

INFORMATION PAPER

MCMR-MMP-I
3 October 2014

SUBJECT: Enterprise Clinical Imaging Archive (ECIA) Overview

1. Purpose: To provide high level details of the ECIA within Image Management Systems

2. Overview: The ECIA is a \$35M joint Army/Navy effort to collapse long-term image archives into two separate radiology image repositories (Army ECIA is located in San Antonio, TX whereas the Navy's is located in Aurora, CO). The Army's contribution to the project is \$16.25M and includes a robust network of image migration hardware, 3 PB of storage in a data center, a cloud-based architecture to connect all Army MTFs, and a clinical image viewer that will be accessible to all clinicians. When the effort is completed, the Army will be able to decommission 17 separate long-term archives and minimize the need for costly data migrations in the future; the last four data migrations took 75 months to complete and cost the government over \$3.1M.

3. Facts:

a. ECIA Talking Points:

- Army is actively migrating a total of 24.1 million radiology studies (750 TB); to date, 4.1 million have been migrated to hardware deployed throughout the AMEDD
- Hub/Spoke configuration allows for multiple PACS to access the central archive through temporal nodes on the AMEDD network; nodes will be able to store 2-3 years of images from each site that is connected to it.
- Temporal nodes are connected to the data center for a single long-term archiving solution.
- Army / Navy data centers will have an active-active connection enabling cross service queries; the Navy data center will serve as the Army's disaster recovery site.
- The final joint archive will be able to house 5.5 PB of data and will be capable of accepting other imaging modalities images

4. Discussion: The Army has installed its primary hardware into the MHS data center in San Antonio, TX. The current MHS / Army Service Level Agreement is pending signature; once the document is signed, the Army will be able to connect the system to the network. Connections between regional nodes will be established. The regional nodes will give Army radiologists and clinicians the ability to search and retrieve images between all regional medical commands for the first time ever. The Army and Navy are currently working with the Air Force PACS office to connect their archives to the ECIA and establish a true tri-service radiology archive.

Cory Martynski/(301) 619-6806
Approved by: John Meirose