

July 19, 2019

National Institute of Standards and Technology (NIST)  
100 Bureau Drive  
Stop 2000  
Gaithersburg, MD 20809

Submitted electronically to: [ai\\_standards@nist.gov](mailto:ai_standards@nist.gov)

**RE: U.S. Leadership in AI: A Plan for Federal Engagement in Developing Technical Standards and Related Tools – Draft for Public Comment**

Kaiser Permanente offers the following comments on the above-captioned NIST Draft for Public Comment on U.S. Leadership in AI: *A Plan for Federal Engagement in Developing Technical Standards and Related Tools* (Draft Plan) released on July 2, 2019.

The Kaiser Permanente Medical Care Program is the largest private integrated healthcare delivery system in the U.S., with 12.2 million members in eight states and the District of Columbia.<sup>1</sup> Kaiser Permanente has implemented a secure Electronic Health Record (EHR) system, KP HealthConnect® to support the delivery of healthcare services to our members and to enhance communications among providers.

NIST solicits comments on its Draft Plan to advance artificial intelligence (AI) standards for U.S. economic and national security needs. The Draft Plan recommends four actions: 1) bolster AI standards-related knowledge, leadership, and coordination among federal agencies; 2) promote focused research on the “trustworthiness” of AI; 3) support and expand public-private partnerships; and, 4) engage with international parties.

**General Comments**

Kaiser Permanente supports identifying key areas for federal engagement in developing technical standards and tools to support the adoption and use of AI across various sectors of the U.S. economy, including health care. While we generally agree with the recommended actions in the Draft Plan, we believe it is important to also prioritize specific sectors and technical areas for engagement; to address both the level of readiness and the

---

<sup>1</sup>Kaiser Permanente comprises Kaiser Foundation Health Plan, Inc., the nation’s largest not-for-profit health plan, and its health plan subsidiaries outside California and Hawaii; the not-for-profit Kaiser Foundation Hospitals, which operates 39 hospitals and over 650 other clinical facilities; and the Permanente Medical Groups, self-governed physician group practices that exclusively contract with Kaiser Foundation Health Plan to meet the health needs of Kaiser Permanente’s members.

adequacy of the approach currently used by federal agencies to engage in standards development; and, to limit rulemaking as the primary mechanism for standards adoption.

We offer the following comments on selected areas of the Draft Plan below.

### **Section 1: Standards and Artificial Intelligence**

In AI, there is a need to establish both “horizontal” standards (standards that are applied consistently across all sectors) as well as “vertical” standards, developed within a specific sector to address unique needs. Health care is a good example of such sector-specific standards, where accuracy, reliability, and safety are paramount.

While it may be typical to adopt standards for health care via rulemaking, federal agencies should curtail this approach in AI. Regulating standards for AI may have various unintended consequences, such as costly remediation or functional limitations for industry, especially if newer standards are published in a compliance enforcement period. Also, regulations may impose government-unique standards at odds with industry innovations that use accredited voluntary consensus standards (developed by standards development organizations or SDOs). The rapid evolution of AI makes it more likely that the slow, deliberate regulatory process would impede progress and innovation.

Tables 1 and 2 describe categories of AI standards that are available or under development, such as: Concepts and Terminology; Data and Knowledge; Human Interaction; Metrics; Networking; Performance Testing and Reporting Methodology; Safety; Risk Management; Trustworthiness; Societal and Ethical Needs; Governance; and Privacy. We recommend including three additional areas in Table 1: Usability, Interoperability, and Accuracy/Reliability.

NIST should consider assuming the role of convener or coordinator for cross-sector and cross-SDO planning and coordination of standards development related to AI.

With respect to standards-related tools, we generally support the approach outlined in the Draft Plan and suggest directing some AI standards development resources towards evaluating AI tools, including funding safe AI training methodologies, practices and evaluation.

Lastly, ethical considerations of AI should assess not just the risks to individuals, but also risks to communities and societies at large, including privacy concerns.

### **Section 2: Government AI Standards Priorities**

A key role for federal agencies is to provide resources to support SDOs and other organizations advancing the development of AI standards and tools. We reiterate our suggestion that NIST should play a leading role as a convener or coordinator.

### **Section 3: Recommended Federal Government Standards Actions to Advance U.S. AI Leadership**

#### 1. Bolster AI standards-related *knowledge, leadership, and coordination* among Federal agencies to maximize effectiveness and efficiency.

Generally, we agree and support this role. We recommend NIST consider the following additions:

- Address the uneven level of readiness and capacity of federal agencies to participate in national and international standards development processes.
- Develop guidance for federal agencies to ensure adequacy and consistency in the approach agencies use to participate in SDOs and processes
- Identify a lead office within each major agency responsible for its engagement in AI standards development

#### 2. Promote focused research to advance and accelerate broader exploration and understanding of how aspects of trustworthiness can be practically incorporated within standards and standards-related tools.

We agree and support this role. The federal government should prioritize research on metrics related to trustworthy attributes as well, and should include, at a minimum, the following areas: Usability, Interoperability, Accuracy/Reliability, Safety, Performance, Data Readiness, Appropriateness of Human Interaction, and Ethical Considerations.

#### 3. Support and expand public-private partnerships to develop and use AI standards and related tools to advance trustworthy AI.

We agree and support this role, while emphasizing the need to address the uneven level of readiness of federal agencies to engage in standards development.

#### 4. Strategically engage with international parties to advance AI standards for U.S. economic and national security needs.

We agree and support this role; and recommend that the federal government ensure a national as well as an international focus, including broadly engaging in the development of American National Standards that may also be adopted internationally.

### **Conclusion**

A critical role for the federal government is to support the development of technical standards and tools in AI by making resources available to SDOs or consortia that are directly responsible for developing voluntary, open, consensus technical standards and tools in AI, including support for human resources (technical subject matter experts) as well as financial and infrastructure resources.

Kaiser Permanente looks forward to working with NIST to strengthen the plan for federal engagement in the development of AI Technical Standards and Tools. We appreciate your

KP Comments  
NIST Draft Plan for Federal Engagement in AI Standards Development

willingness to consider our comments. Please feel free to contact me (510.271.5639; [jamie.ferguson@kp.org](mailto:jamie.ferguson@kp.org)) or Lori Potter (510.271.6621; [lori.potter@kp.org](mailto:lori.potter@kp.org)) with any questions or concerns.

Sincerely,

A handwritten signature in black ink that reads "JA Ferguson". The signature is written in a cursive, flowing style.

Jamie Ferguson  
Vice President, Health IT Strategy and Policy  
Kaiser Foundation Health Plan, Inc.