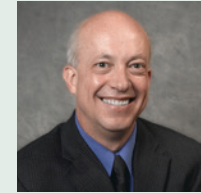


Radiology interoperability guide

SCALE
SMARTER.

In this guide

- 4** Meaningful Use
- 7** Success Story: How Radiology Consultants of Iowa found meaningful use
- 9** HIEs and ACOs
- 11** CCD and Consolidated CDA
- 16** Success Story: How DRA Imaging established a competitive advantage
- 18** Web Services
- 20** The Direct Project
- 24** Corepoint Health products



“Corepoint Health’s technology allows us to take in multiple feeds from 17 different facilities, normalize them, and then integrate them into an efficient workflow for our radiologists. If I were to draw you a picture of just about anything we do, Corepoint Integration Engine would be in the middle. It is central. It makes everything work.”

JOE MOORE | CIO

Radiology Consultants
of Iowa

As health IT demands have increased, one integration partner continues to get stronger.

Achieve your interoperability goals with the #1 ranked interface engine in healthcare six consecutive years. Corepoint Integration Engine is the platform connecting the referring community, improving workflows and enabling secure patient data exchange for every type of healthcare provider.

This Radiology Interoperability Guide describes some key terms, topics and trends currently impacting health IT.



NO 1 RANKED
INTERFACE ENGINE
6 YEARS IN A ROW

© 2015 KLAS Enterprises,
LLC. All rights reserved.
www.KLASresearch.com

Meaningful Use

In August 2013 the ONC released the final Stage 2 requirements and it further defined deadlines and reporting requirements as eligible providers work toward establishing a more interoperable healthcare system.

For radiologists, a majority are eligible to participate in Meaningful Use starting with Stage 1 and progressing to Stage 2. A survey from March 2013 showed that 72% of radiology professionals have done just that. To remain competitive in their markets, radiologists need to be aware of the requirements surrounding the electronic submission of orders, the electronic return of results, and the availability of images in a Certified EHR Technology (CEHRT).

Stage 2 final rules gave clarity to “what” (*continued on next page*)

DID YOU KNOW?

Corepoint
Integration Engine
was the first interface
engine ONC-
Certified for Modular
Ambulatory EHR and
Modular Inpatient
EHR.



needs to be exchanged for this stage of Meaningful Use and “how” the information should be received.

The rules state that ordering physicians have to receive 20% of their results, including the images, as a link to their CEHRT. And when placing an order, the physicians must use CPOE 30% of the time for radiology.

If a radiologist is not participating in Meaningful Use, it will be a challenge to understand referring physician requirements. If orders cannot electronically make it from their EHR technology to the radiology group, business will shift elsewhere.

Stage 2 rules also define new requirements for transporting patient data among facilities. Approved transport methods include Direct Project and secure Web Services, both of which can be achieved in Corepoint Integration Engine. *(continued on next page)*

Request more
information or a product
demonstration ►

Consolidated CDA is a new term that appeared in the Meaningful Use documentation for Stage 2. This is the new Summary of Care document format that must be utilized by physicians when transferring patients from facility to facility. The results section of the Summary of Care document must be electronically populated, which again makes the case for keeping all referring transactions electronic.

Stage 3 proposed rules released in 2013 “begin to transition from a setting-specific focus to a collaborative, patient- and family-centric approach.” This means an increased emphasis on patient engagement and communication.

How Radiology Consultants of Iowa found Meaningful Use success

RCI successfully qualified for Meaningful Use reimbursement in 2012.

Key ways RCI uses Corepoint Integration Engine to improve operations:

- ▶ Improved billing efficiency by sending clinical reports directly to CodeRight.
- ▶ Created a true partnership with the referring community by seamlessly integrating with existing EHR systems. Partners seamlessly connect without the need for additional programs or troublesome workarounds.
- ▶ Sends every RIS message and radiology report through Corepoint Integration Engine to be populated into a quality assurance database, which puts RCI ahead of the curve for quality-based reimbursement.
- ▶ Clinical staff easily manipulates messages to maintain workflow operations.



Radiology Consultants of Iowa

- ▶ 7 Clinics
- ▶ 34 Radiologists
- ▶ 17 Hospitals electronically connected
- ▶ RIS: MedInformatix

**Request more
information or a product
demonstration ▶**

HIEs and ACOs

Effective health data exchange is the main goal of healthcare reform efforts as it pertains to health IT. Health information exchange (HIE) organizations have been a popular topic for several years thanks to their ability to help organizations meet the Meaningful Use requirement of sending patient summary of care information to unaffiliated, external health organizations. According to the eHealth Initiative's 2012 Report on Health Information Exchange, there were 322 HIE organizations in operation in 2012, an increase of 27% from 2011.

While valid concerns remain about the financial sustainability of HIE organizations in their current form, many current HIE organizations are moving to support accountable care organizations (ACOs) and/or Patient-Centered Medical Homes (PCMHs). *(continued on next page)*

Read the
“Helpful Information
About Health
Information Exchanges”
white paper ►

ACO growth exploded in 2011 because healthcare organizations hope to earn Medicare shared-savings rewards for lowering growth in health care costs while meeting quality of care performance standards. Many HIEs are supporting ACOs or PCMHs by providing the data exchange architecture and data analytics.

Many healthcare organizations are choosing to set up an enterprise-level HIE, which provides greater levels of interoperability and control.

“Corepoint Integration Engine allowed us to quickly connect with the Indiana Network for Patient Care (INPC) and allows us to adjust to their needs going forward. We can do all the work in house saving money and time.”

MARTY BUENING | IT DIRECTOR
Northwest Radiology Network

CCD and Consolidated CDA

CCD and Consolidated CDA are two essential health data standards that Meaningful Use ensures will be commonplace in the future of health IT. These summary of care documents include many sections of clinical data, including results.

[Learn more about
CCD and CDA ►](#)

What is a Continuity of Care Document (CCD)?

The Continuity of Care Document (CCD) is used to share summary information about the patient within the broader context of the personal health record, and was designated in Meaningful Use as the data standard EHRs use most to exchange data.

The CCD is based on the HL7 CDA architecture. CDA is a document standard governed by the HL7 organization. *(continued on next page)*

The document standard for HL7 v3 is CDA, and one of the documents within the CDA architecture is CCD.

What is Clinical Document Architecture (CDA)?

CDA is an XML-based, electronic standard used for clinical document exchange that was developed by HL7. CDA conforms to HL7 V3 Implementation Technology Specification (ITS), is based on the HL7 Reference Information Model (RIM), and uses HL7 V3 data types.

What is the primary purpose of a CCD?

The primary purpose of the CCD is for exchange—specifically in the context of a patient being transferred from one care setting to another.

(continued on next page)

DID YOU KNOW?

Corepoint Health offers a 4-hour online CDA / CCD training course. [Learn more ►](#)

Does a CCD offer the complete medical record?

A CCD is not intended to be a complete medical history for a given patient. Rather, it is intended to include only the information critical to effectively continue care. This snapshot of information is broken across 17 different sections that include the clinical content as defined originally by the CCR.

[Learn more about
CCD and CDA ►](#)

How is a CCD viewed?

One of the most important characteristics of a CCD is that it must be human readable using any standard web browser. This is a requirement of any CDA document. The patient data within a CCD document is encoded using XML. The XML can be displayed on a web browser using a style sheet. Any clinician, or even the patient, can open the CCD document and view the patient health data with just an online web browser. *(continued on next page)*

What is the 'Consolidated' part of Consolidated CDA?

Consolidated CDA refers to the development of a single implementation guide that can be the single source of truth. It represents harmonization of Health Story guides, HITSP C32, part of the IHE Patient Care Coordination, and the original CCD by HL7. The Consolidated CDA implementation guide defines templates used to structure the documents. With one implementation guide and all the templates defined in one place, the standard becomes much easier to analyze and implement.

How many different types of documents are included in Consolidated CDA?

The Consolidated CDA implementation guide defines nine different types of commonly used CDA documents. *(continued on next page)*

Each of these nine documents has a document template defined in the Consolidated CDA implementation guide, which will now be the single source of truth for implementing these CDA documents.

How DRA Imaging established a competitive advantage

By using Corepoint Integration Engine, DRA Imaging has taken major steps to improve front desk patient service and billing efficiency, allowing the practice to accurately collect insurance copay revenues and enabling the front desk to focus their attention where it belongs: the patient.

Because DRA Imaging can easily exchange data between internal and vendor applications, satisfaction has increased with the external referring medical community in New York's Hudson Valley region, said Julian Gottesman, CIO at DRA.


"Our RIS is a very robust application, but capturing data entry errors is not always possible," said Wayne Wadsworth, Senior Systems Architect. "These errors filter their way through the system resulting in an ongoing waste of time and effort trying to fix them. We realized many of the data entry errors could be *(continued on next page)*



DRA Imaging

- ▶ 3 Clinics
- ▶ 19 Radiologists
- ▶ RIS: Cerner

Request more
information or a product
demonstration ▶



captured up front as they occur within the RIS. We were not able to accomplish this using our RIS alone and Corepoint Health provided the perfect remedy. We easily built the logic using their configuration application. Connecting our in-house developed software with our RIS using Corepoint Integration Engine allowed us to succeed in reducing billing errors.”

DRA Imaging plans to use Corepoint Integration Engine to improve billing workflows further by tightly integrating with hospital partners to achieve a streamlined charge collection process.

Additionally, real-time work queues will improve the workflows of the patient’s journey through their facility, which will allow clinicians to proactively serve patient needs with “just in time” actionable data.

“Corepoint Integration Engine is thankfully backed by first rate technical staff and leadership, it is obvious how important their customers are to them. The ability to contact their support engineers and implementation team with any issue has increased our confidence in all future interfacing projects.”

WAYNE WADSWORTH
SENIOR SYSTEMS ARCHITECT
DRA Imaging

Web Services

Web Services makes it easier to communicate health data between disparate organizations, regardless of the operating system or software in use. By using Web Services, typically with an integration engine, organizations can exchange large amounts of data over the Internet and intuitively integrate received data into their application environment, all without the need for scripting.

Web Services is highly interoperable and allows for real-time query-based updates on designated trigger events. Once a patient's health data is updated and the trigger is set, that patient record is published to one or more HIEs using industry-standard methods, such as IHE profiles. The exchanged CCD is wrapped with metadata that is stored in the HIE registry, and the document itself typically is stored in the HIE repository. *(continued on next page)*

DID YOU KNOW?

Corepoint
Integration Engine
was one of only eight
Health IT vendors
to receive 2013 IHE
USA Certification
from ICSC Labs.

Web Services Description Language (WSDL) is an XML-based language that provides the framework to send messages electronically over the Internet. XML messages that follow the SOAP standard for secure communications is the most common Web Services standard used in healthcare. Because Web Services allows data transmission regardless of the vendor or workflow, it has been proven to be the ideal communication method for connecting remote providers using predefined IHE Profiles.

The Direct Project

Direct is a government-sponsored initiative to promote the secure communication of patient health information (PHI). To do this, Direct uses the SMTP protocol as its communication backbone. This has led many in the industry to refer to the standard as “secure e-mail.” However, Direct has the potential to be much more than just traditional e-mail.

Using SMTP as the backbone, applications can share data using Direct without any human intervention, much in the same way that Web Services or TCP/IP using VPNs might be utilized. Secure SMTP transfer will be easier to implement, while maintaining scalability.

(continued on next page)

Learn how Corepoint
Integration Engine
supports Direct ►

The benefits

Direct protocol is an ideal substitute for VPNs. Patient health data can be sent securely, sent on demand, and sent using the SMTP protocol. The HL7 message payload can be parsed and sent/received automatically.

Users of Direct

Users of the Direct protocol will be individuals who send secure e-mails with attached PHI and also machines that send automated messages. In a machine-to-machine workflow, Direct protocol will be used to automatically send information from application to application.

PHI will be attached to an e-mail and sent using SMTP as the protocol. The e-mail will be secure and a special (*continued on next page*)

e-mail provider called a HISP (Health Information Service Provider) will need to be utilized.

Direct Project applications

Applications currently using Direct solutions include HIEs, CERHT vendors, and patient portals. The demand is increasing as facilities complete Meaningful Use requirements.

Direct has the capability to handle a variety of data formats, including all the standard healthcare formats. Computer-to-computer sharing of patient health information is simplified by XDM packaging. All of the metadata for the content, such as CCD/CDA, CCR, HL7 V2, DICOM, etc., is defined in a metadata file. This allows the receiving system to decide rather simply how to process the content.

Corepoint Health products

Corepoint Health solutions are transforming the way providers meet their interoperability and operational challenges.



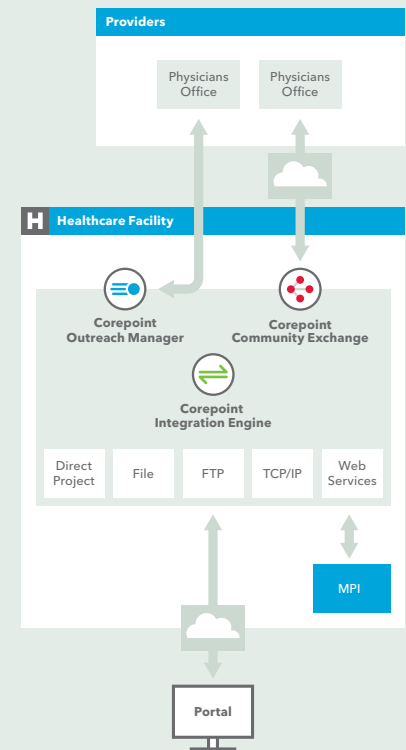
Corepoint Integration Engine is the #1-ranked interface engine by KLAS® six years in a row. With Corepoint Integration Engine, users easily create high-quality interfaces and manage their integration activities.



Corepoint Community Exchange is an innovative enterprise-level HIE solution that allows multiple, remote locations to securely exchange patient data via web services, laying the foundation of innovative care solutions for outpatient clinics and ACOs.



Corepoint Outreach Manager The demand for managing and extending integration outside the facility to referring physicians is increasing exponentially. With Corepoint Outreach Manager, users monitor and control incoming orders, receive orders without a local medical record number, place orders in a holding queue until the patient arrives, and more.



Learn more about
Corepoint Health
products ►

Learn more

Visit corepointhealth.com/products, or contact us at 214.618.7000
or info@corepointhealth.com.



SCALE
SMARTER.