.org

We need more docs working the halls of the Capitol

Physicians, whether we like it or not, are leaders. We lead the healthcare team. We lead our patients to help them navigate their health. We lead their families and provide them with guidance to be caretakers.

So, it just stands to reason that we need physicians to take on leadership roles in the halls of the state Capitol. Whenever and wherever decisions are made on how medicine is practiced in Minnesota, physicians need to be there.

I am not a politician. I see myself as a family physician in a rural setting, juggling my professional duties with my outside-of-work life. Staying up late to catch up on notes for patients. Returning e-mail before clinic hours. Our careers are not 9 to 5. It's a unique challenge, but one we are all honored to have.

Is it fair to ask why anyone would want to take on another full-time role as a state representative or state senator?

I'm glad some of our fellow physicians have made that decision. These individuals see the importance of having physicians on the front lines of the legislative process. I applaud them for making room in their already hectic lives to run for office. Thank goodness there are those who step forward to lead, and I encourage more of you to do the same. Our profession cannot leave lawmaking up to people who know nothing about what's best for patients and for healthcare in Minnesota.

Recently, we've been losing a few physician politicians.

Late last year, Sen. Alice Mann, MD, announced that she would not seek office again in the 2026 election. This decision came on the heels of the House of Medicine losing two other Minnesota physicians. Sen. Kelly

Morrison, MD, left the Legislature in 2024 when she ran for and was elected to represent the 3rd Congressional District. And, Sen. Matt Klein, MD, decided to run for higher office when he threw his hat in the ring for the 2nd Congressional District but lost in the primary.

Fortunately, we have some replacements who are running in November and will provide a physician's point of view when it comes to creating policy; that's assuming that they win their contests. There is medical student Hunter Cantrell (a former MMA Board of Trustee member), who won the DFL primary for Minnesota House District 55B. There's also Jonathan Claussen, MD, who ran unopposed in the GOP primary for Minnesota House District 5B, and Krish Subrahmanian, MD, who ran unopposed in the DFL primary for Minnesota Senate District 49.

We need physicians at the table wherever important decisions are being made. Having the inside perspective on the practice of medicine is so important, especially today when misinformation and stigma often eclipse science and data. If you are considering running for office, go for it! If not you, who? You can be the difference that you want to see in your state and your community. **MM**



Dania Kamp, MD
MMA President

Thank goodness there are those who step forward to lead, and I encourage more of you to do the same. Our profession cannot leave lawmaking up to people who know nothing about what's best for patients and for healthcare in Minnesota.

BETHANY COOK, MD

Bethany Cook, MD, is a medical dermatologist at Dermatology Consultants in Vadnais Heights. She sees patients of all ages and describes her days as “a mix of general dermatology, skin cancer screenings, vascular laser treatments, outpatient surgery, and teledermatology.” She has been an MMA member since 2014.

Where did you grow up, do your undergraduate and grad work, medical degree?

I grew up in Great Falls, Montana, and came to Minnesota to go to Carleton College. I was not considering medical school at the time. I loved the liberal arts, dabbling in everything from marine biology to art history. My most memorable summer was working at a salmon cannery in Kodiak, Alaska. That was a good introduction to working long shifts on little sleep.

Tell us about your family.

We have two daughters, Nora, 11, and Gillian, 9, and a mischievous 4-year-old poodle. My husband, Greg, went to the “other college” in Northfield. He is our family’s resident travel expert and has a talent for planning the best trips. We also like to spend time in northern Minnesota and go camping in the BWCA each summer.

Hobbies or side gigs?

I enjoy biking, cross-country skiing, playing the piano, ping-pong, and any knee-friendly sport. I am learning how to golf, which has been humbling but fun.

Why did you decide to become a physician?

During my final few weeks of college, I met the late Charles Crutchfield III, MD, who was giving an alumni lecture at a Carleton seminar. I was so inspired by his lecture that I ended up working at his dermatology clinic for my first job out of college. This was the spark for my interest in clinical medicine. I enjoyed getting to know patients, learning new skills, and seeing the impact that even small interventions could have on someone’s life. The clinic days would fly by, and I never once caught myself watching the clock.

What was the greatest lesson of your medical education?

That medicine is continually changing. Medical school gives you a framework, but you spend the rest of your career building on it. So many of the medications I prescribe now were not available when I was in residency. Laboratory monitoring guidelines have changed. Treatment plans need to be adjusted because of insurance coverage. And seeing patients continues to impact how I practice. One of my attendings told me to try to learn one thing from every patient. I think about that daily.



What’s the greatest surprise that your education left you unprepared for?

Nothing could have fully prepared me for the responsibility of starting out in practice while also balancing family and young children. It is a challenge in any career, but it can be especially difficult for women in medicine. We all want to be fully present for patients and family, but time and emotional energy are finite. Some of the hardest moments come when these responsibilities collide—

like deciding whether to cancel a full day of clinic to stay home with a sick child. I’m not surprised that over one-third of female physicians go part-time or leave clinical medicine within the first several years after residency. If we want to retain talented, compassionate physicians, we need a system that provides support and flexibility during the times physicians need it most.

What’s the greatest challenge facing medicine today?

The growing gap between what medicine is capable of achieving and what patients can access and trust. New therapies transform what we can offer patients, but those advances aren’t reaching many who could benefit. Basic healthcare is not available for many communities around the world, and public health has faced significant setbacks in recent years. Closer to home, physicians are no longer the sole or even primary source of medical information for many patients. The spread of misinformation and direct-to-consumer health platforms make clinical medicine more challenging. At the same time, healthcare costs continue to rise, increasing pressure on patients, clinics, and hospitals.

How do you keep life balanced?

It is less like walking a balance beam and more like riding waves. I try to be intentional about where I spend my time. Some weeks my work needs more time, and other weeks my family does.

Movement, being with my family, and connecting with friends helps me feel centered outside of work. Also, dogs are great therapy.

If you weren’t a physician—?

Marine biologist or professional ping-pong player.

What has membership in MMA meant to you?

I really appreciate how the MMA keeps me connected to what is happening beyond dermatology. I can stay informed about issues affecting healthcare more broadly and learn from colleagues in other specialties. Having a professional community that advocates for both patients and physicians feels more important now than ever. **MM**

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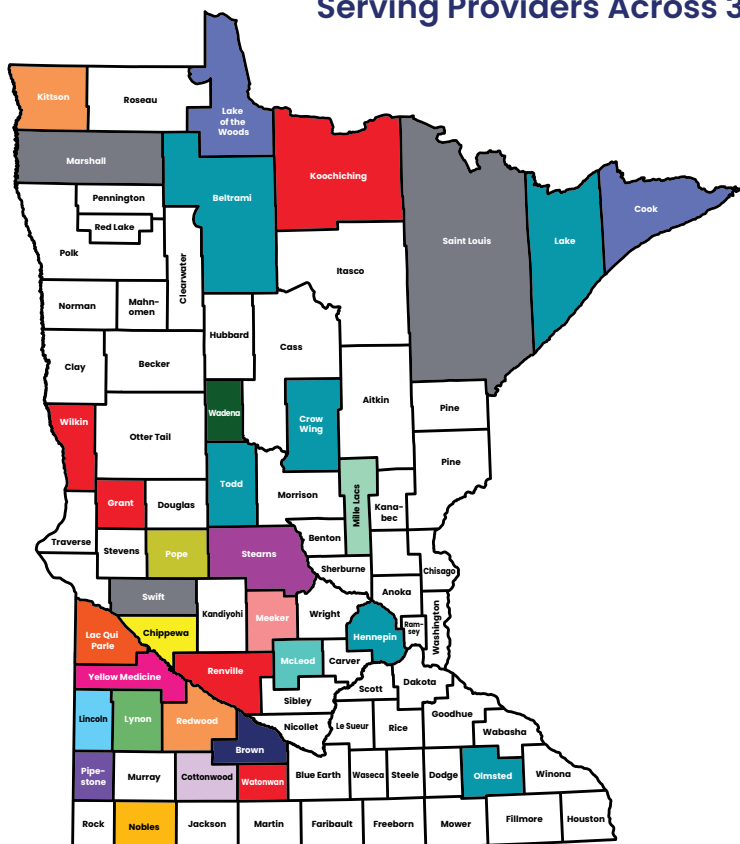
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| Emergency | Behavioral Health & Hospital |
| Pharmacy | Hospitalist, Emergency |
| School Health | Hospitalist, Critical Care 24/7 |
| Senior Care | Critical Care 24/7, Emergency, Hospitalist, Pharmacy, Senior Care |
| Hospitalist, Pharmacy | Behavioral Health, Critical Care 24/7, Emergency, Hospitalist, Pharmacy |
| Pharmacy, Emergency | Behavioral Health, Critical Care 24/7, Emergency, Senior Care, Pharmacy |
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