Improving Patient Care through Interoperability

Contributing Tenant Partners

BioEnterprise

CISCO

HIMSS

Hyland
creator of OnBase

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AT A GLANCE

Interoperability makes it possible to have the right information at the right time for the right people to make the right decisions. The secure, efficient, and effective sharing and use of electronic health information when and where it is needed reduces spending on redundant and ineffective care, increases the odds of getting the most efficacious care, and reduces medical errors. Interoperability improves patient care, helps fulfill a financial and clinical return on health IT investment, and enables clinicians, caregivers and patients to make better decisions. Interoperability enables an ecosystem where patients are at the center of their care.

Introduction

Interoperability and collaboration are vital to positively transform health and healthcare for individuals and communities. When health information systems and technologies communicate with each other, information flows securely and appropriately within and across organizational boundaries. When patient data is securely and seamlessly shared, it is updated and appropriately accessible at all points of care. This provides a complete and accurate view of the patient – anytime and anywhere – resulting in safer, higher quality and more cost-effective care.

All individuals, their families and healthcare providers should be able to send, receive, find and use electronic health information in a manner that is appropriate, secure, timely and reliable to support the health and wellness of individuals through informed, shared decision-making. In such an environment:

- Individuals are at the center of their care.

- Providers have a seamless ability to securely access and use health information from different sources where an individual's health information is not limited to what is stored in disparate health IT systems. It includes information from many different sources and care settings. This includes technologies that individuals use and that portray a longitudinal picture of health, not just episodes of care.

- Diagnostic tests are repeated only when necessary, because the information is readily available.

- Public health agencies and researchers can rapidly learn, develop, test and deploy the very best in clinical, evidence-based guidelines.

Secure Seamless Sharing of Patient Data
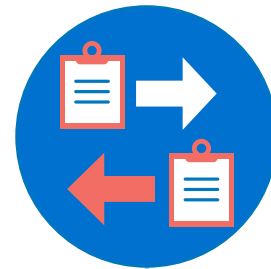
Improves Care

Fufills IT Investment

Caregivers Make Better Decisions

Interoperability Improves Patient Care

- With interoperable health IT systems, there is no need for patients with complex diagnostic and care requirements to carry boxes and bags filled with their medical records as they transverse the care community.

- The ability for patients to log into one system to view all interactions, consultations, diagnoses and medical bills supports the overall picture of a longitudinal health record.

- Open standards-based systems and internet protocol (IP) networks enable data to be moved securely from the enterprise data network edge at the point of care and delivered to an enterprise data center repository in the health information exchange or data network core. Compliance with interoperable data standards enables providers (clinicians) and consumers (patients, payers or other clinicians) of healthcare data to have secure access to that data.

Interoperability Helps Fulfill a Financial and Clinical Return on Health IT Investment

- Interoperable information technologies address these issues by supporting secure, ready access to patients' health and payment histories. This enables smooth patient hand-offs across clinical settings and also improves revenue cycle management.

- Open standards-based systems and internet protocol (IP) networks allow for secure exchange of electronic commerce between all entities in the healthcare value chain. This approach maximizes ROI as all players in the ecosystem are able to securely, quickly and efficiently access needed data to perform their job functions.

- Resources that are leveraged across the care continuum – such as laboratory test results, data, images and clinical decisions – mean the work is not duplicative and wasteful.

Interoperability Enables Clinicians, Caregivers and Patients to Make Better Decisions

- Since patients (consumers) often see different clinicians for different reasons, their health information needs to be both secure and readily available to them and to their care providers.

- Open standards-based systems and internet protocol (IP) enable simpler implementation of data sharing and networking across an Accountable Care Organization (ACO). The financial benefits of a multi-organization care delivery network would be more challenging without an interoperable data set, software applications and secure data networks.

- Care teams, along with patients, can view the same computerized tomography (CT) scan and laboratory data and make joint treatment decisions, together, even though they may be miles apart.

Conclusion

By getting the right information to the right people at the right time, interoperability saves money and, more importantly, it saves lives. But, interoperability is not an overnight process; it is a journey that leads to many positive outcomes. To realize the full potential of health IT to improve the delivery of healthcare, achieve better health outcomes and reduce costs, the industry is encouraged to focus on opportunities to support interoperability that will enable widespread, secure health information exchange.

These opportunities include:

- Helping patients (consumers) easily and securely access their electronic health information, direct it to any desired location, and learn how their information can be shared and used. In addition, patients should be assured that this information will be used effectively and safely to benefit their health and that of their communities.[1]

- Enabling providers to securely share individuals' health information for care with other providers and their patients whenever permitted by law, and not block electronic health information (defined as knowingly and unreasonably interfering with information sharing).[1]

- Adopting and implement federally recognized, national interoperability standards, policies, guidance and practices for electronic health information; and adopt best practices including those related to privacy and security.[1]

[1] HealthIT.gov. (2016). Interoperability Pledge. Retrieved from HealthIT.gov: https://www.healthit.gov/commitment

Contributing Tenant Partners

- **HIMSS** – HIMSS provides all stakeholders with the understanding of how to electronically access health information and share useful data with care providers. Through easy-to-understand tools and resources, it helps individuals learn about security, access and sharing patient health information with those who need to know it.
  More at: www.himss.org

- **Hyland Software** – When providers and health IT systems exchange clinical content through OnBase, clinicians have the patient's information right at their fingertips, can make more informed decisions and provide more confident patient care.
  More at: www.onbase.com

- **BioEnterprise** – A business formation, recruitment, and acceleration initiative designed to grow healthcare companies and commercialize bioscience technologies.
  More at: www.bioenterprise.com

- **Juniper Networks** – Juniper Network's approach to interoperability provides open and standards-based IP networking infrastructure enabling big data analysis defining one of the key areas where IT can contribute in healthcare.
  More at: www.juniper.net/us/en

- **Cisco Networks** – Cisco and UCSF created a partnership to build a Connected Health Interoperability Platform that will consist of a digital health application market place, a secure, cloud hosted data interoperability system across EHR's/devices/apps and API services that enable feature rich, interconnected healthcare application development.
  More at www.digitalhealthplatform.org