

# Exposing the Hidden Curriculum in Radiology Training: A True 360° Evaluation

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Radiology training is traditionally structured around curricula set by national or international organizations, such as the American Board of Radiology, the European Board of Radiology, the Royal College of Radiologists, and the Royal Australian and New Zealand College of Radiologists. These curricula define the minimum knowledge a radiologist must possess to be considered competent for certification. However, employability and career success at the end of residency only partially depend on satisfying formal curricular requirements. Residents are being continuously evaluated against a series of unwritten rules set by their attendings, fellow residents, and collaborating professionals, including technologists and referring physicians (1,2). Here, we attempt to shed light on the “hidden curriculum” by which radiology residents are viewed and provide strategies for resident success.

## Expectations of Attendings

Unwritten expectations from attendings include a combination of professionalism, work ethic, engagement, and effective communication with colleagues and patients. Eagerness to learn and read examinations plays an important role in shaping a good opinion of a resident. These are some of the questions that are invariably considered by attendings, even if they are not spoken out loud: Do residents arrive on time in the morning? Do they miss teaching sessions and journal clubs? Do they keep up with the list? Are they taking ownership of the service? Are they leaving before the attendings? Do they return from conference later than they should? Perceived resident work

ethic also includes producing meticulous reports without typos and grammatical mistakes, which decreases the time needed by attendings to edit reports. Finally, devoting their full attention during readout and accepting positive or negative feedback are important aspects of the hidden curriculum. The implicit messages residents should try to communicate by fulfilling the hidden curriculum is that they want to improve, they take pride in their work, and they respect the time of their attending.

## Survival Hints

1. Directly ask attendings what their expectations are for residents, recognizing that these expectations likely vary by attending. Ask what attendings value from residents, since it may be different from what you value.
2. Carefully read orientation materials to understand your role and responsibilities on service. If no materials exist, seek advice from senior residents or attendings to clarify your role.
3. Develop standardized search patterns to improve reading efficiency. Then, track your studies to look for improvement in speed and to learn how to better structure reports according to attending feedback.
4. Ask for specific feedback. When receiving feedback, work to separate your emotional response to criticism, and accept that this was the attending’s perspective. Create measurable and attainable goals to improve on the basis of the feedback.
5. Arrive at work on time. If you anticipate being late or leaving early, e-mail the attending ahead of time to set the expectation.

## Expectations of Fellow Residents

Apart from attendings, fellow residents play an important role in setting standards for the “ideal resident,” particularly related to collaboration and trust. Seamless collaboration with fellow residents includes fair selection of cases to be reported from the list by avoiding cherry-picking the easiest of cases, thus overloading other residents with the most complicated cases. Being a team player while on call goes far in developing trust with other residents. Equal contribution to the workload of the department allows the development of healthy

RadioGraphics 2022; 42:E9–E11  
<https://doi.org/10.1148/rg.210209>

Content Code: **ED**

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relationships among colleagues. Such relationships are strengthened by mutual understanding and support in cases of personal difficulties, and by taking extra care to avoid undermining other residents in the eyes of the attendings. Taking the time to talk through a didactic case with other residents demonstrates the ability to provide mentorship and helps model good residency citizenship to junior residents. The implicit messages residents should try to communicate to their peers are that teamwork is important and that they can be trusted by their peers.

### Survival Hints

1. Ask senior residents about the expectations for each rotation.
2. Avoid cherry-picking easy cases.
3. Observe the working routine of senior residents and the chief resident, adopting the behavioral elements that make them good team players.
4. Offer to help junior residents navigate the difficulties of residency.
5. Practice empathy. When in doubt, put yourself in another resident's shoes to judge the potential effects of your behavior.

## Expectations of Radiology Technologists

Radiology technologists and other allied health professionals are an invaluable component of any radiology practice. Radiologists should strive to promote a collaborative relationship with technologists to ensure patient safety and deliver quality radiology services. Such an environment significantly influences patient satisfaction, especially in interventional procedures. Professionalism and excellent communication between residents and technologists and other allied health professionals are of paramount importance to create a collaborative work environment (3). The implicit message residents should try to communicate to technologists is that they value the skill set and input of everyone in the department.

### Survival Hints

1. Knowing your technologists' names can go far in fostering a collaborative relationship.
2. Encourage the technologists and other allied health professionals to contact you by phone or face-to-face with questions, concerns, or significant observations about the workflow.
3. Value technologists' input and assessment on the study and the pertinent information they may have obtained from the patient.
4. Explain what you want and expect from the imaging study at the time of the study and welcome technologists' suggestions on how to best achieve the study. Show empathy toward what the technologists are trying to accomplish.

5. We are all part of the care team and want to do what is best for the patient. Don't take a "superior" posture with the technologists.

## Expectations of Referring Clinicians

Outside of the radiology department, residents are viewed by referring clinicians according to the quality and clarity of the report and the prompt communication of urgent findings. Providing timely and accurate interpretations that are communicated effectively is the ultimate resemblance of a competent radiologist in the eyes of the ordering providers. Mastering six core competencies set by the Accreditation Council for Graduate Medical Education (ACGME) (4) is essential in this regard. Specifically, having exceptional medical knowledge, being an effective communicator with outstanding interpersonal skills, and perhaps most importantly, having a deep understanding of system-based practice and professionalism are the keys to strong relationships with the providing clinicians.

Appropriate communication of important findings from the radiologist to the referring clinician is a critical component of patient care and will earn trust with the clinician. This can take the form of well-organized and written reports but is most important when communicating new or unexpected findings that warrant urgent intervention or may result in mortality or significant morbidity (5). Residents should build a relationship of trust with the referring physician by clearly communicating findings, paying attention to the diagnostic dilemmas of the physician, and knowing when to consult their attending. Residents should try to demonstrate that they are helpful consultants for the ordering providers.

### Survival Hints

1. Increase your clinical presence by participating in radiology rounds and conferences as well as multidisciplinary conferences. This is exceptionally important for proceduralists and interventional radiologists. Remember, "If you are not at the table, you may be on the menu."
2. Create tailored and well-organized radiology reports that answer the referring provider's clinical question.
3. Be responsive on the phone to clarify any queries of the referring physicians after the report has been delivered. Having a sense of responsibility and understanding of the patient's and providing clinician's concerns is what sets a good resident apart from a great one.
4. Do not hesitate to ask for advice from your attending when the question asked goes beyond your knowledge.

Residents are constantly measured by criteria that extend beyond the formal curriculum. Early realization of and understanding of the hidden

curriculum is key for career development and success during residency. Residents should be aware of the multiple strategies listed here for tackling the informal aspects of their education. Ultimately, exposing the hidden curriculum will help residents maximize their residency experience and gain confidence from the 360° view box.

**Disclosures of conflicts of interest.**—H.B. Editorial board member of *RadioGraphics*.

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