# **Precision Medicine with AI:** Integrating Imaging with **Multimodal Data (PRIMED-AI)**

The PRIMED-AI program concept explores how AI can bring together medical imaging with multiple, diverse types of health data (or multimodal data) in a way that supports personalized medicine and clinical decision making.



#### **Building Trust & Coordination**

Coordinate activites to ensure program and community cohesion, adaptability, scientific validation & rigor, and operational transparency



#### **Imaging and Multimodal Data** Integration

Facilitate access to and integration of clinical images and multimodal data



#### AI Algorithm and Tool Development

Develop and iterate on AI-based algorithms and tools to support clinical diagnosis, management, and prediction



#### **Clinical Implementation**

Test PRIMED-AI clinical decision support tools to catalyze new precision medicine approaches

## Workshop Summary

On March 11-12, 2025, the National Institutes of Health (NIH) Office of Strategic Coordination–The Common Fund convened the Precision Medicine with AI: Integrating Imaging with Multimodal Data (PRIMED-AI) workshop to identify key opportunities, complexities, and challenges in the emerging space of AI for precision medicine. Experts across NIH, academia, and industry gathered to share perspectives in four sessions. Key takeaways of these sessions are highlighted below.

Throughout the workshop, participants emphasized the importance of developing AI models that aim to provide clinical benefit and further patient health. Developing clinically useful AI models will require representative health data across a variety of health conditions and disease states and instituting data-sharing practices and policies that support these data requirements.

### **Developing Algorithms That Leverage Multimodal Data to Solve Clinical Needs**



**Maximize Benefits** to Patient Care

Access to and Preparing of **AI-Ready Imaging and Multimodal** Data to Enable Interoperability



Validating and Implementing Clinical Imaging and Multimodal AI





Visit <a href="https://commonfund.nih.gov/primed-ai/">https://commonfund.nih.gov/primed-ai/</a> strategic-planning to read the full summary.