



# NilRead Enterprise Viewer

Image enabling the EHR for a true big-picture patient record



## NilRead Enterprise Viewer

In the age of healthcare reform, all roads lead to the electronic health record (EHR). When implemented effectively, this cross-departmental, increasingly cross-enterprise, patient-centric information repository can enhance the quality of patient care and provide medical facilities with significant productivity and financial gains.

However, integrating all-important medical images into this multi-disciplinary record remains one of the technology's greatest challenges. In short, pictures are conspicuously absent from its big-picture patient information.

Too often radiology and cardiology images, and related data, remain sequestered in departmental picture archiving and communications systems (PACS), accessible only to imaging specialists. Digital photos, videos and scanned documents are often lost inside a tangle of home-grown systems, as other medical specialists struggle to take advantage of convenient, new visualization technologies that have outpaced hospital image storage systems.

### Anywhere, anytime image access from your EHR

The Lexmark NilRead family of image viewers ushers medical image access into the modern healthcare age and helps blaze a path to the future. Seamlessly integrating with your EHR, this advanced technology provides a universal vendor-independent platform for accessing a full range of DICOM and non-DICOM image data, wherever it resides – even in legacy PACS. The enterprise-class, scalable solution is based on true zero-footprint, web-based architecture – there's nothing to install, and images never reside on the workstation.

NilRead can identify and ingest images from virtually any departmental archiving solution, whether dermatology JPEGs or radiology DICOM files. NilRead also integrates seamlessly with any contemporary vendor neutral archive (VNA) for healthcare organizations implementing sophisticated consolidated image storage systems.

With NilRead Viewer, physicians across the enterprise and beyond can take advantage of vital imaging information from any department for the benefit of patient care, while medical facilities move along the road toward Meaningful Use.

Reaching beyond the hospital, Lexmark NilRead also runs on any web-enabled mobile device, tablet or PC, providing anywhere, anytime image access and enabling data sharing across multiple locations for trauma transfer and telehealth applications. Robust, server-side rendering ensures fast transfer speeds and enhanced security. With no device or local image download, protected patient data (PHI) never resides on the PC, phone or tablet.

### From image enablement to sophisticated manipulation

The zero-footprint NilRead Core and NilRead Clinical from Lexmark are both affordable choices for incorporating images into your EHR, as part of an organization's portal strategy, or simply for providing a secure method of access to referring physicians or patients – both inside and outside the VPN.

As part of a robust deconstructed PACS strategy for primary diagnostic viewing, radiologists and other imaging specialists can leverage NilRead Interpretation with its sophisticated image manipulation and processing tools. The solution realizes cost savings on informatics infrastructure, while maintaining a similar, user-friendly experience across every use case and device. All NilRead viewers support diagnostic quality display on high resolution monitors.



### The Lexmark NilRead family

Industry-leading web-based, zero-footprint solutions provide a universal platform for viewing medical images in any format across the enterprise and beyond.

#### Three licensing options to meet your needs:

- ▶ **NilRead Core:** Standard enterprise solution for 2D image viewing, with essential clinical measurement tools to complement the EHR image strategy
- ▶ **NilRead Clinical:** Rich enterprise viewing solution for 2D image sets, includes some post processing tools such as basic MPR and 3D, as well as other measurement tools and native collaboration features
- ▶ **NilRead Interpretation:** Primary diagnostic solution with an advanced visualization toolset for a full range of 'ologies, including radiology, pathology and ophthalmology

### Key benefits

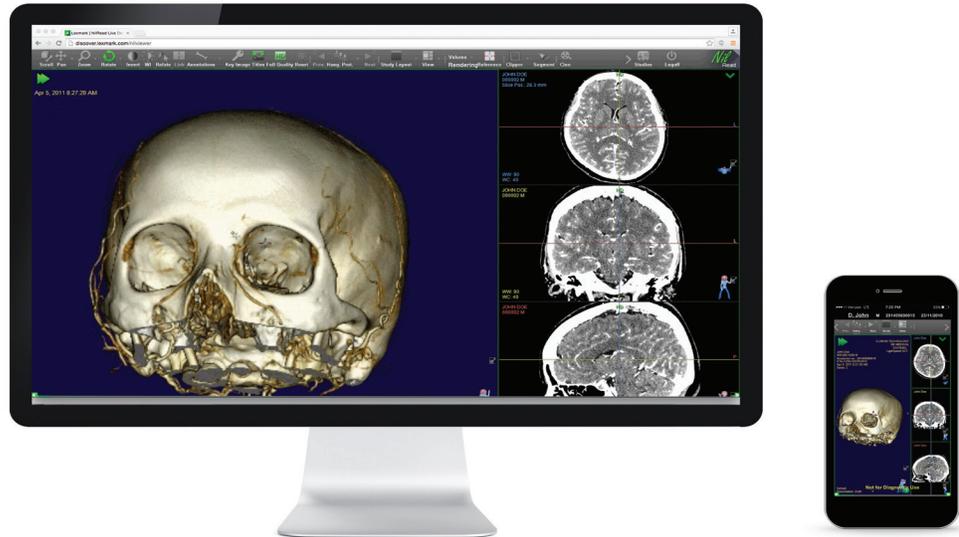
#### For clinical use

- ▶ More informed clinical decision-making with a comprehensive, easily accessible, electronic patient record that includes medical image data
- ▶ Enhanced continuity-of-care with patient information that is readily available to multiple providers and specialists enterprise-wide and beyond
- ▶ Improved treatment speed and precision through anywhere, anytime access to imaging data
- ▶ Streamlined physician collaboration, second opinions and remote diagnoses due to cross-enterprise image communication and powerful collaborative tools

#### For financial and administrative use

- ▶ Compliance with Meaningful Use Stage 2 menu items involving accessibility of medical images in the EHR, helping hospitals maximize reimbursements
- ▶ Enhanced clinician productivity due to streamlined access to complete patient information
- ▶ Viewer independence from PACS, VNA and other archive vendors for greater ownership of imaging informatics assets
- ▶ Streamlined image communication with referring physicians, leading to enhanced patient referrals
- ▶ Back up diagnostic quality DICOM viewing for coverage during a PACS failure or planned event
- ▶ Cost-effective system management based on zero-footprint central server architecture
- ▶ Consistent, user friendly interface and workflow across all devices
- ▶ Upgrade path from NilRead Core/Clinical to NilRead Interpretation full-featured medical imaging workstation
- ▶ Upgrade path to a full enterprise-wide image patient-centric image management system with the addition of a VNA

NilRead's zero-footprint, web-based architecture delivers anywhere, anytime image access from any device.



### Key features

- ▶ Runs seamlessly inside all major browsers using no resident software or plug-ins
- ▶ Full diagnostic image viewing on any high-resolution display and industry-leading resident support for multi-monitor viewing
- ▶ Referral viewing on smartphones, tablets and notebook computers
- ▶ Displays DICOM, TIFF, BigTIFF, SVS, GIF, JPEG, PDF, video; optimized for radiology, cardiology, digital pathology and ophthalmology/optometry applications
- ▶ NilRead Interpretation support for 3D volume rendering, multi-planar reformatting, curved planar reformatting and vessel analysis
- ▶ Integrates with any DICOM network, VNA and supports query/retrieve from DICOM nodes and XDS/XDSi repositories
- ▶ Consistent interface and architecture provides unified NilRead experience from referral viewing to full primary interpretation
- ▶ Rich, native, collaboration tools
- ▶ Server-side rendering optimized for available bandwidth with no resident PHI on viewing device following viewing session
- ▶ Fully compliant XDS/XDSi consumer
- ▶ HIPAA compliant with the highest standard of web protocol security; optional authentication delegation to support existing in-hour methods in use within an organization, such as single sign-on
- ▶ FDA 510K Class II Certification for diagnostic viewing including mammography and digital breast tomosynthesis for all licenses; Health Canada approval for diagnostic use on workstations and mobile devices; CE Mark for sale in in the EU