Achieving interoperability for health data will require industry-wide adoption of standards.

Without common data standards, for example, we could not quickly and easily exchange information across the Internet or pull money from any ATM in the world. We believe this same level of interoperability is possible for health care, starting with oncology. Through electronic health records (EHRs), data could be collected once and then shared across systems—by patients, clinicians, and other stakeholders—to improve patient care.

Numerous organizations are collaborating to improve the interoperability of health data and systems for the benefit of all stakeholders. To prove the value of a common data standard and language for oncology, a team of nonprofit organizations created mCODE (minimal Common Oncology Data Elements).

Oncologists determined which minimal cancer data elements were essential for analyzing patient characteristics, treatments, and outcomes across patients and practices to improve treatment and care coordination. mCODE elements are collected at the point of care through...
EHRs, to reduce clinician burden, and made accessible using Fast Healthcare Interoperability Resources (FHIR) standard interfaces.

Increasing the interoperability of EHR data will allow stakeholders, such as clinicians and researchers, to analyze real-world data from millions of cancer patients—rather than just the limited data from clinical trials—to make critical decisions. Access to data on diverse patient cohorts is critical to informed treatment decisions between clinicians and patients, new research, including drug development, support guidelines and decision support tools for clinical use, and health insurance coverage decisions.

**CodeX Is a New HL7 FHIR Accelerator**

HL7's FHIR Accelerator program—including the Argonaut Project and Da Vinci—has increased the pace of interoperability for health data. The mCODE Team saw this as a successful method for quickly expanding mCODE implementation across all oncology stakeholders. We launched CodeX (Common Oncology Data Elements eXtensions) as a community and platform to accelerate interoperable data modeling and implementation around mCODE, leading to step-change improvements in cancer care and research.

Because mCODE was designed to be the core set of cancer data elements necessary to collect and share patient data across systems, the CodeX community is exploring additional data elements required to address new use cases. For example, there is interest in extending mCODE to high-quality collection of clinical trial end-points, empowering patients to find clinical trials, registry reporting, radiation oncology data aggregation, execution of clinical pathways, and alternative payment model data reporting.

The new accelerator is a community of implementers working together on high-priority oncology use cases that can be adopted on a national basis. CodeX is assisting implementers across the health care spectrum to create HL7 FHIR Implementation Guides and other products that can facilitate FHIR acceleration and adoption activities.

CodeX is also hosting the mCODE Community of Practice: a vibrant community of health systems and others working together to develop best practices for implementing mCODE into production EHRs.

**Join Us**

CodeX is looking for members from all stakeholder groups to work together to ensure that every patient’s journey can improve all future care.

For more information on how to join, please contact Steve Bratt, sbratt@mitre.org, or Greg Shemancik, gshemancik@mitre.org.

mCODE is being tested in clinical settings across the country. The mCODE open source data model data dictionary and FHIR Implementation Guide are freely available on GitHub, www.mcodeinitiative.org, and www.hl7.org/codex.

To learn more about mCODE, go to www.mcodeinitiative.org.

For more information about CodeX, go to http://www.hl7.org/codex.

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