

## Guidelines for One-on-One Remote Supervision Review Committee for Radiology

The Review Committee for Radiology has determined that due to the digitalization of imaging and connectivity across medical enterprises, some functions related to diagnostic radiology education are manageable via remote work (teleradiology). Picture archiving and communication systems (PACS), contemporary informatics, electronic health records, and the widespread use of virtual meeting software following the COVID-19 pandemic allow for radiology attending physicians and learners who are located remotely from the patients undergoing imaging to interpret diagnostic imaging and quickly convey the findings using both written reports and oral communications, as if they were physically located at the same site.

Many practices currently rely on teleradiology to serve their institution's needs for radiology coverage. Allowing experts who are in a different geographical location than the home institution to interpret radiological studies via teleradiology is a benefit that serves the hospitals' and patients' needs.

Sponsoring Institutions with ACGME-accredited residencies and fellowships in radiology may have faculty members who work remotely. This creates the potential to compromise the quality of radiology resident and fellow education when the teaching faculty member is physically separated from the learner. To mitigate that risk, the Review Committee has outlined several important considerations to apply to patient care when there is the expectation of *direct supervision* of radiology residents or fellows by faculty members. To ensure excellence in resident and fellow education, the following guidelines should be applied for one-on-one remote direct supervision:

- Teaching faculty members working remotely *must* have a reliable internet connection and up-to-date computer hardware and software (including PACS) that match the quality of on-site radiologists.
- Teaching faculty members working remotely *must* have a reliable phone connection and the capability to receive forwarded phone calls from the on-site reading room, in order to assist with the phone call burden.
- Teaching faculty members and residents or fellows working remotely from one another *must* have virtual meeting software that allows both to share their computer screen so that they can each view the findings in diagnostic imaging as they discuss the cases.
- Teaching faculty members and residents or fellows *should* have face to face cameras to recreate as much as possible the environment of an on-site reading room shared by both individuals.
- Teaching faculty members who are *directly supervising* radiology residents or fellows via a remote connection *must* review and discuss *each* case with residents/fellows, as opposed to having the resident/fellow provide a preliminary interpretation that is independently signed off by a remote attending physician. Although it is recognized that some busy services rely on a dynamic whereby a resident or fellow will independently review a case and sign off a preliminary report to a staff radiologist without the

expectation of discussing the findings side-by-side at the workstation unless the learner has missed a finding, this denies learners the opportunity of seeing directly how their supervising attending may contemplate observations made when reviewing the cases. For a remote learning experience, which could potentially already be compromised by distance, it is imperative that those learners who require direct supervision be given the equivalent of side-by-side teaching, albeit over the network.

- Programs with virtual teaching faculty members *must* ensure that PGY-1 residents on radiology rotations and first-year radiology residents (PGY-1 and PGY-2 levels) *always* have an on-site supervising radiology attending working with them or immediately nearby in order to ensure a professional working environment. Although a junior resident may be receiving direct supervision from a faculty member who is located remotely and connected virtually, a physically present faculty member is important in the early stages of education to observe the interactions between a junior resident and referring clinicians and technologists. Physically present faculty members are also necessary to serve as role models for the routine professional interactions that occur on site. Physically present faculty members may interpret diagnostic imaging studies for a different subspecialty than the remote faculty member.