Managing Images Across the Enterprise

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July 30, 2015
Objectives

- Summarize what an enterprise imaging strategy is and address key components
- Discuss the role of Clinical Engineering within an enterprise imaging program
- Aside from Radiology, identify areas where point of care ultrasound and other imaging devices may exist within the healthcare enterprise.
What is Enterprise Imaging?
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Imaging is No Longer Contained Within Traditional Boundaries

Many Areas Perform Some Type of Point of Care Imaging
Challenge: Disparate Data
Clinical Workflow Challenges

Images Absent from or Scattered throughout EHR

Images Not Available to Care Team

Images Placed in Paper Record or Scanned into EHR

Limited Access to Images within EHR Context

Limited Data Sharing w/ Acquired & Affiliated Hospitals
Operational Challenges

Need to Enhance the Value of the EHR

Pressures to Reduce Cost

Disparate Storage & Escalating Costs

Support for Departmental Systems & Workflows

Regulatory Compliance (HIPAA, CMS…)

CE-IT COMMUNITY  A CLINICAL ENGINEERING/IT COLLABORATION
Image Enabled EHR
Text + Images = Comprehensive Longitudinal Health Record
A31
ColonoENDOscopy

Procedure Date: 5/17/2012 19:28 AM

Patient Name: Latifah Limted
MME: 00900040
Admit Type: Outpatient
Room: A31 Procedure 4 (A3-131)

Procedure: Colonoscopy
Indications: Screening for colorectal malignant neoplasms. Colon cancer screening in patient at increased risk:
Colorectal cancer in mother
Provider: Stephen E. Brewer, MD
Referring Physician: FD 100 micrograms IV
Complications: No immediate complications.
Requesting Provider:

Procedure:

After obtaining informed consent, the scope was passed under direct vision. Throughout the procedure, the patient's blood pressure, pulse, and oxygen saturations were monitored continuously. The scope was introduced through the anus and advanced to the colon, identified by appendiceal orifice & transitional zone. The colonoscopy was performed without difficulty. The patient tolerated the procedure well. The quality of the bowel preparation was good.

Findings:
The rectal and digital rectal examinations were normal.

A sessile polyp was found in the sigmoid colon. The polyp was 5 mm in size. The patient was repositioned in order to accomplish the maneuver. The polyp was removed with a hot snare. Resection and retrieval was complete.

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The neo-terminal ileum appeared normal.

The exam was otherwise normal throughout the examined colon.
Supports information sharing along care continuum

Enhances collaboration among caregivers

Reduces subjective interpretation
Along the continuum of specialties…
During patient encounters…
... and at the patient’s home
The Strategy
Imaging Activity in a Health System

“Overall, providers are planning to expand the use of their VNA to more departments.”

-KLAS 2013

1Image Archive 2013: Finding Out What is in Store for VNA, September 2013. © 2013 KLAS Enterprises, LLC. All rights reserved. www.KLASresearch.com
Enterprise Imaging Strategy

- Business Analytics
- Exchange
- Access & Visualization
- Service Line Image Integration
- Enterprise Storage Strategy

Governance
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Governance
Enterprise Imaging Strategy Goals

- Enhance Continuity of Care and Coordination
- Enrich Patient Engagement
- Enable Physician Mobility
- Strengthen Regulatory Compliance
- Standardizing Image Acquisition Data and Work Flows
- Streamlining Image Management
- Unifying Image Storage Assets
- Providing a Single Image Viewer for All Types of Imaging
What Does this Mean to CE?

• Increased modality support outside of Radiology
  – Ultrasound primarily
  – Anesthesiology, Intensive Care Units, Emergency Medicine, Ambulatory Clinics, etc.

• Additional considerations when modalities are purchased
  – WiFi capability
  – DICOM Modality Worklist Licensing
Open Discussion

What changes are you experiencing?

What role do you believe CE should play?
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Cleveland Clinic

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Healthcare Strategies
Principal Consultant
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Welcome to the CE-IT Community

AAMI, ACCE & HIMSS have joined forces to advance the timely and critical issues facing the clinical engineering/IT community.

**Our Focus:** The Clinical Engineering & IT Community is the convener of thought leaders addressing medical device integration issues facing the industry today.

**Our Framework:** The activities are facilitated through a Community framework focused on engaging leaders, encouraging communication and convening public forums.

**Our Audience:** The Community is focused on engaging individuals from the biomedical profession, clinical engineering profession, clinicians, executive leaders in information technology and informatics professionals.

By pooling our resources through this collaboration, we are seeking to: foster a united voice for IT and clinical engineering concerns; and develop important resources, best practices, and networking opportunities to advance the interests of CE-IT issues in healthcare.

**WHAT’S NEW**
The Community holds virtual public town hall meetings to explore issues of importance to the industry and community.

Please visit the Resources page to view the CE-IT Town Halls

**NEW! Call for Community Participation**

**CE-IT Community FAQ’s**

**Register for upcoming CE-IT Town Halls:**

**July 30:** Medical imaging across the enterprise

**Sept. 24:** The HTM and IT impact on quality

**Nov. 19:** Interoperability from a legislative perspective