Certified Clinical Hemodialysis Technician-Advanced (CCHT-A)

Weights for Blueprint Categories

Dialysis Practice Areas		% of Test
I.	Clinical	52%
II.	Technical	20%
III.	Role Responsibilities	18%
IV.	Environment	10%

Cognitive Level	% of Test
A. Knowledge	3-7%

Know specific facts, common terms, basic concepts, principles.

B. Comprehension 18-22%

Interpret, compare, contrast, explain, estimate, translate.

C. Application 73-77%

Apply previously learned facts and concepts to new situations. Solve problems.

Accepted April 2018/Effective January 2019

Activities by Blueprint Area - CCHT-A

No.	Activity Statement
	I. Clinical - 50-54%
1	Cannulate patient's access.
2	Set the dialysis machine according to the patient's prescription.
3	Obtain patient's weight and vital signs.
4	Monitor patient during dialysis treatment.
5	Use aseptic technique for dialysis procedures.
6	Evaluate patient's access pre-dialysis.
7	Initiate hemodialysis treatment with arteriovenous graft/fistula.
8	Evaluate patient's pre-dialysis and post-dialysis fluid status.
9	Discontinue patient's dialysis treatment with arteriovenous fistula or graft.
10	Perform post-dialysis fistula/graft access care.
11	Set up extracorporeal circuit.
12	Follow protocol for administering heparin.
13	Discontinue patient's dialysis treatment with hemodialysis catheter.
14	Monitor patient who has a hemodialysis catheter during treatment.
15	Discard disposable supplies post-dialysis, using appropriate/designated receptacles.
16	Identify potential access failure by looking, listening, and feeling.
17	Question patient regarding problems/events since last treatment.
18	Monitor dialysis machine and ancillary equipment (e.g., IV pump, oxygen concentrator) during treatment.
19	Follow protocol for treating hypotension.
20	Identify and report changes in patient's general physical state.
21	Recognize and report changes in patient's cognitive/mental status.
22	Identify relationship of blood pressure changes to fluid volume status.
23	Recognize intradialytic events that effect fluid removal or retention.
24	Understand the purpose and recognize complications of heparin therapy.
25	Recognize and report signs and symptoms of volume depletion or overload.
26	Consider patient's response to last treatment to anticipate changes in care plan.
27	Identify risks for patient exsanguination ("bleeding out").
28	Follow protocol for treating muscle cramps.
29	Recognize and report signs and symptoms of infection.
30	Recognize and report signs and symptoms of orthostatic hypotension.
31	Recognize and report potential or actual adverse patient occurrences.
32	Recognize and report signs/symptoms of access failure (e.g., stenosis, clotting).
33	Administer oxygen per order/protocol.
34	Understand purpose and recognize complications of topical/local anesthetics.
35	Identify complications of end-stage renal disease (CKD Stage 5).
36	Use assistive devices for patient transfers.
37	Obtain blood samples from patient's fistula or graft.
38	Encourage patient to participate in physical activities, e.g., exercise bikes, hand weights.
39	Recognize and report an emergency clinical situation.
40	Cannulate a mature buttonhole access.
41	Perform access flow monitoring.

Activities by Blueprint Area - CCHT-A

	I. Clinical, Continued
41	Perform access flow monitoring.
42	Measure patient's blood glucose level.
43	Communicate patient's treatment outcomes to appropriate personnel.
44	Participate as directed in patient resuscitation activities.
45	Establish a buttonhole access.
	45 Activities
	II. Technical - 18-22%
1	Perform dialysis machine tests (e.g., pressure and alarm tests).
2	Check pH of dialysate solution with an independent device.
3	Ensure safe and proper use of equipment.
4	Adjust dialysate solution temperature according to protocol/prescription.
5	Participate in monitoring the water treatment system.
6	Recognize principles related to water treatment (ion exchange, absorption).
7	Perform quality control checks on equipment (test strips, glucose meter).
8	Apply scientific principles of dialysis underlying patient care (e.g., ultrafiltration).
9	Mix concentrates from powder (e.g., bicarbonate, electrolyte solution).
10	Perform cannulation of a new access or a complicated access (e.g., expert cannulator).
11	Take corrective action ("troubleshoot") when equipment malfunctions.
12	Process patient's laboratory samples.
13	Identify/report/document an adverse event, e.g., equipment malfunction, power failure).
	13 Activities
	III. Role Responsibilities - 16-20%
1	Maintain patient's privacy.
2	Maintain patient's confidentiality.
3	Use proper body mechanics.
4	Maintain safety of environment.
5	Maintain patient's dignity.
6	Document findings and interventions/activities performed.
7	Maintain appropriate caregiver/patient relationships.
8	Encourage and support dialysis treatment prescription and adherence.
9	Communicate patient's treatment outcomes to appropriate personnel.
10	Use appropriate communication techniques/skills (verbal/nonverbal).
11	Report to another staff member prior to breaks or shift change ("hand off").
12	Identify and report changes in patient's behavior.
13	Start-up facility.
14	Participate in an environment that is supportive of cultural diversity.
15	Differentiate roles and responsibilities of care-team members.
16	Serve as an active participant of performance improvement team.
17	Shut down facility
18	Reinforce patient education according to patient teaching plan/goals.

Activities by Blueprint Area - CCHT-A

	Role Responsibilities, Continued
19	Recognize/report need for patient education.
20	Identify and report escalating behavior of patient, visitor, staff.
21	Participate in precepting.
22	Assist in defusing escalating behavior.
23	Prepare for/respond to environmental emergencies (e.g., fire) during treatment.
24	Participate in patient emergency evacuation drills (e.g., fire, natural disasters).
	24 Activities
	IV. Environment - 8-12%
1	Use dialysis/standard precautions.
2	Clean and disinfect dialysis equipment after use, e.g., stethoscope, clamps, machine.
3	Use chemicals to disinfect environmental surfaces.
4	Follow infection control precautions, e.g., isolation, vaccinations.
5	Encourage other staff members to adhere to infection control and/or standard procedures.
6	Maintain an environment to reduce risk for falls (spills/clutter in walkway).
7	Assist with maintaining a safe environment according to regulations.
8	Maintain an unobstructed emergency exit pathway.
9	Maintain a therapeutic environment (noise reduction, temperature control).
	9 Activities