Diagnostic image exchange



Enabling faster, more accurate diagnoses

eing at the core of the diagnostic process, medical imaging is a service under pressure. Health systems face growing shortages of radiologists, while the demand for diagnostic imaging services has become more prevalent. As A result, patients wait longer for diagnoses, and quality begins to suffer. In some countries, health systems also must now meet the burden of tracking radiation dosages for patients over time.

SECURE IMAGE SHARING THROUGH VENDOR NEUTRAL ARCHIVES

A proven way to mitigate the volume of image reporting requests is to reduce the need for repeat scans for non-urgent cases. This can be achieved through secure image sharing among healthcare organizations through vendor neutral archives (VNA). VNAs facilitate access to second opinions and faster, more accurate results for difficult cases, improving the patient experience and reducing costs. Cohesive approaches for storing, retrieving and viewing images also help disaster recovery resilience and reduce audit exposure.

These new imaging platforms can be used for both radiographic and non-radiographic images (captured in services such as cardiology and endoscopy), as well as surgical videos, autopsy film and wound care photos, to support multidisciplinary teams. They can also increase regulatory compliance through consistent application of information governance and retention policies across different image types and centered on patients themselves.

While standards exist to facilitate image sharing, many healthcare organizations are locked into proprietary picture archiving and communications systems (PACS) that make interoperability more difficult.

STANDARDS-BASED DICOM AND VNA SOLUTIONS

As a trusted provider of DICOM and VNA solutions for leading health systems in North America and Europe, CGI has successfully enabled interoperability for PACS without "ripping and replacing" them. As a result, clinicians can continue to use the applications they already know, clinical workflow is not disrupted, and patients are irradiated less.

We have a keen understanding of IHE XDS/XDSi, DICOM and WADO technical protocols as well as preferences for work patterns to be delivered to radiologist desktops. Working with leading technology partners, we have created standards-based shared systems that transform image access and workflow to distribute reporting workloads across a community of radiologists, theoretically based anywhere. Solutions can be managed or hosted by the client or CGI.



PROVEN RESULTS

Having performed VNA interoperability work on two continents at real scale (involving 40 applications in North America and 24 hospitals in Europe), CGI is arguably the most experienced medical imaging system integrator in the world.

We have partnered with clients to develop:

- Shared diagnostic imaging repository solution for 26 hospitals across the Greater Toronto area
- Shared DICOM and non-DICOM repository solution for 22 hospitals that make up Helsinki University hospital in Finland
- Common format for data exchange that is IHE compliant based on XDS profiles.