



E-BRIEF

**AAPC**

# AI Adoption That Protects Accuracy and Revenue

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**Stephani Scott**

RHIT, CPC  
VP AAPC Services



**Tracy Smaldino**

CPMA, CPC  
Medical Auditor Sales Liaison



# Introduction

AI documentation and coding tools are moving quickly from pilot programs to daily workflows. For healthcare leaders, the promise is clear: less administrative burden, faster revenue cycle performance, and more consistent documentation. But the risks are just as real when AI output affects coding accuracy, medical necessity, reimbursement, compliance, and audit exposure.

This eBrief looks at where AI is delivering value, where it still falls short, and what organizations need to put in place before scaling AI-driven documentation and coding. The goal is not to slow adoption. It is to help leaders implement AI with the governance, validation, and human oversight needed to protect accuracy, compliance, and revenue integrity.





## The breaking point in healthcare operations

Healthcare organizations are operating under sustained financial and operational pressure, and the cracks are showing. Physician burnout, staffing shortages, and an escalating denial crisis are forcing leaders to rethink how clinical documentation and coding workflows are structured.

Physicians continue to spend significant time on EHR documentation, often completing notes after hours during what many call “pajama time.” At the same time, revenue cycle teams face increasing scrutiny around documentation accuracy, compliance, and reimbursement integrity.

These converging pressures are accelerating adoption of AI-driven documentation and coding tools. The question is no longer whether healthcare organizations will use AI. It’s how to do it responsibly.





### Early successes and real-world momentum

AAPC's validation work reinforces this picture. When AAPC began auditing ambient scribe technology in 2023, the platform was already outperforming national physician benchmarks for E/M coding accuracy, typically in the 73–77% range.

Through a structured audit-and-iterate validation process, performance improved to over 95% accuracy across seven specialties, including family medicine, internal medicine, geriatrics, cardiology, dermatology, and sleep medicine. That improvement reflects what happens when AI tools are supported by consistent, expert-led oversight.

Similar trends have appeared in other AI-enabled technologies AAPC has validated, including HCC risk adjustment platforms and autonomous coding solutions. When organizations use structured validation and continuous feedback loops, they can improve coding accuracy, documentation integrity, and performance reliability.

However, early success does not represent the full picture. The same validation process that highlights gains also consistently identifies areas where AI under performs. These findings are critical for informed decision-making and responsible scaling of AI-driven documentation and coding tools.





# Where AI still gets it wrong

Despite progress, AI documentation and coding tools continue to show predictable error patterns that introduce compliance, financial, and reputational risk. AAPC audit findings across ambient scribes, CAC platforms, and AI coding assistants show that baseline accuracy varies by tool type:

- Ambient scribes: 77–91%
- AI coding assistants: 86–91%
- CAC tools: strong performance in structured settings, but continued difficulty with clinical nuance without workflow support

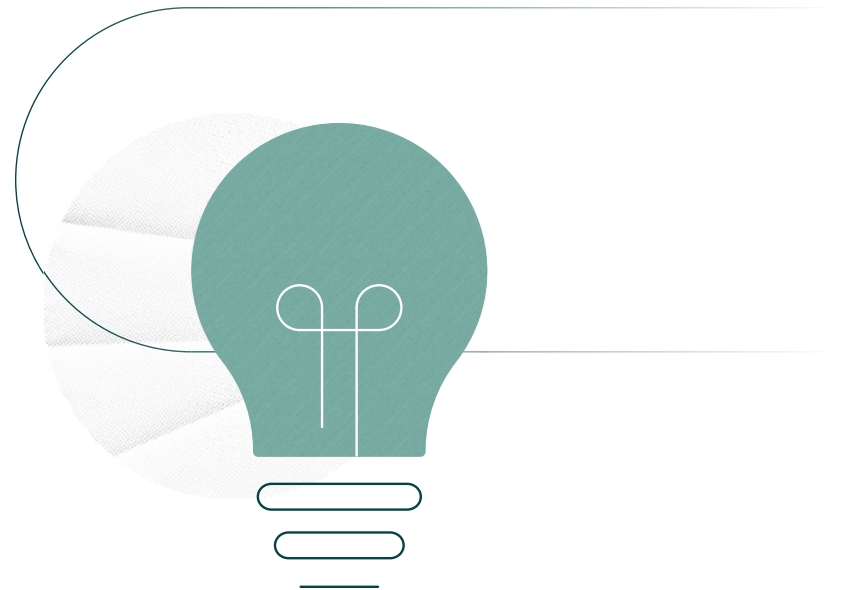
Common documentation issues include:

- Missed or incomplete data capture, such as labs, orders, or external data not linked to the note
- Misinterpretation of risk and medical decision making
- Errors distinguishing acute vs. chronic conditions
- Hallucinated or inferred clinical details when models attempt to fill documentation gaps

For coding-focused tools, recurring errors include:

- Confusion between active and historical conditions
- Lack of ICD-10 specificity
- Incorrect use of combination codes
- Inclusion of symptoms alongside definitive diagnoses
- Inaccurate E/M leveling due to misread risk or data elements

These patterns do not invalidate AI's value. But they do show why scaling without governance introduces measurable clinical, compliance, and financial risk.





## Reframing AI for governance and revenue integrity

Here is the perspective shift that matters most for organizational leaders: AI documentation and coding should not be positioned as a technology project or a productivity initiative. It is a governance, compliance, and revenue integrity program. Organizations that overlook that reality may be under prepared for its financial and regulatory implications.

AI-generated documentation directly affects reimbursement, quality reporting, audit exposure, and compliance posture. A misplaced diagnosis code or inaccurately assigned risk level is not just a documentation gap. It can result in inappropriate reimbursement, failed audits, or regulatory scrutiny. The U.S. Department of Health and Human Services Office of Inspector General has already signaled increased attention to algorithm-assisted coding patterns, and some Medicare Administrative Contractors now require disclosure of AI usage during certain audits. The compliance landscape is evolving quickly, and organizations that get ahead of it will be in a far stronger position than those that react to it.

Effective governance starts with formal oversight structures for AI tools. It means requiring independent, external validation of AI output accuracy on an ongoing basis, not just during initial onboarding. It means requiring independent, external validation of AI output accuracy on an ongoing basis not just during initial onboarding. It also means holding technology vendors accountable.

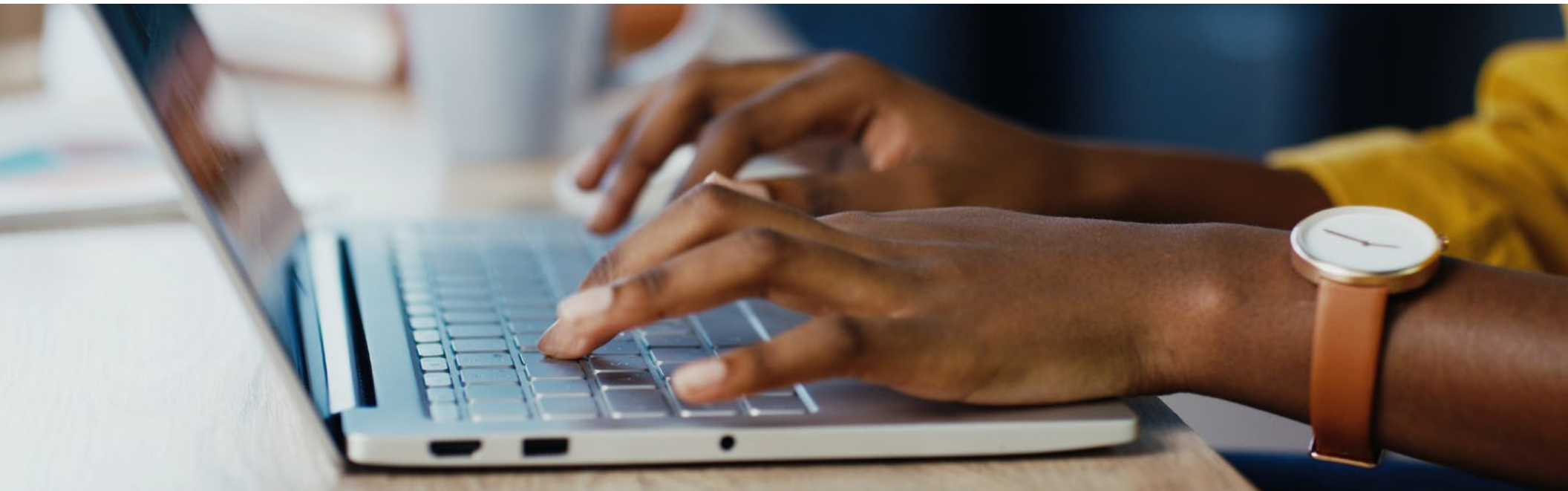
AI vendors must implement formal, ongoing compliance and audit programs that continuously test, validate, and document the accuracy, reliability, and regulatory alignment of their logic, workflows, and outputs at a rigor equivalent to the compliance standards expected of healthcare organizations. Organizations should require this as a condition of any vendor partnership, not as an afterthought.



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External, independent auditing is central to this governance model. An unbiased third-party review provides the validation that internal teams and vendors cannot objectively provide for themselves. As AAPC's work with AI technology vendors demonstrates, independent audit-and-iterate cycles are what drive meaningful, sustained accuracy improvement not just a one-time assessment. As the AI tool market matures, partnerships with independent audit organizations should become a standard and expected component of responsible AI deployment.

Finally, the human in the loop is not optional. The most successful implementations maintain physician, coder, auditor, and CDI professional review and sign-off on AI-generated output throughout the process particularly during early adoption and scaling phases. Getting providers to fully trust AI for their clinical charting is a steep learning curve, and that trust must be earned through demonstrated accuracy, not assumed because a vendor's demo looked promising. Organizations should also ensure that every revenue cycle department has a seat at the table during the build and configuration phase. Gaps discovered after go-live are far more costly to correct than those identified before the first note is generated.





# A new standard for auditing AI documentation and coding

As AI tools reshape how documentation and coding are generated, traditional audit methodologies must evolve alongside them. Standard compliance audits were designed for human-generated documentation. Auditing AI output requires a broader, more clinically integrated approach. Organizations that apply conventional methods to AI-generated notes may miss the systemic patterns that matter most.

Effective AI auditing begins with scale. Standard sample sizes are insufficient to surface the error trends and systematic biases that only become visible across larger data sets. AI audits require larger, more representative samples to evaluate not just individual encounter accuracy but patterns across providers, specialties, and documentation types. We recommend 150 notes per specialty or provider is recommended. The audit must also extend well beyond code validation. Reviewing whether the correct code was assigned is only part of the picture. The more important questions are whether the documentation accurately reflects the patient's encounter, whether it supports medical necessity, and whether it would withstand external audit scrutiny.

For E/M coding specifically, this means auditing each component of medical decision making — problem complexity, data review, and risk — not simply confirming that a level was assigned. It means verifying that the documented level of service is supported by the clinical narrative, not just by a template or a checkbox. For ICD-10 coding, it means assessing condition status, chronicity, specificity, and whether the clinical evidence in the record supports

each code reported. For CPT® and procedure coding, it means confirming that documentation satisfies all required elements for the reported service, not just that a code was generated.

This expanded audit model must also incorporate CDI expertise. Auditing AI-generated notes is not purely a coding function. Clinical documentation integrity professionals play a critical role in evaluating whether the documentation accurately tells the patient's story and reflects the true complexity of care delivered. Bringing CDI into the AI audit process is essential.

AAPC's gold-standard approach — audit, educate, and re-audit — applies here with even greater urgency. In the AI environment, findings must be fed back not only to clinical and coding teams but directly to technology vendors, so that model improvements are informed by real-world compliance data rather than controlled testing environments. That feedback loop is what transforms an AI tool from a liability into a genuine asset.





### How AAPC can help

AI can create meaningful value in documentation and coding workflows, but only when accuracy, compliance, and revenue integrity are built into the process. AAPC helps healthcare organizations and technology vendors validate, navigate, and optimize AI in healthcare with:

- **AI documentation and coding validation** to assess output accuracy across providers, specialties, and encounter types
- **Independent audit reviews** to identify error patterns and support measurable improvement over time
- **CDI-focused documentation review** to confirm that AI-generated notes reflect the patient story and support medical necessity
- **Vendor performance validation** to give organizations and technology partners objective insight into AI accuracy, reliability, and compliance risk
- **Education and training** for providers, coding teams, CDI teams, auditors, and vendor partners





### The bottom line

AI documentation and coding tools are rapidly improving, and the operational benefits are real. They are reducing documentation burden, accelerating revenue cycle performance, improving documentation consistency, and helping address physician burnout at a time when healthcare cannot afford to lose more providers. Technology is no longer a future consideration. It is here, being deployed at scale, and shaping the clinical record every day.

But AI is not a shortcut to quality. It requires oversight, education, and accountability from people who understand both the technology and the regulatory environment it operates in. Organizations that treat AI as a governance and revenue integrity initiative from day one will be better prepared to protect documentation quality, revenue integrity, and long-term compliance.





### Resources

1. Scott, S. (2021, August 2). *Audits Are the Heartbeat of Your Compliance Program*. AAPC Knowledge Center. <https://www.aapc.com/blog/80429-audits-are-the-heartbeat-of-your-compliance-program/>
2. Scott, S. (2024, November 1). *A Case for Coding-Aware AI Scribes*. AAPC Knowledge Center. <https://www.aapc.com/blog/91459-a-case-for-coding-aware-ai-scribes/>
3. AAPC Audit Services. *Ambience AI Scribe Validation Case Study*.
4. AAPC Audit Services. *AI Validation and Audit Services Overview*.
5. Medical Group Management Association (MGMA). (2025). *Artificial Intelligence Issue Brief*. <https://www.mgma.com>
6. MGMA. *Combatting Payer Downcoding: What Medical Practices Need to Know in the Age of AI*. MGMA Podcast. <https://www.mgma.com/podcasts/combating-payer-downcoding-what-medical-practices-need-to-know-in-the-age-of-ai>
7. American Health Information Management Association (AHIMA). *Consideration for Evaluating and Planning for AI in Revenue Cycle*. Journal of AHIMA. <https://journal.ahima.org/page/consideration-for-evaluating-and-planning-for-ai-in-revenue-cycle-5>
8. Becker's Hospital Review. *Healthcare's Billion-Dollar AI Challenge*. <https://www.beckershospitalreview.com/healthcare-information-technology/ai/healthcares-billion-dollar-ai-challenge/>
9. Oatmeal Health. *The Truth About Healthcare AI and Why It Has Failed So Far*. <https://oatmealhealth.com/why-has-ai-failed-so-far-in-healthcare-despite-billions-of-investment/>
10. ICD10Monitor / MedLearn Publishing. (2025, March 3). *AI and Augmented Intelligence in Clinical Documentation Integrity*. <https://icd10monitor.medlearn.com/ai-and-augmented-intelligence-in-clinical-documentation-integrity/>
11. Practolytics. *Technological Advances in Medical Coding*. <https://practolytics.com/blog/technological-advances-in-medical-coding/>
12. Oxford Global Resources. (2024, December 17). *The Future of Medical Coding: Discover the Benefits & Challenges of AI in Coding*. <https://www.oxfordcorp.com/insights/blog/the-future-of-medical-coding-discover-the-benefits-challenges-of-ai-in-coding/>
13. Medwave Billing & Credentialing. (2024, September). *How AI Is Improving Medical Coding Accuracy and Efficiency*. <https://medwave.io/2024/09/how-ai-is-improving-medical-coding-accuracy-and-efficiency/>



## Stephani E Scott

RHIT, CPC | VP AAPC Services

**Stephani Scott, RHIT, CPC**, Vice President of AAPC Services, has over 25 years of experience in the healthcare industry, working closely with physicians and staff in health information management. She has worked in a variety of settings including hospital, long-term care, large multispecialty physician practice, and electronic health record software design and development. Scott has extensive experience in inpatient and outpatient auditing and coding compliance and is responsible for overall project performance and client satisfaction. Scott was also a part-owner of a consulting company for many years, providing services in best practices for physician practice management services including coding, billing, and revenue cycle management audits.



## Tracy Smaldino

CPMA, CPC | AAPC Medical Auditor Sales Liaison

**Tracy Smaldino, CPMA, CPC**, brings over 20 years of experience in the healthcare industry, with deep expertise in auditing, training, and compliance across all sectors. She has partnered with large healthcare systems and multi-specialty practices, where she has played a pivotal role in supporting accurate documentation and adherence to regulatory guidelines. Tracy is passionate about collaborating directly with auditors and providers to deliver education and clear direction on proper documentation and compliance standards. She has extensive hands-on experience with various EHR systems and audit tools, making her adaptable and tech-savvy in a fast-evolving landscape. Her diverse background spans the entire revenue cycle, including billing, coding, auditing, and compliance. Tracy has also served as a Compliance Officer, where she prioritized the development and ongoing improvement of compliance plans.



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