It’s time for an enterprise-wide approach to medical imaging

Enterprise Imaging and Value-Based Care

AGFA HealthCare
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Executive Summary

HEALTHCARE IN GENERAL AND CLINICAL CARE DELIVERY IN PARTICULAR ARE EMBRACING A SIGNIFICANT SHIFT IN HOW ORGANIZATIONS ALIGN THEMSELVES, FOCUSING ON CARE OUTCOMES, AND PUTTING IN PLACE A HOLISTIC, PATIENT-CENTRIC CARE DELIVERY APPROACH THAT IS VALUE DRIVEN. THE EPISODIC ENCOUNTER, VOLUME-BASED APPROACH OF THE PAST IS OFFICIALLY IN THE PAST.

In our past, volume-based environment, images remained in their separate silos of multispecialty care areas. The efficient information sharing required today can be achieved by the creation of a comprehensive EHR, by incorporating medical imaging on a consolidated platform.

THIS TRANSFORMATIONAL SHIFT IN THE HEALTHCARE DELIVERY MODEL HAS BEEN UNDERWAY FOR SOME TIME WITH THE EMERGENCE OF SINGLE VENDOR ELECTRONIC HEALTHCARE RECORDS (EHRS) THAT BRING TOGETHER DISPARATE APPLICATIONS UNDER A SINGLE INTEGRATED PLATFORM. UBIQUITOUS SHARING OF PATIENT INFORMATION IS RIGHTFULLY PERCEIVED AS CRITICAL TO QUALITY PATIENT CARE DELIVERY.

Features of a Value-Based Care Model

VALUE-BASED CARE INVOLVES COORDINATION AMONG CARE PROVIDERS AND PARTICIPANTS TO PURSUE HIGH QUALITY AND HIGH VALUE CARE WHILE REDUCING THE NEED FOR UNNECESSARY MEDICAL SERVICES. IT IS AN INTEGRATED STRATEGY THAT BREAKS SILOS AND INTRODUCES WORKFLOW EFFICIENCIES. THIS APPROACH REQUIRES CARE TEAMS NOT ONLY TO COMMUNICATE AND COLLABORATE EFFICIENTLY, BUT ALSO INVOLVES PATIENTS AND PAYERS SO THAT THE BENEFITS OF A HOLISTIC ENTERPRISE-WIDE VALUE-BASED CARE DELIVERY MODEL ARE REALIZED.

An interoperable ecosystem of clinical exchange, with tools for business intelligence, on a consolidated platform helps care providers deliver coordinated care, monitor health outcomes of their patients, improve operational efficiencies, and control costs.

Imaging is prolific and more imaging data is being created today across the care continuum. However, in most cases there is no meaningful use or access to this imaging data, which in certain cases leads to re-exposure of patients to unnecessary medical tests. This ultimately gives relevance to building a unified governance model for an organization’s clinical imaging needs. Images are also being acquired at point of care, in ambulatory and home settings, and with mobile devices that aid further not only to enable a clinician to view a visual healthcare infographic of a patient, but also to enable patient education and participation.

A consolidated enterprise imaging approach allows physicians and care providers at all stages of the care continuum to have unified access to patients’ medical reports and clinically relevant imaging data that enrich the patient’s visual healthcare infographic.

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The Significance of Enterprise Imaging in the Delivery of Value-Based Care

Imaging has witnessed exponential growth in the last 15 years. During the conversion from film to the digitization of images, it has spawned very strong departmental solutions. Given the transformation from film to where we are today, workflow improvements have certainly been phenomenal.

The development of these departmental solutions has resulted in the creation of silos of images and image related data. In some cases, silos were cross-departmental, but they were also created within the same department as part of acquiring specialized solutions (Mammography, Nuclear Medicine, Clinical Research, Invasive Cardiology, Hemodynamics, Electro-physiology, etc). There have been disparate attempts to try and get these images to other users via third-party integrations and interfaces, but these attempts have been unsuccessful in completing the visual healthcare infographic of a patient.
Establish a Consolidated Enterprise Imaging Strategy

VALUE-BASED CARE IS ALL ABOUT BUILDING A HEALTH CARE MANAGEMENT STRATEGY THAT FOCUSES ON COSTS, QUALITY, AND MOST IMPORTANTLY, OUTCOMES. THE GOAL IS TO CREATE A CULTURE WITHIN AN ORGANIZATION BY REMOVING BARRIERS AND ENABLING:

- Enhanced collaboration and care standardization
- Meaningful use of medical imaging data from across and throughout the care continuum
- Immediate image exchange without heavy cost of data migrations
- Improvement of the patient experience

This not only highlights the need for developing a consolidated Enterprise Imaging approach, but also calls for establishing a holistic purchasing strategy and vendor selection. Purchasing a Radiology PACS, Cardiology PACS, vendor neutral archive (VNA), image transfer tools, and universal viewer separately, perhaps from different vendors, is one approach. By definition, this approach creates multiple (pun intended) challenges, including duplicate caches, too many databases, too many interfaces, differences in vendor vision and roadmap, dispersed management and monitoring, desynchronized upgrades, variance in disaster recovery and business continuity approaches, excessive labor to manage multiple vendors, and future disruption due to vendor mergers and acquisitions.

In order to reduce these inefficiencies, Imaging must follow the footsteps of the EHR, transforming into a comprehensive multi-departmental Enterprise Imaging platform, a singular platform that provides common enterprise services (interfacing, authentication, archiving, visualization, etc.) as well as providing departmental imaging acquisition and management services from radiology to cardiology, GI to ophthalmology, dermatology to pathology, wound care to point of care wherever images inform the diagnostic decision process.

In order to achieve the operational efficiencies expected not only today, but in the future, the need arises for a single converged platform strategy which provides multi-departmental informatics, PACS and imaging services, VNA, image exchange, mobile display and acquisition, physician collaboration, patient engagement, foreign study management, and regional health services, on a single converged platform, without the detriments of multi-vendor “Frankenstein” environments.
Agfa HealthCare’s Enterprise Imaging Solution

As we have said, healthcare organizations across the globe are under pressure to deliver cost-effective and high quality care. One way to achieve this is to empower physicians with easy, direct access to all of a patient’s clinically relevant medical data. While this understanding has led to a meteoric rise in EHR systems, there is still one significant roadblock to ultimate clinical productivity: most of the EHRs available on the market today do not complement the textual data with clinically relevant medical images.

Agfa HealthCare offers a Care-centric Workflow platform which is standards based, improves interoperability and enables a comprehensive patient health record across departments within a single facility or between multiple facilities. Hospital groups, Integrated Delivery Networks (IDNs), or public and private health information exchanges (HIEs) can develop and efficiently share unified patient records containing both images and textual information. We at Agfa HealthCare have built a platform that goes beyond archiving: we enable clinical relevance and enrich medical data.

**Regional**
Enables Regional collaboration and Population Health management with solutions to solve HIE, image sharing and transfer use cases

**Enterprise**
Brings clinical relevance to medical documentation and images on a consolidated and image management platform

**Departmental**
Provides foundation for care continuum with solutions for Radiology PACS, Cardiology PACS, Dermatology, Ophthalmology, Wound Care, Pathology, and beyond, to build a clinically rich visual healthcare infographic of patients

**VNA**
Improves clinical access and interoperability with Agfa’s robust solution for enterprise archiving of DICOM and non DICOM data

**Exchange**
Reduces cost of Image transfer by creating a Federated view to solve image exchange without the need for costly data migrations

**Universal View**
Facilitates universal access and collaboration with Agfa’s XERO® Viewer with real-time communication and collaboration across the care continuum

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Realizing the Value

CLINICAL PROCESS OF CARE - HOW DOES AGFA HEALTHCARE’S SOLUTION ENABLE IMPROVEMENT IN THE
PROCESS OF CLINICAL CARE?
- Allows improved continuity of care between caregivers
- Improves utility, and information sharing between care providers
- Reduces opportunity for errors related to transition of care
- Enables potential for reduction of imaging duplication based on access to prior exams
- Standardizes practices related to exam ordering, demographic creation, exam association, image capture, image storage, and image access, which leads directly to improved processes and potential for error reduction. Allows staff to consistently capture exams and relate them to the patient driving patient safety and efficiency
- Decreases response time to patient requests

PATIENT EXPERIENCE - HOW DOES AGFA HEALTHCARE’S SOLUTION ENABLE IMPROVEMENT OF THE PATIENT
EXPERIENCE?
- Fewer repeat exams reduce patient stress, trauma, time, pressure, and cost
- Access to longitudinal record can help reduce dose by avoiding repeat exams
- Engagement improves the ability of patients to take ownership of their care. Access to imaging information within a Patient Portal provides compliance-enabling support with improved understanding due to access to imaging information within a Patient Portal
- Improves collaboration between caregivers and patients with increased content
- Bedside consults with images/exams
- Delays related to patient discharge can be reduced with faster access to images

OUTCOMES - HOW DOES AGFA HEALTHCARE’S SOLUTION HELP ACHIEVE BETTER OUTCOMES?
- Ability to capture exams remotely and provide imaging services in the community can help reduce potential re-admission
- Improves access to clinically relevant data for research and analytical reports
- Increases number of patients tracked with enriched clinical data
- Improves patient engagement with mobile capture tools
- Improves patient awareness and compliance for chronic disease management and follow up

EFFICIENCY - HOW DOES AGFA HEALTHCARE’S SOLUTION HELPS WITH EFFICIENCY GAINS?
- Improves access to exams can speed up time to discharge or to lower cost service
- Access to longitudinal care will facilitate more community based care and potentially lower re-admission
- Improves cross-departmental workflows and elimination of duplicate processes
- Reduction in Emergency Department (ED) wait-times
- Mobile solutions enable data capture and upload in a meaningful clinical context
- Less time worrying about administrative tasks and more time for patient interaction

From a clinical perspective, **Physicians** can access Agfa HealthCare’s Enterprise Imaging suites to streamline their collaborations, especially in emergency medical situations. **Surgeons** will appreciate the value of an Enterprise Imaging solution as it will allow them to enhance their preparation process. **Ambulatory care** teams can capture images and data outside their hospitals and send the data to care teams in advance of patient’s arrival, so care delivery can begin upon arrival to the ED.

Besides the clinical users, **Radiologists** have already begun leveraging tools for collaboration and communication within their imaging ecosystem. Their role in shaping the healthcare industry, moving beyond interpretation and becoming an enabler of Value-Based holistic care delivery model will be imperative. By leveraging a consolidated imaging strategy to collaborate with other providers, Radiologists can positively impact the patient experience and quality of care.
Why Agfa HealthCare?

FORWARD THINKING HEALTHCARE ORGANIZATIONS ARE MOVING AHEAD AND INVESTING IN TECHNOLOGIES THAT ENRICH THEIR MEDICAL DOCUMENTATION WITH CLINICALLY RELEVANT IMAGING DATA.

We, the specialists at Agfa HealthCare, have been in the imaging industry for over 100 years and have been in the forefront of medical imaging since 1947. Our deep collective understanding of clinical workflows, combined with our breadth of information technology experience, sets us apart. Our customers rely on our commitment to quality patient care to deliver interoperable, forward-thinking strategies for systems of all sizes. One out of two hospitals worldwide use our medical imaging systems. With a consolidated Enterprise Imaging solution and future proof approach, now is the time to invest in introducing a Value-Based Care-Centric model to your operations.

To discuss how Agfa HealthCare can bring value to your care organization, contact us today and let’s develop the right strategic plan to enrich your health system.