

# DACUM Research Chart for Radiologic Technology

Produced for:

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### General Knowledge, Skills & Abilities

### Tools, Equipment, Materials and Supplies

- Coding/charting (CPT)
- Computer and software
- CPR/AED
- Critical thinking
- Filing
- Film critique
- HIPAA Guidelines
- Human anatomy & physiology
- Interpersonal communication
- Knowledge of hospital and departments
- Listening skills
- Medical Terminology
- MSDS guidelines
- Multi-tasking
- OSHA regulations
- Personal contact with patients
- Phone skills
- Proper body mechanics
- Set-up films
- Start IV
- Sterile technique
- Troubleshooting
- Understand lab values
- Universal precautions
- Vital signs
- Written communication

- AED
- Bio-hazard container
- BP cuff
- Breslow cart
- Cardiac monitors
- C-Arm
- Chemicals
- Computers
- Contrast media
- CPT
- Crash-cart
- Digital film
- Digitizer
- Disinfectants (wipes, sprays)
- Eye-wash station
- Films/Cassettes
- Filters
- Grid
- ID Flasher
- Immobilization devices
- IV materials
- Linens
- O2 tanks
- O-arm
- PACS
- Portables
- Positioning aides
- PPE
- Processors
- Reference materials
- Screen cleaners
- Sharps container
- Shielding devices
- Sterile instruments
- Stethoscope
- Suction
- Transportation devices
- Video equipment

### Worker Behaviors

- Accept criticism
- Accountability
- Accurate
- Adaptable to circumstances
- Calm
- Cleanliness
- Dependable
- Detail oriented
- Empathetic
- Ethical
- 'Hands on' care
- Interpersonal communication
- Kind
- Organized
- Patient
- Personal hygiene
- Poise
- Professional appearance
- Punctual
- Responsible
- Soft touch
- Stress management
- Teachers & learners
- Team player/worker
- Tolerance
- Written communication

### Future Trends and Concerns

- Changes in government regulations (c)
- Changes in insurance policies (c)
- Dealing with geriatric patients (t)
- Dose monitoring (c)
- DR vs Ct (c)
- Equipment Update (t)
- Expense of new equipment and technology (t & c)
- Increase in retirement age (t)
- Independent medical facilities (t)
- Intergenerational communications (c)
- Language barrier (c)
- Market saturation (t)
- Mergers and acquisitions (t)
- 'Other duties as assigned' (t)
- Radiation risks (c)
- Recertification for future workers (t)
- Technology vs dose increase (c)
- Wages (c)

### Acronyms

- Aut - Automatic resuscitator
- ARRT - American Registry of Radiologic Technologists
- BLS - Basic Life Support
- CEU - Continuing Education Units
- CPT - Current Procedural Technology
- ENR - Electronic Medical Records
- HIPAA - Health Insurance Portability and Accountability Act
- JCAHO - Joint Commission on Accreditation of Healthcare Organizations
- LRT - Limited Radiology Technicians
- MSDS - Material Safety Data Sheets
- NPO - Nothing per oral (Latin: nil per os)
- OR - Operating Room
- OSHA - Occupational Safety Hazard Act
- PACS - Picture Archival Computer System
- PASS - Pull aim squeeze sweep
- PPE - Personal Protective Equipment
- PREP - Preparation
- RA - Radiologist Assistant
- RIS - Radiologic Information System

# DACUM Research Chart Radiologic Technology

Duties		TASKS															
<b>A</b>	MAINTAIN PATIENT INFORMATION		A1 DOCUMENT RADIOLOGIC DATA IN MEDICAL RECORDS	A2 PROTECT PATIENT PRIVACY (i.e. HIPAA)	A3 PURGE OUTDATED RADIOLOGIC RECORDS	A4 MANAGE IMAGE STORAGE (i.e. PACS, FILM)		A5 UTILIZE INFORMATION SYSTEMS (i.e. RIS)	A6 ASSESS MEDICAL INSURANCE								
<b>B</b>	OBTAIN PATIENT EXAM INFORMATION		B1 PROCURE EXAM REQUISITION	B2 COMPARE PHYSICIAN ORDER WITH REQUISITION	B3 VERIFY PATIENT IDENTIFICATION	B4 ACQUIRE CLINICAL INDICATION OR CONTRAINDICATION		B5 CONFIRM ORDERED EXAM WITH PATIENT	B6 VALIDATE PATIENT PREP								
<b>C</b>	CONDUCT RADIOGRAPHIC PROCEDURES		C1 PRODUCE OPTIMAL RADIOLOGIC IMAGES	C2 PERFORM GENERAL RADIOGRAPHIC EXAMS	C3 ASSIST FLUOROSCOPIC EXAMS	C4 COMPLETE PORTABLE EXAMS		C5 OPERATE RADIOLOGY EQUIPMENT	C6 PERFORM TRAUMA EXAMS	C7 CONDUCT CONTRAST STUDIES							
<b>D</b>	INTEGRATE PATIENT CARE		D1 RESPECT PATIENT	D2 PROMOTE PATIENT SAFETY	D3 RESPOND TO PATIENT NEEDS	D4 INTERACT WITH HEALTH PROFESSIONALS		D5 UPDATE PATIENT STATUS	D6 FOLLOW CODE OF ETHICS								
<b>E</b>	ENSURE RADIATION PROTECTION		E1 WEAR RADIATION MONITORING DEVICE	E2 UTILIZE SHIELDING DEVICES	E3 PERFORM REPEAT ANALYSIS	E4 APPLY ALARA PRINCIPLES		E5 MAINTAIN SHIELDING DEVICES	E6 CONDUCT QUALITY ASSURANCE (i.e. QUALITY CONTROL)								
<b>F</b>	CAPTURE PATIENT IMAGES		F1 IDENTIFY EXAM PROTOCOL	F2 SET UP EXAM ROOM	F3 EDUCATE PATIENT	F4 PREP PATIENT		F5 UTILIZE PATIENT SPECIFIC TECHNIQUES	F6 POSITION PATIENT AND MARKERS (i.e. RIGHT, LEFT, ETC.)	F7 SHIELD PATIENT	F8 INSTRUCT PATIENT	F9 PRODUCE RADIATION EXPOSURE	F10 PROCESS RADIOGRAPHIC IMAGE	F11 CRITIQUE RADIOGRAPHIC IMAGE	F12 DISMISS PATIENT	F13 FINALIZE PATIENT EXAM (i.e. IMAGES, PAPERWORK, ETC.)	F14 MAINTAIN ASEPTIC TECHNIQUE THROUGHOUT PROCEDURE
<b>G</b>	PERFORM CLERICAL RESPONSIBILITIES		G1 FOLLOW BILLING PROCEDURES	G2 ASSUME PHONE RESPONSIBILITIES	G3 SCHEDULE RADIOLOGY EXAMS	G4 COORDINATE STAFF SCHEDULES, (i.e. TECHS, RADS, ETC.)		G5 MANAGE IMAGE AND REPORT TRANSFER									
<b>H</b>	FOLLOW SAFETY GUIDELINES		H1 OBEY OSHA REGULATIONS	H2 MAINTAIN RADIOLOGY EQUIPMENT	H3 MONITOR SUPPLY EXPIRATION DATES	H4 FOLLOW UNIVERSAL PRECAUTIONS		H5 CARRY OUT FACILITY GUIDELINES	H6 OBSERVE MSDS INFORMATION								

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Duties		TASKS													
I	CONTINUE PROFESSIONAL DEVELOPMENT	11	12	13	14	15	16	17	18	19	19				
		ACQUIRE MANDATORY CEU'S	MAINTAIN CERTIFICATIONS, (i.e. ARRT, CPR, STATE, ETC.)	ATTEND STAFF MEETINGS	INCORPORATE NEW TECHNOLOGY	ADAPT TO NEW PROTOCOLS	JOIN PROFESSIONAL ORGANIZATIONS	NETWORK WITH COLLEAGUES	READ MEDICAL PUBLICATIONS	OBTAIN MULTIPLE REGISTRIES	PARTICIPATE IN ON-THE-JOB TRAINING				

What is DACUM (Developing A Curriculum)? DACUM is a relatively new and innovative approach to occupational analysis. It has proven to be a very effective method of quickly determining, at a relatively low cost, the competencies of tasks that must be performed by persons employed in a given job or occupational area.

The profile chart that results from the DACUM analysis is a detailed and graphic portrayal of the competencies involved in the occupation being studied. The DACUM analysis can be used for a variety of purposes: (1) curriculum development, (2) student learning, (3) Training needs assessments, (4) worker performance evaluations, (5) competency test development, (6) meeting ADA requirements, (7) ISO 9000 requirements, etc.

DACUM has been successfully used to analyze occupations at the professional, managerial, technical, skilled and semiskilled levels. DACUM operates on the following three premises: (1) expert workers are better able to describe/define their job than anyone else, (2) any job can be effectively and sufficiently described in terms of the tasks that successful workers in that occupation perform, and (3) all tasks have direct implications for the knowledge and skills, tools and equipment, and worker behaviors that workers must have in order to perform the tasks correctly.

A carefully chosen group of about 6-8 experts from the occupational area form the DACUM committee. Committee members are recruited directly from business, industry, or the profession. The committee meets with a guidance facilitator for two days to conduct the analysis. Modified small-group brainstorming techniques are used to obtain the collective expertise and consensus of the committee.

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