

Interoperability

Secure, appropriate and ubiquitous data access and electronic exchange of health information.

Interoperability is the ability of different information systems, devices and applications (systems) to access, exchange, integrate and cooperatively use data in a coordinated manner, within and across organizational, regional and national boundaries, to provide timely and seamless portability of information and optimize the health of individuals and populations globally.

Health data exchange architectures, application interfaces and standards enable data to be accessed and shared appropriately and securely across the spectrum of care, within all applicable settings and with relevant stakeholders, including the patient.

Four Levels of Interoperability

- 1 Foundational:** Establishes the inter-connectivity requirements needed for one system or application to securely communicate data to and receive data from another
- 2 Structural:** Defines the format, syntax and organization of data exchange including at the data field level for interpretation
- 3 Semantic:** Provides for common underlying models and codification of the data including the use of data elements with standardized definitions from publicly available value sets and coding vocabularies, providing shared understanding and meaning to the user
- 4 Organizational:** Includes governance, policy, social, legal and organizational considerations to facilitate the secure, seamless and timely communication and use of data both within and between organizations, entities and individuals. These components enable shared consent, trust and integrated end-user processes and workflows

Priorities

- ✓ It is critical that we move toward bi-directional, individual access to information, and clearly present the value proposition for all health ecosystem participants related to the collection and exchange of data.
 - HIMSS would like to see United States Core Data for Interoperability expanded to include additional data classes that encompass more information streams, including data focused on: social determinants of health, patient-generated health, wearables, genomics, and healthcare cost and price information.
- ✓ For the current system to evolve, patients must be provided with secure access to actionable information that assists them in directing their own healthcare, as well as inhibits the blocking of information that contributes to more seamless care delivery.
 - Information blocking is defined as a practice by regulated actors—health IT developers of certified health IT, health information networks (HINs), health information exchanges (HIEs), and healthcare providers—that is likely to interfere with the access, exchange or use of EHI.
 - ONC is working with the HHS Office of Inspector General (OIG) to implement the information blocking provisions. HHS IG is charged with the enforcement of information blocking. Health IT developers, HINs or HIEs that are found to be blocking information could be subject to a \$1 million civil money penalty per violation, however there is no current enforcement mechanism in place.
 - HIMSS supports the idea that health IT developers publish Application Programming Interfaces (APIs) and allow health information from such technology “to be accessed, exchanged, and used without special effort.” In addition, HIMSS supports the use of Health Level 7 (HL7®) Fast Healthcare Interoperability Resources (FHIR®) Release 4 (R4) and the additional named implementation specifications. HIMSS recognizes and supports the importance of ONC’s approach to promoting open APIs and the directional signal that ONC is sending to the community by specifying HL7 FHIR.
- ✓ We want to continue to be a resource to stakeholders as they implement the ONC and CMS Interoperability Regulations. Some of the questions that the community is trying to address are: appropriate education from organizations to their staffs on the new regulations; organizational updates of privacy and information security policies and procedures for required data sharing; and, due diligence around and patient education on privacy and security considerations for third-party application developers.

Wins

- 2020 HHS Office of the National Coordinator for Health IT (ONC) and the Centers for Medicare & Medicaid Services (CMS) put our healthcare system on a pathway to broader and more meaningful health data exchange as well as greater empowerment of patients with more control over their data.
- Info blocking provisions in the 21st Century Cures Act and in ONC regulations.

Engagements

- HIMSS Interoperability Showcase at Global Conference.
- Work with the Global Consortium for eHealth Interoperability.
- Collaborate with 30 governments and WHO on the Global Digital Health Partnership.