



# Quality Care Suite 2.0

A collection of AI algorithms embedded on X-ray systems that can be used to reduce image quality errors and improve efficiency

Currently, X-ray departments are under tremendous pressure to manage a rising number of cases. With this heavy load, it's no wonder that errors at the time of acquisition are common and can impact the diagnostic quality of the resulting image. In fact, research shows:

Up to **46.2%** of chest X-rays acquired on portable systems have "quality failures" that can lead to diagnostic errors.<sup>1</sup>

Up to **71%** of the most common portable X-ray exams must be manually rotated to correct the orientation.<sup>1</sup>

Fortunately, with Quality Care Suite 2.0, AI solutions can be leveraged to boost the quality of X-ray images for a broad range of exams. Available as a software option for AMX™ Navigate mobile X-ray systems, this collection of algorithms can be used to assist technologists with automated checks that identify and flag quality errors during acquisition. This allows the technologist to take corrective action before images are sent to the radiologist, saving time and helping ensure that only the best images possible are delivered to the radiologist for review.

By the numbers:

**550,000+**  
Chest X-rays analyzed per year

**120,000+**  
Atypical chest X-ray positioning found with **Intelligent Field of View**<sup>2</sup>

**1.2M+**  
Clicks saved and 13+ days saved with **Intelligent Auto Rotate**<sup>2</sup>

**85%**  
Comprehensive coverage for mobile X-ray exams<sup>2</sup>, with auto rotation for chest, abdomen, pelvis and upper/lower extremities

**290,000+**  
Potential protocol mismatches identified with **Intelligent Protocol Check**<sup>2</sup>



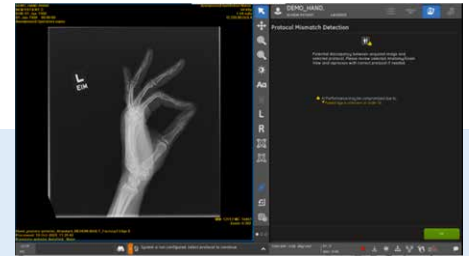
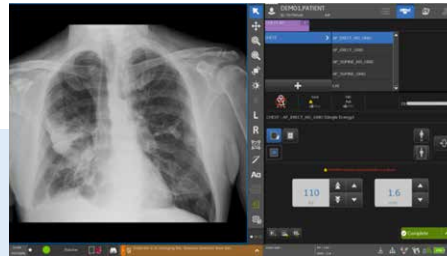
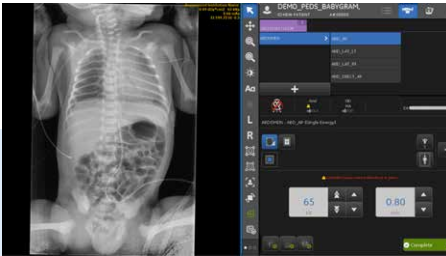
## Help your team do more with AI

With X-ray exams alone representing 60%<sup>4</sup> of all imaging and caseloads on the rise, your technologists are looking for tools to help them be more productive. Quality Care Suite 2.0 can help ease their burden with tools that help them perform efficient, high-quality exams for every patient.



## Real-time quality alerts for when every minute matters

Quality Care Suite 2.0 operates in parallel with Critical Care Suite 2.0 to help technologists reduce image quality errors and save time in critical moments. It provides comprehensive coverage for 85% of mobile X-ray exams<sup>2</sup> (including babygrams, chest, abdomen and pelvis exams for both pediatric and adult patients, and hand, wrist, foot and knee exams for adult patients). Quality Care Suite 2.0 provides quality alerts by checking three key aspects of image quality: image orientation, protocol selection and field of view.



### Intelligent Auto Rotate

This feature automatically detects if an image is not upright and rotates the image to be upright for the viewer. It's compatible with 7 anatomies and 10 patient sizes<sup>2</sup>, and saves technologists approximately 3–4 user interface clicks on 85% of mobile X-ray exams, saving approximately 187,000 clicks a year.<sup>2</sup>



### Intelligent Field of View

This feature detects errors on the acquisition such as when a lung field is clipped in a frontal chest X-ray (AUC >0.99) and notifies the technologist of positioning problems. This allows technologists to determine if a repeat is required before sending the image to PACS.<sup>3</sup>



### Intelligent Protocol Check

This feature conducts an automated quality check to detect errors on the acquisition system, such as mismatch between the protocol used and the anatomy that was acquired.<sup>3</sup> The system assists technologists by notifying them of the mismatch, allowing corrective action to be taken.

<sup>1</sup>Source: [cureus.com/articles/112339-call-to-action-creating-resources-for-radiology-technologists-to-capture-higher-quality-portable-chest-x-rays](https://cureus.com/articles/112339-call-to-action-creating-resources-for-radiology-technologists-to-capture-higher-quality-portable-chest-x-rays). Jin M X, Gilotra K, Young A, et al. (September 15, 2022) Call to Action: Creating Resources for Radiology Technologists to Capture Higher Quality Portable Chest X-rays. *Cureus* 14(9): e29197. doi:10.7759/cureus.29197

<sup>2</sup>GE Healthcare data on file

<sup>3</sup>FDA 510(k) K183182

<sup>4</sup>IMV 2019 X-ray CR / DR Market Outlook Report) page 9, 37

