NV

449.571 Program of training: Curriculum; duties of instructor; written examinations

1.

Each program for training a dialysis technician provided by a facility must consist of a written curriculum that specifies the objectives for each portion of the course.

2.

The written curriculum must include at least the following subjects: (a) Introduction to dialytic therapies, including: (1) The history of dialysis; (2) Definitions and terminology; (3) Communication skills; (4) Ethics and confidentiality; (5) The multidisciplinary process; (6) The roles of the members of an interdisciplinary team established pursuant to the provisions of NAC 449.541; and (7) Information concerning renal organizations and resources; (b) The principles of hemodialysis, including: (1) The principles of dialysis; (2) Access to the circulatory system; and (3) Anticoagulation, local anesthetics and normal saline; (c) Understanding a person who suffers from kidney failure, including: (1) Basic renal anatomy, physiology and pathophysiology; (2) The effect of renal failure on the systems of the body; (3) The symptoms and findings related to the uremic state; (4) The modes of renal replacement therapy, including kidney transplantation; (5) Basic renal nutrition; (6) Basic psychosocial aspects of end-stage renal disease; (7) The medications commonly administered to a patient who is diagnosed with end-stage renal disease, including the manner of administering and the effects of those

medications; (8) Confidentiality of the personal and clinical records of a patient of a facility; (9) Professional conduct; (10) The rights and responsibilities of a patient of a facility; and (11) Rehabilitation of a patient of a facility; (d) Procedures relating to dialysis, including: (1) Using aseptic techniques; (2) The technical aspects of dialysis, operation and monitoring of equipment, and the commencement and termination of dialysis; (3) Delivering dialysis treatment adequately and circumstances that may result from inadequate treatment; (4) Observing and reporting the reaction of a patient to treatment; (5) Monitoring glucose and hemoglobin or hematocrit monitoring; (6) Emergency procedures and responses, including cardiopulmonary resuscitation, the management of an air embolism, and the proper response to line separation and hemolysis; (7) External and internal disasters, fire, natural disasters and preparation for an emergency; and (8) Safety, control of quality and improvement of quality; (e) Information concerning devices used for hemodialysis, including: (1) The theory and practice of conventional, high efficiency and high flux dialysis; (2) Dialysate composition, options, indications, complications and safety; (3) Monitoring and safety; and (4) Disinfecting equipment; (f) The treatment of water, including: (1) Standards for water treatment used for dialysis as described in the American National Standard, Water Treatment Equipment for Hemodialysis Applications, adopted by reference pursuant to the provisions of NAC 449.520; (2) Systems and devices; (3) Monitoring; and (4) The risk of harm to a patient who uses untreated water; (g) If the facility reuses water, information concerning the reprocessing of water, including: (1) Principles of reuse; (2) Safety, control of quality, standard precautions and water treatment; and (3) Standards for reuse as described in the American National Standard, Water Treatment Equipment for Hemodialysis Applications, adopted by reference pursuant to the provisions of NAC 449.520; (h)

Providing instruction for a patient of a facility, including: (1) The role of the technician in supporting the goals of the patient concerning education; and (2) The principles of adult education; (i) Safety and the control of infection, including: (1) The risk of harm to a patient from nosocomial infections and from accidents and errors in providing treatment; (2) Standard precautions, aseptic and sterile techniques, and proper handling of a specimen; (3) Basic bacteriology and epidemiology; (4) The risk of harm to an employee of a facility resulting from exposure to blood and chemicals; and (5) Electrical, fire, disaster and environmental safety and hazardous substances; and (j) The assurance and improvement of quality, including: (1) The role of the dialysis technician in activities concerning the assurance of quality; (2) The principles of the assurance and improvement of quality; and (3) The importance of the assurance of quality to ensure that safe dialysis treatments are provided to each patient of the facility.

(a)

Introduction to dialytic therapies, including: (1) The history of dialysis; (2) Definitions and terminology; (3) Communication skills; (4) Ethics and confidentiality; (5) The multidisciplinary process; (6) The roles of the members of an interdisciplinary team established pursuant to the provisions of NAC 449.541; and (7) Information concerning renal organizations and resources;

(1)

The history of dialysis;

(2)

Definitions and terminology;

(3)

Communication skills;

(4)

Ethics and confidentiality;

(5)

The multidisciplinary process;

(6)

The roles of the members of an interdisciplinary team established pursuant to the provisions of NAC 449.541; and

(7)

Information concerning renal organizations and resources;

(b)

The principles of hemodialysis, including: (1) The principles of dialysis; (2) Access to the circulatory system; and (3) Anticoagulation, local anesthetics and normal saline;

(1)

The principles of dialysis;

(2)

Access to the circulatory system; and

(3)

Anticoagulation, local anesthetics and normal saline;

(c)

Understanding a person who suffers from kidney failure, including: (1) Basic renal anatomy, physiology and pathophysiology; (2) The effect of renal failure on the systems of the body; (3) The symptoms and findings related to the uremic state; (4) The modes of renal replacement therapy, including kidney transplantation; (5) Basic renal nutrition; (6) Basic psychosocial aspects of end-stage renal disease; (7) The medications commonly administered to a patient who is diagnosed with end-stage renal disease, including the manner of administering and the effects of those medications; (8) Confidentiality of the personal and clinical records of a patient of a facility; (9)

Professional conduct; (10) The rights and responsibilities of a patient of a facility; and (11) Rehabilitation of a patient of a facility;

(1)

Basic renal anatomy, physiology and pathophysiology;

(2)

The effect of renal failure on the systems of the body;

(3)

The symptoms and findings related to the uremic state;

(4)

The modes of renal replacement therapy, including kidney transplantation;

(5)

Basic renal nutrition;

(6)

Basic psychosocial aspects of end-stage renal disease;

(7)

The medications commonly administered to a patient who is diagnosed with end-stage renal disease, including the manner of administering and the effects of those medications;

(8)

Confidentiality of the personal and clinical records of a patient of a facility;

(9)

Professional conduct;

(10)

The rights and responsibilities of a patient of a facility; and

(11)

Rehabilitation of a patient of a facility;

(d)

Procedures relating to dialysis, including: (1) Using aseptic techniques; (2) The technical aspects of dialysis, operation and monitoring of equipment, and the commencement and termination of dialysis; (3) Delivering dialysis treatment adequately and circumstances that may result from inadequate treatment; (4) Observing and reporting the reaction of a patient to treatment; (5) Monitoring glucose and hemoglobin or hematocrit monitoring; (6) Emergency procedures and responses, including cardiopulmonary resuscitation, the management of an air embolism, and the proper response to line separation and hemolysis; (7) External and internal disasters, fire, natural disasters and preparation for an emergency; and (8) Safety, control of quality and improvement of quality;

(1)

Using aseptic techniques;

(2)

The technical aspects of dialysis, operation and monitoring of equipment, and the commencement and termination of dialysis;

(3)

Delivering dialysis treatment adequately and circumstances that may result from inadequate treatment;

(4)

Observing and reporting the reaction of a patient to treatment;

(5)

Monitoring glucose and hemoglobin or hematocrit monitoring;

(6)

Emergency procedures and responses, including cardiopulmonary resuscitation, the management of an air embolism, and the proper response to line separation and hemolysis;

(7)

External and internal disasters, fire, natural disasters and preparation for an emergency; and

(8)

Safety, control of quality and improvement of quality;

(e)

Information concerning devices used for hemodialysis, including: (1) The theory and practice of conventional, high efficiency and high flux dialysis; (2) Dialysate composition, options, indications, complications and safety; (3) Monitoring and safety; and (4) Disinfecting equipment;

(1)

The theory and practice of conventional, high efficiency and high flux dialysis;

(2)

Dialysate composition, options, indications, complications and safety;

(3)

Monitoring and safety; and

(4)

Disinfecting equipment;

(f)

The treatment of water, including: (1) Standards for water treatment used for dialysis as described in the American National Standard, Water Treatment Equipment for Hemodialysis Applications, adopted by reference pursuant to the provisions of NAC 449.520; (2) Systems and devices; (3) Monitoring; and (4) The risk of harm to a patient who uses untreated water;

(1)

Standards for water treatment used for dialysis as described in the American National Standard, Water Treatment Equipment for Hemodialysis Applications, adopted by reference pursuant to the provisions of NAC 449.520;

(2)

Systems and devices;

(3)

Monitoring; and

(4)

The risk of harm to a patient who uses untreated water;

(g)

If the facility reuses water, information concerning the reprocessing of water, including: (1) Principles of reuse; (2) Safety, control of quality, standard precautions and water treatment; and (3) Standards for reuse as described in the American National Standard, Water Treatment Equipment for Hemodialysis Applications, adopted by reference pursuant to the provisions of NAC 449.520;

(1)

Principles of reuse;

(2)

Safety, control of quality, standard precautions and water treatment; and

(3)

Standards for reuse as described in the American National Standard, Water Treatment Equipment for Hemodialysis Applications, adopted by reference pursuant to the provisions of NAC 449.520;

(h)

Providing instruction for a patient of a facility, including: (1) The role of the technician in supporting the goals of the patient concerning education; and (2) The principles of adult education;

(1)

The role of the technician in supporting the goals of the patient concerning education; and

(2)

The principles of adult education;

(i)

Safety and the control of infection, including: (1) The risk of harm to a patient from nosocomial infections and from accidents and errors in providing treatment; (2) Standard precautions, aseptic and sterile techniques, and proper handling of a specimen; (3) Basic bacteriology and epidemiology; (4) The risk of harm to an employee of a facility resulting from exposure to blood and chemicals; and (5) Electrical, fire, disaster and environmental safety and hazardous substances; and

(1)

The risk of harm to a patient from nosocomial infections and from accidents and errors in providing treatment;

(2)

Standard precautions, aseptic and sterile techniques, and proper handling of a specimen;

(3)

Basic bacteriology and epidemiology;

(4)

The risk of harm to an employee of a facility resulting from exposure to blood and chemicals; and

(5)

Electrical, fire, disaster and environmental safety and hazardous substances; and

(j)

The assurance and improvement of quality, including: (1) The role of the dialysis technician in activities concerning the assurance of quality; (2) The principles of the assurance and improvement of quality; and (3) The importance of the assurance of quality to ensure that safe dialysis treatments are provided to each patient of the facility.

(1)

The role of the dialysis technician in activities concerning the assurance of quality;

(2)

The principles of the assurance and improvement of quality; and

(3)

The importance of the assurance of quality to ensure that safe dialysis treatments are provided to each patient of the facility.

3.

In addition to the requirements set forth in subsection 2, if a dialysis technician intends to assist in providing training or treatment to a patient of the facility who receives peritoneal dialysis, the program of training for the dialysis technician must include the following subjects: (a) The principles of peritoneal dialysis; (b) Sterile techniques; (c) The systems for the delivery of peritoneal dialysis; (d) The symptoms of peritonitis; and (e) The complications of peritoneal dialysis.

(a)

The principles of peritoneal dialysis;

(b)

Sterile techniques;

(c)

The systems for the delivery of peritoneal dialysis;

(d)

The symptoms of peritonitis; and

(e)

The complications of peritoneal dialysis.

4.

In addition to the requirements set forth in subsection 2, if a dialysis technician

intends to cannulate a dialysis access during the treatment of a patient of the facility or administer normal saline, heparin or lidocaine to that patient, the program of training for the dialysis technician must include the following subjects: (a) Access to circulation, including: (1) Fistula: creation, development, placement of needles and prevention of complications; (2) Grafts: materials used, creation, placement of needles and prevention of complications; and (3) Symptoms to report; (b) Safe administration of medications, including: (1) Identifying the patient; (2) Ensuring the proper administration of medication; (3) Measuring the correct dose; (4) Ascertaining the correct route to administer the dose; and (5) Ensuring the correct time to administer the dose; (c) Administration of normal saline, including: (1) The reasons for administration; (2) Potential complications; (3) The limits of administration; and (4) Information to report and record; (d) Administration of heparin, including: (1) The reasons for administration; (2) The methods of administration; (3) The preparation of an ordered dose; (4) Potential complications; and (5) Information to report and record; and (e) Administration of lidocaine, including: (1) The reasons for administration; (2) The method of administration; (3) The preparation of an ordered dose; (4) Potential complications and risks; and (5) Information to report and record.

(a)

Access to circulation, including: (1) Fistula: creation, development, placement of needles and prevention of complications; (2) Grafts: materials used, creation, placement of needles and prevention of complications; and (3) Symptoms to report;

(1)

Fistula: creation, development, placement of needles and prevention of complications;

(2)

Grafts: materials used, creation, placement of needles and prevention of complications; and

(3)

Symptoms to report;

(b)

Safe administration of medications, including: (1) Identifying the patient; (2) Ensuring the proper administration of medication; (3) Measuring the correct dose; (4) Ascertaining the correct route to administer the dose; and (5) Ensuring the correct time to administer the dose;

(1)

Identifying the patient;

(2)

Ensuring the proper administration of medication;

(3)

Measuring the correct dose;

(4)

Ascertaining the correct route to administer the dose; and

(5)

Ensuring the correct time to administer the dose;

(c)

Administration of normal saline, including: (1) The reasons for administration; (2) Potential complications; (3) The limits of administration; and (4) Information to report and record;

(1)

The reasons for administration;

(2)

Potential complications;

(3)

The limits of administration; and

(4)

Information to report and record;

(d)

Administration of heparin, including: (1) The reasons for administration; (2) The methods of administration; (3) The preparation of an ordered dose; (4) Potential complications; and (5) Information to report and record; and

(1)

The reasons for administration;

(2)

The methods of administration;

(3)

The preparation of an ordered dose;

(4)

Potential complications; and

(5)

Information to report and record; and

(e)

Administration of lidocaine, including: (1) The reasons for administration; (2) The method of administration; (3) The preparation of an ordered dose; (4) Potential complications and risks; and (5) Information to report and record.

(1)

The reasons for administration;

(2)

The method of administration;

(3)

The preparation of an ordered dose;

(4)

Potential complications and risks; and

(5)

Information to report and record.

5.

The instructor of a course of training provided to a dialysis technician shall: (a) Maintain a roster of attendance for each dialysis technician enrolled in the course; and (b) At least once each week during the course, evaluate each dialysis technician enrolled in the course to determine the progress of the dialysis technician in completing the course.

(a)

Maintain a roster of attendance for each dialysis technician enrolled in the course; and

(b)

At least once each week during the course, evaluate each dialysis technician enrolled in the course to determine the progress of the dialysis technician in completing the course.

6.

Except as otherwise provided in subsection 7, each dialysis technician specified in subsection 5 must complete a written examination. The examination must include each of the subjects specified in subsections 2 and 3. If the dialysis technician intends to cannulate a dialysis access during the treatment of a patient of the facility or administer normal saline, heparin or lidocaine to that patient, the examination must include the subjects specified in subsection 4. To pass the written examination, the dialysis technician must achieve a score of not less than 80 percent on each of the subjects required to be included in the written examination pursuant to the provisions of this subsection.

7.

The provisions of subsection 6 do not apply to a dialysis technician who is certified as a dialysis technician by an organization that is approved by the Bureau.