

INVASIVE CARDIOVASCULAR SERIES

<u>Code No.</u>	<u>Class Title</u>	<u>Occ. Area</u>	<u>Work Area</u>	<u>Prob. Period</u>	<u>Effective Date</u>	<u>Last Action</u>
4005	Invasive Cardiovascular Technologist	02	447	6 mo.	08/01/20	New
4006	Invasive Cardiovascular Specialist	02	447	6 mo.	08/01/20	New
4007	Invasive Cardiovascular Manager	03	447	6 mo.	08/01/20	New

Promotional Line: 385

Series Narrative

Employees in positions allocated to this series operate, monitor, and maintain specialized radiographic equipment and supplies to assist physicians in performing invasive and non-invasive procedures for diagnosis, treatment, and/or research studies. They perform a variety of technical patient care tasks while adhering to government, industry, or institutional regulatory guidelines.

DESCRIPTION OF LEVELS OF WORK

Level I: Invasive Cardiovascular Technologist 4005

Employees in positions at this level operate, monitor, and maintain specialized radiographic equipment and supplies to assist physicians in performing invasive and non-invasive procedures involving the acquisition and processing of diagnostic and non-radiographic images. The Invasive Cardiovascular Technologist assists with the preparation of the patient(s) and a sterile procedure environment. They also monitor patient safety and comfort as well as navigate and maintain patient records. They work under direct supervision of higher-level personnel.

A(n) Invasive Cardiovascular Technologist typically:

1. interprets physicians' orders; screens patient(s) prior to a procedure;
2. assists with patient and procedure room preparation; positions and adjusts equipment according to the specifications of the procedure; performs equipment safety checks prior to testing;
3. explains components of procedures to patient(s); observes and monitors patient(s); advises the physician of any abnormal indicators;
4. assists physicians in performing invasive and non-invasive procedures on patient(s) to produce optimal diagnostic images, under supervision; maintains sterile fields during procedures;

5. determines the best method of obtaining optimal diagnostic images; selects and modifies technical factors and adjusts technique, as necessary; uses protective devices and techniques to minimize radiation exposure;
6. positions and transfers patient(s) on/off the radiographic table; provides immobilization devices or stabilizers to obtain optimum results, as necessary;
7. administers contrast media and/or medications, under supervision; seals and labels blood samples acquired during procedures;
8. assists with post-procedure clean-up; maintains and cleans all equipment;
9. selects, monitors, and operates various specialized diagnostic equipment and software; reports equipment and/or software issues;
10. reviews, labels, formats, and processes diagnostic images after capturing; ensures diagnostic images meet established standards.
11. utilizes health information systems to navigate patient records; inputs, retrieves, and maintains information in patient records; verifies accurate completion of patient records following procedures; utilizes procedure and supply codes and charges;
12. adheres to all government, industry, or institutional regulatory guidelines;
13. attends and participates in staff meetings; maintains continuing education requirements; documents completion of all training and in-services;
14. performs administrative support duties such as answering phones, assisting with inventory and records management, scanning documents, scheduling, and stocking examination rooms;
15. performs other related duties as assigned.

Level II: Invasive Cardiovascular Specialist**4006**

Employees in positions at this level operate, monitor, and maintain specialized radiographic equipment and supplies to assist physicians in performing complex and specialized invasive and non-invasive procedures involving the acquisition, processing, and evaluation of diagnostic radiographic and non-radiographic images. The Invasive Cardiovascular Specialist regulates patient flow, ensures radiographic images are accurately processed, and maintains radiographic equipment and software. They work under general supervision of higher-level personnel.

A(n) Invasive Cardiovascular Specialist typically:

1. assists physician in performing specialized and complex invasive and non-invasive procedures; assists attending physicians, as directed;
2. consults with radiologists to determine contrast media and/or medication applications or variances in established procedures;
3. regulates patient flow; supervises procedures for quality control purposes;
4. evaluates, critiques, and processes diagnostic images; ensures diagnostic images were accurately processed and patient records are accurately updated following procedures;
5. inspects, maintains, and troubleshoots equipment and/or software; performs and documents routine advanced quality assurance and preventive maintenance; records equipment and/or software issues; initiates service calls;
6. verifies and processes physicians' orders and patient record requests; corresponds with providers, patients, and/or departments involving coordinating services, referrals, patient records, etc.;
7. assists with personnel functions such as training, supervising, evaluating performance, and/or developing staff, work schedules, and assignments;
8. assists in the development and implementation of policies, procedures, protocols, standards and initiatives;
9. generates and compiles data; monitors, generates, and maintains reports;
10. participates in the research of new techniques and technology relevant to the field;
11. performs duties of the lower level;
12. performs other related duties as assigned.

Level III: Invasive Cardiovascular Manager**4007**

Employees in positions at this level coordinate activities and programs within a division of a radiology department. A(n) Invasive Cardiovascular Manager responsibilities include program development, leadership of staff, and serving as a technical and administrative resource. They work under the supervision of a designated administrator(s).

A(n) Invasive Cardiovascular Manager typically –

1. coordinates all activities and programs within the division; maintains records for all activities and programs, as necessary; creates, reviews, and presents reports;

2. coordinates personnel functions such as interviewing, selecting, training, supervising, evaluating performance, and/or developing staff, work schedules, and assignments; organizes staff meetings; coordinates continuing education training and in-services for staff;
3. acts as a technical and administrative resource; represents the division on various committees;
4. ensures the division maintains compliance with government, industry, or institutional regulatory guidelines;
5. monitors, researches and distributes information regarding changes in regulatory guidelines, policies, protocols, requirements, etc.; maintains and updates protocol manuals.
6. regulates inventory management; coordinates and oversees purchasing of inventory; serves as main point of contact for suppliers which could include sales representatives and/or service providers;
7. prepares, reviews, and makes recommendations for bids and contractual services; assists in the preparation of budget estimates for the division;
8. organizes and oversees research into trends and developments in techniques and technology relevant to the field;
9. participates in the development and implementation of policies, procedures, protocols, standards, and initiatives;
10. performs duties of the lower levels;
11. performs other related duties as assigned.

MINIMUM ACCEPTABLE QUALIFICATIONS REQUIRED FOR ENTRY INTO:

Level I: Invasive Cardiovascular Technologist

4005

CREDENTIALS TO BE VERIFIED BY PLACEMENT OFFICER

1. Any one or combination totaling **six (6) months** from the categories below:
 - A. college course work or training from a vocational, technical, or an armed forces program, as measured by the following conversion table or its proportional equivalent:

- Current/valid registration and certification in Cardiac Interventional Radiography by the American Registry of Radiologic Technologists (ARRT) **equals six (6) months.**
 - Current/valid registration and certification as a Cardiovascular Invasive Specialist (RCIS) or Cardiac Electrophysiology Specialist (RCES) by Cardiovascular Credentialing International (CCI) **equals six (6) months.**
- B. work experience as a radiologic technologist performing cardiac procedures in a catheterization laboratory, electrophysiology (EP) laboratory, interventional (IR) laboratory, or a hybrid laboratory.
2. Current/valid registration and certification in Radiography by the American Registry of Radiologic Technologists (ARRT).
 3. Current/valid accreditation as a Radiologic Technologist by the State of Illinois (IEMA).
 4. Current/valid Cardiopulmonary Resuscitation (CPR) and Advanced Cardiovascular Life Support (ACLS) certification.
 5. **Two (2) years (24 months)** of work experience as a radiologic technologist.

KNOWLEDGE, SKILLS AND ABILITIES (KSAs)

1. Knowledge of principles and processes for providing customer service.
2. Knowledge of health care administration procedures and systems including medical terminology, medical software, medical billing codes, and confidentiality laws (HIPAA).
3. Knowledge of a wide variety of diagnostic radiographic equipment and software and the applicable safety requirements.
4. Knowledge of radiology principles and practices including but not limited to techniques and procedures, human anatomy and physiology, occupational hazards, and safety measures.
5. Knowledge of relevant equipment, policies, procedures, and strategies to promote the safety and security of people, data, property, and institutions.
6. Ability to use full range of body motion to lift, push, pull, carry, or handle objects.
7. Ability to identify measures or indicators of system performance and the actions needed to improve or correct performance, relative to the goals of the system.

8. Ability to use logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.
9. Ability to exhibit strong organizational skills and maintain detailed, accurate records.
10. Ability to communicate effectively as appropriate for the needs of the audience.
11. Ability to interpret work related documents, policies, and procedures.

Level II: Invasive Cardiovascular Specialist**4006**

CREDENTIALS TO BE VERIFIED BY PLACEMENT OFFICER

1. Current/valid registration and certification in Cardiac Interventional Radiography by the American Registry of Radiologic Technologists (ARRT), Cardiovascular Invasive Specialist (RCIS) **or** Registered Cardiac Electrophysiology Specialist (RCES) by Cardiovascular Credentialing International (CCI).
2. Current/valid accreditation as a Radiologic Technologist by the State of Illinois (IEMA).
3. Current Cardiopulmonary Resuscitation (CPR) and Advanced Cardiovascular Life Support (ACLS) certification.
4. **Two (2) years (24 months)** of work experience as a radiologic technologist performing cardiac procedures in a catheterization laboratory, electrophysiology (EP) laboratory, interventional laboratory and/or a hybrid laboratory.

KNOWLEDGE, SKILLS AND ABILITIES (KSAs)

1. Knowledge of business and management principles involved in strategic planning, resource allocation, human resources modeling, leadership technique, production methods, and coordination of people and resources.
2. Knowledge of principles and processes for providing customer service.
3. Knowledge of health care administration procedures and systems including medical terminology, medical software, medical billing codes, and confidentiality laws (HIPAA).
4. Knowledge of a wide variety of diagnostic radiographic equipment and software and the applicable safety requirements.
5. Knowledge of radiology principles and practices including but not limited to techniques and procedures, human anatomy and physiology, occupational hazards, and safety measures.

6. Knowledge of relevant equipment, policies, procedures, and strategies to promote the safety and security of people, data, property, and institutions.
7. Ability to use full range of body motion to lift, push, pull, carry, or handle objects.
8. Ability to identify measures or indicators of system performance and the actions needed to improve or correct performance, relative to the goals of the system.
9. Ability to use logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.
10. Ability to exhibit strong organizational skills and maintain detailed, accurate records.
11. Ability to communicate effectively as appropriate for the needs of the audience.
12. Ability to interpret work related documents, policies, and procedures.

Level III: Invasive Cardiovascular Manager**4007****CREDENTIALS TO BE VERIFIED BY PLACEMENT OFFICER**

1. Current/valid registration and certification in Cardiac Interventional Radiography by the American Registry of Radiologic Technologists (ARRT), Cardiovascular Invasive Specialist (RCIS) **or** Cardiac Electrophysiology Specialist (RCES) by Cardiovascular Credentialing International (CCI).
2. Current/valid accreditation as a Radiologic Technologist by the State of Illinois (IEMA).
3. Current Cardiopulmonary Resuscitation (CPR) and Advanced Cardiovascular Life Support (ACLS) certification.
4. **Five (5) years (60 months)** of work experience as a radiologic technologist performing cardiac procedures in a catheterization laboratory, electrophysiology (EP) laboratory, interventional laboratory and/or a hybrid laboratory.
5. **Two (2) years (24 months)** of supervisory or administrative work experience as a radiologic technologist in an invasive cardiovascular field.

KNOWLEDGE, SKILLS AND ABILITIES (KSAs)

1. Knowledge of business and management principles involved in strategic planning, resource allocation, human resources modeling, leadership technique, production methods, and coordination of people and resources.

2. Knowledge of principles and processes for providing customer service.
3. Knowledge of health care administration procedures and systems including medical terminology, medical software, medical billing codes, and confidentiality laws (HIPAA).
4. Knowledge of a wide variety of diagnostic radiographic equipment and software and the applicable safety requirements.
5. Knowledge of radiology principles and practices including but not limited to techniques and procedures, human anatomy and physiology, occupational hazards, and safety measures.
6. Knowledge of relevant equipment, policies, procedures, and strategies to promote the safety and security of people, data, property, and institutions.
7. Ability to use full range of body motion to lift, push, pull, carry, or handle objects.
8. Ability to identify measures or indicators of system performance and the actions needed to improve or correct performance, relative to the goals of the system.
9. Ability to use logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.
10. Ability to exhibit strong organizational skills and maintain detailed, accurate records.
11. Ability to communicate effectively as appropriate for the needs of the audience.
12. Ability to interpret work related documents, policies, and procedures.