

More Than Clinical: How AI Supports Compliance and Risk Management

Using Artificial Intelligence for More Efficient Compliance Procedures

Is your health care organization using artificial intelligence (AI) yet? Should you be? You have probably heard about the promise of what AI can do for improved patient care diagnostics and precision medicine. But what about its use in non-clinical settings? Even today, there is real value in using AI to work more efficiently.

A 2019 report found that 41 percent of health care executives ranked AI as the technology that will have the highest impact on improving their organizations' operations in the next three years. Current use cases are found in areas such as contact centers, finance and billing, medical chart reviews, and patient self-service.¹

Any department that requires repetitive, labor-intensive review of high volumes of documentation—such as billing, legal, security, and compliance—is a candidate for using AI. Without applying AI, these repetitive, transactional activities are typically fulfilled by humans, which take longer, cost more, and are susceptible to human error. Imagine, for example, AI helping to scan data in seconds to perform a legal review, which would otherwise require a human to read hundreds of pages.²

We are not advocating for AI to replace human interaction, or even replace existing technology investments. Rather, AI can be used to supplement systems that a health care organization purchased in the last decade that may not have capabilities to support new types of operational, administrative work. Also, with AI performing the labor-intensive content review, the human interaction is elevated to more valuable, higher order decision-making functions.

Let's explore three use cases for AI in security and compliance that might help you decide whether to employ an AI solution at your organization.



Gerry Blass is the president and chief executive officer (CEO) at ComplyAssistant and can be reached at gerry@complyassistant.com.

LinkedIn: www.linkedin.com/in/gerry-blass-917a482/



Robert F. Porr, CHC, is a principal at Furnace Brook HealthCare Management Advisors, LLC and can be reached at robert.porr@fbhca.com.

LinkedIn: www.linkedin.com/in/robertporr

CONTRACT LIFECYCLE MANAGEMENT

Ninety-two minutes versus twenty-six seconds. That is the length of time it took humans and AI, respectively, to review five legal documents in a recent study conducted with Stanford University, Duke University School of Law, and University of Southern California. In addition, AI was 10 percent more accurate in its review.³

Now, think about the thousands of corporate agreements that any given health care system is required to manage. Ideally, to remain in compliance with every single contract—whether it is a lease agreement, a physician affiliation, a contracted employee, or a purchase contract—health care organizations should review them every year. Due to the sheer volume and complexity, conducting an annual review like this is rare. Today, however, AI can help.

A few examples of contract lifecycle management that can benefit from the use of AI include the following:

- Review multiple contracts with the same entity to uncover any inconsistencies;
- Review contracts for compliance with federal or multi-state requirements;
- Flag lease contracts that are up for renewal;
- Review physician privilege contracts for renewal and update; and
- Cross-reference physician credentials for compliance with the Stark law.

Wouldn't it be better if 5,000 contracts could be reviewed in a week's time using AI, rather than redirecting 20 full-time employees to manually review them over several months? Or perhaps you have acquired, plan to partner, or have merged with a facility where thousands of agreements necessitate review for evaluating risk. How much easier would this process be with AI to flag high-risk areas?

With the assistance of AI to review documents for routine details, human time and expertise can be put to better use on more important tasks that truly require human touch and decision-making ability.

VENDOR RISK MANAGEMENT

Have you ever noticed another hospital's name in your contract with a software vendor? It happens. Since most standard agreements are template based, especially non-disclosure agreements (NDAs) and purchase contracts, it is crucial to make sure your organization reviews every single contract for consistency and accuracy.

Again, this type of review should be conducted annually. Using AI for an annual review of business associate agreements (BAAs), you can more quickly and easily answer these types of questions:

- Has the contract expired?
- Is the contract up to date with all security and compliance procedure rules, including recent changes?
- Have business associates (BAs) complied with required risk assessments per the contract?
- Are there trends in high-level risks with certain vendors?
- Is the contract in compliance with state and federal regulations?
- Are downstream BAs covered in the contract, and are their agreements up to date?

The first step health care organizations should take is to inventory all BAAs and document each BA's inherent risk of using protected health information (PHI). For the typical health system, this inventory could mean hundreds or even thousands of contracts. To accurately comply with an annual review, using AI would be the most efficient method.

Once inherent risk is determined, the pool of high-risk contracts should be considered for further audits on controls; AI can also help automate selection of which contracts and BAs require further audit controls. Although AI can identify anomalies and gaps, humans can then use that data to work directly with their BAs to reduce risk and prevent breaches.

RISK MODELING

Security, privacy, and information technology (IT) teams already use a variety of

technological solutions to thwart potential security breaches, such as honeypots and email filters. AI can go a step further to examine exceptions or abnormalities in behavior that could indicate potential risk to the security of PHI.

For example, machine learning can examine an electronic health record (EHR) database to determine whether someone is logging on to the system in the middle of the night, when typical login hours are between 9:00 a.m. and 5:00 p.m. In this case, suspicious activity could be flagged, and the system would then require a different type of authentication.

Modeling various risks enables organizations to put themselves in the shoes of potential attackers, understanding where they may hit and where weaknesses may exist in the system or network. Health care organizations can then identify critical gaps that need mitigation.⁴

BONUS USE CASE: REVENUE CYCLE

Industry experts assert that revenue cycle is ideally suited for the application of AI.⁵ With thousands of bills distributed and paid monthly, there is an extremely high volume of data that can be used to improve revenue cycle and billing compliance.

Predicting Claim Denials

Claim denials often occur due to human error in managing the high volume of transactions. AI can be used to scour data, learn how a denial might happen, ultimately leading to changes that can prevent denials in the first place.⁶

Predicting Patient Payment Cycle Time

By understanding how a population of patients pay their bills—including length of time to pay and how they pay—health care organizations can tailor payment communications and options for optimal cycle times.⁷

Predicting Potential Fraud

Federal and state organizations are already using AI and machine learning to model

billing behaviors and discover indicators of fraud. AI can build models around use rates, projected procedures, and illnesses associated with certain zip codes. For example, AI can look for spikes of Medicaid claims in geographic areas that should not typically have such claims. This type of pattern can unveil instances of fraud.

IS AI RIGHT FOR YOUR ORGANIZATION?

Though AI can be a tremendous help in high-volume, transactional, and operational tasks, it does come with some considerations. Here are a few essentials:

1. Can you afford it? There are AI applications for different types of providers and specific applications such as access management and electronic medical record (EMR) system management. Decide what areas need the most support (*e.g.*, billing) and justify that against the use of human time. You may find that the investment is worth it.
2. Be ready for the system to learn. The idea is to go from retrospective (a review of current state) to prospective (what should be). You will need to employ organizational change management to handle the important data and decisions that AI will provide.
3. The size of your organization doesn't matter. Even solo practitioners are being fined by the federal government for issues such as billing errors, and it is simply not feasible for a human to check each bill before it goes out the door. Bottom line, AI can be used in any size or scope of health care provider.
4. Don't think of AI as a "rip and replace" exercise. Instead, think of it as a supplemental tool to the people, applications, and technology that already exist in your organization.
5. Develop an AI strategy. Many organizations approach AI in pieces for certain departments or use cases; however, disparate use overlooks the need to operate in a larger ecosystem, which algorithms are designed to do.⁸

6. Be aware of the risk. Even with its benefits, AI is still a technological solution and comes with the same security and privacy risks as any other technology. Make sure you evaluate your vendor, and ensure your BAA meets your internal standards of compliance.
7. Get an outside expert to weigh in. It is important to have an objective third-party review before you make a decision on how best to use AI to supplement existing investments. Have an independent consultant help ensure appropriate checks and balances are in place before you implement AI, to reduce any risk.

There are proven operational and compliance uses for AI in health care settings, not just clinical care. It is worth considering, especially for the tasks that are high in volume and difficult for humans to accomplish efficiently. Also, because AI is constantly learning, it is also constantly helping you make better, faster decisions. Though AI applications are a monetary investment, you will add value to your organization by having your highly skilled full-time employees do more strategic and value-added work.

Endnotes

1. Digital Health Tech Vision 2019 (accenture.com). Available at https://www.accenture.com/_acnmedia/

- PDF-102/Accenture-Digital-Health-Tech-Vision-2019.pdf#zoom=50
2. Digital Health Tech Vision 2019 (accenture.com). Available at https://www.accenture.com/_acnmedia/PDF-102/Accenture-Digital-Health-Tech-Vision-2019.pdf#zoom=50
3. **Interesting Engineering.** *AI Proves to Be 10% Faster and More Accurate Than Top Human Lawyers.* February 27, 2018. interestingengineering.com/ai-proves-to-be-10-faster-and-more-accurate-than-top-human-lawyers
4. Digital Health Tech Vision 2019 (accenture.com). Available at https://www.accenture.com/_acnmedia/PDF-102/Accenture-Digital-Health-Tech-Vision-2019.pdf#zoom=50
5. **Healthcare Finance News.** *Why the hospital revenue cycle is practically begging for artificial intelligence and machine learning.* November 5, 2018. Available at www.healthcarefinancenews.com/news/why-hospital-revenue-cycle-practically-begging-artificial-intelligence-and-machine-learning
6. **Healthcare Finance News.** *Why the hospital revenue cycle is practically begging for artificial intelligence and machine learning.* November 5, 2018. Available at www.healthcarefinancenews.com/news/why-hospital-revenue-cycle-practically-begging-artificial-intelligence-and-machine-learning
7. **Healthcare Finance News.** *Why the hospital revenue cycle is practically begging for artificial intelligence and machine learning.* November 5, 2018. Available at www.healthcarefinancenews.com/news/why-hospital-revenue-cycle-practically-begging-artificial-intelligence-and-machine-learning
8. **InformationWeek.** *Are You Ready to Manage AI Risks?* April 23, 2019. Available at www.informationweek.com/strategic-cio/security-and-risk-strategy/are-you-ready-to-manage-ai-risks/a/d-id/1334489

Reprinted from Journal of Health Care Compliance, Volume 21, Number 6, November–December 2019, pages 35–38, with permission from CCH and Wolters Kluwer.
For permission to reprint, e-mail permissions@cch.com.
