



Annual Structured Self-Assessment Report - 2023

Introduction

The purpose of Continuing Qualifications Requirements (CQR) is to assist Registered Technologists to document their continued qualifications in the categories of certification and registration held. To accomplish this purpose the continuing qualifications requirements are presented in three parts: the professional profile, the structured self-assessment (SSA) and continuing education (CE).

The purpose of the CQR SSA is to assist Registered Technologists identify gaps in the knowledge and cognitive skills underlying the intelligent performance of the tasks typically required for practice within the categories of certification and registration held and help direct their professional development efforts.

The SSA is made up of ten items for each content category. R.T.s who answer fewer than seven items correctly in a category are required to complete CE related to that content. The maximum amount of CE per category is determined by the overall number of items on that discipline's certification exam and the number of items within each section on that exam. The actual number of CEs prescribed is adjusted between three and seven correct answers (3 or fewer = 100%, 4 = 75%, 5 = 50%, 6 = 25%, 7 or more = 0%).

This report summarizes the results of certified and registered professionals attempting each SSA in 2022. Detailed results are included on subsequent pages for disciplines with three or more completed SSAs during the past year. Statistics for disciplines with fewer than three SSAs will be limited and are identified by an asterisk (*) in the count chart below.

The section-level, performance tables include the potential CE per category, mean raw score (out of 10), mean CE assigned, and the percent of R.T.s who did not receive CE for that section. In addition, the overall row reports total potential CE for the discipline, mean percent correct, mean total CE assigned, and the percent of R.T.s who did not receive CE for the entire SSA. If multiple content specifications were active during the report year, separate section-level tables will be provided for each content specification.

Updates

Updated content specifications for the Radiologist Assistant exam went into effect January 2023. Notably, these content specifications replaced the case study essay responses with objectively scored items. You can read more in the [Updated R.R.A. Documents](#) news release or the [exam content specifications](#) page at ARRT.org. With the discontinuation of essay response items, Radiologist Assistant exam statistics will be presented in this annual report and the technical appendix rather than as a separate publication.

Updated content specifications went into effect July 2023 for both Cardiac Interventional and Vascular Interventional Radiography. You can read more in the [Updated Cardiac Interventional Radiography Documents](#) and [Updated Vascular Interventional Radiography Documents](#) news releases at ARRT.org. Separate section-level performance tables are included for those that took the exam before and after the update. Please note that, due to the change in content, these tables are not directly comparable.



SSA Counts

Discipline	Test Center	Online	Total
Radiography	6259	2833	9092
Nuclear Medicine Technology	164	118	282
Radiation Therapy	389	249	638
Sonography	31	19	50
Magnetic Resonance Imaging	990	422	1412
Mammography	726	291	1017
Computed Tomography	2268	921	3189
Vascular Sonography	9	3	12
Bone Densitometry	118	54	172
Cardiac Interventional Radiography	28	19	47
Vascular Interventional Radiography	150	67	217
Breast Sonography	47	11	58
Registered Radiology Assistant	13	7	20

Radiography

Content Category	Potential CE	Mean Raw Score	Mean CE Assigned	No CE Assigned
Patient Care				
Patient Interactions and Management	6	6.6	1.3	52.6%
Safety				
Radiation Physics and Radiobiology	4	6.1	1.2	41.7%
Radiation Protection	5	6.1	1.6	40.9%
Image Production				
Image Acquisition and Evaluation	5	5.8	1.9	34.4%
Equipment Operation and Quality Assurance	4	5.5	1.6	29.0%
Procedures				
Head, Spine, and Pelvis Procedures	3	6.1	1.0	43.8%
Thorax and Abdomen Procedures	4	6.8	0.8	59.2%
Extremity Procedures	5	5.9	1.8	38.9%
Overall (N = 9092)	36	61%	11.2	4.0%



Nuclear Medicine Technology

Content Category	Potential CE	Mean Raw Score	Mean CE Assigned	No CE Assigned
Patient Care				
Patient Interactions and Management	4	7.8	0.3	83.0%
Safety				
Radiation Physics, Radiobiology, and Regulations	5	6.0	1.7	42.6%
Image Production				
Instrumentation	6	7.3	0.9	67.7%
Procedures				
Radionuclides and Radiopharmaceuticals	5	7.2	0.8	64.9%
Cardiac Procedures	4	7.1	0.7	63.5%
Endocrine and Oncology Procedures	5	7.1	1.0	61.7%
Gastrointestinal and Genitourinary Procedures	3	7.0	0.6	62.8%
Other Imaging Procedures	4	7.6	0.5	70.6%
Overall (N = 282)	36	71%	6.5	20.9%

Radiation Therapy

Content Category	Potential CE	Mean Raw Score	Mean CE Assigned	No CE Assigned
Patient Care				
Patient Interactions and Management	5	6.8	1.0	57.4%
Patient and Medical Record Management	3	6.8	0.7	56.9%
Safety				
Radiation Physics and Radiobiology	4	5.9	1.3	39.2%
Radiation Protection, Equipment Operation, and Quality Assurance	5	6.3	1.3	48.3%
Procedures				
Treatment Sites and Tumors	5	6.3	1.3	45.8%
Treatment Volume Localization	4	7.1	0.7	64.1%
Prescription and Dose Calculation	4	6.3	1.0	46.9%
Treatments	6	8.0	0.4	82.9%
Overall (N = 638)	36	67%	7.7	6.3%



Sonography

Content Category	Potential CE	Mean Raw Score	Mean CE Assigned	No CE Assigned
Patient Care				
Patient Interactions and Management	3	9.1	0.0	100.0%
Image Production				
Basic Principles of Ultrasound	5	6.5	1.2	48.0%
Image Formation	4	6.9	0.8	60.0%
Evaluation and Selection of Representative Images	2	7.5	0.2	76.0%
Procedures				
Abdomen	8	8.4	0.2	94.0%
First Trimester Obstetrics	2	8.5	0.1	88.0%
Second/Third Trimester and High Risk Obstetrics	6	7.4	0.6	70.0%
Gynecology	3	7.3	0.4	68.0%
Superficial Structures and Other Sonographic Procedures	3	9.0	0.0	96.0%
Overall (N = 50)	36	78%	3.5	16.0%

Magnetic Resonance Imaging

Content Category	Potential CE	Mean Raw Score	Mean CE Assigned	No CE Assigned
Patient Care				
Patient Interactions and Management	3	6.9	0.5	63.9%
Safety				
MRI Screening and Safety	4	6.7	0.8	54.5%
Image Production				
Physical Principles of Image Formation	7	6.3	2.0	48.7%
Sequence Parameters and Options	6	5.9	2.0	38.8%
Data Acquisition, Processing, and Storage	5	5.5	2.2	27.5%
Procedures				
Neurological	5	6.5	1.3	50.9%
Body	3	7.0	0.5	65.2%
Musculoskeletal	3	7.3	0.4	69.8%
Overall (N = 1412)	36	65%	9.8	7.3%



Mammography

Content Category	Potential CE	Mean Raw Score	Mean CE Assigned	No CE Assigned
Patient Care				
Patient Interactions and Management	2	7.9	0.1	86.2%
Image Production				
Image Acquisition and Quality Assurance	6	6.7	1.0	57.6%
Procedures				
Anatomy, Physiology, and Pathology	5	7.5	0.3	82.1%
Mammographic Positioning, Special Needs, and Imaging Procedures	7	7.8	0.5	83.6%
Overall (N = 1017)	20	75%	1.9	40.5%

Computed Tomography

Content Category	Potential CE	Mean Raw Score	Mean CE Assigned	No CE Assigned
Patient Care				
Patient Interactions and Management	4	8.1	0.3	83.4%
Safety				
Radiation Safety and Dose	4	6.8	0.8	57.3%
Image Production				
Image Formation	5	6.2	1.5	46.5%
Image Evaluation and Archiving	4	6.5	0.9	52.1%
Procedures				
Head, Spine, and Musculoskeletal	4	6.6	0.9	54.0%
Neck and Chest	4	6.2	1.2	45.2%
Abdomen and Pelvis	5	6.8	1.1	58.2%
Overall (N = 3189)	30	67%	6.7	11.0%



Vascular Sonography

Content Category	Potential CE	Mean Raw Score	Mean CE Assigned	No CE Assigned
Patient Care				
Patient Interactions and Management	4	8.3	0.0	100.0%
Image Production				
Basic Principles of Ultrasound	5	5.0	2.7	16.7%
Image Formation	3	5.2	1.5	16.7%
Evaluation and Selection of Representative Images	6	6.7	0.8	58.3%
Procedures				
Abdominal/Pelvic Vasculature	4	5.9	1.3	41.7%
Arterial Peripheral Vasculature	4	8.3	0.2	91.7%
Venous Peripheral Vasculature	3	7.2	0.3	75.0%
Extracranial Cerebral Vasculature and Other Sonographic Procedures	3	7.1	0.4	66.7%
Overall (N = 12)	32	72%	7.2	0.0%

Bone Densitometry

Content Category	Potential CE	Mean Raw Score	Mean CE Assigned	No CE Assigned
Patient Care				
Patient Bone Health, Care, and Radiation Principles	3	5.9	1.2	40.1%
Image Production				
Equipment Operation and Quality Control	4	6.7	0.8	58.7%
Procedures				
DXA Scanning	7	6.6	1.9	52.3%
Overall (N = 172)	14	64%	3.9	21.5%



Cardiac Interventional Radiography

January 1, 2023 – June 30, 2023

Content Category	Potential CE	Mean Raw Score	Mean CE Assigned	No CE Assigned
Patient Care				
Patient Interactions and Management	6	6.0	2.0	39.3%
Image Production				
Image Acquisition and Equipment	6	7.9	0.6	78.6%
Procedures				
Diagnostic and Conduction System Studies	6	6.4	1.6	39.3%
Hemodynamics, Calculations, and Percutaneous Intervention	8	7.3	1.5	64.3%
Overall (N = 28)	26	69.1%	5.7	21.4%

July 1, 2023 – December 31, 2023

Content Category	Potential CE	Mean Raw Score	Mean CE Assigned	No CE Assigned
Patient Care				
Patient Interactions and Management	6	7.4	0.9	73.7%
Image Production				
Image Acquisition and Equipment	6	7.7	0.3	73.7%
Procedures				
Diagnostic and Electrophysiology Procedures	6	8.0	0.2	84.2%
Interventional Procedures	8	8.0	0.4	89.5%
Overall (N = 19)	26	78%	1.8	47.4%



Vascular Interventional Radiography

January 1, 2023 – June 30, 2023

Content Category	Potential CE	Mean Raw Score	Mean CE Assigned	No CE Assigned
Patient Care				
Patient Interactions and Management	5	7.4	0.6	73.1%
Image Production				
Image Acquisition and Equipment	5	6.7	1.1	56.7%
Procedures				
Vascular Diagnostic Procedures	9	6.6	2.0	53.8%
Vascular Interventional Procedures	6	7.3	0.7	72.1%
Nonvascular Procedures	4	7.4	0.6	71.2%
Overall (N = 104)	29	71%	4.9	24.0%

July 1, 2023 – December 31, 2023

Content Category	Potential CE	Mean Raw Score	Mean CE Assigned	No CE Assigned
Patient Care				
Patient Interactions and Management	5	7.7	0.2	84.1%
Image Production				
Image Acquisition and Equipment	5	7.3	0.7	69.9%
Procedures				
Vascular Diagnostic Procedures	9	7.0	1.2	64.6%
Vascular Interventional Procedures	6	8.1	0.3	88.5%
Nonvascular Procedures	4	7.7	0.5	81.4%
Overall (N = 113)	29	76%	3.0	41.6%

Breast Sonography

Content Category	Potential CE	Mean Raw Score	Mean CE Assigned	No CE Assigned
Patient Care				
Patient Interactions and Management	3	8.7	0.1	94.8%
Image Production				
Basic Principles of Ultrasound	7	6.4	1.5	51.7%
Image Formation	6	7.4	0.7	69.0%
Evaluation and Selection of Representative Images	6	7.5	0.5	75.9%
Procedures				
Anatomy and Physiology	3	7.4	0.5	69.0%
Pathology	6	8.0	0.3	84.5%
Breast Interventions	3	8.6	0.0	96.6%
Overall (N = 58)	34	77%	3.5	20.7%



Radiologist Assistant

Content Category	Potential CE	Mean Raw Score	Mean CE Assigned	No CE Assigned
Patient Care				
Patient Management	9	8.0	0.6	75.0%
Pharmacology	4	5.7	1.5	35.0%
Safety				
Patient Safety, Radiation Protection, and Equipment Operation	7	6.2	2.0	40.0%
Procedures				
Abdominal	10	7.1	1.9	65.0%
Thoracic	6	7.4	0.7	70.0%
Musculoskeletal and Endocrine	6	6.5	1.4	55.0%
Neurological, Vascular, and Lymphatic	6	6.0	1.6	35.0%
Overall (N = 20)	48	67%	9.6	5.0%

