

AbstractID: 11688 Title: Computed Radiography Image Exposure Revisited and Case Study

Purpose: To provide case studies for computed radiographic (CR) system image exposure measurement metrics and drive manufacture innovation.

Methods and Materials: Computed radiography image plate exposure indices were monitored over time. For entries in the exposure log file that indicated more than five times of the usual value, time stamps in the entries were matched manually to images stored on PACS to identify possible causes.

Results: Large variation in the values of the exposure index was found. Both operator errors and software failures were found for images of high value of exposure index. After corrective actions, the FWHM of the distribution of the exposure index has decreased although the range of the value remains the same. Cases from Pediatric Intensive Care Unit are the most difficult to handle because of the patient size and medical complications.

Conflict of Interest (only if applicable): JL is an employee of Agfa HealthCare Corporation