Upon graduation, radiologic science students are expected to know how to perform all general radiological examinations and operate equipment common to a radiology department. Initially, they learned about the radiologic procedures by reading textbooks and attending classroom lectures and laboratories; then, clinical rotations provided valuable hands-on experience.

When students start clinical rotations, their natural inclination is to approach an examination procedure exactly as they learned it in a textbook or how an instructor demonstrated it in class. This approach can lead to a subpar examination that does not provide a health care provider with a diagnostic image. Worse, the patient might be harmed by a students’ inability to operate the equipment. It is imperative, therefore, that students enter their clinical rotations with the understanding that examinations often require modification. Performing an examination on a healthy patient, for example, is different from performing that same examination on a patient who just had surgery or who is disabled. Injured patients or those who are in extreme pain might be unable to tolerate certain examination positions. Some patients, because of their body habitus, might require the technologist to use alternate positioning or positioning devices (eg, angled sponges, decubitus sponges, sand bags) to perform the examination.

Clinical instructors and technologists who work with students can help them learn the lessons that will make them competent, knowledgeable technologists upon graduation.

Proper Appearance
An easy way for students to make a good impression is to be on time, dressed in a clean and neat uniform, and wearing a badge that clearly lists their name and the school they attend. Proper identification protects the student, school, and site from confrontations with doctors or even potential litigation. Patients or visitors might become upset if the student cannot answer questions about an examination or another medical issue. Students should clearly state who they are and what they are doing to everyone they come into contact with to avoid conflict.

Take Notes
Students always should have a notebook and pen with them during the clinical experience. Students should pay attention to how the technologist sets up the room for each procedure, the supplies used (eg, contrast, needles, trays), how the x-ray tube was positioned in the room, what projections were taken, and anything else that might be helpful for the next examination. They also should note questions or concerns as they arise to share with the clinical instructor or the technologist with whom they are working. Students should familiarize themselves with relevant locations at the clinical site (eg, surgery, emergency department, patient...
rooms, recovery) and the rooms for procedures, fluoroscopy, and supplies in the radiology department. Practice and familiarity will ensure that an item or room will be located with ease.

Be Aware
A hospital can be a stressful work environment. Other technologists and supervisors might be handling patient or staffing issues and will not have time to address students' questions or concerns. Students need to be mindful of their surroundings and their reactions to the situation and often should refrain from asking questions until the situation is resolved. Students can help in other ways by wiping down the table or chest board after each examination and by stockpiling negative exposure with sheets, blankets, contrast, needles, and other items needed. Simply being in the room with an anxious patient while a technologist is doing something else typically is greatly appreciated by the technologist and the patient.

The clinical instructor should explain the behaviors and attitudes expected in the radiology department. Students' attitudes and behaviors while interacting with patients, doctors, and other radiologic technologists will be duly noted. In this competitive job market, students must portray a professional attitude. Examples of attitudes and behaviors that could damage students' potential employment include:

- Being overly shy or lacking confidence.
- Immature behavior, whining, or complaining.
- Studying or doing homework at the clinical site.
- Grooming in front of patients or other health care providers.
- Socializing with others while patients are present.
- Checking email, text messaging, or visiting social media sites while at the clinical site.

Working With Patients
Good patient interaction is a key skill in the profession. Students can take the initiative by greeting patients by name (never “sweetie,” “honey,” or “dear”) and by identifying themselves as students and saying what school they attend.

Students should respect a patient's privacy and confidentiality. Before every examination, the student needs to ask the patient's permission to observe or perform the examination and be familiar with the examination before performing it on a patient. If a patient sees the student struggling with the x-ray equipment or room setup, then the patient might lose confidence in the student's ability and refuse to be treated by the student. If that happens, the student loses a training opportunity and potentially leaves the technologist with an angry, uncooperative patient.

Criticism
Criticism, although difficult to hear, can be helpful coming from experienced technologists. Students can benefit from the comments and critiques regarding the complex examinations. Students should give the technologist respect by listening attentively, taking notes, being open minded, and not arguing. Negative comments should be viewed as corrective measures and a valuable part of the training that ensures protection of the student and the patient.

If students feel that they are being disrespected or mistreated, they should talk to the person privately and try to resolve the issue before it escalates. Students can help in other ways by wiping down the table or chest board after each examination and by stocking the room with sheets, blankets, contrast, needles, and other items needed. Simply being in the room with an anxious patient while a technologist is doing something else typically is greatly appreciated by the technologist and the patient.

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Working With Others
To work competently with other technologists and patients, students should familiarize themselves with the department's radiologic protocols. During downtime, students can practice positioning their fellow students for the various examinations. They also can move the x-ray tube around the room, centering it to the table and chest Bucky. They can take exposures of x-ray phantoms with different techniques or exposure parameters and check their work with a technologist. Later, they can get feedback from their clinical instructors on their practice images.
Getting Help

Students never should be afraid to ask questions and seek additional help, especially from the clinical instructor whose job it is to ensure students succeed. Each school’s reputation and integrity is built on the quality of its students entering the field, and turning out subpar technologists is dangerous for everyone involved.

If a student is having an issue with someone in the clinic that cannot be resolved with a simple conversation, then the student should set up a meeting with the instructor. The following issues need immediate attention:

- Students performing an examination that they have not been trained to do.
- Students doing examinations by themselves without a licensed technologist nearby.
- Students being forced to do examinations they are not comfortable doing.

If students experience any of these situations, they should notify the lead supervising technologist and the clinical instructor. These professionals will appreciate being notified about these issues and can make the appropriate changes to the curriculum.

Conclusion

Students have numerous sources of help during their years in training. They should tap into all of them to learn as much as they can about the profession they are entering and to ensure they are as well trained as possible before taking on the critical role of technologist on a health care team. Clinical instructors and technologists can help students learn the lessons that will make them competent, knowledgeable technologists upon passing the Registry exam. Students play a huge role in this valuable learning experience.

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