Executive Summary

Healthcare policy initiatives are spurring the creation and adoption of health information exchanges (HIE) and implementing an HIE solution is multifaceted. AT&T Healthcare Community Online (HCO) is a pre-integrated cloud-based HIE designed to facilitate the secure internal and external exchange of patient data. HCO integrates information from disparate sources, including electronic health records (EHR) and other key systems, into a single view and maintains the integrity of the data while providing a cost-effective strategy for meeting the strict requirements and pending deadlines of meaningful use.
Introduction

Health information exchanges (HIEs) are designed to connect providers across systems within a region, facilitate syndrome surveillance, achieve meaningful use, promote transparency and accountability and improve patient outcomes by creating a sustainable healthcare delivery system that contains cost.

AT&T Healthcare Community Online (HCO) is a cloud-based HIE that integrates information from disparate sources, including electronic health records (EHR) and other key systems, into a single view and facilitates the secure internal and external exchange of patient data.

Between 2009 and 2010, there have been numerous healthcare policy initiatives – including the American Recovery and Reinvestment Act of 2009 (ARRA) and the Patient Protection and Affordable Care Act of 2010 (PPACA) – designed to be catalysts for the adoption of health information technology. The new acts have put a premium on utilizing information technology to foster clinical decision-making, with the overarching goal of improving transparency, access and patient care while simultaneously reducing overall healthcare costs. Additionally, in the event of a rapid outbreak of a communicable disease or infection at the state or regional level, providers that utilize an HIE have an effective way to share and disseminate information to improve patient and population outcomes.

Healthcare providers are being incentivized to deploy HIEs to improve provider communication, reduce redundancies and streamline the gathering and dissemination of patient information.

In a recent eHealth Initiative report titled “The State of Health Information Exchange in 2010: Connecting the Nation to Achieve Meaningful Use,” the researchers discovered that “more organizations are reporting a reduction in staff time and redundant testing through the use of a health information exchange.”

Yet many healthcare organizations are apprehensive – the majority of the concerns involve cost, complexity and time – about creating an HIE solution that complies with the meaningful use requirements. However, despite funds earmarked within ARRA to help address potential budgetary challenges, many clinicians and eligible hospitals, including critical access hospitals, fear they will have to develop expensive custom applications to integrate existing clinical and administrative systems, which could jeopardize data security and the integrity of their overall infrastructure.

Although many of the concerns – cost, complexity and time for implementation – can be barriers to adopting an HIE, there are options for individuals who want a pre-integrated HIE solution that will meet meaningful use requirements as well as alleviate implementation and financial concerns. HCO is a cloud-based HIE that integrates information from disparate sources, including EHR and other key systems, into a single view and facilitates the secure internal and external exchange of patient data. HCO maintains the integrity of the data while providing a cost-effective strategy for meeting the strict requirements and pending deadlines of meaningful use.

Implementing an HIE solution is multifaceted. Healthcare organizations need the ability to retrieve clinical data quickly, accurately and efficiently. They also need to consolidate information from multiple disparate databases into a single dashboard, which will help them focus on providing timely, effective, equitable, safe and patient-centered care.

The goal of an HIE is to be a conduit for sharing information and digitizing patient information, which is one step toward having an integrated approach to real-time point-of-care data including laboratory results and current prescription information. HCO supports certified EHR, telehealth, mHealth, imaging management, e-prescribing, billing and other applications that are crucial for a robust HIE solution.

To connect with national, state and regional HIEs, HCO features a single sign-on access to pre-integrated applications. This enables providers and hospitals to cost-effectively deploy a fully managed, flexible, reliable and scalable HIE solution.

With the HCO cloud-based platform, healthcare providers can receive aggregated patient health information at the point of care. Moreover, they can:

- Access a single and highly secure view of patient data from multiple sources and technologies, including telehealth, mHealth, imaging management and clinical applications
- Share information with other members of the healthcare ecosystem

The HCO patient-centric model is focused on boosting care by reducing medical errors and improving health outcomes, decreasing medical costs and addressing government regulations regarding patient privacy and meaningful use.

Achieving Meaningful Use

The objective of the Patient Protection and Affordable Care Act (PPACA) is to expand healthcare coverage to Americans. With the expansion of insurance coverage to more people via health insurance exchanges, HIE solutions are going to be essential as we move into the next generation of healthcare. More covered lives equal more clinical data, which equal an exponential need to have systems that can share information in a consistent manner. In short, to facilitate access to and retrieval of clinical data to provide safer, more timely, efficient, effective, equitable, patient-centered care, the new health legislation – combined with new mandates such as meaningful use and PPACA – will require that providers find automated, integrated solutions such as HCO from AT&T.

To foster the adoption of EHRs and HIEs, one of the main priorities of meaningful use is to improve the quality, safety and efficiency of health care and to reduce disparities. To this end, the legislative aims of the new healthcare policies are to foster provider adoption of information technology such as EHRs and HIEs as there is strong consensus that:

- Automated tools will improve provider/patient communications and ultimately engage patients and families in healthcare decision-making
- Improve care coordination
- Make certain that adequate privacy and security protections exist for personal health information
HIEs can help healthcare providers improve the continuity of patient care, participate in syndrome and epidemiological studies and increase patient follow-up.

**Healthcare Community Online**

**Benefits of AT&T’s Cloud-based Platform**

**Aggregate Data Platform**
**Benefits:**
- Ability to pull together data from multiple sources, including EHR, telehealth, mHealth, imaging management, clinical applications and other critical programs
- Ability to select from an ecosystem of best-of-breed certified vendors or hook in own existing systems
- Choice of applications from vendors such as Allscripts®, Aprima®, athenahealth, Inc., Cerner Corporation, E-MDs, Inc., eClinicalworks®, Epic Systems Corporation, GE Healthcare, Greenway Medical Technologies, McKesson Corporation, and Siemens Corporation

**Highly Secure Communication/Messaging**
**Benefits:**
- Centralized engine that facilitates highly secure communication between users
- Expedited data routing and transformation between all legacy systems and external sources and endpoints
- Master Patient Index, which makes certain patients are correctly identified
- Record Locator Service, which detects various care episodes for quick access to and retrieval of a single patient record

**Near-Real-Time Access, Anywhere**
**Benefits:**
- Virtually anytime, anywhere and near-real-time access to patient information and eHealth applications
- Extended connectivity with rural physicians, who aren’t forced to install, adopt and maintain complex technology or suffer a disruption in service

**Simple & Secure Access**
**Benefits:**
- Centrally managed single sign-on so authorized users can log onto multiple systems at once
- Time savings with faster retrieval of critical patient data

** HIPAA Compliance**
**Benefits:**
- Meaningful use compliance
- Strong security measures that adhere to Health Insurance Portability and Accountability Act (HIPAA) regulations
- Single sign-on, creating an authenticated, federated environment that securely advances collaboration and communication within the provider community

**Single View for Diverse Applications**
**Benefits:**
- Holistic view of patient history
- Remote diagnosis and care
- Faster detection and more-accurate tracking of public health issues
- Clearer visibility into the health and needs of a provider’s patient population

**Scalability**
**Benefits:**
- Easy addition of individual users as well as entire merged entities

For instance, under the Meaningful Use Final Rules, providers are required to use systems capable of exchanging relevant clinical information such as drug/drug and drug/allergy interaction checks; the electronic creation and transmittal of prescriptions; and record-keeping of patient demographics such as preferred language, gender, race, ethnicity and date of birth among care providers and other patient-authorized entities. The ability to have a secure, holistic view of a patient’s treatment history and pending treatment plans will reduce test redundancies, drug/drug interactions and preventable medical errors. Despite these incredible potential benefits that healthcare IT can offer, some healthcare organizations may still be reluctant to implement an HIE solution, due to concerns about the long-term financial feasibility and sustainability of maintaining an HIE. The adoption barriers to HIE, such as initial cost and ROI, are being outweighed by the rising cost of healthcare as well as legislative initiatives to streamline the healthcare business as well as clinical workflow processes. Moreover, a centralized process that takes into account data adjudication rules and data integrity may significantly lower administrative costs.

**The Solution Is in the Cloud**

AT&T solutions and services are integrated with various applications so providers can have a single view of patient data. With the HCO solution, healthcare providers can quickly, securely and cost-effectively connect their clinical and administrative systems to each other and to national, state and regional HIEs.

**Adopting HIE**

The simplicity, flexibility, scalability and security of the HCO provide a solid foundation for accelerated and simplified adoption of HIEs. HCO, the AT&T HIE solution, integrates existing applications, enabling healthcare providers to maintain their legacy technology investments without having to replace their existing infrastructures.

The eHealth Initiative report “The State of Health Information Exchange in 2010: Connecting the Nation to Achieve Meaningful Use” found that healthcare organizations have realized financial savings in numerous ways. For instance, some have experienced reduced staff time spent on clerical administration and filing and handling prescriptions, lab and radiology results. Fewer dollars were spent on redundant tests, medication errors were reduced and the cost of care for chronic care patients decreased.

The Healthcare Community Online HIE solution will be instrumental in achieving the four main priorities of the meaningful use legislation:

1. Improve the quality, safety and efficiency of health outcomes and reduce health disparities
2. Engage patients and families in healthcare
3. Improve care coordination
4. Ensure adequate privacy and security protections for personal health information

A reliable network is the backbone to support healthcare IT solutions. The AT&T network combined with the cloud-based HCO platform and targeted services facilitate the secure internal and external exchange of patient data to reduce administrative costs and improve patient care while enabling providers to adopt and sustain an HIE.
Notes

2. Patient Protection and Affordable Care Act of 2010 (Public Law 111-148)


7. Ibid.

For more information contact an AT&T Representative or visit www.att.com/healthcare.