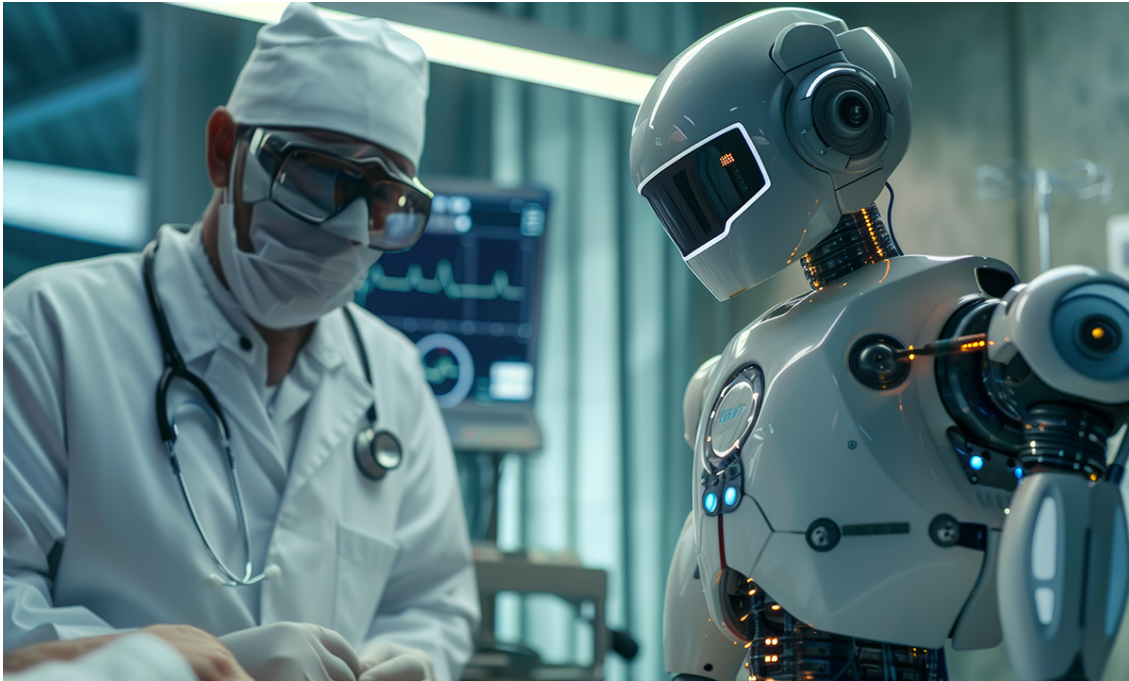


Navigating AI in Your Practice



Artificial Intelligence (AI) is transforming all industries, and healthcare is no exception. While AI may seem like a recent phenomenon, its foundations date back many decades to the 1950s. Since its inception, AI has slowly grown until recently, when the technology reached a tipping point, making AI far more affordable, capable, and available across all industries. As AI technologies continue to advance and find their way into everyday applications, medical practices need to assess how they can benefit from this powerful tool. This article explores the progression, available and future uses, risks, and strategies for integrating AI into your medical office.

A Technical Revolution

As stated, AI is not new, but given current affairs, we seem to be in the middle of a technological revolution. For the past two decades, AI has quietly powered various systems, working behind the scenes to increase efficiency, personalize user experiences, and automate complex tasks. For example, Netflix's personal recommendations, Amazon's product recommendations, and Tesla's autonomous driving feature are all built on AI. Such solutions were complicated to develop and were typically left to those in advanced fields of computer and data science, making AI inaccessible to most businesses and the general public. The current surge of interest in AI, however, is largely due to generative AI solutions

like ChatGPT, which became available in 2022. These solutions allow individuals to easily interact with AI to create text, images, and audio, using intuitive interfaces. As a result, AI's potential is now at the fingertips of everyday people, not just big tech firms.

Chatbots Bring a New Era of AI

Chatbots such as OpenAI's ChatGPT, Microsoft's Copilot, and Google's Gemini (previously Bard) introduced the world to new, intuitive, and easy-to-use solutions for everyone. These types of AI systems are known as Large Language Models (LLMs) and are trained on trillions of language-based datasets. As a result, these solutions allow individuals to interact (i.e., chat) with the AI using human language—an act known as prompting. These solutions are broad in nature and can be used for idea creation, writing articles, reviewing and summarizing documents, research, and data analysis. Many of these solutions are free, with paid versions offering additional features and capabilities. Anyone using chatbots for business is recommended to use the paid version. These versions offer greater protection of the data you give it, thus ensuring the privacy of your data.

AI as a Feature

In addition to chatbots, many of the currently available AI solutions for medical practices are not specific to the medical industry but are instead designed as general administrative and business tools. These capabilities have been integrated into widely used applications such as Microsoft Office, Google Docs, Adobe products, and Grammarly. Like chatbots, these solutions, when enabled with AI, allow individuals to interact with the application using human language. For instance, in Microsoft Word, you could create an outline for a document and then ask AI to create a five-hundred-word document in the format of a newsletter based on the outline. If you wanted to analyze a contract, you could open the contract in Word and prompt the AI to provide a summary. To get more specific, you could ask the AI to highlight sections of the contract that protect data privacy, particularly as related to HIPAA. One of the greatest advantages of these features is saving time, performing in minutes what might take hours to accomplish by a human.

Emerging AI Solutions in Medical Practices

Practical uses of AI specific to medical practices are an emerging technology yet to make it into widespread adoption. Future solutions will materialize as both enhanced features within existing solutions and entirely new products. Although emerging, a current look at the developing landscape provides a good idea of where and how these solutions will be delivered. Solutions are expected to benefit all aspects of the medical industry, including administrative processes, diagnosis, and treatment of patients.

A good indicator of where AI solutions will appear is the Food and Drug Administration's list of authorized medical devices, last updated August 7, 2024 [1]. Among the listed devices, Radiology comprises an overwhelming majority, accounting for 76% of AI-driven devices, followed by Cardiovascular and Neurology. Further demonstrating an interest in AI is a survey conducted by the American Medical Association (AMA) in August of 2023 [2]. Just

over 1,000 physicians responded, with 68% seeing an advantage in AI. Areas of most interest to physicians included reducing administrative burdens including documentation and prior authorization. 38% of physicians reported currently using AI in some capacity, primarily for documentation, translation services, and assisting with diagnosis. However, this use of AI does come with concerns, including patient-physician relationships, potential liability, and patient safety topping the list.

Responsible Use

Before implementing any AI solution internally or delivering AI-derived results to patients, it is essential for healthcare professionals to carefully review and validate the data. All AI solutions come with inherent risks, including bias, incorrect results, data security and privacy concerns, and lack of transparency. Therefore, it is vital for medical practices to implement oversight and governance mechanisms to mitigate these risks and ensure that AI technologies are used responsibly. AI technologies should be viewed as powerful tools to enhance productivity and increase diagnostic accuracy, rather than as replacements for healthcare professionals. It is crucial to remember that the responsibility for how these AI solutions are applied ultimately lies with the medical practitioners, not with the AI. Additionally, ensuring compliance with HIPAA is critical for protecting patient data privacy and security when using AI technologies.

Engage Employees and Establish Guidelines

It is essential for medical practices to engage in discussions about AI with their employees to ensure its responsible use. Clearly define what constitutes acceptable and unacceptable uses of AI to set clear expectations. Encourage employees to be transparent about how they are using AI, fostering an environment of accountability and awareness. Educate employees about the risks associated with AI and emphasize their responsibility for validating any results derived from AI solutions. To mitigate the risks associated with AI, it is crucial to develop policies that clearly communicate an organization's stance on AI, establishing acceptable use, and addressing data privacy and security. A good resource to start with is the Artificial Intelligence Policy provided by SANS.org [3], which offers guidelines on creating a framework for AI use in the workplace.

Conclusion

In conclusion, AI is revolutionizing all industries and holds immense potential for medical practices. While AI offers numerous benefits such as enhanced efficiency, improved patient outcomes, and time savings, it is essential to approach its integration cautiously. Medical practices must be proactive in discussing AI use with their employees, setting clear guidelines for acceptable and unacceptable practices, and ensuring transparency in how AI is utilized. By educating staff about the risks, implementing governance policies, and prioritizing data security, practices can harness AI's power while safeguarding patient care and privacy.

If you have questions about HIPAA, cybersecurity, or access to SVMIC resources, call 800-342-2239 or email ContactSVMIC@svmic.com.

If you experience a cybersecurity or other HIPAA related incident, contact SVMIC as soon as possible by calling 800-342-2239 and ask to speak with the Claims department.

Other individuals in your organization may benefit from these articles and resources, such as your administrator, privacy or security officer, or information technology professional. They can sign up for a Vantage® account [here](#).

1. [Artificial Intelligence and Machine Learning \(AI/ML\)-Enabled Medical Devices | FDA](#)
2. [AMA Augmented Intelligence Research \(ama-assn.org\)](#)
3. [Information Security Policy Templates | SANS Institute](#)

Risk Matters: They are NOT Just "Little Adults"



Medical care and treatment of children (“minors”) present unique challenges not typically found in the provision of medical services to adults. These challenges can often be a source of medical malpractice risk and, should a malpractice lawsuit be filed, juries tend to view injuries (especially catastrophic ones) to children more sympathetically than they would similar injuries to adults. Therefore, it is important that every practitioner who provides care to children implement risk management strategies for their practice.

Some factors that can make risk management more challenging in pediatric settings:

- Relative rarity of many pediatric illnesses.
- Premature and neonate patients are highly vulnerable to risks of infection, respiratory complications, and issues with feeding and temperature regulation.
- Limited capacity for communication and cooperation in young children.
- High levels of dependency on others (e.g., parental/caretaker observation and assessment of problem).
- Pediatrics covers many stages of development from newborn to adult.
- Changes in patients can make diagnosis difficult (e.g., weight, height, physiologic and developmental maturation).

- Frequency of childhood diseases and injuries (whose presentation can also be misleading and a source of misdiagnosis).
- Medication errors due to weight-based miscalculation of dosages.
- Cultural, political, religious, and societal beliefs as well as misinformation relating to vaccines, therapies and treatments.
- Language and literacy barriers.
- Disputes as to which parent or guardian has medical decision-making authority.
- Constantly changing laws and regulations relating to whether a minor patient can provide medical consent or whether it remains solely with the parent/guardian.
- High-volume specialty (many patients, many visits, many telephone calls, and the addition of telehealth care).

Risk management strategies a practice might consider include:

- **Education and Training:** Ensure that every member of the care team receives frequent and ongoing education and training specific to pediatrics including care standards, safety protocols, legal requirements, and risk management practices.
- **Pediatric-Specific Guidelines:** Implement clinical guidelines specifically designed for pediatric patients to ensure appropriate care.
- **Develop Risk Reduction Strategies Specific to the Practice:** Evaluate past adverse events including “near misses” and specific areas to determine where risk can be mitigated. Develop risk reduction strategies specific to the practice and document those strategies in written policies where appropriate.
- **Communication:** Develop a rapport with patients and families by demonstrating empathy and effectively communicating with them. Communication includes education, active listening by the provider, and removing any barriers that exist including those relating to language and literacy. Be understanding of another person’s beliefs but explain in a non-judgmental manner the benefits of the recommended care to the patient/parents. Develop a mutually agreed upon plan of care. If unable to achieve an agreed upon plan, and the refusal to follow your recommendation is likely to result in significant harm to the patient, consider involving the facility ethics committee, an SVMIC Claims Attorney or (in extreme cases) the Department of Children’s Services. Review patient/family complaints to detect ways to improve communication.
- **Documentation:** Timely and thoroughly document all encounters with patients and family members including who were present. Document all after-hours telephone calls as well as any informed consent discussions in detail.

For further guidance please review the American Academy of Pediatrics Practice Management article, *Protecting the Practice from Medical Liability*, April 4, 2024, or contact an SVMIC Claims Attorney at 800-342-2239 or ContactSVMIC@svmic.com.

Closed Claim Review: The Will to Win



The prospect of being sued is unnerving at best, terrifying at worst. Although I don't know this from personal experience, I have talked to hundreds of our providers when they have called to report a lawsuit that has been filed against them. Thus, I know the range of emotions that most of the readers of this article, who have been through a medical malpractice lawsuit, experience. Any concern is only exacerbated when the patient has suffered a catastrophic injury or there has been a loss of life. Even if that is not the case, the stress is real. That is the negative part of this article. The positive part is that what seems like worst case scenarios can turn out to be wins. Any provider who has been through a lawsuit with us knows that they are assigned an excellent defense lawyer and have the full backing of the SVMIC claims team to navigate your way through the process. But that is only two thirds of what is needed to be successful regardless of how success is defined. The last third of the equation is you, the reader. And what is needed from you is the will to win.

In giving lectures or presentations, I have found that what providers love the most are war stories. Particularly when there is a positive ending. I am going to write about three cases

that were dangerous and complicated. All three resulted in defense verdicts due to the defendant providers believing in their care, themselves, and being invested in the process with their defense lawyers. The first involved a case out of Kentucky with a 55-year-old female who cleaned horse stables. She presented to the ED with paraspinal tenderness in the left mid-back area along with point tenderness over the paraspinal muscles. She was treated and released with medications for pain and muscle spasms. This was the beginning of a tortuous yearlong course. The ending of the medical story is that the patient developed an infection that seeded in her spine, diskitis. The diskitis finally became angry and ate away the spinal column leading to paraplegia. The basis of the lawsuit involved the multitude of visits to her primary care physician and the local ED for an array of medical issues. Essentially, she went through a year of treatment with various providers for various issues but during this time the diskitis was never completely addressed with curative long-term IV antibiotics. Instead, the patient received occasional oral antibiotics that had the effect of slowing but not eliminating the spinal infection. But the patient's PCP informed her that she had diskitis. This physician had even offered to pay her travel expenses to Louisville to allow treatment for this condition. But the patient refused. Then, she repeatedly presented to the ED but never disclosed that she had diskitis. The patient allowed this condition to go untreated and became paralyzed. The lawsuit was filed against her PCP, the ED physicians, the surgeon who removed the abscess, and a hospitalist who had cared for the patient. These five physicians were adamant that they had provided great care based on the information they had available to them in real time. They never wavered on their desire to have their day in court to defend their care. Their confidence and resolve, along with excellent expert support, made the decision easy to take this case to trial despite the potential for a large verdict due to the patient's paraplegia. After six days of trial, the jury unanimously agreed that none of the physicians had deviated from the standard of care and returned with a defense verdict for all.

There are moments in our history when the resolve to keep fighting can be tested by the passage of time. Well over a decade ago, a 25-year-old male presented to a suburban Alabama ED and reported having sharp chest pain, radiating to the left arm as a tingling sensation, and sweating that started when he became upset at work. During triage, he reported that the pain was gone. After taking a history, performing a physical examination, and reviewing an EKG, our emergency room provider diagnosed the patient with "CP [Chest Pain] – Resolved." Our provider instructed the patient on medications to take and told him to follow-up with his primary care provider. The patient was found deceased at home the next morning by a relative. The autopsy report listed coronary atherosclerosis as the cause of death with no acute MI seen, and no complete arterial occlusion or PE seen. Suit was filed and the allegations against our provider were failure to properly evaluate, diagnose and/or treat the patient's underlying heart disease, misinterpreting the EKG, failure to perform a medical screening exam, and failure to stabilize the patient before discharge. To counter these allegations, our defense lawyers obtained expert opinions from five very credible experts. The first said that the patient was an "unusual host" due to his young age as well as his presentation. Because of these elements, the slightly abnormal EKG was not concerning. He too would have discharged the patient. Our next expert supported the evaluation and discharge, saying the patient was unlikely to have

survived the event even if he had been hospitalized. Our third concurred with our second expert and added that even if the patient had been kept for enzymes and scheduled for a stress test the following morning, he would not have survived. Our expert cardiovascular pathologist believed the patient died from a fatal arrhythmia caused by stenosis and ischemia. Our fifth expert believed our provider had no reason to suspect CAD in a patient of this age and physical condition. Trial dates were set and continued multiple times. The litigation bogged down for other various reasons. And then a pandemic hit further delaying the trial. What was consistent during this time, however, were demands by opposing counsel to settle the case. But each time, our provider said no. We fully supported that decision each time. Finally, the trial took place. It lasted two weeks. It was emotional when the family members testified. Two jurors sobbed during the mother's testimony. Our experts performed at peak level as did our provider while on the stand. On the tenth day the jury got the case to decide. It only took them an hour to give a unanimous defense verdict for our ED provider.

A few years ago, in a small town in Arkansas, an 85-year-old male was admitted to the hospital after being diagnosed with flu. He was stabilized and appeared to be doing well. But late in the evening, he had an acute event. His heart rate was in the 150s, his oxygen saturations were in the 60s, and he was unresponsive and struggling to breathe. The RRT was called. One of the members of that team was our insured nurse practitioner assigned to the ICU that night. She, as well as nurses and two hospitalists, quickly arrived to the room. Based on the circumstances, all the providers agreed they needed to intubate him before taking him anywhere. Our NP covered her standard pre-intubation checklist and prepared to intubate him. She tilted his head and lifted his chin. In doing so, she realized his neck was very stiff. There was not any flexion in his neck, even when they removed the pillow from under his head. He had no range of motion in his neck. She gave etomidate to relax the patient and make it easier to manipulate his stiff neck and allow her to more easily achieve the airway. She asked for the glidescope. As she was working with the glidescope and starting the intubation, she heard a pop. It happened when she was lifting the chin. Immediately when the neck popped, it flexed with the tension alleviated, and she was able to secure an airway. The patient's O2 sats immediately increased and the patient was taken for testing as to the cause of the acute event. A few weeks later the patient succumbed to his flu and passed away. To our surprise, a lawsuit was filed alleging that our NP broke the patient's neck during the intubation causing the patient's death. The allegations were that she should not have intubated him because they could have kept bagging him and transported him to a more controlled setting to get the intubation done; she should have waited for the EM MD to come to the room to assist with the intubation; and/or when she started prepping the patient for intubation and recognized a stiff neck/no neck ROM, she should have abandoned the intubation or changed technique. What was discovered after the intubation was that the patient had a condition known as diffuse idiopathic skeletal hyperostosis (DISH). This was unknown to anyone at the time of the intubation. We quickly developed strong expert support that immediate intubation was required, or the patient would have passed away. The allegation of waiting for the ED physician to arrive was easily refuted as that provider was treating another emergency at the time. But most importantly, we had proof that our NP was by far the most qualified

available provider to perform the intubation as she had performed over 300 of them prior to this event. No other available provider had ever intubated a patient. As the trial date approached, opposing counsel made a settlement demand on our NP. Her defense lawyer was duty bound to tell her of the demand even though we all agreed that this case needed to be tried. Emboldened by the strong defense that had been built, our NP replied that she had no desire to settle the case because “I did not do anything wrong.” We completely agreed as did the jury. It only took them an hour and half after a five-day trial to render a unanimous defense verdict in her favor.

These three cases are but a small sample size of the defense verdicts we have had over the years. But all three exemplify that even when the medicine is complicated, the facts are contested, and the outcomes are devastating, trials can be and have been won. The common thread through these three cases, and all the others, is the providers’ belief in themselves and being an advocate for their care with the aid of defense counsel and SVMIC. It takes a team effort to prevail in these cases. But more to the point, what impresses juries and ultimately carries the day is the defendant provider and how they perform at their deposition and at trial. When there is a will to win, there is a likelihood of success. I know because I saw it firsthand in all three of these cases.

We Are All Patients



I had the bad fortune to suffer an injury recently, but it gave me the opportunity to evaluate navigating the healthcare system as a patient. While these observations aren't meant to be a reflection on *your* practice, they are provided to offer a lens into our collective continual opportunity for improvement.

No easy button. Getting an appointment remains a friction-filled process. Locating the phone number, getting a scheduler on the line, and seemingly having to convince them to book an appointment feels wildly wrong. I walked out of several care settings, thinking, "Geez. I am paying for this service..." Self-scheduling was available, but only on a limited basis -- and seemed nearly as clunky as calling the practice. Focus on your scheduling process -- in essence, it is your practice's sales department, so make it easy for the patient.

Enough with the forms. We have long obsessed with our forms, and I was hoping that we had loosened the grip. However, I was handed forms in all colors (true story - pink, yellow, and green), but most annoying were the questions on repeat. Asking the patient via two forms, then by the medical assistant, and finally the physician - it left me wondering if anyone was communicating with one another? If you ask the patient once, don't request it again unless you have to by law.

Cost of care. Revenue cycle management is a vital function of your practice, yet engagement with the patient may not match your after-visit efforts. In my case, I was given several important options during my care. Perhaps I needed additional imaging? Another referral might be required? Maybe a good brace [for the injury] would help me? Etc. When I probed gently about the cost - an important decision-making factor in all other aspects of my life – I was greeted with a puzzled look. I recognize that the reimbursement system is very complex, but it's crucial to honor the patient for this consideration even if just to acknowledge cost as a determinant.

Thin walls. At one front office, I arrived five minutes late for my appointment. The appointment was for 11:45 am, and I was checking in at 11:50. Because I had been a dutiful patient in completing my registration on a pre-visit basis, my time to check-in was a matter of seconds. As I was sitting down, the phone rang at the front desk. I could hear the receptionist saying: "Well, y'all are the ones who scheduled her so close to lunch. I can't help it that she's here. Someone's got to come get her..." [and so forth]. Whether your team is frustrated with each other, the system – or whatever it may be, it's not appropriate to take it out on the patient. The walls are thin – recognize that patients are *a/ways* listening.

The lesson? Look around. Be observant. Put yourself in the patient's shoes, and remember, we are all patients ourselves at one time or another.

The contents of The Sentinel are intended for educational/informational purposes only and do not constitute legal advice. Policyholders are urged to consult with their personal attorney for legal advice, as specific legal requirements may vary from state to state and/or change over time.