

The Emerging Role of Artificial Intelligence (AI) in Healthcare Denials and Appeals

Presenters:

Kendall Smith, MD, SFHM

Vivek Radhakrishna

To join the audio conference:

Call-in toll number: (914) 614-3221

Access code: 315-660-552

Or use your computer audio

AHDAM

The Association for Healthcare Denial & Appeal Management



GoToWebinar Attendee Participation

Your Participation

Open and close your control panel.

Join audio:

- Choose **Mic & Speakers** to use VoIP
- Choose **Telephone** and dial using the information provided

Download handouts.

Submit questions and comments via the Questions panel.

The screenshot shows the GoToWebinar control panel interface. It includes a menu with icons for navigation, audio, handouts, and questions. The audio section is expanded, showing options for 'Computer audio', 'Phone call', and 'No audio'. The 'MUTED' status is visible. The handouts section shows a document titled 'AHDAM The Legal and Regulatory Aspects of A...'. The questions section has a text input field with the placeholder text '[Enter a question for staff]' and a 'Send' button. The bottom of the panel displays 'AHDAM Webinar' and 'Webinar ID: 290-174-163' along with the GoToWebinar logo.

CEUs/Contact Hours

- Free CEUs are offered to AHDAM members only.
- To obtain CEUs, you must attend the live webinar for at least 53 minutes and complete the survey that will pop up automatically for you at the end of the webinar.
- CEU certificates will be emailed to you generally within a week of the webinar.
- CEUs are not available for watching the recording of this live webinar.
- Disclosure: No individuals in a position to control content for this activity have any relevant financial relationships to declare.

From the survey you will be prompted to select desired CEUs:

- Association of Clinical Documentation Improvement Specialists (ACDIS): Certified Clinical Documentation Specialist (CCDS)
- National Association of Healthcare Revenue Integrity (NAHRI): Certification in Healthcare Revenue Integrity (CHRI)
- Commission for Case Manager Certification (CCMC): CCM board certified case managers
- American Health Information Management Association (AHIMA): Certified health information management professionals
- American Nurse Credentialing Center (ANCC): Continuing nursing education
This nursing continuing professional development activity was approved by the Northeast Multistate Division Education Unit, an accredited approver by the American Nurses Credentialing Center's Commission on Accreditation.

Join us for our Virtual Winter Workshop!

AHDAM is pleased to invite you to the 2024 Virtual Spring Workshop!

- Interactive tracks led by experts in the field
- Coverage of crucial topics vital to understanding the complex and ever-changing nature of denial and appeal management
- Specifically designed for healthcare professionals who are involved in denial and appeal management or revenue cycle management

<https://www.ahdam.org/2024workshops>

The workshop is available live and on-demand.

May 14 – May 23

The Association for Healthcare Denial and Appeal Management

- The nation's only association dedicated to Healthcare Denial and Appeal Management.
- Our mission is to support and promote professionals working in the field of healthcare insurance denial and appeal management through education and collaboration.
- Our vision is to create an even playing field where patients and healthcare providers are successful in persuading medical insurers to make proper payment decisions.

www.ahdam.org

Created through the generous support of PayerWatch

PayerWatch – AppealMasters	PayerWatch – VERACITY
<p>Thousands trained in denial and appeal management</p> <p>Taking your appeals all the way</p> <p>Clinical-legal approach</p>	<p>A leader in the denial prevention industry</p> <p>Service to providers in protecting revenue</p>

www.payerwatch.com

Disclaimer

The Association for Healthcare Denial and Appeal Management (AHDAM) publishes and distributes materials on its website that are created by our members or invited industry subject matter experts for the benefit of all AHDAM members. AHDAM does not certify the accuracy or authority of these materials.

These materials are distributed and presented as research information to be used by AHDAM members, in conjunction with other research deemed necessary, in the exercise of AHDAM members' independent professional judgment. AHDAM claims no liability in relation to reliance on the content of these materials. The views expressed in the materials are the views of the material's authors and do not necessarily represent the views of AHDAM. Any references are provided for informational purposes only and do not constitute endorsement of any sources.

There are no conflicts of interest to declare for any individual in a position to control the content of this presentation.

Kendall Smith MD, SFHM

Chief Medical Officer, Chief Physician Advisor



Dr. Kendall Smith is a Senior Fellow in Hospital Medicine (SFHM) and currently acts as Chief Medical Officer for PayerWatch - AppealMasters, a leading appeal educator and appeal services firm for hospitals and health systems. He's been deeply involved in denial and appeals management throughout his hospitalist career. He has served as a physician leader on hospital revenue cycle management teams while also serving as the Physician Advisor for Clinical Resource Management. Dr. Smith is also an AHIMA ICD-CM/PCS approved trainer/ambassador.

Vivek Radhakrishna

President and CTO, PayerWatch/AppealMasters



Vivek has more than 22 years of experience designing/developing software and has worked across multiple domains in his professional life, including banking, telecommunication, K-12 education and healthcare. He has been with PayerWatch for 8+ years; Vivek believes that the customer is the most valuable asset an organization can have and that all software design should be driven by a unrelenting pursuit of end user focus and experience which enables them to effectively use applications to achieve business results. As President and Chief Technology Officer (CTO) he revels in solving problems, finding creative solutions to customer needs and clearing a path for the organization to do the very best they can while constantly moving forward.

Learning Objectives

At the conclusion of the webinar, the learner will be able to:

Self-report they can identify, as they pertain to artificial intelligence in regard to healthcare denials and appeals: one benefit, one regulatory limitation, and one ethical consideration.

At the conclusion of the webinar, at least 90% of participants will share on the evaluation:

1. The ability to identify one benefit of the use of AI as it pertains to healthcare denials and appeals processes..
2. The ability to identify one regulatory limitation from CMS regarding the use of AI as it pertains to healthcare denials and appeals processes.
3. The ability to identify whether confidentiality is an ethical consideration when using AI in the healthcare denials and appeals processes..

GRAFFITTI WALL



Any sufficiently advanced technology is indistinguishable from magic.

Arthur C. Clarke



Any technology distinguishable from magic is insufficiently advanced.

Barry Gehm



Any technology, no matter how primitive, is magic to those who don't understand it.

Florence Ambrose



COLOR BY MENNE

© STANLEY 1999

Section 1

The Basics of AI

AHDAM

The Association for Healthcare Denial & Appeal Management



01

Definition

AI, or artificial intelligence, is like the Swiss Army knife of technology – it's designed to mimic human intelligence, but without the need for coffee breaks!

02

Types of AI

From AI that can play chess to AI that can predict the weather, there's a whole spectrum of AI personalities out there, each with its own quirks and talents.

The Four Types of AI



Reactive Machines

These are the AI equivalents of one-hit wonders – they can perform specific tasks, but they don't have any memory or emotions.

Limited Memory AI

Just like your forgetful friend who can't remember where they left their keys, these AIs have a bit of memory but not enough to hold a grudge.

Theory of Mind AI

This is the AI that's trying to understand humans – it's like the friend who's always analyzing everyone's behavior at the party.

Self-Awareness

The grand finale for the evolution of AI would be to design systems that have a sense of self, a conscious understanding of their existence. This type of AI does not exist yet.

Definition

Narrow AI, also known as Weak AI, is designed to perform a specific task or a set of tasks. It operates within a limited context and is not capable of generalizing its learning to other domains.

Applications

Examples of narrow AI include virtual personal assistants like Siri and Alexa, recommendation systems, and image or speech recognition software.

Advantages

Narrow AI systems are highly efficient in performing their designated tasks and have practical applications in various industries, such as healthcare, finance, and customer service.



Definition

General AI, or Strong AI, refers to AI systems that possess the ability to understand, learn, and apply knowledge across different domains, similar to human intelligence.

Challenges

Developing true general AI is a complex and ambitious goal, as it requires machines to exhibit cognitive abilities, problem-solving skills, and adaptability comparable to humans.

Implications

The realization of general AI raises profound ethical and existential questions, impacting labor markets, societal structures, and the nature of human-AI interactions.

Concept

Superintelligent AI surpasses human intelligence across all domains and activities. It has the potential to outperform the brightest human minds in scientific research, strategic planning, and creative endeavors.

Risks

The emergence of superintelligent AI poses existential risks, including the loss of human control, unintended consequences, and the potential for catastrophic outcomes if not aligned with human values.

Considerations

As the pursuit of superintelligent AI progresses, ethical considerations around its governance, safety, and societal impact become increasingly critical.

Challenges

AI systems can inherit biases from training data, leading to discriminatory outcomes in areas such as hiring, lending, and law enforcement.

Transparency and Accountability

Ensuring transparency in AI decision-making processes and holding AI developers and users accountable for the ethical implications of their systems is essential to mitigate bias and discrimination.

Data Privacy Concerns

AI systems often rely on vast amounts of personal data, raising concerns about privacy breaches, unauthorized access, and the potential misuse of sensitive information.

Regulatory Frameworks

Implementing robust data protection regulations and ethical guidelines is crucial to safeguard individuals' privacy rights in the context of AI applications.

Explainability

The lack of transparency in AI decision-making processes can hinder accountability and raise ethical concerns regarding the opacity of algorithmic outcomes.

Regulatory Compliance

Establishing clear guidelines for AI developers and users to ensure responsible and transparent AI deployment is essential to address accountability and ethical considerations.

What is Generative AI?

Definition

Generative AI is a subset of artificial intelligence that focuses on creating new content such as text, images, audio, and video. Unlike other AI models that are designed for specific tasks, generative AI has the ability to produce original and diverse outputs based on the patterns and structures it learns from the input data.

Capabilities

Generative AI models can generate content that is not explicitly programmed, allowing for creativity and innovation in various fields such as art, design, and storytelling. They can understand and replicate the characteristics of the input data to produce new and unique outputs.

Applications

Generative AI is used in a wide range of applications including content generation, creative design, virtual assistants, and data augmentation. It has the potential to revolutionize industries by automating content creation and enabling new forms of human-machine collaboration.

01

Enhanced Accuracy

AI algorithms have demonstrated the potential to improve diagnostic accuracy by analyzing medical imaging and identifying patterns that may not be immediately apparent to human eyes.

02

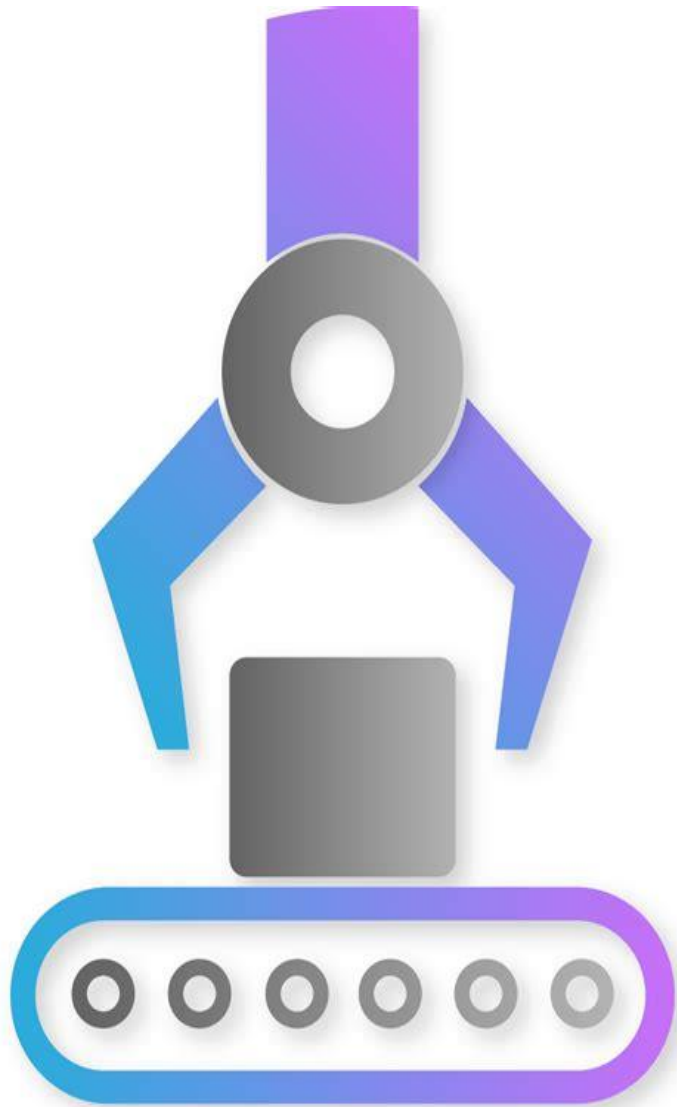
Efficient Triage

By rapidly analyzing patient data, AI systems can assist in prioritizing cases, ensuring that critical conditions receive prompt attention and resources.

03

Challenges and Ethical Considerations

The integration of AI in diagnostics presents challenges related to data privacy, algorithm bias, and the need for human oversight to ensure ethical and accurate outcomes.



Tailored Treatment Plans

AI technologies can analyze vast datasets to identify personalized treatment options based on an individual's genetic makeup, medical history, and specific health needs.

Predictive Analytics

By leveraging machine learning, AI can forecast disease progression, anticipate potential complications, and recommend proactive interventions to optimize patient outcomes.

Regulatory Compliance

The adoption of AI in personalized medicine necessitates stringent regulatory frameworks to ensure patient safety, data security, and ethical use of predictive analytics.

01

Continuous Surveillance

AI-powered devices and wearables enable real-time monitoring of patient vitals, facilitating early detection of anomalies and timely intervention.

02

Empowering Patients

Remote monitoring solutions empower patients to actively participate in their care, promoting self-awareness and facilitating proactive health management.

03

Integration Challenges

The seamless integration of AI-enabled monitoring systems with existing healthcare infrastructure requires careful consideration of interoperability, data standardization, and cybersecurity measures.



Augmented Decision-Making

AI-driven clinical decision support systems provide healthcare professionals with evidence-based insights, aiding in diagnosis, treatment planning, and medication management.



Reduced Diagnostic Errors

By cross-referencing patient data with vast medical knowledge, AI systems can help mitigate diagnostic errors and enhance the overall quality of care.



Professional Adoption and Training

The successful integration of AI tools necessitates comprehensive training programs to equip healthcare providers with the skills to effectively leverage these technologies.



Streamlined Workflows

AI applications optimize administrative processes, resource allocation, and scheduling, thereby enhancing operational efficiency within healthcare facilities.



Cost Containment

Through predictive analytics and resource optimization, AI contributes to cost containment and resource allocation, ensuring optimal utilization of healthcare resources.

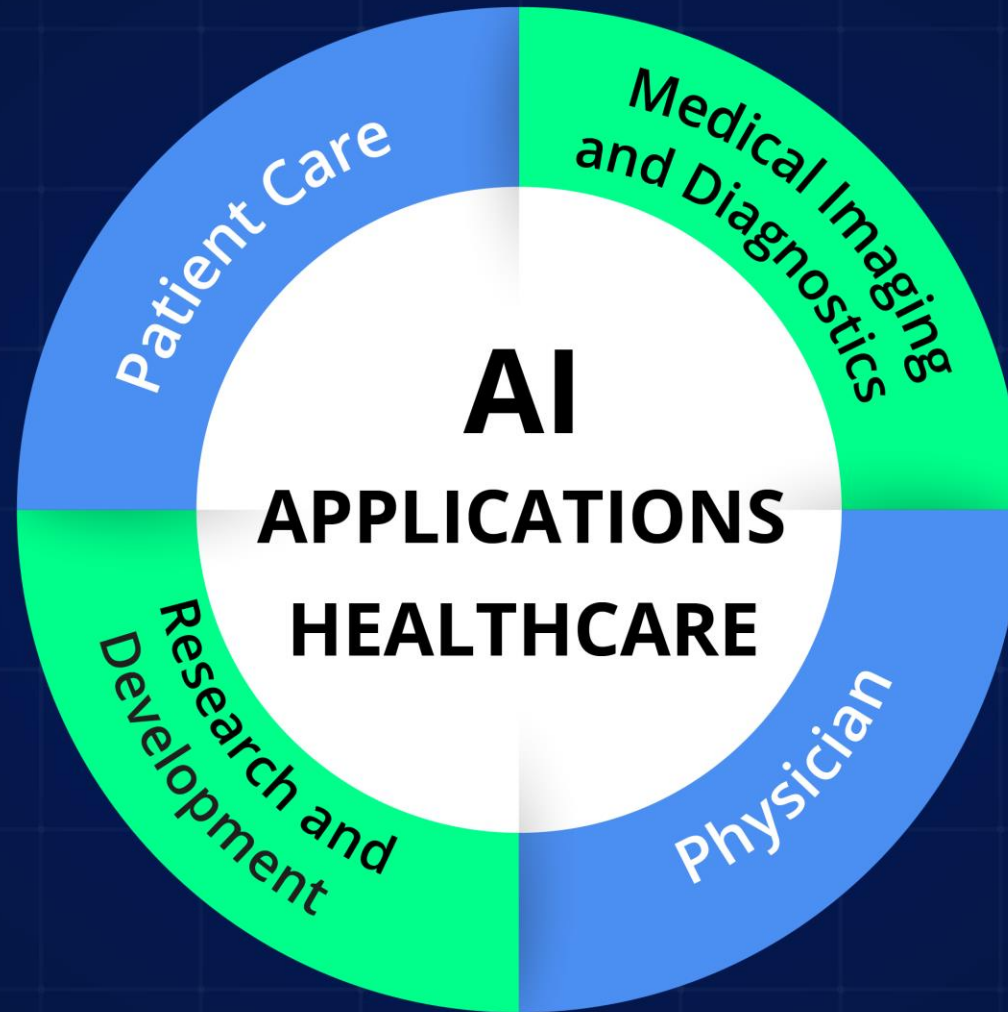


Staff Buy-In and Change Management

The successful implementation of AI-driven operational enhancements requires proactive change management strategies and staff engagement to ensure smooth adoption.

- Automated & Assisted Diagnosis and Treatment
- Real-time Patient Prioritization and Triage
- Pregnancy Management
- Health Assistants and Personal Trainers

- Data Mining and Analytic
- Drug Discovery
- Drug Design
- Pandemic Detection
- Vaccine Development



- Error Free Diagnostic results
- Intelligent Symptom Analysis
- Predictive and Early diagnostic!
- Radiology Assistant
- Diagnosis via Medical Imaging

- Surgical Robots
- Personalized medications & care
- Clinical Trials
- Alternative Diagnosis Prescription auditing

Section 2

AI in Healthcare Denials and Appeals

AHDAM
The Association for Healthcare Denial & Appeal Management



Lawsuits take aim at use of AI tool by health insurance companies to process claims

**MONEY
WATCH**

By Elizabeth Napolitano
December 18, 2023 / 2:32 PM EST / MoneyWatch



A class-action lawsuit, filed on December 12, alleges that health insurer Humana used an AI model called nHPredict to wrongfully deny medically necessary care for elderly and disabled patients covered under Medicare Advantage — a Medicare-approved plan run by private insurers. Another lawsuit, filed last month, alleges United Healthcare also [used nHPredict to reject claims](#), despite knowing that roughly 90% of the tools denials on coverage were faulty, overriding determinations by patient physicians that the expenses were medically necessary.

A Humana spokesperson said the company uses "various tools, including augmented intelligence to expedite and approve utilization management requests," and "maintains a 'human in the loop' decision-making whenever AI is utilized." The spokesperson added that Humana does not comment on pending litigation.

United Healthcare did not reply to CBS MoneyWatch's request for comment.



Over two months last year, the company denied more than 300,000 claims, spending an average of 1.2 seconds on each claim, Propublica reported. While medical doctors signed off on the denials, the system didn't require them to open patient medical records for the review.

DEPARTMENT OF HEALTH & HUMAN SERVICES
Centers for Medicare & Medicaid Services
7500 Security Boulevard, Mail Stop C4-21-26
Baltimore, Maryland 21244-1850



DATE: February 6, 2024

TO: All Medicare Advantage Organizations and Medicare-Medicaid Plans

SUBJECT: Frequently Asked Questions related to Coverage Criteria and Utilization Management Requirements in CMS Final Rule (CMS-4201-F)

Will AI Replace Humans In the Appeals Process?

Machine Denial Ping Pong??





Photo by Alex Pereslavitsev

Let's See A.I. In Action Writing a Denial

RK

You

Write a letter to a medical director for a health insurance company arguing that inpatient care, not observation care was appropriate for their member, an 85 year old gentleman admitted to the hospital with a fever of 103, respiratory rate of 24, a platelet count of 100,000 and a bilirubin of 2.0 and a creatinine of 2.5. Calculate the patient's SOFA score and mortality rate. The tone of the letter should be professional and the audience is another physician. Cite Sepsis-3.

Let's See A.I. In Action Writing a Denial

I am writing to appeal the decision regarding the level of care provided to one of your members, an 85-year-old gentleman admitted to the hospital under observation status. I believe that inpatient care, rather than observation care, was appropriate for this patient given the severity of his condition and in accordance with the guidelines outlined in Sepsis-3.

Upon admission, the patient presented with a fever of 103°F, a respiratory rate of 24 breaths per minute, a platelet count of 100,000, a bilirubin level of 2.0 mg/dL, and a creatinine level of 2.5 mg/dL. These clinical indicators strongly suggest the presence of sepsis, a life-threatening condition that requires immediate and intensive medical intervention.

To further support my argument, I have calculated the Sequential Organ Failure Assessment (SOFA) score for the patient based on the provided clinical parameters:

- Respiratory rate: 24 (score of 1)
- Platelet count: 100,000 (score of 3)
- Bilirubin: 2.0 (score of 2)
- Creatinine: 2.5 (score of 2)

Total SOFA score: 8

Let's See A.I. In Action Writing a Denial

According to Sepsis-3 guidelines, a SOFA score of 2 or greater indicates organ dysfunction and is predictive of an increased risk of mortality in patients with suspected infection. In this case, the patient's SOFA score of 8 underscores the severity of his condition and the urgent need for inpatient management and monitoring.

Additionally, it is important to consider the patient's age (85 years old), which is an independent risk factor for adverse outcomes in cases of severe illness such as sepsis. Advanced age is associated with a higher mortality rate and may necessitate more aggressive treatment and closer observation.

Based on the clinical presentation, SOFA score, and the patient's age, I strongly believe that inpatient care would have been more appropriate for optimizing his chances of recovery and reducing the risk of complications. Therefore, I respectfully request reconsideration of the level of care provided to ensure the patient receives the necessary medical attention and interventions.

Thank you for your attention to this matter. I am available to provide any additional information or clarification as needed.

Questions and Answers



AHDAM

The Association for Healthcare Denial & Appeal Management

Thank you for attending today's event!

AHDAM Spring Virtual Workshop
<https://www.ahdam.org/virtual-workshop-series-may-2024>

For more information, please contact:

Karla Hiravi at khiravi@payerwatch.com

Dr. Kendall Smith at ksmith@payerwatch.com

PayerWatch

