From the Editor's Desk

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Diagnostic Images and Clinical Laboratory Results

Have you had difficulty viewing radiology images from those CD-ROMs patients bring to you from their imaging facility? I do, and it unnecessarily interferes with patient care and unnecessarily slows me and distracts from the time and energy I devote to patients. We need to work so that we don't end up with a similar chaotic and incompatible information world as we move to electronic health records (EHRs).

As part of our transition to an EHR, we have networked computers in each patient examination room. Our practice also has a PACS system through which we view images created within our hospital and health system. I use these "point-of-care" terminals to show my patients images from their radiologic studies. I tour the patient (usually with CT images) through their body, showing them their normal organs, their tumor if it is visible, and as time goes by, show the results of our treatments. I use these images to involve patients in their treatment decisions.

Almost every day, a patient brings to me a CD-ROM with images from a recent CT, MRI or PET scan, and I am unable to show them their images from these discs. Though most discs come with image viewing software as an executable file (".exe"), as a software antivirus measure I am prohibited from loading these executable files onto our desktop computers. As a work-around, we have a universal reader installed on the desktop computers in our patient care area. Despite this, most times I am unsuccessful at opening the images. We have all learned to live with the reality of malicious computer viruses, and the measures needed to protect our system and the patient's information from these malign invaders. We should not live with workarounds for vital patient care images. We cannot tolerate information products that only serve the needs of the creators of the information (in this case, the stand-alone radiology facilities), and are not designed to transmit the information, in any usable form, to the point-of-care, where I need it and where it serves our patients best.

For the diagnostician, images are part of the information needed to do the job. Photographs, CT images, or plain films, as well as peripheral blood smears, are all part of the diagnostic picture, and we are cheating ourselves, and most importantly our patients, if we don't utilize all of the information available. If we don't have this information readily available, we are inefficient, we shortchange our patient, and we may miss important diagnoses.

Malcolm Gladwell, in his book *Blink*, describes one attribute of an expert as the ability to unlock and listen to the subconscious interpretation—in a blink. In our medical training, during which we're under time pressure to produce the right answer, to evaluate the patient with our visual, tactile, and auditory senses, we practice incorporating this information into our patient evaluations. Skilled clinicians use their view of the patient, their hands, and their other senses to form a diagnostic impression. As evocative and vivid as our written words are— "gaunt" "wasted" "jaundiced"—seldom do these or other terms have the power of a visual image to evoke from our training the visceral sensation to arrive at a diagnosis and to educate patients. Similarly, "nodule," "infiltrate," and "mediastinal mass compressing the trachea" or "slight change in the tumor size" are all inadequate descriptors of phenomena we interpret for our patients. The images are necessary for us to properly do our job. Depriving us of this information reduces the skill with which diagnosticians can diagnose.

I have written in this space before about the ideal medical record and how it should present only the information each user—physician, patient, chemotherapy nurse, and biller—needs to have to reliably do their job. The *JOP* has also described RHIOs (Regional Health Information Organizations), health information exchange (HIE) organizations that aim to solve this problem for clinical laboratory results. (A RHIO is a multistakeholder group charged with improving the quality, safety, and efficiency of health care delivery by solving the interoperability problem. It is not just for clinical laboratories).

I encourage our imaging colleagues to build into their wonderfully helpful imaging systems the ability to share the images and their results seamlessly and more easily with us, their customers. Professional societies and standard setting organizations should also encourage facile data sharing as part of the health information exchange movement. Practicing oncologists should refer their patients to imaging facilities that facilitate sharing of their data with their customers—referring physicians and patients. In addition, the *JOP* will highlight successful efforts along these lines in future issues.