

Spec. Code: 3884
Occ. Area: 02
Work Area: 444
Prob. Period: 6 mo.
Prom. Line: none
Effective Date: 09/15/71

CARDIOVASCULAR SURGERY TECHNICIAN

Function of Job

Under supervision of a physician, to operate and maintain the heart-lung machine and certain related equipment, to carry out selected cardiopulmonary procedures, to assist in the development and application of new techniques, and to maintain equipment and supplies.

Characteristic Duties and Responsibilities

1. prepare and assemble heart-lung machine for open-heart surgery
2. operate heart-lung machine during open-heart surgery, including priming oxygenatory with appropriate fluid and blood derivatives, and making appropriate connections for heart-lung machine from lines connected with patient's arteries and veins
3. control blood flow rates and gas delivery during the period of open-heart procedure within limits designated by attending surgeon and notify surgeon of any inability to maintain perfusion within limits
4. evaluate data on vital signs and metabolism to assess adequacy of support of patient's circulation and respiration
5. regulate perfusion and blood volume to facilitate termination of operation of heart-lung machine
6. set up, calibrate, operate, and maintain electronic monitoring equipment used during surgery and the postoperative period
7. collect specimens and perform laboratory analyses for blood PH, PCO₂, and hematocrit
8. operate analytical equipment for continuous monitoring of arterial and venous oxygen content and blood flow meter
9. insert arterial and venous catheters into patient's arteries and veins for monitoring of arterial and venous blood pressure
10. assemble and operate apparatus for measurement of cardiac output by dye-dilution technique
11. assemble and operate intra-aortic balloon assist device for support of circulation during therapy of cardiogenic shock

12. assist in research procedures in relation to cardiac procedures on animals and selected patients
13. keep appropriate records of techniques and procedures and research performed
14. be responsible for the maintenance, cleanliness, and sterility of apparatus and supplies, periodically evaluating sterilization procedures
15. perform related duties as assigned

Minimum Acceptable Qualifications

CREDENTIALS TO BE VERIFIED BY PLACEMENT OFFICER

1. at least two years of experience in the Armed Services as a Medical Corpsman

or

graduation from an approved program in professional nursing

or

university training which includes at least 12 hours in the biological and chemical sciences and one year of appropriate experience in a medically related field

or

three years of experience as an Operating Room Technician

PERSONAL ATTRIBUTES NEEDED TO UNDERTAKE JOB

none