

Weekly Checkup AI in Health Care

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This week, the Senate Committee on Health, Education, Labor, and Pensions (HELP) Ranking Member Bill Cassidy (R-LA) released a white paper on artificial intelligence (AI) and its potential impacts on health care, education, and the workforce. How does the top HELP Republican foresee the future role and influence of AI in the world of health care?

The first application the white paper touches on is one of the most obvious: improving drug development and approval. AI is already impacting drug development, with over 100 drug approval applications in 2021 submitted to the Food and Drug Administration (FDA) that used AI in the development of the given drug. **AI has the potential to reduce development costs to manufacturers by up to \$54 billion annually**. **To take advantage of these benefits, the FDA will need to be able to engage with academia and industry on AI research, as well as employ experts in a wide variety of fields so that the agency can understand how to sensibly regulate AI. Additionally, AI can speed up the review process of drugs. Sen. Cassidy notes that Congress will need to explore how to help the FDA recruit and retain top talent, as well as how to implement AI into the approval process.**

The paper also discusses AI's potential role in medical devices, as well as its diagnostic and treatment capabilities. The FDA approved more than 200 AI-enabled medical devices between 2021–2022. As AI technology evolves and its uptake grows, Congress will need to update the agency's approval framework to keep pace. Of note, FDA's current review process is not designed to incorporate products whose software changes to improve over time. Targeted flexibility will be necessary to ensure that while consumer safety is maintained, innovation is not unnecessarily stifled.

AI is already being used to help physicians diagnose patients, though questions remain about what this means for clinicians' role in patient care. As stakeholders' trust in AI will be key for its uptake, the paper calls for transparency in AI development so that patients and clinicians can understand the most appropriate and effective ways to use these tools. This is especially true when it comes to the patient population on which an AI algorithm was trained: A training population different from the actual patient may result in inaccurate usage. The paper also calls for a framework that makes liability around patient harm resulting from AI use predictable and clear.

AI is sure to have an immense impact on health care administration and insurance coverage, as well. **Given that administrative tasks, particularly around electronic health records, are the largest cause of physician burnout, the ability of AI to reduce time spent on these tasks will go a long way toward preventing workforce shortages and increasing patients' quality of care.** AI could streamline administrative burdens on health systems, including scheduling and claims filing, as well as claims processing by health insurers. The paper notes that some estimates put national health expenditure savings from AI usage in administrative functions at 5–10 percent. The paper also notes, however, that Congress will need to ensure that AI algorithms don't override clinical decisions – a delicate balance to be sure, given current debates over the appropriate usage of prior authorization.

Finally, Sen. Cassidy's paper notes that Congress will need to address privacy concerns for data used in AI. Some of that data is already covered under privacy rules in the Health Insurance Portability and Accountability

Act (HIPAA), but not all. While AI can de-identify data used in its algorithms, it can also be used to re-identify that data as belonging to a specific individual. The white paper calls on Congress to examine how to protect health information that falls outside the scope of HIPAA. **Patient trust in AI systems is going to be crucial to obtaining the benefits from these tools.**

AI will continue to play a growing role in the research and development, clinical, and administrative sides of health care. Sen. Cassidy's white paper raises the key issues that any framework must address, as well as crucial questions that policymakers must ask of experts and constituents. **Congress will need to author targeted and flexible policy solutions over the next few years to ensure that AI becomes a boon for health care and not a bust.**