

September 22, 2023

The Honorable Bill Cassidy, M.D.  
Ranking Member  
United States Senate  
Senate Committee on Health, Education,  
Labor and Pensions  
428 Senate Dirksen Office Building  
Washington, DC 20510

Dear Ranking Member Cassidy:

On behalf of the over 159,000 members of the American Dental Association (ADA), thank you for the opportunity to comment on your white paper, "Exploring Congress' Framework for the Future of AI: The Oversight and Legislative Role of Congress Over the Integration of Artificial Intelligence in Health, Education, and Labor."<sup>1</sup> America's dentists commend you and your colleagues for your efforts to understand the benefits and risks of the emerging uses of AI in health care, and for your work towards an appropriate legal framework for AI in health care.

Any legal framework must recognize and facilitate both the great potential for AI as a tool for dentists and other health care professionals, and the essential role of human expertise and clinical judgment in health care. Additionally, we hope that you and your colleagues will consult with the ADA on any legislation that establishes standards for AI that are relevant to dentistry.

Artificial Intelligence (AI) and augmented intelligence have been used in the dental industry for several years, and their use is expanding in dental practice. Integrating AI and augmented intelligence in dental practices can assist in clinical and administrative functions and scheduling impact including:

- Image analysis and assisted diagnosis;
- Continuation of care;
- Treatment planning and prosthesis designing;
- Robotic and automation;
- Virtual reality and augmented reality;
- Claim processing; and,
- Data analysis and predictive analytics.

The ADA's Standards Committee on Dental Informatics (SCDI) recently developed a white paper, "Overview of Artificial and Augmented Intelligence Uses in Dentistry."<sup>2</sup> The white paper introduces the use of Artificial Intelligence (AI) and Augmented Intelligence (Aul)<sup>3</sup> in clinical disciplines including prevention, caries and periodontal disease, implants, oral and maxillofacial surgery, endodontics, prosthetics, dentomaxillofacial imaging, orthodontics, temporomandibular joint disorder and sleep

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<sup>1</sup> [HELP Committee GOP Final AI White Paper](#). Accessed September 15, 2023.

<sup>2</sup> [American Dental Association SCDI White Paper No. 1106](#). Accessed September 18, 2023.

<sup>3</sup> "Sometimes referred to as intelligence amplification, Aul plays a similar role to AI except that it keeps human intelligence elements in its procedure. Rather than performing an assignment for a clinician like AI might do, Aul acts as a tool to assist the clinician in the task. One aspect of The American Medical Association House of Delegates' definition emphasizes that Aul's design *enhances* human intelligence rather than replacing it." See page 8 of ADA's white paper.

disorders. Promising developments in teledentistry, electronic dental records, dental laboratory uses and scanning also are included. The paper further provides information on non-clinical areas, with a focus on payor topics, such as claims processing, payment integrity and quality assurance, and on dental practice administrative issues involving claims preparation, including attachments. The document also provides information on the current regulatory environment, including the U.S. Food and Drug Administration (FDA) and the global framework.

As an American National Standards Institute (ANSI) developer, the ADA's SCDI is currently in the process of developing two new ANSI standards regarding "Image Analysis Systems" and "Validation Dataset Guidance for Image Analysis Systems using Artificial Intelligence." These standards are intended to help guide these uses of Aul/AI responsibly. The ADA is also developing the U.S. position for the first international standard on AI and augmented intelligence in dentistry, ISO 18374 Dentistry – Artificial intelligence (AI) based 2D X-ray analysis — Data generation, data annotation and data processing.

The ADA has also been named a Designated Standards Maintenance Organization (DSMO) by the Secretary of Health and Human Services (HHS) to maintain standards adopted under HIPAA and to work with HHS and other organizations to adopt new standards or modify existing standards. As you and your colleagues continue to develop the legal framework for AI in health care, and as you begin to introduce legislation to establish this framework, we would strongly encourage you to utilize the ADA as a vetted relevant resource.

Thank you for your leadership on this issue, and for this opportunity to comment on your white paper. We hope to work with you to address the many challenges and opportunities facing the health care industry, and our nation, as AI and Aul are integrated into health care. We believe the ADA's white paper is an important introduction for legislators and regulators to the uses of AI and Aul in dentistry, and would welcome any questions you may have about the content of the paper. Should you have any questions, please contact Natalie Hales at 202-898-2404 or [halessn@ada.org](mailto:halessn@ada.org).

Sincerely,

George R. Shepley, D.D.S.  
President

Raymond A. Cohlmiya, D.D.S.  
Executive Director

GRS:RAC:nh