

CARDIAC SONOGRAPHER 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>
4636	Cardiac Sonographer I	02	447	6 mo.	04/15/05
4637	Cardiac Sonographer II	02	447	6 mo.	04/15/05
4638	Cardiac Sonographer III	02	447	6 mo.	04/15/05

Promotional Line: 63

Series Narrative

Cardiac Sonographers operate specialized diagnostic equipment to produce pictures of the heart by means of echocardiography, a method for transmitting high frequency ultrasound beams around the heart area. Sonographers in this series primarily scan the heart muscle, heart valve, and the large vessels originating from the heart. The services provided by employees in this series are often performed for businesses other than the hospital.

DESCRIPTION OF LEVELS OF WORK

Level I: Cardiac Sonographer I

4636

Employees in positions allocated to this level of the series administer standard echocardiographic scans of patients and perform other basic duties related to the examination.

A Cardiac Sonographer I typically –

1. schedules patients for echocardiographic scans.
2. positions patients for scans; sets up and adjusts equipment for each scan.
3. performs standard scans and ensures that physicians are provided with required information.
4. assists higher level sonographers in clinical training of medical, sonography, and radiologic technology students and radiology residents in the performance of standard scans.
5. assists senior sonographers, radiologists, and/or physicians in more complex examinations.
6. prepares, updates, and files records of procedures performed and related materials; collects studies or materials for teaching or referral purposes; copies reports for use by higher level sonographers.
7. prepares preliminary reports for physicians' review.
8. performs other related duties as assigned.

Level II: Cardiac Sonographer II**4637**

Employees in positions allocated to this level of the series administer echocardiographic procedures that require delicate or exacting steps and seasoned judgment.

A Cardiac Sonographer II typically –

1. administers and monitors scans (such as two-dimensional echocardiograms utilizing saline and pharmacological contrast, conventional M-mode, Doppler and two-dimensional echocardiographic scans).
2. interprets scans and ensures that they provide physicians with required information.
3. distributes and provides explanation of echocardiographic scans.
4. trains staff members in procedures and techniques; explains principles of echocardiography technology to students and staff.
5. assists with advanced or highly technical scans.
6. maintains and adds documentation to medical records.
7. performs minor maintenance and repair of equipment (such as echocardiographic equipment and video tape recorders).
8. provides technical assistance to researchers conducting studies using echocardiographic techniques.
9. performs the duties of a Cardiac Sonographer I as needed.
10. performs other related duties as assigned.

Level III: Cardiac Sonographer III**4638**

Employees in positions allocated to this level of the series supervise an echocardiographic laboratory; train or advise students or staff in echocardiographic procedures; and perform advanced echocardiographic procedures.

A Cardiac Sonographer III typically –

1. coordinates the operations of an echocardiographic laboratory; develops and implements procedures and technical operations used in the laboratory; evaluates current procedures and operations
2. performs advanced echocardiographic procedures (such as utilization of cardiographic intervention during echocardiography).
3. assists medical personnel in conducting research into new echocardiographic techniques and technology.
4. monitors the operation and calibration of laboratory equipment; makes moderate repairs; defines and arranges for more complex repairs when needed
5. supervises and trains staff in echocardiographic procedures; this may include:

- a. assigning directing, scheduling, checking, and evaluating the work of staff; selects employees in conjunction with supervising physician
 - b. training sonography staff in established echocardiographic procedures or new procedures being implemented in the laboratory; advising them on individual examinations as needed
 - c. orienting, supervising, and evaluating the performance of students or residents in echocardiographic procedures in the laboratory
 - d. explaining echocardiographic techniques to medical or paramedical staff receiving in-service training in echocardiography
 - e. assisting in discipline and/or termination of employees.
6. manages the operations of the unit; this may include:
 - a. reviewing, arranging, and making changes in patient examination schedule, as necessary
 - b. assuring completion of patient records, patient billing, requisitions, and vouchers
 - c. preparing daily and monthly reports on procedures performed in the laboratory
 7. performs the duties of a Cardiac Sonographer II as needed.
 8. performs other related duties as assigned.

MINIMUM ACCEPTABLE QUALIFICATIONS REQUIRED FOR ENTRY INTO: ALL LEVELS

Level I: Cardiac Sonographer I

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CREDENTIALS TO BE VERIFIED BY PLACEMENT OFFICER

(A) Associate Degree in Cardiac Technology

OR

(B) Possession of Registered of Diagnostic Cardiac Sonographer (RDCS) credentials

PERSONAL ATTRIBUTES NEEDED TO UNDERTAKE JOB:

1. knowledge of basic cardiovascular anatomy
2. knowledge of terminology and techniques used in diagnostic echocardiography
3. knowledge of cardiopulmonary resuscitation (CPR)
4. ability to keep records and write reports
5. ability to work effectively with patients and their families, medical staff, and others

6. ability to follow oral and written instructions
7. ability to read and interpret patient's clinical history
8. ability to perform routine scans
9. manual dexterity

Level II: Cardiac Sonographer II**4637**

CREDENTIALS TO BE VERIFIED BY PLACEMENT OFFICER

1. (A) Associate Degree in Cardiac Technology

OR

(B) Possession of Registered Diagnostic Cardiac Sonographer (RDCS) credentials
2. One year of cardiac sonographic work experience performing duties comparable to those of the first level of this series, which included the operation of real-time equipment

PERSONAL ATTRIBUTES NEEDED TO UNDERTAKE JOB:

1. knowledge of cross-sectional anatomy, physiology, and pathology as related to real-time equipment
2. skill in the operation and maintenance of standard echocardiographic equipment
3. ability to produce complex echocardiographic recordings
4. ability to examine and evaluate technical aspects of complex echocardiographic scans
5. ability to operate advanced echocardiographic equipment
6. ability to interpret requests and instructions from medical staff
7. ability to train technologists and medical, sonography, and radiologic technology students in scanning and operational technique of equipment in a clinical setting
8. ability to perform minor repair on equipment

Level III: Cardiac Sonographer III**4638**

CREDENTIALS TO BE VERIFIED BY PLACEMENT OFFICER

1. (A) Associate Degree in Cardiac Technology

OR

- (B) Possession of Registered Diagnostic Cardiac Sonographer (RDCS) credentials
2. Three years of cardiac sonographic work experience, of which two years were comparable to that gained at the second level of this series

PERSONAL ATTRIBUTES NEEDED TO UNDERTAKE JOB:

1. extensive knowledge of pathology reflected in echocardiographic scans
2. knowledge of how to calibrate echocardiographic equipment
3. ability to produce complex and specialized scans (such as those performed on critically ill and post-surgery patients)
4. ability to examine and evaluate technical aspects of advanced echocardiographic scans
5. ability to perform administrative duties
6. supervisory ability
7. ability to instruct medical, sonography, and radiologic technology students and/or staff
8. ability to perform minor to moderate repairs on echocardiographic equipment