



CodeX™
Common Oncology Data Elements eXtensions

Introduction to CodeX

HL7 FHIR Accelerator in Oncology

Only 3% of adult cancer patients participate in clinical trials that gather high-quality data for cancer research.

What if we could learn from the experiences of the other 97% of patients?

There are many barriers to collecting and sharing valuable patient data, including the inconsistent use or absence of data standards and the difficulty of transforming how we receive, access, and share patient information in a complex and non-interoperable healthcare system. Every interaction between a clinician and a cancer patient has the potential to provide data that could be used to improve care for that particular patient, as well as for all who follow.

A multi-stakeholder community is forming to address the need to obtain high-quality, computable data for cancer care and research. The community is called CodeX – the Common Oncology Data Elements eXtensions project within the HL7 Fast Healthcare Interoperability Resources (FHIR) Accelerator program.

Leveraging the mCODE™ standard (minimal Common Oncology Data Elements), CodeX will expand around this core to encompass additional use cases, accelerating opportunities to create a learning health system based on interoperable data and improved patient care.



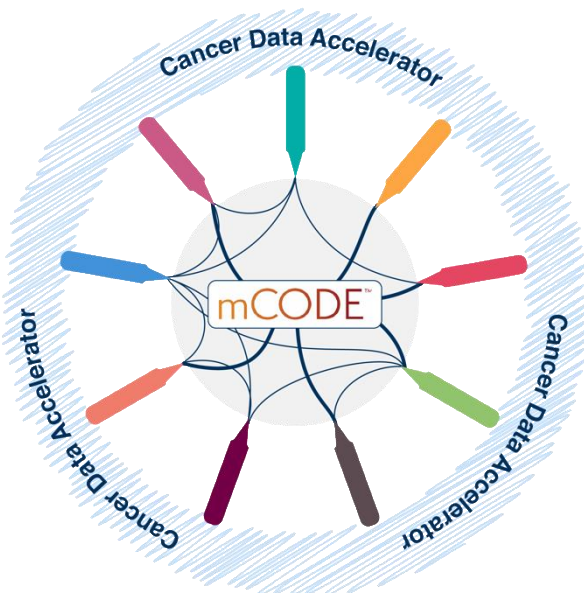
The Objective of CodeX

To create a national platform for interoperable cancer data modeling, driven by use cases that address the most urgent challenges in cancer care and research

Objectives

CodeX is assembling patients, providers and health systems, researchers, regulators, payers, and electronic health record vendors and information technology innovators to:

- Revolutionize cancer patient data collection, data sharing, and care by developing high-quality FHIR Implementation Guides, Reference Implementations, and pilots that demonstrate value
- Leverage the capabilities of mCODE, adding the additional data elements needed for new use cases
- Exchange data through electronic health record (EHR) and other systems in an interoperable way
- Streamline data collection to unburden workflows, while protecting patient privacy



Leveraging mCODE

- CodeX will speed the development and interoperability of new data models necessary for better cancer research and care, leveraging the mCODE core data model
- Extensions around mCODE would be based on priority use cases
- Some extensions may require new data elements that would be proposed to move into mCODE

MITRE's mission-driven teams are dedicated to solving problems for a safer world. Through our federally funded R&D centers and public-private partnerships, we work across government to tackle challenges to the safety, stability, and well-being of our nation.

Governance Structure

The Steering Committee, representing all of the key stakeholders, will prioritize CodeX activities, approve use cases and projects, contract for project managers and technical experts, monitor progress, report status to the CodeX members and decide which products should go to HL7 for formal standardization.

The Operating Committee, representing CodeX members, will propose use cases, project plans and deliverables, artifacts for standards development, and requests for funding for consideration by the Steering Committee. The Operating Committee will also facilitate staffing of projects with in-kind personnel contributed by founders, members, and implementers.

Level	Annual Membership Fees	Operating Committee Vote	Sponsor Partner Operating Committee Membership	Opportunity to Provide PMO Staff	Pledge Resource	Access to Use Case Artifacts	Provide Feedback
<u>Founder</u> <i>(early adopters – join by specified date)</i>	\$ 35,000	1	2	X	X	X	X
Premier	\$ 45,000	1	2	X	X	X	X
Sponsor	\$ 30,000	1	1	X	X	X	X
Member	\$ 20,000	1			X	X	X
Developer/Implementer	In kind only				X	X	X

Non-Member Participation

will be encouraged, but monitored, and must contribute to, not detract from, the established timeline and deliverables.

Resourcing

- Resources will come from in-kind contribution of participating developers and supported by member fees
- HL7 will act in the role of administrator and establish an account specifically for CodeX
- HL7 will receive an administrative fee to support CodeX and the standards development, balloting and publication efforts
- Funds will be used at the direction of the CodeX Steering Committee to fund project management and experts for projects
- Project management will establish budgets for use cases and monitor execution

Engagement with HL7

- Permanent role for an HL7 board member on Steering Committee
- Administrative services
- Establish a clear path for work to enter standards development via input/engagement with the responsible HL7 WG where required
- Selective balloting/publication of CodeX developed FHIR Implementation Guides
- Participation in HL7 FHIR Connectathons

Intellectual Property

- All work products will be made generally available royalty-free.

Implementation Approach

- CodeX projects will develop FHIR Implementation Guides and Reference Implementations
- These RIs will be tested at connectathons (or related industry FHIR developer forums), piloted in coordination with the CodeX members and other related organizations

Management and Technical Support

- Project management and coordination of the overall program, along with specific dedicated project management and SME support.
- Technical tooling, training and support to help members develop and test data models and FHIR Implementation Guides

For More Information

Interested in joining CodeX or learning more? Please contact: Greg Shemancik, gshemancik@mitre.org, or Steve Bratt, sbratt@mitre.org