



Regulating AI Medical Scribes

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I. EXECUTIVE SUMMARY

AI medical scribes are being rapidly implemented, but their audio-only inputs can result in medical records that are inaccurate and misrepresents the patient-provider interaction. At its current state, AI medical scribe platforms fail to accurately interpret tone, sarcasm, and body language, creating unnecessary clinical errors. This policy will explore the real-world impacts of these problems and propose policy solutions such as physician oversight and accuracy standards to maintain efficient, accurate, and ethical use.

II. OVERVIEW

Healthcare systems are increasingly adopting AI medical scribes to improve efficiency and improve clinical documentations. These scribes use voice technology and large language models to listen and transcribe patient-provider conversation in medical records. Although well-documented benefits include decreasing physician burn-out and improving efficiency, these systems have limits on how they interpret human conversation in our most vulnerable state. As a result, accurately documenting the interaction is critical towards providing the highest level of medical care. Currently limited to an audio-only input, these systems cannot integrate visual cues and body language to fully dissect what a patient may be reporting literally

versus what is the true nature of what the patient is expressing. Also, accents, fast conversations, and muffled audio contribute to AI scribe inaccuracies and misinterpretations. These misunderstandings can lead to unnecessary consequences and referrals that can impair efficiency. Beside the short-term effects, AI medical scribe raises questions about long-term dependence. Due to these concerns, AI scribes require a closer look on how they should be regulated in medicine. This capstone will examine how AI medical scribes reform should be implemented to balance productivity with patient safety.

A. Relevance

The rapid implementation of AI medical scribes reflects a new era of efficient and automated healthcare, driven by the high rates of physician burnout and time expense. According to a study done by the ACP journal, nearly 50% of healthcare providers' time is spent charting in electronic medical records systems, which displays the necessity for proficient, automated solutions. In recent years, technological advancement in AI scribing has been universally adopted in healthcare systems around the world before proper guidelines have been created to regulate this rapidly growing field. Precise, error-free documentation is critical towards delivering high-level medical care. Every step towards diagnosis and treatment stem from obtaining an

accurate history from the patient. The utilization of this technology is rapidly being adopted and is projected to be the standard for transcribing medical report taking. According to a study done by the American Medical Association in January of 2026, 81% of physicians use some sort of artificial intelligence in their medical practice and roughly 30% use some sort of ambient AI scribe technology. A recent study reports that there is an overall 1-3% transcribing error rate which is lower than the 7-11% rate seen in automated speech-recognition dictation systems. However, this technology introduces distinctive errors such as AI hallucinations where the system generates content, which seems plausible but has no basis on what actually occurred. Additional critical errors include misattributions, omissions, and misinterpretations (site: Beyond Human Ears article). According to a study conducted by the National Academies of Sciences, Engineering and Medicine in 2015 reported that 5% of adults experience a diagnostic error each year. Incorrect medical documentation significantly contributes to this error rate and even the smallest errors can lead to serious consequences. Over the last year, we have seen an explosion of new medical AI scribe technology entering the marketplace. However, regulation on reliability and standardization of these new platforms are lacking. In fact, the responsibility falls fully on the provider using the technology to verify the accuracy. If these AI medical scribes cannot be regulated safely, then the costs will outweigh the benefits, which will reduce the opportunity to use them beneficently.

III. HISTORY

A. Current Stances

Medical scribes have long been used in healthcare

to ease workload and prioritize accuracy of diagnoses. Traditionally, this role has been dominated by humans, who are able to understand both nonverbal and verbal cues, in order to properly document a patient's symptoms. However, with the development of AI technology in recent years, it has served as a more efficient alternative to document medical conversations. These systems automatically transcribe patient-doctor conversations and organize them in a system in a matter of seconds, so they have been rapidly implemented in healthcare.

In recent years, the usage of these AI technologies has skyrocketed due to productivity demands and physician burnout. Multiple studies have proved that physicians spend hours outside of work time documenting their conversations with patients, causing high burnout rates. Also, there has been increased adoption of 'ambient' AI medical scribes, which summarize conversation between patients and doctors without direct physician input. These technologies work by attempting to transcribe information in real time, making decisions about what parts of the conversation are relevant to diagnosing a patient. Released in 2020, an example of an ambient AI scribe is Nuance's Dragon Ambient eXperience (DAX), which listens to conversations to interpret information. However, various studies indicated that this scribe only saved 30 seconds to two minutes of information per conversation, raising consensus about reliability and accuracy.

The rapid adoption of AI medical scribes displays a broader impact in healthcare, as automation should be balanced with human oversight. While these scribes offer important benefits such as efficiency, it comes with new risks like ensuring the accuracy of interpreted information. The

current stance on AI scribes is the balance between innovation and transparency. As these AI scribes will continue to develop, and frameworks need to be able to keep up. In the future, humans must decide whether audio-inputs are sufficient enough to make correct diagnosis, or if these technologies should be halted until the technology can start accurately utilizing video to interpret body language and visual cues to generate a more accurate account of a patient's visit.

Currently, these scribes are being regulated by private individual hospital systems rather than the government itself. Internal guidelines and physician oversight remain the most reliable ways to review how AI scribes are being used properly. However, companies continue developing new forms of these technologies before their regulations can keep up. In 2024, the American Medical Association created policies that encouraged physicians to remain involved in the review of AI-generated conversations. This shows the need for a uniform policy that will regulate how these technologies are used.

IV. POLICY PROBLEM

A. Stakeholders

The primary stakeholders are the patients themselves as they are directly impacted by this technology. Some patients may rely on AI scribes to make their diagnosis or treatment, so if AI scribes misinterpret conversations, then the patients will be harmed by inaccurate information. Patients should have a say in the proper policies implemented to create accurate AI scribes, so they don't create extra risks for themselves.

Other stakeholders are the physicians and

healthcare systems because they benefit from the efficiency that the scribes provide. However, they can be blamed if the scribes do not operate correctly, which can cause unnecessary damage. These scribes also help doctors spend more time with patients, as they do not need to spend the majority of their day documenting patients' cases. Healthcare systems must figure out how to balance productivity and efficiency with transparency and accuracy.

B. Risks of Indifference

The risk of indifference to AI medical scribes lies in the chance that inaccurate information or misinterpreted information could become the norm for transcribed conversations. If physicians do not maintain proper oversight of these scribes, they could become too dependent on the technology, which lacks proper interpretation of body language, tone, and sarcasm. This could lead to medical records overlooking errors with the transcript, causing further harm. Over time, healthcare systems will start to optimize efficiency over accuracy, showing the risk of indifference. Once AI scribes become fully embedded in healthcare systems, it will be harder to fix the inaccuracy of medical scribes. Addressing the risks earlier rather than later will ensure that proper policies are created to apply this technology without any errors.

C. Nonpartisan Reasoning

Because AI scribes affect healthcare, one of the important systems in society, their regulation should be viewed as a nonpartisan issue. The detrimental impact of inaccurate information resulting from medical scribes affects everybody, regardless of political views. Some of the benefits of regulating AI medical scribes include:

- 1) Preventing physician burnout and prioritizing efficiency: Preventing physician burnout benefits the entire healthcare system as physicians can now spend more time with their patients instead of writing notes. With this extra time, physicians can be more efficient by seeing more patients and improving the workplace. In turn, this allows healthcare systems to become more productive while prioritizing accuracy as well.
- 2) Improvement in medical documentation: Accuracy is a main priority for medical documentation as physicians need physician records to make diagnoses, prescribe treatments, and ensure safety. If AI scribes are able to interpret information properly, they can organize patient information not just efficiently, but accurately in medicine.
- 3) Preserving patient trust: Patient trust depends on the information recorded during physician-patient interactions. If the recorded information is misinterpreted or inaccurate with physician oversight, patients may lose trust in the healthcare systems and the physician. This is why it is important to regulate AI medical scribes, so that hospitals can run smoothly without any concerns. Regulating AI scribes would also preserve trust between the patients and physicians by reassuring patients that AI is only used as a support tool, not as replacement for human judgment and care.

V. TRIED POLICY

On January 1st 2025, California's Assembly Bill 3030, a policy about regulating AI in healthcare, went into effect. This law mandates all healthcare systems to inform patients when AI is used to assist with physician-clinical conversations. Also, this policy requires that the healthcare system must provide a way for the patient to contact a physician or healthcare provider, showing the attempt for more transparency.

However, this policy has flaws as it doesn't fix the fundamental issues of implementing AI in healthcare. Although AB 3030 talks about the disclosure of when AI is used, it doesn't address the accuracy of this information and whether it can interpret tone, sarcasm, and body language without fewer errors.

Another relevant policy is the Texas Senate Bill 1188, which requires physicians to review and disclose AI-created records. This policy is more relevant for regulating AI medical scribes because it ensures physicians take accountability for what the AI scribes generate. Similarly to the AB 3030, this bill doesn't address the real concerns of scribes because it mainly talks about disclosure. Due to the lack of policies relating to regulating AI scribes, there must be new policy options to combat this issue more effectively.

VI. POLICY OPTIONS

AI scribe transparency framework

Without proper transparency, patients can lose trust in physicians while healthcare systems can lose their reliance. To address this concern, an AI scribe transparency framework could establish a uniform government-led standard led by the

Department of Health and Human Services to regulate how AI is implemented, reviewed, and monitored across hospitals. This framework will outline three main requirements that healthcare systems must ensure their physicians meet in order to operate with AI in their conversations. The first requirement is patient consent before the conversation starts. Patients must agree to how the AI scribe is being used, what information it will record, and how it will create notes based on tone, sarcasm, and accents. The second requirement is physician review before the notes are implemented into the system. This ensures that the physicians are still responsible for the information recorded by the AI, and the physicians will be able to fix the errors the scribe makes. The third requirement is patient access because the patient should be able to access the notes that AI took, so they maintain trust in physicians while pointing out potentially inaccuracies the physicians missed. By using this framework, this policy option could remove the uneven standards for how AI is used across hospitals. States will also be able to adopt additional requirements to this framework, but the overall framework will be uniform.

Physician Review and Hospital Accountability System

Human oversight is a requirement for proper implementation of AI in all fields, not only in medicine. Unlike the framework that focuses on maintaining patient trust, this review and accountability system would focus on how systems correct AI scribe errors. First, physician review would require all AI-transcribed conversations to be considered a draft until the physician reviews the content and approves it to go into the system. Next, it would be mandatory

for hospitals to have an error-tracking accountability system that flags AI records that have errors. If these errors continue to occur with no change, the hospital would be required to report the issue and try to fix the solution or limit the use of that AI. This policy addresses the regulation of AI medical scribes at the hospital level putting accountability on healthcare systems.

High-risk scenarios

High-risk scenarios in medicine occur often, so healthcare systems need to be able to handle those scenarios properly. A plausible solution would be the restriction of AI in those high-risk scenarios until further development of this technology is made. Due to the lack of video cues and misinterpretation of body language and accents, we must remove the usage of AI in these situations, as one mistake could be the matter of life and death. At the federal level, HHS could define high-risk scenarios and provide a baseline. Because every state has different healthcare systems, state governments can decide their unique restrictions that fit the needs of their state hospitals.

VII. CONCLUSIONS

In this paper, I have explored the implementation of AI medical scribes, and their regulations due to audio-only input. While these scribes prevent physician burnout and improve efficiency, they pose questions about accuracy, transparency, and bias. The most implementable solution to combat this issue was the AI scribe transparency framework because the federal government can implement this framework to create a uniform standard, ensure physician review, and maintain patient trust. Although we have a long way to go before AI medical scribes adopt video cues and

remove their errors, I think that this technology can still be used responsibly with proper guidelines. In the future, I hope to see hospitals where AI in healthcare is being used to benefit patients and our society as a whole.

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