



Annual Structured Self-Assessment Report - 2024

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 = 75%, 7 or more = 0%).

This report summarizes the results of certified and registered professionals attempting each SSA in 2024. 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 went into effect January 2024 for Sonography and Vascular Sonography. You can read more in the [Updated Sonography Documents](#) and the [Updated Vascular Sonography Documents](#) news releases at ARRT.org.



SSA Counts

| Discipline | Test Center | Online | Total |
|-------------------------------------|-------------|--------|-------|
| Radiography | 6209 | 2369 | 8578 |
| Nuclear Medicine Technology | 155 | 95 | 250 |
| Radiation Therapy | 384 | 240 | 624 |
| Sonography | 34 | 12 | 46 |
| Magnetic Resonance Imaging | 1036 | 400 | 1436 |
| Mammography | 732 | 219 | 951 |
| Computed Tomography | 2574 | 906 | 3480 |
| Vascular Sonography | 6 | 1 | 7 |
| Bone Densitometry | 127 | 42 | 169 |
| Cardiac Interventional Radiography | 33 | 15 | 48 |
| Vascular Interventional Radiography | 193 | 71 | 264 |
| Breast Sonography | 57 | 11 | 68 |
| Registered Radiology Assistant | 12 | 13 | 25 |

Radiography

| Content Category | Potential CE | Mean Raw Score | Mean CE Assigned | No CE Assigned |
|---|--------------|----------------|------------------|----------------|
| Patient Care | | | | |
| Patient Interactions and Management | 6 | 7.1 | 1.0 | 64.1% |
| Safety | | | | |
| Radiation Physics and Radiobiology | 4 | 6.1 | 1.2 | 41.5% |
| Radiation Protection | 5 | 6.1 | 1.6 | 42.1% |
| Image Production | | | | |
| Image Acquisition and Evaluation | 5 | 5.9 | 1.8 | 36.5% |
| Equipment Operation and Quality Assurance | 4 | 6.0 | 1.2 | 39.5% |
| Procedures | | | | |
| Head, Spine, and Pelvis Procedures | 3 | 6.3 | 0.9 | 46.8% |
| Thorax and Abdomen Procedures | 4 | 7.2 | 0.6 | 67.0% |
| Extremity Procedures | 5 | 6.2 | 1.5 | 45.2% |
| Overall (N = 8578) | 36 | 63.4% | 9.9 | 5.3% |



Nuclear Medicine Technology

| Content Category | Potential CE | Mean Raw Score | Mean CE Assigned | No CE Assigned |
|--|--------------|----------------|------------------|----------------|
| Patient Care | | | | |
| Patient Interactions and Management | 4 | 7.6 | 0.4 | 73.6% |
| Safety | | | | |
| Radiation Physics, Radiobiology, and Regulations | 5 | 5.8 | 2.0 | 34.8% |
| Image Production | | | | |
| Instrumentation | 6 | 7.3 | 0.9 | 67.6% |
| Procedures | | | | |
| Radionuclides and Radiopharmaceuticals | 5 | 7.1 | 0.9 | 63.2% |
| Cardiac Procedures | 4 | 7.0 | 0.7 | 63.6% |
| Endocrine and Oncology Procedures | 5 | 7.0 | 1.1 | 60.0% |
| Gastrointestinal and Genitourinary Procedures | 3 | 7.0 | 0.6 | 63.2% |
| Other Imaging Procedures | 4 | 7.6 | 0.5 | 71.6% |
| Overall (N = 250) | 36 | 70.3% | 7.1 | 19.2% |

Radiation Therapy

| Content Category | Potential CE | Mean Raw Score | Mean CE Assigned | No CE Assigned |
|--|--------------|----------------|------------------|----------------|
| Patient Care | | | | |
| Patient Interactions and Management | 5 | 6.7 | 1.1 | 54.0% |
| Patient and Medical Record Management | 3 | 6.9 | 0.6 | 60.6% |
| Safety | | | | |
| Radiation Physics and Radiobiology | 4 | 5.9 | 1.4 | 35.6% |
| Radiation Protection, Equipment Operation, and Quality Assurance | 5 | 6.5 | 1.3 | 48.6% |
| Procedures | | | | |
| Treatment Sites and Tumors | 5 | 6.4 | 1.3 | 49.5% |
| Treatment Volume Localization | 4 | 7.0 | 0.7 | 60.9% |
| Prescription and Dose Calculation | 4 | 6.4 | 1.0 | 49.4% |
| Treatments | 6 | 7.9 | 0.4 | 83.8% |
| Overall (N = 624) | 36 | 67% | 7.7 | 9.0% |



Sonography

| Content Category | Potential CE | Mean Raw Score | Mean CE Assigned | No CE Assigned |
|---|--------------|----------------|------------------|----------------|
| Patient Care | | | | |
| Patient Interactions and Management | 3 | 8.4 | 0.1 | 89.1% |
| Image Production | | | | |
| Basic Principles of Ultrasound | 4 | 6.0 | 1.2 | 39.1% |
| Image Formation | 5 | 6.4 | 1.2 | 58.7% |
| Evaluation and Selection of Representative Images | 3 | 6.5 | 0.8 | 47.8% |
| Procedures | | | | |
| Abdomen | 7 | 6.7 | 1.6 | 54.3% |
| First Trimester Obstetrics | 2 | 7.1 | 0.4 | 58.7% |
| Second/Third Trimester and High Risk Obstetrics | 6 | 6.4 | 1.5 | 52.2% |
| Gynecology | 3 | 7.5 | 0.2 | 78.3% |
| Superficial Structures and Other Sonographic Procedures | 3 | 7.7 | 0.3 | 80.4% |
| Overall (N = 46) | 36 | 69.6% | 7.4 | 6.5% |

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 | 63.6% |
| Safety | | | | |
| MRI Screening and Safety | 4 | 6.8 | 0.8 | 56.5% |
| Image Production | | | | |
| Physical Principles of Image Formation | 7 | 6.3 | 2.1 | 47.6% |
| Sequence Parameters and Options | 6 | 5.8 | 2.2 | 37.7% |
| Data Acquisition, Processing, and Storage | 5 | 5.5 | 2.2 | 27.4% |
| Procedures | | | | |
| Neurological | 5 | 6.5 | 1.3 | 50.8% |
| Body | 3 | 7.0 | 0.6 | 62.8% |
| Musculoskeletal | 3 | 7.2 | 0.4 | 68.7% |
| Overall (N = 1436) | 36 | 64.9% | 10.1 | 7.8% |



Mammography

| Content Category | Potential CE | Mean Raw Score | Mean CE Assigned | No CE Assigned |
|---|--------------|----------------|------------------|----------------|
| Patient Care | | | | |
| Patient Interactions and Management | 2 | 8.1 | 0.1 | 87.5% |
| Image Production | | | | |
| Image Acquisition and Quality Assurance | 6 | 6.7 | 1.0 | 55.6% |
| Procedures | | | | |
| Anatomy, Physiology, and Pathology | 5 | 7.5 | 0.3 | 81.7% |
| Mammographic Positioning, Special Needs, and Imaging Procedures | 7 | 8.0 | 0.4 | 86.3% |
| Overall (N = 951) | 20 | 75.7% | 1.8 | 38.6% |

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 | 83.6% |
| Safety | | | | |
| Radiation Safety and Dose | 4 | 6.6 | 0.9 | 52.8% |
| Image Production | | | | |
| Image Formation | 5 | 6.1 | 1.6 | 42.8% |
| Image Evaluation and Archiving | 4 | 6.5 | 1.0 | 52.4% |
| Procedures | | | | |
| Head, Spine, and Musculoskeletal | 4 | 6.5 | 0.9 | 52.0% |
| Neck and Chest | 4 | 6.1 | 1.2 | 43.2% |
| Abdomen and Pelvis | 5 | 6.7 | 1.2 | 56.2% |
| Overall (N = 3480) | 30 | 66.5% | 7.1 | 10.0% |



Vascular Sonography

| Content Category | Potential CE | Mean Raw Score | Mean CE Assigned | No CE Assigned |
|--|--------------|----------------|------------------|----------------|
| Patient Care | | | | |
| Patient Interactions and Management | 3 | 7.7 | 0.1 | 85.7% |
| Image Production | | | | |
| Basic Principles of Ultrasound | 4 | 7.4 | 0.3 | 71.4% |
| Image Formation | 2 | 5.4 | 0.7 | 14.3% |
| Evaluation and Selection of Representative Images | 6 | 6.1 | 1.5 | 42.9% |
| Procedures | | | | |
| Abdominal/Pelvic Vasculature | 3 | 6.4 | 0.6 | 71.4% |
| Arterial Peripheral Vasculature | 4 | 8.6 | 0.1 | 85.7% |
| Venous Peripheral Vasculature | 4 | 7.6 | 0.1 | 85.7% |
| Extracranial Cerebral Vasculature and Other Sonographic Procedures | 3 | 6.7 | 0.6 | 42.9% |
| Overall (N = 7) | 29 | 70.0% | 4.1 | 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 | 1.1 | 35.5% |
| Image Production | | | | |
| Equipment Operation and Quality Control | 4 | 6.7 | 0.8 | 58.6% |
| Procedures | | | | |
| DXA Scanning | 7 | 6.3 | 2.1 | 45.6% |
| Overall (N = 169) | 14 | 62.9% | 4.1 | 21.9% |



Cardiac Interventional Radiography

| Content Category | Potential CE | Mean Raw Score | Mean CE Assigned | No CE Assigned |
|---|--------------|----------------|------------------|----------------|
| Patient Care | | | | |
| Patient Interactions and Management | 7 | 6.9 | 1.2 | 66.7% |
| Image Production | | | | |
| Image Acquisition and Equipment | 4 | 6.9 | 0.6 | 66.7% |
| Procedures | | | | |
| Diagnostic and Electrophysiology Procedures | 6 | 7.0 | 0.9 | 75.0% |
| Interventional Procedures | 9 | 7.8 | 0.8 | 77.1% |
| Overall (N = 48) | 26 | 71.5% | 3.6 | 43.8% |

Vascular Interventional Radiography

| Content Category | Potential CE | Mean Raw Score | Mean CE Assigned | No CE Assigned |
|-------------------------------------|--------------|----------------|------------------|----------------|
| Patient Care | | | | |
| Patient Interactions and Management | 4 | 7.8 | 0.2 | 84.5% |
| Image Production | | | | |
| Image Acquisition and Equipment | 5 | 7.4 | 0.6 | 73.9% |
| Procedures | | | | |
| Vascular Diagnostic Procedures | 7 | 7.3 | 0.8 | 75.8% |
| Vascular Interventional Procedures | 7 | 8.2 | 0.3 | 89.4% |
| Nonvascular Procedures | 6 | 7.6 | 0.5 | 78.0% |
| Overall (N = 264) | 29 | 76.8% | 2.5 | 43.2% |



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 | 95.6% |
| Image Production | | | | |
| Basic Principles of Ultrasound | 7 | 6.2 | 2.0 | 48.5% |
| Image Formation | 6 | 7.2 | 0.8 | 70.6% |
| Evaluation and Selection of Representative Images | 6 | 7.4 | 0.6 | 76.5% |
| Procedures | | | | |
| Anatomy and Physiology | 3 | 7.3 | 0.4 | 67.6% |
| Pathology | 6 | 7.9 | 0.3 | 86.8% |
| Breast Interventions | 3 | 8.6 | 0.0 | 98.5% |
| Overall (N = 68) | 34 | 76.1% | 4.1 | 22.1% |

Radiologist Assistant

| Content Category | Potential CE | Mean Raw Score | Mean CE Assigned | No CE Assigned |
|---|--------------|----------------|------------------|----------------|
| Patient Care | | | | |
| Patient Management | 9 | 8.2 | 0.5 | 88.0% |
| Pharmacology | 4 | 6.6 | 0.9 | 48.0% |
| Safety | | | | |
| Patient Safety, Radiation Protection, and Equipment Operation | 7 | 5.7 | 2.4 | 36.0% |
| Procedures | | | | |
| Abdominal | 10 | 7.7 | 1.6 | 72.0% |
| Thoracic | 6 | 7.8 | 0.2 | 84.0% |
| Musculoskeletal and Endocrine | 6 | 6.3 | 1.4 | 36.0% |
| Neurological, Vascular, and Lymphatic | 6 | 6.1 | 1.7 | 44.0% |
| Overall (N = 25) | 48 | 69.1% | 8.8 | 4.0% |

