

DACUM Research Chart for Radiologic Technologist

DACUM Panel

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DACUM Research Chart for Radiologic Technologist

Duties		← Tasks →				
A	Prepare Department for Daily Operation	A-1 Obtain report from previous shift	A-2 Warm up x-ray equipment	A-3 Perform QC on film processor	A-4 Check crash/emergency cart	A-5 Post staff room assignments
		B-1 Check for staff absences	B-2 Compare staffing to patient schedule		B-3 Call in additional RTs	B-4 Change staff room assignments
C	Triage Workflow	C-1 Evaluate emergency room activities	C-2 Prioritize in-house patients	C-3 Check schedule for special exams	C-4 Review outpatient schedule	
D	Prepare for Diagnostic Exam	D-1 Verify physician orders	D-2 Generate exam order	D-3 Prepare room for patient	D-4 Verify patient with two forms of identification (e.g., DOB, name, physician name)	
E	Perform Diagnostic Exam	E-1 Select diagnostic equipment	E-2 Implement patient care (e.g., IV lines, catheters, sterile technique)		E-3 Select proper technical factors	E-4 Assist radiologist with specified exams*
		E-12 Perform head exams	E-13 Perform GI exams	E-14 Perform urinary tract exams	E-15 Perform special procedure exams	
F	Assess Image Quality (film/digital)	F-1 Verify patient identification on film (e.g., patient demographics)		F-2 Assess technical quality of image (e.g., artifacts, motion)		F-3 Evaluate anatomical positioning
G	Prepare Film/Image for Interpretation	G-1 Retrieve patient folder	G-2 Attach patient documentation (e.g., requisition, charge slip, prescription)		G-3 Complete exam documentation/initiate charge process	
		G-8 Discharge patient				
H	Participate in Professional Development	H-1 Maintain registry and licensure	H-2 Participate in competency assessment (e.g., low volume, high risk, age specific)		H-3 Participate in professional organizations	H-4 Network with colleagues
		H-10 Pursue advanced registry in other modalities (e.g., CT, MRI, Mammo, NM)		H-11 Enroll in college courses	H-12 Participate on inter and intra department committees	

*See the extensive list of Specific Diagnostic Exams that can be performed.

A-6 Review radiologist's schedule	A-7 Review patient's schedule	A-8 Review OR schedule	A-9 Bring films to OR	A-10 Maintain patient changing rooms	A-11 Stock x-ray rooms with supplies	A-12 Order supplies
C-5 Prioritize patient workflow (e.g., ER, OR, STAT, walk-ins)		C-6 Review OR schedule and add-ons	C-7 Determine radiologist availability	C-8 Adjust RT staffing per workflow	C-9 Respond to workflow interruptions (e.g., phones, equipment breakdowns)	
D-6 Observe patient condition for exam	D-7 Interview patient (e.g., history, allergy, pregnancy)		D-8 Explain procedure (obtain consent)	D-9 Maintain patient/RT safety (e.g., physical, radiation, universal precautions)		D-10 Maintain patient privacy/confidentiality
E-5 Position patient for exam	E-6 Perform chest exams	E-7 Perform upper extremity exams	E-8 Perform lower extremity exams	E-9 Perform abdomen exams	E-10 Perform spine exams	E-11 Perform pelvis exams
E-16 Respond to unexpected change in patient condition		E-17 Process exam film(s)				
F-4 Evaluate correct labeling of body parts	F-5 Decide whether to accept or reject image	F-6 Decide whether to discharge or hold patient				
G-4 Label patient folder	G-5 Combine current film with previous film		G-6 Check films with radiologist for concerns/results		G-7 Respond to radiologist requests (e.g., repeat exam or perform additional exam)	
H-5 Read professional literature	H-6 Attend seminars	H-7 Earn continuing education credits	H-8 Attend inservice training (e.g., mandatory, other)		H-9 Serve as preceptor (e.g., new staff, college students)	

General Knowledge and Skills

Communication skills: verbal, written, listening
Basic computer knowledge
Body mechanics
Interpersonal skills
Time management skills
Triage skills
Organizational skills
Customer service skills
Patient understanding
Second language skills
Confidentiality rules
Departmental procedures
Trouble-shooting skills

Medical terminology
Anatomy & physiology
Mechanical/technical ability
Problem solving skills
Radiation safety
Analytical skills
Patient positioning
Radiation physical
Pathology
Patient care skills
General office skills

Worker Behaviors

Compassion
Tactful
Diplomatic
Flexible
Dependable
Intelligent
Ethical
Persistent
Positive attitude
Efficient
Effective
Sense of humor
Creative

Professional appearance
Able to function in emergency situations
Non-prejudicial
Learns from mistakes
Work well with others
Able to multi-task
Conscientious
Adaptable
Exercise good judgment
Honest
Healthy life style

Tools, Equipment, Supplies and Materials

Barium
Needles
Emesis basins
Skeleton (hanging)
Linen: towels, washcloths, sheets, pillowcases, blankets, gowns
IV contrast: non-ionic/ionic
Lead aprons – half shields (for patients)
Reference books
Sharps container
Slide boards
Procedure trays: Myelogram, Arthrogram, Hystrosalpingogram, Lumbar puncture
Disinfectant
Privacy screens/curtains

Syringes
Tape
Pillows

View box
Lead aprons
Portable x-ray unit
C-arm unit
Pigg-o-stat
ID camera
Lead markers
Cassette holder
IV Pole
Stretcher
Wheelchair
Stepstool

Positioning sponges
Radiation monitoring devices:
- film badge
- pocket dosimeter
- T.L.D.
Grid
Cassettes
CR Reader
Office equipment
Office supplies
X-ray Phantom
Grid cassette

Diagnostic Radiographic/Fluoroscopic room

- Radiographic table
- Console
- Floating x-ray tube
- Upright buckey
- Fluoro-monitor

Dark Room

- Sensitometer
- Densitometer
- Film processor
- Processor chemicals: fixer, developer
- X-ray film
- Safelight (red light)

Future Trends and Concerns

Digital radiography
Continued shortage of staff
Computerized radiography
More formal education for radiological technologists
P.A.C.S
More x-ray equipment in physicians offices
Tele-radiography
Plain film digitizers
Reduced insurance coverage
Reduced insurance reimbursement
Increase in patient load
More computer knowledge
Increased cost of equipment and supplies
Increased cost of staffing
Older incoming staff (second career)

DACUM Research Chart for Radiologic Technologist

Acronyms

RT – Radiologic Technologist
P.A.C.S.-Patient Archiving Communication System
OR – Operating Room
ER -Emergency Room
ED – Emergency Department
IV – Intravenous
GI - Gastro-Intestinal
OP – Out Patient
NM – Nuclear Medicine
MRI – Magnetic Resonance Imaging
CT – Computed Tomography
PET – Position Emission Tomography
TLD - Thermo Lucent Dosimeter
CR - Computerized Radiography
Rad - Radiology
DR - Digital Radiography
US - Ultrasound
DICOM – Digital Information Communication in Medicine
AMB – Ambulatory
Str - Stretcher
WC – Wheelchair
QC – Quality Control
Mammo – Mammography
STAT - to do immediately
ASAP – As Soon As Possible

This is a list of the Specific Diagnostic Exams that can be performed under each of these body areas:

Chest Exams:

- Sternum
- Lungs
- Ribs

Abdomen Exams:

- KUB
- Alimentary canal

Upper Extremity:

- Finger
- Hand
- Wrist
- Forearm
- Humerus
- Shoulder
- AC joint
- SC joint
- Scapula
- Elbow
- Clavicle

Lower Extremity:

- Toe
- Knee
- Foot
- Femur
- Ankle
- Heel
- Tib-Fib

Spine

- Toe
- Knee
- Thoracic
- Lumbar
- Sacrum/coccyx

Pelvis

- Hip
- Pubic bones
- SI joints

Head work:

- Skull
- Sinus
- Mandible
- TM joints
- Nasal bones
- Orbits
- Facial bones
- Mastoids

GI Tract:

- Upper GI
- Small bowel follow thru
- Enterocolysis
- Barium enema
- Esophagram
- Video esophagram

Urinary Tract:

- IVP
- Cystogram
- Retrograde
- Urethrogram

Special Procedures:

- Myelogram
- Joint aspiration
- Sinogram
- Cholangiogram
- Bronchogram
- Arthrogram
- Hysterosalpingogram
- Loopogram
- Discogram
- Fistulogram
- Sialogram