

March 15, 2025

Re: Request for Information on the Development of an Artificial Intelligence (AI) Action Plan; Networking and Information Technology Research and Development (NITRD) National Coordination Office (NCO), National Science Foundation

The Radiological Society of North America (RSNA) appreciates the opportunity to provide input to the White House Office of Science and Technology Policy (OSTP) and the Networking and Information Technology Research and Development (NITRD) National Coordination Office (NCO), National Science Foundation, on the Development of an Artificial Intelligence (AI) Action Plan (“Plan”).

As the leading global organization representing over 52,000 medical imaging professionals across 150 countries, RSNA plays a central role in advancing AI-driven innovation in healthcare. RSNA hosts the world’s largest and most influential radiology conference each November in Chicago, Illinois, drawing tens of thousands of radiologists, researchers, and industry leaders from around the globe. This premier event serves as the definitive forum for showcasing cutting-edge AI applications in medical imaging, facilitating interdisciplinary collaboration, and fostering public-private partnerships that drive healthcare innovation.

Radiology and medical imaging are among the most data-intensive fields in medicine, and AI-driven technologies have already begun transforming clinical practice. Radiology has experienced the highest rate of AI tool development and deployment, with more than 76% of the over 1000 FDA-cleared AI algorithms designed for radiological applications. AI has the potential to significantly enhance diagnostic accuracy, streamline workflows, and improve patient outcomes. However, for these benefits to be fully realized, it is essential to strike a balance between fostering innovation and ensuring that regulatory oversight does not become overly burdensome. RSNA supports policies that encourage AI adoption while allowing for necessary flexibility and efficiency in the regulatory process.

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Key Considerations for the AI Action Plan

1. Fostering Trust Through Robust Validation and Transparency

AI adoption in radiology and healthcare at large hinges on trust—among clinicians, patients, and regulatory bodies. To cultivate this trust, post-deployment monitoring of AI tools must be standardized, with clear mechanisms for evaluating real-world performance and safety. RSNA urges OSTP to include provisions in the AI Action Plan that:

- Support ongoing validation studies of AI models in different clinical settings.
- Establish transparent reporting mechanisms for AI efficacy and safety.
- Encourage collaboration between regulatory agencies, professional societies, and healthcare institutions to ensure continuous oversight while avoiding unnecessary bureaucratic hurdles.

2. Encouraging AI Innovation Through Targeted Research and Development

AI in healthcare is only as strong as the research infrastructure that underpins it. RSNA recommends that the AI Action Plan prioritize:

- Foundational research to develop optimized AI algorithms capable of addressing a broad spectrum of conditions.
- Translational research to refine AI integration into clinical workflows while maintaining efficiency, quality, and safety.
- Expansion of data and reporting standards to enhance interoperability and support comprehensive AI performance tracking.

3. Reducing Barriers to AI Adoption Through Smart Regulation and Industry Collaboration

AI has the potential to improve efficiency and quality of care, but its successful implementation requires a regulatory approach that encourages—not stifles—innovation. RSNA encourages OSTP to:

- Streamline regulatory pathways to accelerate AI approvals while maintaining high safety and performance standards.
- Foster partnerships between industry, academia, and government to ensure AI tools reach the clinical environment swiftly.
- Ensure that AI regulation is adaptable to the fast-evolving nature of AI technologies, avoiding excessive red tape that could slow progress.

4. Addressing AI Education and Workforce Development Needs

As AI tools become increasingly embedded in clinical practice, equipping radiologists and other healthcare professionals with the necessary knowledge to critically evaluate, interpret, and utilize these technologies is paramount. RSNA encourages OSTP to:

- Develop federally supported AI literacy programs tailored for healthcare professionals.
- Collaborate with professional societies to implement standardized training and certification pathways for AI competency in medicine.
- Support ongoing education initiatives to ensure that providers and patients understand the implications of AI integration in care delivery.

5. Strengthening Public-Private Partnerships for AI Development and Deployment

RSNA has a long history of spearheading initiatives that drive technological progress in medical imaging. We stand ready to collaborate with OSTP, NSF, and other stakeholders to advance AI-enabled innovation. RSNA's contributions to AI development include:

- Leading the adoption of DICOM imaging standards in the early 1990s, accelerating the digitization of radiology.
- Supporting the Integrating the Healthcare Enterprise (IHE) initiative to improve interoperability between diagnostic systems and electronic health records.
- Developing foundational semantic standards, such as RadLex (<https://radlex.org/>) and RadElement (<https://radelement.org/>), that enhance machine readability of medical imaging data.
- Organizing AI challenge competitions since 2017, attracting global researchers to develop and validate AI algorithms for disease detection and classification.
- Collecting, processing and annotating large medical imaging datasets for AI challenges and research (<https://mira.rsna.org/>).
- Helping organize and supplying data to the Medical Imaging Data Resource Center (MIDRC - www.midrc.org), which aggregates and annotates medical imaging data for AI research and validation.

To further the goals of the AI Action Plan, RSNA is prepared to serve in an advisory capacity, collaborate on data-sharing initiatives, and facilitate AI research through our established programs. We believe that by leveraging expertise from leading professional societies, policymakers can create a more robust and responsible AI ecosystem that fosters innovation while ensuring patient safety.

RSNA appreciates the opportunity to contribute to this critical discussion. We welcome continued engagement with OSTP and other federal agencies to shape AI policies that promote safe, effective, and scalable AI integration in healthcare. For additional information or questions, please contact RSNA's Director of Government Relations, Libby O'Hare (eo hare@rsna.org).

Sincerely,

A handwritten signature in black ink that reads "Jeffrey Klein". The signature is written in a cursive style with a large, sweeping initial "J".

Jeffrey Klein, MD
Chair of the Board
Radiological Society of North America

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