



Practice Analysis Report: Computed Tomography - Effective September 2026

Introduction

The ARRT establishes the job relatedness of an examination via a practice analysis (also called a job analysis). Practice analyses document the role to be credentialed, the topics to be covered by the examination used in the credentialing decision, as well as the degree of emphasis that each topic receives. The rationale for practice analyses is outlined in *The Standards for Educational and Psychological Testing* (American Educational Research Association, American Psychological Association, National Council on Measurement in Education, 2014) and in the National Commission for Certifying Agencies (NCCA) *Standards for the Accreditation of Certification Programs* (NCCA, 2021). Legislation and legal precedent also stress the importance of practice analysis in the development and validation of certification exams. The ARRT conducts a practice analysis for each discipline approximately every five years. Regular updates are important for professions that continually evolve due to advances in technology because they help ensure that the content specifications and other certification requirements reflect current practice.

This report describes the practice analysis for Computed Tomography (CT) conducted from November 2023 to April 2025. The project sought to identify tasks currently required by the typical CT technologist and to determine what knowledge and cognitive skills are required to effectively perform those tasks.

To accomplish this task, ARRT hosted several meetings with a committee of subject matter experts (SMEs) to develop a survey of job tasks; evaluate survey results; and revise the content specifications, content outline, and clinical experience requirements. ARRT selected seven SMEs for this committee from across the United States and from a range of practice settings (e.g., hospitals, clinics, educational programs). These SMEs represented a range of expertise including six certified and registered technologists and one radiologist.

All statistical analyses were performed by trained statisticians employed by ARRT and meetings were primarily conducted by ARRT's Assessment Development Coordinators with psychometric support provided by ARRT psychometric staff.

The ARRT Board of Trustees reviewed all changes to exam content and eligibility requirements before giving approval in July 2025. The first exam under the new content and eligibility requirements was administered in September 2026.



Task Inventory

Survey Development

ARRT begins the practice analysis process by revising the task inventory, which is a listing of clinical and supporting procedures related to practice. The committee reviewed the previous task inventory and content outline before creating an updated list of job tasks by adding, deleting, or rewording tasks as necessary to reflect changes in the profession.

The committee used the updated job task list to create a survey for distribution to individuals working in the profession. The first section of this survey consisted of 113 tasks asking current CT technologists how frequently they perform each task utilizing a six-point scale with the following options: *Never Perform*, *Yearly*, *Quarterly*, *Monthly*, *Weekly*, and *Daily*. Based on past research, ARRT uses a frequency scale with absolute anchors because data from scales like importance and criticality, which use subjective anchors, have inferior statistical properties (Babcock, Risk, & Wyse 2020). The data gathered by absolute anchor frequency scales also correspond well to medical imaging practice as defined by external data sources (Babcock & Yoes, 2013) and add value beyond advisory committee members' judgement without data (Wyse & Babcock, 2018).

To reduce the length and burden of the practice analysis survey, the committee identified tasks from the previous task inventory that they believed were so ubiquitous in practice that over 90% of respondents would report that they do perform the task. The following tasks were omitted from the survey and included in the new task inventory without further discussion:

- Remove radiopaque materials (e.g., dentures, clothing, jewelry) and radiosensitive devices from the exposure field that could interfere with the image.
- Determine if the patient is at risk for an adverse reaction prior to the administration of a contrast media.
- Use aseptic or sterile technique when indicated.
- Document required information (e.g., imaging examination, IV administration, contrast extravasation) in the patient's medical information system (e.g., EMR, HIS, RIS).
- Clean, disinfect, and/or sterilize facilities and equipment.
- Advocate for radiation safety and protection.
- Visually inspect equipment (e.g., cable, cords, table, accessories, straps) and take appropriate action, if needed.
- Use image display functions (e.g., magnification, windowing, annotation).
- Use image evaluation tools (e.g., distance measurement, ROI).
- Transfer, retrieve, or delete images to/from data storage (e.g., PACS/MIMPS, EMR).

The second section of the survey included 19 questions regarding the respondent's role and workplace such as hours worked, primary job title, and department composition.

Survey Sample

ARRT staff randomly selected individuals from the ARRT database who met the following eligibility criteria:

- Listed CT as their primary discipline
- Worked as a technologist
- Were not deceased or retired



- Had no adverse action flags (e.g., ethics flags)
- Were not restricted, sanctioned, or on probation
- Were not listed as “no contact”
- Held a current ARRT credential in any discipline
- Had a valid address in a U.S. state or Washington, D.C.

The sample was stratified by certification status and years of experience. The final sample included 4,000 CT technologists. Table 1 details the total number of technologists sampled in each category.

Table 1. Technologists sampled.

Certification?	Experience	Number of Technologists Sampled
Yes	0-5 years	1,700
No	0-5 years	800
Yes	6-10 years	1,000
No	6-10 years	500

ARRT distributed 4,000 surveys by mail and 4,000 by email. Of the mailed surveys, 572 were returned, yielding a 14.3% return rate. Of the emailed surveys, 474 responses were received, yielding an 11.9% return rate.

The 1,046 returned surveys were reviewed for data quality. Records were removed for the following reasons: no longer practicing in CT (n = 32), incorrect responses to both attention-check items (items 15 and 80; n = 1), practicing CT 16 hours or fewer per week (n = 32), missing data (n = 115), and duplicate responses from technologists who completed both the mail and email surveys (n = 26). The final data set included 824 technologists.

Analysis

ARRT psychometric staff first calculated the percentage of respondents who report performing the task and the percent who report performing the task daily or weekly (Table 2). ARRT allows tasks performed by 40% or more of respondents to be included on the task inventory without further discussion so that committees may focus on discussions most likely to impact task inclusion. However, committees still review all survey results and may choose to include tasks below the threshold or reject tasks above the threshold as they see fit based on their joint expertise.

Tables 3 through 20 present results for the non-task survey items. Percentages may not total 100% because some items had a small number of blank responses, and some allowed respondents to select more than one option.

Two additional analyses were conducted for this study. First, because remote CT scanning was a new survey item and a common topic across many disciplines, we examined who performed remote CT scans, where they are performed, and how often they occur. Table 21 presents these results. Second, we examined whether responses differed between technologists working in hospitals with 250 or fewer beds and those working in hospitals with more than 250 beds. Table 22 presents these results.



Table 2
Percent of technologists performing tasks

Item	Task	Performing	Daily/Weekly
1	Verify that informed consent is obtained, as necessary.	91.2%	84.10%
2	Verify a time-out is performed, as necessary.	74.0%	62.10%
3	Recognize abnormal or missing lab values (e.g., eGFR, creatinine, hCG) relative to the examination ordered.	99.6%	99.10%
4	Communicate relevant information (e.g., allergies, patient condition, abnormal lab results, radiation dose) with appropriate members of the care team.	99.9%	99.30%
5	Use proper body mechanics, ergonomic devices, and/or patient transfer devices to promote patient and personnel safety.	99.9%	98.80%
6	Use positioning aids (e.g., knee cushion, pillows, straps), as needed, to enhance the examination and promote patient comfort and/or safety.	100.0%	99.40%
7	Review pertinent patient clinical information prior to the administration of a medication other than a contrast media:		
	a. lidocaine	38.5%	31.0%
	b. glucagon	15.8%	11.1%
	c. metoprolol	31.2%	25.4%
	d. nitroglycerin	31.5%	23.7%
	e. thrombolytics	18.3%	14.0%
8	Recognize normal and abnormal effects of a medication other than a contrast agent.	58.1%	42.2%
9	Determine if the patient's central line is power injectable prior to the administration of a contrast media.	91.8%	72.9%
10	Perform advanced vascular access and/or de-access:		
	a. port access	20.4%	13.2%
	b. port de-access	16.9%	11.1%
	c. ultrasound-guided venipuncture and IV placement	22.3%	15.7%
11	Use power injector:		
	a. syringeless	32.2%	26.9%
	b. dual head	93.8%	90.1%
	c. single head	52.3%	45.6%
12	Perform venipuncture.	90.2%	77.6%
13	Select appropriate protocol (e.g., FOV, type of acquisition, imaging parameters).	99.4%	98.5%
14	Modify imaging parameters to compensate for patient conditions or artifacts (e.g., patient motion, metal artifact, pathology).	99.4%	96.6%
16	Take appropriate precautions to minimize radiation exposure to the patient.	99.9%	98.8%
17	Use a scanning technique to ensure peak IV contrast enhancement:		



Item	Task	Performing	Daily/Weekly
	a. timing bolus	93.2%	89.9%
	b. bolus tracking	97.7%	96.8%
	c. scan delay	99.4%	97.8%
18	Use direct patient monitoring during contrast injection, when possible.	98.7%	97.6%
19	Obtain vital signs (e.g., pulse, blood pressure), when appropriate.	67.9%	37.9%
20	Recognize abnormal ECG patterns.	41.8%	27.8%
21	Monitor patient sedation (e.g., oral, IV, general anesthesia), when appropriate.	21.7%	12.8%
22	Recognize the need for and administer emergency care (e.g., call a code, initiate CPR, retrieve crash cart).	94.9%	37.7%
23	Handle, label, and submit laboratory specimens (e.g., biopsy tissue).	49.0%	30.4%
24	Notify appropriate personnel of adverse events or incidents (e.g., patient fall, contrast reaction, scanning errors).	99.5%	49.8%
25	Initiate the process for reporting adverse events (e.g., incorrect patient or body part scanned), as needed.	89.5%	36.4%
26	Respond appropriately to radiation dose alert or dose notification.	85.8%	50.9%
27	Verify radiation dose documentation.	85.2%	67.0%
28	Perform sequential scanning techniques (e.g., step-and-shoot).	54.8%	38.6%
29	Participate in remote CT scan (e.g., perform from off-site).	3.9%	2.4%
30	Use advanced energy acquisition:		
	a. spectral CT	13.6%	11.0%
	b. photon-counting CT	6.8%	4.9%
	c. dual source	31.9%	27.8%
	d. dual energy	38.9%	32.3%
31	Assess images (e.g., anatomy, artifacts) to determine successful completion of the examination.	99.9%	99.0%
32	Perform retrospective reconstruction (e.g., MIP, MPR).	99.6%	97.6%
33	Perform advanced image postprocessing (e.g., VR, SSD, 3D).	88.9%	77.3%
34	Create iodine map.	12.3%	8.2%
35	Perform and document the results of QC tests.	89.6%	68.9%
36	Evaluate the results of QC tests.	68.2%	49.9%
37	Gather high quality images and documentation for accreditation.	57.3%	26.5%
Perform the following scans with specific protocols for:			
<u>HEAD</u>			
38	head	96.6%	48.4%
39	trauma head	97.6%	52.9%
40	temporal bones (IACs)	53.1%	15.3%



Item	Task	Performing	Daily/Weekly
41	orbits	99.0%	92.3%
42	dedicated mandible	86.5%	38.0%
43	CTA head	98.3%	78.8%
44	CTV head	98.8%	88.5%
45	sinuses	62.7%	15.5%
46	maxillofacial	58.9%	40.8%
47	temporomandibular joints (TMJs)	96.6%	48.4%
48	brain perfusion	97.6%	52.9%
<u>NECK</u>			
49	soft tissue neck	99.9%	92.6%
50	CTA neck	99.3%	92.8%
51	CTV neck	58.9%	25.1%
<u>SPINE</u>			
52	cervical	99.8%	97.4%
53	thoracic	99.8%	83.1%
54	lumbosacral	99.2%	89.7%
55	post myelography	63.8%	23.9%
56	spinal trauma	89.8%	74.2%
<u>CHEST</u>			
57	chest	100.0%	98.7%
58	chest trauma	91.1%	79.6%
59	CTA chest	99.8%	94.9%
60	CTA for aortic dissection	70.2%	
61	CTV chest (SVC, pulmonary vein)	71.3%	39.0%
62	coronary artery calcium scoring	67.7%	51.4%
63	aortic valve calcium scoring	34.0%	19.9%
64	prospective gated studies	56.1%	39.7%
65	retrospective gated studies	47.9%	33.9%
66	coronary artery angiogram	56.4%	42.3%
67	physiologic cardiac studies (e.g., FFR, coronary plaque analysis, coronary perfusion)	23.4%	14.9%
68	pulmonary embolus (PE) study	99.8%	95.4%
69	lung nodule study	89.6%	77.2%
70	low-dose lung screening	86.4%	69.4%
71	high-resolution computed tomography (HRCT, ILD)	88.4%	55.9%
72	transcatheter aortic valve replacement (TAVR)	42.9%	25.0%
73	transcatheter mitral valve replacement (TMVR)	20.7%	8.6%



Item	Task	Performing	Daily/Weekly
74	breast	6.9%	2.6%
75	esophagram	44.2%	8.2%
<u>ABDOMEN / PELVIS</u>			
76	abdomen	100.0%	99.0%
77	abdomen trauma	91.3%	79.5%
78	multiphase liver	94.0%	58.6%
79	enterography study	81.1%	32.1%
81	multiphase pancreas	88.8%	40.0%
82	multiphase adrenals	87.7%	30.5%
83	multiphase kidneys	90.5%	51.2%
84	urogram/IVU	89.8%	59.2%
85	renal stone protocol	99.8%	97.6%
86	appendicitis study	89.1%	77.3%
87	CT colonography	37.9%	10.9%
88	CTA abdomen	98.4%	79.6%
89	CTV abdomen (IVC, DVT)	69.8%	36.0%
90	pelvis	99.8%	90.5%
91	pelvis trauma	91.1%	75.3%
92	dedicated delay bladder	77.0%	43.0%
93	cystogram (retrograde)	68.4%	15.5%
94	CTA pelvis	83.6%	53.7%
95	CTV pelvis (e.g., May-Thurner, DVT)	49.1%	18.5%
96	rectal contrast	72.2%	9.3%
<u>MUSCULOSKELETAL</u>			
97	upper extremity	99.6%	69.3%
98	lower extremity	99.8%	77.5%
99	arthrography	51.8%	13.9%
100	shoulder	98.9%	59.9%
101	bony pelvis	98.8%	74.6%
102	hips	97.2%	72.2%
103	CTA run-off	97.4%	64.0%
104	CTA extremity	94.9%	41.1%
105	CTV extremity (e.g., DVT)	62.5%	20.5%
106	whole body CT (e.g., low-dose skeletal survey)	17.8%	5.2%
Perform the following procedures with specific protocols for:			
107	biopsy	55.1%	37.0%



Item	Task	Performing	Daily/Weekly
108	drainage	53.1%	33.9%
109	aspiration	49.6%	28.8%
110	ablation (e.g., cryo, thermal, microwave, alcohol)	30.0%	10.4%
111	pain injection	24.4%	8.5%
Perform the following with specific protocols for:			
112	portable CT	6.7%	3.5%
113	surgical planning		
	a. musculoskeletal	69.2%	46.8%
	b. craniofacial	62.3%	39.9%
	c. cardiac	45.1%	29.5%



Table 3

How many years have you worked as a CT technologist?

Response	Count	Percentage
Less than 1 year	33	4.0
1 - 3 years	207	25.1
4 - 5 years	218	26.5
6 - 10 years	297	36.0
More than 10 years	62	7.5

Table 4

On average, how many hours per week do you work in CT?

Response	Count	Percentage
Less than 16 hours	8	0.9
16 - 32 hours	145	17.6
33 - 40 hours	493	59.8
More than 40 hours	178	21.6

Table 5

How would you describe your typical work shift(s)? (Select all that apply)

Response	Count	Percentage
First	548	66.5
Second	332	40.3
Third	213	25.8
Weekend	292	35.4

Table 6

Which of the following best describes your primary place of employment?

Response	Count	Percentage
Academic/university hospital	58	0.7
For profit hospital	104	12.6
Not for profit hospital	222	26.9
Dedicated research facility	3	0.4
Government (military/VA) hospital	12	1.5
Outpatient imaging center	82	10.0
Physician's office or clinic	8	1.0
Mobile unit	1	0.1
Remote	0	0.0
Free-standing emergency clinic or urgent care	27	3.3
Other	15	1.8



Table 7

If you work in a hospital, what is the approximate size (number of beds)?

Response	Count	Percentage
Fewer than 50	94	11.4
50-100	68	8.3
101-250	168	20.4
251-500	143	17.4
Not Applicable	125	15.2

Table 8

How many CT scanners are in your facility (excluding PET/CT and Radiation Therapy)?

Response	Count	Percentage
1	248	30.1
2	243	29.5
3	144	17.5
4 or more	180	21.8

Table 9

How many CT technologists are staffed at your primary place of employment (include yourself)?

Response	Count	Percentage
Less than 3	80	9.7
3-5	105	12.7
6-10	248	30.1
11-15	177	21.5
More than 15	205	24.9

Table 10

In the last year, has the number of assistants/aids in your facility/department changed?

Response	Count	Percentage
Increased	206	25.0
Decreased	152	18.4
No change	203	24.6
Not applicable	256	31.1

Table 11

In the last year, has the number of full-time CT technologist positions at your facility/department changed?

Response	Count	Percentage
Increased	243	29.5
Decreased	188	22.8
No Change	336	40.8
Unsure	49	5.9



Table 12

In the last year, has the number of CT technologists at your facility/department changed, excluding contract employees?

Response	Count	Percentage
Increased	228	27.7
Decreased	269	32.6
No change	318	38.6

Table 13

What lab value(s) do you use to evaluate renal function? (Select all that apply)

Response	Count	Percentage
eGFR	766	93.0
Creatinine	603	73.2
BUN	119	14.4
Other	7	0.8

Table 14

How do you determine when to modify preset protocols? (Select all that apply)

Response	Count	Percentage
When directed by senior staff	243	29.5
Independently, as required by particular cases	407	49.4
In consultation with a radiologist or other provider, based on clinical indications	592	71.8
I do not change the preset protocols	97	11.8

Table 15

What type of training or education did you have specific to CT prior to certification? (Select all that apply)

Response	Count	Percentage
Informal, on the job training	482	58.5
Structured on the job training, including didactic and supervised clinical instruction	350	42.5
Formal coursework provided by a college or university	250	30.3
Self-guided learning (e.g., online, ASRT, journal and textbook reading, etc.)	395	47.9
Seminar/conference (e.g., ASRT, MTMI, state society)	24	2.9
Other	13	1.6

Table 16

What type of continuing training or education do you use specific to CT? (Select all that apply)

Response	Count	Percentage
Informal, on the job training	344	41.7
Structured on the job training	150	18.2
Formal coursework provided by a college or university	39	4.7
Self-guided learning (e.g., online, ASRT, journal and textbook	657	79.7



reading, etc.)		
Vendor-supported training	166	20.1
Seminar/conference (e.g., ASRT, MTMI, state society)	24	2.9
Other	13	1.6

Table 17

I would like to get future surveys like this through the mail:

Response	Count	Percentage
Strongly Agree	86	10.4
Agree	163	19.8
Neither Agree nor Disagree	327	39.7
Disagree	117	14.2
Strongly Disagree	118	14.3

Table 18

I would like to get future surveys like this through email:

Response	Count	Percentage
Strongly Agree	128	15.5
Agree	187	22.7
Neither Agree nor Disagree	286	34.7
Disagree	123	14.9
Strongly Disagree	90	10.9

Table 19

What certifications do you currently hold? (Select all that apply)

Response	Count	Percentage
R.T.(R)	751	91.1
R.T.(N)	6	0.7
CNMT	4	0.5
R.T.(CT)	670	81.3
R.T.(T)	5	0.6
NMTCT(CT)	1	0.1



Table 20

How long did this survey take to complete?

Response	Count	Percentage
Less than 10 minutes	128	15.5
10-19 minutes	429	52.1
20-29 minutes	198	24.0
30-39 minutes	44	5.3
40-49 minutes	7	0.8
50-59 minutes	3	0.4
60 minutes or more	5	0.6

This analysis focuses on remote CT scanning, including technologists' training, on-the-job experience, work setting, and facility size. As shown in Table 3, 3.9% ($n = 20$) of respondents reported performing remote CT scanning, and 2.6% reported doing so frequently. Figure 1 shows the bed count for facilities where respondents reported performing remote CT scanning. Because these results are based on only 20 respondents, they should be interpreted with caution.

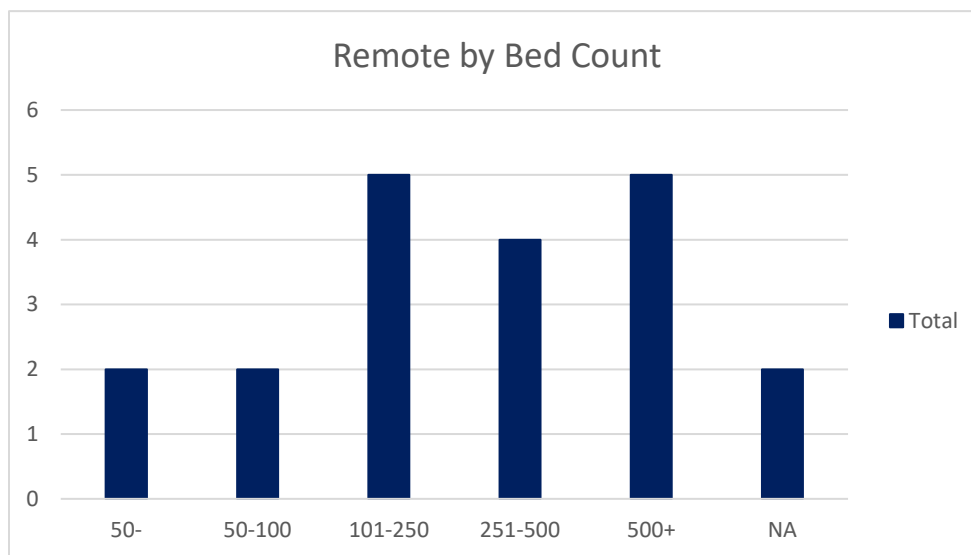


Figure 1. Remote CT scanning by size of facility.

Figure 2 shows the impact of experience among technologists who reported performing remote scanning ($n = 20$). The results indicate a clear preference for more experienced technologists, with participation increasing as experience grows and appearing to level off after approximately 10 years. Notably, no respondents with less than one year of experience reported performing remote CT scanning.



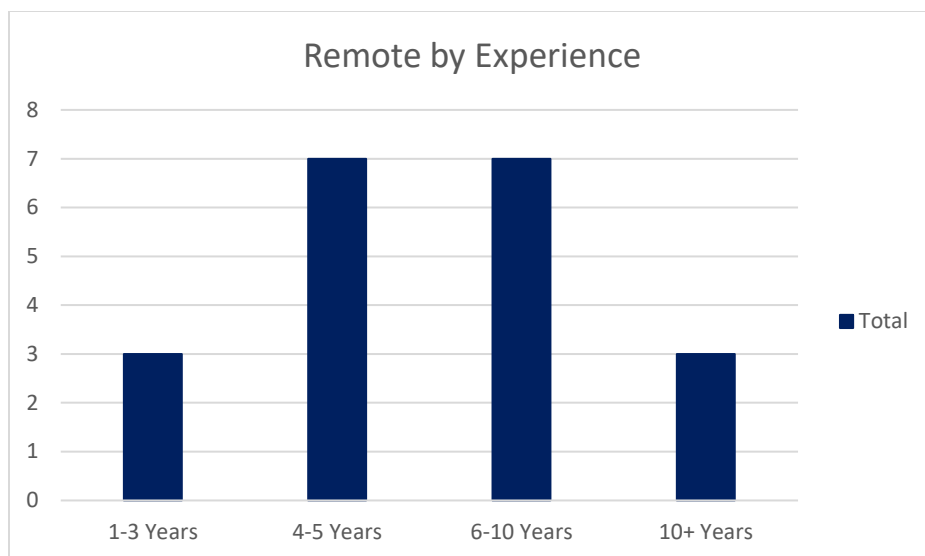


Figure 2. Remote CT scanning by experience.

Table 21 shows the credential strings for every respondent indicating remote scanning in any location on the survey.

Table 21. Credential strings for R.T.s performing remote CT scanning

Credential String	Percent (n = 23)
NONE	4.35%
R.T.(R)(ARRT)	4.35%
R.T.(R)(CT)(ARRT)	73.91%
R.T.(R)(CV)(M)(CT)(BD)(ARRT)	4.35%
R.T.(R)(M)(CT)(ARRT)	4.35%
R.T.(R)(MR)(CT)(ARRT)	4.35%
R.T.(R)(T)(CT)(ARRT)	4.35%

Table 22 shows that CT technologists have significantly different tasks varying by the size of the facility at which they work.

Table 22

Percent performing tasks that work in hospitals with more or fewer than 250 beds (excludes those responding with "Not Applicable")

Survey Item	Task	250 or fewer beds	251 or more beds
7a	Review info. prior to admin. of lidocaine	36.4%	49.3%
7c	Review info. prior to admin. of metoprolol	21.7%	42.7%
7d	Review info. prior to admin. of nitroglycerin	19.8%	42.0%
11a	Use power injector: syringeless	33.1%	41.8%
20	Recognize abnormal ECG patterns	34.5%	46.9%
30c	Use advanced energy acquisition: dual source	19.7%	45.0%
30d	Use advanced energy acquisition: dual energy	22.0%	61.0%



48	HEAD: brain perfusion	41.3%	85.3%
55	SPINE: post myelography	56.2%	81.8%
62	CHEST: coronary artery calcium scoring	56.2%	79.0%
63	CHEST: aortic valve calcium scoring	25.6%	49.0%
64	CHEST: prospective gated studies	45.5%	72.5%
65	CHEST: retrospective gated studies	35.5%	60.6%
66	CHEST: coronary artery angiogram	51.2%	72.0%
67	CHEST: physiologic cardiac studies	14.9%	35.9%
72	CHEST: transcatheter aortic valve replacement	24.8%	67.6%
73	CHEST: transcatheter mitral valve replacement	11.6%	36.4%
75	CHEST: esophagram	35.0%	60.1%
87	ABDOMEN/PELVIS: CT colonography	31.7%	46.9%
93	ABDOMEN/PELVIS: cystogram (retrograde)	52.9%	90.8%
96	ABDOMEN/PELVIS: rectal contrast	57.9%	90.2%
105	MUSCULOSKELETAL: CTV extremity	48.8%	68.8%
107	MUSCULOSKELETAL: biopsy	47.1%	68.5%
108	MUSCULOSKELETAL: drainage	45.5%	67.8%
109	MUSCULOSKELETAL: aspiration	40.5%	66.4%
110	MUSCULOSKELETAL: ablation	13.3%	44.8%
111	MUSCULOSKELETAL: pain injection	9.9%	28.7%
113c	MUSCULOSKELETAL: surgical plan. cardiac	33.9%	62.0%

Note: Results are presented for committee consideration if differences are statistically significant (i.e., Chi-square $p < .01$); if values were on either side of the 40% threshold; or if the difference in percent performing is greater than 20 percentage points.

Task Inventory

The practice analysis committee met in September 2024 to review the practice analysis survey data and determine whether any tasks should be dropped from or added to the task inventory. The committee also clarified the wording of several tasks.

The Board of Trustees approved the final task inventory in January 2025. The final task inventory may be found on the ARRT website: <https://www.arrt.org/pages/arrt-reference-documents/by-document-type/task-inventories>



Content Specifications and Clinical Experience Requirements

Content Specifications

The practice analysis committee updated the content specifications based on changes to the task inventory and the field. The committee considered the knowledge and cognitive skills required to successfully perform the tasks in the final task inventory and verified that those topics were covered in the content specifications, adding additional content as necessary. The committee also removed any topics that could not be linked to the updated task inventory.

The updated content specifications were then made available for public comment in February 2025 and the committee met again in April 2025 to discuss the comments before making any final adjustments.

In addition, the committee edited all sections of the content specifications for clarity and updated terminology to reflect current practice.

The Board of Trustees approved the final content specifications in July 2025. The final content specifications may be found on the ARRT website: <https://www.arrt.org/pages/arrt-reference-documents/by-document-type/examination-content-specifications>

Content Weighting

The practice analysis committee determined the number of items that should be assigned to each section of the exam through a process known as content weighting. First, the committee performed a bottom-up exercise where members individually estimated the number of unique items that should be included in each section. Second, the committee performed a top-down exercise where members individually estimated the relative proportion of the exam that should be dedicated to each section. Finally, ARRT staff provided the committee with summary values from the two exercises and the committee held a discussion to finalize their recommendation for the number of items assigned to each section (Table 23).

Table 23
Number of Items per Section

Content Area	Number of Scored Items
Patient Care	21
Patient Interactions and Management (21)	
Safety	21
Radiation Safety and Dose (21)	
Image Production	52
Image Formation (30)	
Image Evaluation and Archiving (22)	
Procedures	71
Head, Spine, and Musculoskeletal (25)	
Neck and Chest (22)	
Abdomen and Pelvis (24)	
Grand Total	165



Clinical Experience Requirements

ARRT created clinical experience requirements to verify that candidates have completed a subset of clinical procedures within a modality. Successful performance of these fundamental procedures, in combination with mastery of the cognitive knowledge and skills covered by the certification examination, provides the basis for the acquisition of the full range of clinical skills required in a variety of settings.

The practice analysis committee reviewed and updated the previous clinical experience requirements considering the final task inventory and content specifications. The updated clinical experience requirements were then made available for public comment in February 2025 and the committee met again in April 2025 to discuss the comments before making any final adjustments.

The Board of Trustees approved the final clinical requirements in July 2025. The final clinical experience requirements may be found on the ARRT website: [Clinical Experience Requirements - ARRT](#).

Conclusion

Numerous individuals contributed to this project, as committee members, document reviewers, or as survey respondents. Periodic practice analysis is a necessary step in the life cycle of an exam program to ensure that the content of the exam and the eligibility requirements remain relevant with current practice. This study noted significant changes to the field of Computed Tomography, and thanks to the efforts of all involved it assures that the ARRT Computed Tomography exam program will continue to be an excellent assessment of Computed Tomographer wishing to demonstrate their qualifications by seeking certification and registration.

