

Policy Name: Clinical Competencies and Simulations

Policy Number: RAD 8.03

Title of Policy Owner: Campus Director & Dean of Academic Affairs

Policy Type: □RHEI/Shared Services □BSMCON □SCHS ☑SOMI

**Approved by:** RHEI Leadership Team

Effective Date: 6/8/2023 Version: 2.1 Policy Status: Approved

## I. Policy

It is the policy of Bon Secours St. Mary's Hospital School of Medical Imaging (SOMI) that the Radiologic Technology program be competency based and simulations are only available under certain specifications.

### II. Purpose

The purpose of this policy is to establish and outline competency progression and simulation eligibility criteria as set forth by the School and the American Registry of Radiologic Technologists (ARRT).

### III. Scope

This policy applies to all SOMI students.

#### IV. Definitions

(As defined by the ARRT for specific radiographic procedures):

**Competency** requires students to perform radiographic procedures independently, consistently, and effectively

**Trauma** requires modifications in positioning due to injury with monitoring of the patient's condition.

Age specific requirements:

- Pediatric radiographic procedures must be performed on a child 6 years old or younger.
- **Geriatric radiographic procedures** must be performed on a patient 65 years of age **and** physically or cognitively impaired as a result of aging.

**Facility protocol** will determine the positions/projections used for each procedure unless otherwise noted on the student's competency form or mandated by a doctor's note (provided the altered procedure includes a minimum of 2 projections).

**Simulation** (per ARRT) requires that competencies performed as a simulation must meet the same criteria as competencies demonstrated on patients. For example, the competency must be performed under the direct observation of the Dean or designee and be performed independently, consistently, and effectively. Simulation

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must be on a live human being using the same level of cognitive, psychomotor, and affective skills required for performing the procedure on a patient. Simulation of radiographic procedures requires the use of proper radiographic equipment without activating the x-ray beam. Students are required to evaluate related images and identify anatomical structures.

## V. Policy Details

### **Competency Progression**

Students must sequentially progress through a specific series of non-graded and graded competency testing to be designated "Competent" as defined by the American Registry of Radiologic Technologists (ARRT). Each student must meet the established competency guidelines required by the program.

The requisite order for confirming competence in radiographic procedures is as follows:

**Step 1:** Student attends lecture and/or lab as communicated by the course instructor.

NOTE: Certain specialty radiographic procedures may not require lab. Students will be advised of procedural competency requirements by a faculty/staff member in advance of fulfilling the competency requirement.

**Step 2:** Student is eligible to perform required pre-competencies. Requirements are: 3 pre-competencies for radiographic procedures categorized by the ARRT as "mandatory" and 2 pre-competencies for radiographic procedures categorized by the ARRT as "elective".

**Step 3:** Student successfully completes lab competency (practical testing).

**Step 4:** Student successfully completes master competency (minimum grade of 88% required) on radiographic procedures determined by the ARRT.

**Step 5:** Student successfully completes program specific final competencies (minimum grade of 88% required).

**Step 6:** Student must complete all required competencies (mandatory, elective, and final) with a minimum grade of 88% in this listed sequence in order to be eligible for the ARRT examination.

## **Instructional Laboratory**

The School of Medical Imaging has a designated imaging lab equipped with a nonenergized radiographic unit on which the instructor demonstrates radiographic procedures, and students utilize lab time to practice. Students also have designated practice time.

### **Competency Structure**

**Laboratory Competency** (lab practical testing, minimum grade of 80% required): Radiographic procedure that is performed in the lab setting by the student. Lab competencies are required to be graded by Program faculty. A grade of 80% or higher must be achieved prior to performing master competencies in the clinical environment.

**Pre-Competency:** Radiographic procedure that is performed in the clinical setting by the student, that allows minor assistance by the Clinical Preceptor or a qualified

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radiographer. This competency may be performed after lecture and/or lab of that specific radiographic procedure. All procedures are performed with **direct supervision** until the student has successfully completed the master competency evaluation. Then the student may perform the examination under **indirect supervision**.

**Master Competency:** Radiographic procedure that must be performed independently by the student. Master competencies are required to be graded by Program Faculty or Clinical Preceptors. A minimum grade of 88% or higher must be achieved. Master competencies assess retention and comprehension of critical knowledge and refinement of clinical skills.

Students who receive unsatisfactory grades on master competencies are required to follow the procedure below:

- After reviewing applicable assignment grade(s) and Clinical Preceptor feedback available upon completion of the competency assignment, the student is required to meet with the Program Coordinator Clinical Education Experience to obtain and complete remedial clinical training assignment(s).
- Repeat the master competency until a score of 88% or higher is achieved, although a final grade of 88% is the highest that will be recorded for a repeat master competency.
- A maximum of three (3) repeat master competencies per imaging procedure is allowed. If an 88% is not achieved on the third attempt, a final clinical grade of "F" is awarded, and the student must repeat the clinical course.

**Final Competency:** Six (6) program specific radiographic procedures must be performed independently by the student I the 4<sup>th</sup> and/or 5<sup>th</sup> semesters. Final competencies are required to be graded by Program Faculty or Clinical Preceptors. A minimum grade of 88% or higher must be achieved. Final competencies assess overall comprehension of critical knowledge and refinement of clinical skills.

Students who receive unsatisfactory grades on final competencies are required to follow the procedure below:

- After reviewing applicable assignment grade(s) and Clinical Preceptor feedback available upon completion of the competency assignment, the student is required to meet with the Program Coordinator Clinical Education Experience to obtain and complete remedial clinical training assignment(s).
- Repeat the final competency until a score of 88% or higher is achieved, although a final grade of 88% is the highest that will be recorded for a repeat final competency.
- A maximum of three (3) repeat final competencies per imaging procedure is allowed. If an 88% is not achieved on the third attempt, a final clinical grade of "F" is awarded, and the student must repeat the clinical course.

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\*Students can receive a total of six (6) unsatisfactory grades on master and/or final competencies throughout the entirety of the program. Upon receiving the 6<sup>th</sup> unsatisfactory grade, a final clinical grade of "F" is awarded and will result in the student being academically dismissed from the program.

## **Competency Requirements**

#### **Required Mandatory Competencies:**

Mandatory Pre-Competencies: A minimum of 108 pre-competencies must be completed to meet graduation requirements; zero (0) may be simulated.

Mandatory Master Competencies: 36 mandatory master competencies must be completed to meet graduation requirements; zero (0) may be simulated.

## **Required Elective Competencies:**

*Elective Pre-Competencies:* A minimum of 33 pre-competencies must be completed to meet graduation requirements; only skull or sinuses may be simulated.

*Elective Master Competencies:* A minimum of 15 master competencies must be completed to meet graduation requirements; only skull or sinuses may be simulated.

# Required Final Competencies in the 4<sup>th</sup>/5<sup>th</sup> semesters:

Final Competencies: A minimum of six (6) must be completed to meet graduation requirements. The categories identified by the ARRT are: Upper Extremity, Lower Extremity, Spine and Hip, Fluoroscopy Studies, Mobile Radiographic Studies, and Pediatric Patient. These categories are also identified on the Clinical Competency Student Tracking Form. Zero (0) final competencies may be simulated. A minimum of two (2) final competencies are required to be graded by Program Faculty or Program Clinical Preceptors.

### **Simulations**

Simulations to meet graduation requirements: It is the philosophy of the School of Medical Imaging that every opportunity possible be taken to acquire competencies within the clinical setting. Only radiographic head-related procedures may be simulated. Simulations are required to be approved by the Program Coordinator Clinical Education Experience.

#### VI. Attachments

N/A

## VII. Related Policies

RAD 8.01 Clinical Plan

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### VIII. Disclaimers

Nothing in this policy creates a contractual relationship between Bon Secours St. Mary's Hospital School of Medical Imaging (SOMI) and any party. SOMI, in its sole discretions, reserves the right to amend, terminate or discontinue this policy at any time, with or without advance notice.

## IX. Version Control

Version	Date	Description	Prepared by
1.0	5/20/2022	New Template & Revisions	Program Coordinator
2.0	9/11/2022	Revisions – ARRT Requirements & Competency Requirements	CDDAA
2.1	7/17/2023	New Template & New Numbering	DCRM

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