Interoperability — Curing Healthcare Data’s “Tower of Babel”

United Nations diplomats speak a multitude of languages that require translators to help make everyone understand each other. Without translators, the U.N. would be like the biblical Tower of Babel, where everyone speaks but no one understands anyone else.

Similarly, the technical and data incompatibilities between healthcare record and source platforms, from patient-related data generated by the myriad EHRs (electronic health records), hospitals, physicians, labs, artificial intelligence, medical devices, billing, wellness apps and the like, created by different vendors and for different user types, can’t readily communicate with each other. It’s as if they all speak different “languages,” like healthcare data’s virtual Tower of Babel.

They need their own “translation” mechanisms to ensure that patient health data coming from different sources correlates correctly, and everyone along the treatment path can access full patient health information and make a knowledgeable, value-based diagnosis and treatment plan based on what’s been done and what should happen next, without duplicating efforts.

That ability for healthcare data to “speak the same language” and be consistently and easily accessed and correlated across platforms and from different sources is known as interoperability. “Healthcare interoperability,” says EHRIntelligence.com, “is a way for organizations to utilize information and ensure that patients can receive proper care, even if they move from one provider to the next.”

How interoperability fits into the healthcare ecosystem

The Healthcare Information and Management Systems Society (HIMSS) says that, “Interoperability is the ability of different information systems, devices or applications to connect, in a coordinated manner, within and across organizational boundaries to access, exchange and cooperatively use data amongst stakeholders, with the goal of optimizing the health of individuals and populations.” It’s this
interoperability across the complete spectrum of care that makes mandated value-based health care possible in 2019 and beyond.

The HIMSS goes on to explain that, “Optimally, interoperability facilitates connections and integrations across these systems to occur regardless of the data’s origin or destination or the applications employed, and ensures the data are usable and readily available to share without additional intervention by the end user.” That means data is not only available to healthcare providers but also to patients who want to get their medical records electronically.

**Here’s why interoperability is growing rapidly**

The impetus for healthcare data interoperability is rising at an exponential rate due to:

- Changing federal regulations. CMS (the Center for Medicare and Medicaid Services) just, “…released proposed rules that require many types of insurers to provide electronic health data in a standard format by 2020,” according to a very recent Modern Healthcare article. “In two long-anticipated rules, the CMS and the Office of the National Coordinator for Health Information Technology (ONC) proposed requiring healthcare providers and insurers to implement open data-sharing technology to ensure data can move from one plan to another, potentially by way of patient apps.” Encouraging the use of technologies that allow seamless health data exchange can help patients more easily share information with providers to reduce duplicate testing and promote continuity of care.

- The artificial intelligence (AI) push. With the momentum for nationwide interoperability, there is an increasing amount of data as a whole. Healthcare organizations need to apply the right tools to handle that information, and advanced analytics capabilities, like AI, are quickly becoming a top option. AI advancements, machine learning, and improvements to EHR usability could all transform patient care, especially when they are interoperable.

- Hospital associations’ recommendations. The January 2019 interoperability report offers the nation’s hospital associations’ recommendations to pursue pathways to interoperability through improvements in security and privacy, efficient solutions, cost-effective infrastructure, health IT standards, shared best practices, and data sharing that supports population health management and other burgeoning areas of health IT use. It presses public and private stakeholders to advance healthcare interoperability.

- Interoperability networks offer secure options. Healthcare organizations have different options for secure data exchange, which can expand provider access to patient records and aid the industry transformation to value-based care.

- Evolving interoperability standardization. Early in 2019, Ann Arbor, Mich.-based nonprofit Health Level Seven released its newest version of the Fast Healthcare Interoperability Resources (FHIR) standards framework, which promises to lay the groundwork for improved interoperability, according to a recent Healthtech article. This desirable approach will make it easier to upgrade rather than replace applications as they evolve and improve.

- Increases in patient data access options. Ensuring that patient data access is a reliable and secure option is increasingly critical as healthcare works to adopt value-based care. Informed healthcare stakeholders agree that a well-informed patient is a better patient, and improved
Reaping the benefits of interoperability

While interoperability often may be an afterthought, it should be in the forefront of every healthcare provider’s thoughts going forward for many advantageous reasons:

- Saves time. A provider can receive the patient’s data in real time. This allows a physician or hospital to make informed decisions about the patient’s health without waiting for paper records, faxed/scanned information, or requiring security clearance on other providers’ systems. With interoperability, for example, a patient could visit the doctor, submit samples for testing and view the test results on his or her computer or mobile device, all in the same day.
- Around-the-clock availability. Because information is all handled electronically, it can be used any time to save lives in an emergency room with instant access to the relevant data in the patient’s medical records, such as their list of medications, allergies and other critical information 24 hours a day, 7 days a week.
- Reduces errors and risks. Interoperability reduces the risk of malpractice lawsuits that stem from misreading data and wrong diagnosis due to physicians not having the information they need. Additionally, it facilitates a better flow of information, which leads to improved efficiency and faster, better patient health outcomes. Interoperability also reduces the need for manual data input, which frees up time, minimizes errors, and alleviates illegibility issues or hunting through complex charts.
- Improves patient care. EMR Interoperability allows a patient’s medical records to follow them throughout the health care system. Patients benefit from increased access to their medical records, faster communication and better quality of care.
- Saves money in the long run. Interoperability could ultimately reduce the cost of healthcare through reduction of malpractice lawsuits, hospital stays and patient visits, and eliminating redundant or inapplicable testing and unnecessary procedures.
- Offers effective collaboration. Cross-health system and cross-provider collaboration is critical for good and cost-effective care,
- Results in better public health data. In an ideal world, every healthcare organization would be interoperable with one another, creating a network of shared data which can be used to predict long-term health trends and facilitate faster, more accurate collection of public health data.
- Improves patient privacy. When organizations do not know exactly where patient data exists in every instance, privacy breaches become inevitable. No one can guarantee a scribbled note containing PHI (protected health information) will be discarded correctly and not carelessly placed at the top of a full trash can in a waiting room or left in a copy machine. Conversely, when clinical staff input sensitive data via a secure device on an interoperable network, they can be confident that their patients’ PHI will be better protected.
On-the-spot assistance to help you speak the same language

Connecting disparate medical systems and wrangling patient record data is critical to healthcare. Hospitals and healthcare providers are inching closer to, but still short of, seamless interoperability because of confusion, time and money constraints, misunderstandings, coordinating stakeholders, standardization across care settings, IT usability issues, and information blocking efforts.

“However, with initiatives to overcome these challenges already gaining traction,” according to EHRIntelligence.com, “interoperability advancements will likely continue despite these obstacles.”

The key to facing interoperability challenges (and reaping the benefits in your healthcare organization) is having knowledgeable, ready-to-step-in assistance that meets your needs. Blue Eagle Consulting experts will help you analyze your current interoperability situation, understand where you need support, train your staff, and help your organization speak the same language as healthcare providers across the nation.

To find out more about our interoperability resources Get in touch today to let us know how we can help you.