Carestream

Smart DR Workflow

Efficient. Consistent. Smart.

Optimize Your Workflow with the Power of AI.

SMART IMAGING SOLUTIONS

Imaging Software Powered by Eclipse

Imaging Just Got a Whole Lot Smarter.

We are poised on the edge of a new era in Radiology. The application of Artificial Intelligence has already begun to add great value across the entire imaging chain – from capture to diagnosis. It promises major gains in efficiency, which in turn may lead to a higher standard of care and better outcomes.

For example, Carestream's Eclipse, the power behind our Imaging Software, goes beyond image processing to deliver outstanding clinical value for image capture and workflow.

Our Smart X-ray Rooms offer improved features, for faster, more efficient exams and enhanced workflow. Automated positioning and exposure settings provide uniform protocols for similar exam types. This provides image consistency for improved diagnostic confidence.

Advantages at a Glance

- Optimizes workflow and reduces repeats through automated equipment positioning, patient and pose verification, and automated colllimation field.
- Improves image consistency and optimizes radiation dose through automated technique selection based upon the patient's size.
- Promotes improved infection control by reducing the need for direct radiographer and patient contact.

* Only Chest PA is currently supported.

Meet the Power Behind Our Smart DR Workflow.

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.

Our Advanced Smart Features automate tasks and workflow steps to streamline processes, support radiographer productivity, save time and enhance patient care.

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The Power of Smart-Room Capabilities.

Smart DR Workflow uses AI to streamline common tasks.

For busy departments with limited resources, our Smart Room* can help automate tasks for radiographers – enabling faster exams, enhanced patient throughput, greater productivity and improved patient care.

Ai

*Smart Room Features are available on certain DR Systems. Contact your local Carestream Representative for more information.

Video Assist

This feature prompts patients with photos on a supplemental monitor to guide them on how to properly position themselves next to the Bucky. This helps minimize close radiographer/patient interaction – especially critical to reduce the risk of infection when imaging contagious patients.

Patient-Position Monitoring

Radiographers can monitor their patients from the operator console through a live camera view that shows a patient at the wallstand.

Audio Assist

This allows for improved communication via preset and customizable audio guidance to patients. Radiographers can easily and efficiently provide instructions to their patients to help guide them through their procedure.

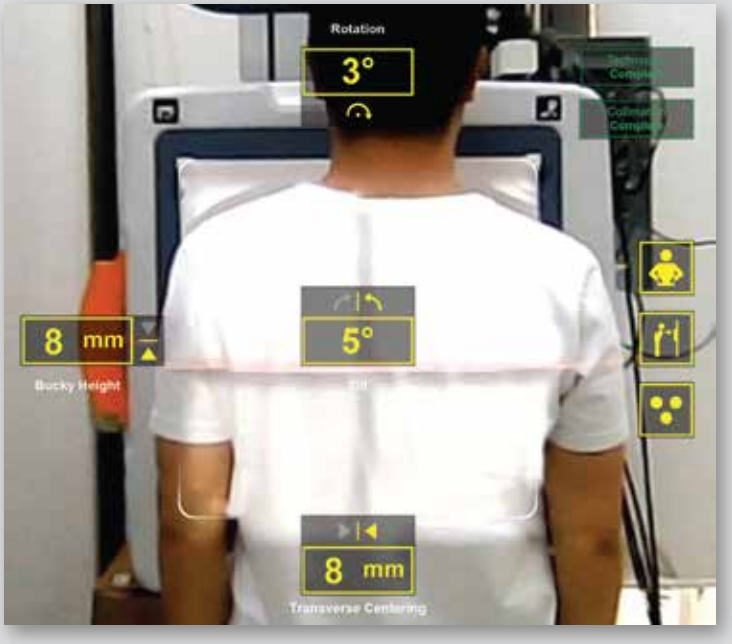
Smart Auto-Position Ai

Input from the camera is used to assess a patient's height and size, and to ensure that the patient is standing out of the equipment's path. The wallstand and tubehead automatically move into the right position – vertically only, and at a slow speed, for safety.

Ai Smart Patient Positioning

The live camera view is augmented with overlays for patient position correction/verification, pose verification, detector boundary, Smart Technique and Smart Collimation status.

This allows for more accurate alignment and consistent image acquisition. It also reduces the need for physical contact between the radiographer and patients – a huge benefit when direct contact with potentially contagious patients needs to be minimized.



Smart Technique Ai

A recent study[1] published in the Journal of the American College of Radiology reports that, on average, 18% of imaging exams require retakes, with 15% of those retakes due to exposure issues. Carestream's Smart Technique automatically selects the appropriate acquisition technique based upon the patient's size. This can eliminate up to 492 retakes every year. And because retakes require about three minutes each, this could save more than 24 hours each year – while it enables faster dose setting and reduces overexposures.

Chest Image Auto-Correct

Carestream's Chest Image Auto-Correct feature applies AI to automatically display chest images in the proper orientation. This is key, as a study[2] presented at the 2019 Conference on Machine Intelligence in Medical Imaging reported that 83% of all bedside chest X-rays require manual intervention to rotate images – requiring 19.59 hours of manual clicks over a period of one year. According to this study, Chest Image Auto-Correct has the potential to reduce those 19.59 hours to just seven minutes of clicks per year – a dramatic time savings to accelerate workflow for radiographers, reduce costs and allow images to be sent to PACS more quickly.

Tech-Assist Chest QA

Contrast Noise Ratio (CNR) notifies users when the acquired image is outside the preset target contrast and lower limit range – allowing radiographers to make corrections as needed to ensure optimal image quality.

The Anatomy Clipping feature uses AI to outline areas of the chest anatomy that may have been collimated off the image. This allows radiographers to quickly determine whether a retake is needed, which minimizes recalls.

Our Deviation Index feature quantifies the deviation of the actual exposure index and notifies users if it's outside the preset target range – again, so that radiographers can make corrections that ensure the best possible image quality.

Smart Collimation

This feature automatically moves the collimator blades to the appropriate field, based on the detected size and position of each patient, in order to provide image consistency and help reduce anatomy clipping and retakes.

All of our Smart Features that include automated tasks also include a manual override, so that radiographers always maintain control and can change the system settings, as needed.

Uses Artificial Intelligence technology.

* Smart Room Features are currently available on the DRX-Compass, DR Fit and DRX-Evolution Plus Systems.

1 Unified Database for Rejected Image Analysis Across Multiple Vendors in Radiography. Kevin J Little, Ingrid Reiser , Lili Liu, Tiffany Kinsey , Adrian A Sánchez, Kateland Haas, Florence Mallory, Carmen Froman, Zheng Feng Lu.

2 Leveraging Deep Learning Artificial Intelligence in Detecting the Orientation of Chest X-ray Images. Khaled Younis, PhD, GE Healthcare; Ravi Soni, MS; Min Zhang, PhD; Najib Akram; German Vera; Katelyn Nye; Gireesha Rao; Gopal Avinash, PhD; John Sabol, PhD.

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.

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"Rx only"

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