.
.

Annual Report for Assessment of Outcomes for 2010-2011
SAC: Radiography

1. ***Describe the changes that have been implemented towards improving student's attainment of outcomes that resulted from the outcome assessments carried out in 2010-2011.***

   Topic: Uses effective written and oral communication skills (CCO – 1) in educational and clinical settings

   Faulty were concerned that some students in previous cohorts lacked solid college-level writing skills. The SAC agreed that courses should place more emphasis on writing and faculty adjusted their courses to reflect higher expectations of student writing skills.

   What changed:

   Prior to this year the written report in RAD 209 was not assigned as many points, but due to course revision and more emphasis placed on writing based on research of a disease topic, the point value was increased from 9 to 28 points. There are a number of assignments plus an oral presentation in this course, therefore this writing project is just a percentage of the overall grade.

   - Writing Skills – Student papers for RAD 209, Advanced Radiographic Procedures, taught in term 5 of the two-year program:
     - Class size- 31 students
     - Benchmark - minimum score of 23 out of 28 possible points (85%)
     - Results - 94% of class scored equal to or above benchmark
     - Rubric – the instructor evaluated papers according to criteria clearly stated in the rubric that was provided to the students along with course syllabus. A copy of the rubric is provided with this report.

   CO -1 – Communication is linked to this programmatic outcome and the SAC feels we are fostering college level writing skills through this course as well as others in the Program.

   Student clinical performance assessment process:

   The Program has always used standardized assessment forms and criteria with rubrics for evaluating clinical skills. Due to discussions during Advisory Committee meetings and comments from both clinical staff and managers, the weighting of clinical skills was adjusted to better reflect the ones most critical to professional competencies. The two forms are submitted along with this document for comparison.

   During the 2010-2011year the points earned by students correlated closely to the written comments/concerns whereas in previous years they had some disconnect. The areas that students demonstrate deficiencies in have been more obvious and easier to track and counsel students on. Performance Improvement Plans are more likely to occur earlier on in the Program due to our new assessment point scale.

2. **Outcomes Assessed This Year**:

Outcomes assessment is an ongoing process for the Radiography Program due to professional accreditation requirements. The master outcomes plan for reporting to the Joint Committee on Education in Radiologic Technology (JRCERT) is slightly different for the Outcomes Assessment Plan for reporting to the College. A copy of the plan for reporting to the JRCERT accompanies this document.

Both plans assess the following criteria, **but not** all criteria on the assessment forms have outcomes reported. This is because surveys are sent out after program completion, to be completed by clinical employers and the graduates. Students complete the Program at the end of Summer Term of their second year .Graduate and employer surveys are done at 6 months and 9 months post graduation.

The following assessment outcomes are available for this document:

- Communication Skills – Both written and oral communication skills are assessed throughout the two years of each cohort of students. Rubrics and or grading scales (1-5, 6-10) are used depending upon which clinical skill is being assessed. Written assignments and oral presentations are also graded according to rubrics and assigned point values (1-4).

RAD Outcome	PCC Core Outcome	Assessment Method	Results
Uses effective written and oral communication skills in educational and clinical settings	CO -1 Communication	**RAD 209** – Advanced Radiographic Procedures: Portfolio with: -written paper (rubric, scale of 1-4 for 7 criteria, 28 points possible) -oral presentation (9 points possible)	For Class of 2011: n=31 Mean Score: 25.7 93% of class above benchmark (benchmark – 85% of class will score ≥23 out of 28 points possible) Mean Score: 8.9 100% of class above benchmark (benchmark- 85 % of class will score ≥ 7 out of 9 points possible) -
		End of Term Assessment: - By Clinical Instructor - Evaluated on communication skills with staff and patients - Standard assessment form and rubric - (scale 1-4)	N=31 Mean Score: 3.80 100% of class above benchmark (benchmark - 90% of students will score ≥3 on a 4 point scale)

The faculty and director all felt that the writing skills of students had not been challenged enough in some courses, therefore, more emphasis on those skills is now found in courses. The rubric for RAD 209 has clearly defined criteria for what is expected for each category and how they receive the point value.

Communication skills are also addressed and practiced in all lab sessions and testing.

Critical Thinking Skills –Professional standards reflect CO-3 of the College and are also assessed throughout the two-year program. Students work closely with staff technologists and clinical instructors in the clinical setting and must be able to demonstrate the ability to critically think through non-routine situations and procedures. Radiography is not an exact science, no two patients are alike and every day there are challenges that require modifications to routine projections and positioning of the patient.

Methods used to assess the students are:

RAD Outcomes	PCC Core Outcome	Assessment Method	Results
Demonstrate problem solving skills in the clinical setting	CO -3 –Critical Thinking	**In progress**	Not available
		Trauma lab simulations: - Positioning skills - Image quality - Correct use of landmarks and baselines - Ability to compensate for patient condition	N = 31 Mean Score: 93.6% 100% of class scored above benchmark (benchmark - 85% of students will score ≥ 85% out of 100% possible)

Professional Competence - Following graduation from the Program students are eligible to sit for the national certification examination. Successful completion of this exam qualifies them for state licensure and employment. The College and Program foster professional development that allows students to become successful and provide service to the community.

Professional competence is assessed as follows:

RAD Outcomes	PCC Core Outcome	Assessment Method	Results
Successful completion of national certification examination (ARRT)	CO -5- Professional Competence	Completion Scores for ARRT examination (statistics provided by the ARRT)	N=31 Mean Score: 93.6% 100% of students scored above benchmark (benchmark – 85% of graduates will score ≥ 75% on first attempt)
		Employer Survey – Standard survey form and scale (1-4)	In progress – not available

Cultural Awareness – Radiography professionals must embrace and demonstrate cultural awareness. In the healthcare setting diverse people include patients, staff and fellow students. The Program begins diversity discussions in Term 1 and many of the following terms have courses with diversity topics in them. Due to requests from clinical partners who also encourage cultural awareness, a course in the second year of the Program engages students again in diversity education and group projects and scenarios that are graded. A rubric for the group discussion is provided with this document.

RAD Outcome	PCC Core Outcome	Assessment Method	Results
Identifies and understands barriers and misunderstanding associated with different cultures/ethnic groups and how these might affect	CO – 4 Cultural Awareness	RAD 100 and RAD 203: Students assigned individual and group projects, discussion boards. Faculty lecture on topics	Between RAD 100 and RAD 203 the students are graded on participation, completion of forms. All students (31) completed

competent patient care.		and engage students in class discussions and scenarios.	assignments with passing scores and participated in both classroom and group discussions and projects.

Community and Environmental Responsibility - Radiography professionals best serve the community by adhering to professional standards. These include patient safety, radiation safety and protection and medical ethics. Each term in the program students are evaluated by the staff and clinical instructors according to criteria listed on the standardized assessment forms. Graduates are also evaluated by managers who also complete a standardized survey tool.

RAD Outcome	PCC Core Outcome	Assessment Method	Results
Applies/adheres to radiation protection standards. Maintains safety practices for the community, coworkers and self. Demonstrates adherence to professional ethics and standards.	CO – 2 Community and Environmental Responsibility	End of Term Assessment Clinical Instructor completes standardized assessment form that specifies these topics	N = 31 Mean Score: 4.8 100% of students scored above the benchmark of≥ 4 on a 5 point scale

3. What did we learn about how well students are meeting the outcomes?

From the outcomes the Program is able to verify student success in meeting or exceeding benchmarks and professional expectations. The clinical affiliates work closely with the Program to assure that student assessment is fair and inclusive of all areas important to both educational and professional growth and development. This past year the clinical rotation assessments better reflected student performance due to the new weighting of the grading scale and criteria.

4. Identify any changes that should, as a result of this assessment, be implemented to help improve students' attainment of outcomes.

At this time, only if the employer surveys or future course or clinical assessments indicate areas of concern, the Program will continue to implement the current outcomes assessment with modifications as needed. The fact that this program is required to report outcomes to the professional accreditation agency they are reviewed consistently and any areas that are of concern are addressed quickly.

5. **Reflect on the effectiveness of this assessment tool and assessment process**.

As previously stated, this program is outcomes driven due to the professional skills and standards that graduates must achieve. Although the Program strives to match the assessment standard for the College, there is also the need to meet the requirements of the JRCERT, and therefore, two outcomes documents are needed.

Disease Report Rubric

RAD 209

CATEGORY	4 POINTS	3POINTS	2 POINTS	1 POINTS
Organization	Information is very organized, used logical progression	Information is organized	Information is mostly organized	Information appears to be disorganized
Content	Disease is well described. It includes several supporting details for description and etiology	Disease is described, but not thorough. Only a few supporting details are included	Disease description minimal, only one detail included per area	Disease not well described, has little to do with topic, no supporting details
Substance	It includes several supporting details for diagnosis, prognosis and treatment	Only a few supporting details are included	Description minimal, only one detail included per area	Not well described, has little to do with topic, no supporting details
Paragraph Construction	All paragraphs include introductory sentence, explanations or details and concluding sentence	Most paragraphs include introduction, details and conclusion.	Paragraphs do not always have all sentences required.	Paragraphing structure was not clear and sentences were not typically related.
Diagrams & Illustrations	Neat, accurate and add to understanding of exam	Text does not refer to them, may have too many	Sloppy, do not add to understanding of exam	Do not aid in understanding or are not accurate
Sources	All sources for information and graphics in desired format	Not all information or graphics correctly identified in format	Sources listed, but used incorrect format and not identified in text	Sources poorly documented
Mechanics	No grammatical, spelling or punctuation errors	Almost no grammatical, spelling or punctuation errors	A few grammatical, spelling or punctuation errors	Many grammatical, spelling and punctuation errors

Group Discussion

Discussion Date:

For each item score your group's performance:
1 = not very good
2 = needs improvement
3= adequate
4 = stellar

Write justification for your score (form must be typed)

Item	Score	Justification/Response
Everyone came prepared		
Everyone fully participated		
Everyone contributed ideas No one dominated		
We listened to each other		
Everyone asked questions if they didn't understand or gave clear explanations		
We completed the assigned work		
Total		

Reflect on what you learned, how did group function during discussion (above in table). What conclusion did your group come to for the session? Group response to questions and summary of concepts discussed (300 words min.).

Making the Radiology Patient a Priority

Recognizing cultural diversity and demonstrating population-specific competency are important traits for technologists.

As we prepare for the expected but unannounced Joint Commission survey, we've had multiple mock tracers. During our Human Resources tracer, we discussed the importance of cultural diversity and population-specific competency.

With constantly increasing demands for efficient state-of-the-art imaging services by physicians, insurers and patients--coupled with a growing national shortage of highly skilled technologists--developing a culturally inclusive workplace can differentiate mediocre imaging department from a high performing imaging department. From a management perspective, ensuring that staff members truly demonstrate a skill set by which all patient populations can feel comfortable makes greater sense.

Radiographers bring their personal cultural heritage as well as the cultural and philosophical views of their education into the professional setting. Therefore, the technologist must understand the need to handle patient encounters with increased sensitivity. Managers: I recommend looking at the populations your department serves and educating staff members based upon your findings. In our department, we have population (age)-specific training for the following groups of patients: infants, children, adolescents, adults and geriatrics. Direct observation is used to ensure competency when selecting the appropriate technical factor, the correct equipment (grid vs. nongrid), positioning skills, radiation protection practices and communication skills. The supervisor observes the cases performed, and the form is completed and signed by both parties. Additionally, a multiple choice test is administered based on these specific population needs and characteristics. All technologists must pass this exam with a minimum grade of 80 percent. These competencies are performed as part of the annual evaluation process.

Our facility has a very successful, highly rated bariatric surgery program, which means all the patients that have this type of surgery will be seen in our department, one-day post-op for a limited upper GI. We must treat these individuals with the respect and dignity they deserve. Additionally, our staff members must be aware of weight limitations--not only on the radiographic equipment, but in the bathrooms, seating areas, etc. We've developed a self-learning reading packet that includes/reviews special revisions we've made throughout our facility to accommodate our bariatric population. The technologist is required to take a graded multiple choice exam featured at the end of the packet. Again, 80 percent is required to pass the exam, which is also performed annually.

As part of the annual mandatory competencies, our human resources department has included materials focused on the cultural characteristics, health care beliefs and practices. The material is formatted into a grid that identifies the specific cultural group, its typical communication styles, typical family, social and work relationships, health

values/beliefs and finally, health customs and practices. Again, a multiple choice test based on the materials is administered and graded.

In 2011, the Joint Commission will focus on health care literacy for patients with limited English proficiency. The Joint Commission will expect facilities to address how they'll provide meaningful access to health and social services, given the ways in which language can be a barrier to health care. So, more work remains in the New Year.

That said, getting past the requirements for a survey are imperative; more important, though, is how we make patients and their families feel when they're in our care. By simply assessing the patient and providing a bariatric gown instead of a regular size gown, a technologist greatly enhances patient satisfaction. Now the larger patient isn't embarrassed by having to request a gown when the typical size doesn't fit; patient satisfaction is improved. Same story when your technologist can communicate effectively to distract and encourage a 6-year-old during an exam. That child's parents will be satisfied that their child was well cared for in your department. A technologist can exhibit kindness to the elderly patient with thin tissue by putting a sheet between the patient and the place where the tape will be applied to assist them in maintaining the position.

At the end of the day, patients expect good outcomes, so in their mind that's already a given. We're judged on our ability to communicate and make them comfortable during their time in our department. Perhaps the patients won't be able to identify that what's being demonstrated is a core competency related to cultural diversity; however, they will remember--and tell their friends and families--how they felt cared for during their time within our department. And that means that they'll be loyal and return to us for future imaging needs.

Kathleen R. Kennedy, MS, RT(R)(QM), is senior director of imaging & physician support services at Mercy Medical Center, Rockville Centre, N.Y.

RAD 203
Cultural Communication

1. How do cultural differences result in different expectations regarding the nature and quality of care as well as an understanding of what constitutes and appropriate patient/caregiver relationship? Give examples.

2. Provide examples of ways that cultural differences might affect how a patient views time and appointment promptness. How can a medical practice accommodate the different perspectives of time?

3. Some cultures value candor and some value an indirect approach. In which cultures would you modify a fatal prognosis by either giving the news in stages of avoiding the news altogether? What are the ethical implications of failure to provide the patient with the prognosis?

RAD 203
Diversity

1. What comes to mind when you hear the following terms?
   - Race
   - Ethnicity
   - Diversity
   - Culture

2. Do these terms bring up any of the following: fear, confusion, frustration, anger, challenge or excitement? Are there other terms you are more comfortable with?

3. Why is diversity important in imaging?

4. Select two isms and explain their impact on imaging. (ageism, ableism, adultism, classism, egocentrism, ethnocentrism, racism, heterosexism, sizism, sociocentrism)

5. Develop a scenario with a diversity issue.

1. I had an experience with a deaf woman who had a new baby. She had a translator who signed to the patient what the nurses said and then told the nursing staff what the patient said. As we spoke I kept talking to the interpreter and directed all of my communications to her. Finally, the interpreter told me to face the patient and speak directly to her.

   Why did the interpreter say to look at the patient?

2. In a rural emergency department, a deaf patient had been waiting in the Emergency Department exam room behind closed doors for one and a half hours. The patients chief complaint was abdominal pain and no medical evaluation had been done. When asked why, the nurse simply replied ... "she is deaf and mute and we are waiting for the interpreter, it's a week end it will be a while before they arrive, we'll just have to wait. "

   What do you think about this situation? What could they have done differently?

3. A middle-aged Chinese patient refused pain medication following cataract surgery. When asked, he replied his discomfort was bearable and he could survive without any medication. Later the nurse found him restless and uncomfortable. Again the nurse offered pain medication. Again he refused, explaining that her responsibilities at the hospital were far more important than his comfort and he did not want to impose. Only after she firmly insisted that the patients comfort was one of her most important responsibilities did the patient finally agree to take the medication.

4. A Vietnamese woman, after giving birth to a son, refuses to cuddle him but she willingly provided minimal care such as feeding and changing his diaper. The nurse feeling sorry for the baby, picked him up, cuddled him and stroked the top of his head. Both the mother and the husband became visibly upset.

   Why were the patents upset and why did they refuse to cuddle him?

5. A Hispanic woman had to sign an informed consent form for a hysterectomy. The patient spoke no English and the hospital staff relied on her bilingual son to serve as the interpreter. When the son explained the procedure to the mother, he appeared to be translating accurately and indicating the proper body parts. His mother signed the consent form willingly. The next day, however, when she learned that her uterus had been removed and she could no longer bear children, she became very angry and threatened to sue the hospital.

   Why would this be a problem and how did it occur if the procedure was explained?

6. When the nurse entered the room of her Iranian patient, she found the patient huddled on the floor, mumbling. At first she thought the patient had fallen out of bed, but when she tried to help her up the patient became visibly upset. She spoke no English and the nurse had no idea what the problem was. ~~The patient had been praying~~.

   What was gong on?

RAD 203
Communication

1. In your childhood days, how did your family react when a child had a fever – put on additional layers of clothing or take layers off? How was the practice explained?

2. In what way does the appropriate taking of a patient's history enhance caring?

3. What are some obstacles to good communication with the patient?

4. How can you improve your communication skills?

5. How can the questions, "What medicines, vitamins, or herbs are you currently taking?" be revised to encompass home remedies?

6. Looking at the tips for communication, are any of these common for your culture? Have you heard of all these? Do you consciously try to use them?

7. How do you view illness? Is it a matter of genetics? Environment? Luck? Diet? How do you think other cultures view illness?

8. Some cultures value candor and a direct approach while others favor an indirect approach. What do you think are the preferences for some of the cultures you have worked with?