



1002 E. Newport Center Drive, Suite 200, Deerfield Beach, FL 33442  
(954) 596-4977

### **Cardiovascular Technologists & Technicians Job Description**

Activate fluoroscope and camera to produce images used to guide catheter through cardiovascular system.

Adjust equipment and controls according to physicians' orders or established protocol.

Assess cardiac physiology and calculate valve areas from blood flow velocity measurements.

Assist physicians in diagnosis and treatment of cardiac and peripheral vascular treatments, for example, assisting with balloon angioplasties to treat blood vessel blockages.

Attach electrodes to the patients' chests, arms, and legs, connect electrodes to leads from the electrocardiogram (EKG) machine, and operate the EKG machine to obtain a reading.

Compare measurements of heart wall thickness and chamber sizes to standard norms to identify abnormalities.

Conduct electrocardiogram, phonocardiogram, echocardiogram, stress testing, and other cardiovascular tests to record patients' cardiac activity, using specialized electronic test equipment, recording devices, and laboratory instruments.

Enter factors such as amount and quality of radiation beam, and filming sequence, into computer.

Explain testing procedures to patient to obtain cooperation and reduce anxiety.

Monitor patients' comfort and safety during tests, alerting physicians to abnormalities or changes in patient responses.

Monitor patients' blood pressure and heart rate using electrocardiogram (EKG) equipment during diagnostic and therapeutic procedures in order to notify the physician if something appears wrong.

Observe gauges, recorder, and video screens of data analysis system during imaging of cardiovascular system.

Observe ultrasound display screen and listen to signals to record vascular information such as blood pressure, limb volume changes, oxygen saturation and cerebral circulation.

Operate diagnostic imaging equipment to produce contrast enhanced radiographs of heart and cardiovascular system.

Prepare and position patients for testing.

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Prepare reports of diagnostic procedures for interpretation by physician.

Check, test, and maintain cardiology equipment, making minor repairs when necessary, to ensure proper operation.

Conduct tests of pulmonary system, using spirometer and other respiratory testing equipment.

Inject contrast medium into patients' blood vessels.

Obtain and record patient identification, medical history and test results.

Reprogram pacemakers according to required standards.

Supervise and train other cardiology technologists and students.

**Required Knowledge:**

**Medicine and Dentistry** -- Knowledge of the information and techniques needed to diagnose and treat human injuries, diseases, and deformities. This includes symptoms, treatment alternatives, drug properties and interactions, and preventive health-care measures.

**Computers and Electronics** -- Knowledge of circuit boards, processors, chips, electronic equipment, and computer hardware and software, including applications and programming.

**Biology** -- Knowledge of plant and animal organisms, their tissues, cells, functions, interdependencies, and interactions with each other and the environment.

**Mathematics** -- Knowledge of arithmetic, algebra, geometry, calculus, statistics, and their applications.

**English Language** -- Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.

**Clerical** -- Knowledge of administrative and clerical procedures and systems such as word processing, managing files and records, stenography and transcription, designing forms, and other office procedures and terminology.

**Skills Required:**

**Operation and Control** -- Controlling operations of equipment or systems.

**Operation Monitoring** -- Watching gauges, dials, or other indicators to make sure a machine is working properly.

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**Science** -- Using scientific rules and methods to solve problems.

**Reading Comprehension** -- Understanding written sentences and paragraphs in work related documents.

**Mathematics** -- Using mathematics to solve problems.

**Speaking** -- Talking to others to convey information effectively.

**Writing** -- Communicating effectively in writing as appropriate for the needs of the audience.

**Active Listening** -- Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.

**Monitoring** -- Monitoring/Assessing performance of yourself, other individuals, or organizations to make improvements or take corrective action.

**Critical Thinking** -- Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.

**Abilities Required:**

**Written Comprehension** -- The ability to read and understand information and ideas presented in writing.

**Oral Comprehension** -- The ability to listen to and understand information and ideas presented through spoken words and sentences.

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**Oral Expression** -- The ability to communicate information and ideas in speaking so others will understand.

**Problem Sensitivity** -- The ability to tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing there is a problem.

**Near Vision** -- The ability to see details at close range (within a few feet of the observer).

**Information Ordering** -- The ability to arrange things or actions in a certain order or pattern

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according to a specific rule or set of rules (e.g., patterns of numbers, letters, words, pictures, mathematical operations).

**Job Activities:**

**Monitor Processes, Materials, or Surroundings** -- Monitoring and reviewing information from materials, events, or the environment, to detect or assess problems.

**Documenting/Recording Information** -- Entering, transcribing, recording, storing, or maintaining information in written or electronic/magnetic form.

**Identifying Objects, Actions, and Events** -- Identifying information by categorizing, estimating, recognizing differences or similarities, and detecting changes in circumstances or events.

**Assisting and Caring for Others** -- Providing personal assistance, medical attention, emotional support, or other personal care to others such as coworkers, customers, or patients.

**Communicating with Supervisors, Peers, or Subordinates** -- Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person.

**Updating and Using Relevant Knowledge** -- Keeping up-to-date technically and applying new knowledge to your job.

**Making Decisions and Solving Problems** -- Analyzing information and evaluating results to choose the best solution and solve problems.

**Interpreting the Meaning of Information for Others** -- Translating or explaining what information means and how it can be used.

**Processing Information** -- Compiling, coding, categorizing, calculating, tabulating, auditing, or verifying information or data.

**Getting Information** -- Observing, receiving, and otherwise obtaining information from all relevant sources.

Employee Signature \_\_\_\_\_ Date \_\_\_\_\_

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