

Three Enterprise Image Management “Truths” to Guide Health IT

Born in radiology, imaging has grown up and out...now it's all about the Enterprise

The Radiology Department has long driven imaging technology. From new modalities to advanced visualization, radiology teams have worked to push the technology of capturing and viewing patient images. While key solution components advanced, other essential elements lagged – namely image storage, sharing and communication. Archiving solutions attempted to address only “A” in PACS. Today, healthcare organizations are looking to Enterprise Imaging Platforms for a more comprehensive foundation for their enterprise imaging strategies.

Imaging is growing beyond 1 or 2 departments or locations and now reaches across departmental and regional boundaries. In the wake of digital imaging capture across multiple “ologies” lies virtual mountains of digital files that healthcare teams are struggling to consolidate, normalize, access and share. Rapid industry consolidation through mergers and acquisitions adds fuel to the consolidation fire.

PACS “Deconstruction”

In 2014 most, if not all, PACS and Disaster Recovery (DR) market watchers spoke to a technology shift afoot to “deconstruct” PACS and move to vendor neutral, non-proprietary solutions for imaging management. Vendor Neutral Archives (VNAs) address the “A” in PACS (and many PACS vendors now offer a VNA), but beyond archiving more comprehensive imaging management platforms are being evaluated and selected by IDNs, regional hospitals and imaging centers. Companies like Sentara Healthcare, the University of Pennsylvania Health System, and Wake Radiology all deployed Enterprise Imaging Platforms in 2014. Why?

Vendor Neutrality: Beyond the Archive

The imaging market is experiencing widespread adoption of Enterprise Imaging Platforms, not just VNAs. These platforms enable interoperability within departments and across sites and regions through intelligent communication engines (the next generation “C” in PACS). These platforms offer visibility into the flow of patient study data across your enterprise regardless of originating modality, department, location, or vendor brands. In addition to intelligent archiving, Enterprise Imaging Platforms provide advanced workflow engines, universal worklist management and analysis of imaging data that returns actionable intelligence.

What does this mean for PACS and how can you take advantage of the technology advances in imaging management to build your own enterprise imaging strategy in 2015? If a new enterprise imaging management strategy is on your 2015 plan, here are 3 key strategic elements you may want to review and consider as you launch into our enterprise imaging strategy definition.

1. Deconstructing your PACS.

The concept of breaking a PACS into pieces to optimize an enterprise imaging strategy gained traction in 2014. PACS may not be going away, but there are certainly some dramatic changes underway. With discussions around the deconstruction of PACS into best-of-breed components, how should you approach building your own enterprise imaging strategy? A few thoughts:

- a. Consolidate archiving and the communication of imaging data across your enterprise with an Enterprise Imaging Platform. Through this platform, enable vendor neutral archiving capabilities that intelligently manage and control storage; enable imaging workflows across sites and departments; image enable your electronic health record (EHR); and enable sharing and access.



b. Drive specialty diagnostic workflows from a universal worklist that intelligently drives specialists to the correct reporting and visualization tool. Visualization tools may vary from traditional PACS solutions to zero footprint diagnostic solutions that can stream imaging data directly out of the archiving component of the Enterprise Imaging Platform (i.e., the VNA).

c. Select a universal and zero footprint clinical viewer to image enable your EHR.

2. Imaging solutions are not just departmental anymore.

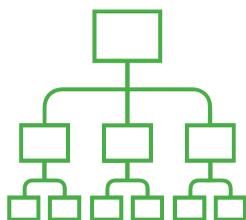
For archiving and communication of imaging data, the value flows across the enterprise. With 60% of medical imaging outside of Radiology and Cardiology, it is time to truly provide a single source for access and sharing of imaging data across your enterprise.

With the right Enterprise Imaging Platform you should have one solution, one vendor, and one throat to choke across your enterprise for all archiving and communication.



3. Imaging is still about the workflow.

For the past two decades, “workflow” across imaging has seen improvements through frontend PACS worklists and diagnostic reporting solutions. In the decade to come, with Enterprise Imaging Platforms consolidating storage and communication, a new level of workflow intelligence is on the way.



A solid workflow solution is at the heart of a successful enterprise imaging strategy and workflow efficiencies, resource load balancing and workflow analytics continue to advance and drive interest. In fact, with advances in workflow technology, many organizations launch their enterprise imaging strategy to solve key workflow issues first. Communication workflow is central to the imaging cycle from the “backend” starting with the modality to the “front end” of visualization and reporting.

a. Workflow at the “backend”: Workflow solutions at the “backend” of imaging management intelligently split and communicate imaging data to the desired visualization solutions. Manual intervention is eliminated from even the most complex data flows allowing better study control, access, sharing and leveling of resources.

b. Workflow for visualization, reporting and analysis: Workflow solutions are also key on the “front end” where universal worklists and workflow engines drive diagnostic viewers and reporting solutions that interoperate with the Enterprise Imaging Platform, optimize diagnostic workflows, and load balance human resources.

PACS, VNAs and Enterprise Imaging Platforms – What does the future look like?

The future of imaging management is bright. Solutions that make a meaningful business impact and an impact on patient care and patient outcomes are being deployed in IDNs, regional hospitals, and imaging centers. These Enterprise Imaging Platforms give healthcare leaders visibility, intelligence and decision support that puts healthcare organizations in control of their imaging data. They offer clinicians best of breed visualization, efficiency gains and improved throughput while delivering studies where and when they are needed.

If you are planning to evaluate your enterprise imaging strategy in 2015, be sure to seek out solutions that consolidate archiving and the communication of imaging data across your enterprise. Make an intelligent workflow solution central to your enterprise vision and don’t compromise on business reporting, analytics and visibility as part of your Enterprise Imaging Platform.

About Mach7 Technologies™

Mach7 Technologies is a global provider of enterprise image

management solutions that allow healthcare enterprises to easily identify, connect, and share diagnostic image and patient care intelligence where and when it is needed. Mach7’s innovative communication and workflow technology delivers complete image management including rapid record identification, integration, synchronization and routing, advanced clinical viewing, and optimized vendor-neutral archiving across the enterprise. Healthcare institutions around the world use Mach7 solutions for archiving, clinical productivity improvement, IT cost savings, health information exchange, meaningful use compliance, and improved patient data communication.

