

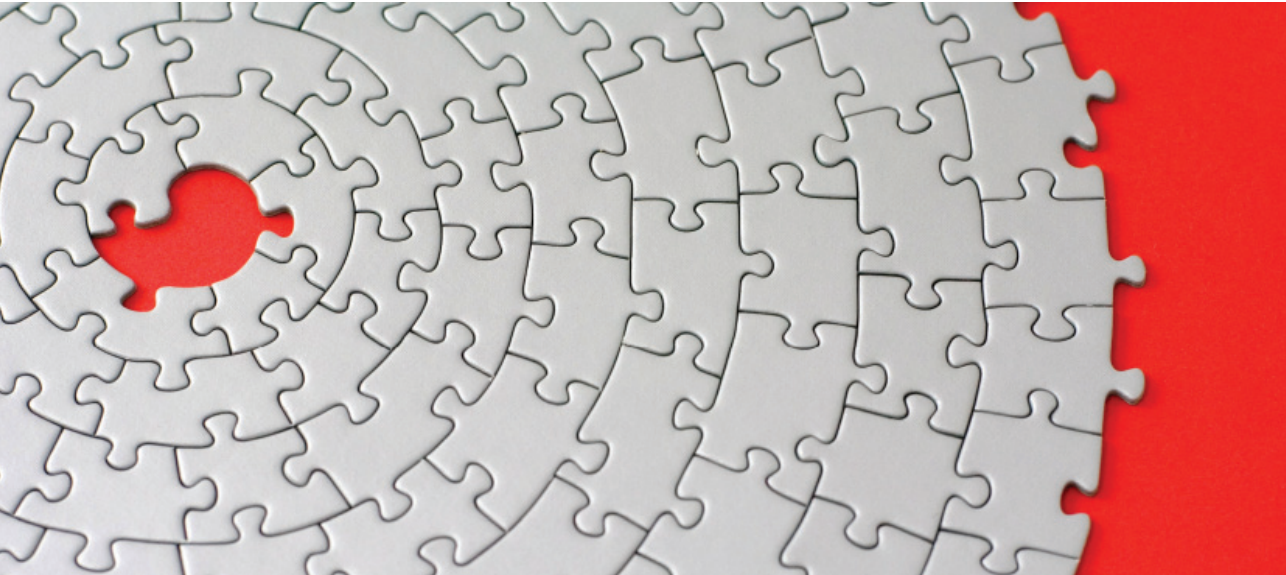


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Our vision is to connect physicians to each other and to the entire community of care, including patients, hospitals, labs and pharmacies, providing a more seamless patient experience.

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Paving the Way to Interoperability

Allscripts' Solutions for Simplified Data Sharing Among Healthcare Organizations



Article by:

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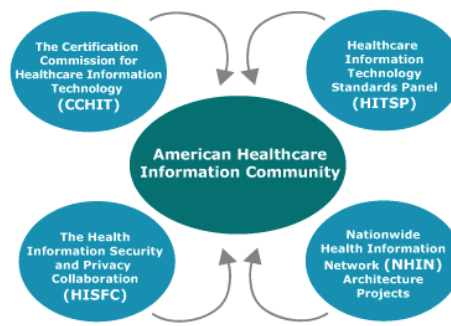
*Principal Engineer
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Many different kinds of computers talk to each other, many types of businesses have linked up using versatile Web services, and individuals throughout the world easily connect over the Internet. So why don't healthcare systems communicate? Despite the serious, time-sensitive nature of healthcare services, and technological advances that make interoperability possible, electronic systems that support the healthcare industry have been lagging behind providers' connectivity needs. Fortunately, recent developments are opening the door to true interoperability among healthcare organizations, with vendors like Allscripts taking the lead in providing flexible solutions that address many key healthcare issues.

INTEROPERABILITY ISSUES IN THE HEALTHCARE INDUSTRY

Healthcare providers, industry observers and vendors are all watching closely to spot the regulatory trends and technology developments that will determine how interoperability in the healthcare industry will be achieved over the next decade. The top issues that are coming to the forefront for all of those involved include improving access to patient information, enabling direct data exchange based on accepted standards, accelerating the interoperability timetable, and equipping healthcare providers to satisfy CCHIT (Certification Commission for Healthcare Information Technology) requirements.

FIGURE 1:
Standards Bodies for the
Healthcare Industry



Easier Access To Patient Information

One of the most urgent needs in the industry today is improved data access, with the focus on giving healthcare providers quick, easy ways to retrieve, review and update accurate patient-specific clinical information at the point of care—regardless of healthcare setting, geographical location, or type of HIS (Hospital Information System) and/or EHR (Electronic Health Record) system used locally. Rising to the challenge, various vendors have been working at diverse levels, using a variety of approaches, to ensure connectivity for their own products and to encourage interoperability among different platforms. The most common data access models being considered include:

- **Central Repository:** Multiple healthcare organizations feed information into a secure, universally accessible database that can be queried at will by any authorized provider.
- **Direct Data Exchange:** Provider databases share data transparently, based on accepted exchange formats and standards.
- **“Switchboard”:** A central routing configuration permits authorized providers to query multiple external sources to view specific types of patient information.

The advantages and shortcomings of these different approaches—including issues concerning the ways in which particular solutions would be effectively implemented, managed, monitored and financed—are still being debated. Regardless of approach, however, all vendors and providers face the larger challenge of identifying and agreeing on data exchange standards that can provide the practical foundation for any community connectivity solution.

Data Exchange Standards

Many industry participants are interested in eventually achieving secure, direct exchange of information between heterogeneous patient information systems, based on accepted industry-wide exchange formats and protocols. The CCHIT, the HITSP (Healthcare Information Technology Standards Panel) and the NHIN (National Health Information Network) are taking the lead in identifying advanced technologies appropriate for this purpose, establishing the actual standards to be used for healthcare data exchange, providing guidance as to best practices for implementation, and continually monitoring the industry to ensure that evolving standards and practices meet real-world needs. In fact, these three bodies have been contracted by the Department of Health and Human Services, through the Office of the National Coordinator for Health IT (ONC) specifically to:

- 1) identify interoperability standards to facilitate the exchange of patient data (HITSP),
- 2) define a process for certifying that health IT products comply with appropriate standards (CCHIT), and
- 3) develop a series of prototypes to establish the requirements of a nationwide health information network (NHIN). The IHE initiative (Integrating the Healthcare Enterprise) aids in these efforts by providing a detailed implementation and testing process to promote the adoption of standards-based interoperability by vendors and users of healthcare information systems. *See fig. 1*

Although some strides have already been made, the movement toward achieving universal acceptance of particular standards is still very much “in progress.”

Accelerating The Interoperability Timetable

Most healthcare providers would like to implement enabling technology for interoperability as quickly as possible, in order to address the growing complexity (and associated isolation) of diverse electronic healthcare systems. Improved connectivity would help providers respond more effectively to growing regulatory pressures and reporting requirements, while lowering administrative costs, reducing risk and liability, and helping providers overcome logistical obstacles to providing top-quality patient care. As indicated above, cooperation among vendors and providers has led to some accomplishments in this area, but in most cases providers’ needs are still outpacing related applications, standards and enabling technologies.

CCHIT Certification

In its own words, CCHIT is “a recognized certification body (RCB) for electronic health records and their networks, and an independent, voluntary, private-sector initiative.” Its mission is to “accelerate the adoption of health information technology by creating an efficient, credible and sustainable product certification program.” Through its work, CCHIT is helping to ensure that healthcare systems can eventually become effectively interconnected, and that reliable methods are in place to ensure the quality of connectivity solutions.

The aim of healthcare vendors in relation to CCHIT is to make it possible for hospitals, physician practices and other healthcare facilities to easily adopt and implement systems that comply with CCHIT guidelines. For providers, compliance may be the key to functioning cost-effectively within the scope of initiatives

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Our consuming passion is to transform healthcare... making what some call impossible, possible.”

such as P4P (pay for performance), which will very likely be linked to CCHIT certification over time. Also at issue are valuable government contracts that may soon be off-limits to providers whose systems can't meet CCHIT requirements. Certification is therefore among the most critical criteria for selecting healthcare technology platforms.

ALLSCRIPTS INTEROPERABILITY SOLUTIONS

The concept of connectivity is fundamental to Allscripts' vision to deliver Just Right, Just-In-Time Information™ and to “connect physicians to each other and to the entire community of care including patients, hospitals, labs and pharmacies, providing a more seamless patient experience.” The company's development efforts and industry participation support its “passion to transform healthcare, making what some call impossible, possible.”

Driving Standards

Allscripts is leading industry efforts to create a thoroughly integrated community of national healthcare providers, whose cooperation will permit universal, fully secure access to patient data via simple, standards-based access methodologies and technology platforms that are easy to establish, manage and maintain. The company is also driving the standards that will make these advances possible.

Enabling Incremental Interoperability

Allscripts believes that healthcare organizations shouldn't have to wait for full-scale standards adoption or completely refined interoperability technology. Allscripts is heading the movement toward providing interim interoperability solutions that increase the possibilities for secure data

access across applications to the greatest extent possible today, while laying a solid foundation for enhanced connectivity along the way as interoperability standards and methodologies become more prevalent.

A Commitment To Technology Leadership

Allscripts continually expands on and establishes new connectivity capabilities within the Allscripts product family, directly participates in the work of technical review committees within major standards bodies, and incorporates interoperability enablers—in line with the most recently accepted standards and practices—into each new product release. The goal is to ensure that Allscripts products remain “interoperability-ready” as community-based data exchange becomes an increasingly near-term reality.

ALLSCRIPTS-TO-ALLSCRIPTS CONNECTIVITY: Allscripts users benefit from a variety of product connectivity solutions that target the top, real-world data access needs identified by healthcare providers.

Empowering Emergency Departments

Typically, the ED has urgent need for data feeds both into and out of its hospital's HIS/ADT (Admissions, Discharge, Transfer) systems, as well as links with EHR and electronic care management solutions. Allscripts HealthMatics ED currently offers interoperability in the following ways:

- Automatic communication between Allscripts HealthMatics ED (HMED) and the Allscripts Canopy care management system, providing useful alerts to care managers and social works, plus high risk flags for the HMED tracking board

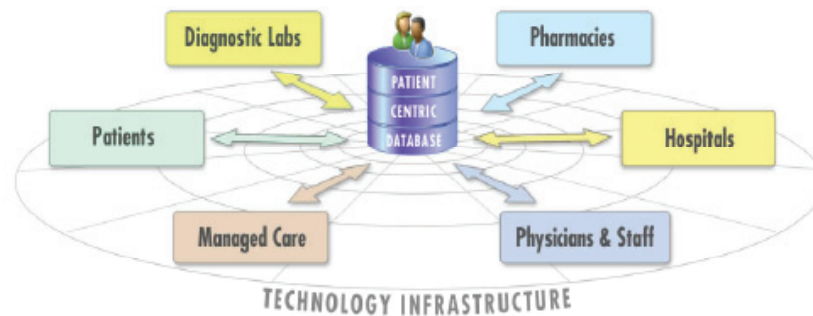
- Background uploads of ED data to the HIS
- Remote chart access (RCA) in HMED, permitting off site primary care physicians to receive automatic emails notifying them of a patient's visit to the ED, and allowing them to securely view patients' updated charts in Allscripts HealthMatics EHR or Allscripts TouchWorks EHR

Data Exchange For Clinical Practices

Independent physician groups frequently require ways to exchange data with other healthcare facilities either as automatic updates to electronic patient charts or on an ad hoc basis whenever needed. Allscripts TouchWorks EHR and Allscripts HealthMatics EHR advance connectivity in the following ways:

- Upcoming support for bi-directional data exchange, enabling the two systems to share data easily
- Demonstrated ability to share a common repository with standards-based hospital systems, permitting larger communities to link patient information from diverse facilities
- Both TouchWorks EHR and HealthMatics EHR are 2006 CCHIT Certified Ambulatory EHR products that have met a comprehensive set of criteria for functionality (setting features and functions to meet a basic set of requirements.), interoperability (enabling standards-based data exchange with other sources of healthcare information) and security (ensuring data privacy and robustness to prevent data loss)

FIGURE 2:
Allscripts Community
Connection (ACC)



INTEROPERABILITY IN THE BROADER HEALTHCARE COMMUNITY

In keeping with its leadership position, Allscripts is an active member of all major industry standards bodies, and participates closely in the work of the IHE. By actively influencing industry standards and implementation guidelines, and continually evolving Allscripts technology accordingly, Allscripts ensures that its end users remain optimally positioned to take advantage of effective interoperability methodologies, both now and in the future. Participation includes:

- EHR Vendors Association (EHRVA) Board of Directors
- EHRVA Standards & Interoperability Work Group
- EHR-Lab Interoperability and Connectivity Standards (ELINCS)
- IHE IT Infrastructure (ITI) Technical Committee
- IHE Patient Care Coordination (PCC) Technical Committee
- ASTM E31 membership
- CCR Acceleration Task Force
- Certification Commission for Health Information Technology (CCHIT) Interoperability Workgroup

Demonstrated Distributed Capabilities

IHE's annual Connectathon provides a week-long interoperability testing event that allows vendors to demonstrate and validate their integration work. Thousands of vendor-to-vendor connections have been tested overall, and tens of thousands of transactions passed among the systems tested. Recent IHE Connectathon trials clearly demonstrated Allscripts' interoperability with outside vendors' platforms, using technology that will be incorporated in all future Allscripts product upgrades.

Data Exchange In A RHIO (Regional Health Information Organization)

Geographically clustered physician practices might wish to participate in a regional data sharing configuration that optimizes costs and improves efficiency for all participants. Ever-expanding Allscripts connectivity provides the basis for a highly productive and cost-effective interoperability solution for local provider communities. Allscripts technology supports the RHIO model and permits various community connectivity solutions for Allscripts customers.

These solutions include the Allscripts Community Connection (ACC), an interoperable health information network that allows members of the care-team to collaborate and access comprehensive, patient-centric data. Leveraging the ACC platform, physicians can obtain patient-specific information from both internal legacy systems and external systems distributed throughout a healthcare community. Information available includes admission and visit data, lab and test results, prescribed medications, clinical notes and summaries, demographic and payer information, and more. *See fig.2*

The ACC supports existing standards and will support future standards as they are defined. Its architecture easily interfaces with many data sources and applications, ensuring that users can continue to use their existing infrastructure as new connectivity technologies emerge in the healthcare community.

CONNECTIVITY ADVANTAGES OF ALLSCRIPTS SOLUTIONS

Through its interoperability initiatives and leadership, Allscripts delivers significant operational and financial benefits to healthcare organizations ranging from small physician practices to major regional healthcare systems. Advantages include:

- Immediate cost reductions due to increasingly easy data exchange among Allscripts systems
- Faster, easier, less costly incorporation of internal and external interoperability functionality over the long term
- Higher quality patient care with enhanced methods for identifying outcomes and establishing best practices
- Improved aggregation of data for disease and population management
- Enhanced market position in local community based on faster, streamlined services
- Reduced risk and liability as a result of quicker, more efficient access to accurate patient data

With Allscripts, healthcare organizations can start now to incorporate connectivity for critical information delivery systems while establishing a solid, cost-effective foundation for expansion and enrichment over time. In a complex technology environment that makes it difficult to comprehend and respond to evolving issues regarding interoperability, Allscripts provides a single-point vendor solution that ensures compliance and flexibility, lowers costs, and contributes to high return on investment for valuable patient data systems. •

About The Author

George Cole, *Principal Engineer, Allscripts*

George joined Allscripts in January 200 and currently directs the Interoperability efforts for Allscripts. He is a member of the CCHIT Interoperability Workgroup, the IHE ITI Technical Committee and Patient Care Coordination Technical Committee, as well as the EHRVA Standards and Interoperability Workgroup.