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Committee on Health, Education, Labor, and Pensions

Subcommittee on Primary Health and Retirement Security

Hearing on

Avoiding a Cautionary Tale: Policy Considerations for Artificial Intelligence in Health Care

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Dr. Keith Sale, MD, FAAOA

The University of Kansas Health System

Introduction

Chairman Markey and Ranking Member Marshall, I am Dr. Keith Sale, Vice President and Chief Physician Executive of Ambulatory Services at The University of Kansas Health System and Associate Professor of Otolaryngology-Head and Neck Surgery at The University of Kansas School of Medicine. Located in the Kansas City metro area, The University of Kansas Health System is the only academic health system in Kansas, providing a full range of care to patients from every county in Kansas and Missouri, all 50 states and nearly 30 countries. The health system offers over 140 hospital and clinic locations, including its original campus in Kansas City, Kansas, which includes 1,300 beds and is supported by over 17,000 employees and 1,500 physicians. Thank you for the opportunity to present testimony to you and your colleagues on the Subcommittee on Primary Health and Retirement Security regarding the adoption of AI (Artificial Intelligence) and how it can transform the delivery of healthcare and more importantly, enhance patient care. In a changing healthcare environment, AI is one of many tools available to help the American healthcare system improve access and create better outcomes.

Increasing patient care needs in America are overwhelming the healthcare workforce and persistent nursing and physician shortages continue to challenge our healthcare infrastructure. The Association of American Medical Colleges projects the United States will see a shortage of between 37,800 and 124,000 physicians within the next 12 years[1]. In addition, by 2025 the United States is projected to see a shortage between 200,000 to 450,000 of registered nurses needed for direct patient care[2]. Simultaneously, healthcare systems face increased financial pressures that include insurance companies creating more barriers to delivering care like pre-authorizations and paying less for the care we provide and higher costs for medicines and equipment critical to patient care.

The Opportunity of AI

Healthcare systems continually evolve to match the ever-changing patient care environment. Before Electronic Medical Record (EMR) systems were widely implemented and before AI improvements, physicians and providers spent considerable time recording and transcribing notes from patient visits because detailed records from patient encounters maintained continuity for follow up visits and

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[1] Robeznieks, A. (2022, April 13). *Doctor shortages are here-and they'll get worse if we don't act fast*. American Medical Association. https://www.ama-assn.org/practice-management/sustainability/doctor-shortages-are-here-and-they-ll-get-worse-if-we-don-t-act

[2] Gamble, M. (2022, May 12). *US faces deficit of 450,000 nurses by 2025*. Becker's Hospital Review. https://www.beckershospitalreview.com/workforce/us-faces-deficit-of-450-000-nurses-by-2025.html?oly_enc_id=4391J2302867B6A

improved patient outcomes. However, each stage was duplicative of the original conversation and added time to the patient encounter completion. Historically, these notes could take days to get back into the patients' records. Today AI technology records the conversation between the doctor and patient during the appointment, summarizes the interaction, and downloads the conversation for review within minutes of patient encounter ending. This technology reduces the steps in documentation and directly captures the conversation in real time. Physicians can then edit notes to ensure accuracy and upload finalized clinical notes into the electronic medical record within minutes of completing a visit.

Patient and Physician Benefits

As the complexity of patient care increases, the administrative burden has exploded, and patients now have unprecedented access to physicians and health care workers through EMR portals. AI automates routine and time-consuming tasks reducing the administrative burden and allowing physicians and providers to spend more time with patients focusing on better outcomes. Finding efficiencies for the administrative and documentation burden of healthcare may also allow physicians to see more patients and help address the capacity challenges resulting from the growing physician shortage. In addition, AI's reduction of administrative tasks and documentation may help mitigate the growing concern of physician burnout, much of which relates directly to documentation and administrative burden. Allowing providers to spend more time with direct patient care will help return the joy of practice to our physicians and providers, reduce administrative burdens, and thereby improve patient outcomes.

Importance of Oversight

While AI holds immense potential, its implementation should be built upon clinical practice guidelines, be compliant with patient privacy standards, and be safeguarded from misuse. Physicians and healthcare professionals must be actively involved in the development and validation of AI tools to ensure they are driven by clinical guidelines and that they enhance rather than replace human expertise. Trained and licensed clinicians develop expertise through direct patient interactions that should not be fully replaced by AI. Rather, AI can be used to help clinicians sort through the growing volumes of healthcare data, present care options based on recommended best practices, and inform physicians about therapeutic options. AI will greatly expedite patient care, but human judgment will still need to determine if a final care plan is appropriate and in line with a patient's condition and expectations. To best utilize AI in healthcare requires access to vast volumes of clinical data, financial data, research data,

and patient data, much of which is considered highly sensitive and personal information. Maintaining the privacy standards built around the Health Insurance Portability and Accountability Act (HIPAA) that currently exists to protect our patients' privacy is paramount. Continued observance of these standards will safeguard individual data and ensure that healthcare data is used responsibly and kept secure. While healthcare providers, patients, and technology companies contribute to this data pool, the question of data ownership may not be straightforward. Conversations about data ownership and use are essential to maintaining patient trust and preserving the sanctity of patient privacy. Importantly, HIPAA privacy and security standards will also have to keep up with current technology as well.

In conclusion, the integration of AI and its consumption of healthcare data carries tremendous opportunities for improved patient care and outcomes and reduced physician and clinical team burnout. However, data privacy and management are equally significant and require careful consideration. As Congress navigates this complex landscape, it is essential to balance the promise of AI with safeguards to protect patient privacy and maintain data security. I urge this committee to support initiatives, such as AI, which promote improved patient care while simultaneously easing the administrative burdens currently troubling our healthcare teams. Additionally, responsible data management and patient privacy must be at the core of AI integration into healthcare to protect our patients' rights and safeguard their privacy.

Thank you for your attention and I am available to address any questions you may have.