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OF MEDICAL ASSISTANTS

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All in
ON
AI?

Responsible Use of
Artificial Intelligence in
Health Care Settings

With Change Comes Growth

Spring has always been my favorite time of the year. With the temperatures slightly warmer than winter and cooler than summer comes the new growth of flowers, trees, and more.

Like in nature, this year has been a time of regrowth and even new growth for me as a leader. As leaders, we all look at our successes and see how we have grown in our roles. But have you stopped to think about how failures in work or life also help you grow? I have grown from what I learned from failures, and I try to be thankful for these lessons.

We also grow by becoming just a little more involved! Not sure where to begin in your local chapter or your state society? Find a leader and ask them how to become involved. Don't worry; they won't throw you into the deep end, but they will encourage and guide you. They will fan that spark of enthusiasm. Review your chapter or state bylaws and become familiar with the committees and the purpose of each committee. What sparks your interest? What area do you feel you might have suggestions for growth and change? Then, join that committee and help make a difference.

The Board of Trustees (BOT) is continuing to grow initiatives set over the last few years to help bring more awareness to the public about credentialed medical assistants and the AAMA. The Partnership Task Force continues to research new opportunities with allied health organizations that mutually benefit both the AAMA and the prospective partners. The Leadership Development Strategy Team is working to continue to help current and new leaders grow with continuing education and tools. The BOT approved the creation of an Ad Hoc Committee on Mentoring at the Planning Session to help create tools for current leaders to use to help new leaders grow in their chapters and states and hopefully continue to nurture you as a growing leader.

Personally, the AAMA Annual Conference has always been a place I could learn and grow as a leader. From the continuing education sessions to the leadership session for state and chapter leaders to the networking opportunities with medical assistants from across the United States, I have learned so much.

I encourage you to visit the AAMA website to view the online Volunteer Leadership Application and see whether there is a committee, strategy team, or task force that works toward a goal you're passionate about, and sign up to be a part of next year's team.

So, I ask you, how are you going to grow this year? Have a great spring, and enjoy the changes that come with growth.

Virginia Thomas, CMA(AAMA)

Virginia Thomas, CMA (AAMA)
2024–2025 President



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All in ON AI?



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AAMA update

Make History in Arlington, Virginia

Online registration for the 2025 AAMA Annual Conference is live. Visit the Cvent website to access a wealth of resources:

- **Research discounts and details.** Find conference hotel discounts and information about activities and events in the Old Dominion State.
- **Plan your professional timeline.** Pore over an abundance of continuing education opportunities to see which best suit your career needs.
- **Strengthen past and present connections.** Meet and greet your fellow AAMA members from all over the country!

Plan now to attend conference by adding this year's dates to your calendar:

Arlington, Virginia—Sept. 19–22, 2025



2025 State Society Conferences

The AAMA shares available information on state society conferences via the “State Society Conferences” webpage (under the Education and Events tab of the AAMA website) and via the AAMA Facebook page’s events section.

AAMA members and other interested medical assistants—if your state is not listed, contact your state president for details. You can find your state president on the “State and Chapter Listings” webpage (in the “About” section). (*Updates will be posted to the AAMA website and Facebook page as received.*)

State society leaders— Here are two ways to reach potential attendees:

1. Make sure your state conference information is posted on the AAMA website. You can email the AAMA at MarCom@aama-ntl.org with questions and updated information, including links to registration information for your state meeting.
2. If you would like AAMA staff to share your event via the AAMA’s Facebook page, broadcast to 52,000+ followers, email MarCom@aama-ntl.org. ♦

On the Web

Who's Who?

Under the “About” Section/Staff

The AAMA has supported medical assistants for more than six decades, and in that time, we’ve had the privilege to know some outstanding individuals who have worked hard day in day out to serve the medical assisting field in myriad ways. In the spirit of strengthening connections, the “AAMA Staff” webpage provides a breakdown of all staff.

State Scope of Practice Laws

Under Publications/“State Scope of Practice Laws” Section

Access updated documents detailing key state scope-of-practice laws for medical assistants. Find out everything you need to know about the duties medical assisting staff can legally perform in a given state or jurisdiction.

Check Certification Expiration

Under My Account/Scroll Down to “Certification Information”

Time flies. Make sure it doesn’t pass your recertification by! CMAs (AAMA) can double-check their certification expiration dates on the AAMA website. Sign in or create an account to stay ahead of the curve.

Listen Up

Under Publications/AAMA Podcast

Check out the AAMA’s new podcast and be informed on the go. Two episodes have been published thus far: “Résumé Tips and Interview Insights” and “A Legal Look at Medical Assisting.” ♦

Official Call for HOD Representation

State societies are entitled to the following representation in the House of Delegates at the 2025 AAMA Annual Conference in Arlington, Virginia.

AK	3	NC	9
AL	3	ND	2
AR	2	NE	3
CA	3	NH	3
CO	3	NJ	3
CT	3	NM	2
FL	4	NV	2
GA	4	NY	3
HI	2	OH	6
IA	5	OK	3
ID	3	OR	4
IL	4	PA	4
IN	6	SC	4
KY	3	SD	3
KS	2	TN	3
MA	3	TX	3
ME	3	UT	3
MI	5	VA	3
MN	5	WA	6
MO	3	WI	6
MT	3		



Enter the Excel Awards!

It's time to submit your entries for the 2025 Excel Awards! Start gathering your submission materials to enter the competition honoring excellence in the field of medical assisting:

- **AAMA members.** Nominate an individual or institution deserving of recognition:
 - o A medical institution—big or small—that employs medical assistants and is a strong supporter of professional growth, particularly in the areas of certification and recertification, continuing education, and membership.
 - o An exemplary national leader for one of the three Awards of Distinction: Golden Apple, Leadership & Mentoring, and Medical Assistant of the Year.
- **State leaders.** Enter your state publication, website, marketing campaign, or community service effort for recognition.
- **Medical assisting students.** Craft an essay responding to this prompt: “Describe your strategies for professional development as a medical assistant and how you will advocate for the profession’s essential role on the health care team.” Enter for a chance to win \$1,000.
- **Anyone.** Nominate influential new leaders for the AAMA Rising Star Awards.

Visit the “Excel Awards” webpage to read the details on required submission materials. Submit your entry forms via the AAMA website by **July 15**. ♦



Find great state conference gift items on the

AAMA Store

New items in the AAMA store: Display pride in your career and honor other medical assistants with AAMA membership milestone pins. And you can purchase practical reminders of your commitment to care with AAMA padfolios and keychains.

Scan the code below to view our offerings



Undue Influence on Academic Accrediting Bodies and Professional Certifying Boards Is Forbidden



Donald A. Balasa, JD, MBA
AAMA CEO and Legal Counsel

The following is adapted from my presentation at the Commission on Accreditation of Allied Health Education Programs (CAAHEP) Symposium on January 17 and 18, 2025, in Lake Buena Vista, Florida.

Background and History

The CMA (AAMA)* Certification Exam has been offered by the Certifying Board (CB) of the American Association of Medical Assistants* (AAMA) since 1963. It is the AAMA's only professional certification. (The AAMA Continuing Education Board offers assessment-based certificates [ABCs] in geriatrics, pediatrics, electronic order entry, allied health education, and practice management. However, these ABCs are not professional certifications.) The CMA (AAMA) Certification Program has been accredited by the National Commission for Certifying Agencies (NCCA) since 2006.

Prior to June 1998, the primary eligibility pathways for the CMA (AAMA) Certification Exam were (a) graduation from a CAAHEP-accredited medical assisting program or (b) one year of full-time—or two years of part-time—health work experience under the supervision of a licensed health care professional.

Beginning in the early 1990s, employers wanted medical assistants to be knowledgeable and competent in a broader range of clinical tasks—especially intramuscular, intradermal, and subcutaneous injections and venipuncture. In response to this change in employer demand, the CB wanted to provide evidence that CMAs (AAMA) had the necessary psychomotor skills (as well as the necessary knowledge) to perform these

tasks. Having health care work experience did not guarantee that a medical assistant was proficient in performing these tasks. Graduating from a CAAHEP-accredited medical assisting program provided such evidence because of the competency requirements in accredited programs.

In 1995, to provide evidence that CMAs (AAMA) had demonstrated psychomotor competence in these tasks, the CB recommended to the AAMA Board of Trustees (BOT) that—starting in June 1998—only graduates of CAAHEP-accredited medical assisting programs would be eligible for the CMA (AAMA) Certification Exam.

The 1995 AAMA Bylaws required the BOT to approve policy changes proposed by the CB. In 1995, the BOT approved the pathway change.

Undue Influence Forbidden by the NCCA Standards

Undue influence on accredited certification programs is forbidden by the NCCA *Standards for the Accreditation of Certification Programs* (NCCA Standards).

The NCCA, established in 1977, accredits certification programs in a wide array of professions. It accredits certification programs under its NCCA Standards. The NCCA Standards (a) prohibit undue influence on NCCA-accredited certification programs by (for example) membership organizations and academic accrediting bodies and (b) ensure certification program autonomy in decision-making over all essential certification activities. Note the following from the NCCA Standards:

Standard 2: Governance and Autonomy

The certification program must be structured and governed in ways that are appropriate and effective for the profession, occupation, role, or specialty area; that ensure stakeholder representation; and that ensure *autonomy* in decision-making over all essential certification activities.

Essential Elements:

- A. The program must have established policies and procedures showing that the governance structure and the process for selection and removal of certification board members protect against any *undue influence* that could compromise the integrity of the certification process.
- B. The certification organization must identify [its] status as a legal entity (or part of a legal entity) and demonstrate that the certification board has *autonomy* in decision-making for all essential certification policies and activities.

...

Commentary:

...

2. *Essential certification decisions* refer to the core aspects of a certification program, such as eligibility standards; standards for initial certification and maintaining certification; disciplinary determinations; the development, administration, and scoring of examinations; and the selection of subject-matter experts (SMEs). [Emphases added.]¹

If the CMA (AAMA) Certification Program were NCCA-accredited in 1995, the authority of the BOT to approve the CB's proposal to change the pathways *would* have constituted undue influence under the

NCCA Standards.

After the pathway change was implemented, some educators at medical assisting programs accredited by the Accrediting Bureau of Health Education Schools (ABHES) objected because they claimed that their graduates were just as well educated as CAAHEP graduates. ABHES threatened a lawsuit.

In response to the threatened ABHES lawsuit, the CB took the following actions:

- Compared the curriculum requirements of CAAHEP and ABHES.
- Compared scores of CAAHEP and ABHES graduates on the CMA (AAMA) Certification Exam. (Many ABHES graduates had taken the exam after work experience.)
- Sent observers to ABHES site visits with permission from ABHES.

Based on the evidence compiled, in 2002, the CB changed its eligibility pathways and allowed graduates of ABHES-accredited programs to take the CMA (AAMA) Certification Exam under the same conditions as CAAHEP graduates. ABHES accepted this pathway change and did not file a suit.

Some educators in CAAHEP-accredited medical assisting programs did not like the CB's decision to create a pathway for ABHES graduates. Some of them wanted the Curriculum Review Board (the CRB, the predecessor of the Medical Assisting Education Review Board [MAERB]) to take punitive action against the CB because of its eligibility pathway decision.

If the CRB, for example, had retaliated against the CB by not accepting performance on the CMA (AAMA) Certification Exam as an outcomes measure, this would have been *undue influence* on the CB. To its credit, the CRB did not take any retaliatory actions against the CB.

The AAMA Bylaws were amended in 2005 to grant autonomy to the CB.

Specifically, the authority of the BOT to approve CB policies was removed. The CMA (AAMA) Certification Program was accredited by the NCCA in 2006.

Undue Influence Forbidden by CHEA Standards

Undue influence on academic accrediting bodies recognized by the Council for Higher Education Accreditation (CHEA) is forbidden by the *CHEA Standards and Procedures for Recognition (CHEA Standards)*.

CAAHEP is recognized by CHEA as a programmatic accrediting body. The *CHEA Standards* (a) prohibit *undue influence* on CHEA-recognized academic accrediting bodies by (for example) professional certifying boards and membership organizations and (b) ensure the *independence* of the accrediting bodies in making accreditation decisions. Note the following from the *CHEA Standards*:

STANDARD 3. ACCREDITATION STRUCTURE AND ORGANIZATION

An accrediting organization demonstrates that it:

...

3.H. maintains *independence* from any sponsoring and/or parent organization with respect to all accreditation activities, reviews, actions, and decisions;

...

Sponsoring and/or Parent Organization: An organization with a direct or indirect affiliation or agreement with the accrediting organization. The affiliation may include any management, financial, or other oversight capacity *but does not limit, influence, or control accreditation activities*.

...

3.H. EXAMPLES OF SUGGESTED EVIDENCE:

Description of how the accrediting organization's accreditation activities are *separate and independent* from those of its parent. [Emphases added.]²

Historically, MAERB accepted the performance on only the CMA (AAMA) Certification Exam as an outcomes measure of student achievement.

MAERB changed its policy and accepted for exam outcomes measures other medical assisting exams that are NCCA-accredited and meet other requirements.

Some AAMA leaders disagreed with MAERB's decision to accept medical assisting exams other than the CMA (AAMA)

Certification Exam. Some delegates to the AAMA House of Delegates threatened to take punitive action against MAERB, such as directing the BOT to expel Accreditation Department staff from the AAMA Executive Office.

Coercive actions against MAERB and its staff by the AAMA would have violated the provisions of the *CHEA Standards* that require independence "from any sponsoring and/or parent organization with respect to all accreditation activities, reviews, actions, and decisions."²

Key Takeaways

The *NCCA Standards* (a) prohibit undue influence on accredited certification programs and (b) ensure the autonomy of certification programs in making essential certification decisions. Such undue influence can come, for example, from a professional association or an academic accrediting body. Undue influence or lack of autonomy can prevent a certification program from becoming or remaining accredited by the NCCA.

The *CHEA Standards* require that recognized academic accrediting bodies (and their subsidiary accreditation-recommending bodies) (a) "maintain independence from any sponsoring and/or parent organization with respect to all accreditation activities, reviews, actions, and decisions" and (b) prevent a "Sponsoring and/or Parent Organization" from "limiting, influencing, or controlling accreditation activities."² Not meeting these requirements can prevent a CHEA-recognized academic accrediting body from obtaining or maintaining CHEA recognition. ♦

Questions may be directed to CEO and Legal Counsel Donald A. Balasa, JD, MBA, at DBalasa@aama-ntl.org.

References

1. National Commission for Certifying Agencies. *Standards for the Accreditation of Certification Programs*. Revised October 2021.
2. Council for Higher Education Accreditation. *CHEA Standards and Procedures for Recognition*. Accessed February 18, 2025. https://www.chea.org/sites/default/files/other-content/CHEA_Standards_and_Procedures_for_Recognition-FINAL.pdf



A JUGGLING ACT

Pick Up These Strategies
to Address Work-Life
Balance

by Pamela M. Schumacher, MS, CCMP

An educator's life is a constant balancing act of juggling personal and professional responsibilities while managing competing expectations. Achieving a semblance of balance between work and personal commitments takes careful thought and boundary setting, because ignoring work-life balance can lead to burnout, stress, and a diminished passion for teaching.¹

Up in the Air

Definitions for *work-life balance* vary. Research suggests that work-life balance is the ability to accomplish the goals set in both work and personal life and achieve satisfaction in all life domains. Other definitions say the term “balance” implies equal engagement in and satisfaction with work and personal life roles.²

“An accepted definition is the proportion and balancing of time someone spends

working compared with the time spent on other dimensions of one's life. This is not a static balance because work and life demands will shift,” says Sean McCandless, PhD, an associate professor of public and nonprofit management at the University of Texas at Dallas. “Work should not dominate one's life, and as people with many aspects to our lives, we must have time for ourselves, our families, our friends, and our interests in order to be healthy and happy.”

“My personal definition is accomplishing what I want to at work and balancing that with what I want to accomplish at home. This includes not worrying about work while at home or vice versa,” says Joy Mendez, CMA (AAMA), CBCS, an allied health programs director at Apollo Career Center in Lima, Ohio.

Laurence J. Stybel, EdD, cofounder of Stybel, Peabody & Associates Inc., in Boston, sees it differently: “I don't like the phrase ‘work-life balance’ because it creates the

image of a scale, which is a binary framework—you're either working or taking care of your family. If you frame the problem from an ordinal perspective, it's no longer an either/or situation. Ordinal thinking refers to conceptualizing something within a list of things that can be shifted or combined.”

Dr. Stybel explains that thinking in terms of trade-offs is a better way to approach work-life issues. For example, Dr. Stybel connected with potential clients for his company by joining a committee at his church. “Eventually one of them became a client, thanks to the relationship I made working on the committee,” he explains. “This activity supported my professional goal of business development, and it assisted my family life. It's important to look for synergies that benefit all areas.”

Don't Drop the Ball

Work-life balance among educators has been a topic of intense discussion for decades.

Eyes on the Prize

Use these tips for resetting⁴:

- **Budget your time like you would your finances.** Set an outer limit of how much time you spend per week on work.
- **Set boundaries.** If you're working at home, have a designated workspace so you can keep work out of your family-focused space.
- **Streamline lesson planning.** Use plans others have developed and tweak them to fit your needs. Pair new units that require more planning with familiar units that demand less time.
- **Delegate.** Allow others to step in and help. Can students do any of your tasks? Are there family members who can help with meals, errands, or cleaning?
- **Take breaks.** Give yourself permission to meditate for 10 minutes or go for an afternoon walk. At a minimum, stop throughout the day and take three deep belly breaths.

It's no surprise, given the wide range of challenges they face³:

- Increased administrative tasks
- Expectations for extended availability
- Pressure to meet testing benchmarks and curriculum standards
- Budgetary issues and declining student enrollment

"These challenges cause pressure, stress, and burnout," says Dr. McCandless. "Professionals such as teachers and medical assistants experience acute stressors implicating our emotions, and when emotional stressors get to us, our burnout goes up. And when we do not have solutions for burnout, of which work-life balance is a key solution, then we become less productive, and our emotional and physical health suffers.

"Workplaces are stressful," he notes. "Getting what we need to survive—whether it's food or money to purchase other resources—is

stressful. Burnout is the exhaustion that results from workplace stressors and pressures that go unmanaged. These stressors can be caused by heavy work burdens; being treated unfairly; not having clear job expectations; poor work dynamics, especially in interpersonal situations; not feeling valued; and just being tired of what the job entails. Without some release of or control of these stressors, mental and physical exhaustion will only compound, and there is only so much we can take."

Prolonged stress and lack of attention to work-life issues has many negative consequences for educators, including decreasing job satisfaction, increasing the likelihood of leaving teaching, withdrawing either physically or psychologically from work, inappropriate anger, and increased alcohol and drug consumption. It can also cause an individual to experience excessive anxiety, mental fatigue, and burnout, while increasing depression.¹

Mendez, an educator for 22 years, has seen work-life challenges for a long time: "I think the struggle with work-life balance has always been there. ... [And yet] it's more of an issue now because having emails on your phone and access to them 24/7 has exacerbated the issue."

Finding a Rhythm

Strategies exist on multiple levels to improve work-life situations. "Personal-level strategies include relaxing, exercising, sleeping better, engaging in meditation, taking time to reflect on one's day, and writing down stressors in a journal," notes Dr. McCandless. "At an interpersonal level, having friends and colleagues with whom you can vent and even have fun with and seek support is essential.

"Personal-level strategies ... can do only so much if the work environment has perpetual stress," he continues. "Bosses should find ways to mitigate stress by providing greater clarity on tasks, finding more resources for support, being supportive, and advocating for employees with higher-ups. Workplaces can structure time to relax and even offer mental and physical health programs to aid in overall health. At the societal level, having greater awareness of the extent and implications of work-life balance is critical

because this awareness could inform broader policies regarding workplace dynamics."

Dr. Stybel recommends setting clear boundaries with supervisors, colleagues, and students using something akin to a pain chart. "Educators are getting maybe 120–150 emails daily, and they're all important, but are they [all] urgent? Create a system like a pain chart to deal with emails ... using a scale from 1 to 10 to describe how urgent the message is. One can mean, 'Get back to me in a week,' whereas 10 means 'Something exploded; I need to talk to you now!' This can be used in all areas of your life. When you're interviewing [for a job] you can ask, 'On a scale of 1 to 10, how flexible are you about me working from home if I have a sick child or need to take care of an elderly parent?' Again, you're better served by adopting an ordinal—instead of binary—way of thinking."

Michael Drinan, AS, HBOT, CEIS, CMA (AAMA), a hyperbaric oxygen technician at Beverly Hospital Wound and Hyperbaric Medicine Center, in Beverly, Massachusetts, agrees that work-life balance starts with the job interview: "Make sure to surround yourself with people who are team-oriented and very, very communicative and that your manager cares about you as a person and not just about the company. Team culture is just as important as the salary."

The benefits of working toward harmony and balance in work and life spheres are tremendous, summarizes Dr. McCandless: "You are far likelier to be happy and healthier, both in work and in other aspects of your life. You may even enjoy work more!" ♦

References

1. Agyapong B, Obuobi-Donkor G, Burbach L, Wei Y. Stress, burnout, anxiety and depression among teachers: a scoping review. *Int J Environ Res Public Health*. 2022;19(17):10706. doi:10.3390/ijerph191710706
2. Bulger C. Work-life balance. In: Michalos AC, eds. *Encyclopedia of Quality of Life and Well-Being Research*. Springer Dordrecht; 2014:7231–7232. Accessed February 17, 2025. https://doi.org/10.1007/978-94-007-0753-5_3270
3. Markowitz S. Teacher work life balance. *Progress Learning* blog. Accessed February 17, 2025. <https://progresslearning.com/news-blog/teacher-work-life-balance/>
4. Six ways to create work-life balance. *National Education Association Member Benefits* blog. Accessed February 17, 2025. <https://www.neamb.com/family-and-wellness/6-ways-to-create-worklife-balance>

In-Ear Microphones for Detecting Alzheimer Disease

Alzheimer disease affects over 50 million people worldwide. No cure for Alzheimer disease exists, and early diagnosis remains challenging. But recently, researchers from École de Technologie Supérieure and Dartmouth University have started looking into the ears, aiming to spot signs of cognitive impairment early by recording sounds and vibrations in the eardrum.

People with Alzheimer disease exhibit a loss of motor control along with cognitive decline. One of the earliest signs of this decay can be spotted in involuntary eye movements known as saccades, reports *ScienceDaily*.

Detecting and analyzing saccades requires a patient to be monitored by eye-tracking equipment, which is often inaccessible. So, researchers are using devices called *hearables* to capture physiological signals from the body.

Eye movements, including saccades, cause eardrum vibrations that can be picked up by sensitive microphones located in the ear. The researchers are conducting experiments with volunteers, giving them both hearables and conventional eye trackers. Their goal is to identify signals corresponding to saccades and to differentiate between healthy signals and others that indicate neurological disorders like Alzheimer disease.

They hope that one day their research will lead to devices that can perform noninvasive continuous monitoring for Alzheimer along with other neurological diseases.



Health Care AI Requires Human Monitoring

At the University of Pennsylvania Health System, an artificially intelligent algorithm that predicts chances of death prompts physicians to discuss a patient's treatment and end-of-life preferences. However, the tool is not always accurate, reports ABC News. A routine tech checkup found that the algorithm worsened during the COVID-19 pandemic, becoming 7% worse at predicting who would die, according to a 2022 study.

Artificial intelligence (AI) is already widespread in health care, and its systems require consistent staffing and monitoring to be implemented and ensure they are working well.

A common AI product in physician's practices is called *ambient documentation*, a tech-enabled assistant that listens to and summarizes patient visits. Last year, investors at Rock Health tracked \$353 million going into these documentation companies. However, a current standard does not exist for comparing the output of these tools.

That is a problem, especially when small errors can be devastating. A team at Stanford University attempted to use large language models, the technology underlying AI tools like ChatGPT, to summarize patients' medical histories. They compared the results with what a physician would write. Even in the best-case scenario, the models had a 35% error rate.

If metrics and standards are sparse and errors occur for strange reasons, institutions must invest many resources. At Stanford, it took eight to 10 months and 115 hours to audit two models for fairness and reliability.

Experts have presented the idea of AI monitoring AI, with a human monitoring both. However, they acknowledged that this would require organizations to spend even more money, which is complicated by the realities of hospital budgets and the limited supply of AI tech specialists.





Medical Debt Banned from Credit Reports

About 1 in 12 adults in the United States had medical debt as of 2021, according to KFF, a nonprofit group that researches health policy issues. However, unpaid medical bills will no longer appear on credit reports under a new rule the Biden administration finalized in January 2025, says NBC News.

The change is set to take effect in March. This means that about \$49 billion in medical bills will be taken off credit reports for more than 15 million Americans. Lenders would also be prohibited from using medical information in their lending decisions, according to the Consumer Financial Protection Bureau (CFPB). The CFPB determined that a medical bill on a person's credit score did not properly predict whether they would repay a loan. However, it contributed to thousands of denied mortgage applications.

The agency expects that the rule will lead to the approval of about 22,000 additional mortgages yearly. Additionally, Americans with medical debt on their credit reports could see their credit rise by an average of 20 points.



Oregon Health Care Workers Strike

Nearly 5,000 health care workers from Providence hospitals began a strike in January, picketing all eight hospitals in Oregon. This comes after months of contract negotiations between the health system and the Oregon Nurses Association (ONA) union, which is representing the workers.

The strike is the largest involving health care workers and the first involving physicians in the history of Oregon, according to the ONA.

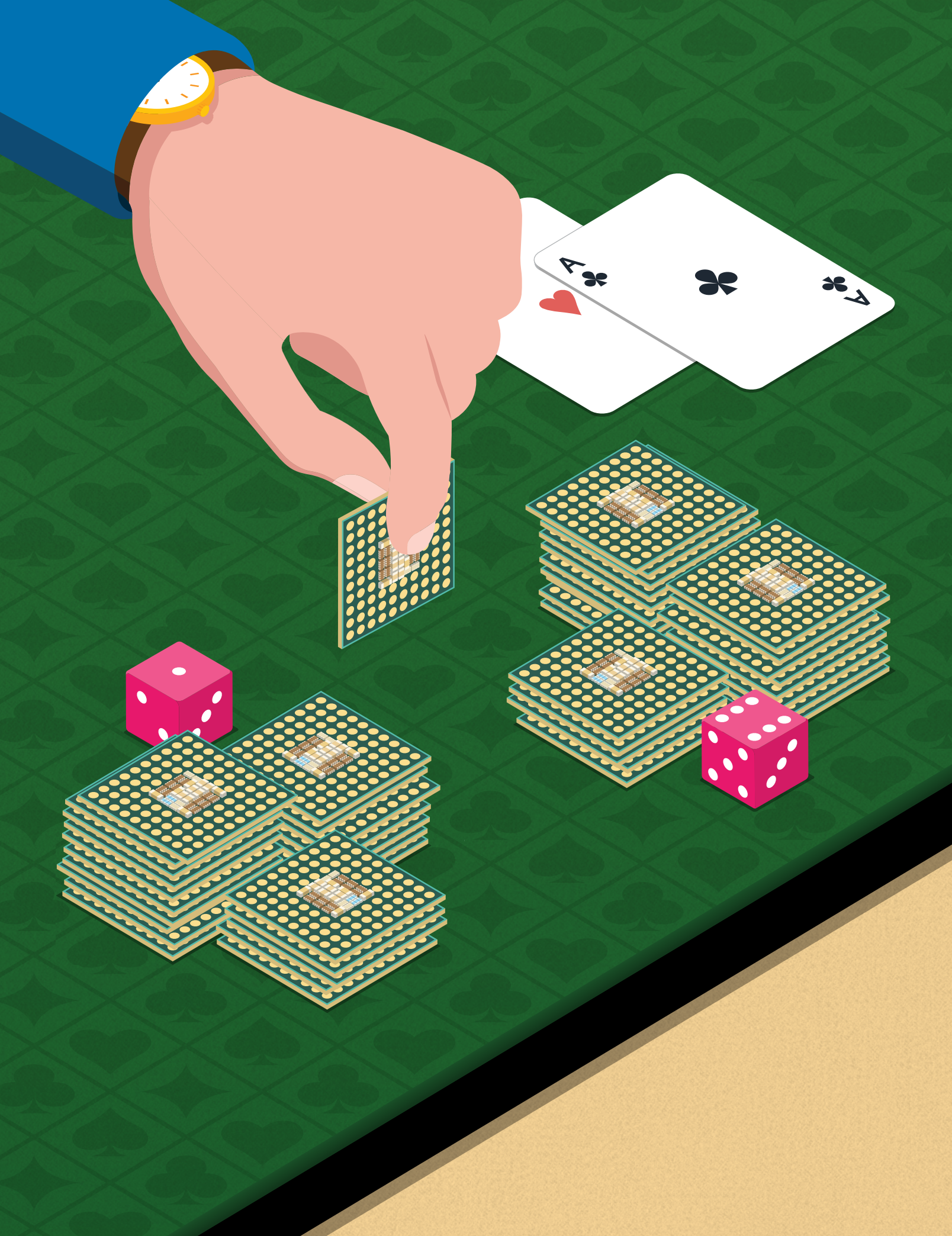
The group of strikers is set in its demands for fair contracts that will prioritize patient safety, follow the state's staffing law, decrease physician caseload, and offer regionally competitive wages and benefits to be able to recruit and retain more staff, according to the Associated Press.

Providence says it has made offers for pay raises and has been committed to reaching an agreement.

This strike—ongoing at the time of publication—emphasizes an important focus on taking care of the health care professionals who take care of so many patients.



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All in ON AI?



Responsible Use of Artificial Intelligence in Health Care Settings

By Mark Harris

The age of artificial intelligence has arrived. As a field of computer science, artificial intelligence (AI) has been a focus of research for decades. But only in the last few has the promise of this potentially transformational technology begun to appreciably affect society and the ways we live and work.

With the introduction in late 2022 of ChatGPT, a chatbot developed by OpenAI researchers that uses machine learning and natural language processing (NLP) technology to generate humanlike responses, popular interest in AI has increased con-

siderably.¹

But ChatGPT is only one expression of the AI trend. In business and society, new AI tools and resources are poised to significantly affect the global economy and work culture in the coming years.²

The exponential rise of AI technology also influences the medical field. Indeed, the use of AI products is expanding into nearly all facets of the health care system, with applications in both clinical and administrative areas. Globally, some estimations predict AI health care technology will amount to a \$188 billion industry by the year 2030.³

In Spades

Health care leaders and organizations are taking notice. For instance, last fall the American Academy of Family Physicians announced it is undertaking a large-scale study of the best ways to integrate AI into primary care medicine.⁴ The study seeks to examine the ways AI technology can reduce administrative burdens and improve physician well-being and patient care.⁴

The American Medical Association

(AMA) has also adopted a series of principles to guide the use of AI technology in medicine.⁵ The AMA recognizes both AI's potential to enhance patient care along with the need to ensure that patient privacy, security, and other concerns are addressed as new technology is developed and adopted.

The use of AI tools and products in health care is at present more pronounced in the administrative arena, says a report from Medscape and the Healthcare Information and Management Systems Society.⁶ AI tools are now used for tasks such as patient note transcription, review of electronic health records (EHRs), coding, and other aspects of recordkeeping. AI is also used to create routine patient communications, develop online chatbots for patient interactions, manage staff schedules, and improve the function of patient appointment systems.⁶

Elsewhere, clinical AI tools are being adopted for use in analyzing X-rays, CT scans, and other images; in diagnostic testing; in designing treatment plans; and for other uses.⁶

The Hand Being Dealt

What exactly is AI? IBM, a major technology and industrial research corporation, defines AI as follows: "AI is technology that enables computers and machines to simulate human learning, comprehension, problem solving, decision-making, creativity and autonomy."⁷

AI technology also involves some key

related concepts or categories. These include machine learning, generative AI (gen AI), NLP, and predictive analytics.⁸

Machine learning involves AI software applications that are capable of learning by identifying patterns in large sets of data. In medicine, this capability among other uses can improve the evaluations of how a disease is likely to progress or its outcome.

Gen AI describes technology that makes

it possible to create content, including text, images, and video. ChatGPT is one example of gen AI. This generative capability is built on what IBM describes as “deep learning models” that generate content known as “statistically probable outputs” from raw data.⁹

NLP involves the technological capacity to understand and generate human language. This allows computers to interpret both written and spoken human language. An example is found in automated phone systems that enable calls to be routed in response to the human voice.

Finally, **predictive analytics** refers to AI’s use as a forecasting tool, capable of anticipating future health trends, patterns, and patient needs based on an analysis of large data sets.

AI Priorities: MGMA

The Medical Group Management Association outlines their advocacy priorities concerning the use of AI:

- Medical groups should be able to easily understand the use and function of AI products. ...
- Policies should be aligned across agencies to avoid establishing competing and confusing standards. ...
- The deployment of AI should avoid the unintentional exacerbation of current administrative hurdles. Federal and private payers should not use AI to amplify burdens associated with prior authorization and intensify denials of critical patient care.
- Payers must be transparent and provide ample disclosures about their use of AI for utilization management, claims processing, and coverage limitations. ...
- Patient privacy should remain a priority first. ...
- All attempts should be made to mitigate discrimination and bias in the development and utilization of AI to ensure these systems do not perpetuate harmful healthcare inequities.
- Medical groups ... should be appropriately protected from liability associated with AI as it pertains to the conditions of the technology developed outside of the practice.¹⁸

Play Your Cards Right

As new AI-driven tools and technology products are used, the promise of improved organizational performance and other benefits must be balanced with the challenge of ensuring AI tools are used responsibly. Ideally, AI integration should improve patient care delivery while also easing administrative burdens for the workforce. While the extent to which today’s nascent AI technology will serve these larger improvement goals over time perhaps remains to be determined, health industry leaders are generally optimistic about AI’s potential benefits.

“Overall, I think our attitude toward AI should be one of excitement and an openness to adopt,” says Andrew Swanson, MPA, FACMPE, chief revenue officer of Medical Group Management Association (MGMA). “Health care has long struggled with needing to hurl more ‘bots’ [AI-powered software], in particular, at administrative problems. This technology is intelligent enough now to be able to discern the nuance and complication of the administrative side of our health care system. Where we rely on highly skilled coders or highly skilled billing and management people to ferret through codes and complicated prior authorizations and denials, the machines can now do that.”

Notably, a MGMA Stat poll in October 2024 found that more than 4 out of 10 medical groups (43%) had added or expanded their use of AI-driven tools during the year.

This represented a sharp increase in AI use compared to 2023, when only 1 in 5 groups (21%) reported adding or expanding AI technology.¹⁰

Reflective of the industry trend, MGMA now offers AI-driven practice management tools to assist medical practices in their revenue and operational responsibilities. “The MGMA Analytics tool is our version of a practice improvement suite that leverages AI, particularly machine learning, to understand where billing challenges and operational workflow challenges are occurring between provider and patient and the billing cycle,” explains Swanson. “Like other AI applications, what’s brilliant about this tool is that before you would need to do things like time and motion studies—or you would need to review dozens of denials per particular payers. The time it would take to get through that analysis can now be done in literally seconds.

“The billing manager now doesn’t need to review why, for example, 20 Aetna claims for a type of case or procedure seemingly get denied every time or every other time. Now the system immediately flags it and says to pay attention to this type of code or this type of case and educate the provider on whatever it is that prevents the denied claim from moving forward. And here’s how it would suggest handling these 20 denials immediately. The efficiency, training, and insight these tools provide to providers and staff up front is invaluable. The efficiency it gains you is wildly advantageous for the practice.”

Wild Cards

Instead of the term *artificial intelligence*, the AMA prefers to use the term *augmented intelligence* to describe AI’s use in medicine.¹¹ This terminology is meant to convey an emphasis on AI’s assistive role in clinical care. AI technology should be designed to enhance—not replace—the intelligence, training, and skills clinicians bring to their patient care responsibilities. In other words, human beings—physicians and other care providers—remain in charge.

Swanson understands the AMA’s concerns, although he prefers to use the terms that industry experts are using. “The differentiation here is between [gen AI] and

AI Priorities: The American College of Physicians

“[The American College of Physicians] believes that the development, testing, and use of AI in health care must be aligned with principles of medical ethics, serving to enhance patient care, clinical decision making, the patient-physician relationship, and health care equity and justice.”¹⁷

the ChatGPT area and what has come to be known as machine learning or NLP,” he observes. “These are more industry recognized terms, and it behooves us to educate our staff to understand the differentiation in these technologies.

“For example, there isn’t a medical practice on the planet now that doesn’t have a call or decision tree [automated telephone routing system]. That is now ubiquitous technology. This is a basic reactive machine that we have taught what to say and how to drive a decision tree for the customer. There has been an evolution in this technology as [NLP] has gotten better. The technology is evolving to be more user-friendly. That [new] technology now is relatively as cost comparative as the older decision tree. So why not replace an existing technology with a new and improved technology at slightly more cost to improve your patient experience?”

The challenge, observes Swanson, is in how to leverage NLP to benefit quality patient care or how to leverage machine learning as a “smart technological helper” to expedite patient visits and ensure timely and seamless documentation of visits in the EHR. The goal of smarter technology should hopefully lead to a better patient experience.

“I heard somebody say recently we should be focused on AI in a back-office capacity,” says Swanson. “Yes, but their point

was to exclude its [interactions] with patients [on behalf of staff]. But I think most people were pretty happy when Phreesia [software that automates patient check-in and other administrative functions¹²] became available. Now when we go to the doctor’s office, we don’t have to fill out the same paperwork every time. When the technology is conducive to improving people’s experience, patients are usually happy engaging with technology as long as it expedites their process into care and gives them what they want, which is usually more time with the provider.”

Of course, the fact that AI technology makes it possible to automate various administrative tasks does raise concerns about the long-term impact on the health care workforce. “[Gen AI] has the potential to complement millions of workers’ skills, enabling them to be more productive, creative, informed, efficient, and accurate,” notes a recent Brookings Institute report. “On the other hand, employers may choose to automate some, or even all, of their employees’ work, leading to possible job losses and weakened demand for previously sought-after skills.”¹³

Ideally, AI technology and software should enhance staff efficiency and performance. In turn, this could lead to improved job satisfaction. In fact, one possible benefit of enhanced automation is that it could allow

providers and staff more time to interact directly with patients.

But perhaps technology is only as beneficial or harmful as the intentions that inform its goals and applications. AI software can help medical practices to better analyze patterns of claims denials, toward the goal of reducing denials. Yet unregulated AI could also be used by insurance companies to find more effective ways to facilitate denial of beneficiary claims.¹⁴ In this context, the long-term impact of AI technology on the health care workforce is an aspect of a larger story still being written.

Up the Ante

Certainly, health care providers, managers, and staff must learn to use AI resources appropriately and responsibly, guided by their own experience and staff education and training. For health care leaders and managers, this responsibility might begin with verifying the reliability of the AI tools or products the group or practice is looking to adopt in its operations.

“You should make sure that whatever software the practice is using as an AI tool or resource is accurately pulling the information that you want,” says David J. Zetter, PHR, SHRM-CP, CHCC, senior health care consultant with Zetter Healthcare Management Consultants in Mechanicsburg, Pennsylvania. “That’s the first thing. Before utilizing a new AI tool, you want to vet it. What are your colleagues or others saying about tools or products the practice is considering using or buying? See what others [such as trusted review sources] are recommending. Are there online reviews? Are there LISTSERVs you’re affiliated with that have product recommendations? It’s really no different than purchasing a new practice management billing system or an EHR. You will want to kind of kick the tires on it, so to speak. So, get involved, ask questions, and vet the products.”

With gen AI-type products, the practice should also exercise care in how these new tools are introduced, suggests Zetter. “You can’t always just accept what any AI-generated search would come up with and just assume it’s correct, especially if it’s just pulling everything out of whatever

“Medical practices need to be cautious and take a careful look at what they are using AI products for. Is there anything with AI that is going to be of risk to either providers or patients? If so, how will you mitigate that risk? If you purchase an AI tool from a company, who is gathering or collecting that data? Who gets to see it? Is it pulling information on patients? HIPAA [The Health Insurance Portability and Accountability Act of 1996] has very strict policies on who can have access to patient information. When you’re buying products off the shelf or from a company, I think you really need to understand where this information is going and who has access to it.”

—David J. Zetter, PHR, SHRM-CP, CHCC

AI Priorities: AMA

Toward the goal of responsible AI usage, the AMA has published commitments they pledge to follow as AI develops:

- Develop AI principles for the use of AI in health care. ...
- Support the development of state and federal policies that ensure the appropriate oversight and continued innovation in AI. ...
- Collaborate with health and technology leaders to research AI's applications and ensure that physicians have a leading voice in shaping AI's role in medicine. ...
- Prepare and inform physicians by providing high value insights and actionable resources.¹⁹

Health care practices might look to the AMA—and similar organizations—for ideas to model their own AI principles after.

internet resources it accesses.”

Other experts agree oversight is necessary. “We have to make sure we’re getting the end results that we need,” says Sharon Easterling, MHA, RHIA, CCS, the CEO of Upskillz, a health care management consulting group in Charlotte, North Carolina. “You can’t just create something and forget about it. There needs to be ongoing testing. That’s actually a role you could have someone do within your organization. Assign someone who is looking at those functions [in which] you’ve implemented AI. You want someone who is able to make sure you’re getting the right results, who can report and do the analysis.”

To clarify, using gen AI to create or communicate general information, such as public announcements, clinic updates to patient mailing lists, and similar tasks involves different applications than AI tools use to analyze already verified data in the practice’s EHR or practice management system. The cautions to verify or vet AI

results is more an issue with the former tasks.

Interestingly, some medical practices are also finding ways to adapt or customize AI technology to suit particular issues in their organizations. “One practice I worked with built a tool that can search their practice management system to pull the data they need for a prior authorization,” reports Zetter. “As they work with each insurer, they can now find all the different data points they need to obtain, which can be different for each payer depending on the service or the prior authorization. They hired a programmer to program their software to automatically populate all that data in the prior authorization forms. Now their staff doesn’t have to spend time trying to pull that data out of the system. This is a task they took upon themselves to do.”

Hold All the Cards

For medical office staff, AI tools can introduce new levels of ease and efficiency into their work, says Allyson Valentine, CMA (AAMA), the care coordinator for Pulmonary Medical Associates in Newton, New Jersey. In early 2024, the clinic began using a new AI-powered software application (Medical Brain¹⁵) to manage patient scheduling and related responsibilities. The app is an AI-generated clinical decision support platform that allows patients to manage appointments, receive updates and reminders, and otherwise connect with providers at any time. The software also offers a library of evidence-based clinical modules.¹⁵

“Our AI app can read the patient’s chart and know when they last had a mammogram or colonoscopy, for example, and when they’re due for a follow-up,” reports Valentine. “The app can message the patient

to let them know it’s time to check their diabetes [laboratory tests]. It can remind them of an upcoming appointment or that it’s time to schedule a new appointment. The patient can then message our office to confirm an appointment or to reschedule. If we have to reschedule, we can do so without even picking up the phone.”

Valentine shares some recent patient encounters using the AI platform: “I recently got a message from Medical Brain that a patient was due for a follow-up appointment, based on the last chart note that the doctor had wanted to see the patient back in December. It did not appear this patient had scheduled, so the app was letting me know. My job then was to message the patient and ask if I could help them schedule that appointment.

“In another instance, I had a patient message us using the app to say she was sick with a sore, swollen throat and fever. I immediately sent a text message to the doctor, who was at the hospital at the time, letting him know this patient was sick. He was able to quickly get back to me with a prescription to send in for the patient. I was then able to contact the patient to tell them the doctor was prescribing a Z-Pack [antibiotic] to be sent to their pharmacy. I then took care of the medication order.”

Patient enrollment information for the AI-supported service is made available to all patients, says Valentine. “The patient can download the Medical Brain app and once enrolled, it connects to our office and they can just open it up and send us a message, like they’re text messaging us,” she explains.

Valentine first learned about the product at an event for Atlantic Health System’s accountable care organization. She brought the app to the attention of the physician she works for, who made the decision to

Avoid Getting Lost in the Shuffle

“To mitigate the negative impact of AI on the health care workforce, it is essential to focus on [the] collaboration between health care professionals and AI systems, ensuring that AI complements human expertise rather than ... [replaces] it. Health care organizations should invest in training and upskilling programs to prepare a workforce for the integration of AI into health care delivery. Policymakers and health care leaders must address the ethical and legal implications of AI in health care to ensure its responsible and equitable implementation.”²⁰

introduce it into the practice. For staff, the app is not difficult to learn to use, she adds, and the sponsoring company also provides training and ongoing support.

“If you use it correctly, the app can really make your job so much easier,” she says. “In my experience, it’s one of the most amazing things I’ve come across. But for this kind of tool to really work, I think everybody in the office has to know how to use it. That’s the key to its effectiveness. You’ve also got to remember these tools are for the patients to help the patients. If you can’t think of it in that way, since it’s something new to learn, it might be more of a nuisance for you.”

A Winning Hand

Of course, what any AI technology product can or cannot do for the practice will also depend on the effort staff are willing to put into learning new tools. At this early stage of AI adoption, staff education on AI is likely still somewhat uneven or preliminary.

“I think right now a lot of us in health care are just trying to figure out how to implement AI into our organizations,” acknowledges Easterling. “And because we’re not so sure of some of that, we’ve been hesitant. But I would say managers should definitely start familiarizing staff with the terminology related to AI. We know AI is already embedded in a lot of software products that health teams are or will be using. They’re going to be getting prompts from the software. They are going to be able to write prompts to the software. It’s important at this stage for staff to start to understand the mechanisms behind AI and what it is doing.”

As the influence of AI tools and resources expands, medical practices will also need to stay vigilant with how they manage privacy and security responsibilities. “Certainly, privacy is always a concern, especially with health care data,” concludes Easterling. “In fact, some health care providers and organizations may be reluctant to use AI services due to concerns [about protecting] the privacy of health care data. They may be reluctant to use [online] cloud services such as Microsoft Azure [computing platform] or an Amazon or Google workstation because that’s putting information out there on the

cloud. But those services are HIPAA [Health Insurance Portability and Accountability Act of 1996] compliant. There are safeguards put in place. And then also you have to make sure that you are addressing cybersecurity within your organization.”

While ensuring AI is used responsibly, Easterling also encourages providers and staff to be AI innovators by exploring new ways to use these tools to save time or create solutions in their day-to-day practice operations. The more they can learn, the more AI resources can be tailored to make their work easier and better and improve patient care services.

The growing influence of AI in the health care system represents a new world of opportunity, innovation, and change. For health care professionals, navigating this world requires an open mind and a willingness to learn, grow, and adapt to an ever-evolving technological landscape. ♦

The CE test for this article can be found on page 28.



References

1. Introducing ChatGPT. Open AI. November 30, 2022. Accessed February 17, 2025. <https://openai.com/index/chatgpt/>
2. Lohr S. How A.I. could reshape the economic geography of America. *The New York Times*. December 26, 2024. Accessed February 17, 2025. <https://www.nytimes.com/2024/12/26/technology/ai-economy-workers.html>
3. How AI is being used to benefit your healthcare. Cleveland Clinic. September 5, 2024. Accessed February 17, 2025. <https://health.clevelandclinic.org/ai-in-healthcare>
4. Payerchin R. AAFP starting large-scale project to examine AI technology in family practice. *Medical Economics*. October 9, 2024. Accessed February 17, 2025. <https://www.medicaleconomics.com/view/aafp-starting-large-scale-project-to-examine-ai-technology-in-family-practice>
5. AMA issues new principles for AI development, deployment & use. Press release. American Medical Association. November 28, 2023. Accessed February 17, 2025. <https://www.ama-assn.org/press-center/press-releases/ama-issues-new-principles-ai-development-deployment-use>
6. Healthcare Information and Management Systems Society; Medscape. *AI Adoption in Healthcare Report 2024*. December 6, 2024. Accessed February 17, 2025. <https://cdn.sanity.io/files/sqo8bpt9/production/68216fa5d161adebceb50b7add5b496138a78cdb.pdf>
7. Stryker C, Kavlakoglu E. What is artificial intelligence (AI)? IBM. August 9, 2024. Accessed February 17, 2025. <https://www.ibm.com/think/topics/artificial-intelligence>
8. Macon & Joan Brock Virginia Health Sciences at Old Dominion University. Glossary of AI terms in medicine. Edited October 14, 2024. Accessed February 17, 2025. https://www.evms.edu/about-us/ai-resources/resources_and_ai_tools/glossary_of_ai_terms_in_medicine/
9. Martineau K. What is generative AI? IBM. April 20, 2023. Accessed February 17, 2025. <https://research.ibm.com/blog/what-is-generative-AI>
10. Harrop C. Pace of AI adoption in medical groups quickens in 2024. *MGMA Stat*. October 9, 2024. Accessed February 17, 2025. <https://www.mgma.com/mgma-stat/pace-of-ai-adoption-in-medical-groups-quickens-in-2024>
11. Applications of AI in health care: augmented intelligence vs artificial intelligence in medicine. American Medical Association. March 27, 2024. Accessed February 17, 2025. <https://www.ama-assn.org/practice-management/digital/applications-ai-health-care-augmented-intelligence-vs-artificial>
12. Phreesia. Accessed February 17, 2025. <https://www.phreesia.com>
13. Kinder M, de Souza Briggs X, Muro M, Liu S. Generative AI, the American worker, and the future of work. October 10, 2024. Accessed February 17, 2025. <https://www.brookings.edu/articles/generative-ai-the-american-worker-and-the-future-of-work/>
14. Arnold WR, Chakrabarti M. How insurance companies use AI to deny claims. *WBUR*. December 18, 2024. Accessed February 17, 2025. <https://www.wbur.org/onpoint/2024/12/18/united-health-ai-insurance-claims-healthcare>
15. Medical Brain. Accessed February 17, 2025. <https://medicalbrain.com>
16. Health information privacy. US Department of Health and Human Services. Accessed February 17, 2025. <https://www.hhs.gov/hipaa/for-professionals/privacy/laws-regulations/index.html>
17. Daneshvar N, Pandita D, Erickson S, Snyder Sulmasy L, DeCamp M. Artificial intelligence in the provision of health care: an American College of Physicians policy position paper. *Ann Intern Med*. 2024;177(7). Accessed February 17, 2025. <https://www.acpjournals.org/doi/10.7326/M24-0146>
18. MGMA Government Affairs. *Artificial Intelligence (2024 Issue Brief)*. February 7, 2024. Accessed February 17, 2025. <https://txt.so/V3PIxX>
19. AMA future of health: the emerging landscape of augmented intelligence in health care. American Medical Association. February 26, 2024. Accessed February 17, 2025. <https://www.ama-assn.org/practice-management/digital/ama-future-health-emerging-landscape-augmented-in-telligence-health-care>
20. Reddy S. The impact of AI on the healthcare workforce: balancing opportunities and challenges. *Healthcare Information and Management Systems Society*. April 11, 2024. Accessed February 17, 2025. <https://gkc.himss.org/resources/impact-ai-healthcare-workforce-balancing-opportunities-and-challenges>

SCREEN TEAM



Health Professionals Unite to Score More CRC Screenings

By Cathy Cassata

Colorectal cancer (CRC) is the second deadliest cancer in the United States, yet experts believe that CRC has a 90% survival rate with early detection.¹ Screenings can detect abnormal cells before they become polyps, which typically take 10 to 15 years to develop into cancer.²

“Preventive screenings can help find and remove polyps before they turn into cancer or when the cancer is in the early stages and easier to treat,” says Joseph Perez, MD, a family practice physician at Lehigh Valley Health Network in Bangor, Pennsylvania.

Because CRC screenings are so effective, the American Cancer Society recommends, since 2018, that CRC screenings begin at 45 years old for everyone. And yet, up-to-date CRC screening prevalence among adults ages 45 years and older was 59% in 2021, found the National Health Interview Survey.³

In response, the American Cancer Society National Colorectal Cancer Roundtable established a campaign to push for CRC screening rates of 80% and higher in communities nationwide.

“There are multiple reasons that people don’t get screened,” says Dr. Perez. “For colonoscopies, the preparation process requires patients to take the day off before the procedure to adequately cleanse the colon [and] additional time for the procedure itself.”

Other issues include a lack of insurance or transportation (not having a person who can drive them home after the procedure) and anxiety around the procedure and results.

“There are other at-home screening options for patients, including stool-based testing like the fecal immunochemical test (FIT) and Cologuard, but some people find them unappealing because of the method of

sample collection,” says Dr. Perez. “My goal is to educate the patient on their options [and] the importance of screenings and to ease their concerns.”

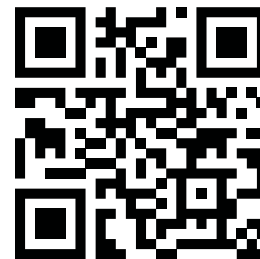
Champions for CRC Screenings

Due to Dr. Perez’s active involvement in various quality metrics within his health care system, he was asked in 2023 to take on the role of CRC screening physician champion to aid in increasing screening rates. “As I talked to more people, I began hearing the impact that colorectal cancer had on some patients’ lives. Hearing their stories and knowing from a primary care perspective that this disease can be screened and prevented motivated me to do my best to get all my eligible patients screened,” he says.

He turned to his medical assistant, Melissa Stephan, RMA(AMT), for help. She worked with the clinical coordinators,

Complete the Corresponding e-LC Course Worth 1 CEU!

In recognition of National Colorectal Cancer Awareness Month, and in partnership with the NCCRT, the AAMA is offering *Panel: Timely Colonoscopy Follow-Up to Positive (Abnormal) Non-Colonoscopy Tests*, worth 1 CEU, for free—available only in the AAMA e-Learning Center.



clinical managers, and quality specialists to run reports of eligible patients who had not received CRC screenings.

“Based on those reports, [Stephan] made phone calls to patients and scheduled them to come in to see me. If she noticed that they were scheduled for an upcoming annual exam or a follow-up for another condition, she’d hold off on calling and then give me a heads up before their visit,” says Dr. Perez.

From 2021 to 2024, Stephan took charge of the process as his primary medical assistant. “I like to advocate for patients and people in general,” says Stephan. “Sometimes they struggle to have a voice, and that’s what we’re here for: to get them the answers they’re seeking and all the information they need to make informed health decisions.”

Health Care Heroes

Stephan noticed that many patients became uninterested in CRC screenings when they heard the word *colonoscopy*.

“They’d refuse right away, so I’d say, ‘I just want to inform you there are other options such as screenings like Cologuard and FIT that you can do in the comfort of your own home, but if you do complete it at home, Dr. Perez recommends you do so in about a week so we can get the results to you in a sufficient amount of time,’” she says.

She would also inform them that if the test results were positive, Dr. Perez highly recommends that they get a colonoscopy. “Most patients were agreeable, so giving them the other options and talking to them without big medical terms allowed us to relate to patients and be able to communicate better by letting them know what we had to offer, why we are offering it, and how it can help,” says Stephan.

While rooming patients, if she noticed that they were hesitant about CRC screen-

ings or open to them, she gave Dr. Perez a heads-up on the patients’ mindsets before he entered the room.

“The medical assistant’s input lets me know the challenge I’m facing when I see the patient and gives me a minute to prepare and determine how I approach the shared decision-making process with patients,” says Dr. Perez. “I can educate the ‘why’ for them, and they can be active in their own care by asking questions, and then hopefully, the patient realizes they can be proactive with CRC screening.”

To help further, Stephan educated herself on answers to common questions patients would ask regarding the tests, such as how long the test was good for if they tested negative and when they would need to take it again. “I put myself in the patients’ shoes and thought about what I would ask, and then I came up with relatable and factual responses that Dr. Perez agreed with,” she says.

She also referred patients to educational materials and demonstration kits that the clinic’s educational department supplied. “There is a lot of information that medical assistants can give to patients, but I’m still giving the advice and making the medical decisions for the best test,” says Dr. Perez.

It’s a team effort, he notes, to help patients make decisions. “I’m not the doctor that I am unless I have my team around me, and it starts with my medical assistants,” says Dr. Perez. “The patients who interact closely with my medical assistants may give [the medical assistants] invaluable tidbits of information. A little bit of conversation and a listening ear from the medical assistant might be the catalyst for me to be able to discuss topics that may save the patient’s life down the road.”

Saving the Day

Dr. Perez observes that many patients who are reluctant to undergo screenings come around to them once they learn more. He recalls a patient in his 50s who never had a CRC screening. During the patient’s conversation with Stephan, she was able to encourage him to be open to learning more from Dr. Perez.

“She opened the door a little for me, and ... [together, the patient and I] decided on Cologuard as a screening method, which ended up coming back positive. Then his colonoscopy showed a large adenomatous polyp that needed to be removed,” says Dr. Perez.

After one year of pushing for CRC screenings, Dr. Perez and Stephan met their network goal by achieving a 10% increase from the previous year. They continued to increase screenings in the following years too. While Stephan now teaches medical assisting courses at her alma mater Lincoln Technical Institute, Dr. Perez continues to work with his current medical assistants on the initiative.

“My goal was to be the best medical assistant I could be, and I believe I reached that working for Dr. Perez,” concludes Stephan. “I felt I made an impact on patients and possibly saved lives.” ♦

References

1. Screening and prevention. Colorectal Cancer Alliance. Accessed February 17, 2025. <https://colorectalcaner.org/screening-prevention>
2. Can colorectal cancer be prevented? American Cancer Society. Updated March 4, 2024. Accessed February 17, 2025. <https://www.cancer.org/cancer/types/colon-rectal-cancer/causes-risks-prevention/prevention.html>
3. American Cancer Society. Colorectal Cancer Facts & Figures 2023-2025. 2023. Accessed February 17, 2025. <https://www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/colorectal-cancer-facts-and-figures/colorectal-cancer-facts-and-figures-2023.pdf>

Let's Dig In

Whether due to food restriction, decreased appetite, or other reasons, undereating can cause numerous physical, mental, and emotional health issues.

Healthline and *Medical News Today* warn of these side effects:

- **Low energy levels.** Insufficient calorie levels make it difficult to sustain your energy levels throughout the day.
- **Hair loss.** An inadequate intake of calories, protein, iron, and other nutrients is a common cause of hair loss.
- **Skin problems.** Skin may wrinkle, thin, and even peel or tear.
- **Reproductive difficulties.** Your hormone signals may become impaired, making it difficult to get pregnant.
- **Mood changes.** Poor nutrition can lead to low mood and negatively affect your mental health.
- **Frequent illness.** Adequate nutrients are necessary for healthy immune system function.
- **Constipation.** Low calorie intake can cause infrequent bowel movements because it will result in less waste in the digestive tract.
- **Feeling cold all the time.** Your body needs to burn a certain number of calories to create heat and maintain a healthy and comfortable body temperature.



The Cons of These Proteins

Protein is essential for building muscle, strengthening your immune response, and creating neurotransmitters and hormones. However, some foods and drinks that are promoted as being high in protein may be inadequate sources of protein, cautions *Health* and *SELF*.

Your daily protein needs vary according to personal factors like your age, activity levels, and calorie intake. The Mayo Clinic recommends that your daily protein intake should total 50 to 175 grams if your daily calorie needs are 2,000. That means—at the low end—you'd need about 17 grams of protein three times a day. Keep that in mind when looking at how few grams of protein are in these popular protein fallbacks:

4 grams per tablespoon of peanut butter

→ Combine peanut butter with a protein powder for your smoothies.

6–9 grams in a 6-ounce serving of plain, traditional yogurt

→ Opt for Greek yogurt instead, which has double (or more) the protein.

8 grams per cup of quinoa

→ Pair quinoa with beans, chicken, or lentils to craft a protein-rich meal.

<10 grams per serving in some protein bars and protein bites

→ Double your protein intake by swapping these for a breakfast of two hard-boiled eggs, a piece of cheese, and some fruit—all of which you can prep ahead of a busy week.





Stress Solutions

Frequent anxiety can interfere with normal daily activities and affect your work, home, and personal life. Although challenging, anxiety is treatable. While some people may find relief from taking medication, others find success with natural remedies, such as these suggested by WebMD and Verywell Health:

- **Exercise.** Studies show that exercise can help alleviate anxiety symptoms. Additionally, getting active helps take your mind off what is bothering you and triggers your body to release endorphins.
- **Avoid alcohol and smoking.** Alcohol and cigarettes may seem to calm your nerves at first. However, your anxiety may worsen after drinking or smoking.
- **Improve your sleep hygiene.** Not only does anxiety make it more challenging to fall asleep, but not getting enough sleep can worsen anxiety. Protect yourself against anxiety by establishing a consistent bedtime routine and creating a healthy sleep environment.
- **Reduce caffeine consumption.** If you're experiencing anxiety, try to keep caffeine consumption to a minimum. Caffeine can induce or worsen feelings of anxiety.



Have the Guts

Nearly 1 in 5 adults in the United States experience constipation. That number increases to about 1 in 3 for adults over the age of 60. Thankfully, adding several delicious and nutritious foods to your daily eating habits can help offset the discomfort of constipation.

Stock up on food that's high in fiber (both soluble and insoluble fiber), hydrating, anti-inflammatory, and made of healthy fats to make your visits to the bathroom more productive, according to Prevention and Everyday Health.

Food	Examples
Dried fruit	Apricots, dates, and raisins
High-fiber fruits and vegetables	Apples, avocados, berries, broccoli, carrots, and spinach
Water-rich fruits and vegetables	Cucumbers, grapes, watermelon, and zucchini
Prebiotics	Bananas, garlic, and onions
Probiotics	Fermented foods (e.g., kimchi and sauerkraut), kefir, and yogurt
Nuts	Almonds, walnuts, and pecans
Legumes	Black and pinto beans, lentils, and chickpeas
Whole grains	Oats, brown rice, and whole wheat



Missing in Action

Address Absenteeism by
Working with Employees

By Brian Justice

Absenteeism, or habitual absence (as from work), presents problems for every organization of every size. While rates vary across occupations and industries, the average rate in the United States is 3.1%.¹ In 2023, more than 17 million people worked in health care in all roles and at all levels.² So, on any given day, more than half a million of them are out unexpectedly.

Many health-related practices, clinics, laboratories, hospitals, and more are understaffed every day. The rhythm of those workplaces is disrupted, productivity slows, frustration builds, and patient care suffers.

And it's expensive! Recent statistics are unavailable, but the Centers for Disease Control and Prevention reports that in 2015 absenteeism cost employers just short of \$226 billion, or \$1,685 per employee.³ Those costs include overtime for those filling in, higher administrative costs, and lower revenue.

Other non-financial costs must be paid too. These include decreased morale, increased stress levels, patient complaints, and, most crucially of all, subpar care.¹

Ultimately, to avoid issues for others (patients and coworkers), managers should work with employees to ensure they have the support and resources necessary to help them avoid absenteeism. Prevention via meaningful discussions about employees' causes for absenteeism and how it affects others can go a long way in creating a sustainable change.

Present Company Excluded

"Absenteeism has a trickle-down effect," says Michelle Gibbons, CMA (AAMA), a practice manager who supervises around 25 employees for Logan Health in Moore, Montana. "You end up with more staff burn-out because one person is doing the work of two or three, perhaps missing steps. It's not intentional, of course. It's just having too much on their plate, and it can be difficult to get everything done."

Abby Thomas, CMA (AAMA), a workers' compensation representative in Milford, Indiana, agrees. "A huge part of working in health care is knowing you can count on your colleagues to be present and perform

their tasks every day," she says. "Chronic absenteeism in any medical workplace affects team morale and patient care, which can lead to frustration that impacts the overall mood within the office, especially in environments that can include very stressful situations."

Contributing factors include the pervasive worker shortage. Adding to that is an even more alarming fact: approximately 75 million people² in the United States live in a health professional shortage area, defined as a geographic area, population, or facility with inadequate access to primary, dental, or mental health care providers.⁴ That means absenteeism can have an even larger—and genuinely devastating—impact on people who are underserved to begin with.

Absent-Minded

"Every organization and individual practice should have a strong attendance policy that clearly defines expectations for both leaders and employees," says Kristi McCormick, vice president of operations for INTEGRIS Health Medical Group in Oklahoma City, Oklahoma. "Conversations about attendance

Time to Talk

Early intervention is key to managing absenteeism effectively, says Jill Wilkins, CMA (AAMA). Addressing issues when they begin to develop helps managers prevent patterns from escalating into ongoing disruptions.

“It does us no good to avoid having the difficult conversation, as it just leads to further issues and gives the impression that the behavior is acceptable,” she states. “Explain how [absenteeism] affects the team and the organization, have the conversation privately and respectfully, and collaborate on solutions that address their challenges, such as flexible hours or other accommodations.”

Michelle Gibbons, CMA (AAMA), emphasizes the importance of creating a safe and private environment for these discussions. “Set aside time for a one-on-one, closed-door conversation,” she says. “Try to understand their situation first, as we don’t always know what challenges they’re facing.”

Managers must also balance that empathy with accountability. “It’s easy to feel sympathy for an employee’s situation, whether it’s a late babysitter or car trouble, but not addressing the issue creates an environment in which tacit approval would seem to exist for disruptive behaviors,” explains Kristi McCormick. “Future conversations will become only more difficult if the issue is ignored.”

Ultimately, staying calm and objective while highlighting how absenteeism affects both the team and the organization is key.

“When employees realize their teammates are negatively affected, it often resonates more strongly,” Wilkins notes. By fostering open communication and collaboration, managers can address absenteeism constructively and effectively.

should begin during the interview stage, with explanations about how unplanned call-ins impact everyone.”

This approach is also advocated by Jill Wilkins, CMA (AAMA), director of clinic operations for UnityPoint Clinics in Johnston, Iowa. “Encourage open communication and foster an environment where employees feel comfortable discussing challenges they may be facing, whether personal or professional,” she says. “Establish a foundation of trust. The more employees trust their leaders, the more open they will be in communicating any issues before they start causing problems.”

Staff absenteeism may be caused by a combination of reasons¹:

- Bullying or mental health
- Burnout
- Childcare or eldercare needs
- Disengagement (i.e., feeling disconnected from the organization’s mission and subsequently lacking the motivation to work)
- Health issues like chronic conditions, seasonal illness, and medical appointments
- Low morale
- Poor mental health

Heather Lamb, a workplace well-being

expert in Waldorf, Maryland, also advocates for other policies that can help drive absenteeism down. “Flexible work options, like sick days or personal days without penalty, can help create a work culture that values the employees’ need for time off and doesn’t make them feel guilty about it,” she says. “Managers should also check in with employees on a regular basis to make sure they’re not feeling overwhelmed or stressed. This can avert absenteeism before it grows into a larger concern.”

Here to Stay

Addressing absenteeism effectively begins with immediate and constructive conversations between managers and employees.

“I think that leaders have the most success with curbing tardiness and absences when issues are immediately addressed,” says McCormick. “The conversation doesn’t have to be negative or punitive but should bring awareness to the employee about their role in the team’s success.”

Acknowledging improvement and progress helps too.

“Managers should want everyone to be successful in their role,” she adds. “For example, saying, ‘Beth, I know we discussed your tardiness last month, but your attendance has been perfect recently. Dr. Smith mentioned how smoothly her clinic has been running in the mornings, and she was even

able to work in a couple of sick patients. I appreciate you!’ ”

Thomas underscores the deeper meaning of health care work: “A key quality to instill in all employees, regardless of job title, is that this work is not just a paycheck. Every patient you encounter is someone’s loved one, friend, or family member.”

Every patient must be cared for with the same level of respect and dedication that employees expect their own loved ones to experience. Simply showing up—literally!—has a deep and profound impact on the work environment, colleagues, and, most importantly, patients. ♦

References

1. Absenteeism in the workplace: causes, impacts and how to address it. Indeed. Updated November 4, 2024. Accessed February 17, 2025. <https://www.indeed.com/hire/c/info/what-is-absenteeism-in-the-workplace>
2. National Center for Health Workforce Analysis. *State of the U.S. Health Care Workforce*, 2024. November 2024. Accessed January 24, 2025. <https://bhwh.hrsa.gov/sites/default/files/bureau-health-workforce/state-of-the-health-workforce-report-2024.pdf>
3. Worker illness and injury costs U.S. employers \$225.8 billion annually. CDC Foundation. January 28, 2015. Accessed February 17, 2025. <https://www.cdcfoundation.org/pr/2015/worker-illness-and-injury-costs-us-employers-225-billion-annually>
4. What is shortage designation? Health Resources and Services Administration. Reviewed June 2023. Accessed February 17, 2025. <https://bhwh.hrsa.gov/workforce-shortage-areas/shortage-designation>



By Cathy Cassata

When patients with severe allergies are exposed to an allergen, it can cause anaphylaxis, a life-threatening allergic reaction.

“It will start rapidly and continue to progress rapidly,” says Shu-Yung James Wu, MD, an allergy and immunology physician at Northwell Staten Island University Hospital.

Anaphylaxis affects the respiratory system, causing wheezing, breathing trouble, and a drop in blood pressure. The condition

usually involves the skin, lungs, and cardiac and gastrointestinal systems, explains Dr. Wu.

“The main causative agent involved here is histamine, [which] causes itching. It also causes swelling and hives,” says Dr. Wu.

During an allergic reaction, histamine is released by specialized cells in the body called mast cells and basophils. Histamine causes the blood vessels in the body to become leaky, which causes fluid to move out of the blood vessels into the surrounding tissues. “This is what causes rapid swelling,” says Dr. Wu. “At the same time, this loss of

fluid from the blood vessels causes blood pressure to drop since the usually closed circulatory system is now leaky and cannot maintain pressure.”

During anaphylaxis, histamine causes more histamine to be released into the body by triggering more mast cells and basophils to release it, leading to a chain reaction that worsens over time. “This loss in blood pressure, along with swelling in places like the airways, can lead rapidly to death if untreated,” says Dr. Wu.



One *for* All

**Advocate for Anaphylaxis
Preparedness—Epinephrine
with Every Person**

Rapid Response

Anaphylaxis is most frequently caused by allergies to food, insect stings, medications, and latex.¹

As soon as a person has an anaphylactic reaction, they should be immediately injected with epinephrine. Epinephrine—the adrenaline that is naturally produced in the body by the adrenal glands when the body is under stress—is used as a medicine that is injected into the body during anaphylaxis.²

The effects of epinephrine cause breathing to become deeper and faster and dilate

the airways, helping to reduce swelling.² It prepares the body for a fight-or-flight response by increasing heart rate and blood pressure. When this happens, the small blood vessels constrict and force blood into vital organs and away from the surface of the skin.

“This effect is rapid and happens within seconds once the drug is administered. So, as a first line when every second and minute counts, it is lifesaving because it can work so quickly to try to stop the swelling and blood pressure drop,” says Dr. Wu.

While epinephrine begins to work immediately, the full effect of the medicine can take five to 10 minutes and begin to wear off within 20 to 30 minutes.²

Additional treatments called adjunctive medications are sometimes used. For instance, Albuterol can help open the constricted airways, and oxygen may be given to help with respiration.

Antihistamines such as Benadryl are ineffective first-line therapies for anaphylaxis. “They may help with itching but do not reverse the airway constriction or low

blood pressure,” says Lenard Markman, DO, member of the Advocacy Committee of the Wisconsin Association of Osteopathic Physicians and Surgeons.

Steroids might also be given to stop the later effects of an allergic reaction, especially for patients who have asthma, but steroids do not take effect for hours. Even if steroids are injected, Dr. Wu notes it will take two or more hours for steroids to have any benefit.

“So, in terms of saving someone’s life during anaphylaxis, there is no real alternative to epinephrine,” he says.

If a person does not recover within five minutes of an epinephrine dose, they should be given another dose.

A biphasic or rebound reaction may occur in up to 20% of patients who experience anaphylaxis, which means they may have another episode of anaphylaxis, usually within six to 12 hours after their symptoms subside.

“This is why it is so important to make sure patients have additional epinephrine at the time of discharge and know how to use it,” says Dr. Markman.

Symptoms of Anaphylaxis

While initial symptoms of anaphylaxis may be mild and include a runny nose or a skin rash, they can progress quickly to the following severe symptoms¹:

- Abdominal pain
- Cardiac arrest
- Diarrhea
- Dizziness
- Fainting
- Feeling of doom
- Hives
- Hoarse voice
- Low blood pressure
- Nausea
- Rapid heartbeat
- Swelling
- Throat tightness
- Trouble breathing
- Vomiting

Be Prepared

Epinephrine is available with a prescription as a nasal spray, a pre-filled auto-injector, and a vial that can be used to fill a syringe. However, the medication has been prescribed to only patients with a diagnosis of life-threatening allergies.

For those unaware that they have an allergy, not having epinephrine on hand can be life-threatening. Such was the case for Dillon Mueller, an 18-year-old from Wisconsin who was unaware that he was allergic to bees. In October 2014, while helping his best friend with yard work, Dillon was stung by a bee, causing anaphylaxis. His friend performed CPR until an ambulance arrived. However, the ambulance did not have epinephrine on hand. After spending a week on artificial cardiopulmonary support, Dillon’s parents had to make the decision to discontinue care. Dillon did not survive.

“Most ambulances still do not have epinephrine; they’re not required to have it. At the time of Dillon’s reaction, it was very expensive for ambulances to have it,” says Dr. Markman. “Wisconsin now allows all first responders to have drawn up epinephrine that is injected. It’s very easy and very inexpensive.”

After learning about Dillon’s story, Dr. Markman teamed up with Dillon’s parents and the Wisconsin Association of Osteopathic Physicians and Surgeons to advocate for wider access to epinephrine. Together, they created state legislation called Dillon’s Law, which was signed into law in Wisconsin in 2017. The law allows any individual in Wisconsin to be trained on the use of epinephrine; after completing training, they can obtain epinephrine from a pharmacy and use it to save a person having a severe allergic reaction. All people involved are covered under the state Good Samaritan liability law.

“We feel epinephrine administration is something that everyone should be trained in. With 1 in 13 kids having food allergies, every daycare and school should have epinephrine available. Parents should have it with first aid kits,” says Dr. Markman.

He led the Do It for Dillon Anaphylaxis Training Program, the first state-approved hands-on anaphylaxis train-

ing program offered at no cost with no age restrictions. Over 5,000 people have been trained through the program, and at least 16 lives have been saved by people who took the course.

“Dillon’s parents have become amazing anaphylaxis instructors. Last year, they led over 46 different anaphylaxis training courses. They are determined to prevent the tragedy they faced from happening to you, your family, or patients,” says Dr. Markman.

Dillon’s Law also passed in Indiana, Minnesota, and Colorado and is under consideration in Illinois. A national Dillon’s Law was introduced in 2023 but was not voted on in the 2023–2024 Congress. Dr. Markman hopes it will be voted on in 2025. In the meantime, he continues to work with individual states.

The national organization Food Allergy Research & Education also offers a free online course³ on how to administer different epinephrine auto-injectors that anyone across the country can access.

Window of Opportunity

In 2019, at the annual convention for the Wisconsin State Society of Medical Assistants, Dr. Markman certified over 100 medical assistants on the administration of epinephrine. He was thrilled that 16 medical assistants volunteered to become instructors of the Do It for Dillon Anaphylaxis Training Program.

“I should have expected this. The medical assistants I have known and worked with have such a wonderful, sincere commitment to their patients and community,” says Dr. Markman. “Medical assistants know how important it is to have epinephrine available.”

If medical assistants can use epinephrine to save a patient in the practice, he believes they should be allowed to obtain epinephrine and use it anywhere to help others.

Colleen Conklin, CMA (AAMA), agrees. As an assistant professor for the College of Western Idaho, she points out that medical assistants are trained to administer injections.

“We do not specifically teach how to inject epinephrine; however, it is a standard intramuscular injection,” she says.

Medical assistants are also equipped to

Most Common Food and Insect Allergens

About 8% of children and 11% of adults in the United States have a food allergy.⁴ Over the past few decades, the prevalence of food allergies in kids has increased. Food allergies in children have risen by 50% since 1990, according to the Centers for Disease Control and Prevention.⁵

The following are the most common foods people are allergic to, according to the Food Safety and Inspection Service⁶:

- Eggs
- Fish
- Milk
- Peanuts
- Sesame
- Shellfish
- Soybeans
- Tree nuts
- Wheat

Regarding insect sting allergies, between 1.6% and 5.1% of U.S. citizens have experienced life-threatening allergic reactions. Moreover, an average of 72 deaths per year occur from stings in the United States.⁷

Most insect stings in the United States come from wasps, yellow jackets, hornets, and honeybees. Lenard Markman, DO, warns that red and black imported fire ants are now a concern in southern parts of the country.

"7% of the population is allergic to bees and fire ants. Fire ants are like bees without wings; they bite and sting. They are a huge problem for Texas and are migrating north because it's getting warmer," says Dr. Markman.

educate patients on the seriousness of anaphylaxis and how to self-administer epinephrine.

"Patients should be taught that anaphylaxis is deadly and that epinephrine will reverse the situation, so it's imperative that medical assistants stress this and that patients who have anaphylaxis carry their EpiPens with them," says Conklin.

Her experience as a paramedic taught her how to administer epinephrine in syringe form; however, she says most patients who medical assistants will interact with need to understand how to use an epinephrine auto-injector like EpiPen or AUVI-Q.

"The pre-loaded pens make it easier so that the needle will be the right size and the medicine will reach the muscle, but you still need to know where to administer it so that it quickly gets into the system," says Conklin.

Because epinephrine causes the small blood vessels to constrict and redirects blood flow to vital organs, Dr. Wu says it must not be injected into extremities like hands and feet but rather into a body part with large amounts of blood flow so it will circulate around the body as fast as possible.

"Therefore, we inject epinephrine into a large muscle. Typically, this is the outer thigh, as that is one of the largest muscles in the body," says Dr. Wu.

For auto-injector forms, he says to remove the protective cap from the device, arm the device, and jab the device into the outer thigh. At this point, the needle automatically injects the patient.

"Injection is typically done within two seconds, but as a matter of timing when your adrenaline is running, we typically teach people to count to 10," he says.

Heath care professionals must communicate with patients about the effects of epinephrine in case they ever need to administer it.

"Since it is basically a shot of pure adrenaline, the patient will experience heart racing like their heart is going to jump out of their chest. They will feel agitated and shaky, and because the blood vessels in the skin will constrict, they will start to feel cold," says Dr. Wu.

Lastly, patients should know that the most common cause of preventable death in an anaphylactic reaction is a delay in the administration of epinephrine. Anaphylaxis is a chain reaction, and if you can interrupt the effects early enough, it does not progress as far, says Dr. Wu.

"People often fear giving it because it seems like such a drastic measure. Most patients, especially children, will not have any lasting negative effects from epinephrine

as long as it is injected properly into a large muscle and not a finger," he says.

Note that people with heart conditions are at increased risk of death from anaphylaxis, so it is important to treat them quickly. However, epinephrine may cause the heart to beat faster and stronger.

"But this is to be balanced with the likelihood of death if anaphylaxis progresses," says Dr. Wu. "So, in summary, you should not be afraid to administer epinephrine to an otherwise healthy patient in anaphylaxis. The side effects are temporary, and you could be saving the life of a patient." ♦

The CE test for this article can be found on page 29.



References

1. Anaphylaxis. American College of Allergy, Asthma & Immunology. Reviewed January 29, 2018. Accessed February 17, 2025. <https://acaai.org/allergies/symptoms/anaphylaxis/>
2. What is epinephrine? Allergy & Asthma Network. Accessed February 15, 2025. <https://allergyasthma-network.org/anaphylaxis/what-is-epinephrine/>
3. Save a life: recognizing and responding to anaphylaxis (English) 2024-2025. Food Allergy Academy. Accessed February 17, 2025. <https://www.foodallergyacademy.org/course/save-a-life-recognizing-and-responding-to-anaphylaxis-2024-2025>
4. Food allergy. National Institute of Allergy and Infectious Diseases. Reviewed September 5, 2024. Accessed February 17, 2025. <https://www.niaid.nih.gov/diseases-conditions/food-allergy>
5. Jackson KD, Howie LD, Akinbami LJ. Trends in allergic conditions among children: United States, 1997–2011. National Center for Health Statistics. Reviewed November 6, 2015. Accessed February 17, 2025. <https://www.cdc.gov/nchs/products/databriefs/db121.htm>
6. Food allergies: the "big 9." Food Safety and Inspection Service. Updated March 21, 2024. Accessed February 17, 2025. <https://www.fsis.usda.gov/food-safety/safe-food-handling-and-preparation/food-safety-basics/food-allergies-big-9>
7. Insect sting allergies. American College of Allergy, Asthma & Immunology. Reviewed June 28, 2023. Accessed February 17, 2025. <https://acaai.org/allergies/allergic-conditions/insect-sting-allergies/>



AI in Health Care Administration

Deadline: Postmarked no later than **June 1, 2025**

Credit: 2.5 AAMA CEUs (gen/admin) **Code:** 143877

Electronic bonus! This test is available on the e-Learning Center at learning.aama-ntl.org. Miss the postmark deadline? Take the test online instead!

Directions: Determine the correct answer to each of the following, based on information derived from the article.

- | T F | T F |
|---|---|
| <input type="checkbox"/> <input type="checkbox"/> 1. At present, artificial intelligence (AI) has a greater impact on the clinical aspects of health care delivery than the administrative aspects. | <input type="checkbox"/> <input type="checkbox"/> 11. Natural language processing can understand and generate human language in the spoken—but not the written—form. |
| <input type="checkbox"/> <input type="checkbox"/> 2. AI tools can help with patient notices and scheduling. | <input type="checkbox"/> <input type="checkbox"/> 12. AI has the potential to increase efficiency in the delivery of health care and to increase the collective health of society, but it also has the potential to be used for nefarious purposes. |
| <input type="checkbox"/> <input type="checkbox"/> 3. Experts anticipate that AI will replace the decision-making of medical clinicians. | <input type="checkbox"/> <input type="checkbox"/> 13. Health care leaders and organizations like the American College of Physicians say physician practices need not align their use of AI in health care with maintaining health care equity. |
| <input type="checkbox"/> <input type="checkbox"/> 4. Patients are usually happy with using technology in the provider's practice if it permits patients to spend more time with their providers. | <input type="checkbox"/> <input type="checkbox"/> 14. ChatGPT uses machine learning and natural language processing technology to generate humanlike responses. |
| <input type="checkbox"/> <input type="checkbox"/> 5. Providers and their staff need to make sure that AI products and tools do not infringe on patient privacy and security. | <input type="checkbox"/> <input type="checkbox"/> 15. An example of machine learning is the automated phone systems that route calls in response to a human voice. |
| <input type="checkbox"/> <input type="checkbox"/> 6. The proper use of AI should result in greater job satisfaction for staff working in providers' practices. | <input type="checkbox"/> <input type="checkbox"/> 16. Payers need not disclose their use of AI for claims processing, advises the Medical Group Management Association. |
| <input type="checkbox"/> <input type="checkbox"/> 7. "Augmented intelligence" is a better descriptor of AI's use in medicine, according to the American Medical Association. | <input type="checkbox"/> <input type="checkbox"/> 17. AI can be used to manage staff schedules. |
| <input type="checkbox"/> <input type="checkbox"/> 8. AI tools cannot yet analyze CT scans, X-rays, and other medical imaging. | <input type="checkbox"/> <input type="checkbox"/> 18. Online cloud services (e.g., Microsoft Azure) do not comply with the Health Insurance Portability and Accountability Act of 1996. |
| <input type="checkbox"/> <input type="checkbox"/> 9. The use of AI by medical groups in the United States has been increasing in recent years. | |
| <input type="checkbox"/> <input type="checkbox"/> 10. <i>Predictive analytics</i> is described as the use of AI as a forecasting tool for future health trends. | |



Epinephrine

Deadline: Postmarked no later than **June 1, 2025**

Credit: 1 AAMA CEU (gen/clin) **Code:** 143878

Directions: Determine the correct answer to each of the following, based on information derived from the article.

- | T F | T F |
|--|--|
| <input type="checkbox"/> <input type="checkbox"/> 1. Epinephrine increases heart and respiration rates and forces blood away from the skin's surface and into the body's vital organs. | <input type="checkbox"/> <input type="checkbox"/> 10. A rebound reaction, which can happen in some individuals, usually occurs within 6 to 12 hours after the initial anaphylactic reaction. |
| <input type="checkbox"/> <input type="checkbox"/> 2. Anaphylaxis typically starts slowly and progresses at a slow and manageable rate. | <input type="checkbox"/> <input type="checkbox"/> 11. Benadryl and other antihistamines are effective treatments for anaphylaxis in addition to, or in place of, epinephrine. |
| <input type="checkbox"/> <input type="checkbox"/> 3. The body's reaction to combatting anaphylaxis usually raises blood pressure. | <input type="checkbox"/> <input type="checkbox"/> 12. Epinephrine should be injected into a large muscle, not into hands or feet. |
| <input type="checkbox"/> <input type="checkbox"/> 4. Dillon's Law in Wisconsin allows individuals to be trained on the use of epinephrine and obtain it from a pharmacy to aid a person having an anaphylactic reaction. | <input type="checkbox"/> <input type="checkbox"/> 13. Histamine, the main causative agent of anaphylaxis, causes fluid to move out of blood vessels and into surrounding tissues, which results in swelling. |
| <input type="checkbox"/> <input type="checkbox"/> 5. Steroids usually have an effect on an allergic reaction at least two or three hours after administration. | <input type="checkbox"/> <input type="checkbox"/> 14. A federal version of Dillon's Law was enacted by Congress in 2024. |
| <input type="checkbox"/> <input type="checkbox"/> 6. A benefit of epinephrine is that its effects are long-lasting; they decrease four hours after injection. | |
| <input type="checkbox"/> <input type="checkbox"/> 7. Allergies to latex, insect stings, medications, and food are the most common causes of anaphylaxis. | |
| <input type="checkbox"/> <input type="checkbox"/> 8. A delay in the administration of epinephrine for anaphylaxis is the most common cause of preventable death during an anaphylactic reaction. | |
| <input type="checkbox"/> <input type="checkbox"/> 9. A person having an anaphylactic reaction should not be injected with epinephrine until the patient has been observed for 12 hours. | |

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Put at Ease



CMA (AAMA) Provides Comforting Care for Patients with Chronic Pain



By Cathy Cassata

Amybeth Box, CMA (AAMA), spends her days helping patients manage chronic pain in the San Diego area. “It’s not for the weary. There are days that are tough, when patients are really struggling, but I take pride in showing them compassion and making them feel better,” she says.

Many of the patients she sees underwent cervical or spinal fusions, experience failed back surgery syndrome, or have chronic joint pain. Oftentimes, before they end up at Box’s clinic, they have visited several physicians who have unsuccessfully treated their pain. “They’re at a loss,” she says. “Because of the opioid epidemic, a lot of physicians don’t want to prescribe opioids, and many patients don’t want to take them. But in addition to medication management, we offer regenerative therapies such as red light therapy and sound wave therapy.”

Her days consist of rooming patients, taking vitals, and assisting with procedures like intrathecal pain pump refills, epidural injections, joint injection platelet-rich plasma

procedures, vampire facials (the combination of platelet-rich plasma and microneedling procedures), and hair restorations. She also provides educational materials regarding at-home care like stretching exercises. “When a patient leaves the office, they forget a lot of details, so educating them and welcoming communication is really important,” explains Box.

She enjoys being a trusted source for patients. “If I have to be their sounding board for the five or 10 minutes that I’m with them, then that’s what I do,” she says. “I have learned that many times, they are not angry with us, but they’re angry with the pain.”

She personally relates to their situations, because she recently had a double cervical disc replacement, which causes discomfort. “I’m in their shoes, which gives me more empathy for what they’re going through,” says Box.

Her favorite part of the job is when an implantable therapy or injection brings a patient relief. “Witnessing their pain under control, them gain the ability to walk comfortably again, or a positive change in their whole demeanor and quality of life makes the hard days so worth it,” she says.

The most challenging part of her job is working with palliative care patients. “There are days I know I’m losing one of them, and the best way through it is to give them the care they deserve while they’re here,”

says Box.

She cherishes the times when patients give her hugs and tell her how she eased their fears.

“I’ve been working as a medical assistant for 26 years in a variety of specialties under great physicians who taught me different aspects of medicine. I tap into everything I’ve learned at this job,” says Box.

Before she started working in pain management in 2021, she spent six years in South Carolina working at the Naval Hospital Beaufort. There, she processed Navy Medicine recruits for the United States Marine Corps by reviewing their medical records; conducting laboratory tests, blood draws, and hearing and vision tests; and administering immunizations. “We’d process about 9,000 recruits a year,” says Box.

She flourished there. In 2012, she earned the title of lead medical assistant for recruit medical readiness; in 2016, she received the Civilian of the Quarter award; and in 2017, she was nominated for Civilian of the Year. “I learned a lot about Navy Medicine, made lifelong friends, and met my husband who is a Hospital Corpsman.”

Her early years as a medical assistant included working in pediatrics, urology, OB-GYN, and primary care. “I like knowing a little bit about everything in the body because you understand the patient better,” says Box. “This really helps me when caring for people in pain.” ♦



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