

HEMODIALYSIS TECHNOLOGIST 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> |
|-----------------|---|------------------|------------------|---------------------|-----------------------|--------------------|
| 4504 | Hemodialysis Technician | 02 | 444 | 6 mo. | 05/01/11 | Rev. |
| 4628 | Hemodialysis Technologist | 02 | 444 | 6 mo. | 05/01/11 | Rev. |
| 4505 | Assistant Chief Hemodialysis Technologist | 02 | 444 | 6 mo. | 05/01/11 | Rev. |
| 4506 | Chief Hemodialysis Technologist | 02 | 444 | 12 mo. | 05/01/11 | Rev. |

Promotional Line: 251

Series Narrative

Employees in positions assigned to this series primarily are responsible for providing a safe and effective dialytic treatment to patients. They connect patients to a dialysis machine and take the technical steps necessary to ensure that the patient's blood is properly dialyzed (cleansed). They also calculate the trans-membrane pressure and blood flow to achieve the therapeutic goals set by the renal physician.

Dialytic treatments involve (a) operating the hemodialysis machine; (b) setting up and operating laboratory equipment; (c) connecting patients to the hemodialysis machine; (d) evaluating the proper amounts of chemical levels; (e) monitoring the chemical and physical condition of the patient; (f) ensuring the stability of the patient; and (g) recording data on charts.

Hemodialysis Technologists are also responsible for the daily operation, maintenance, and minor repair of the dialysis equipment.

Higher-level technologists also engage in the supervision of patient care, dialysis personnel, and technological operations of the dialysis area and perform more difficult dialytic treatment at a higher level.

DESCRIPTIONS OF LEVELS OF WORK

Level I: Hemodialysis Technician **4504**

Employees in positions allocated to this level are entry-level technologists who take the technical steps necessary to ensure that the patient's blood is properly dialyzed. They work under the direct supervision of a Chief Hemodialysis Technologist.

A Hemodialysis Technician typically –

1. sets up, operates, cleans, and provides routine maintenance for the hemodialysis machine
2. sets up and operates auxiliary laboratory equipment (such as sodium/ potassium calcium analyzers, glucose analyzers, and centrifuges)
3. connects patients to the hemodialysis machines, which involves performing cannulation and sterile handling arterio-venous shunts, subclavian catheters, and femoral catheters
4. evaluates the amount of chemical levels in the blood serum which will vary according to the particular dialysis for each patient

5. monitors the chemical and physical condition of the patient during the operation of the hemodialysis machine, ensuring the stability of the patient through various techniques, including the administration of pharmacologic agents and possible cardiac-arrest procedures
6. records chemical levels, reactions, drugs, body fluids, and vital signs on charts
7. notifies the shift supervisor of any unusual change in the patient's condition
8. under emergency conditions, reacts to acute changes in the condition of the patient
9. performs related duties as assigned

Level II: Hemodialysis Technologist**4628**

Employees in positions allocated to this level are technologists who perform more difficult dialytic treatments. They assist in the supervision of both dialysis personnel and the technological operations of the dialysis area. They work under the direct supervision of Chief Hemodialysis Technologist.

A Hemodialysis Technologist typically –

1. performs unusual, difficult, and complex dialytic treatments (such as dialyzing acute critically ill patients)
2. assists in the training of families of outpatients in the operation of the hemodialysis machine in order that dialysis may be performed in the patient's home
3. assumes responsibility for the preparation of blood serum requisitions, which initiate the ordering of specially prepared blood tests through direct association with the blood bank
4. refers unusual problems concerning patients undergoing dialysis care to the attending physicians
5. assists in the instruction of Hemodialysis Technologists in the use of new or modified techniques or equipment and in the performance of unusual or complex procedures
6. acts as site leader and assists with the supervision of Hemodialysis Technologist I's and auxiliary personnel (such as equipment attendants and student helpers); is responsible for recommending the need for additional personnel and evaluating employees
7. maintains operating records (such as patient daily log, treatment records and charts, dialysis machine maintenance, laboratory equipment and-blood chemistry data, and other auxiliary dialysis equipment)
8. assist in implementing new or modified techniques; recommending the purchase of new equipment or the modification of present equipment; and maintaining adequate supplies for the performance of hemodialysis on the particular shift assigned
9. performs work related to the lower level in this series
10. performs related duties as assigned

Level III: Assistant Chief Hemodialysis Technologist**4505**

Employees in positions allocated to this level supervise patient care, dialysis personnel, and the technological operations of the dialysis area for the shift the incumbent works. They have limited administrative responsibility in the hemodialysis unit and work under general supervision from a Registered Nurse and Chief Hemodialysis Technologist.

An Assistant Chief Hemodialysis Technologist typically –

1. determines work priorities for the shift, based on patient requirements and available staff; makes work assignments to Hemodialysis Technologist I's and II's
2. supervises dialysis staff, providing quality-control checks and evaluating personnel; resolves general shift problems; carries out unit policies and procedures and recommends changes as necessary; maintains operating records
3. participates in dialysis rounds by accompanying the physician and answering technological questions; ensures physicians' orders are carried out; assists in the resolution of patient scheduling problems; refers unusual problems concerning patient care to the attending physician
4. delegates site-leader responsibilities to lower-level technologists
5. performs complex dialytic treatments (such as rendering services in emergency situations)
6. implements new or modified techniques; evaluates and recommends new equipment for purchase; maintains adequate supplies for the performance of dialytic therapy
7. instructs trainees; Technologists, hospital staff, and families of candidates for home dialysis in dialysis procedures; instructs dialysis staff in the use of new or modified dialysis techniques or equipment
8. ensures that dialysis equipment is maintained
9. ensures that the dialysis area is kept stocked
10. performs work related to the lower level in this series
11. performs related duties as assigned

Level IV: Chief Hemodialysis Technologist**4506**

Employees in positions allocated to this level direct the operation of all shifts of a hemodialysis unit, in collaboration with the Administrative Nurse I, and coordinate the activities of the hemodialysis unit with other departments and facilities. They work under the administrative supervision of the nursing director of the hemodialysis unit.

A Chief Hemodialysis Technologist typically –

1. supervises the activities of hemodialysis technologists and auxiliary personnel on all shifts, including planning, and scheduling

2. coordinates the use-of new or modified techniques or equipment and the use of complex procedures
3. coordinates the training of designated patient's families in the operation of a hemodialysis machine so that dialysis may be performed in the patient's home
4. confers with physicians and nurses to schedule patients, determine the amount of treatment needed for each patient, and establish which patients should be given priority in accordance with the severity of the patient's condition
5. evaluates the quality of hemodialysis services performed
6. plans efficient use of floor space and facilities
7. evaluates the quality and quantity of supplies and equipment
8. ensures that hemodialysis equipment is in proper operating condition
9. performs personnel-related duties (such as recommending promotions, increases in pay, and/or training and adjusting grievances, mistakes, and misunderstandings)
10. maintains records of patients' biochemistry and general physiological measurements made by the unit
11. implements departmental policies and procedures and recommends changes as necessary
12. coordinates activities of hemodialysis unit with other departments and other facilities
13. keeps abreast of current practices and trends in hemodialysis techniques and management by reading literature and visiting other hospital units
14. performs work related to the lower level in this series
15. performs related duties as assigned

MINIMUM ACCEPTABLE QUALIFICATIONS REQUIRED FOR ENTRY INTO

Level I: Hemodialysis Technician

4504

CREDENTIALS TO BE VERIFIED BY PLACEMENT OFFICER

1. Possession of at least one valid certification:
 - a. Nephrology Nursing Certification (NNCC) as a Certified Clinical Hemodialysis Technician (CCHT)
 - b. Board of Nephrology Examiners Nursing and Technology (BONENT) as a Certified Hemodialysis Technician/Technologist (CHT)
 - c. National Nephrology Certification Organization (NNCO) with a Certification in Clinical Nephrology Technology (CCNT)

KNOWLEDGE, SKILLS AND ABILITIES (KSAs)

1. Knowledge of hemodialysis preparations (such as connecting patients to hemodialysis machine, setting up equipment, etc.).
2. Knowledge of hemodialysis methods and techniques.
3. Skill in operation and monitoring of specialized equipment (such as hemodialysis machine).
4. Skill in maintenance of equipment.
5. Skill in recording data on charts.
6. Ability to work under conditions of emergency.
7. Ability to deal effectively with others.
8. Ability to technologically manage the hemodialysis treatment of a patient in accordance with established hospital standards.

Level II: Hemodialysis Technologist**4628**

CREDENTIALS TO BE VERIFIED BY PLACEMENT OFFICER

1. Possession of at least one valid certification:
 - a. Nephrology Nursing Certification (NNCC) as a Certified Clinical Hemodialysis Technician (CCHT)
 - b. Board of Nephrology Examiners Nursing and Technology (BONENT) as a Certified Hemodialysis Technician/Technologist (CHT)
 - c. National Nephrology Certification Organization (NNCO) with a Certification in Clinical Nephrology Technology (CCNT)
2. **One (1) year (12 months)** of experience comparable to that gained as a Hemodialysis Technician

KNOWLEDGE, SKILLS AND ABILITIES (KSAs)

1. Knowledge of hemodialysis preparations (such as connecting patients to hemodialysis machine, setting up equipment, etc.).
2. Knowledge of hemodialysis methods and techniques.
3. Skill in operation and monitoring of specialized equipment (such as hemodialysis machine).
4. Skill in maintenance of equipment.
5. Skill in recording data on charts.
6. Skill in preparing daily work reports.

7. Ability to work under conditions of emergency.
8. Ability to deal effectively with others.
9. Ability to technologically manage the hemodialysis treatment of a patient in accordance with established hospital standards.
10. Ability to assist in the supervision of lower level technologists.
11. Ability to modify techniques.
12. Ability to determine length of dialysis treatment for various patients.

Level III: Assistant Chief Hemodialysis Technologist**4505**

CREDENTIALS TO BE VERIFIED BY PLACEMENT OFFICER

1. Possession of at least one valid certification:
 - a. Nephrology Nursing Certification (NNCC) as a Certified Clinical Hemodialysis Technician (CCHT)
 - b. Board of Nephrology Examiners Nursing and Technology (BONENT) as a Certified Hemodialysis Technician/Technologist (CHT)
 - c. National Nephrology Certification Organization (NNCO) with a Certification in Clinical Nephrology Technology (CCNT)
2. **Two (2) years (24 months)** of experience comparable to that gained as a Hemodialysis Technologist

KNOWLEDGE, SKILLS AND ABILITIES (KSAs)

1. Knowledge of hemodialysis preparations (such as connecting patients to hemodialysis machine, setting up equipment, etc.).
2. Knowledge of hemodialysis methods and techniques.
3. Knowledge of the operation of a wide range of equipment generally found in a hemodialysis unit.
4. Skill in operation and monitoring of specialized equipment (such as hemodialysis machine).
5. Skill in maintenance of equipment.
6. Skill in recording data on charts.
7. Skill in preparing daily work reports.
8. Ability to work under conditions of emergency.
9. Ability to deal effectively with others.

10. Ability to technologically manage the hemodialysis treatment of a patient in accordance with established hospital standards.
11. Ability to modify techniques.
12. Ability to determine length of dialysis treatment for various patients.
13. Ability to evaluate new equipment.
14. Ability to supervise lower-level technologists.
15. Ability to determine priorities.
16. Ability to participate in rounds (accompanying physician and answering technical questions).

Level IV: Chief Hemodialysis Technologist**4506**

CREDENTIALS TO BE VERIFIED BY PLACEMENT OFFICER

1. Possession of at least one valid certification:
 - a. Nephrology Nursing Certification (NNCC) as a Certified Clinical Hemodialysis Technician (CCHT)
 - b. Board of Nephrology Examiners Nursing and Technology (BONENT) as a Certified Hemodialysis Technician/Technologist (CHT)
 - c. National Nephrology Certification Organization (NNCO) with a Certification in Clinical Nephrology Technology (CCNT)
2. **Two (2) years (24 months)** of general Hemodialysis experience
3. **Two (2) years (24 months)** of experience comparable to that gained as a Assistant Chief Hemodialysis Technologist that included assisting in the supervision of work operations

KNOWLEDGE, SKILLS AND ABILITIES (KSAs)

1. Knowledge of hemodialysis preparations (such as connecting patients to hemodialysis machine, setting up equipment, etc.).
2. Knowledge of hemodialysis methods and techniques.
3. Knowledge of the operation of a wide range of equipment generally found in a hemodialysis unit.
4. Knowledge of current practices and trends in dialysis techniques.
5. Skill in operation and monitoring of specialized equipment (such as hemodialysis machine).
6. Skill in maintenance of equipment.
7. Skill in recording data on charts.

8. Skill in preparing daily/annual reports.
9. Supervisory skills.
10. Ability to work under conditions of emergency.
11. Ability to deal effectively with others.
12. Ability to technologically manage the hemodialysis treatment of a patient in accordance with established hospital standards.
13. Ability to modify techniques.
14. Ability to determine length of dialysis treatment for various patients.
15. Ability to evaluate new equipment.
16. Ability to determine priorities.
17. Ability to participate in rounds (accompanying physician and answering technical questions).
18. Ability to schedule subordinates and assign work.
19. Ability to evaluate the quality of services.
20. Ability to evaluate quality and quantity of supplies and equipment.
21. Ability to maintain records.
22. Administrative ability.