

PACSGear Image Link

Because medical image interoperability shouldn't be a manual process.

IT interoperability is a top priority in healthcare organizations today. Many believe it is essential to providing true patient-centered care that improves outcomes. The problem is achieving system interoperability is no easy task. The closed, proprietary nature of most health IT systems makes sharing data and content between systems complicated.

The medical imaging environment within most healthcare facilities is a prime example of this dysfunction. Whether a native deficiency in image and video capture devices in specialty departments (e.g. radiology, gastroenterology, ophthalmology, dermatology, etc.), or brought on as part of a PACS replacement, the lack of worklist functionality can force many organizations to perform manual workarounds to properly index, archive and share DICOM and non-DICOM content throughout the enterprise. These manual workarounds—such as the manual data entry of image and study information—can slow the capture process, introduce the potential for human error and make the captured content less interoperable as a result. PACSGear Image Link was designed to eliminate these manual workarounds once and for all — ensuring the integrity of the content and facilitating its access via core clinical systems.

Streamlined image indexing for improved interoperability

PACSGear Image Link fills the functionality gap inherent in many image and video capture modalities by receiving, parsing, storing and making available HL7 patient and study information to those devices via the DICOM Modality Worklist (DMWL) standard. By providing a query-able source of patient and study information to worklist deficient modalities, Image Link enables faster and more accurate indexing of captured images and video. Furthermore, automation of the indexing process helps to make this content more accessible to other core applications throughout the enterprise (e.g. EHR, PACS, etc.).

Key features

- ▶ **Patient identification and mapping**
 - ▶ Receive and parse HL7 messages
 - ▶ Map parsed data to DICOM tags in Image Link database
 - ▶ Ensure patient demographic data is matched to image or study in a consistent, reliable and automated manner
- ▶ **Filtering**
 - ▶ Allow filters on queries so that only specific data is returned to the requesting system, providing accurate and efficient data acquisition to the clinician
- ▶ **PACSGear and third party image support**
 - ▶ Image Link is built on the latest industry standard messaging protocols (HL7 and DWML), allowing the solution to support not only the entire PACSGear product line, but imaging products from third-party vendors as well
- ▶ **Scalability**
 - ▶ Image Link is scalable enough to support the smallest departmental use case all the way up the largest organizational PACS replacement

PACSGear Image Link Use Cases

Image Link can be used as a stand alone solution or in conjunction with other PACSGear and Hyland Healthcare products to streamline image and video capture workflows for a variety of departments throughout the enterprise including:

- ▶ **Radiology**
- ▶ **Cardiology**
- ▶ **Dermatology**
- ▶ **GI**
- ▶ **Surgery/OR**
- ▶ **Ophthalmology**
- ▶ **Ultrasound**

PACSGear Image Link in action for Point of Care Ultrasound

1. Image Link receives and processes an HL7 message containing patient demographic data.
2. Image Link provides patient demographic data via DICOM Modality Worklist to POC Ultrasound so the images will be linked to the patient.
3. Ultrasound is performed.
4. Photos or video clips automatically routed to the Acuo VNA or other clinical archive through the locally hosted PACSGear Core Server and the content is linked to the EHR.
5. EHR retrieves the images for viewing with NilRead or other enterprise viewer.

