Assessment: Course Four Column





El Camino: Course SLOs (HSA) - Radiologic Technology

ECC: RTEC 106:Clinical Experience 1

Course SLOs	Assessment Method Description	Results	Actions
SLO #1 Technique Factors - Students will demonstrate the ability to select appropriate technical factors for			

Course SLO Status: Active Course SLO Assessment Cycle: 2017-18 (Fall 2017), 2020-21 (Fall 2020)

Input Date: 10/30/2017

beginning radiologic exams.

Inactive Date: Comments::

SLO #2 Radiation Safety Basics -

Student will demonstrate knowledge of radiation protection and application of these principles to patients, self and staff.

Course SLO Status: Active
Course SLO Assessment Cycle: 2016-

17 (Fall 2016)

Input Date: 11/08/2013

Inactive Date: Comments::

Performance - Clinical Evaluation

Form Section F (1-5)

Standard and Target for Success: Students will score an average of 3.5

of 5 in Section F (1-5)

Additional Information:

Semester and Year Assessment Conducted: 2016-17 (Fall 2016)

Standard Met?: Standard Met

Using the clinical evaluation form section F 1-5 on radiation protection. Students scored an average of 3.8 exceeding the goal. (02/23/2017)

% of Success for this SLO:

Faculty Assessment Leader: Guillermina Trevis

Faculty Contributing to Assessment:

Action: We are in the process of revising this SLO to a new item to assess as we are consistently meeting this benchmark. (02/23/2017)

Action Category: Curriculum Changes

Follow-Up: We are consistently meeting the benchmark so we will revise this SLO to a new SLO to be assessed for next cycle. (03/02/2017)

Semester and Year Assessment Conducted: 2013-14 (Fall

2013)

Standard Met?: Standard Met

Action: We will assess the data next year to see if they continually meet the benchmark. If so, we

Course SLOs	Assessment Method Description	Results	Actions
		Students scored 3.85 out of 5. They met the benchmark for this SLO. (01/05/2014) % of Success for this SLO: Faculty Assessment Leader: Mina Colunga	may adjust the benchmark higher. (01/05/2015) Action Category: Teaching Strategies
		Faculty Contributing to Assessment: Dawn Charman, Colleen Mcfaul, Arshad Fazalbhoy, Naveed Hussain, Sivi Carson, Matt Trites and Tino Lopez	Follow-Up: The rubric is being changed to a four point scale. In addition there is a committee

SLO #3 Transporting Patients -

Students demonstrate the proper transporting patients on gurneys transporting technique via wheelchair wheelchairs. Two educators had and gurney.

Course SLO Status: Active

Course SLO Assessment Cycle: 2015-

16 (Fall 2015)

Input Date: 11/08/2013

Inactive Date: Comments::

Performance - Performance of transporting patients on gurneys and wheelchairs. Two educators had students practice moving simulated patients from wheelchair to x-ray table and gurney to x-ray table and vice versa. Then they were asked to transport patients through a maze without hitting anything or anyone. Students will multiple chances to master the skill until they are deemed proficient.

Standard and Target for Success:

100% of students are able to safely transport patients in a wheelchair or gurney.

Additional Information:

Semester and Year Assessment Conducted: 2015-16 (Fall 2015)

Standard Met?: Standard Met

Students were given multiple scenarios and opportunities to practice transporting patients in wheelchairs and gurneys. On average they practiced half of the semester during labs and in clinical setting and were able to competently transport patients. (01/28/2016)

% of Success for this SLO:

Faculty Assessment Leader: Mina Colunga
Faculty Contributing to Assessment: Joel Sanchez

Action: The method of instruction using modeling by instructors of the proper and safe method of transporting patients in wheelchairs and gurneys was very effective. Next year some complexity can be added to the situation creating case scenarios for diverse groups of patients. (01/28/2016)

forming that will discuss

expanding on the evaluation tool to be more precise. (09/16/2016)

Action Category: Teaching

Strategies

Follow-Up: Scenarios were developed to include level 2 patients, who have more devices connected to them. (09/16/2016)

ECC: RTEC 111:Fundamentals Rad Tech I

Course SLOs	Assessment Method Description	Results	Actions
slo #1 Exposure Factors - Students will evaluate how exposure factors selected by the technologist can affect radiographic quality, density and contrast on a radiographic image. Course SLO Status: Active Course SLO Assessment Cycle: 2016-17 (Fall 2016) Input Date: 11/29/2013 Inactive Date: Comments::	Performance - During lab the students surveyed were presented with images with poor and acceptable contrast, density and/or recorded detail. Then they were asked how to fix the problem if there was unacceptable contrast, density, and/or recorded detail. Standard and Target for Success: Students will score an average of 75% in recognizing whether the image has met the standards. They will also obtain 75% in giving the correct modifications needed to fix any errors. Additional Information: Eric Villa was part of the process.	Semester and Year Assessment Conducted: 2016-17 (Fall 2016) Standard Met?: Standard Not Met Students were able to identify 86% of the time if the image had sufficient density, 82% of the time for sufficient contrast, 58% for recorded detail. In terms of fixing the image the average for density was 78%, contrast= 72%, recorded detail= 53%. (02/23/2017) % of Success for this SLO: Faculty Assessment Leader: Guillermina Trevis Faculty Contributing to Assessment: Eric Villa	Action: Mina and Eric will meet to discuss a plan to teach this differently or activities to help them understand. In terms of these students, Dawn who teachers the second year physics has been notified so they can be remediated in that section and cover it again. (08/10/2017) Action Category: Teaching Strategies Follow-Up: Class is under review and discussions are underway to find better ways for students to identify contrast and density on radiographic images and to make appropriate revisions. (03/02/2017)
SLO #2 Control of Scatter - Students will assess various methods to control scatter radiation. Course SLO Status: Active Course SLO Assessment Cycle: 2014-15 (Fall 2014), 2017-18 (Fall 2017) Input Date: 11/29/2013 Inactive Date: Comments:: Exam/Test/Quiz - On the final exam there will be 11 questions related to controlling scatter. Students should be able to successfully identify methods to control scatter radiation. Standard and Target for Success: 75% Additional Information:		Semester and Year Assessment Conducted: 2014-15 (Fall 2014) Standard Met?: Standard Met 11 questions related to the control of scatter radiation were on the final exam. The students answered 79% correct demonstrating the students are able to successful assess methods to control scatter radiation. The exam was given via ETUDES and results extracted from the analysis of each question. (12/18/2014) % of Success for this SLO: Faculty Assessment Leader: Guillermina Colunga Faculty Contributing to Assessment: Colleen McFaul and Dawn Charman	Action: Design a before and after exam to see how much they advanced from the beginning of the course until the end of the course. In addition develop a lab portion that the students will physically have to demonstrate the use of methods to control scatter radiation. (12/18/2015) Action Category: Curriculum Changes Follow-Up: Labs were specifically developed to demonstrate concepts to eliminate scatter radiation. (01/28/2016)
SLO #3 Equipment Manipulations -	Presentation/Skill Demonstration -	Semester and Year Assessment Conducted: 2015-16 (Fall	Action: The instructional methods

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Students will analyze radiographic images for diagnostic quality contrast, Performance Test density and recorded detail. The student will be able to make appropriate adjustments of the x-ray equipment to correct any errors with the image

Course SLO Status: Active Course SLO Assessment Cycle: 2015-

16 (Fall 2015)

Input Date: 11/29/2013

Inactive Date: Comments::

Assessment Method Description

Evaluation of Equipment

Standard and Target for Success:

Students will pass with 91% average on evaluation of equipment manipulation performance test on the first trv.

Additional Information:

Results

2015)

Standard Met?: Standard Met

23 students took the performance test and scored an average of 94%

50 points possible x 23 students = 1150 possible The scores were 1081 out of 1150 = 94% (01/28/2016)

% of Success for this SLO:

Faculty Assessment Leader: Mina Colunga Faculty Contributing to Assessment: Joel Sanchez **Actions**

are working and students scored well. We will continue this method through the next cycle and if the standard is met again, we will consider replacing it with a new SLO for this course. (01/28/2016)

Action Category: SLO/PLO **Assessment Process**

Follow-Up: The students met the criteria again this year. So we will discontinue this SLO and add a new one. We are adding new SLO to replace this SLO, the benchmark is being met. (03/01/2017)

ECC: RTEC 123:Radiographic Positioning 1A

SLO #1 Radiation Safety & Shielding - Performance - Students will apply Students will apply radiation safety by ALARA radiation safety principles on using appropriate shielding with a lead apron during an on campus simulated lab evaluation.tudents will be able to analyze radiographic images for diagnostic quality contrast, region, prior to positioning the x-ray density and recorded detail. The student will be able to make appropriate adjustments of the x-ray equipment to correct any errors with the image.

Course SLO Status: Active Course SLO Assessment Cycle: 2015-

16 (Fall 2015)

Course SLOs

Input Date: 11/08/2013

Inactive Date: Comments::

Assessment Method Description

patients, self and others. In a simulated lab evaluation, students will correctly apply radiation shielding to their patient's gonadal tube, each time they perform a simulated radiographic exposure. In RTEC 123 there are 10 simulated assessments. Fall 2015 there were 23 students. N=230 assessments.

Standard and Target for Success: At least 90% of the 1st year students evaluated will remember to place the shielding.

Additional Information:

Results

Semester and Year Assessment Conducted: 2015-16 (Fall 2015)

Standard Met?: Standard Met

Benchmark is 90 % of the student will correctly apply radiation shielding to the gonads of the patients, less than 10 % of the students will forget or apply the shielding incorrectly.

Fall 2015 N=230 assessment. Results = 4 student did not apply a shield 10 students applied the shield, but it could have been placed in a better position. 14/230 =216 correctly applied shielding =94% Benchmark exceeded. Will continue to monitor as this is an important skill that students must always remember to do in the clinical site with patients. Reinforcing this is lab will help them to apply the skill more consistently in the clinical practice. (02/05/2016)

% of Success for this SLO:

Faculty Assessment Leader: Dawn Charman **Faculty Contributing to Assessment:**

Actions

Action: Will continue to monitor as this is an important skill that students must always remember to do in the clinical site with patients. Reinforcing this is lab will help them to apply the skill more consistently in the clinical practice. (02/05/2016)

Action Category: Teaching Strategies

Follow-Up: This is a requirement to shield the patient every time an exposure, or "simulated exposure" is made. Students do really well during the testing period, as they know that they will fail the simulation if they do not shield. A better assessment would be to measure how many times during practice they do not shield. The volume would be high, so perhaps selecting a random practice day every few weeks would be more achievable. Other faculty agree, and will implement in Fall 2017. (03/01/2017)

Follow-Up: Continue to reinforce this important practice in RTEC 124 as well. Evaluate the results and compare to the first semster results for improvement. (02/05/2016)

SLO #2 Radiographic Positioning -Students demonstrate correct positioning of patients for quality

Performance - Lab Simulated Competency Evaluation **Standard and Target for Success:** Semester and Year Assessment Conducted: 2013-14 (Fall 2013)

Standard Met?: Standard Met

Action: For the 2014 Fall semester, this assessment was

Course	SLO.

Assessment Method Description

Results

Actions

radiographic exams of the Chest, Upper and Lower Extremities.

Course SLO Status: Active
Course SLO Assessment Cycle: 2016-

17 (Fall 2016)

Input Date: 11/08/2013

Inactive Date: Comments::

The Benchmark was set at an average of 85%.

Additional Information: Related Documents:

RT 123 124 233 SIM EVAL & EXPOSURE FORM 2013 (Repaired).doc

RT 123 124 Sim Eval

There were 23 students and 8 assessments each for this course. N= 184 assessments. There was one student who did not pass any of the assessment tests, and was dropped from the course.

N= 178 - Excluding the failing students - the results were as follows:

Ave grade for assessments:

#1 Chest 88%, #2 Upper Extremity 86%, 3# Lower Extremity 82%, #4 Final Exam 83%.

Benchmark set was an average of 85%. While the first two assessments exceeded the benchmark.

the third and final (which are harder skill levels) did not meet the benchmark. The average for all assessments = 84.75% or 85% The benchmark was marginally met. (including the 1 failing student = results = 83.5%, and not met)

The 85% was a random number, and may be too high of an expectation for first year, first semester students. Will continue to monitor each fall, to watch for trends. These results could be improved if additional open labs were offered for the students. More funding for student lab aides to help with offering open labs would be needed to meet this goal.

(02/21/2014)

% of Success for this SLO:

Faculty Assessment Leader: Dawn Charman

Faculty Contributing to Assessment:

again measured, and the results showed a slightly higher results of 85.5%. Additional lab aide hours are still needed during this semester to enable students to have additional pracitce for these skills. (12/11/2016)

Action Category:

Program/College Support

Follow-Up: Cannot spilt the lab sections into more that 2 sections without support. Need more funding for lab aides for open labs for the first semester practice. (03/03/2017)

Action: With the larger number of students in each lab, the actual hand-on practice time is limited. Possible solutions:

1) Split the lab from 2 to 3 sections, limiting the number of students per lab to allow more demonstration and practice of skills - the support of the college would be needed for increased faculty loads to cover the labs.
2) Increase the budget to allow an number of Student Lab mentors so that additional open labs could be offered to allow students additional practice time (12/10/2014)

Action Category:

Program/College Support

Follow-Up: Will continue to seek funding for additional open labs. Have asked to additional time allowed after hours at clinical sites as well for students to practice. (03/03/2017)

Assessment Method Description

Results

Actions

Performance - Students will be evaluated with a "simulated patient" during an evaluation using a standard rubric to evaluate the correct positioning of a specific radiographic exam. They will also create an radiographic exposure using the phantoms in the lab to access their positioning skills.

Standard and Target for Success:

Overall, 85% of the class will pass each of the simulated evaluations per unit - based on the criterial that each student must score 75% or higher to pass the evaluation. There are many factors other than just positioning skills contained within the rubric, therefore for this assessment, only the positioning evaluation points will be factored.

Additional Information:

Semester and Year Assessment Conducted: 2016-17 (Fall 2016)

Standard Met?: Standard Met

There were 23 students and 8 assessments each for this course. N= 184 assessments. We have now added Exposure testing along with simulations. One exposure taken for each simulation exam. This proves to the student if they really correctly performed the exam correctly as they can see an image.

There were two students who were facing personal problems, and one with other issues that were affecting how they were doing overall in the class. They all dropped before week 12.

 $N=178\,$ - Excluding the failing students - the results were as follows:

Ave grade for assessments:

#1 Chest 88%, #2 Upper Extremity 86%, 3# Lower Extremity 87%, #4 Final Exam 88%.

Benchmark set was an average of 85%. For the positioning part of the assessments - all exceeded the benchmark, The 85% was a random number, and originally thought to be too high of an expectation for first year, first semester students - I has proven to be a good number. Will continue to monitor each fall, to watch for trends. These results could still be improved if additional open labs were offered for the students. More funding for student lab aides to help with offering open labs would be needed to meet this goal. (03/02/2017)

% of Success for this SLO:

Faculty Assessment Leader: Dawn Charman Faculty Contributing to Assessment:

Action: The problem still remains that if we could offer more hands on time for the students - either by having open labs for the fall semester by paying lab aides, or splitting the class into 3 sections, students could use more practice time. We have been able to acquire some portable x-ray machines so that students can spread out into smaller groups, which has shown improvement. As well I have DVD's made from prior labs that they download and are asked to watch prior to coming

to lab. (03/03/2017) **Action Category:**

Program/College Support

SLO #3 Patient Communication -

Students will demonstrate effective communication skills with patients, self and others.

Course SLO Status: Active Course SLO Assessment Cycle: 2014-15 (Fall 2014), 2017-18 (Fall 2017)

Input Date: 11/08/2013

Presentation/Skill Demonstration -

Students will demonstrate proper and effective communication skills for each type of patient they will encounter during the practice simulations and simulated lab evaluations on campus. Student will identify potential radiation risks to Semester and Year Assessment Conducted: 2014-15 (Fall 2014)

Standard Met?: Standard Not Met

The results were as follows: Benchmark 85% (3.4/4 points) per assessment.

Ave grade for assessments in section one communication: Eval #1 75% (3.0/4) Eval#2 80% (3.2/4) Eval #3 85% (3.4/4) and Final Eval 90% (3.6/4) Benchmark set was an average

Action: The expected benchmark of 85% may be too high for this level. This is a first semester, first year student, who is just learning how to integrate all of the skills that they are learning. The average for all assessments = 82.5% or 3.3/4 the overall trend

Assessment Method Description

Results

Actions

Inactive Date: Comments::

the patient, barriers in communication and ability or inability to following directions. Students must be able to: obtain and record patient history, explain or discuss procedures, Provide clear verbal instructions and directions to patients either face to face or from a distance of several feet. This includes effectively pronouncing and enunciating the instructions and explaining instructions to patients with hearing deficits. Communicate proficiently with colleagues and other health professionals.

Standard and Target for Success: On

the Simulated Lab Evaulation Form - section #1 Patient/Tech Relationship there are a possible 4 points per simulation in the communication area. Students shall score an average of 85% (3.4/4 points per assessment) on section 1 for communication. There 2 simulations assessment per evaluation and total of 4 evaluations per semester per student. 8 assessments per student total

Additional Information:

Related Documents:

RT 123 124 Sim Eval

of 85%. While the first two assessments did not meet the benchmark, the third and final (which are harder skill levels) did the benchmark. This would be expected as this is the first semester in this course, and students are still learning how to integrate all of the skills that they are learning. The average for all assessments = 82.5% or 3.3/4

The benchmark was marginally not met.

Analysis - The 85% was a random number, and may be too high of an expectation for first year, first semester students. Will continue to track each fall, to watch for trends. These results could be improved if additional open labs were offered for the students. They can use more practice time to master these skills, more funding for student lab aides to help with offering open labs would be needed to meet this goal.

(01/09/2015)

% of Success for this SLO:

Faculty Assessment Leader: Dawn Charman
Faculty Contributing to Assessment: Rosa Luna

indicated that they did not meet the first 2 evaluations, but did meet, then exceed with the last two evaluations. Will watch for improvements during the next course RTEC 124, then reevaluate the teaching methods and benchmarks for the next group of first year, first semester students. (01/10/2016)

Action Category: Teaching Strategies

Follow-Up: In both the RT 123 and 124 labs the students are required to practice communication, history taking, and assessment of the patient during the practice sessions, so that they will perform better, and remember these skills during the simulations. In addition, in the Spring 2017 RT 124 course will be adding some "patient scenarios" to the simulations when to get to the more difficult studies such as Portable Radiography, Trauma, Fluoroscopy and Pediatrics so that the student learner can utilize their critical thinking and problem solving skills with communicating and positioning the patient for radiographic procedures. (03/01/2017)

Action: Additional money for lab aides are needed. Will re assess this SLO at the end of the Fall 2015 semester (12/12/2015)

Action Category:

Program/College Support

Follow-Up: Each year in our Program review we continue to request additional funding for more student lab aides. As of yet, we have not been able to receive more funds. We were able to work out an arrangement with the the clinical sites to give the student some clinical credit hours for the time spent in our positioning labs, which gave us more lab hours for the aides to spend with the first year students. Ideally additional funding would be a better solution. In addition, I have had new part time faculty volunteer some time to help with open lab hours. The clinical sites have agreed to allow the students to utilize the unused rad rooms at the clinical site for additional practice time after they have completed their clinical hours or when there is down time during the day.

All of this additional practice time will help to improve the first year student's communication, positioning skills and use of radiation protection. (02/05/2016)

Course SLOs

ECC: RTEC 217:Clinical Experience 4

Assessment Method Course SLOs Results **Actions** Description SLO #1 Quality Factors - Students will use proper (high kVP, low mAs) technique factors to produce high quality diagnostic images. Course SLO Status: Active

Input Date: 10/30/2017 Inactive Date:

Comments::

SLO #2 Infection Control - Students will demonstrate proper protocols for final exam regarding infection infection control.

Course SLO Assessment Cycle: 2017-18 (Fall 2017), 2020-21 (Fall 2020)

Course SLO Status: Active

Course SLO Assessment Cycle: 2014-

15 (Fall 2014)

Input Date: 11/08/2013

Inactive Date: Comments::

Exam/Test/Quiz - 15 questions on control practices and protocols. **Standard and Target for Success:**

75% out of 100% on 15 questions related to infection control on clinical final.

Additional Information:

Semester and Year Assessment Conducted: 2014-15 (Fall 2014)

Standard Met?: Standard Not Met

Students scored an averarage of 60% on the infection control sections. The students did not meet the goal of 75%. This reinforces the need revision in instruction techniques at the clinical sites. Clinical educators need to find revisions on how to assure students demonstrate proper infection control at the clinical sites. (01/15/2015)

% of Success for this SLO:

Faculty Assessment Leader: Mina Colunga

Faculty Contributing to Assessment: D. Charman, M. Trites, C. McFaul, Sivi Carson, A. Fazalbhoy, Tino Lopez, Rosa Luna,

N. Hussain

Action: In the spring clinical faculty will meet to discuss how to modify teaching strategies to assure students are able to demonstrate proper infection control protocols. There may be some additional assignments related to infection control needed to be added to curriculum. (05/15/2015)

Action Category: Teaching **Strategies**

Follow-Up: We have added a patient care component to include infection control methods into orientation. The goal is to increase their understanding of proper infection control standards. (03/02/2017)

Follow-Up: ARRT journal was used to supplement infection control deficiency and some new modules were added to ETUDES platform that described and taught infection control standards. (01/28/2016)

Assessment Method Description

Results

Actions

SLO #3 Cardinal Rules - Students will apply the cardinal rules of radiation safety principles on patients, self and others.

Course SLO Status: Active

Course SLO Assessment Cycle: 2015-

16 (Fall 2015)

Input Date: 11/08/2013

Inactive Date: Comments::

Field Work/Internship - Clinical Evaluation Section F 1-5

Standard and Target for Success:

Students will score an average of 3.5 out of 4 on Clinical Evaluation-Section F: 1-5.

Additional Information:

Semester and Year Assessment Conducted: 2015-16 (Fall 2015)

Standard Met?: Standard Met

Using Clinical Evaluation Section F: 1-5 with random evaluations being selected the students scored 3.6 of 4.0, meeting the benchmark. From 76 evaluations 50 were randomly selected. (01/28/2016)

% of Success for this SLO:

Faculty Assessment Leader: Mina Colunga

Faculty Contributing to Assessment: Dawn Charman, Colleen McFaul, Joel Sanchez, Rosa Luna, Tino Lopez, Matt Trites, Sivi Carson, Arshad Fazalbhoy, Naveed Hussain Action: Follow up with faculty to see if there is a better way to assess this or multiple ways since the scores were high. (01/28/2016)

Action Category: SLO/PLO Assessment Process

Follow-Up: The full time faculty conducted an evaluation training course with clinical instructors. The rubrics and the importance of proper use of rubrics were discussed. We will conduct the same training course with clinical educators in the Spring 2017. (12/07/2016)

Follow-Up: In our August 2016 faculty meeting we discussed how to use the clinical evaluation tools more accurately. We will have the same meeting with clinical instructors in November 2016. Through educating our clinical instructors and clinical educators, we are hopeful they will use the tool more accurately. (09/16/2016)

ECC: RTEC 233:Radiographic Positioning 2

Course SLOs

Assessment Method Description

Results Actions

SLO #1 Radiographic Skull

Positioning - Students will demonstrate positioning a patient in the various positions needed to produce diagnostic quality radiographs in skull imaging.

Course SLO Status: Active Course SLO Assessment Cycle: 2015-

16 (Fall 2015)

Input Date: 11/08/2013

Inactive Date: Comments::

Performance - Students will position a simulated patient in at least two cranial positions learned this semester. The positions can be from any unit such as mandible, skull, sinus or facial bones. Students will not know the specific position ahead of time so must be able to position

Standard and Target for Success:

any type of projection.

BASED ON RUBRIC: It is expected that 80% of the time, students will score 45 or above on each simulated position. Students will have two positions to perform. Rubric will be attached.

Additional Information: The grading rubric is the same rubric used in other positioning classes within the program. Since students will be expected to perform these exams on real patients, the success bar is set high. They have been tested on these exams at the end of each unit so again, high degree of success is expected.

Semester and Year Assessment Conducted: 2015-16 (Fall 2015)

Standard Met?: Standard Not Met

Scores from the final simulation were tallied. There were 17 scores above 45 out of a total of 38 scores. The percentage of students scoring 45 or higher on their simulations was 55%. This does not meet the benchmark of 80%. (01/05/2016)

% of Success for this SLO:

Faculty Assessment Leader: Colleen McFaul **Faculty Contributing to Assessment:**

Action: I plan on keeping the same kind of tally on all the unit exam simulations. If 80% of the students are scoring above 45 on each of the unit exams, then I would conclude that the final exam is bringing a high level of anxiety to the students. I could break down the final exam into smaller units if that is the case. If 805 of the students are not scoring above 45 on the unit exams, then I need to arrange for more demonstrations or configure the lab differently to ensure more practice time. (01/14/2016)

Action Category: Teaching

Strategies

Follow-Up: Using the same scoring, the number of students scoring above 45 or higher on the exam increased. Fall of 2015, there were 55% of the students who were scoring 45 or higher (90%) on the simulation. In the Fall of 2016, there were 65% of the students who scored 45 or higher. Although the benchmark was not reached, there was marked improvement in the scores. I will assess again next fall. (03/02/2017)

SLO #2 Radiographic Skull Image Evaluation - Students will analyze radiographic images of the skull, recognize and identify any errors and **Case Study** - Students will produce a radiograph of a skull phantom for their final lab exam. They will have the opportunity to take a second

Semester and Year Assessment Conducted: 2014-15 (Fall 2014)

Standard Met?: Standard Met

The class average score for this assessment was an 87.9%.

Action: Lab time will be adjusted to allow more practice time on making the positional corrections needed to improve the radiograph

Assessment Method Description

Results

Actions

accurately correct for the positioning errors.

Course SLO Status: Active

Course SLO Assessment Cycle: 2014-15 (Fall 2014), 2017-18 (Fall 2017)

Input Date: 11/08/2013

Inactive Date: Comments::

radiograph, correcting for any errors that occurred with the first radiograph. They will submit the radiograph and a written evaluation of the radiograph. These will be graded according to the grading rubric.

Standard and Target for Success:

The target for success is a score of 88%. This includes the score on written portion and the score of actual radiograph submitted.

Additional Information: At the end of the semester, students should be competent to take radiographs of many different types. The students draw randomly to determine which position the radiograph should demonstrate. They are timed during the exposure exam to ensure competence for actual patient care.

The class median for the assessment is 89%. Although the target for success was met, the goal was just barely met. Improvement is needed. (12/16/2014)

% of Success for this SLO:

Faculty Assessment Leader: Colleen McFaul

Faculty Contributing to Assessment:

Related Documents:

SLO #2 Data RT233 Final Exposure Evaluation Fall 2014.xls

s. (12/16/2015)

Action Category: Teaching

Strategies

Follow-Up: Lab time was adjusted to allow for more time for both positioning and exposing a radiograph. Unfortunately, there were some minor equipment issues that prevented the students from repeat exposures. There was time for a first exposure but then a repeat exposure was not able to be done due to time contraints and equipment mal-function in just two of the labs. Care was taken to avoid those issues in future labs. (02/02/2016)

SLO #3 Radiographic Skull Anatomy and Positioning - Students will analyze cranial anatomy and how it relates to proper positioning of the skull during radiographic exams.

Course SLO Status: Active
Course SLO Assessment Cycle: 2016-

17 (Fall 2016)

Input Date: 11/08/2013

Inactive Date: Comments::

Exam/Test/Quiz - Students will be able to accurately identify significant cranial anatomy on radiograph images of typical exam projections and relate it to proper positioning. As part of the final exam, there will be a series of matching questions dedicated to this assessment. Students will need to identify anatomy that will be needed to position the patient correctly.

Standard and Target for Success: It is expected that 80% of the students will average 80% or higher on these matching questions.

Additional Information: In the radiologic technology program, 80% is a high-range C grade. Our

Semester and Year Assessment Conducted: 2016-17 (Fall 2016)

Standard Met?: Standard Met

On the first matching question, students averaged 42%. There were 10 anatomical points to match to the correct bone. This was a cumulative question, covering anatomy over the entire course of the semester. On the second matching question, students averaged 78% on the question, again a cumulative question with 10 points of anatomy relating to a particular bone. The third question only had 5 points of anatomy and the class average was 57%. The results were very disappointing. However, looking closer at the results, I realized that the percent was indicating only those students who scored 100% on all of the matching for that question. In order to get an accurate average, I had to go back and tally the questions by hand. After tabulating results by hand, the scores seemed more reasonable. Please see attache document. Overall, 17 out of 19

Action: Since the students seem proficient and meet the standard for this SLO, instructors should monitor the SLO for one more year. If the standard is met again, I would recommend changing the assessment method or change the SLO. (02/19/2017)

Action Category: SLO/PLO Assessment Process

Course SLOs	Assessment Method Description	Results	Actions
	students will be working on patients after they graduate and will need a	ed a students are scoring 80% or higher. This meets the	

after they graduate and will need a high skill level. The standard is set high in order for students to strive for high skill level. students scored 80% or higher. This indicates 89% of the students are scoring 80% or higher. This meets the standard for this SLO. When I break it down by question, more than 80% of the students scored over 80% on each question. I (02/15/2017)

% of Success for this SLO:

Faculty Assessment Leader: Colleen McFaul Faculty Contributing to Assessment:

ECC: RTEC 244:Radiation Physics, Equipment, and Safety

Course SLOs

SLO #1 Comparing Techniques for Imaging Systems - The student will formulate radiographic techniques and compare exposure differences for 3 radiographic examination (Ex: chest, lumbar spine and knee), using digital and film screen imaging systems.

Performance - Students will deve the required radiographic technic (kVp & mAs) needed for film/screation radiographs to newer computed radiography and digital images, at then compare and contrast the differences in exposure index

Course SLO Status: Active Course SLO Assessment Cycle: 2016-

17 (Fall 2016)

Input Date: 11/08/2013

Inactive Date: Comments::

Assessment Method Description

Performance - Students will develop the required radiographic technique (kVp & mAs) needed for film/screen radiographs to newer computed radiography and digital images, and then compare and contrast the differences in exposure index numbers to radiographic images.

1) Lab Experiment Rubric - Score 1-4 for how well they included the necessary information within the lab report: Purpose, hypothesis, methods and results

2) Summary - how well did they summarize and report on their

To compare how the increase or decrease of the exposure factors used influences the outcome image (SLO #1) and radiation dose to the patient (SLO #2)

findings:

Students will write a two page report comparing and contrasting patient exposure to the x-radiation used to create images with film and digital imaging systems. Students will describe their purpose, hypothesis, methods and materials used and procedure to obtain finding. Students will analyze the results, and compare the predicted results with the actual results of radiation exposures and techniques. then write a brief summary of their conclusion.

Standard and Target for Success:

Students should average a 3.5 of 4 point scale.

Results

Semester and Year Assessment Conducted: 2016-17 (Fall 2016)

Standard Met?: Standard Met

Students should average a 3.5 of 4 point scale. Students did an good job in the development and analysis of techniques and related results. One of the major contributing factor could be the availability of new Digital Radiography (DR) Imaging equipment in the campus lab, along with Computed Radiography (CR) and a working darkroom for film/screen (FS) studies.

This experiment will also be tied with the #2nd SLO for patient radiation dose. This is an important analysis for student radiographers, as the use of only CR & DR equipment at the clinical sites makes it difficult for them to understand the relationship of exposure to dose. F/S images shows what happens when incorrect techniques are set - with CR and DR, the exposure index (EI) can vary, and the computer automatically makes adjustments to the outcome image, and students have difficulty correlating the changes. This SLO and assessment will have to be changed for the next cycle - The ARRT has discontinued the Film Screen curriculum, and our processor was not adequately prepped for in the new building. The waste chemicals are corroding the plumbing, and therefore we will discontinue the use of film processing. This is disappointing as I still see it as a valuable tool to the student's understanding of what happens when they can visually see the changes in technique - not just a comparison of numbers.

RESULTS Comparison

2012 - 3.80 (18 students) 2013 3.89 (21 students) 2014 - 3.80 (19 students) 2015 - 3.70 (19 students) 2016 3.80 (18 students) (02/01/2017)

% of Success for this SLO:

Faculty Assessment Leader: Dawn Charman Faculty Contributing to Assessment:

Actions

Action: This assessment will be discontinued as we are eliminating the processor in the department. The ARRT has discontinued the curriculum for film and screens and processing of film. (03/03/2017)

Action Category: Curriculum Changes

Results

Actions

Additional Information:

Semester and Year Assessment Conducted: 2013-14 (Fall 2013)

Standard Met?: Standard Met

Fall 2013 - 21 Students - average score for report was 3.89/4.0

Students did an excellent job in the development and analysis of techniques and related results. One of the major contributing factor could be the availability of new Digital Radiography (DR) Imaging equipment in the campus lab, along with Computed Radiography (CR) and a working darkroom for film/screen (FS) studies.

In the past, only the FS studies could be performed on campus, and the DR & CR students had to be conducted at the clinical sites. There is now a greater consistency with the students and the results, as they are all using the same equipment on campus. This experiment will also be tied with the #2nd SLO for patient radiation dose. This is an important analysis for student radiographers, as the use of only CR & DR equipment at the clinical sites makes it difficult for them to understand the relationship of exposure to dose. FS images shows what happens when incorrect techniques are set - with CR and DR, the exposure index (EI) can vary, and the computer automatically makes adjustments to the outcome image, and students have difficulty correlating the changes. Will continue this assessment for at least one more year.

Comparison of previous results:

2010 - 3.77 (18 students)

2011 - 3.79 (12 students)

2012 - 3.80 (18 students)

2013 - 3.89 (21 students)

Improvement see with both the number of experiments performed, and the results.

2011 - 3.79 2012 - 3.88

(02/10/2014)

% of Success for this SLO:

Action: This assessment was tied into #2nd SLO for patient radiation dose completed in Fall 2014. This is an important analysis for student radiographers, as the use of only CR & DR equipment at the clinical sites makes it difficult for them to understand the relationship of exposure to dose. (02/01/2015)

Action Category: Teaching Strategies

Action: The results shows that the students are able to develop accurate techniques with the use of the new equipment in the lab. The next assessment will focus on SLO#2 comparing patient dose to radiographic technique changes and applying ALARA principles. (12/10/2014)

Action Category: Teaching Strategies

Action: Will continue this assessment for at least one more year. Comparison of previous results: 2010 - 3.77 (18 students) 2011 - 3.79 (12 students) 2012 - 3.80 (18 students) 2013 – 3.89 (21 students) Improvement see with both the number of experiments performed, and the results. 2011 - 3.79 2012 - 3.88 It would be hignly benefical to maintain service contracts for the digital and computed radiography systems so that regular PM's can maintain the equipment at it's

optimum performance.

Assessment Method Description

Results

Actions

Faculty Assessment Leader: Dawn Charman Faculty Contributing to Assessment: Related Documents:

RT 244 SLO Rubric for Exposure & Rad Dose.pdf

(02/13/2014)
Action Category:
Program/College Support

SLO #2 Patient Dose and Techniques

- The student will calculate the radiographic phantoms, and ionized lab, and an ionization chamber, students were to directed to make (film screen, DR and CR) and compare and contrast the relationship of the imaging systems to patient dose.

radiographic phantoms, and ionized lab, and an ionization chamber, students were to directed to make exposures using 3 type of imaging systems. Students will write a two page report comparing and

Course SLO Status: Active Course SLO Assessment Cycle: 2014-15 (Fall 2014), 2017-18 (Fall 2017)

Input Date: 11/08/2013

Inactive Date: Comments::

Laboratory Project/Report - Using radiographic phantoms, and ionized lab, and an ionization chamber, exposures using 3 type of imaging systems. Students will write a two page report comparing and contrasting patient exposure to the x-radiation used to create images with film and digital imaging systems. Students will describe their purpose, hypothesis, methods and materials used and procedure to obtain finding. Students will analyze the results, and compare the predicted results with the actual results of radiation exposures and techniques, then write a brief summary of their conclusion. A rubrick was used to evaluate their paper and the results.

Standard and Target for Success: GRADING SCALE: 36-33 = A / 33-29.5

= B / 29 - 26 = C.

Students are expected to average 85% (31/36 points).

Additional Information:

Related Documents:

RT 244 SLO Rubric for Rad Dose.pdf

Semester and Year Assessment Conducted: 2014-15 (Fall 2014)

Standard Met?: Standard Met

22 students presented their papers. The total scores ranged from 26 (73%) - 36(100%). The total points combined = 674/792 = average of 85%. The benchmark was just met. This is the first time using this analysis and rubric. While some students did an excellent analysis, some did not put in the effort that was expected. Another problem was that the ionization chamber was not consistently measuring the output dose. This caused confusion when the actual results did not meet with the expected results.

The program will seek funding to either get service for the current dosimeter that was purchased 4 years ago, or seek funding to purchase a new ionization chamber. (02/01/2015)

% of Success for this SLO:

Faculty Assessment Leader: Dawn Charman Faculty Contributing to Assessment:

Action: While the benchmark was met, there was inconsistancy in reporting of the results because the ionization chamber dosimeter was not giving accurate readings. Will need to see if this equipment can be repaired or replaced. It was purchased with CTEA funding about 4 years ago for approximately \$1000. (12/11/2016)

Action Category:

Program/College Support

Follow-Up: Two new ionization chambers were purchased with CTEA funding in Fall 2015. Using the new equipment will greatly improve the accuracy of the results. It is expected that the next time this lab is performed, the exposure levels can be measure and evaluated and a more precise comparison of the exposure levels between the different imaging systems will be evaluated, giving the student's a greater appreciation of how this affects patient dose. (02/05/2016)

Follow-Up: Two new ionization chambers were purchased with CTEA funding in Fall 2015. Using the new equipment will greatly improve the accuracy of the

Actions

results. It is expected that the next time this lab is performed, the exposure levels can be measure and evaluated and a more precise comparison of the exposure levels between the different imaging systems will be evaluated, giving the student's a greater appreciation of how this affects patient dose. (02/05/2016) (02/05/2016)

SLO #3 Biologic Effect of Radiation

Exposure - Students will describe the acceptable radiation dose limits for patients and radiation workers, and then analyze the biologic effects to humans that receive an overexposure.

Course SLO Status: Active
Course SLO Assessment Cycle: 2015-

16 (Fall 2015)

Course SLOs

Input Date: 11/08/2013

Inactive Date: Comments::

Essay/Written Assignment -

Students will work in teams of four. They will research recent literature on radiation dose and patient exposures. Each group will select a different procedure using digital or conventional fluoroscopy for exams such as ERCP, then present an oral and written report on their results. Standard and Target for Success:

Team members must contribute equally to the assignment. Team members will evaluate each other on their participation and contribution. There is a standard rubric used to score the presentation and written report. A minimum score of 80% must be achieved to be considered a successful report.

Additional Information:

Semester and Year Assessment Conducted: 2015-16 (Fall 2015)

Standard Met?: Standard Met

Fall 2015- 5 team evaluated 5 high dose fluoroscopy exams. Teams scored overall from 85% to 95%, Team members were honest in their evaluation of their peers. Overall presentations showed good preparation and were well organized and presented. Will continue with this SLO for another cycle as this is a new assessment. (02/05/2016)

% of Success for this SLO:

Faculty Assessment Leader: Dawn Charman Faculty Contributing to Assessment:

Action: Will continue with this SLO for another cycle as this is a new assessment. The rubric used for the evaluation assisted the students in preparation of their reports and they commented that they found it useful. (02/05/2016) Action Category: Teaching

Action Category: Teaching Strategies

Follow-Up: There were 5 teams, with one group of 3. Most of the students did well on the research and report - scoring 88-94%. Two groups found the extra work to be overwhelming with all of the other course content and other classes they must study for this semester. The assignment was modified to include the new proposed lower acceptable dose standards that are suggested by the NRC (Nuclear Regulatory Commission). As each clinical site uses different equipment, some digital equipment is not longer providing an exposure index number, which makes the

Actions

correlation to dose and techniques used more difficult for the student to assess. This might be better used for the Spring RTEC 255 course, as that is when the curriculum covers more of the "high dose fluoroscopy exams" One of the most successful exercises from this project was getting students to better correlate the SI standards in measure of radiation, as the older British units will soon be eliminated. Will probably look for another type of assessment for the next SLO cycle. (03/06/2017)

Course SLOs

ECC: RTEC 328:Clinical Experience 7

Course SLOs

Assessment Method Description

Results **Actions**

SLO #1 Professionalism - The Student Performance - Semester Clinical will demonstrate professionalism with patients, self and others

Course SLO Status: Active Course SLO Assessment Cycle: 2016-

17 (Fall 2016)

Input Date: 11/08/2013

Inactive Date: Comments::

Evaluation Form for the following sections:

Section #A Patient Care, #B Professionalism and # C Dependability will be used to measure the student radiographer's professionalism with patients, self and others.

Standard and Target for Success:

Students will average a 4/5 on

Sections A. B & C Additional Information: Semester and Year Assessment Conducted: 2016-17 (Fall 2016)

Standard Met?: Standard Met

Students averaged 4.5/5 on the area of professionalism. This improvement can be directly tied to providing some funding for their attendance at a national ACERT conference, attendance at state Radiologic Health Branch meetings, and our encouragement to join both the state and national professional societies (ASRT & CSRT). Faculty gave assignments from the professional journals on ethics, patient care and professionalism, which help the students gain a greater knowledge and understanding of the expectations and behaviors of a professional. (03/06/2017)

% of Success for this SLO:

Faculty Assessment Leader: Dawn Charman **Faculty Contributing to Assessment:**

Semester and Year Assessment Conducted: 2013-14 (Fall 2013)

Standard Met?: Standard Met

Fall 2013 - 18 Students, 1 -Final Semester Evaluation. N=18 Student's averaged 4.1/5 on sections A,B,& C on their last evaluation for the program.

Benchmark just met, would like to see improvement in this area. A greater emphasis will be placed on these sections throughout the program. Clinical assignments and discussion questions will be implemented via ETUDES to elicit better student involvement and participation in these areas. (02/10/2014)

% of Success for this SLO:

Faculty Assessment Leader: Dawn Charman Faculty Contributing to Assessment: Mina Colunga

Related Documents:

RTEC Clinical Semester EVAL.pdf

Action: Continue to seek funding sources to assist students to attend professional conferences. Student are encouraged to join both state and national societies to obtain the benefit of journal articles and other resources such as scholarships. Faculty assignments have increased students knowledge and understanding of professionalism, and we will continue to make these assignments available to students. (03/01/2017)

Action Category:

Program/College Support

Action: A greater emphasis will be placed on these sections throughout the program. Clinical assignments and discussion questions will be implemented via ETUDES to elicit better student involvement and participation in these areas. (02/13/2014)

Action Category: Teaching

Strategies

Follow-Up: The program faculty were able to obtain some funding in 2016 for Professional conference attendance. This prompted more of the students to join our national and state societies, which promotes professionalism. We have also instituted more reading from journal articles from these society

Actions

publications. (02/26/2017)

SLO #2 Problem Solving for Image

Critique - Students will evaluate radiographic images and make appropriate changes when necessary to produce quality diagnostic images.

Course SLO Status: Active Course SLO Assessment Cycle: 2014-15 (Fall 2014), 2017-18 (Fall 2017) Input Date: 11/08/2013

Inactive Date: Comments::

Case Study - Student will present radiographic exams they have performed in a small group session. The Image Cririque Presentation grading rubrick is used to evaluate their performance in evaluation and critical thinking- (Sections D, E &F) This is the last Image Critique for the Senior students. The expected scores should improve from the first semester to the last.

Standard and Target for Success:

Image Critieque Eval Section Point Values:

D= 12 points E=12 points F= 40 points (64 points = 100%)
At this level students are expected to score at least 80% in each section and should average 90% or better (58/64 points).

Additional Information:

Related Documents:

2013 Image Critique Grading Form.pdf

Image Critique 2014 STUDENT Updated Presentation Form.pdf

Case Study - Student will present radiographic exams they have performed in a small group session. The Image Critique Presentation grading rubric is used to evaluate their performance in evaluation and critical thinking- (Sections D, E &F) This is the last Image Critique for the Senior students. The expected scores should improve from the first

Semester and Year Assessment Conducted: 2014-15 (Fall 2014)

Standard Met?: Standard Met

Results: 21 Students Critiques = 1249/1344 points obtained (93% average)

The lowest score achieved was 83% and the highest score was 98%.

The benchmark was exceeded. Improving the Image Critique grading rubric and providing it to the students has helped students understand the expectations of the assignment, which has improved the results. (02/01/2015)

% of Success for this SLO:

Faculty Assessment Leader: Dawn Charman Faculty Contributing to Assessment:

Action: This new form has improved student results. Will consult with other faculty to see if this has improved the results at all levels (1st year to Senior Students) in the program. Will continue to watch for trends to determine if any other changes are needed. (01/10/2016)

Action Category: Teaching Strategies

Follow-Up: The faculty continue to consult review and revise the program forms each summer to best meet the needs of the program and the students. This included the Image Critique Forms. Providing the grading criteria to the students has given them a better understanding of what is expected. Therefore, their presentations have improved, even in the first year. Senior students now average closer to 97% on the final Image Critique. (02/05/2016)

Semester and Year Assessment Conducted: 2017-18 (Fall 2017)

Standard Met?: Standard Not Met

Scores were collected from the First Year Image Critique and a scoring average was calculated to be 91%. It is expected that the Senior Students would improve upon this score. Unfortunately, the average score was 86%. This is a significant drop in the score. There could be many reasons for this drop in scoring average. Since this class was a first year class, we have had a large number of new clinical

Action: Instructors will share their methods for using the grading rubric as to create more consistency in grading. Also the data sample could be limited to same student/same instructor to look at consistent performance and consistent grading. (10/20/2018)

Action Category: Teaching

Course SLOs

Assessment Method
Description

Results
Actions

semester to the last.

Standard and Target for Success:

The target for success is improvement over the First Year Image Critique score. The scoring average for the First year score was 91 %. It is expected that 90% of the students would score higher than 91%.

Additional Information:

educators who would been scoring the students. It is quite possible that these instructors may be grading a bit harder than instructors in the past. A method to avoid this would be to have only full time instructors data included in this SLO. That might have a bit more consistency in grading and make a better comparison. Alternatively, the scores from the same instructor for the same students could be the only scores tabulated and compared. This also might have more consistency in grading.

To directly improve the students grades, the students could gave more insight if the instructors gave more comments instead of numerical grade. This would help the student improve their scores. (10/20/2017)

% of Success for this SLO: 64

Faculty Assessment Leader: Colleen McFaul

Faculty Contributing to Assessment: Dawn Charman

SLO #3 Radiographic Techniques -

Students will employ radiographic techniques that produce quality diagnostic images using the lowest patient dose while maintaining good ALARA (as low as reasonably achievable) radiation safety principles on patients.

Course SLO Status: Active
Course SLO Assessment Cycle: 2015-

16 (Fall 2015)

Input Date: 11/08/2013

Inactive Date: Comments::

Journal/Log - Radiographic
Technique Charts. Throughout the
program, students have been
required to develop and maintain
radiographic technique charts. This
is the last clinical course prior to
graduation. At this time in their
clinical education, their technique
charts should be accurate and well
developed.

Standard and Target for Success:

100% of all senior students will have a well developed and accurate technique chart that they can continue to use and refine as they prepare to work as Radiologic Technology Professionals.

Additional Information:

Semester and Year Assessment Conducted: 2015-16 (Fall 2015)

Standard Met?: Standard Met

Each senior student met with the Program Director and Clinical Coordinator to review various clinical paperwork, including their Technique Logs. Of the Senior Students Class of 2015, 17/18 students who began the RTEC 328 course, completed the course and would be completing the program. Those 17 students had 100% compliance in completion of their Technique Logs.

It is interesting to note that the 1 senior student who failed both the clinical and academic portions RT 328 course also did not have an accurate journal for the Technique Log, which was attributed to one of the reasons why this student was lagging behind in their clinical performance, despite much coaching and remediation by the clinical staff and college faculty. (02/05/2016)

% of Success for this SLO:

Faculty Assessment Leader: Dawn Charman Faculty Contributing to Assessment:

Strategies

Action: Students will continued to be required to develop and maintain Technique books from the start of their clinical rotations. Clinical educators will check these on a regular basis, and when collecting competency forms to assure that the students have accurate and up to date techniques listed for the various exams. At the end of each semester, the students are required to submit their technique logs to the Clinical Coordinator. During the last semester, the students will transfer the techniques into a Technique Log book, that is accurate and well developed, that will transfer to their professional career and a Radiologic Technologist. (02/05/2016)

Course SLOs	Assessment Method Description	Results	Actions

Action Category: Teaching Strategies