



35 W. Wacker Dr., 16th Floor, Chicago, IL 60601 | www.ahima.org | 312.233.1100

April 30, 2024

The Honorable Ami Bera, MD
US House of Representatives
172 Cannon House Office Building
Washington, DC 20515-0506

RE: Response to Request for Information on Use of Artificial Intelligence in the Healthcare Industry

Submitted via email to bera.ami@mail.house.gov

Dear Representative Bera,

Thank you for the opportunity to provide feedback to ensure we are prepared for the continued deployment of artificial intelligence (AI). In coming years, AI and machine learning (ML) will change not only the way healthcare and health information is delivered, administered, and managed, but will also change the makeup of the healthcare workforce, including the training and skills needed for available jobs in the future.

AHIMA is a global nonprofit association of health information (HI) professionals. AHIMA represents professionals who work with health data for more than one billion patient visits each year. The AHIMA mission of empowering people to impact health drives our members and credentialed HI professionals to ensure that HI is accurate, complete, and available to patients and clinicians. Our leaders work at the intersection of healthcare, technology, and business, and are found in data integrity and information privacy job functions worldwide. AHIMA members also bring the expertise and knowledge around HI and data that is necessary to inform investments in our healthcare system.

We appreciate your commitment to identifying and addressing challenges so that we can collectively create a framework that supports the changes AI will bring in the coming years. As the healthcare ecosystem increasingly deploys and integrates AI and ML into its workflows, we must ensure that any framework includes the operational knowledge and expertise of HI professionals who are vital to the safety of patients, the privacy and security of patients' health information, and the maintenance of the healthcare revenue cycle, which supports over 3.7 billion medical claims per year.

AHIMA offers the following feedback in response to the Request for Information.

Implementation

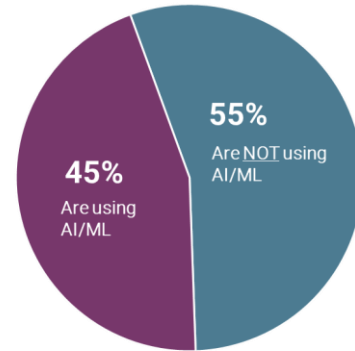
How extensively is AI currently being implemented in healthcare institutions and other settings across the country?

In August 2023, AHIMA contracted with NORC at the University of Chicago to conduct a comprehensive [survey](#) of HI professionals on workforce challenges and the impact of emerging technologies, such as artificial intelligence.¹

The survey found 45 percent of respondents reported that their department uses AI or ML to assist with coding, documentation, or other HI-related workflows, while 55 percent reported not using AI or ML (**Figure 1**).

More than half of respondents (52 percent) reported that their organization plans to increase the use of AI/ML over the next 12 months and 47 percent plan to continue using AI. This indicates that the role of emerging technologies in HI will continue to accelerate in the future. More organizations experiencing understaffing anticipated increasing the use of AI/ML in the next year (55 percent) compared to those who did not experience understaffing (44 percent). This suggests AI/ML tools may have a critical role in addressing workforce challenges, including understaffing.

Figure 1: AI/ML Use

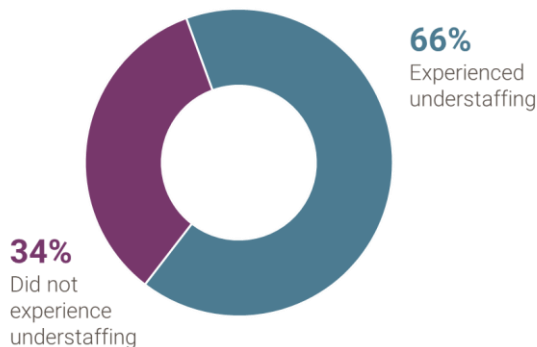


Q20: Does your department use artificial intelligence and/or machine learning (AI/ML) to assist with coding, documentation, or other HI-related workflows? (N=2,388)

What areas of healthcare are benefiting the most from AI integration, and what are the primary challenges hindering further adoption?

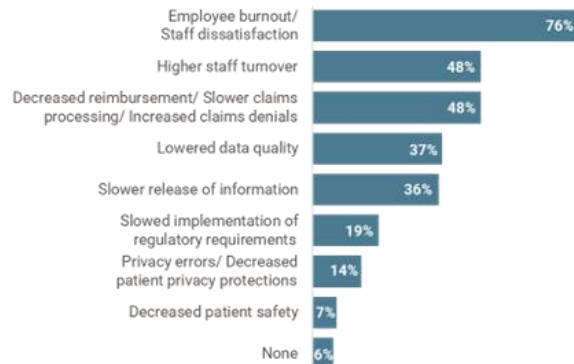
The AHIMA-NORC study also indicated that 66 percent of respondents experienced understaffing of HI positions in the last two years (**Figure 2**). These conditions led to employee burnout and staff dissatisfaction (76 percent), higher turnover (48 percent), decreased reimbursement, slower claims processing and increased claims denials (48 percent), lowered data quality (37 percent), and slower release of information (36 percent) (**Figure 3**).

Figure 2: Understaffing in the Last Two Years



Q8: Has your organization experienced understaffing of HI positions? (N= 2,494)

Figure 3: Impact of Understaffing

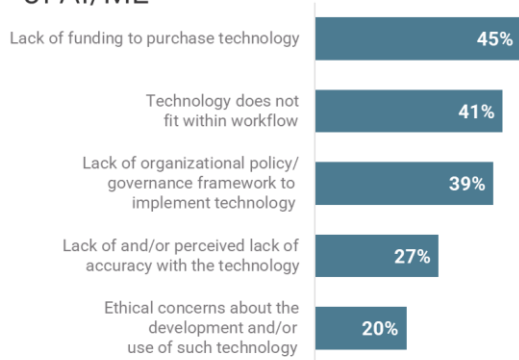


Q9: What consequences of understaffing among HI positions have you seen impact your organization within the last year? Select all that apply. (N=1,645)
 Note: Respondents were able to select multiple response options, so categories do not sum to 100%

¹Available at: <https://7932134.fs1.hubspotusercontent-na1.net/hubfs/7932134/Whitepapers/Workforce-AI%20Study%20Final.pdf>.

That said, the survey indicated that AI has begun to show promise in alleviating some of the challenges that arise from understaffing. Respondents noted that certain AI/ML technologies alleviated staff burnout and overwork. Such tools included autonomous coding (48 percent), administrative workflow assistance (46 percent), chatbots (32 percent), and healthcare utilization management (30 percent). Improved productivity, which may also help mitigate staff burnout, was one of the top benefits cited by respondents using AI/ML tools.

Figure 4: Barriers to Adoption of AI/ML

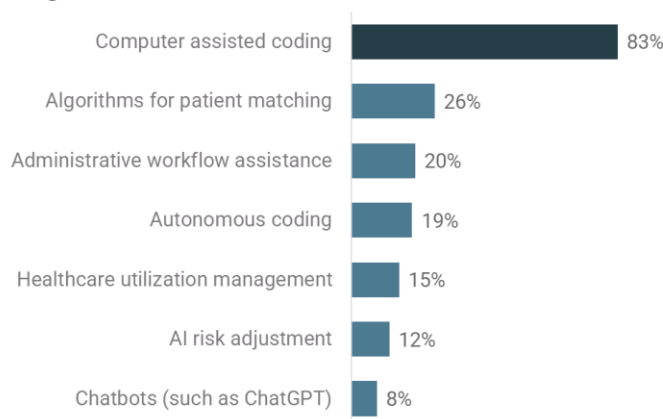


Q21: Why don't you currently use artificial intelligence or machine learning (AI/ML) with coding, documentation, or other HI-related workflows? Select all that apply. (N=1,227)
 Note: Respondents were able to select multiple response options, so categories do not sum to 100%

Among respondents not using AI/ML tools, lack of funding to purchase the technology was a primary reason for not using these tools (Figure 4). Respondents in rural areas were more likely to list lack of funding as a reason for not using AI/ML tools (57 percent) compared to urban and suburban organizations (41 percent and 38 percent, respectively). This suggests lack of funding is a prominent barrier in rural areas. Organizational size is also a factor in whether respondents are deploying AI/ML. Forty-nine percent of respondents from smaller organizations cited lack of funding as a reason for not using AI/ML, compared to 38 percent of respondents from larger organizations.

What are the various applications of AI in clinical or operational contexts?

Figure 5: AI/ML Tools Used



Q22: What types of AI/ ML does your department use? Select all that apply. (N=1,068)
 Note: Respondents were able to select multiple response options, so categories do not sum to 100%

The AHIMA-NORC survey also explored the types of AI/ML in use by HI departments today.

The survey found that the most common AI/ML tool used by HI professionals was computer-assisted coding (83 percent), followed by algorithms for patient matching (26 percent), administrative workflow assistance (20 percent), autonomous coding (19 percent), healthcare utilization management (15 percent), AI risk adjustment (12 percent), and chatbots (8 percent) (Figure 5).

In the AHIMA-NORC survey, respondents identified a mix of benefits (e.g., reduced administrative burden and improved data quality) and challenges (e.g., increased technical burden, oversight, and errors) as a result of the use of AI/ML tools (Figure 6).

In addition to the AHIMA-NORC survey, AHIMA conducted an in-depth qualitative analysis with leaders in the health IT (Information Technology) field, including HI professionals, to better understand the use of AI for non-clinical tasks to support healthcare operations and payment.² The kinds of non-clinical AI used fell into four functional areas: health information management, clinical documentation creation, operational supports, and payer tools (Figure 7).

Figure 6: Potential Benefits and Challenges of AI/ML Tools

Benefits	Challenges
<ul style="list-style-type: none"> Alleviates staff burnout/overwork Reduced administrative burden Improved productivity Reduces staff headcount Reduces departmental expenses Decreased claims denials Improved compliance Increased patient safety Improved data quality 	<ul style="list-style-type: none"> Reduced data quality Increased claims denials Increased errors Increased costs Increased technical burden Increased oversight (need for more QA)/ Increased regulatory reporting burden Lack of skilled workforce Real or perceived bias issues

Figure 7: Types of AI/ML Tools

Functional Area	Examples of AI Tools
Health Information Management	<ul style="list-style-type: none"> Automated/computer-assisted coding Records management Medical records quality assurance Release of information requests
Clinical Documentation Creation	<ul style="list-style-type: none"> Documentation generation (such as notes from ambient listening) Physician in-box management Chart summarization and reports Back-end tools to support queries and documentation completion
Operational Supports	<ul style="list-style-type: none"> Revenue cycle management (such as pre-billing review of claims) Self-service registration and scheduling Customer support automation tools Review and audit of contracts for compliance purposes
Payer Tools	<ul style="list-style-type: none"> Care management (such as reminders and identification of high-risk individuals) Claims processing Automated quality measures Electronic prior authorization tools

With respect to other applications of AI, the potential adoption of ICD-11, the International Classification of Diseases, 11th revision of the international standard for systematic recording, reporting, analysis, interpretation, and comparison of mortality and morbidity data, in the coming years may require greater AI integration in operational contexts.³ In turn, this could present an opportunity to alleviate the cost and burden of an ICD-11 transition while alleviating the administrative burden associated with coding and documentation. The role of AI in ICD-11 implementation should continue to be a key consideration as the transition to ICD-11 in the US is explored.

Efficacy, Accuracy, and Transparency

What guardrails or accountability mechanisms could be set to ensure end-to-end transparency?

While AI has potential to improve healthcare in non-clinical areas, there needs to be consideration for end-users who utilize these AI tools. End-users include but are not limited to clinicians, HI professionals, and patients. Oversight of AI technologies and processes will continue to be a crucial role for HI

² Available at: https://www.ahima.org/media/rovhtiif/ncai-issue-brief_v1-1.pdf?utm_campaign=2024-Q1-AHIMA-AIHub&utm_source=ahima-org-web&utm_medium=pdf&utm_content=pdf-download-link.

³ Available at: https://icd.who.int/en/docs/icd11factsheet_en.pdf.

professionals when deploying and managing AI tools. Additionally, end-users will need the ability to understand how an AI tool arrived at its conclusion in order for a provider or HI professional to provide quality assurance on the results rendered by AI. Appropriate guardrails must be in place to allow for such transparency without creating risk to the AI developer's intellectual property.

How can we ensure guardrails are put in place to mitigate risks such as disparate impact from racial, ethnic, and other biases?

It is vital that data used to train AI is representative of the patient population that the AI tool will be deployed for. Additionally, end-users should be given enough information to assess whether the AI tool will perform as anticipated before deploying the tool. Mitigating the risk of bias should also be a shared responsibility between the AI developer and the clinician. Liability around bias must be taken into consideration with respect to how the tool is developed and used, rather than falling to the end-user or clinician using the tool.

Are there specific examples of AI applications that have significantly improved patient outcomes or streamlined healthcare processes?

In the AHIMA-NORC survey, reduced administrative burden was reported as a key benefit of AI/ML tools. Such tools included: administrative workflow assistance (71 percent), chatbots (53 percent), algorithms for patient matching (49 percent), healthcare utilization management (42 percent), autonomous coding (37 percent), AI risk adjustment (36 percent), and computer assisted coding (22 percent). These tools show the potential to help address staff burnout as a result of understaffing—a key driver of staff turnover. Respondents also noted that certain AI/ML tools alleviated staff burden and overwork, as well as improved productivity.

Ethical and Regulatory Considerations

With the increasing reliance on AI in healthcare decision-making, what ethical and regulatory considerations need to be addressed to ensure patient safety, privacy, and equity?

Currently, there is no regulatory framework in place to require oversight for, testing of, or verification of healthcare AI tools that are deemed outside the scope of the Food and Drug Administration, the US Department of Health and Human Services (HHS) Office for Civil Rights (OCR), or the Office of the National Coordinator for Health Information Technology (ONC). The Biden-Harris Administration has implemented several regulatory requirements that seek to provide additional transparency around data used to train algorithms in certified health IT products. This includes requirements to halt the ability of clinicians to implement and use biased algorithms.

That said, there is no requirement today for AI tools to complete real-world testing in the healthcare environment, limiting the ability of clinicians to understand how an AI tool will operate prior to implementation. Furthermore, while the privacy and security rules required for all healthcare technologies also apply to AI tools used by HIPAA covered entities, the limits of the current HIPAA framework will be strained as AI tools, especially large language models (LLMs) continue to advance. Appropriate regulatory authority by OCR is needed to ensure patient privacy and security is protected in an ever-changing healthcare ecosystem. Part of solving the gap related to AI regulation will also involve creating a framework for understanding when an AI tool is considered market-ready, in addition to ensuring the tool meets the needs of the end-user. Ensuring an algorithm not only meets market

readiness standards for patient safety, but also ensuring it functions as expected is crucial. An AI tool implemented prior to reaching a certain level of technological maturity or one that is not aligned with its intended scope and uses, creates a low trust environment that may cause real harm to individuals or result in other unintended consequences.

How can the use of AI in healthcare provide benefits while safeguarding patient privacy in clinical settings?

Privacy is the bedrock of patient trust and intersects with AI in a number of ways. How patient health data is used in the development of AI tools has implications for patient privacy and should be a key consideration.

It is also important to recognize that AI may help with processes that affect patient privacy. In the AHIMA-NORC survey, 66 percent of respondents reported improved data quality was a benefit when using algorithms for patient matching. Improved data quality for patient matching can lead to fewer overlaid health records, whereby health information from two individuals is combined into one record, reducing concerns around privacy violations under HIPAA and state law.

What regulations, policies, frameworks, and standards should entities utilizing AI adhere to, and what mechanisms are in place or should be in place to supervise and enforce them?

There are currently few frameworks and standards for the utilization and implementation of AI. One existing framework is the National Institute of Standards and Technology's (NIST's) [AI Risk Management Framework](#) that assists organizations and developers in understanding the organizational risks associated with deploying AI. While the risk management framework is crucial, it is one small piece of a larger regulatory puzzle. We recommend that HHS should be given the authority to further study and understand the realities of AI in healthcare and propose standards and framework requirements that apply to all actors under the department's authority. An HHS framework in tandem with one like the NIST risk management framework can move the nation toward a more comprehensive approach focused on the development and use of trusted AI. For requirements to be understood and implemented by end-users, HHS must have a regulatory framework that is consistent across the healthcare continuum. It is of paramount importance for the framework to be developed by taking into consideration the perspective of patients, clinicians, HI professionals, other relevant end-users, and technology developers to ensure the regulatory goals are met by the finalized framework.

Other Considerations

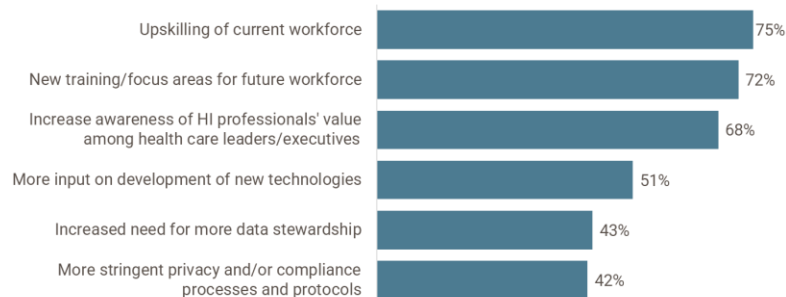
Are there legislative measures that Congress can take to ensure access to safe, reliable AI healthcare services?

Legislation should consider liability issues around the use of AI, including how liability is attributed to end-users, such as clinicians, versus developers of AI tools.

Additionally, the rapid adoption of non-clinical AI indicates the need for attention from lawmakers regarding workforce readiness. The AHIMA-NORC study confirms this need. When asked what is

necessary for the HI profession to succeed amid increased adoption of AI, 75 percent of respondents recommended upskilling of the current workforce and 72 percent recommended new training and focus areas for future workforce (Figure 8). Research to understand the impact of AI/ML and the creation of best practices to guide effective and safe use of these technologies are also needed.

Figure 8: Workforce Readiness Opportunities for AI/ML



Q27: What do you think is necessary for the HI profession to succeed amid the increased adoption of artificial intelligence or machine learning (AI/ML) tools? Select all that apply (N=2,329)
Note: Respondents were able to select multiple response options, so categories do not sum to 100%

Policy Recommendation: Federal Funding for Upskilling Programs

Health information privacy and quality considerations will become more complex as AI tools evolve and are deployed within the US healthcare ecosystem. Current and future HI workforces must be prepared to not only maintain high standards of data quality but to ensure the confidentiality, privacy, and security of patients' health information. Federally funded, rapid upskilling programs for HI professionals are needed to equip the current workforce with the technical skills and capacity to oversee adoption, implementation, and use of AI/ML tools.

Government agencies, including the ONC and the Health Resources and Services Administration (HRSA), should convene HI professionals, clinicians, payers, and data technology companies to develop a rapid upskilling program and related curriculum that can be deployed and supported online and/or at the state and local level.

This curriculum could be developed as a full module in the ONC's Health IT Curriculum Resources for Educators and dedicated to training, best practices, and guidance for using different AI/ML tools. Supported by federal funding, this curriculum could be circulated nationally and adapted at the state and local level and/or at healthcare organizations as a training and upskilling program. This curriculum could also be integrated into current certification, graduate, and undergraduate health information programs.

Policy Recommendation: Federal Funding for Education and Training

There is a need to strengthen support for individuals entering the HI workforce to counter the impact of understaffing and support the profession in addressing the HI needs of the healthcare system. Policymakers should work to break down barriers to education and training for those interested in entering the HI workforce.

Congress should allocate a portion of new and existing grants within HHS on HI education, training, and certification programs. Specifically, grants should be provided through HRSA to support training and education for HI professionals, especially those in rural and underserved areas.

It is also important to provide federal funding through additional channels. For example, HHS could collaborate with the US Department of Education to fund grants for undergraduate and graduate programs and, in collaboration with the US Department of Labor (DOL), develop apprenticeship

opportunities for individuals interested in pursuing a career in health information. Funds could be distributed at the federal level or among states, allowing state health departments to allocate funding according to specific local needs. The specific direction of funds may be unique to the needs of each state.

Policy Recommendation: Research to Understand Impact of AI/ML and Improve Use and Impacts

Continued investigation of the impact and development of guidance and best practices is needed to ensure effective use and appropriation of funding in the adoption and use of AI tools. Additional research by the government and external stakeholders is needed to further understand real-world experiences with AI/ML tools, as well as downstream implications including implementation challenges, barriers to adoption, impact on data quality, patient privacy, patient safety, workflow, and impacts on HI workforce staffing needs.

HRSA or other appropriate government agencies should also fund research on the impact of specific AI/ML tools on administrative compliance, staffing needs, and patient-related outcomes such as readmissions, safety, and care experience.

Policy Recommendation: Creation of Best Practices to Guide Effective and Safe Use of Technologies

Best practices to ensure standardized, effective, and safe use of technologies are also needed with the accelerated adoption of AI tools. NIST should consider convening AI experts and HI leaders in a working group to develop such standards for health systems and hospitals (or create a healthcare-specific subgroup of NIST's current AI Standards Coordination Working Group).

AHIMA thanks Representative Bera for his leadership on AI in the clinical and non-clinical space and for the opportunity to provide feedback. We look forward to working with you to ensure AI has a positive impact on Americans' health information, the HI workforce, and ultimately patient outcomes. Should you or your staff have any additional questions or comments, please contact Kate McFadyen, senior director, government affairs, at kate.mcfadyen@ahima.org or (202) 480-6058.

Sincerely,



Mona Calhoun, PhD, MS, Med, RHIA, FAHIMA
President and Chair



Kevin Klauer, DO, EJD
Chief Executive Officer