WHAT IS RSNA®

The Radiological Society of North America (RSNA) is a non-profit that represents over 52,000 professionals across the breadth of radiologic subspecialties in over 150 countries.

Mission:

RSNA promotes excellence in health care through education, research, and technologic innovation.

- RSNA works to ensure that the growing use of artificial intelligence (AI) in radiology improves the efficiency, safety, and quality of patient care.
- RSNA's initiatives in AI include building datasets to train AI tools, standardizing data representation, analyzing AI bias and fairness, benchmarking AI tool performance, and assessing their effectiveness and safety.

What tools does a radiologist use?

- Radiologists use X-rays, Computed Tomography (CT), and Magnetic Resonance Imaging (MRI) to produce images of the human body.
- Radiologists analyze and interpret these images to assess, diagnose, and treat a wide range of medical conditions.
- Radiologists record their interpretations in radiology reports that are shared with patients and their care providers and made part of the patient's medical record.
- Informatics transforms data into expert knowledge to support improvements in the delivery of care.

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AI in Medicine & Healthcare: Policy Recommendations

Radiology is the most AI-active field in medicine, with over 76% of FDA-cleared algorithms targeting medical imaging. AI is already boosting diagnostic accuracy and efficiency, yet widespread adoption remains slow. To unlock its full potential, federal policymakers must act now—encouraging innovation while streamlining oversight to protect patients without stifling progress. The Radiological Society of North America (RSNA) supports policies that promote AI uptake in medicine and healthcare with flexible, efficient regulation.

Guiding Principles for Implementing AI in Medicine and Healthcare

AI in healthcare must serve a clear purpose: improving patient care and empowering clinicians. These guiding principles aim to ensure that AI advances accelerate progress in our ability to diagnose, treat, and cure disease, while maintaining patient safety.

Improving Patient Care

Requires a foundation of safety, evidence-based practice and established standards. Transparency is vital —for developers, providers, and patients alike.

Empowering Clinicians

Physician oversight remains essential, though its role should evolve with technology and ethics. As AI systems move toward autonomy, we must define when and how that autonomy is acceptable—balancing innovation with trust, accountability, and fairness.

Key Pillars of a Comprehensive Federal Approach to AI in Medicine and Healthcare

Accelerate Innovation with Targeted R&D

AI's promise in healthcare hinges on real-world usability. Federal investment in research and infrastructure can close the gap between technical capability and clinical integration. To close this gap, Congress should:

- Fund foundational research to develop AI algorithms for diverse diseases and conditions
- Support translational research to refine AI integration into clinical workflows
- Expand data and reporting standards to improve interoperability and performance tracking
- Invest in scalable, interoperable imaging infrastructure at NIH and NIST to support advanced clinical trials

Enable Adoption Through Smart Regulation

AI can enhance care quality and efficiency—but only if federal regulation protects patients and unleashes innovation without stifling progress. Congress should:

- Streamline regulatory pathways to accelerate AI tool approvals while maintaining patient safety standards
- Support regulatory science research to equip agencies with cutting-edge insights
- Foster collaboration among FDA, HHS ASTP, NIH, industry, and academia to align innovation with oversight
- Ensure regulation remains adaptable to fast-evolving AI technologies

Build Trust Through Validation and Transparency

Widespread AI adoption in medicine depends on trust—among patients, providers, and tool developers. Standardized post-deployment monitoring and clear performance benchmarks are essential. Congress should:

- Direct federal agencies to support validation and ensure AI tools are explainable to both clinicians and patients
- Support multicenter, prospective validation trials using real-world imaging data
- Develop explainable and interpretable AI systems for both clinicians and patients
- Create and maintain benchmark frameworks with public challenge datasets
- Standardize post-deployment monitoring and reporting mechanisms for AI safety and efficacy

Strengthen AI Education and Workforce Readiness

As AI becomes embedded in care delivery, healthcare professionals need the skills to evaluate and use these tools effectively. Congress should direct federal agencies to:

- Establish and support AI literacy programs tailored for healthcare professionals
- Collaborate with professional societies to implement standardized training and certification pathways
- Support ongoing education initiatives for both providers and patients on AI's role in care delivery

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