Carestream

ImageView Software
Powered by Eclipse with AI

Advanced. Powerful. Customizable.

Leverage Artificial Intelligence for Superb Image Quality and Workflow Efficiency.

INTELLIGENCE IN ACTION

Imaging Software Powered by Eclipse

Our Eclipse Engine Applies AI for Dramatic, Real-World Benefits.

Carestream's decades of innovation in the radiology field have now yielded the new benchmark in imaging software – ImageView, powered by our remarkable, AI-based Eclipse engine.

With Eclipse, artificial intelligence is no longer an abstract promise. Eclipse applies powerful, proprietary algorithms and artificial intelligence to drive concrete, measurable results through Imaging Intelligence, Workflow Intelligence and Analytics Intelligence.

The bottom line? Superb image quality, unrivaled diagnostic confidence and a new standard for workflow efficiency.

Ai Enabled

Advantages at a Glance

- Incorporates Imaging, Workflow and Analytics Intelligence to optimize image quality, supercharge productivity and improve the imaging experience for patients and staff.
- Uses proprietary algorithms and artificial intelligence to deliver superb image quality for unrivaled diagnostic confidence.
- Provides lower dose without loss of image quality with our Smart Noise Cancellation feature when compared to our standard image processing.
- Allows customizable "looks" to suit your preferences.
- Offers a wide range of specialized viewing options for clear and precise imaging, whether in the ER, OR or ICU.
- Delivers advanced security capabilities to protect you from ever-changing cybersecurity risks.

Intelligence in Action.

There's lots of talk about artificial intelligence in imaging these days. But just what AI is and what it can really do seems to remain a bit vague.

Not at Carestream. We put AI into action – and the benefits fall into three key categories:

Imaging Intelligence.

Eclipse Imaging Intelligence capabilities offer robust processing features for images of optimal quality – while reducing quality errors and minimizing dose.

- Smart Noise Cancellation provides better image quality or lower radiation dose without loss of image quality versus our standard image processing.
- New image processing allows your facility to control settings and make adjustments – for the precise "look" you prefer.
- Options offer companion views that can help reduce the number of exposures and provide a clearer views of an area of interest.

Workflow Intelligence.

- Advanced Smart Features* assist the radiographer by automating manual tasks and workflow steps to streamline processes, improve radiographer productivity, save time and enhance patient care.
- An optimized workflow reduces repeats through automated equipment positioning, patient pose, positioning verification and automated collimation.
- Improved image consistency minimizes radiation dose through automated techniques selection, based upon each patient's size.
- AI technology promotes improved infection control by reducing the need for direct radiographer and patient contact.

Analytics Intelligence.

These capabilities leverage digital dashboards for analysis of operational, business and clinical performance.

- Now administrators can track key parameters, including average exposure rates, rejected images and detector stats.
- Analytics help to define areas where progress is needed to support development of appropriate improvement plans for your staff and department.

Imaging Software Powered by Eclipse

*Smart Features are offered on CARESTREAM DRX-Evolution Plus and DRX-Compass Systems.

A Major Boost to Productivity and Efficiency.

- ImageView offers a single-screen workflow to provide a smooth and simplified user experience.
- Most common operations are just a single button press away.
- An intuitive and easy-to-use interface simplifies training while optimizing workflow.
- A common user interface across Carestream DR products simplifies cross-product use and reduces training time and costs.
- Advanced applications provide more detailed information for improved diagnostic confidence.
- Uniform protocols set to your preferences deliver greater consistency, fewer repeat exams and improved productivity.
- Access to RIS and PACS provides immediate availability to additional patient information and reduces the time to complete each study.
- Smart DR Workflow uses AI to streamline common radiographer tasks.

This High-Efficiency Interface Saves Time and Effort.

No flipping. Less clicking. New ImageView Software consolidates multiple screens into a single view, saving you time and giving you exceptional ease of use.

Patient data, study data and views

Markers, image manipulation/ processing tools, formatting and workflow controls

Image viewer and positioning aids

< Detailed patient worklist

> Image acquisition status, including technique and hardware information

Quality Enhancement Features.*

Tech-Assist Chest QA Ai

Contrast Noise Ratio (CNR) notifies the user when the CNR on the acquired image is outside the preset target range.

Anatomy Clipping Software uses artificial intelligence to outline areas of the chest anatomy that may have been collimated off the image.

Deviation Index quantifies the deviation of the actual exposure index from the preset target range.

Total Quality Tool
This tool allows for a quick determination of each of your detector's functionality. When incorporated into your facility's QC program, it provides data on your detectors' response over time and allows you to track MTF, CNR and Flat-Field artifacts. Data can be exported into Excel for tracking purposes. This option comes with the software, a flat-field phantom and carrying case.

Administrative Analysis and Reporting
This digital dashboard allows you to analyze and develop improvement plans for your staff and the department. You can track your average exposure rates, rejected images and reasons, detector statistics, including drops, and Total Quality Tool (TQT) QA results.

Workflow Enhancement Features.*

Carestream products are DICOM-compliant and support interoperability in accordance with IHE to address clinical needs in support of optimal patient care.

Detector Verification
For a system with multiple detectors, the system notifies the user when a non-selected detector sees substantial physical movement. Exposure is disabled until the user confirms the correct detector.

IHE Scheduled Workflow
This saves time and boosts productivity by automatically notifying your HIS/RIS of exam status.

DICOM Modality Worklist
The worklist facilitates automatic transfer of patient and procedure data from your HIS/RIS system, eliminating manual data entry and increasing radiographer productivity.

IHE Dose Reporting
This system collects and distributes comprehensive dose information to PACS – including DAP values, techniques and exposure indices.

SoftDAP
With SoftDAP, you can calculate dose without the need for physical DAP hardware. It utilizes various input parameters including kV, mA, focus, filter-field size and tube to compute and report a DAP value. SoftDAP complies with the IEC standard and offers performance superior to that of a DAP meter.

Remote Patient-Data Entry
Patients are your first priority. Let radiographers dedicate more time to them, by making data entry an office-based PC task. Reduces overall radiographer workload, too.

Smart DR Room Features*

Video Assist
A supplemental display provides visual positioning guidance to each patient prior to the procedure.

Smart Auto Position Ai
Camera input automatically fine-tunes the position of the wallstand bucky and tubehead, based upon the patient's height.

Smart Collimation Ai
This feature automatically adjusts the collimation field based on the detector size and position of each patient. This feature provides image consistency and helps reduce anatomy clipping and retakes.

Smart Technique Ai
The appropriate acquisition technique is automatically selected, based upon the patient's size. Enables automatic technique settings to improve workflow and reduce retakes.

Patient Position Monitoring
A live camera view allows radiographers to observe their patients from the operator console. This can help validate the patient is properly positioned prior to acquisition.

Smart Patient Positioning Ai
This augments the live camera view at the console with overlays to assist the radiographer with patient position and pose, which allows for more accurate patient positioning and consistent image acquisition. It can also help improve infection control by reducing direct contact between the radiographer and patient.

Audio Assist
Preset and customizable audio guidance allows for improved communication with patients. Radiographers can easily and efficiently provide instructions to their patients to help guide them through their procedure.

Ai Uses Artificial Intelligence technology.

*Availability of software features and options varies by region and specific Carestream Image Capture Systems. Contact your Carestream representative or dealer for details.

Workflow Enhancement Features.* (Continued)

Advanced Trauma Capability
Work faster when every second counts. Gain immediate access to patient records and depend on predefined exam/procedure codes to speed workflow in trauma cases – so you can get patients to treatment faster.

Procedure Mapping
Extra keystrokes add up to wasted time. Preconfigured and dynamic RIS-procedure mapping speeds data entry and workflow. Exam Tutor gives radiographers the flexibility to acquire images in any sequence.

Repeat View
Quickly duplicate and repeat a view using the same technique and grid settings.

Chest Image Auto-Correct Ai
This feature applies artificial intelligence to automatically display chest images in the proper orientation.

Prior Image Review
Retrieve and review images from PACS and copy technique to the current exam.

Long-Length Imaging (LLI) Auto LLI
Capture a wide range of vertebral and long-bone images with your patient in an upright or supine position. The system automatically aligns, captures and stitches the images.

Single-Exposure LLI
Capture long-length images with a single exposure using the CARESTREAM DRX-L Detector. This solution drastically decreases patient hold time, reduces dose, speeds workflow, decreases repeats and allows for a higher level of patient comfort.

Patient CDs/DVDs
Increase your patients' satisfaction. Now they can walk out the door with a CD or DVD copy of their images, including a DICOM viewer to take to their referring physician.

Security and Convenience.

- Microsoft Windows 10 and other built-in "Secure by Design" elements, such as intrusion protection and prevention, make ImageView Carestream's most secure medical device software.
- Domain Authentication provides centralized user administration using site standards for security. This controls user identities and access with Single Sign-On.
- Secure log-in and patient privacy features help facilities maintain compliance with industry regulations.

ImageView Software, Powered by Eclipse, Benefits Everyone in Your Facility.

Radiology Administrators

- The common user experience reduces training costs.
- Optimized workflow results in higher productivity and ROI.
- Digital Tomosynthesis could free up the CT room for additional patient exams.

Radiographers

- Minimal screen transitions, quick access to frequently used operations and enhanced capabilities optimize workflow.
- The common user experience simplifies training and cross-system work.
- SmartGrid provides improved workflow and easier positioning, supports all body parts and is lighter than a physical grid.
- AI-powered features with our DR rooms save time by automating workflow to improve productivity, provide image consistency and reduce repeats.
- Prevent shooting the incorrect detector with the detector-verification feature – exposure is disabled until user confirmation is made.

Radiologists

- Advanced image processing delivers superb image quality with consistent presentation.
- Dual Energy and Digital Tomosynthesis provide additional information for improved diagnostic confidence.
- Our AI-based Smart Noise Cancellation (SNC) feature isolates noise from the signal, then subtracts the noise – using lower dose and producing images that are dramatically clearer than what our standard processing provides. SNC delivers sharp, easier-to-read images for improved diagnostic confidence.

IT Managers

- ImageView and Microsoft Windows 10 offer a high level of security with built-in "Secure by Design" elements such as intrusion protection and prevention.
- Domain authentication provides centralized user administration and access monitoring.

*Availability of software features and options varies by region and specific Carestream Image Capture Systems. Contact your Carestream representative or dealer for details.

See the Unseen.

Eclipse is the engine that drives Carestream's ImageView Software. It uses powerful, proprietary algorithms and artificial intelligence to deliver superb image quality and unrivaled diagnostic confidence.

With ImageView, Powered by Eclipse, you'll also find a new universe of viewing capabilities at your command. Together, they give you unprecedented freedom to adjust, manipulate and view your images in harmony with your preferences – and with each patient's condition.

Image-Processing Features

Black Surround

Focus in on the issue. This black-surround option masks the white collimated area to eliminate foreground flare. It automatically defines your area of interest and allows manual selection of complex anatomical structures for rapid, accurate collimation verification.

Low-Exposure Optimization

See every detail. Low-exposure optimization minimizes quantum noise interference in low-exposure imaging areas to capture the finest diagnostic details.

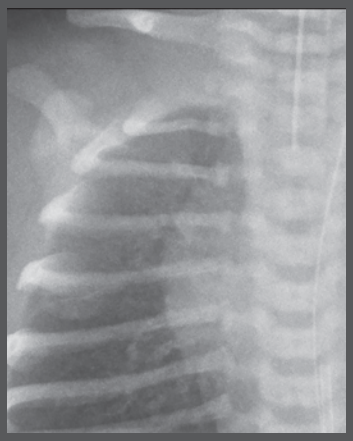
Grid Detection & Suppression

Get a clearer view. This option provides improved image quality through automatic detection and suppression of gridline artifacts.

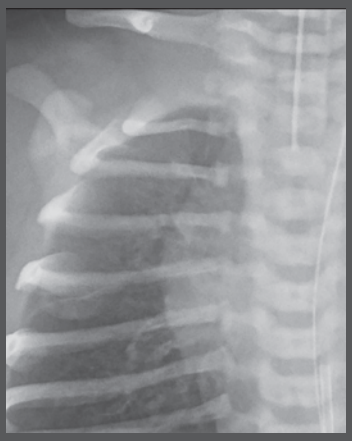
Image-Processing Options

Smart Noise Cancellation Ai

Our exclusive, AI-based Smart Noise Cancellation uses deep-learning technology to isolate noise from the signal, then subtracts the noise – producing images that are dramatically clearer than what our standard noise suppression provides. SNC enables you to lower radiation dose without loss in image quality and provides improved diagnostic quality, preservation of fine detail and better contrast-to-noise ratio for images acquired at clinically nominal exposures.*



Original image of spine and ribcage with significant obscuring noise



The image with the noise removed, for better clarity and easier reading

Elbow acquired at a very low exposure with standard processing

Elbow after SNC is applied, preserving the trabeculae in the bone and making them more prominent

*Verified using Carestream detectors in a reader study performed by board-certified radiologists comparing pairwise images taken at nominal dose CsI ISO 400 speed / GOS ISO 320 speed) and reduced dose (CsI ISO 800 speed / GOS ISO 500 speed) with SNC.

EVP Plus

Supercharge processing productivity with Enhanced Visualization Processing (EVP) Plus. EVP Plus image processing supports multiband-frequency processing to provide better noise control, sharpness, contrast and density while minimizing artifacts.

Fixed Processing: The baseline look – like analog screen film, with fixed contrast, detail and sharpness

Most Popular: Medium latitude, increased detail and nominal sharpness

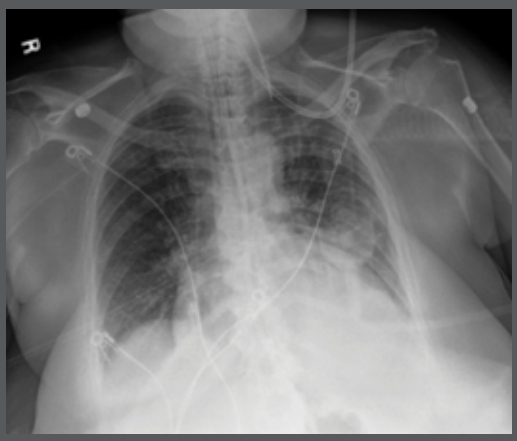
Bright Detail: Brighter, sharper and wider latitude for more soft-tissue detail

Wide Latitude: A slightly darker look, with less soft-tissue detail

The **CARESTREAM DRX-Revolution Mobile X-ray System** offers robust functionality with our most advanced image processing in a single platform – resulting in ease of use and image quality that can take bedside imaging to new levels.

Image-Processing Options

Tube and Line Visualization
Be sure with a single exposure. With this feature, a companion image is created with optimized processing for clearer, easier visualization of PICC lines and tubes. It increases confidence that tubes and lines are placed correctly – and remain in position.



Without Tube and Line Visualization

With Tube and Line Visualization

Pneumothorax Visualization
Save time with software that creates a companion image from the original exposure, optimized to accentuate the appearance of free air in the chest cavity.

Without Pneumothorax Visualization

With Pneumothorax Visualization

Upgrade your analog X-ray room or mobile unit to DR – easily and economically – with the **CARESTREAM DRX-Transportable System/Lite.** This solution features wireless tablet operation.

Image-Processing Options

Bone Suppression Ai

Based on a powerful form of artificial intelligence called Random Forests, this feature creates a companion image that suppresses the appearance of bone and enhances the visualization of soft tissue, to increase clinical confidence in pathology assessments. Another benefit – this option requires no additional exposure to the patient.

Without Bone Suppression

With Bone Suppression

Pediatric Image Optimization and Enhancement

This option provides default acquisition techniques and image-processing parameters optimized for each patient's body size, from the smallest neonatal patient to the largest adolescent. The seven-band multifrequency processing delivers improved noise suppression and enhances details for more productive pediatric exams.

Without Pediatric Option

With Pediatric Option

Neonate (very low birth weight)
55 kVp, 1.0 mAs,
0.024 DAP, 126 IEC EI

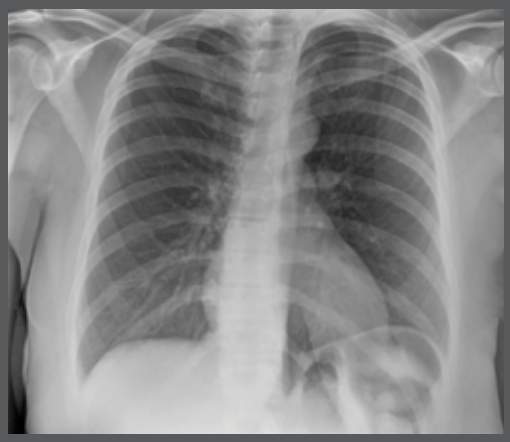
Infant
65 kVp, 0.9 mAs,
0.108 DAP, 209 IEC EI

Our portfolio of **DR Detectors** includes wireless, shareable and fixed models to meet your demands based on exam type, detector size, dosage level and budget.

Image-Processing Options

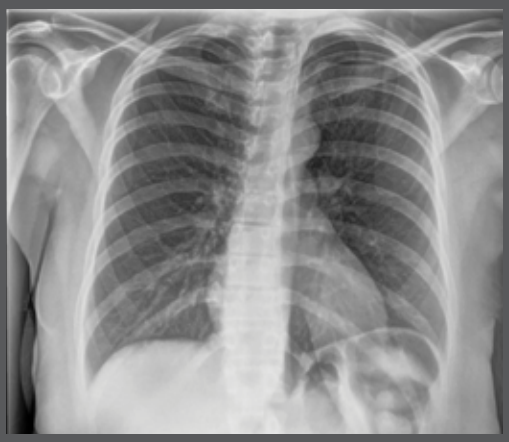
SmartGrid

SmartGrid processing provides image quality comparable to images acquired with an antiscatter grid at a reduced patient dose. The benefits of grid-like image quality without the use of an antiscatter grid can lead to improved workflow and ease of imaging for radiographers.



No Grid

Physical Grid



SmartGrid

Long-Length Imaging

Capture vertebral and long-bone images – then automatically stitch the images from multiple (up to five) detector acquisitions. This represents a new perfomance benchmark for speed and efficiency in long-length imaging.

Since its introduction, our flagship **CARESTREAM DRX-Evolution Plus System** has set a benchmark for X-ray room imaging performance. The software uses Eclipse image processing to deliver pristine image quality that supports accurate diagnoses.

Advanced Applications*

Dual Energy

This option uses patented differential filtration to subtract rapidly acquired low- and high-energy acquisitions for the generation of bone and soft-tissue images. Using this feature allows for more sensitive detection of abnormalities in the lung and improved assessment of bone abnormalities.

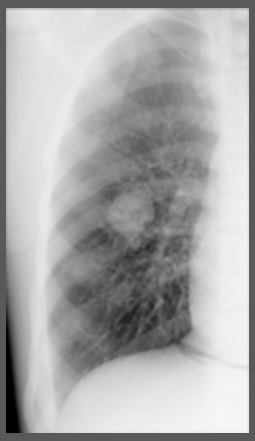
Standard Chest X-ray

Dual Energy – Soft Tissue

Dual Energy – Bone

Digital Tomosynthesis

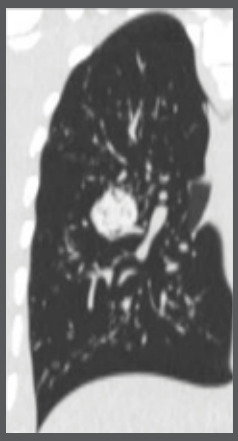
This option separates overlapping structures, similar to CT, but with much higher resolution in the coronal planes. It delivers a much lower dose than standard CT exams and provides better depth localization compared to conventional projection radiography.



Standard Chest X-ray

Dual Energy
(Tissue Discrimination)

Digital Tomosynthesis
(Spatial Discrimination)



Computed Tomography
(Spatial Discrimination)

*Contact your sales representative or dealer for the standard and optional features on specific Carestream products.

NO MATTER WHICH ROAD YOU'RE ON,

WE'LL GET YOU WHERE YOU NEED TO GO.

SMART IMAGING SOLUTIONS

The Fastest Route to a Successful Imaging Future.
As you travel to the future of imaging, what's your next step? Perhaps you need to accelerate your X-ray workflow. Or add a new imaging solution to your facility to provide better patient care.

Wherever you're headed, we have the smart solutions you need: Full-digital imaging rooms and leading-edge mobile units. Wireless, shareable detectors and CR-to-DR retrofit kits. Affordable CR systems. Advanced digital imagers and our Managed Print Solutions service. And as always, the gold-standard in X-ray film technology.

Start Mapping Your Route Today.
From small clinics, urgent care facilities and specialty practices to large hospitals and imaging centers, every facility will find a Carestream solution to meet the most specific needs. Visit carestream.com and start your journey to greater productivity and a higher standard of patient care.

More Solutions from Carestream.
Carestream also offers Non-Destructive Testing solutions to help ensure quality and safety in the aerospace, petrochemical and other industries, as well as Contract Manufacturing to bring innovative coated products to market.

A Community of Service and Support.
For dependable service, look to our Customer Success Network. We work continuously to improve your imaging performance, help you to innovate as needs change, and make the most of your budget and resources. Carestream's Customer Success Network surrounds you with a dynamic team of experts, with a Single Point of Entry for easy, customized access to the right people in every situation. You and your patients will benefit from the expertise and best practices only Carestream can deliver.

Imaging Software Powered by Eclipse

Eclipse:
Harness the Power of Decades of Innovation.
Carestream's Eclipse is the engine behind our innovative imaging software. It uses AI technology and proprietary algorithms to significantly increase the value of the entire imaging chain, from capture to diagnosis.

carestream.com/imageview

Rx only

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