EMC IMAGE & CONTENT MANAGEMENT

Redefine how you manage, share and integrate diagnostic images and unstructured content

ESSENTIALS

- Deliver a patient-centric view of images and unstructured content across the enterprise
- Image-enable your EHR/EMR to provide faster time-to-care
- Eliminate disparate systems with a single, scalable data source
- Enhance interoperability by consolidating resources and minimizing interfaces
- Improve information access and sharing capabilities across the continuum of care
- Support information lifecycle management (ILM) and data mining
- Enhance viewing and eliminate unnecessary workflow steps
- Reduce incidents of duplicate testing and improve efficiency
- Simplify data management and maintenance, and reduce total cost of ownership (TCO) for IT

TRANSFORMING IMAGE MANAGEMENT & COLLABORATION

As the healthcare industry moves toward collaborative, patient-centered care, organizations continue to be challenged with providing their clinicians with a comprehensive view of all medical information, including diagnostic images. And with the growth of medical imaging technologies now extending beyond radiology, clinicians are increasingly requiring access to both DICOM and non-DICOM information as they move across the hospital and the continuum of care.

But clinician demand is being hampered by current medical image and data management strategies as organizations struggle with growing volumes of medical images, larger file sizes as a result of technological advances in modalities, and more stringent image retention requirements. Multiple deployments of PACS (Picture Archiving and Communication System) also make sharing and managing images with other related structured and unstructured content specific to a patient's care difficult.

The traditional solution to this challenge has been a Vendor Neutral Archive (VNA). While a step in the right direction, VNAs alone don't go far enough to meet enterprise data access requirements. Healthcare organizations now have to consider how to manage the complexity of medical images alongside their electronic health record—encompassing both image- and non-image-related information. And as they simultaneously try to comply with the industry's new model of patient data management in support of collaborative care efforts, they have to look beyond department-only strategies to consider the needs of the whole enterprise.

To meet these challenges and achieve long-term data management strategies and meaningful-use initiatives, organizations are investing in enterprise solutions that integrate with existing clinical systems and enable access to and sharing of all unstructured content from a single data source.

IMPROVE HOW IMAGES AND RELATED CONTENT ARE MANAGED AND ACCESSED

Leveraging the benefits of the market leading vendor-neutral archive and enterprise content management (ECM) solutions, the EMC Image and Content Management (ICM) solution allows healthcare organizations to redefine their clinical content management strategy and image-enable their EHR/EMR with a single, integrated system for managing and viewing all types of unstructured data—not just diagnostic images.

EMC²

The EMC ICM solution includes all the functionality of a VNA for diagnostic image storage, and enhances that functionality to include the capabilities of an enterprise content management solution for comprehensive clinical content management, integration and sharing. The scalable data management and archiving solution is optimized to manage all unstructured content, and through integration with the EHR/EMR, makes available at the point of care, a longitudinal, patient-centric view of a patient's medical record.

ICM affords healthcare organizations the ability to consolidate medical image resources and leverage existing investments in EHR/EMR systems to enable the integrated management and viewing of all clinical content from a single source. Organizations are also able to attain an enterprise data management strategy while increasing productivity and simplifying, at a reduced cost, the achievement of Meaningful Use Stage 2, as well as compliance with federal and state regulations.

The solution provides the ability to:

- Facilitate sharing—through the use of open standards—of all diagnostic images and unstructured content throughout the enterprise and across the continuum of care while maintaining patient privacy and security.

- Aggregate any data type and index the associated metadata to ensure that all clinical content—irrespective of type—is stored in a central location, organized by patient, for easy access.

- Image-enable the EHR/EMR to provide a fully integrated, patient-centric view of the complete patient record—further facilitating enterprise-wide consistency and collaboration.

- Improve data availability and protection by consolidating growing volumes of medical images across multiple departmental solutions, and providing instant access to both new images and evaluation of relevant prior diagnostic studies. And ensure regulatory compliance by making data secure, immutable—unable to be deleted or altered—and auditable.

- Allow for workflow processes to be applied against the data to enable further improvements to patient care.

- Empower clinicians with a comprehensive view of their patients, leading to greater clinician efficiency and improved patient outcomes.

- Improve the interoperability of information and virtualize data within and between systems to enhance clinical efficiencies, reduce healthcare delivery costs and improve patient-care decisions.

- Enable clinical workflow redesign in an effort to strengthen transitions of care supporting Meaningful Use Stage 2 (MU2) and supporting global payment strategies associated with Accountable Care Organization (ACO) efforts.

- Avoid vendor lock-in and more quickly adopt or incorporate new imaging technology, or replace clinical applications, by using standard, non-proprietary data file formats—preventing compatibility issues, costly integration and data migrations, and potential workflow disruptions.

By leveraging a single repository across multiple departments to manage image and non-image information based on industry standards, the ICM solution empowers healthcare organizations to move from imaging silos to content-centric synergies in delivering patient care, enterprise-wide.
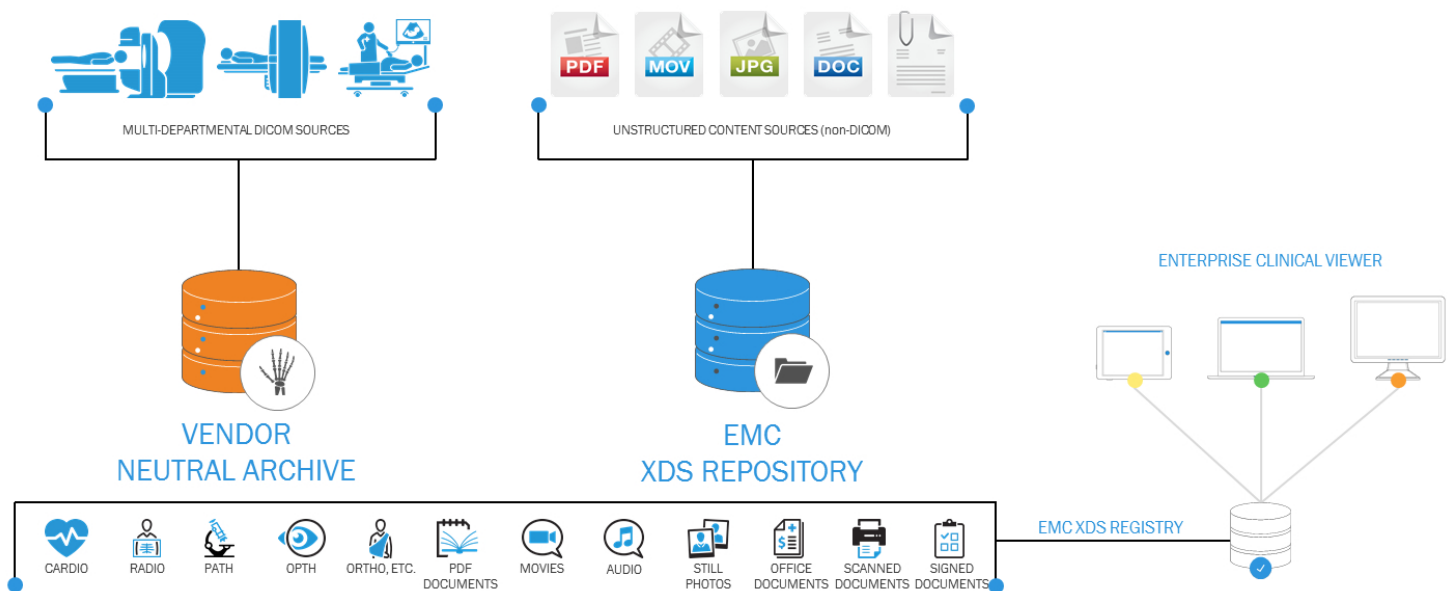
EMC²

A PLATFORM FOR INTEROPERABILITY

The EMC Image and Content Management solution—combined with EMC Isilon and VNX storage platforms—delivers a powerful, scalable, secure and highly available IT infrastructure for archiving, viewing and sharing your diagnostic images and related content anywhere, anytime.

SIMPLIFY IMAGE AND CONTENT MANAGEMENT AND VIEWING

Unlike a vendor-neutral archive, the ICM solution consolidates all patient information from disparate departmental applications, and transforms and standardizes this raw medical data into a non-proprietary, standards-based format. This data is then integrated in to the EHR/EMR to create a comprehensive, patient-centric view of all medical data—allowing for it to be mined intelligently and distributed centrally and securely within the organization and externally across the continuum of care.

The result is increased interoperability, significantly reduced costs and improved clinician access. To do so, the ICM solution relies on three components:

- **Vendor Neutral Archive and EMC Documentum**—to consolidate, standardize, manage and share all clinical content and medical images from multiple PACS, health information systems (HIS), radiology information systems (RIS) and other specialized imaging applications into a single, integrated repository for image viewing and management that image-enables your EMR and empowers your clinicians with enterprise-wide access to a complete, patient-centric view of all diagnostic information at the point of care.

- **EMC Medical Records Manager**—to facilitate easy access, sharing and integration of clinical content. This is enabled through the use of Health Level 7 (HL7) and IHE standards for Cross-Enterprise Sharing of Documents and Images (XDS / XDS-I)—allowing for images and related content to be integrated into various healthcare application environments. And by using Cross-Community Access (XCA)—enabling for the secure exchange of healthcare information with every clinician across the enterprise and the continuum of care, regardless of their facility location.

- **Enterprise Viewer**—to enhance the viewing of imaging data and content by enabling users to review and consult all information associated with a patient within your EHR/EMR, or on a laptop, tablet or smartphone—in one place, and anywhere it is needed to improve workflow and patient interaction.

MULTI-DEPARTMENTAL DICOM SOURCES

UNSTRUCTURED CONTENT SOURCES (non-DICOM)

ENTERPRISE CLINICAL VIEWER

VENDOR
NEUTRAL ARCHIVE

EMC
XDS REPOSITORY

EMC XDS REGISTRY

CARDIO   RADIO   PATH   OPTH   ORTHO, ETC.   PDF DOCUMENTS   MOVIES   AUDIO   STILL PHOTOS   OFFICE DOCUMENTS   SCANNED DOCUMENTS   SIGNED DOCUMENTS

EMC²

EMC KNOWS HEALTHCARE

EMC is a trusted healthcare solutions provider serving more than 5,000 healthcare customers worldwide. Our healthcare solutions and industry leading IT infrastructure—storage, cloud, virtualization, security and analytics—allow healthcare organizations to transform how they view, organize, access, manage and use patient information to create efficiencies and optimize care delivery. We don't just work with our customers, but we become their trust advisor and strategic partner in improving patient outcomes and empowering patient-centered care.

EMC solutions help to reduce costs, improve efficiencies and enhance the quality of healthcare worldwide.

GET STARTED

The EMC Image and Content Management solution allows healthcare organizations to redefine how diagnostic images and unstructured content are managed and shared for an integrated, patient-centric view across the enterprise and continuum of care.

To learn more about EMC Image and Content Management, contact your local representative or authorized reseller—or visit us at www.EMC.com.

EMC²