GAINING PHYSICIAN ACCEPTANCE IN A PACS ENVIRONMENT
or “Where the @#$%#^ Is My Film?”

By Paul Dubiel, RT(R), MS
Part 2 of 3

The implementation of PACS at Seton Healthcare Network has elicited positive and negative responses from physicians and staff. The first article in this series, (August 2005 Link) focused on “There is no such thing as over communication.” Here is a continuation of the key issues that helped physicians navigate the process.

2. Get physician buy-in up front.

This is where you get to be a politician or used car salesman. Go out there and sell the benefits of the change to whoever wants to listen. Find allies who are positive spokes-

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STEPS OF A CERTIFICATION EXAM

By Carole South-Winter, CNMT, RT, MEd
Certification/Education Manager

On September 10-11, the AHRA and Radiology Administration Certification Commission (RACC) sponsored an Item Writing Workshop in Boston. The purpose of this workshop was to craft high-quality questions for inclusion in future certified radiology administrator (CRA) examinations.

Item writers taking part included Jill Curie, Winnie Greishaber, Jenni Jones, Rosemary Lippinco, Tom Redman, Patti Sopsik, and Jeff Zehel. Sequestered into a meeting room for nearly 12 hours, these CRAs toiled with the daunting task of creating, validating, and justifying potential test questions. The item writers followed accepted procedures for developing reliable and content-valid examinations. Each step in the test construction process is carefully documented; multiple reviews by content and psychometric experts and the use of stringent criteria strengthen the validity of the test. Continuous evaluation of each examination’s reliability maintains the consistency of the test to accurately measure examinees’ skills.

Jim Henderson of CASTLE Worldwide, the CRA examination vendor, explained the process of test writing, including a history of a 1960s Supreme Court case regarding testing. The ruling stated that if an exam is used for job relatedness, certain criteria must be met. In the case of the CRA the domains represent learning or role delineations.

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Last month, I struggled with searching for my presidential “theme” for these columns. After considering—and then eliminating—“shoes,” I eventually came up with “happiness.” I was ready to write a year’s worth of “happiness” columns. But then the United States was struck by a natural disaster of almost imaginable proportions.

Hurricane Katrina was both enormous and overwhelming for me. I live in a 9/11 state, and was quite surprised by my own reaction. After 9/11, I considered myself a bit toughened over disasters. I was not. My heart ached and then split open. By the Thursday after the hurricane hit, I could not watch the TV any longer. I panicked over not getting in touch with my New Orleans friend, Howard, all week. I was embarrassed and appalled how Americans were not receiving the proper help. Certainly, I was not living my “theme.” But, the remarkable thing about happiness is that we cannot touch it without knowing the polar opposite. How does a fish know he’s wet? It is the same concept. When he’s caught and drying on the dock, a fish realizes he was wet. Unless we’ve been cold, how would we recognize hot? Hurricane Katrina allowed us to feel the extreme misery, which is needed to recognize the opposite. Happiness experts say that only 2% of the population is naturally born happy. The other 98% fake it, or live an unhappy existence.

Outside my office one day, I heard Henry, a senior volunteer at my hospital, listening to another senior citizen complain for well over 20 minutes. The patient complained about the parking, his gout, his gallbladder, the bill, the delays, the everything.

I was pretty impressed, though, because Henry was not kind or compassionate. In fact, this volunteer was mostly miserable. Truthfully, I never liked Henry at all. But my mind changed after watching him listen to this pitiful patient.

“He was an old neighbor of mine,” Henry told me. “And at my age, the only reason to listen to someone complain is so he feels obligated to return the favor and listen to me someday.” I never liked that Henry.

Over the years, I’ve read a lot about happiness. And for 98% of us, the older we get, the more like Henry we become. If you want to be happy, you end up being the salmon swimming upstream, the happy minority.

A few years ago, I began to notice unhappiness was even affecting the young! A sweet, young technologist came to work with us after graduation. Tina didn’t have a bill, responsibility, nor care in the world. She was in love with her boyfriend. She drove an expensive convertible. She bought trendy clothes for trendy parties. Tina had a very happy life.

Six months later, she was in my office, on the brink of termination for excessive absenteeism. Tina sat crying, while replaying all the legitimate excuses she believed in. Her last reason was her most legitimate. Her wallet was stolen from her car.

“How come you don’t want to be happy?” I asked Tina.

“Roouawl?” she asked, sounding like Scooby Doo, not expecting my question.

“I do,” she assured me. I assured her she did not. I replayed her list of excuses. I suggested Tina try on “sabotage.” Tina disagreed. She was in denial, but eventually saw the self-destructive role she played by leaving her wallet on the front seat of her convertible in Passaic, NJ.

We stayed in my office a while, her crying, me shoving the mirror in front of her. Tina ended up getting some real help and salvaging her job. Tina taught me no matter how great life looks from the outside, very few people find real happiness inside. It isn’t easy being happy.

For all of us, I hope we saw the pain of Hurricane Katrina’s destruction and were astute enough to acknowledge and experience the benefit of that sight.

After the hurricane struck, Ed Cronin, our new executive director, immediately registered the AHRA with FEMA. AHRA is acting as a clearinghouse to match up employment and equipment needs with those in need. Ed quickly recognized the purpose and strength of AHRA. I think Ed’s a 2%er.
people for the system—those who can help you gain acceptance of changing to PACS. Radiologists can be the biggest help. Assuming they are on board, they can be a great physician-to-physician asset, acting as the sense of reason championing the PACS environment and its many benefits to all potential users.

3. Training is essential.

Long before the first workstation is installed, get physicians, nurses, and other technical staff trained and comfortable with the system. This is essential to success.

It is imperative to realize all staff does not have the same comfort level in using workstations. Surgeons who are extremely comfortable putting back together patients who were severely injured in car wrecks don’t always have the same comfort level maneuvering around the PC as your 10-year-old son who plays video games does.

It is also important to realize that physicians who say they know how to use a PC and those who actually have that skill are 2 different things.

Getting out to meet with physicians and staff. Make them log on, get their passwords, and get comfortable with the system. These aren’t always the most pleasant uses of your time, but they are essential.

It isn’t good enough to schedule training sessions in a classroom Monday through Friday from 8:00 AM—5:00 PM, post a few signs, and expect all the staff and physicians who need the training to show up. You need to be prepared to make it as simple and accessible as possible to the staff members who don’t work the day shift. It means having someone do the training at midnight and on weekends. It means taking a PC to section meetings and council meetings. It means going after the physicians who you know will be big users that just haven’t had time or inclination to make the training, then pinning down a time and place to get them that training. Without training, no matter how many workstations you have positioned throughout the hospital, you’ll never reach the level of usage that you need to make PACS a success.

4. Find the physicians who you feel will be the biggest obstacles, and make them champions for your cause.

It’s easy to find the technophiles who long for advances in computer technology to make their practice of medicine easier. But the trick is winning over those who you know will accept PACS only after screaming and yelling and trying to get every physician and staff member willing to listen to join them in discrediting the new technology.

Reaching out to these physicians and doing a lot of one-on-one hand holding through the planning, development, and implementation process will go a long way in winning them over and making them champions for the system. We have learned that if you really listen to what “resisters” are saying, they do have valid points. These points could make the system easier for them to use, and they could help others accept the new technology.

Simple suggestions from “resisters”—such as relocation of workstations for maximum efficiency, changing their preferences so they can pull up their studies without having to navigate through the unread list, or just giving them the phone number for the PACS help desk—can make the acceptance of PACs still not easy, but easier for you and the physician not willing or ready to change.
**EVENTS 05**

**AHRA Board of Directors Meeting**  
November 12, 2005  
Hilton Logan, Boston, MA

**AHRA Audio Conferences**  
AHRA audio conferences are economical and convenient!  
64-Slice CT  
October 20, 2005 / 1:00 PM - 2:30 PM Eastern

JCAHO Update for 2006  
December 15, 2005 / 1:00 PM - 2:30 PM Eastern

Log on to www.ahraonline.org for audio conference descriptions and upcoming presentations.

**Upcoming CRA Events**  
RACC Online Election: October 17-November 4  
Cast your ballot to fill the open seats on the Radiology Administration Certification Commission (RACC).

CRA Examination: March 10, 2006  
Applications are due January 25, 2006 for this exam held at CompUSA testing centers. Log on to www.ahraonline.org for details.

**AHRA 2006 Annual Meeting & Exposition**  
July 30 - August 3, 2006  
Las Vegas, NV  
**SAVE THE DATE**  
The premier event for imaging and radiology administrators, as well as other healthcare professionals.

**AHRA 2007 Annual Meeting & Exposition**  
July 8-12, 2007 (Gaylor Palms Hotel, Orlando)

To register for any AHRA conference, www.ahraonline.org or call (800) 334-AHRA or (978) 443-7591  
For other information on conference details, call (703) 964-1240  
Exhibits, Speakers: Jennifer Leq, x 21  
Conference Logistics: Linda Hachero, x 13

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**AHRA MISSION STATEMENT**  
The American Healthcare Radiology Administrators is a resource and catalyst for development of professional leadership in imaging sciences.

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The critical steps in the construction of a content-valid examination proved to be more challenging and methodical than the item writers believed. The item writers were first instructed in the mechanics of writing a valid question. The question or stem must be accompanied by 4 response options (choices); 1 is the key (answer) and 3 are distracters (incorrect answers). In addition to writing the question, the item writers must be conscious of the number of prepositional phrases, matching technical language, using formulas in different ways, avoiding open-ended sentences and stating the stem positively avoiding not and except so that reverse logic does not confuse the candidate. Item writers must always be aware of the cognitive level the candidate is expected to perform at in addition to assessing problem-solving skills.

The steps of a certification exam construction include:

- role delineation
- development of the test blueprint
- item development and validation
- test assembly
- review and revision
- content valid examination
- passing point
- test administration
- psychometric analysis

Role delineation: Before developing an examination, a role delineation study determines the knowledge and skills that define a minimally competent professional in the field to be tested. Linking the knowledge and skill defined in the role delineation study to the examination content ensures that an examination is content valid. In psychometric terms, validation is how a test developer documents the competence inferred from an examination test score.

During the role delineation process, a committee of subject matter experts defines the overall performance domains associated with competent practice. These performance domains are further broken down into more distinct tasks, knowledge, and skills required on the job. The job responsibilities developed by the subject matter experts are then validated through a survey of practitioners. The practitioners review the rate and domains and tasks according to their importance, criticality, and frequency of performance. This step was done months before the first test was even administered, and the 5 CRA domains resulted.

Development of test blueprint: In the next step, the results from the validation survey are used to develop a blueprint, or a plan, for the examination. The information regarding the importance, criticality, and relevance of each domain and task is translated directly into the percentage of items that should be included in the examination for each content area. This blueprint guides the item development and examination assembly process and ensures that the examination reflects the relative importance of the required knowledge and skills. Each domain was subdivided into specific tasks that a radiology administrator performs.

Item development and validation: All examination items are written by experts in the practice field. Each item writer is trained in writing, reviewing, editing, and validating questions. Each question is reviewed and validated by at least 3 other subject matter experts and must have at least 2 verifiable references. Each item is classified by content category, assigned a cognitive level, and validated according to its appropriateness to the certification-level practitioner. After development, items are reviewed to ensure they are psychometrically sound and grammatically correct. This is what occurs at an item writer workshop or online question development.

Test assembly: Each examination is created by randomly selecting the appropriate number of items for each content area, as specified in the test blueprint.

The test assembly portion will involve another group of CRAs, which will meet this month in Phoenix during the AHRA Imaging Center Administrators Conference. They will be constructing the March 2006 CRA exam.

The level of ability or difficulty of the test is high but attainable; the 70% pass rate will differentiate between those who know and practice as a competent radiology manager. Reasons identified for not successfully passing the CRA exam may include:

- did not study
- not enough variety of experience
- not enough experience in the field
- lack of information

An opportunity for CRAs to write questions for 2007 tests are open to all CRAs in good standing. If you would like to be a part of this integral part of the CRA program, please contact Carole South-Winter, AHRA Education/Certification Manager, at csouthwinter@ahraonline.org.

The RACC and AHRA would like to express their thanks to the item writers to committing their weekend to the CRA program.

Attention all CRA’s

If you would be interested in taking part of a pilot mentoring program for administrators wishing to set for the CRA exam, please contact Carole South-Winter at csouthwinter@ahraonline.org by November 1 to take part in this exciting and vital AHRA adventure.
THE FIVE DOMAINS OF THE CRA EXAMINATION

By Stephen R. Gaines, MS, RT(R)(CT), CRA

In 2001, the AHRA announced the onset of a huge project to identify the standard knowledge and competencies radiology and imaging leaders must possess in today's market, and to recognize those individuals that successfully meet these standards. With financial support from Kodak Health Imaging, the AHRA launched the certified radiology administrator (CRA) program. The program establishes a method for radiology and imaging leaders to become certified in their field of expertise and earn CRA credential.

To successfully achieve the certification, the candidate must first meet the specified requirements of education and professional experience to determine eligibility and subsequently obtain a passing score on the CRA examination. The examination is a thorough measurement tool of the candidate's knowledge in 5 domains, or areas of expertise, believed to be the necessary attributes of an effective radiology and imaging leader. The successful candidate will have a well-rounded knowledge of all domains, as the examination will tap into many layers of understanding and comprehension.

The 5 domains of the CRA examination are: human resource management, asset resource management, fiscal management, operations management, and communication and information management. The titles of the domains are self-defining, but in this article, I will further outline and describe the contents of the domains to assist future candidates in their goal to achieve CRA status.

The human resource management domain consists of many aspects related to the psychological and legal guidelines of managing people. The successful candidate will have an understanding of the basic fundamentals of calculating staffing needs in relation to procedure volumes; the development and characteristics of job descriptions; recruiting and marketing techniques; and motivating, empowering, and rewarding people. Labor laws and regulations, union negotiations and accreditation are also included in this domain.

The asset resource management domain pertains to the aspects of managing and acquiring assets and capital equipment. Knowledge of leasing versus purchasing, costs of ownership, inventory management, methods of acquiring capital funds and equipment, project management, and the development of business plans is essential to this domain. As you can see, this domain is heavily inclusive of business-related functions of the radiology and imaging leader.

The fiscal management domain is similar to asset resource domain in that it too contains business-related functions. However, fiscal management focuses on financial attributes such as budgeting and forecasting of revenues and expenses. Knowledge of annual budget preparation, developing a proforma, and short-term and long-term business strategies are the keys to performing well in this domain.

Operations management includes the knowledge of day-to-day functions of radiology and imaging departments. Included in this domain are the fundamentals of planning and organizing, workflow development, marketing techniques, analysis and understanding of demographic data, and methods to keep up-to-date on changes in the field. This domain will query your knowledge of the tools necessary to operate and lead radiology and imaging businesses in today's ever-changing world.

The communication and information management domain includes knowledge of today's "digital world." In other words, the methods we use to acquire, transfer and archive data and information. This includes anything from basic e-mail to digital images to picture archiving and communications systems (PACS), and teleradiology. Clearly, as radiology and imaging leaders, we do not have to be information technology (IT) experts. However, as we become a more technology-driven business, more often than not we realize that we have to have an understanding of the IT vocabulary in order to communicate and interact with our IT friends. Knowledge of DICOM, networking, and storage options is essential.

As you can see by the vast array of contents of the CRA examination, it is an excellent tool to assess the candidates to assure they possess the enormous amount of knowledge needed in order to function as radiology and imaging leaders in today's market. The role of the administrator has changed over the past few years—most significantly during the past 5-10 years, as radiology and imaging have become technology-driven businesses. The AHRA understands how the administrator's role has changed, and it has established the means to identify and recognize those individuals in the field that possess the tools to meet the challenges.

Should you need more information regarding the CRA program and/or the examination, contact AHRA. Congratulations to my CRA peers on your accomplishment—and good luck to all of you who are pursuing the certification.
Radiology

Come join a winning team, and be a part of the Chesapeake General Hospital family. We are looking for a Radiology Diagnostic Imaging Picture Archiving and Communications System (PACS) Administrator. The mission of the department is to provide quality images and treatment to patients in a compassionate and efficient manner. Under the broad direction of the Radiologist and Director of Radiology Services, the PACS Administrator will be responsible for implementing, managing, monitoring, troubleshooting, backup functions, implementation and training of staff on the PACS, RIS System and Voice Recognition. Must have knowledge of a network, its components, capabilities and limitations and functions. Must also have an understanding of Radiology processes and its different modalities, how they function and interact/interface with one another. 2 years supervisory experience preferred. Requires computer experience, must have a mechanical aptitude and ability, with attention to detail. At least one year of experience with PACS system preferred. For immediate consideration, fax a resume to Brenda Earley at 757-312-6162, or email brenda.earley@chealth.org.

Department Director

Chesapeake General Hospital, in southeastern Virginia, is looking for a new Director in the Radiology Department. The Director is responsible for the diagnostic imaging department operations, including functions of computer assisted tomography, nuclear medicine, diagnostic radiology, diagnostic breast center, ultrasound, magnetic resonance imaging, special procedures and the cancer treatment center. Coordinates functions internally and interdepartmentally to provide maximum level of service to patients. Must be a graduate of a two year ARRT approved Radiological Technology School. ARRT registered. BS degree preferred, but not required. Minimum five years supervising experience in Radiology services to include budget and finance responsibilities. Must be familiar with operations in Diagnostic Radiology, CT, MRI, Nuclear Medicine, Ultrasound, Special Procedures and Radiation Oncology. Experience with PACS technology desired.

For immediate consideration or to forward any questions, please contact Brenda Earley at 757-312-6162. You may fax a resume to 757-312-6209 or email it to brenda.earley@chealth.org.
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Interim employment is now a career option! Attractive management opportunities exist nationwide. If you would accept a short-term assignment, send resume and the names, addresses and phone numbers of four professional references to: the Nielsen Healthcare Group, Dept I, 20 Allen Ave, Suite 330, St Louis, MO 63119 or fax to 314.984.0820 or email to nhcg@primary.net No Fees.

Manager, Imaging Services

GHA - Cincinnati, Ohio

GHA, one of the region’s largest multi-specialty provider groups, is seeking a manager to oversee our multi-center radiology/imaging department. The manager is expected to build and maintain a department that supports GHA’s strategic imperatives. Responsibilities include: operational leadership, staff supervision, profitable growth, coordination of services and quality improvement.

GHA is located in Cincinnati, Ohio, home to the Reds, Bengals and the arts, including: ballet, opera, symphony, Broadway Series and more.

Minimum qualifications include: 5+ years in a clinical management role, prior imaging experience, process improvement knowledge, excellent communication skills. Preferred qualifications include: A.R.R.T. or related certification or licensure, and bachelor’s degree or equivalent work experience. EOE

Email resume to: elizabeth.kerstine@cgha.com
Fax resume to: 513-841-0316
Apply online www.cgha.com

Upcoming AHRA Events

Imaging Center Administrators Conference
October 14-15, 2005

Radiology Administration Certification Commission (RACC) Online Election
October 17-November 4

AHRA at RSNA (booth 3335)
November 27-December 2, 2005

JCAHO 2006 Update Audio Conference
December 15, 2005