

**Title:** Use of CD-ROMS for Digital Image Viewing During New Pediatric Orthopaedic Consults – Do We Need a Standardized Viewer for Digital Imaging?

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**Abstract:**

The purpose of this study is to perform a practice management evaluation of CD-ROM imaging. Thirty-three patients who presented with images on a CD-ROM before and 33 patients after the addition of DICOM software were compared. Data collected included: site of origin of the CD-ROM, time in minutes spent to access the images, number of computers tried until images were viewed, cases of failure to view the images, quality of the images on a Likert 1-5 scale, and the need to repeat images. Prior to the application of DICOM software, average time to access the images was 16 minutes; average number of computers needed was 2 (range 1-4). Image quality averaged 2.8. Repeat images were needed in seven cases. After introduction of the DICOM software, the average time to view the images was 3.5 minutes; average number of computers needed was 1 (range 1-2). The image quality averaged 3.8. Repeat images were indicated in 5 cases. Advances in computer software including the DICOM viewer can improve workflow, physician productivity, and potentially patient satisfaction. Despite our use of advanced computer software, 3 CD-ROMS (9%) were unreadable. Standardization of software for digital imaging is needed.