AMIA Supports NIH Efforts to Assess Value of Repositories

Informatics experts recommend NIH also review data quality, completeness when measuring value of digital repositories

Bethesda, MD (PRWEB) October 06, 2016 -- In comments submitted to the National Institutes of Health (NIH) last week, the American Medical Informatics Association (AMIA) said data repositories and knowledge bases play a critical role in enabling research and promoting biomedical research rigor, transparency and reproducibility. The nation’s leading biomedical and clinical research informaticians suggested that NIH consider metrics to assess data quality and completeness, among the other dimensions identified by the Request for Information (RFI).

The NIH published an RFI in August to solicit input on metrics “to assess the value and impact of biomedical digital data repositories that may provide a basis for technical and science policy actions required to support the long-term sustainability of repositories.” Officials noted that “colossal changes in biomedical research technologies and methods have shifted the bottleneck in scientific productivity from data production to data management, communication, and interpretation.”

A 2012 report recommended the NIH promote data sharing through central and federated repositories, stating that “The NIH should act decisively to enable a comprehensive, long-term effort to support the creation, dissemination, integration, and analysis of the many types of data relevant to biomedical research. To achieve this goal, the NIH should focus on achievable and highly valuable initiatives to create an ecosystem of data and tools, as well as to promote the training of people proficient in using them in pursuing biomedical research.”

The NIH RFI noted that in order to prioritize activities related to repository management and aid funding decisions by agencies that support repositories, the NIH RFI identified several categories of measurement, including the domains of utilization, impact, quality of service and governance.

“AMIA supports the identified domains…However, we recommend NIH view these domains with varying degrees of importance,” the comment letter said. In reviewing the domains, AMIA noted that utilization – as measured by downloads or log-ins – ranked low as a proxy for value. Whereas impact measures, such as publications from data and patents, were more useful metrics of value. “We believe this category of metrics reveal more about a repository’s value than other metrics, and we encourage NIH to look for both innovative and comparable measures,” comments noted.

Additionally, AMIA suggested NIH officials look at another dimension of data repositories: data quality and data completeness. “AMIA believes it is important to acknowledge that repositories are only useful if they are comprised of quality data, including meta-data. As NIH considers ways to measure value, we encourage NIH to focus additional attention on data veracity and completeness.”

“In the era of precision medicine, biomedical data repositories are the lifeblood of clinical research,” said AMIA President & CEO Douglas B. Fridsma, MD, PhD, FACP, FACMI. “As we begin to reengineer the clinical research enterprise, it will be critical to objectively differentiate between quality and inferior repositories.”
Click here for AMIA’s full response to NIH’s RFI.

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AMIA, the leading professional association for informatics professionals, is the center of action for 5,000 informatics professionals from more than 65 countries. As the voice of the nation’s top biomedical and health informatics professionals, AMIA and its members play a leading role in assessing the effect of health innovations on health policy, and advancing the field of informatics. AMIA actively supports five domains in informatics: translational bioinformatics, clinical research informatics, clinical informatics, consumer health informatics, and public health informatics.
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