

RADIOLOGY PRACTICE

Physician and tech shortage fuels drive for 'supertechs'

Two paths emerge: ACR endorses more limited version of the radiology practitioner assistant

By: C.P. Kaiser

Three years ago, special procedures technologist James Abraham left New Mexico to work in rural Montana. Unfortunately, many procedures allowed in New Mexico were off limits for technologists in the Big Sky Country. Although the 19-year veteran had brought some much-needed organizational and medical skills to the interventional suite at Kalispell Regional Medical Center, he was essentially operating at 50% capacity. That is, until he began training as a radiology practitioner assistant.

With less than a year remaining in a two-year RPA program, Abraham is already saving radiologists precious time.

"In a typical 10-hour workday, he doubles the time I have for reading and interpreting images," said Dr. Hugh Cecil, who recruited Abraham after working with him in New Mexico. "If he left, it'd be like replacing half a radiologist."

Where Cecil used to spend half an hour performing a CT-guided biopsy, he now spends five minutes. Abraham obtains informed consent and handles other patient management duties, positions the patient, and lines up the needle. The nurse administers the appropriate medications. Cecil walks in, places the needle, takes the biopsy, and leaves to read more films.

Abraham performs the lion's share of other procedures, including shoulder MR arthrograms and ultrasound-guided paracentesis, thoracentesis, peripherally inserted central catheter (PICC) line placement, CT-guided sacroiliac joint injections and localizations for biopsies and drainage, upper GI and barium enema studies, cholangiograms, nephrostograms, flow studies, hip injections for pain management, various tube changes, fluid aspirations, and dialysis fistulagrams. Abraham works under radiologist supervision, but as he progresses through the program and his group becomes more comfortable with his skills, he'll perform these procedures autonomously.

Earlier this year, the Montana legislature joined two other states in recognizing RPAs, essentially giving them authority to perform duties that registered technologists cannot. These so-called supertechs may be an answer to today's acute shortage of both radiologists and technologists, but their acceptance has been hard-won, particularly within organized radiology.

The American College of Radiology has not endorsed RPAs since their inception in 1995. RPAs are taught to evaluate images, and the ACR considers the line between evaluation and interpretation a thin one. Two years ago, the American Society of Registered Technologists began formulating its own version of the supertech. The ASRT sought support from the ACR, which decided it had better be involved in the process if it wanted some control over the results. At its annual meeting in May, the ACR council voted to endorse the concept of the radiologist assistant (RA) as proposed in a plan crafted by the ASRT, the ACR, and others.

"This was an issue that appeared to be moving forward, and the ACR felt it should be at the table with input and giving direction," said Dr. Charles Williams, chair of the ACR human resources task force. "We wanted the radiologist assistant to be a benefit to our members and not a substitute for the radiologist."

WHERE IT BEGAN

In the mid-1990s, Jane Van Valkenburg, Ph.D., chair of radiological sciences at Weber State University in Ogden, UT, was asked by the Department of Defense to create a program to train physician extenders. Military hospitals, like their civilian counterparts, are suffering an acute shortage of both radiologists and technologists and are searching for ways to stretch thinning resources. But when the military scrapped the project, Van Valkenburg found enough civilian support to start the program at her institution. The program, the only one of its kind, has averaged 15 graduates a year, but the numbers are growing: 53 technologists are currently enrolled, and 108 have been accepted for the fall class.

"That tells you something about the demand," Van Valkenburg said. "At first radiologists felt threatened, but then they realized that these people make their jobs easier."

As much as the ACR might try to distance itself from RPAs, radiologists have been involved with the program since day one, she said. Students must be registered technologists with at least five years' experience and must be recommended by a radiologist at their practice or facility. Radiologists work with and teach the students, and the curriculum has changed based on radiologists' feedback.

North Carolina's High Point Regional Health System has two RPAs and one in training. The RPAs do most of the fluoroscopy, help with minimally invasive

procedures, and act as intermediaries between radiologists and referring clinicians, said Dr. Mark Lukens of High Point Radiological Services. Lukens joined the practice in 1998, after the group had already sent its first technologist to the Weber State program. Today, he serves as an advisor to Van Valkenburg.

"We have stellar techs, and we are interested in furthering their careers," Lukens said. "The radiology practitioner assistant program is a way to do that, and it helps us keep quality people."

The advisory panel that gave shape to the radiologist assistant concept consisted of representatives from the ACR, ASRT, and American Registry of Radiologic Technologists, representatives from industry, and the president and vice president of the National Society of Radiology Practitioner Assistants. Many members of the NSRPA felt betrayed by their officers' acquiescence to this "watered down" version of an RPA, Van Valkenburg said.

"It was bitter, and some RPAs called for the officers' resignation," she said.

Van Valkenburg said she empathizes with the NSRPA representatives. Not being too politically savvy, they may have felt intimidated by the ACR and ASRT representatives. Nevertheless, the ACR is now onboard, throwing its weight behind the concept of the physician extender.

The name chosen for this new entity was especially important to the ACR. The advisory panel rejected "radiology practitioner assistant." It noted that the inclusion of the word "practitioner" is potentially misleading to the public and other health professionals because it implies that the individual is an assistant to any medical practitioner, not just to radiologists. Panel members also agreed that the title "radiologist assistant" clearly links the advanced-level technologist to the radiologist.

Although the scope of practice for RAs will evolve, it is slightly narrower than that of RPAs. RAs will still take responsibility for patient assessment, management, and education. Duties might include determining whether a patient has been appropriately prepared for a procedure, obtaining patient consent prior to a procedure, and adapting exam protocols to improve diagnostic quality. But they will not differentiate normal from abnormal imaging examinations or assess the radiographic findings to determine whether immediate radiologist interpretation is needed.

RAs will perform selected radiology procedures including but not limited to dynamic and static fluoroscopy, cyst aspiration, needle biopsies, and lumbar punctures. RPAs also perform fluoroscopy, biopsies, and fluid drainage, as well as arthrograms, placement of nasogastric and enteroclysis tubes, myelograms, and any other procedures in which competency has been demonstrated and which the radiologist is comfortable delegating to the RPA.

The ACR panel did not like the fact that RPAs "evaluate and review" images. It suggested that the phrase confers too much authority on the technologist, bordering on image interpretation. Additionally, RPAs report unusual findings to staff radiologists and then to the supervising radiologist. The RA, on the other hand, makes initial image "observations" and communicates those directly to the supervising radiologist.

A program at Loma Linda University in Southern California is expected to enroll the first RAs this fall. Loma Linda was one of four institutions to which the ASRT Research and Education Foundation provided \$25,000 to start an RA program. The others were Midwestern State University in Wichita Falls, TX, the University of North Carolina at Chapel Hill, and the University of Medicine and Dentistry of New Jersey. Plans are under way to accommodate 13 other institutions that vied for the startup funds, including Bloomsburg University of Pennsylvania, Northern Kentucky University, Massachusetts College of Pharmacy and Health Sciences, and the University of Alabama at Birmingham.

At present, 38 states license radiologic technologists. Advanced-level technologists do not need additional licensure in those states because the job is an extension of the radiologic technologist profession. In the states that do not license radiologic technologists, physician extender should be recognized as an advanced role for the radiologic technologist, according to the ACR's Williams.

The general trend, however, has been for political bodies to broaden the scope of practice for non-M.D.s, said Dr. Leonard Berlin, radiology chair at Rush North Shore Medical Center in Chicago.

"Contrary to the wishes of physicians, the non-MD ancillary people have gotten more authority to perform medical procedures," Berlin said. "Just look at the optometrists versus ophthalmologists. Whether that happens in radiology remains to be seen. But it won't surprise me."