Bachelor of Science in Medical Imaging
St. Mary's/Marshall University Undergraduate Program Assessment Report
2009-2010

I. CONSISTENCY WITH UNIVERSITY MISSION

The Mission statements of Marshall University, St. Mary's Medical Center and the St. Mary's School of Medical Imaging emphasize support for quality education, the expansion of knowledge through research and creative activities, the provision of service to society, to diversity, and finally, to academic freedom. The Mission Statement for the School of Medical Imaging follows. Key phrases from the Marshall University and School of Medical Imaging Mission Statements are abstracted from the original documents and appear in **Table I** to demonstrate the consistency.

School of Medical Imaging Mission Statement

The mission of St. Mary's School of Medical Imaging is to prepare qualified graduates in the area of imaging sciences through current educational methodologies. The faculty, in collaboration with internal and external groups, will foster the development of a learning environment that is responsive to local and national trends in health care to produce multi-competent radiology professionals.

To accomplish this mission, Medical Imaging:

Ensures the integrity of the programs through maintenance of rigorous professional educational standards and through high expectation of student learning and performance;

Encourages involvement of faculty in service to society and the profession and promotes lifelong learning in our students;

Supports the engagement of faculty in research and scholarly activities;

Provides an environment that is sensitive to a culturally, racially, and ethnically
diverse student body, faculty, and staff; and Maintains an environment that provides for academic freedom and shared governance.

Adopted by SOMI 3/2010

Table 1: Comparison of Marshall University and St. Mary's SOMI Mission Statement

Marshall University Mission Statement	St. Mary's School of Medical Imaging
Provide affordable, high quality undergraduate education appropriate for the state and the region.	Prepare qualified graduates in imaging sciences. The BS program prepares students to practice as both the entry level radiographer and the advanced practitioner.
Improve instruction through the use of innovative teaching methods that require students to become actively involved in the learning process and develop critical thinking skills necessary for life-long learning	The role of faculty in imaging education is to facilitate the students' learning experience through systematic guidance in their endeavors to acquire those knowledge, skills and judgments necessary for competence in the practice of medical imaging.
Enhance the quality of health care in the region	A key component of medical imaging is to promote safe radiation practices for both the public and occupational worker.
Educates a citizenry capable of living and working effectively in a global environment.	Each person is a unique individual, capable of rational thoughts and self-directed behaviors, with physiological, psychosocial and spiritual needs

II. Program Student Learning Outcomes

The SOMI will not graduate a class with the baccalaureate degree until 2012. The data provided below is from the previous five year American Registry of Radiologic Technologist (ARRT) primary certification examination in radiography. The program expects to maintain the same pass rates and standards. See appendix A. The program's goal is to exceed both the national pass rate and to exceed the mean on the five individual sections of the exam.

III. Assessment Activities

The ARRT requires certification candidates to not only successfully complete the didactic portion of an imaging program, but also to demonstrate clinical competence in a number of radiographic procedures. The learning sequence is for the student to be presented the procedure in lecture and laboratory. Once they have successfully passed the laboratory examination which includes safe radiation practice and appropriate patient care as well as imaging specific technical factors, they may practice the procedure in the clinic under the supervision of a staff technologist. Joint Review Commission on Education in Radiologic Technology (JRCERT) accreditation standards requires the student to perform all procedures with direct supervision until they have demonstrated competence. When the student feels confident in their ability, they will perform the procedure with a clinical instructor. After a student has successfully done so, they may then perform that procedure with indirect supervision. All mandatory and a number of elective procedure competencies (designated by the ARRT) must be completed prior to graduation. The assessment activities for procedural competency include the laboratory examination and the clinical competency evaluation.

Additional assessment is derived from lecture examination and clinical instructor evaluation. Students must achieve a 75% on lecture exams. Clinical instructor evaluations assess the overall performance of a student in the clinical setting including safe radiation practices.

Table 2 (below) exhibits the outcome assessment plan for the SOMI.

IV. Analysis/Planned Actions

There is no standardized practice examination in the imaging sciences; however, SMMC SOMI students are required to pass a practice exam prior to graduation with a minimum score of 85%. The exam is similar in format and content to the ARRT exam. Students are allowed three attempts to pass the exam. No student has failed to pass the exam by the third attempt. The program utilizes a variety of resources for the examination included some commercial ARRT board review sources.

V. OVERVIEW OF CHANGES IMPLEMENTED IN YOUR PROGRAM THIS PAST YEAR BASED ON RESULTS AND PLANNED ACTION SPECIFIED IN LAST YEAR'S REPORT.

No applicable

VI. SPECIFY ANY CHANGES/MODIFICATIONS MADE TO YOUR PROGRAM BASED SPECIFICALLY ON DATA OBTAINED DURING ASSESSMENT DAY ACTIVITIES.

No data at this time.

Table Two: Outcome Assessment Plan

2009-2011 Assessment plan					
Program Effectiveness					
Outcome (Effectiveness)	Measurement Tool	Benchmark	Timeframe	Responsible party	Results
Students will pass the ARRT national certification on the 1st attempt	ARRT 1st Time Pass Rates	85% or higher	January	Program Director Advisory Board	
Of those pursuing employment, students will be gainfully employed within 6 months post-graduation	Graduate Survey	100% of graduates will be employed within 6 months	March	Program Director Advisory Board	
Students will complete the program within 24 months	Retention Rate	85% or higher	June	Program Director Advisory Board	
Students will be satisfied with their education	Graduate Survey	Respondents will indicate satisfaction with an average score of 3 or better (4	March	Program Director Advisory Board	

		point scale)			
Employers will be satisfied with the graduate's performance	Employer Survey	Respondents will indicate satisfaction with an average score of 3 or better (4 point scale)	March	Program Director Advisory Board	

Goal One: Student Learning: Students will be clinically competent					
Outcome	Measurement Tool	Benchmark	Timeframe	Responsible party	Results
Students will apply positioning skills	Laboratory Simulation-(Question 6) Random sampling of three simulations per student	Average score of 3.5 or higher (5-point scale)	1st Year-Spring Semester	Laboratory Instructor	
	Clinical Competency Form (Objective 6) Random sampling of three competencies per student	Average score of 4 or higher (5-point scale)	2nd Year Spring semester	Clinical Coordinator Clinical Instructors	
Student will select appropriate technical factors	Laboratory Simulation (Question 9) First Year terminal exam	Average score of 3.5 or better	1st Year Terminal Exam	Laboratory Instructor	
	Clinical Competency Form (Objective 8)-Random sampling of three competencies per student	Average score of 4 or higher (5 point scale)	2nd Year Spring Semester	Clinical Coordinator Clinical instructors	
Students will practice radiation protection	Laboratory Simulation (Question 8) First Year terminal exam	Average score of 4 or higher (5 point scale)	1st Year terminal exam	Laboratory Instructor	
	Clinical Competency Form (Objective 7)	Average score of 4 or higher (5 point scale	2nd Year Spring Semester	Clinical Coordinator Clinical instructors	
Student will demonstrate ethical behavior and understand of HIPPA	MI 203 Ethics and Law Class"HIPPA and Ethical Practice Exercise"	Average score of 80% or higher	1st Year-Fall Semester	Course Instructor	Average score of 90%
	Clinical Instructor Evaluations Objective 3	Average score of 3 or better on averaged evaluations	2nd Year-Spring Semester	Clinical Coordinator Clinical instructors	

Goal Two: Students will use critical thinking and problem solving skills					
Outcome	Measurement Tool	Benchmark	Timeframe	Responsible party	Results
Students will manipulate technical factors for non-routine examinations	Clinical Competency Form Question 9: trauma competencies only	Average score of 3.5 or higher (5-point scale)	1st Year-Spring Semester	Clinical Coordinator Clinical Instructors	
	Clinical instructor evaluation objective 4, 5	Average score of 4 or higher (5-point scale)	2nd Year Spring semester	Clinical Coordinator Clinical Instructors	
Students will adapt positioning for trauma patients	Clinical competency form Question 6, 7 : trauma competencies only	Average score of 3.5 or better	1st Year Spring Semester	Clinical Coordinator Clinical Instructors	
	Clinical instructor evaluation objective 4, 5	Average score of 4 or higher (5 point scale)	2nd Year Spring Semester	Clinical Coordinator Clinical instructors	
Student/graduate will demonstrate critical thinking and problem solving skills	Simulation Exercise: radiographic simulation and multidisciplinary simulation	Average score of 85% or higher.	2nd Year Spring Semester	Multidisciplinary faculty	

Goal 3: *Students will exhibit effective communication skills in the healthcare setting.*					
Outcome	Measurement Tool	Benchmark	Timeframe	Responsible party	Results
Students will use effective oral communication skills with clinical staff and patients	Clinical Competency Form Question 3 Random sampling of three competencies per student	Average score of 3.5 or greater (Scale of 5)	1st Year- Spring Semester	Clinical coordinator clinical instructors	
	Clinical Instructor Evaluation objective 9	Average score of 4 or greater Scale of 5)	2nd Year Spring semester	Clinical coordinator clinical instructors	
Students will practice written communication skills	Writing assignment on importance of effective communication and cultural competency	Average score of 80% or better	1st Year Fall Semester	Instructor	Average score of 90%
	Research paper submitted at the WVSRT conference.	Score of 80% or better on the research paper rubric	2nd Year Fall Semester	Program director	Average score of 90% on submitted papers

Goal 4: *Students will evaluate the importance of professional growth and development*				
Outcome	Measurement Tool	Benchmark	Timeframe	Responsible party
Students will synthesize the importance of continued professional development	Oral presentation on latest developments in imaging technology presented during a seminar	Score of 80% or better on presentation rubric	End of each semester	Program director
	Survey response from student professional development seminar	Average of 3.5 or better (scale of 5)	Spring semester	
	Continuation of students into professional level of program			
Students will assess the importance of attendance at professional meetings and/or membership in a professional organization	Survey post WVSRT conference	Average of 4 or better (scale of 5)	2nd Year Fall Semester	

Appendix A.

Report based on dates from 01/2006 through 12/2010

Radiography

National Comparison Report

SCHOOL FOR MEDICAL IMAGING-RADIOGRAPHY
ST MARY'S MEDICAL CENTER
School ID:
Date Generated:
RITA FISHER
1834
1/27/2011
2900 1ST AVE
HUNTINGTON, WV 25702-0000

Year Group	Candidates	A	B	C	D	E	Mean	Rank	% Pass
Calendar	Number	Section	Means				Total	Percentile	
2006 Program	16	9.0	8.7	8.8	8.9	9.4	89.1	84	100.0
2006 USA	14061	8.7	8.4	8.3	8.4	8.8	84.8	-	90.5
2007 Program	19	9.1	8.6	8.5	8.9	9.3	88.7	84	100.0
2007 USA	14142	8.7	8.3	8.3	8.4	8.8	84.7	-	90.8
2008 Program	17	9.0	8.6	8.8	8.9	9.4	89.2	84	100.0
2008 USA	14210	8.6	8.2	8.4	8.4	8.8	84.6	-	91.0
2009 Program	17	8.9	8.5	8.8	8.7	9.3	88.0	78	100.0
2009 USA	13762	8.6	8.2	8.4	8.4	8.9	84.8	-	91.4
2010 Program	17	9.0	8.8	8.9	9.0	8.9	89.3	84	100.0
2010 USA	13550	8.7	8.2	8.3	8.5	8.7	84.9	-	92.4

(1) A percentile rank indicates the percentage of scores at or below the corresponding mean scaled score. Percentile ranks are rounded to the nearest whole number.
(2) These percentile ranks were not obtained by comparing your school mean to all other school means, but rather by comparing the mean score of your program´s graduates to the distribution of scores for all US graduates.
(3) Mean scores and percentile ranks based on few candidates are not stable and should be interpreted with caution.
(4) To ensure student confidentiality, dashes indicate either too few candidates, or data is not yet available, or does not apply.
NOTES:
(5) Content specifications that serve as the basis for section scores are periodically revised. Consult this link to see the content specifications for the past several years.