SYSTEM UPDATE

Keep Knowledge of Health Care Technology Current



By Brian Justice

Medical assistants are often the first people patients see, and their first job is to inspire trust. Now that nearly every patient interaction incorporates technology from the get-go, a medical assistant's digital literacy is more crucial than ever. And educators are well-positioned to help students succeed in this area.

However, health care technology is developing at a fast pace. Advances in telehealth, artificial intelligence (AI), and digital health are driving hybrid workflows, remote monitoring, virtual care, and the management of patient data. Because these technologies evolve so rapidly, health care workers' competencies should be reviewed regularly and brought up to date as needed.[1]

This acceleration makes it increasingly crucial for medical assistants to adapt to new technologies and, given how quickly they evolve, be ready for newer ones.

"Digital literacy for a medical assistant today means having the skills to use modern health technology with confidence, accuracy, and efficiency in a clinical setting," says Rebecca Gayheart, DNP, MSN, APRN, FNP-C, CNL, a medical assisting adjunct professor with the U.S. Career Institute in Fort Collins, Colorado.

A Stanford University study found that the expanding capabilities of digital tools have also expanded medical assistants' responsibilities, particularly in helping patients and providers use technology in virtual care.[2] As health care becomes even more dependent on technology, medical assistants will collect and manage more health information and share that data throughout the larger health care system.[3]

"That means digital tools must be used in service of excellent patient care, which is the ultimate goal," says Melba Militante, CEO of Phoenix Virtual Solutions in Orange, California. "The real skills are not in just using those tools, but knowing how to use them effectively."

KEYS TO SUCCESS

Medical assistants must be familiar with technology such as telehealth, health apps, remote monitoring, wearables, and more. These tools not only gather and manage data, but they are increasingly used to help patients manage their own health.[4]

"Medical assistants do not necessarily need to know specific software, but they need to understand how to work with the software at hand," says Janet Perry Quintana, a commissioner with the Distance Education Accrediting Commission. "The need to access patient demographics, insurance, visit records, medical reports, prescriptions, [and] test results, not to mention knowing how to use billing and coding software, means that technological skills are among the most important ones today's medical assistant needs."

Students must also understand how AI can improve the patient experience and outcomes.[4] Just as importantly, they need to know its limitations. While it can be used for studying, summarizing information, and organizing notes, ease of use can easily lead to overreliance. AI is not reliably accurate, so it is not only wise but crucial for students to

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SOFT SKILLS, HARDWIRED

Whatever the technology and its capabilities, some basic touchstones of effective professional service remain the same. Communication skills, critical thinking, and adaptability will always empower medical assistants to understand and use technology to best serve patients.

"Digital etiquette is among the most valuable skills that a medical assistant needs to perform effectively," says Marjorie Van Duyne, CMA (AAMA), an adjunct medical assisting educator at Wayne Community College in Goldsboro, North Carolina. "The written word is still a valuable and insightful tool to communicate [effectively]. Bad grammar can be seen as the inability to pay attention to detail, and shorthand, like LOL or OMG, can be read as immature or unprofessional." Her students participate in weekly discussion boards about sentence structure, spelling, and grammar.

"Today's medical assistants still struggle with communication," says Karen McIntyre-Pearson, a medical assisting educator at Miller-Motte College in North Carolina. "Being a professional team member with good judgment and critical thinking [is a major concern] for many health care providers. It's very important to be trained in using electronic health record software, medical office systems, organizational dynamics, and clinical settings [and] procedures before graduating."

Graduation cannot be the end of digital learning, and McIntyre-Pearson has felt the need for continued training herself. "To do my job effectively, I attend in-service classes," she says. "I would also advise medical assistant educators to make sure the students are familiar with AI in researching articles and interpersonal communication."

As platforms and technologies continue to change, the most durable goal is to develop the communication skills, judgment, critical thinking, and adaptability medical assistants will need to move from one digital environment to the next.

understand its capabilities and limitations.[5]

"Treat AI output like an unverified chart entry," says Militante. "Useful, but not fully usable until a human checks it. Verification, privacy, and data integrity depend on how responsibly a tool, in this case AI, is used." This approach should be the foundation of AI instruction. Learning how to compare AI-generated output with clinical guidelines, existing literature, and other credible sources helps identify errors, determine what is relevant to the situation, identify missing information, and decide whether to accept the AI output, modify it, or reject it altogether.[5]

TECH CHECK

Security is a primary concern with virtually every developing technology, especially in health care. Learning to use digital tools responsibly includes appreciating the importance of cybersecurity, patient data protection, and the ethical, legal, and regulatory requirements governing digital tools in health care.[4]

"Documentation integrity matters," states Militante. "Understanding when a message needs to be secure and how patient data flows through a practice are skills that are needed to protect and serve the patient."

To that end, the Department of Health and Human Services declared that education about new and emerging social engineering threats should be incorporated into security awareness and training programs related to the Health Insurance Portability and Accountability Act. Medical assistants must learn to recognize phishing, follow appropriate information access practices, and recognize how their own use of digital tools can protect, or inadvertently expose, patient information.[6]

"Students must understand their scope of practice," says Perry Quintana. "As more patient information becomes available through technology, a solid education requires that a medical assistant knows what they can do with it in their role. For instance, while they may see a diagnosis in a patient record, it is often out of their scope of practice to discuss it with the patient."

THE NEXT UPGRADE

As digital technology changes how health care is delivered and expands how medical assistants support patients and providers, digital literacy must be hardwired into new medical assistants as they enter the workforce.

What medical assistants learn today may be replaced or updated tomorrow, making the ability to adapt just as important as knowing how to use any particular tool. For educators, the challenge is to prepare students not just for the digital workplace they will enter after graduation but to continue learning as that workplace evolves.

Educators can future-proof digital literacy by teaching foundational, tool-agnostic principles instead of specific software interfaces. In other words, educators should make sure that students are trained to use any technology they encounter. When educators focus on critical thinking and concepts, the skills remain relevant no matter how fast technology changes. ✦

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