Year- End Report

2013-2014

Department: Radiologic Technology

Document Prepared By:
Department Information

Annual Updates

Review & Documentation:

Current year goals & outcomes

   - Goal will be completed May 12, 2014. Our Interim Report is due on May 12, 2014. To date we have assigned Standards to faculty, updated program effectiveness data, updated JRCERT web page requirements, and are currently completing the compilation of data for our Outcomes Assessment report. Each faculty member is writing narratives for his/her assigned Standards and collecting data specific to his/her courses. We will be reviewing all materials as a department and having an additional person proofread for errors before sending to the JRCERT.

2. Attend AEIRS Conference and Interim Report update through JRCERT.
   - Goal successfully met. Julie Lackscheide and Deb Nordman attended the AEIRS Conference in Salt Lake City, Utah and received 13.5 continuing education credits.

3. Obtain new clinic placements. We will need five spots to replace the ones that are no longer available. This may require some assistance from administration.
   - Unfortunately, we did not obtain any additional clinic placements. Blodgett Spectrum asked to drop down to six students which now places us at 23 students to start for fall 2014. I have contacted many hospitals to no avail. However, I am hopeful that Greenville will still work out for at least one spot. I will be asking again if the current sites will consider a second shift.

4. Revision of course schedule for use in new department.
   - Goal successfully met. The addition of RT 240 (Cross-Sectional Imaging) and the revision of credit to RT 215 and RT 211 to the Rad Tech course load required us to rearrange schedules.

5. Revision of lab courses to include new technology provided with Cook renovation (video), computer testing.
   - Goal successfully met. Patient scenarios were developed for students to practice on other students. These practice scenarios will be videotaped and then given a grade based on a rubric developed at the Clinical Instructor Retreat. The grade
will be for learning purposes only and students will be allowed to view the videos over and over to improve their skills.

6. Research possibility of completing all (or most) clinic forms online (Blackboard)
   - Goal successfully met. The cost to put all or most clinic forms online is still too high at this time. It is over $100.00 per student. In addition, we do not have the support of the clinic sites and their technologists. For now, we have created a web page for Rad Tech faculty and Clinical Instructors where all forms, important dates, meetings, etc. are posted. Student information and forms are posted in specific courses through Blackboard. However, in order to fill a form out it must still be printed first.

7. Update Student Handbook
   - Goal successfully met. The student handbook was updated in several areas. Those areas included:
   - Health guidelines for students
   - Updated faculty information
   - Clinic site location changes
   - Grade scale changes and simulated competency changes
   - Absence, tardy policies
   - Program re-entry date
   - Health records completion date
   - Probation policy revision

8. Develop Rad Tech Department Web Page
   - Goal successfully met. As mentioned previously, we have created a web page for Rad Tech faculty and Clinical Instructors where all forms, important dates, meetings, etc. are posted.

Goals for next year

1. Complete Academic Program Review
2. New classroom and Lab refinement
3. Online Course Development of GH 111
4. Revise clep test for GH 110
5. Plan and implement Clinical Instructor Retreat
6. Attend AEIRS Conference
7. Attend RSNA with first and second year students

Internal collaborations and partnerships

The Rad Tech Program (second year students) worked with Child Development Program to complete an Academic Service Learning project. This involved a “Bone Buddies” Toy Clinic that provided educational learning opportunities for the
preschoolers regarding bones and radiology. The second year students gained valuable experience working with the pediatric population.

An additional Academic Service Learning project completed by the second year students utilized the Job Training Residential Construction program (set up through Habitat for Humanity) students worked under the direction of Kyle Lackscheide.

The Program Director worked with Musalata Mohamad to create reading lists for Rad Tech students in her contextualized writing courses, English 101 and 102.

As part of the FPE, the Program Director worked with Eve Sidney to streamline the amount of time spent on assessment during laboratory classes. As a result, we decided it would be beneficial to develop online quizzes. Since Eve utilizes this type of assessment in her labs, she was willing to train me to develop my own online assessments. These will be utilized in the RT 110 Lab.

**External collaborations and partnerships**

The Rad Tech program continues their relationship with Habitat for Humanity and the great service learning provided to our students. Students this year worked on a home in Wyoming, Michigan which is a lead certified house.

Additionally, this year the Rad Tech program brought in Janalee Holt a Forensic Imaging Speaker. She is a founding board member of the Forensic Imaging Society of the Americas. Forensic imaging is a growing area of interest students could explore after graduation.

**Departmental needs for support from other departments within the college**

The Rad Tech department would like to use some advertising for MRI applicants. I will check to see if printing services can help us with a professionally designed flyer that can be mailed to the ARRT list.

Currently, we are still in need of clinic sites. However, there are two possible sites in the works.

Additionally, we have been without a secretary for the past seven weeks. We do however, have an outstanding student worker. It would be extremely helpful if the hiring process continues to run smoothly and quickly.

I have recently met with Donna Kragt and discussed our data needs for Rad Tech.

**Program accreditation Updates**

The program is in the middle of its eight year accreditation award. The Rad Tech web page has been updated with the new JRCERT Program Effectiveness Data requirements.
The program’s Interim report is due on May 12, 2014. This year it will be done completely online. To date we are currently retrieving data for our Outcomes Assessment report. Each faculty member is writing narratives for his/her assigned Standards and collecting data specific to his/her courses.

Description of departmental advising plan and outcomes

The Rad Tech Program has spent the last year redefining its Academic Advising Plan. We now have five two hour advising days that are posted on our web page. I have covered three of these days and Julie covered the remaining two. These are walk in times where any student who has questions regarding the Rad Tech or MRI program can get answers directly from a department faculty member. Additionally, times can be scheduled with the program director. Over the last year, Paula Naujalis and I have attended a Counseling Department meeting and an Enrollment Center Department meeting. The purpose of these meetings was to help explain the Rad Tech and MRI programs and their respective requirements. Paula has updated our frequently asked questions on the web page and we have updated the remainder of our Rad Tech web page including a totally new format for program effectiveness data. We plan to add advising days for this summer and continue the original five days (or six) for the next school year.

Departmental professional development activities

Summer
-The AEIRS conference was attended by both Rad Tech faculty - Julie Lackscheide and Deb Nordman in July, 2013. This is a national conference of Radiology educators in Imaging Sciences. We were able to incorporate several suggestions into our curriculum.

Fall
Clinical Instructor Retreat – this includes all clinical instructors and the GRCC faculty. During this retreat, we choose a major project to accomplish and then a team building exercise for the late afternoon.
-Revision of Lab courses to include new technology
  -Standardized technique chart developed for the RT Lab
  -Scenarios developed for the RT 110, and 210 Lab courses
  -Rubric was developed for videotaping of scenarios in RT lab
-RSNA was attended by Julie Lackscheide, Deb Nordman and first and second year Students. This is an international convention with the vendors showing the newest Equipment and software available in radiology

Student Awards

-Holly Wadsworth – Delta Pi Alpha
-Ian Saunier (Student Worker ESP) Student Worker of the Year

Other department updates

RT
-The Rad Tech department had a student representative on the Strategic Leadership Team, Bryan Earvin
-The department moved from the Data Center back to College Park Plaza in late August
-Development of Clinical Instructor/faculty Blackboard site
-Created a “Radiology” sign with the help of all clinical instructors at the CI Retreat
-The Rad Tech Club has been extremely busy this past year. The first years have held numerous fund raisers to pay for the second years Pinning Ceremony Flowers and Pins. The second years have been busy raising money to attend a two day registry review seminar.
-Completed search for Temporary Full-Time Clinical Coordinator
-Completed search for Tenured Full-time Clinical Coordinator
-Working to update Health Brochure
-Working to complete “100 Year” Banner
-Completed C-arm assessment project and have started new assessment project involving the Rad Tech board exam specific scores
-Updated program mission and goals

-GH and MRI (See EOL)

Faculty & Staff

Faculty & Staff Annual Updates

Professional Development Activities

AEIRS Conference attended by Julie Lackscheide and Deb Nordman

- The AEIRS conference provided us with the suggestion to develop scenarios to allow students to experience exams prior to working with a real patient. We have developed three scenarios for the RT 110 Lab and three for the RT 210 lab. Examples of suggested cases were provided by the Clinical Instructors at the fall Clinical Instructor Retreat. Each student will be given a specific scenario to practice on a peer while being videotaped. They will be graded using the rubric developed at the Clinical Instructor Retreat and the results discussed with the instructor. This will allow students to critique their own work and set goals for improvement. Additionally, information learned in class will be applied before entering the clinical sites.
-After comparing the ASRT curriculum grid to the GRCC Rad Tech program curriculum, we were able to determine our curriculum was meeting or exceeding requirements. We went a step farther and saw that the program’s lowest scores on the board exam always occur in Radiographic Equipment and Operation. So, I revised or developed several new quizzes for the course and instituted the use of flashcards. In an effort to retain the information throughout the program, one of the AEIRS lectures suggested student produced flashcards for each lecture test. These flashcards are then saved and used throughout the program as review. Students are required in RT 113 (Equipment and Quality Control on Boards exam), RT 110 and RT 212 to choose what they think are the five most important questions from the test. We will use these flashcards for final exam review and during the final course of the program for the national boards review.

-As part of Deb’s FPE process, the RT 110 lab course has been improved. Each of the quizzes that were previously given in class, have now been placed online. This will allow more application time for students. As a part of this process, the RT 212 lecture was also updated to online quizzes.

-Deb and Julie have attended all required FPE professional development courses. Additionally, both have completed the faculty observation training.

EOL/Release Time Work

GH
-The GH 110 course curriculum is now available for all GH instructors. With so many faculty it is helpful to have a base curriculum to build on.

-The GH 107 text was researched for a better version. After exhausting many authors and texts, a suitable new text was not found. The staff voted to keep the same text until the right fit can be found.

-Jennifer Riggs and Matt Mekkes have completed their online training and would like to begin online GH courses.

-Additionally, Jennifer Riggs will be working to take on a GH 111 course.

-GH 110 courses increased by two for fall and GH 111 was added for summer 2014

-Mary will begin work on GH 111 Online (summer)

-Matt will be updating the clep test for GH 110 (summer)
MRI
- Added Holland Community Hospital as our fifth clinical site for MRI

- Worked to complete a needs analysis survey among all of the consortium clinical sites (CT, Mammography are the two fields most sites are interested in)

- Per our Advisory board meeting, GRCC now has a verbal agreement of five sites for CT, should the consortium start this program.

- All four of the GRCC MRI summer graduates passed their boards exam and all four are currently employed.
  
  one fulltime University of Michigan
  
  one fulltime Spectrum Health
  
  one resource Spectrum Health Blodgett
  
  one resource Bronson Methodist (Kalamazoo)

- Skype Consortium Directors meeting X2

- KCC Consortium Directors meeting

- Updated MRI website

- Developed flyer to advertise for 2014 MRI program

- Met with Malinda Powers x2 (ideas to attract new MRI students)

- Set up MRI interview team for February and updated application forms

- Reviewed all MRI applications and calculated packets

- Interviewed all seven candidates, accepted four students for 2014/15 cohort

- Planned and hosted Orientation for all students and MRI Consortium Members

- Accreditation materials have all been completed and returned to JRCERT. The Consortium is still waiting for a response.

- Worked with Bryam Vliem and Lakisha Beck to clear transcripts
Faculty & Staff Accomplishments/Awards

- This year GRCC hosted the Orientation Day (April 24, 2014) for all students and staff of the MRI Consortium
- The GH program continues to increase the number of online courses for GH 110 and GH 107
- Jennifer Riggs and Matt Mekkes have completed their online certification
- Julie Lackscheide has completed approximately one third of her Master’s degree
- The Program Director served on the Search Committed for a Full-Time Tenure position to replace Robert Long

Faculty Development for Upcoming Year

- AEIRS Conference, July-2014
- Clinical Instructor Retreat, October – 2014
- RSNA, December - 2014
Perkins Indicators

<table>
<thead>
<tr>
<th>CIP Code</th>
<th>Program Code</th>
<th>Program</th>
<th>1p1 Technical Skills</th>
<th>2p1 - Degree/Cert Award</th>
<th>3p1 Retention &amp; Transfer</th>
<th>4p1 Placement</th>
<th>5p1 Non Trad Participation</th>
<th>5p2 Non Trad Completion</th>
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<tbody>
<tr>
<td>51.091</td>
<td>305</td>
<td>Radiology Technology*</td>
<td>95%</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
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</table>

**Perkins Indicators Analysis & Summary**

1p1 Technical Skills – Technical skill assessments consistently meets or exceeds the state requirement of 92% with 96%.

2p1 Credential/Degree – The Rad Tech program continues to experience a high pass rate for the national board exam (95%-2013). This figure is well above the state required 29%.

3p1 Retention – Retention in the Rad Tech program for the year 2013 was not as good as usual. We lost four students (two regarding illness and two regarding grades). However, we still met and exceeded the state requirement of 71% with 86% retention.

4p1 Placement – The Rad Tech program met and exceeded the state requirement of 71% with 100% placement.

4p1 Non-Traditional Student Participation – The program met and exceeded the state requirement of 23% with 30% participation.

5p1 Non-Traditional Completion – The Rad Tech program met and exceeded the state requirement of 20% with 22% completion.
## Assessment of Student Learning

### Radiologic Technology

**Program Outcomes:**

1. Student Will Demonstrate Critical thinking Skills
2. Student will demonstrate appropriate communication skills
3. Students will be clinically competent
   - Student will exhibit professional attributes in the clinical setting

<table>
<thead>
<tr>
<th>Program Learning Outcomes</th>
<th>ILO</th>
<th>Measure</th>
<th>Findings/ Improvements/Impact</th>
<th>Status, Fall 13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student adapts correctly</td>
<td>Critical Thinking Skills, Social</td>
<td>Students will be trained to utilize C-Arm equipment. Assessed by student completion of competency checklist in lab and exit questionnaire. With each graduating class, exit interviews are performed the last semester of clinical. In that interview we address the personal concerns of the program and areas in which students felt that more attention was needed or could be scaled back. In the graduating class of 2012, one major concern that stood out was the need for more additional time with the C-arm</td>
<td>We implemented additional C-arm education, hands-on training, and scenario (see attached) testing. Additional handouts (see attached) and discussion of the C-arm were incorporated into RT 113 lab, while the hands-on portion was incorporated into RT 212 lab (see attached). From the report of the assessment, a benchmark of 90% proficiency was set. From these additional changes made to curriculum, the proficiency of this specific scenario testing was at 95%.</td>
<td>Based on the 2013 cohort, only 9% expressed the need for additional C-arm training. Their need was specifically in the hands-on aspect of the C-arm and how it is needed at their clinic site based on the exams that are performed in surgery. This concern was vocalized with our</td>
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<td>and the procedures related to this equipment. From these discussions, 33% of the student cohort expressed a need.</td>
<td></td>
<td>Clinical Instructors (CI's) at our Clinical Instructor Retreat in October of 2013. From this discussion with the CI's we have started to develop a master list of surgical exams performed with the C-arm at each clinic site, and what the technologist’s responsibility is during these exams. (CI Meeting Minutes October 2013)</td>
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<tr>
<td>Student modifies exam for non-routine patient (wheelchairs, stretcher, trauma, etc.)</td>
<td>Critical Thinking Skills,</td>
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<td>Student will be able to demonstrate effective oral communication skills.</td>
<td>Communication Skills</td>
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<td>Student will be able to demonstrate effective written communication</td>
<td>Communication Skills</td>
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<tr>
<td>skills</td>
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<td>Students will apply radiation safety according to ALARA principles.</td>
<td>Social Responsibility Skills</td>
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<tr>
<td>Students will demonstrate positioning skills</td>
<td>Communication Skills, Critical Thinking Skills</td>
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<tr>
<td>Students will select appropriate technical factors</td>
<td>Social Responsibility Skills, Critical Thinking Skills</td>
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<tr>
<td>Student will exhibit professional attributes in the clinical setting.</td>
<td>Personal Responsibility, Social Responsibility</td>
<td>Students will be trained to utilize C-Arm equipment. Assessed by student completion of competency checklist in lab and exit questionnaire.</td>
<td>Collected initial data No data included in report – project began in 11-12.</td>
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<td>Students will determine the importance of continued professional development.</td>
<td>Personal Responsibility Skills, Social Responsibility Skills</td>
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