Revolutionizing Cardiovascular Outcomes Through a Common Standard

Housed within the CodeX FHIR Accelerator, the mission of CardX (Cardiovascular data eXchange) is to engage a diverse group of stakeholders in the cardiovascular domain to enable standards-based interoperability in cardiovascular health and healthcare.

CardX will identify opportunities and execute scalable pilots that demonstrate the value of standards-based interoperability across multiple use cases. Foundational to CardX is the development of the core CardX cardiovascular vocabulary – a standard language for key cardiovascular clinical concepts and data – and the creation of the CardX FHIR Implementation Guide.

CardX will strengthen the delivery of cardiovascular care by supporting clinical care quality and patient safety through alignment with clinical guidelines, performance measures and metrics, and participation in cardiovascular registries.

Why CardX?

Cardiovascular disease is the leading cause of death and disability in America. The domain of cardiovascular medicine has a long and rich tradition of developing consensus guidelines and practice models demonstrated to reduce cardiovascular morbidity and mortality. Despite this foundation of evidence-based medicine, translation of the science to practice that informs therapeutic decision-making, evaluates quality, safety, and performance, and contributes to new discovery is incomplete. Why is this? Clinical information is routinely captured in unstructured documents stored in non-interoperable, siloed platforms. CardX aims to identify and use core clinical information as “good data” for assessing patient characteristics,
treatments, and outcomes through standardized and interoperable FHIR APIs.

CardX Vision

To promote cardiovascular quality through FHIR-enabled data exchange of key clinical concepts as interoperable data elements. Central to the parent CodeX FHIR Accelerator and extended to the CardX cardiovascular domain are Use Cases that embrace the vision of collecting high-quality patient data once and using it across multiple contexts and workflows.


CardX follows the approach established by the CodeX FHIR Accelerator. The target is the collection and sharing of real-world patient clinical data to inform clinical decision-making, evaluate quality and performance, support participation in clinical registries, and contribute to new discovery.

CardX Goals

- Convene cardiovascular stakeholders to develop and harmonize an open-source standard and common language for cardiovascular concepts
- Enable the collection of computable data at the point of care integrated with clinical workflows while reducing clinician burden
- Support the needs of all stakeholders and communities: patients, clinicians, registries, payers, regulators, researchers, information systems
- Provide the foundation for innovation and transformation of cardiovascular care

Join Us and Lead the Quest for Smarter Cardiovascular Data to Improve Patient Care and Outcomes

We are actively seeking leading organizations across all stakeholder groups to join CardX and gain a deeper understanding of how to implement and use FHIR, lead the development of FHIR in the cardiovascular domain, and influence the future of data interoperability. Paid membership and participation in CardX has many advantages: seats on the
Operating Committee, Use Case Leadership Teams, and the ability to sponsor another organization into CardX. Detailed information about CardX membership can be found here: CodeX Membership Options.

We are currently establishing our membership to identify our first use cases. CardX use cases are based on the interest of the Membership as well as their impact on high-quality, computable data, enabling the cardiovascular ecosystem. Examples of potential CardX use cases include:

- FHIR-based remote patient monitoring with guidelines-based management of hypertension
- FHIR-specified, high-quality data elements captured in EHR documentation and re-used for registry data submission
- Application development targeting decision support that leverages standardized cardiovascular data for the management of heart failure, atrial fibrillation, coronary artery disease, and other high-prevalence, high-burden cardiovascular diseases
- Enabling FHIR-based cardiovascular data exchange in health information technology systems, particularly pilots demonstrating the feasibility and value of adoption and scaling of FHIR-based approaches

How to Get Involved

To get involved in work shaping and to participate in CardX use cases, contact Melissa Christian (melchristian@unmc.edu). Contact the CodeX team at CodeX@HL7.org to discuss Membership options that will enable you and your organization to drive real impact within CardX and any other CodeX Use Cases of interest.