

# **AMEDD END STAGE RENAL DISEASE STANDARDS OF PRACTICE**

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TECHNICAL BULLETIN }  
 No. MED 3 }

HEADQUARTERS  
 DEPARTMENT OF THE ARMY  
 WASHINGTON, DC, 31 March 1988

## AMEDD END STAGE RENAL DISEASE STANDARDS OF PRACTICE

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# PART ONE

## GENERAL DIALYSIS STANDARDS

### CHAPTER 1

#### GENERAL

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**1-1. Purpose.** The purpose of the AMEDD dialysis unit standards is to fulfill professional obligations to establish standards of practice and delivery of care to patients who have (or are at risk to develop) end stage renal disease (ESRD). As such they pertain primarily to chronic dialysis and implementation of the same. It is realized that Army Medical Department (AMEDD) dialysis units conduct dialysis procedures away from the unit, especially for acute patients. Additionally, acute patients may, at times, be dialyzed within the unit. Although the major emphasis of these standards is chronic dialysis, allusion to acute dialysis is made where deemed necessary given those circumstances. These standards will serve as a tool to assist in the auditing and evaluation process of care given to the patients. Standards are dynamic and require revisions as practice dictates.

**1-2. Definitions.** See the glossary for definitions of special terms.

**1-3. Responsibility.** The professional medical, nursing, and allied health staff are responsible for the development and revisions of the standards. Based on the standards, each profession is responsible for evaluating respective professional care given, as well as its effectiveness relative to patient care goals and management of delivery.

**1-4. Objectives.** *a.* The dialysis unit standards are based on respective professional standards of the community, Federal regulations, and standards outlined by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO). They are divided into five parts:

- (1) General Dialysis Unit Standards.
- (2) Standards of Practice for Physicians—ESRD Patient Population.
- (3) Standards of Practice for Nephrology Nurses in Dialysis Units—ESRD Patient Population.
- (4) Standards of Practice for Social Services—ESRD Patient Population.
- (5) Standards of Practice for Dietitians—ESRD Patient Population.

*b.* When implemented these standards will—

- (1) Ensure delivery of safe and individualized, goal-centered care to ESRD patients.
- (2) Identify the effective mode of delivery of care to the individual patient of renal replacement therapy.
- (3) Identify staffing requirements and policies to provide safe and effective care.
- (4) Clarify roles of all personnel in dialysis units.
- (5) Identify appropriate educational interventions for patient and staff populations.
- (6) Establish research priorities.
- (7) Identify the need for change or revisions of policies and procedures.
- (8) Ensure patient, family, and staff participation in health promotion, maintenance, and restoration.

## CHAPTER 2

## SPECIFIC DIALYSIS UNIT STANDARDS

**2-1. Objective.** *a.* The objective of chronic renal replacement therapy is to return renal failure patients to a state of as near normal health, social function, and productivity as is possible.

*b.* Under optimum conditions, the patient with uncompensated chronic uremia appropriately treated will become asymptomatic, go back to his or her usual work full time, and become fully trained and doing dialysis in the home, 2 weeks to 4 months from the initiation of home training.

*c.* The patient with ESRD who meets appropriate criteria may receive a kidney transplant when a donor is available.

*d.* All dialysis units will have a statement of well defined program objectives to include the rehabilitation of the patient and the capacity of the unit.

**2-2. Patient selection criteria.** *a.* All dialysis units will have a written patient selection plan that discusses various criteria used in patient classification which will qualify or disqualify a patient for treatment. Included in the plan is consideration of the following factors:

(1) *Diagnosis.* Medical diagnosis as well as status of the disease necessary for treatment, and medical problems which would disqualify a patient. Patients must have established renal failure requiring renal replacement therapy.

(2) *Social.* Appropriate emphasis on the patient's social, emotional, and economic situation as they relate to his or her ability to be effectively maintained on a program.

(3) *Psychological.* Evaluation of the ability of the patient and his or her family to accept and adjust to the rigorous dialysis regimen.

(4) *Age.* Young children and older individuals may present special problems requiring individual consideration.

*b.* Criteria should specify information to be obtained for evaluation.

*c.* There must be assignment of a person (or persons) ultimately responsible for the patient selection decision. A patient selection committee may be formed and must include individuals who have experience and training in the diagnosis and management of renal disease. For transplantation, input from the transplantation team is desirable. For home training selection, at least one member must have experience in home dialysis training.

*d.* Before admission to a dialysis program, the patient must be informed of the unit's responsibility

for continuing the patient in the dialysis program and the specific circumstances that may result in termination of treatment.

*e.* Once a patient is accepted by a dialysis facility, that patient is the responsibility of that facility and its staff until the responsibility is terminated by mutual agreement between the facility and patient.

**2-3. Staffing of dialysis units.** *a.* The dialysis unit has an appropriately qualified staff to provide care on a 24-hour basis.

*b.* Medical director and medical staff standards are outlined in part II, JCAHO, Standards of Practice for Physicians—ESRD Patient Population. In addition, there will be a qualified surgeon capable of constructing internal arteriovenous fistulas, internal arteriovenous grafts, and external plastic arteriovenous shunts necessary for hemodialysis; and dealing with complications involving the accesses. Ideally the surgeon should provide the dialysis unit with a diagram indicating the course of all placed internal accesses. Additionally, a physician experienced in inserting both acute and chronic Tenckhoff or other peritoneal dialysis catheters must be available.

*c.* All other professional medical services provided in the hospital should be readily available to dialysis patients when needed. Particular attention should be given to satisfying the psychological and emotional needs of dialysis patients by the responsible physician, the ancillary staff and when indicated, by psychiatric consultation and/or the clinical psychologist and medical social worker. The role of house staff participating in the dialysis unit must be defined.

(1) *Professional nursing services.* Standards are outlined in part III, JCAHO, Standards of Practice for Nephrology Nurses in Dialysis Units—ESRD Patient Population.

(2) *Hemodialysis technicians.* Technicians preferably will have a practical nursing background and must be graduates of an accredited hemodialysis technician school, or must have a minimum of 2 years dialysis experience after a structured preceptorship program. A mechanical technician is desirable for a unit that will treat more than 30 to 40 patients especially if re-use is planned.

(3) *Social services.* Standards are outlined in Part IV, JCAHO, Standards of Practice For Social Services—ESRD Patient Population. One master of social work (MSW) should be designated full-time to the dialysis unit for every 50 dialysis patients (home or in-center).

(4) *Dietitian.* Standards are outlined in Part V, JCAHO, Standards of Practice for Dietitians—ESRD Patient Population. One registered dietitian should be designated full time to the dialysis unit for every 50 dialysis patients (home or in-center).

d. The above mentioned unit dialysis staff members will be designated as members of the patient care team. Other members should include a psychiatrist, a chaplain, and members from both the physical therapy and occupational therapy services. The patient care team should meet frequently so that all patients are discussed and their short term care plans modified as needed and outlined in the supporting professional standards.

e. Staffing guidelines are—

(1) *Unit capacity.*

(a) Under optimum conditions, each home training station will train 10 to 12 patients a year.

(b) Determining the capacity of the hemodialysis unit is complex. It is determined by several factors:

- 1 The number of times a patient is dialysed.
- 2 The length of each dialysis.
- 3 The number of dialysis positions.
- 4 The number of trained staff available.
- 5 The type of dialysis taking place.

(c) Optimum dialysis time for a single patient depends upon such items as the type of dialyzer and residual renal function. Its determination is the prerogative of the attending nephrologist.

(2) *Staffing ratio guidelines.*

(a) A ratio of at least one staff person to one patient is needed for hemodialysis of the acutely ill patient, for pediatric dialysis, and for the patient in home training.

(b) A minimum of two dialysis staff personnel must be in the in-center unit at all times while dialysis is being conducted. One of the staff must be a dialysis trained professional nephrology nurse. Additional professional nurses and hemodialysis technicians are assigned based on total workload factors.

(c) A physician must be physically present in the hospital when dialysis is being conducted outside the dialysis unit.

(d) A ratio of one staff person to three patients is satisfactory for chronic in-center hemodialysis with stable patients. With self-care patients, a ratio of one staff person to six patients is adequate.

(e) In home dialysis training units a trained home dialysis training nurse must be present during dialysis. One registered nurse should be allocated full-time to every 10 to 12 patients.

(f) There should be one registered nurse for every five technicians.

## 2-4. Physical design, equipment, and services. a.

*Principle.* The dialysis unit is designed to ensure a

safe and supportive environment for dialysis patients and for the personnel who care for them. With the highly technical nature of the dialysis care environment, the dialysis staff and patient can be at risk to sustain injury. A well designed unit, built to the state of the art safety codes, is essential in order to ensure that no harm will come to patient or staff.

b. *Guidelines.* Regulations governing physical facilities for care of dialysis patients establish guidelines. They include criteria outlined by the JCAHO, AR 385-10, 385-30, and local command policies.

c. *Units: physical design criteria.* Dialysis home training units (DHTUs) and in-center hemodialysis units are separate, distinct units. The following criteria will apply to both units as appropriate:

(1) Each patient bed or chair area in the unit must provide a minimum of 110 square feet of floor space. The bed and chair area are designed to permit a clearance of 4 feet on at least one side of the bed and chair. The bed or chair will be located in the room in such a way that connections to either arm or leg may be made. The designated space per station may include bed and chair space, nursing space, and work area but exclude storage space. It is designed to provide necessary patient privacy and for implementing isolation procedures that conform with the hospital standards for these procedures when they become necessary.

(2) The space in the home training room provides a minimum of 130 square feet to include chair, nursing work area, and storage for 1 day's worth of dialysis supplies. A patient training room is required for every 10 to 12 patients. Equipment within each training room will include—

- (a) Chalk or magnetic board.
- (b) Slide or overhead projector.
- (c) Recliner.
- (d) Minimum of two straight back chairs.
- (e) Storage cabinet.
- (f) Overbed table.
- (g) Source of dry heat (that is, a microwave oven).

(h) Portable peritoneal dialysis supply carts.

(3) Floor space is provided for a central nurses' station. (Not required in DHTUs.) The nurses' station must have direct or indirect visual observation of all patients.

(4) In teaching units, arrangements are such as to encourage the patient to assume responsibility for his or her own care as rapidly as possible, consistent with his or her learning capacity.

(5) The unit is designed to provide privacy for patients either by providing separate cubicles or by use of cubicle curtains.

(6) Space is provided for storage of linen.

(7) A janitor's closet is provided either within or immediately adjacent to the unit.

(8) Space is provided for adequate refrigerated as well as nonrefrigerated storage. Environmental control must be adequate to maintain an appropriate temperature for dialysate solution and betadine impregnated supplies. There will be different refrigerated spaces for food and non-food supplies. Additional storage space of approximately 400 square feet is required to provide logistical support for a DHTU.

(9) There are separate "clean" and "dirty" utility rooms.

(10) A lavatory with handwashing facilities is provided separately for patients and staff. Both are conveniently located near the unit.

(11) Handwashing facilities are convenient to the patient bed or chairs within the unit.

(12) Space is provided for instrument maintenance and storage of equipment. Space will also be available for assembling, disassembling, and testing dialyzers.

(13) A conference room should be conveniently located in or near the unit.

(14) Adequate 30-ampere electrical circuits with a 3-wire grounded system will be available in the unit with a minimum of 2 duplex 120-volt receptacles convenient to each bed and chair and located at least 30 inches above the floor. All electrical equipment must meet the standards outlined in subparagraph *d* below. Where equipment is to be used in the patient's home, it will be checked for electrical safety prior to release from the unit. An emergency backup power system must be available to the unit.

(15) Plumbing for all units is designed to provide a minimum water pressure adequate to the needs of the equipment used. Waste lines serving the dialysis equipment must be designed to prevent back flow and there will be necessary check valves and shut off valves appropriately located in the plumbing system.

(16) Isolation facilities must be available for any patients with infectious diseases. They will be used according to guidelines outlined in the hospital's and unit's infectious control policies.

(17) An effective means of separating children from adults undergoing dialysis will be provided whenever possible.

(18) A staff and/or lounge break area must be available close to or within the unit.

(19) An emergency call system to summon help from outside the unit in the event of an emergency must be available.

(20) Adequate office space must be provided for the following administrative personnel:

(a) Medical director (should include a patient examining area).

(b) Head nurse.

(c) Noncommissioned officer in charge (NCOIC).

(d) Home dialysis training nurse in the DHTU.

*d. Electrical safety criteria.*

(1) *Principle.* The dialysis unit will be constructed, equipped, and operated in a manner which protects patients, visitors, and personnel from electrical hazards. The use of electrical equipment in the dialysis unit, along with liquids used in dialysis which are highly conductive, places patients, staff, and visitors at risk. Proper operation and maintenance of equipment is essential to prevent injury from electrical shock, fire, and explosions.

(2) *Supporting criteria.*

(a) The dialysis unit's construction, equipment, and operation will comply with all applicable building codes and Federal, State, and local command policies and regulations related to electrical safety.

(b) The following requirements with respect to electrical safety will be met by each device:

1 Electrical apparatus meets the "nonisolated" patient connection requirements of the American National Standard Safe Current Limits for Electromedical Apparatus.

2 An electrical ground is provided whenever necessary according to normally accepted practice.

3 Metals in electrical apparatus or components are corrosion resistant when used as specified or in accordance with normally accepted procedures.

4 Electrical receptacles are shielded from liquid spills.

5 Electrical circuits are separate from hydraulic circuits and adequately isolated from fluid leaks.

6 Main electrical failure to a system and its components is indicated by an audible alarm.

(c) All electrical equipment and/or electronic systems used within the dialysis unit will be inspected for reliable and safe performance. Such inspection will—

1 Be performed by a qualified person as outlined in NFPA Standard 99.

2 Occur prior in initial use, after repair, and thereafter at least semiannually.

3 Be documented.

(d) Resource persons are available to the dialysis staff at all times to provide advice and/or service on electrical equipment and electronic systems.

(e) Information regarding the use and care of all equipment is readily available to the dialysis staff.

(f) Written policies and procedures regarding electrical safety are established. Such policies and procedures include, but are not limited to—



1 Preventive maintenance programs.

2 General precautions in the care of patients requiring the use of electrically operated devices.

3 Precautions in the care of patients who are particularly prone to electrical hazards such as those with debilitating conditions, loss of skin resistance, indwelling catheters or cardiac leads and severe electrolyte abnormalities.

4 Proper grounding.

5 Restrictions in the use of extension cords and adapters.

6 Prevention of overload to any electrical system.

7 Inspection of electrical equipment and electronic systems.

8 Disposition and servicing of malfunctioning equipment.

9 Regulation and maintenance of appropriate temperature and humidity to prevent electrical hazards.

*e. Fire safety criteria.*

(1) *Principle.* The dialysis unit must be constructed, equipped, and operated in a manner which protects patients, visitors, and personnel from fire hazard. Fire safety is an issue of concern to all health professionals charged with the care and safety of their patients. The abundance of electrical equipment utilized within the dialysis unit renders it an area of increased risk for fire hazards. Sparking and overheating of electrical equipment are documented causes of hospital accidents. Such events become particularly hazardous in the unit, where the frequent use of oxygen and flammable liquids provides an environment which readily supports fire.

(2) *Supporting criteria.*

(a) The dialysis unit construction, equipment, and operation will comply with applicable building codes, national fire codes, current life safety codes of the National Fire Protection Association (NFPA), JCAHO standards, and local command policies.

(b) A manually operated fire alarm system will be available within the dialysis unit.

(c) Fire extinguishers will be available within the dialysis unit at all times and will be—

1 Of the type required for the classes of fire anticipated in the area.

2 Located so as to be readily available when needed.

3 Inspected at least monthly with the inspection documented.

(d) A dialysis staff member will be a member of the hospital safety committee.

(e) The unit must ensure that policies and procedures which will minimize fire hazards to patients, visitors, and personnel are established and reviewed annually. Such policies and procedures include, but are not limited to—

1 Prevention of fire hazards in the presence of an oxygen enriched atmosphere.

2 Use, storage, and transportation of gas cylinders.

3 Fire drills.

4 Fire extinguisher system.

5 Evacuation plan.

6 Reporting of fire safety policy violations.

(f) Fire drills must be held at least quarterly for each shift, their occurrence documented and evaluated, and corrective action taken for any deficiency.

*f. Equipment and supplies.*

(1) *Principle.* The dialysis unit will have essential equipment and supplies immediately available at all times. Provision of safe and effective care assures availability of the equipment and supplies necessary to implement appropriate interventions. The dialysis devices and accessories as well as emergency equipment are essential in dialysis therapy.

(2) *Supporting criteria.*

(a) In accordance with the standards set by JCAHO, when not provided in the unit, at least the following will be readily available in the hospital for use within the dialysis unit:

1 Oxygen and compressed air and the means of administration.

2 Mechanical ventilatory assistance equipment, including airways, manual breathing bag, and ventilator.

3 Cardiac defibrillator with synchronization capability.

4 Respiration and cardiac monitoring equipment.

5 Thoracentesis and closed thoracotomy sets.

6 Tracheotomy set.

7 Tourniquets.

8 Vascular cutdown sets.

9 Infusion pumps.

10 Laryngoscopes and endotracheal tubes.

11 Tracheobronchial and gastric suction equipment.

12 Portable x-ray equipment.

(b) There will be established written policies and procedures for ordering, monitoring, and replacing equipment and supplies needed for the unit.

(c) There will be policies that ensure equipment and supplies considered necessary during emergency situations will—

1 Be centrally located and readily accessible.

2 Have documented inspection every day the unit is open by appropriate unit personnel.

(d) Dialysis devices and accessories considered essential for dialytic therapy will—

1 Be inspected by biomedical maintenance at regular intervals and the inspection documented.

2 Be serviced by school trained biomedical repairmen who must be available for the repair and maintenance of all equipment. The individual to perform maintenance often will be involved in other projects, but must be designated to be available at all times when emergency or priority repairs are required.

(e) Necessary supplies and equipment will be available before admission of a new patient.

(f) Provision will be made for replenishment of needed supplies on a 24-hour basis including but not limited to—

1 Access to supply areas not located on the unit.

2 Availability of nursing supervisors or on-call personnel who are responsible for obtaining needed supplies from areas not staffed on a 24-hour basis.

(g) Sterilization equipment will be available to process those items requiring sterilization.

*g. Other services.*

(1) Clinical laboratory services will be readily available 24 hours a day and have the capability of performing all necessary laboratory tests (including chemistries, blood gas analysis, electrolyte determination, serum and urine osmolality, microtechniques, and microbiology services) with timely reporting of results.

(2) The unit or hospital will assure that there is an adequate supply of blood to meet the needs of patients at all times.

(3) Diagnostic radiologic services will be readily available 24 hours a day.

**2-5. Policies and procedures.** *a. Principle.* The dialysis unit must be managed in a manner which ensures the delivery of safe and effective dialysis treatment. In order to provide continuity of safe and effective patient care, an organized management system is essential. This system must provide a written philosophical and practical basis for all care provided within the unit or home environment which reflects the multidisciplinary nature of the care involved with the acute and chronic renal failure patient.

*b. Responsibility.* The primary responsibility for development of dialysis unit policies and procedures is with the medical director. Coordination and approval of other professions is mandatory when policies and procedures reflect practice of those professions. The

evaluation and monitoring of unit policies and procedures is the co-responsibility of the medical director and unit head nurse.

*c. Supporting criteria.*

(1) The dialysis unit and Dialysis Home Training Unit Program have a written philosophy and objectives which—

(a) Reflect the Army standards for dialysis units.

(b) Guide the activities of the unit or Dialysis Home Training Unit Program.

(2) The operations of the unit must conform to Federal laws, Army regulations, Army Medical Department policies, and local command policies.

(3) A policy and procedures manual will be developed, annually reviewed, and approved by the hospital administration. Where appropriate, there is a multidisciplinary approach to policy development. At a minimum there should be policies and procedures developed that address the following areas:

(a) Administrative policies.

1 Unit mission and objectives.

2 Description of unit.

3 Organization chart or chain of command.

4 Medical director's role.

5 House staff and consultant role.

6 Attending nephrologist's role to include initiation of transplant evaluation.

7 Nursing administration role (unit level).

8 Committee structure of a multidisciplinary nature which includes discharge planning and quality assurance.

9 Kidney procurement.

10 Organization of the unit chart (medical record) and policy guidelines on how to use all forms.

11 Admission and selection criteria.

12 Transfer or discharge criteria includes expected duration of stay emphasizing minimizing the stay due to nosocomial infection. Emphasis is on maturation into a home training program or self-care.

13 Transfer of patients when space is unavailable to include prioritization of care.

14 Transient patients.

15 Provisions made for home visits per unit capabilities.

(b) Operational policies.

1 Hours of operation.

2 General safety to include water quality and water pressure loss.

3 Electrical safety.

4 Maintenance routines.

5 Infection control to include visitors and traffic control; eating and smoking in the unit; isolation of infectious patients or staff; handling of linen,

trash, and needles and syringes; lavatory facilities; health screening of personnel; environmental cleaning; prophylaxis for procedures and contaminations (DHTU only).

6 Confidentiality requirements to include patient consent for release of information.

7 Emergency protocols to include supply, equipment, and drug protocols and issues.

8 Support services to include social services, dietitian, logistics, medical maintenance, and sales representatives.

9 Fire and disaster policy and plan to include specific unit roles and the bomb threat issue.

10 Physical security.

11 Staffing requirements to include patterns, overtime, vacation, and on-call policies.

12 Job descriptions and performance standards.

13 Care delivery system to include shift duties and assignment of personnel.

14 Evaluation of competency.

15 Documentation of patient phone consultations and staff phone consultations.

16 Nursing responsibilities related to policy for general wards related to care of dialysis patients, specifics for communicating with physicians, nursing process utilization and documentation, emergency measures, standing physician orders, utilization of students in the unit, role in research, and logistical management.

17 Patient considerations to include informed consent, rights and responsibilities of patients, patient education, written take home instructions and an acknowledgment of a renal replacement options discussion.

(c) Dialysis clinical procedures.

1 Administration of medication to include anticoagulants, antibiotics, emergency drugs, blood and blood products, oxygen, and preparation of dialysis solutions to include testing of conductivity.

2 Procedures for each dialysis machine and equipment using manufacturer's recommendations as guidelines to include set-up and/or priming and pressure testing of dialyzers, breakdown of the machine at the end of treatment, sanitization of the machine, and operator maintenance.

3 Initiation of dialysis for each access to include single and double needle.

4 Monitoring during dialysis to include acute, chronic, calculation of transmembrane pressure, alarms, and troubleshooting.

5 Termination of dialysis for each access to include single and double needle.

6 Access care.

7 Laboratory procedures to include hematocrit, clot times, submission of specimens, procedure for any laboratory equipment maintained on the unit, and checks for residual sanitization agents.

8 Medical complications and emergencies to include air embolism, seizures, hypo- and hypertension; chills and fever, hemolysis, headache, cardiac arrhythmias, muscle cramping, chest pain, nausea and vomiting, pruritis, transfusion reaction, cardiac and/or respiratory arrest, new dialyzer syndrome, adverse reaction to medication, and fluid overload.

9 Technical problems to include clotted lines, clotted dialyzers, blood leak, air in blood, arterial pressure (high and low), venous pressure (high and low), conductivity (high and low), temperature (high and low), low water pressure, electrical outage, needle dislodgement, venospasm, line separation, and dialysate pressure alarm.

10 Special procedures to include subclavian catheter insertion, femoral catheter insertion, declotting shunts, continuous arterial venous hemofiltration (CAVH), hemoperfusion, and sequential ultrafiltration.

11 Patient and family education to include conservative management and transition to renal replacement therapy, community resources, psychosocial and sexual adaptations, in-center resources, disaster and emergency measures (must be reviewed with patient annually), access care, diet and fluids, medications, complications (medical and technical), blood studies, disease processes, treatment modalities, rights and responsibilities, a problem solving standing operating procedure (SOP) for the patient, grievance mechanism, and informed consent.

12 Water standards to include monthly cultures of water and dialysate; annual comprehensive water analysis (additionally electrolytes must be checked after operator maintenance on proportioning mechanism), sanitizing waters system, protocol for changing filters, monitoring device for water purification, monitoring water pressure and quality, and a problem solving SOP.

13 A maintenance policy which must be in accordance with the manufacturer's recommendations and produce documentation of maintenance performed.

(d) Policies related to DHTU.

1 Medical advice during phone conversations.

2 Peritoneal catheter insertion care.

3 Alteration in catheter patency.

4 Management of peritonitis.

5 Monitoring of home patients.

6 Catheter break-in.

7 Catheter flushing.

- 8 Bag exchange.
- 9 Peritoneal line, tubing, or set change.
- 10 Peritoneal catheter incisional dressing change.
- 11 Capping off.
- 12 Adding intraperitoneal medication.
- 13 Catheter exit site care.
- 14 Catheter exit site leakage.
- 15 Medical complications to include bloody effluent, pruritis, and intraperitoneal air.
- 16 Technical complications to include dialysate overheating (continuous ambulatory peritoneal dialysis (CAPD)), a hole in the line, bag rupture, and spike contamination.

*d. Mandatory unit programs.* Every dialysis unit must develop policies related to the following unit programs (criteria for each program policy will be outlined):

*(1) Quality Assurance Program.*

*(a) Principle.* The dialysis unit will have a multidisciplinary, well defined, organized written program to evaluate care of the dialysis patient. Systematic mechanisms for regular review and evaluation of patient care practices are essential to attain optimal, achievable standards of care.

*(b) Supporting criteria.*

1 Performance standards and standards of care of each dialysis unit will be established to ensure quality of care. Such standards will serve as a basis for concurrent audits of aspects of the dialysis program.

2 Sources of the predetermined criteria (standards of practice, policies, and procedures) are to be reviewed annually, revised as necessary, dated to indicate the time of the last review and signed by the reviewing authority.

3 Evaluation of practice includes identification, analysis, and documentation of variations from set criteria; determination and documentation of deficiencies; investigation of deficiencies to determine the probable cause by the concerned practitioner or unit; submission of recommendations for corrective actions of identified deficiencies to the investigator of the quality assurance program; selection and implementation of corrective actions at the level of the unit unless the scope, intensity, or cause of the deficiency is outside the unit's jurisdiction; monitoring and recording of results of corrective action; further investigation and provision of corrective action if necessary; report of findings, recommendations, corrective actions and monitored results to the hospital quality assurance committee. A program will be established at the unit level to monitor all unit standards of care.

*(2) Infection Control Program.*

*(a) Principle.* The dialysis unit will have a comprehensive infection control program. The risks and dangers of nosocomial infection have been well documented. Infections acquired within the hospital or brought into the hospital from outside sources are potential hazards for all persons having contact with the hospital. The risks of infections within the dialysis unit is even greater due to the multiplicity of risk factors present; such as, use of blood products and increased susceptibility of the patient to pathogenic as well as opportunistic organisms.

*(b) Supporting criteria.*

1 Written infection control policies and procedures specific to the unit will be established and comply with any requirements directed by JCAHO, the hospital infection control committee, Centers for Disease Control, and the physical layout of the unit.

2 Written infection control policies and procedures will address the prevention and control of infection among patients, personnel and visitors. These include but are not limited to—

- Patient eligibility for admission, including requirements for equipment and personnel.

- Methods employed in the prevention of potential nosocomial infections.

- Storage, handling, and disposal of supplies, waste, and equipment.

- Inspection for outdated sterile items.

- Environmental disinfection and equipment sterilization.

- Nursing personnel assignment.

- Apparel worn by hospital personnel.

- Specific indications for isolations and precaution requirements in relation to potential or actual hepatitis and other infectious diseases.

- Responsibility and authority for initiating and enforcing infection control.

- Acceptable ventilation patterns, air exchange rates, air temperature, and humidity.

- Staff and patient laboratory tests for hepatitis will be monitored according to current Centers for Disease Control standards.

3 The dialysis staff, in collaboration with the hospital infection control committee, will annually review and revise the unit's infection control policies and procedures.

4 The dialysis staff and the hospital infection control committee will devise an on-going system for reporting, reviewing, and evaluating infections within the dialysis unit.

5 The dialysis staff will monitor all findings from concurrent and retrospective patient care evaluations that relate to infection control activities within the dialysis unit.

6 The dialysis staff is encouraged to receive the hepatitis vaccine series.

7 Documented inservice education concerning current infection control practices, pharmacological interventions and their implications will be provided.

(3) *Water Quality Program.*

(a) Principle. Water used for dialysis purposes will be analyzed periodically and treated as necessary in order to assure that it is biologically and chemically compatible with acceptable dialysis techniques.

(b) Rationale. The water used in a hemodialysis machine is an integral part of the kidney dialysis process. The dialysis unit must be equipped with water treatment methodologies that can provide adequate water quality for dialysate production which meets the standards proposed by the Association for the Advancement of Medical Instrumentation (AAMI). Water quality for hemodialysis treatment is an important issue of concern to health care professionals. Severe patient reactions such as hypotension, shock, and hyperpyrexia have been associated with water containing bacteria and/or their endotoxins. Also, some chemicals have been shown to cause toxicity in dialysis patients. The maximum level of chemical contaminants identified as needing restriction may be present in water for dialysis. Therefore, the unit must perform regular water testing to ensure safe levels of chemicals and bacteria in the water.

**2-6. Staff, patient, and public education.** *a. Educational requirements.* The educational requirements of a dialysis program will vary with individual situations. The following elements should be among those considered for determining the content and scope of the program:

(1) Nature and objective of the program (acute versus chronic; home versus hospital).

(2) Nature and capacity of facilities.

(3) Symptomatology and course of kidney disease.

(4) Alternative methods of treatment.

(5) Patient selection criteria.

(6) Costs of the program with appropriate explanatory interpretations to include Medicare and CHAMPUS reimbursement policies.

(7) Description of an artificial kidney.

(8) Education and orientation of the patient's family.

(9) Patient grievance channels.

*b. Staff education.*

(1) A formal orientation and preceptorship program will be developed for all new staff entering into the dialysis unit.

(2) All professional staff members are required to

seek continuing education. Documentation of such education is mandatory.

(3) All staff members are encouraged to participate in community educational and renal related activities. Such organizations include the End Stage Renal Disease Networks, the National Kidney Foundation, and the American Kidney Foundation.

(4) An active dialysis unit inservice program will be initiated in all dialysis units and should encompass a minimum of 24 inservices per year. Topics considered acceptable are any relating to renal disease and dialysis as well as those mandated by JCAHO. Inservice education should be based, at least in part, on the results of the monitoring and evaluation of the appropriateness of care provided to patients treated in the unit. Documentation is mandatory.

*c. Patient education.* A unit policy will be developed outlining in detail the patient education program. At a minimum, such programs will include—

(1) Orientation to the unit that includes routine activities of the unit, health care providers' names and roles, relevant hospital and unit policies, and available support services.

(2) Information on disease condition, renal replacement therapy, medications, diet, access care, diagnostic tests, followup care and psychosocial implications of ESRD.

(3) Information related to patients' role and responsibilities related to conservative management and renal replacement therapy.

(4) Information related to community resources available.

*d. Public education aspects of the dialysis program.*

(1) There are inevitably public information and education involvements for any institution which undertakes the operation of a dialysis program. These result largely from the life or death nature of the individual patient's disease and treatment or lack of treatment; the necessity for employing appropriate case selection methods since not all patients are suitable for treatment and treatment resources are at best limited; the not infrequent failures and possible complications of treatment; and the psychological and emotional trauma for the individual and his or her family confronted with the necessity for continuing dialysis to assure survival and hopefully a near normal level of activity and self-sufficiency.

(2) Because of these aspects, a public education program should be planned consistent with local community needs. It should include collaboration and integration with public education efforts of other official and voluntary agencies and organizations concerned with the problem of kidney disease treatment

by hemodialysis and transplant surgery. There are four distinct segments of the public to be considered. They are—

(a) The community at large, within the hospital's service area.

(b) The community of employees within the hospital.

(c) The community of patients and families who are receiving or will receive treatment.

(d) The medical community.

(3) Objectives of the educational effort are to—

(a) Promote a community-wide understanding and support of the program.

(b) Promote early referral of cases of failing kidney patients for evaluation and possibly more effective treatment.

(c) Protect the program from adverse publicity resulting from a misunderstanding of objectives, policies and procedures, and failures.

(d) Ensure that the patient and his or her family understand the nature of the disease and the implications of alternative courses of treatment. Ongoing patient education should be provided by all members of the patient care team throughout the patient's dialysis unit stay.

(4) Several methods of communicating with the public have proven effective. By using materials already available, the program can minimize its own investment in developing an educational campaign. Some or all of the following methods may be used:

(a) Medical staff and county medical society presentations.

(b) Films.

(c) Speaker bureaus.

(d) Literature.

(e) Open house.

(f) Newspaper articles.

(g) Radio and television.

(h) Scheduled demonstration visits for outside groups.

(i) Patient manuals.

**2-7. Records and Documentation.** *a.* Specific standards related to documentation responsibilities for each profession are outlined in the individual professional standards in this TB MED, parts two through five.

*b.* Dialysis patient charts will include the following as a minimum (exclusive of normal forms required in any patient's outpatient or inpatient record):

(1) Long-term care plan.

(2) Short-term patient care plan.

(3) Medication record.

(4) Dialysis laboratory and diagnostic procedure record.

(5) Consent forms (SF 522 (Medical Record—Request for Administration of Anesthesia and for Performance of Operations and Other Procedures)).

(6) History and physical.

(7) Dialysis nursing assessment.

(8) Standing physician's orders—chronic dialysis (when applicable).

(9) Progress Notes (SF 600 (Health Record—Chronological Record of Medical Care) is to be used by the entire dialysis health care team in outpatient charts).

(10) Dialysis therapeutic documentation care plan.

(11) Patient's rights and responsibilities.

(12) ESRD education record.

(13) Peritonitis record (if appropriate).

(14) Hemofiltration flowsheet (if appropriate).

(15) Continuous ambulatory peritoneal dialysis record (if appropriate).

(16) Continuous cyclic peritoneal dialysis record (if appropriate).

(17) Hemodialysis treatment record (if appropriate).

(18) Hemodialysis clinic visit (if appropriate).

(19) Peritoneal dialysis clinic visit (if appropriate).

*c.* All records used will have written policies on their use on file in the dialysis unit.

*d.* For records location policy, dialysis records will be considered outpatient records.

(1) The dialysis record chart will be kept in the dialysis unit and contain originals of all the forms listed in paragraph 2-7(b). Other pertinent data such as chest x-ray reports or electrocardiogram (ECG) reports can be copied and placed in this chart.

(2) Each unit will establish a record "purging" policy with the patient administration division (PAD). PAD will maintain the regular outpatient record.

## PART TWO

# STANDARDS OF PRACTICE FOR PHYSICIANS— ESRD PATIENT POPULATION

### CHAPTER 3

#### GENERAL

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**3-1. Purpose.** The purpose of the AMEDD Standards of Practice for Physicians—ESRD Patient Population is to fulfill the professional obligation to set standards by which practice can be evaluated. Standards are dynamic and require revisions as practice dictates.

**3-2. Nephrology specialization.** Nephrology is a specialized area of practice dealing with actual or potential problems that could result in ESRD. Nephrology includes management of patients on all types of renal replacement therapy and the associated conservative management.

**3-3. Responsibility.** Nephrologists are responsible for the development and revisions of the Standards of Practice for Physicians—ESRD Patient Population. They also establish criteria for the evaluation of the effectiveness of medical therapy delivered to the defined patient population. Nephrologists bear primary responsibility for the conservative management and renal replacement therapy of patients with ESRD. Included in this responsibility is approval of all policies and procedures developed to manage the care of patients requiring renal replacement therapy.

**3-4. Objectives.** The Standards of Practice for Physicians—ESRD Patient Population blends standards outlined in Federal regulations, various State regulations, and the JCAHO. These standards are adaptable to any situation encompassing conservative ESRD management and renal replacement therapy. When implemented, the standards will—

*a.* Ensure delivery of individualized goal-oriented medical management of patients with (or at risk of) ESRD.

*b.* Identify the most effective mode of delivery of medical care in acute, chronic, and home dialysis programs.

*c.* Provide explicit criteria for peer review and performance evaluation.

*d.* Identify appropriate educational intervention for a specific patient and staff population.

*e.* Identify the need for medical research.

*f.* Assess the need for change or revision of policies and procedures.

*g.* Ensure physician participation in community health promotion, maintenance, and restoration.

*h.* Establish the physician as the leader of the multidisciplinary team responsible for patient care planning for patients requiring renal replacement therapy.

## CHAPTER 5

## PATIENT CARE RESPONSIBILITIES

**5-1. Data base.** The physician documents on approved forms a complete data base on the new patient by the third encounter. The data base includes—

- a.* A complete medical history and physical examination.
- b.* An ESRD diagnosis and results of diagnostic evaluation supporting that diagnosis.
- c.* A listing of the patient's major diagnoses.
- d.* An assessment of the appropriate treatment modality for the patient and a justification for that treatment modality.

**5-2. Care plans.** The physician develops the long- and short-term care plans in conjunction with the health care team and the patient. The plans include the ESRD diagnosis and therapeutic options.

- a.* Patient participation is essential in care plan development.
- b.* Multidisciplinary conferences are used to develop, review, and/or revise the long- and short-term care plans. Issues to be reviewed include but are not limited to—
  - (1) An update of the dialysis prescription.
  - (2) An appropriate dry weight.
  - (3) Appropriateness of current diet therapy.
  - (4) Appropriateness of current medications.
  - (5) Psychosocial issues.

- c.* Long-term care plans are reviewed and/or revised every year.

- d.* Short-term care plans are reviewed and/or revised monthly for unstable chronic patients, quarterly for stable chronic patients, or at scheduled clinic visits for home dialysis patients.

**5-3. Dialysis prescription.** The physician orders the dialysis prescription.

- a.* The initial prescription is ordered before the first dialytic treatment.
- b.* The physician documents review and/or revision of the prescription as needed, and at a minimum quarterly for chronic patients and quarterly or at scheduled clinic visits for home dialysis patients.

**5-4. Medications and therapies.** The physician orders the medications and therapies to be given on dialysis. This includes diet and fluid regimen. (A dialysis diet order "per dietitian" is acceptable.) Close communication between physician and nurse concerning medication and other therapy changes is mandatory. A change in therapy to include a change in medications mandates annotation in progress notes.

**5-5. Progress record.** The physician documents progress relative to major active diagnoses—

- a.* Monthly for chronic patients.
- b.* Quarterly or at scheduled clinic visits for home dialysis patients.
- c.* Weekly for acute dialysis patients dialyzed outside the dialysis unit.
- d.* Documentation should include, as appropriate—
  - (1) Results of prior therapy.
  - (2) Relevant new data.
  - (3) Impression.
  - (4) Therapeutic or diagnostic plan to include medication changes.

**5-6. Dialysis record.** The physician monitors and documents patient progress, condition, and response to renal replacement therapy as needed, but at a minimum of—

- a.* At each treatment for acute dialysis patients dialyzed outside the dialysis unit.
- b.* At daily unit rounds for chronic patients during dialysis and a progress annotation in the chart at least monthly.
- c.* Quarterly or at scheduled clinic visits for home dialysis patients.
- d.* If rounds on chronic patients are precluded by a medical emergency, at phone contact with the unit charge nurse which is mandatory.

**5-7. Laboratory studies.** The physician orders and evaluates appropriate laboratory studies for chronic dialysis patients monthly and quarterly or at scheduled clinic visits for home dialysis patients.

**5-8. Medical history.** The physician performs a periodic updated medical history and physical examination as needed but at least yearly. Included are an ECG and other indicated studies.

**5-9. Physician presence for acute dialysis treatment.** The physician must be physically present in the hospital during the conduct of acute dialysis outside the dialysis unit.

**5-10. Discharge summary.** The physician provides a discharge summary within 1 week of the patient's recovery, transplantation, or death.

**5-11. Transfer summary.** The physician documents a transfer summary at the time the patient is transferred to another facility.



## PART THREE

# STANDARDS OF PRACTICE FOR NEPHROLOGY NURSES IN DIALYSIS UNITS—ESRD PATIENT POPULATION

## CHAPTER 6

### GENERAL

**6-1. Purpose.** The purpose of Standards of Practice for Nephrology Nurses in Dialysis Units—ESRD Patient Population is to fulfill the profession's obligations to assess, plan, implement and evaluate nursing practice as it relates to all patients requiring renal replacement therapy. These standards will serve as a documentation tool to assist in the audit and evaluation process. Nursing standards are dynamic and require revisions as practice dictates.

**6-2. Nephrology nursing specialization.** Nephrology nursing is a specialized area of nursing practice dealing with the problems of patients with ESRD requiring renal replacement therapy. It encompasses a nursing knowledge base that is extended to include information needed to meet the needs of adult and pediatric patients requiring peritoneal dialysis and hemodialysis, either in an acute or chronic dialysis unit or in the home environment. This speciality also includes patients undergoing or preparing to undergo CAVH and hemoperfusion. Nephrology nursing is concerned with care of patients undergoing the following (see glossary):

- a. Acute dialysis.
- b. Chronic dialysis.
- c. Complicated chronic dialysis.
- d. Home training dialysis.
- e. Home dialysis.
- f. Conservative management.

**6-3. Responsibility.** Professional nephrology nurses are responsible for the development and revision of the standards of practice for nephrology nursing in dialysis units. They also establish criteria for the evaluation of the effectiveness of nursing practice delivered based on the standards. Although patients have the ultimate responsibility for their health status, professional nurses bear primary nursing responsibility for the conservative management and renal replacement therapy the ESRD patients receive. Included within this responsibility is the supervision of care provided by paraprofessional nephrology technicians to ensure delivery of safe

care. These responsibilities require that professional nephrology nurses in dialysis units maintain technical competency in dialytic therapy.

**6-4. Objectives.** The nephrology nursing speciality standards blend the Army Medical Department Standards of Nursing Practice (DA Pam 40-5) with standards outlined in publications by the American Nephrology Nurses Association, the American Association of Critical Care Nurses, the JCAHO, Federal regulations and the AMEDD dialysis unit standards. They are divided into two classifications of standards. These are the nursing process standards and structure standards. These standards for nursing practice are adaptable to any situation where dialytic therapy occurs and when implemented will—

- a. Ensure delivery of individualized goal-oriented dialysis nursing care through the use of the nursing process by professional nurses, or professional nurses in conjunction with dialysis technicians.
- b. Identify the most effective mode of nursing care delivery in the acute or chronic dialysis unit as well as the home setting.
- c. Assess need for numbers and levels of personnel required to provide patient care; this can form the basis for new manpower requirements.
- d. Provide explicit criteria for development of job descriptions, performance criteria, evaluation of patient care, and peer review.
- e. Identify appropriate educational intervention for a specific patient and staff population.
- f. Identify the need for nursing research and participation in other research programs.
- g. Assess the need for change or revision of policies and procedures.
- h. Ensure patient, family, and community participation in health promotion, maintenance, and restoration.
- i. Establish the registered professional nurse as the leader of the nursing care team who works in conjunction with a multidisciplinary health care team to develop goal-oriented care for the ESRD patient needing dialytic therapy.

## CHAPTER 7

## NURSING PROCESS STANDARD I—COLLECTION OF DATA

**7-1. Principle.** Data will be collected continuously during conservative management and dialysis on all patients in acute and chronic settings. Nurses will be accessible to patients during home dialysis. The collection of data about the health status of the patient is systematic and continuous, prioritized by the immediate condition of the patient, communicated to appropriate persons, and is recorded and stored in a retrievable and accessible system.

**7-2. Rationale.** A systematic, complete, and ongoing collection of data is imperative to a realistic assessment of a patient's needs for provision of comprehensive nursing care. The patient's health status data must be available for all members of the health care team on a need to know basis.

**7-3. Assessment criteria.** *a.* The nephrology nurse collects subjective and objective data to determine the status of the patient's problems and needs. The nephrology nurse—

(1) Utilizes appropriate physical examination techniques.

(2) Demonstrates technical competency in gathering objective data.

(3) Demonstrates competency in communication skills.

(4) Utilizes a current knowledge base in the process of data collection.

(5) Gathers pertinent physical, social, psychological, and spiritual data from the patient, significant others, other health care team members, and hospital and clinic records.

(*a*) A nursing history includes all items listed on an approved form for the nursing history and data base for medical records.

(*b*) A nursing assessment includes statements on the following as appropriate:

1 General assessment data base.

○ General appearance.

○ Age (include data as referenced in pediatric standards of nursing practice).

○ Sex.

○ Race.

○ Height.

○ Weight to include gain between dialysis treatments.

○ Allergies.

○ Blood type.

○ Hepatitis status.

○ Medical diagnosis.

○ Previous hospitalizations and past health problems.

○ Current medications.

2 Physical assessment systems review.

○ Integumentary system to include for turgor, lesions, color, scars, bruises, pruritus, and edema.

○ Head, face, neck to include for headaches, dizziness, and history of trauma; ears for earaches, frequent infections, tinnitus, vertigo, hearing tests, and hearing aides; eyes for blurring, spots, lacrimation, photophobia, itching, pain, infection, inflammation, exudate, glasses, and examination data; mouth for lesions, braces, caries, dental appliances, dental habits, dental examination data and results, and tongue.

○ Gastrointestinal to include for anorexia, nausea, vomiting, indigestion, pain, constipation, hiccups, diarrhea, ostomy, melena, daily bowel habits, and diet to include fluid consumption.

○ Pulmonary to include for breathing pattern, respiratory rate, cough, lung sounds, and smoking history.

○ Cardiovascular to include for heart rate, heart sounds, arrhythmias, peripheral pulses, and blood pressure (supine, standing, sitting).

○ Musculoskeletal system to include for muscle tone, weakness, atrophy, cramps, decreased range of motion; skeletal pain, fractures, and deformity.

○ Reproductive to include for gravida/para, onset of menarche, pap smear date, birth control, amenorrhea, decreased potency, and impotence.

○ Neurological to include for mental status, sleep patterns, neuropathies, sensory disturbances, and history of seizures.

○ Endocrine to include for delayed puberty, decreased libido, temperature intolerance, and excessive growth of hair.

○ Genitourinary to include for primary disease, anephric, transplant, urine characteristics, ostomy, venereal disease, infections, stones, and congenital anomalies.

○ Access site to include for location, external (shunt, subclavian, femoral, peritoneal catheter); and internal (AV fistula, graft).

3 Psychosocial assessment.

○ Psychological behavior on admission (anxious, agitated, apprehensive, restless, coopera-

tive, demanding, depressed, calm, willing to learn, or withdrawn).

- Family members.
- Educational level.
- Military history and occupational status.
- Language spoken.
- Recreational activities and hobbies.
- Understanding of renal disease.
- Use of community resources.
- Compliance with previous medical regi-

mens.

- Religion.
- Daily activity assessment.

*b.* The nephrology nurse collects subjective and objective data within a time period which reflects the gravity of the patient's problems and needs. The initial nursing assessment is initiated and recorded by the nurse by the end of the first patient encounter and completed by the end of the third patient encounter.

*c.* The nephrology nurse collects data in an

organized, systematic fashion to ensure completeness of assessment, concise communication of findings, and documentation of pertinent data in the permanent record. Data storage, documentation, and the communication system may include nurses notes, nursing data bases, taped nursing reports, walking nursing rounds, patient care conferences, and flow sheets.

*d.* The nephrology nurse reviews and revises the data base as new information is available and at the following time periods:

(1) *Acute*: each treatment.

(2) *Chronic*: every month for complicated patients and quarterly for stable patients.

(3) *Home*: every scheduled clinic visit.

*e.* The nursing history and assessment of the patient transferred into or out of the dialysis program should be reviewed and revised.

*f.* The nephrology nurse collaborates with other health team members to collect and share data and facilitates the availability of pertinent data to all health care team members.

## CHAPTER 8

## NURSING PROCESS STANDARD II—PATIENT PROBLEMS AND NURSING DIAGNOSES

**8-1. Principle.** Patient problems and nursing diagnoses are derived from the health status data recorded on an approved nursing data base and/or assessment form.

**8-2. Rationale.** The health status of the patient provides the data base for determining the health care needs. Patient problems and nursing diagnoses are clear, concise statements of existing or potential deficiencies in the patient's physical, emotional psychosocial, or spiritual responses, created by or related to a health problem that the nurse can treat.

**8-3. Assessment criteria.** *a.* The nephrology nurse identifies problems and needs based upon personal experiences and knowledge of the biological physical, psychological, and social sciences.

(1) *Data collection.* The nephrology nurse bases all problems upon pertinent subjective and objective data as collected from sources identified in Standard I.

(2) *Data analysis.* The nephrology nurse hypothesizes an etiologic basis of the patient's problems and needs utilizing the collected data.

(3) *Recognition of a pattern—nursing diagnosis.* The nephrology nurse analyzes the identified patient's problems and needs to determine whether they fall into a pattern that will lead to a nursing diagnosis. A nursing diagnosis cannot be based on a single cue, it must describe a pattern. A list of currently acceptable nursing diagnoses can be found in: Kim, MJ; McFarland, GK; McLane, AM. (1984). *Pocket Guide to Nursing Diagnoses*. St. Louis: the C.V. Mosby Company. Suggested common nursing diagnoses for the nephrology patient are—

- (a) Activity intolerance.
- (b) Bowel elimination, alterations in: constipation.
- (c) Cardiac output, alteration in: decreased.
- (d) Comfort, alteration in: pain.
- (e) Coping, ineffective family: compromised or disabling.
- (f) Coping, ineffective individual.

(g) Diversional activity, deficit.

(h) Fluid Volume, alteration in: excess.

(i) Health maintenance, alteration in.

(j) Home maintenance management, impaired.

(k) Nutrition, alteration in: less than body requirements.

(l) Powerlessness.

(m) Urinary elimination, alteration in patterns.

(4) *Validation or collaboration:*

(a) The nephrology nurse validates the nursing diagnoses by reviewing the preceding steps to determine that accurate and sufficient data has been obtained, leads logically to the diagnosis, and results in a pattern characteristic of the diagnosis.

(b) The nephrology nurse collaborates with the patient, significant others, and other health team members in identification of problems and needs.

*b.* Identified nursing diagnoses are utilized in the following manner.

(1) *Prioritized.*

(a) The nephrology nurse establishes the priority of problems and needs according to the actual or potential threat to the patient. This is particularly relevant to the acute dialysis patient.

(2) *Reviewed and revised.* The nephrology nurse reassesses problems and needs and their priority as the data base changes. At a minimum these should be reviewed as follows:

(a) Acute dialysis patients: each treatment.

(b) Chronic complicated patients: monthly.

(c) Chronic stable patients: quarterly.

(d) Home dialysis patients: at each scheduled clinic visit.

(3) *Documented in the medical record.* The nephrology nurse documents identified problems and nursing diagnoses, including their management and resolution in the permanent record.

(4) *Related to the patient's response.* The nephrology nurse states the nursing diagnoses and patient problems as related to the patient's response, not as a reiteration of the medical diagnosis.

## CHAPTER 9

NURSING PROCESS STANDARD III—NURSING CARE GOALS

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**9-1. Principle.** Nursing care goals, derived from the patient problems and nursing diagnoses and reflective of the prognosis, are formulated to provide a framework within which health care needs are addressed and resolved.

**9-2. Rationale.** Nursing care goals are states toward which nursing actions are directed to resolve identified problems, prevent problems, and direct patient education. They also ensure that the patient, significant other, or family is able to—

*a.* Verbalize knowledge of the disease condition, signs and symptoms, and therapy.

*b.* State names of prescribed medications, dosage, frequency, actions, and untoward effects.

*c.* Demonstrate essential skills necessary for health care.

*d.* Verbalize an understanding of those adaptive behaviors essential to promote, maintain or restore health, and when applicable, maintain life with dignity and comfort until death occurs.

**9-3. Assessment criteria.** *a.* The nephrology nurse identifies appropriate nursing goals for the problem and need. These nursing care goals are—

(1) Mutually established by the patient, family, significant other, and health care providers.

(2) Realistic and achievable within an identifiable period of time.

(3) Consistent with the therapy prescribed.

(4) Measurable patient outcomes.

(5) Attainable through available human and material resources.

*b.* The nephrology nurse formulates nursing care goals to—

(1) Meet patient and family education needs.

(2) Address prevention of high-risk complications.

(3) Address immediate and long-term needs.

(4) Develop outcome standards for patients undergoing specific dialytic therapies.

## CHAPTER 10

## NURSING PROCESS STANDARD IV—PATIENT CARE PLAN

**10-1. Principle.** An appropriate plan of nursing care will be formulated based on current scientific knowledge. It is developed to achieve identified goals.

**10-2. Rationale.** A systematic method to achieve the goals must be established. The scope of the plan of care is determined by the anticipated needs of the patient and revised as the needs change.

**10-3. Assessment criteria.** *a.* The nephrology nurse devises a plan of care that reflects current knowledge of the biological, physical, psychological, and social sciences. The nephrology nurse—

(1) Utilizes nursing assessment and determines nursing interventions for problems and needs.

(2) Addresses all identified problems and needs in the plan.

(3) Organizes the plan to reflect the priority of identified problems and needs.

*b.* The nephrology nurse develops the plan of nursing care to include—

(1) Nursing assessment, identified problems, and nursing diagnoses and goals.

(2) Nursing actions and orders to attain the goals that specify when appropriate WHO, WHAT, WHY, HOW, WHERE, and WHEN nursing orders and actions are to be performed. They should also include measures to prevent any adverse effects directly related to nursing practice.

(3) Whenever possible, prehospitalization procedures and health regimens practiced by the patient and family.

(4) Management of those individual risk factors which contribute to potential complications.

(5) Utilization of appropriate resources through consults and multidisciplinary conferences.

(6) Identification of activities through which care is evaluated.

(7) Patient and family education. Suggested content should include—

(*a.*) Orientation to the unit that includes routine activities of the unit, machinery, health care providers' names and roles, relevant hospital and unit policies, and support services.

(*b.*) Information on disease condition, renal replacement therapy, medications, diet, access care, diagnostic tests, followup care, and psychosocial implications of ESRD.

(*c.*) For pediatric patients, information relative to growth and development according to pediatric standards of nursing care.

(*d.*) Information related to patient role and responsibilities related to conservative management and renal replacement therapy.

(*e.*) Information related to community resources available.

(8) Considerations in the educational plan will include learning principles, behavioral objectives, a reinforcement plan, the readiness aspect, and the content level based on the patient's level of knowledge and understanding.

*c.* The nursing input into the patient care plan is—

(1) Developed by the nephrology nurse in collaboration with the patient, family, and other health team members.

(2) Initiated by the professional nurse by the end of the first patient encounter and completed by the end of the third patient encounter.

(3) Flexible and readily available to all health care providers as appropriate.

(4) Developed to incorporate interventions that communicate acceptance of the patient's beliefs, culture, religion, and socio-economic background.

(5) Developed, reviewed, and revised as problems are identified, reassessed, and resolved by the nurse with input from the patient and/or family and health care team members. At a minimum, this should occur every treatment for the acute dialysis patients, once a month for the chronic complicated patient, quarterly for the stable chronic patient, and at each scheduled visit for the home dialysis patient.

(6) Reviewed by the responsible professional nurse prior to assigning and/or providing care.

(7) Used in nursing care rounds, team conferences, and change of shift reports.

(8) Part of the permanent patient record.

## CHAPTER 11

NURSING PROCESS STANDARD V—NURSING ACTIONS AND  
IMPLEMENTED PLAN OF CARE

**11-1. Principle.** The nursing actions and plans of nursing care are implemented according to the priority of identified problems and needs. Nursing actions or orders are prescribed, with participation of the patient and/or family, to implement the plan of care, and documentation is integral to implementation.

**11-2. Rationale.** Nursing actions are planned nursing activities to promote, maintain, and restore the patient's maximum level of general health. The plan of care is skillfully implemented with appropriate attention to the patient's safety, psychological, physiological, educational, and spiritual needs. Implementation of the plan of care and the patient's response to the therapeutic measures are to be documented.

**11-3. Assessment criteria.** *a.* The nephrology nurse initiates nursing actions or orders. The prescribed nursing orders include but are not limited to measures that—

(1) Provide for a safe and therapeutic environment.

(2) Reflect how the patient can cope with or prevent health problems and maximize health capabilities.

(3) Reflect management of individual risk factors contributing to potential complications.

(4) Reflect management of actual or potential complications.

(5) Accomplish applicable patient outcome standards.

(6) Help the patient adapt to the physical, psychological, and social changes occurring as a result of the disease process and dialytic therapy.

(7) Reflect the patient's and/or family's participation in health promotion, maintenance, and restoration.

*b.* The nephrology nurse writes nursing orders so that they are—

(1) Independent nursing activities.

(2) Activities to assist in implementing medical orders.

(3) Consistent with the plan of care and related to identified problems and nursing diagnoses.

(4) Timed and dated.

(5) Revised upon changes in the patient's behavior as determined by the registered nurse and other health care providers.

(6) Consistent with standards, policies, and procedures.

(7) Predicated on patient and/or family informed consent.

(8) Documented in the medical record on an approved form.

(9) Signed by the registered nurse who wrote them.

*c.* The nephrology nurse implements the nursing orders and plan of care. The nephrology nurse—

(1) Integrates current scientific knowledge with competency in psychomotor skills.

(2) Implements care in an organized yet humanistic manner.

(3) Provides care in such a way as to prevent complications and life-threatening situations.

(4) Implements the nursing actions and plan of care in collaboration with the patient, family, and other health team members.

(5) Coordinates care delivered by health team members.

(6) Supports and promotes the patient's right to participate in his or her care.

*d.* The nephrology nurse documents interventions in the permanent record in a problem oriented nursing record format. Documentation includes—

(1) The patient's unique status, needs, responses, problems, capabilities, and limitations.

(2) The degree of goal achievement or non-achievement, as documented for each identified problem and nursing diagnosis. Documentation should reflect the effect of nursing intervention as related to goal achievement or non-achievement.

(3) The reason for omission of prescribed medical and/or nursing orders.

(4) Consistency with the timeframe specified in the goals and nursing orders.

(5) A status and progress summary of all current problems and nursing diagnoses on transfer into or out of a dialysis program.

(6) The date, time, and writer's full signature on nursing notes. Initials will verify accomplishment of actual nursing orders on appropriate forms.

## CHAPTER 12

NURSING PROCESS STANDARD VI—REASSESSMENT OF PATIENT PROGRESS

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**12-1. Principle.** The results of nursing care will be continuously evaluated. The patient's progress or lack of progress toward goal achievement, as assessed by the patient and/or family and nurse, directs reassessment, reordering of priorities, new goal development, and revision of the care plan.

**12-2. Rationale.** The effectiveness of nursing care depends upon comprehensive and intelligent determination of nursing's impact upon the health care status and goal achievement of the patient. The patient is an essential part of this determination.

**12-3. Assessment criteria.** *a.* The nephrology nurse collects data for evaluation within an appropriate time interval after intervention.

*b.* The nephrology nurse compares the patient's response to expected results to determine achievement or non-achievement of goals.

*c.* The nephrology nurse discusses the progress, as well as lack of progress, with the patient to encour-

age the patient's participation and responsibility for the plan of care.

*d.* The nephrology nurse determines the relevance of the nursing interventions to the identified patient problem and nursing diagnosis.

*e.* The nephrology nurse bases the evaluation on data from all pertinent sources.

*f.* The nephrology nurse evaluates the plan of care in collaboration with the patient and/or family and other health care team members.

*g.* The nephrology nurse attempts to determine the cause of any significant differences between the patient's response and the expected response.

*h.* The nephrology nurse reviews the plan of care and revises it based on the evaluation results.

*i.* The nephrology nurse documents evaluation findings, effectiveness of nursing care, and goal achievement in the nursing notes on a per treatment basis for acute patients, once a month for complicated chronic patients, quarterly for stable chronic patients, and quarterly or at scheduled clinic visits for home dialysis patients.



## CHAPTER 13

## STRUCTURE STANDARD I—SAFE, SUPPORTIVE DIALYSIS ENVIRONMENT

**13-1. Principle.** The dialysis unit or environment is designed to ensure a safe supportive environment for dialysis patients and for the personnel who care for them.

**13-2. Rationale.** With the highly technical nature of the dialysis care environment, the nephrology nurse and dialysis patient can be at risk to sustain injury. A well designed unit, built to the state of the art safety codes, is essential in order to ensure that no harm will come to patient or staff.

**13-3. Supporting criteria.** *a.* The nephrology nurse participates in the development of the philosophy of use and in the designing and planning of new or renovated dialysis units.

*b.* The nephrology nurse demonstrates knowledge of and appropriate responsibility for implementation of an electrically safe environment and one that is consistent with established policy and procedure.

*c.* The nephrology nurse demonstrates knowledge of and responsibility for implementation of appropriate aspects of the fire safety program.

*d.* The nephrology nurse demonstrates knowledge of and responsibility for obtaining necessary equipment and supplies.

(1) The nephrology nurse participates in establishing an inventory of necessary equipment and supplies for the unit that will—

(*a*) Include routine as well as emergency equipment.

(*b*) Reflect the specific needs of the potential patient population.

(2) The nephrology nurse participates in establishing written policies and procedures for ordering, monitoring, and replacing equipment and supplies needed for the unit.

(3) The nephrology nurse ensures that equipment and supplies considered necessary during emergency situations will—

(*a*) Be centrally located and readily accessible.

(*b*) Have documented inspection each day the unit is open by appropriate personnel.

(4) The nephrology nurse ensures that dialysis

devices and accessories considered essential for dialytic therapy will—

(*a*) Be inspected by biomedical maintenance at regular intervals.

(*b*) Have documented inspection by appropriate personnel.

(5) The nephrology nurse is responsible for ensuring the availability of necessary supplies and equipment before admission of a new patient.

(6) The nephrology nurse ensures that provision is made for replenishment of needed supplies on a 24-hour basis including but not limited to—

(*a*) Access to supply areas not located on the unit.

(*b*) Availability of nursing supervisors or on-call personnel who are responsible for obtaining needed supplies from areas not staffed on a 24-hour basis.

*e.* The nephrology nurse demonstrates knowledge and appropriate responsibility to ensure that water used to prepare dialysate does not contain chemical contaminants and microbial count in excess of that recommended by the Association for the Advancement of Medical Instrumentation (AAMI).

*f.* The nephrology nurse participates in establishing and monitoring infection control policies.

(1) The nephrology nurse, in collaboration with the hospital infection control committee, annually reviews and revises the unit's infection control policies and procedures.

(2) The nephrology nurse and the hospital infection control committee devise an ongoing system for reporting, reviewing, and evaluating infections within the unit.

(3) The nephrology nurse monitors, as appropriate, all findings from concurrent and retrospective patient care evaluations that relate to infection control activities within the dialysis unit.

(4) The nephrology nurse participates in documented inservice education concerning current infection control practices, pharmacologic interventions and their nursing implications.

*g.* The nephrology nurse ensures the delivery of safe nursing care to patients, being cognizant of the various "causes of action" for which the nurse may be legally liable.

## CHAPTER 15

## STRUCTURE STANDARD III—EVALUATION OF PERFORMANCE AND THE NURSING QUALITY ASSURANCE PROGRAM

**15-1. Principle.** The nephrology nurse's performance appraisal is based upon the roles and responsibilities identified in the job description. Nursing standards of practice are monitored through a quality assurance program.

**15-2. Rationale.** In order to maintain quality care within the dialysis field, nursing must establish written standards of nursing performance and mechanisms for evaluation of this performance. Written, measurable criteria delineating the nephrology nurse's roles and responsibilities in the dialysis unit provide the mechanism needed for the monitoring and evaluation of job performance and its impact on the quality of nursing care provided.

**15-3. Supporting criteria.** *a.* Job descriptions are criterion-based, written, and readily available for each classification of nursing personnel, and include—

- (1) Job title.
- (2) Organizational relationships and chain of command.
- (3) Basic functions and responsibilities.
- (4) Requirements and special skills needed, including but not limited to—
  - (a) Training requirements.
  - (b) Committee responsibilities.
  - (c) Teaching responsibilities.
  - (d) Leadership responsibilities.
- (5) Expectations for continuing education.
- b.* Nursing staff are evaluated in accordance with the appropriate military or civilian rating system:
  - (1) AN officers are evaluated in accordance with the officer evaluation report (OER) requirements. (AR 623-105.)
  - (2) Enlisted personnel are evaluated in accordance with enlisted evaluation report (EER) requirements. (AR 623-205.)
  - (3) Civilian personnel are evaluated in accordance with civilian personnel office requirements. (AR 690-400.)

*c.* Nursing staff develops a performance checklist to evaluate new staff's performance.

*d.* In addition to the formal evaluation mechanisms listed in *b* above, nursing staff is evaluated by—

- (1) Achievement of goals as set by the individual nurse in performance evaluation counseling.
- (2) Nurses responsible for the evaluation of those under their chain of command and who must have a thorough knowledge of the components of the individual's job description as well as knowledge of the appropriate rating system.

*e.* Within the framework of the dialysis unit quality assurance program, the nephrology nurse in the dialysis unit will have practices monitored as follows:

(1) Nephrology nursing practice is monitored and evaluated quarterly by such mechanisms as—

- (a) Retrospective chart review.
- (b) Generic audit and/or occurrence screening.
- (c) Process audit.
- (d) Peer review.

(2) Nephrology nursing practice is evaluated against a set of predetermined criteria representative of—

- (a) Standards of nursing practice.
- (b) Patient outcome standards.
- (c) Performance standards.
- (d) Nursing philosophy and objectives.
- (e) Nursing policies and procedures.
- (f) Current scientific knowledge.

(3) Sources of the predetermined criteria; that is, standards of practice and nursing policies and procedures are to be—

- (a) Reviewed at least annually.
- (b) Revised as necessary.
- (c) Dated to indicate the time of the last review.

(d) Signed by the reviewing authority.

(4) Evaluation of nursing practice includes—

- (a) Identification, analysis, and documentation of variations from set criteria.
- (b) Determination and documentation of deficiencies.

(c) Investigation of deficiencies to determine the probable cause by the concerned practitioner or unit.

(d) Submission of recommendations for corrective actions of identified deficiencies to the investigator of the Quality Assurance Program.

(e) Selection and implementation of corrective actions at the level of the professional nurse or unit unless the scope, intensity, or cause of the deficiency is outside the unit's jurisdiction.

(f) Monitoring and recording results of corrective action.

(g) Further investigation and provision of corrective action if necessary.

(h) A report of findings, recommendations, corrective actions, and monitored results to the chief, department of nursing.

(i) A continuous monitoring program to evaluate the status of all of a unit's standards of care.

## CHAPTER 16

## STRUCTURE STANDARD IV—CLINICAL NURSING RESEARCH

**16-1. Principle.** Nephrology nursing practice includes both the conduct and utilization of clinical research.

**16-2. Rationale.** The primary task of nursing research is the development and refinement of nursing theories which serve as guides for the advancement of nursing practice and improved patient care. The nursing profession has an obligation to initiate clinical nursing research and participate in or contribute to non-nursing research projects. The professional nurse has a personal responsibility to deal effectively with ethical issues and to be knowledgeable about related legal parameters of practitioner-researcher relationships to subjects with respect to human rights. (ANA Code for Nurses, 1976.)

**16-3. Supporting criteria.** *a.* Professional nurses are responsible for acquiring knowledge and understanding of the research process.

*b.* The nephrology nurse conducts and utilizes research independently and/or in collaboration with others. Such activities should reflect—

(1) Support and encouragement of nursing colleagues who are engaged in clinical research.

(2) An awareness of his or her own strengths and limitations in various aspects of the research process.

(3) Current knowledge of clinical research in his or her own field of practice.

(4) Respect for a variety of types of research efforts, each of which can further the development of nursing knowledge.

*c.* The nephrology nurse facilitates current and future clinical research through the consistent and accurate recording of data related to the patient's condition and nursing care provided.

*d.* The nephrology nurse implements changes in clinical practice only when the safety and effectiveness of the new practice have been established through an adequate research base and systematic investigation. Such changes must be accompanied by a written policy change and incorporation into an ongoing evaluation system or mechanism.

*e.* The nephrology nurse explores methods of sharing the finding of research efforts with nursing colleagues and with those from other disciplines.

*f.* The nephrology nurse determines the potential hazards and benefits related to research involving subjects for whom he or she is responsible, including patient, family, and personnel.

*g.* The nephrology nurse acts to protect the rights of human subjects, including—

(1) The right to privacy and confidentiality.

(2) The right to voluntary and informed consent without coercion.

(3) The right to freedom from mental and emotional harm.

(4) The right to know any potential harm or benefits related to participation in the research.

(5) The right to refuse to participate or to withdraw from a study without fearing reprisal or jeopardizing care.

*h.* The nephrology nurse is cognizant of and may participate in the mechanisms available to address violation of the rights of human subjects.

## PART FOUR

# STANDARDS OF PRACTICE FOR SOCIAL SERVICES— ESRD PATIENT POPULATION

## CHAPTER 17

### GENERAL

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**17-1. Purpose.** The Standards of Practice for Social Services—ESRD Patient Population are developed to fulfill the professional obligation to outline standards of social services care to patients requiring conservative management and renal replacement therapy as a result of ESRD.

**17-2. The social worker.** Social services are provided to patients and their families and are directed at supporting and maximizing the social functioning and adjustment of the patient. The qualified social worker is responsible for conducting psychosocial evaluations, participating in team review of the patient progress, and recommending changes in treatment based on the patient's current psychosocial needs. The social worker provides case-work and groundwork services to patients and their families in dealing with special problems associated with ESRD. They identify community social agencies and assist patients and families in using them. (Federal Register, Vol. 41, No. 108, Thursday, June 3, 1976, 405.2163 (b) and 405.2171 (b)). Inherent in the

delivery of services, professional social workers consider the following to be essential:

*a.* The maximization of individual patient potential and growth through self-determination, the enhancement of independence, and the participation in treatment.

*b.* The respect and dignity for the autonomy and being of the patient.

*c.* In order to facilitate the above, the social worker promotes and maintains professional relationships with the patient as well as other patient care providers.

*d.* Professional social work services are provided in a variety of settings to include the in-center dialysis unit, the clinic, and the DHTU.

**17-3. Responsibilities.** Professional social workers are responsible for the development and revision of the Standards of Practice for Social Services—ESRD Patient Population. They function within a multi-disciplinary team according to defined AMEDD dialysis unit standards. Standards are dynamic and will change with revisions in practice.

## CHAPTER 19

## PROCESS AND OUTCOME CRITERIA

**19-1. Early Intervention Program.** *a. Process criteria.*

(1) *Timeframe.* The social worker implements initial orientation upon ESRD diagnosis and upon referral of the attending physician or nurse.

*(2) Purpose.*

(a) Education of the patient and/or family based on assessment of current need and psychological needs.

(b) Counseling and referral services are provided as appropriate.

*b. Outcome criteria.*

(1) Establishment of the basis for an ongoing working alliance.

(2) The patient and/or family are provided with information and support.

**19-2. Intake evaluation.** *a. Process criteria.**(1) Timeframe.*

(a) The social worker completes the written initial intake interview on each patient new to the facility within 2 weeks of his or her introduction to treatment.

(b) A report of medical evidence must be documented within 1 month.

*(2) Data base.*

(a) Demographic information.

(b) Financial information.

*b. Outcome criteria.*

(1) Medicare application initiated.

(2) Initial psychosocial data incorporated in patient care plan.

(3) Initial advocacy activities facilitate patient adjustment to illness and treatment.

**19-3. Psychosocial evaluation.** *a. Process criteria.**(1) Timeframe.*

(a) A written psychosocial evaluation will be placed in the medical record within 1 month.

(b) An initial, less formal brief psychosocial evaluation will be made within 2 weeks, to be followed by a comprehensive psychosocial history within 3 months.

*(2) Data base.*

(a) Family of origin.

(b) Nuclear family.

(c) Education and employment.

(d) Financial and insurance.

(e) Significant medical or psychosocial history.

(3) *Components of assessment of psychosocial functioning.*

(a) Self-image.

(b) Roles.

(c) Interpersonal relationships.

(d) Coping mechanisms and stress management.

(e) Areas of strength.

(f) Areas of concern.

(g) Communication skills.

(4) *Psychosocial treatment plan and goal setting.*

*b. Outcome criteria.*

(1) Medical treatment plan reflects the patient's psychosocial situation.

(2) The patient and family situation is communicated to the treatment staff.

(3) Social work intervention is based on the psychosocial assessment.

(4) Psychosocial evaluation and treatment plan are in the medical record.

**19-4. Team review: collaboration and consultation.***a. Process criteria.*

(1) The long-term care plan will be done by the professional team, including the social worker, at least once a year. The social worker will participate in short-term care plans monthly for unstable chronic patients, quarterly for stable chronic patients, and at scheduled clinic visits for home patients.

(2) The social worker will participate in formal ESRD team review to develop long- and short-term care plans.

(3) The social worker encourages the patient to participate in formulation of care plans.

(4) The social worker attends all staff meetings relative to patient care and in that context makes recommendations for treatment based on psychosocial factors.

(5) The social worker will regularly communicate on an informal basis with other members of the treatment team to inform them of relevant developments in patient and family situations.

*b. Outcome criteria.*

(1) The medical treatment plan reflects the patient's medical and psychological situation.

(2) The long-term care plan reflects selection of appropriate treatment modalities and setting, as well as goals for the coming year.

(3) The short-term plan is a reflection of the patient's current status.

(4) There is a statement in the chart that the patient has participated in formulation of long- and short-term plans.

**19-5. Problem-oriented counseling.** *a. Process criteria.* The social worker is available for counseling or other intervention with the patient and/or his or her family relating to, but not limited to—

- (1) Adjustment to illness or medical treatment.
- (2) Transportation.
- (3) Finances and insurance.
- (4) Rehabilitation.
- (5) Marriage and family.
- (6) Individual growth and crises.
- (7) Bereavement.
- (8) Stress management.
- (9) Information and referral.
- (10) Coping mechanisms.
- (11) Support systems.
- (12) Sexuality.

*b. Outcome criteria.*

(1) The problem is assessed and the plan for resolution is implemented.

(2) The problem is resolved to the extent possible by direct intervention and/or referral to community resources.

(3) The social worker and/or patient determine which services are unavailable to or unutilized by the patient.

**19-6. Ongoing supportive counseling.** *a. Process criteria.* The social worker will have regular contact with each patient. These contacts represent the opportunity for the patient and social worker to build, develop, and maintain a functional working relationship.

*b. Outcome criteria.*

(1) The patient and social worker relationship will enhance the patient's overall sense of well-being.

(2) A contract for counseling and services will be based on identification of needs or problems.

**19-7. Community resources: Utilization, development, and liaison.** *a. Process criteria.*

(1) The social worker will keep an up-to-date file of community resources available and potentially beneficial to the patient group.

(2) The social worker will research and develop new resources that are available and beneficial to the patient group.

(3) The social worker will serve as liaison between the patient group and community resources available to them on a continuing basis.

(4) The social worker will inform patients and staff of the community resources available to them.

(5) The social worker will actively engage in public education.

*b. Outcome criteria.*

(1) The social worker has a substantial knowledge of appropriate community referrals for patients.

(2) The social worker is identified as an advocate for ESRD patients in the community.

(3) Patients will derive maximum benefit from community resources available to them through education and referral.

**19-8. Consultation to staff.** *a. Process Criteria.*

(1) The social worker presents inservice educational programs.

(2) The social worker consults with the physician(s) and/or patient care staff upon request or at the social worker's discretion.

*b. Outcome criteria.*

(1) Staff members gain additional knowledge.

(2) Anxiety, stress, and tension level of individual staff members is reduced.

(3) Patient and staff differences and/or conflicts are reduced.

**19-9. Transfer of patient information.** *a. Process criteria.*

(1) A copy of timely, pertinent psychosocial information should be forwarded to the social worker on both intrafacility and interfacility transfers within 1 week. Telephone contacts may also help to facilitate the transfer.

(2) The social workers communicate with the staff of their respective facility (current and new) in facilitating the patient transfer.

(3) The social worker counsels with the patient regarding the transfer and the meaning of the transfer to the patient in his or her adjustment to treatment.

*b. Outcome criteria.*

(1) The patient information is communicated to the staff of the new facility.

(2) The transfer process provides for a smooth transition for staff, patient, and family.

**PART V**  
**STANDARDS OF PRACTICE FOR DIETITIANS—**  
**ESRD PATIENT POPULATION**

**CHAPTER 20**

**GENERAL**

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**20-1. Purpose.** The purpose of the Standards of Practice for Dietitians—ESRD Patient Population is to fulfill the professional responsibilities for developing and implementing standards of practice for giving nutritional care to the patient with ESRD.

**20-2. ESRD dietitian qualifications.** Qualifications to provide dietetic care to the ESRD patient population are—

*a.* Maintain registration by the Commission on Dietetic Registration, American Dietetic Association.

*b.* Have at least 2 years of clinical experience as a registered dietitian (preferred).

*c.* Have trained at least 2 weeks under an experienced renal dietitian who has worked in renal dietetics for at least 1 year (preferred).

**20-3. Responsibility.** It is the responsibility of dietitians working with ESRD patients to review and revise the standards of practice as required.

## CHAPTER 21

### ORGANIZATIONAL STRUCTURE

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**21-1. Function.** The dietitian in the ESRD facility functions at a peer level to the nurse manager and the social worker and is directly responsible to the medical director. The dietitian is also responsible to the director, nutrition care.

**21-2. Qualifications.** Qualifications to provide dietetic care to the ESRD patient population are to—

- a.* Maintain registration by the Commission on Dietetic Registration, American Dietetic Association.
- b.* Have at least 2 years of clinical experience as a registered dietitian (preferred).
- c.* Have trained at least 2 weeks under an experienced renal dietitian who has worked in renal dietetics for at least 1 year (preferred) .

**21-3. Dietitian policies and procedures.** A written record must be kept of the policies and procedures by which dietitian services are governed. This includes a

statement of program philosophy, objectives, and job descriptions for department members.

**21-4. Coverage and availability of dietitian services.** The suggested ratio of dietitian to patients for maximum effectiveness of service is one full-time dietitian to 50 patients (in-center and home dialysis patients.) The dietitian's responsibilities encompass a variety of patient circumstances including pre-dialysis, acute, chronic in-center, home dialysis, transplantation, and patients during hospitalizations. The ratio should be adjusted accordingly when working with patients in a variety of settings and different stages of treatment.

**21-5. Continuing education.** Opportunities for continuing education must be available. Membership and participation in professional organizations relevant to the dietitian role in ESRD treatment should be encouraged.



## CHAPTER 22

## STANDARDS OF NUTRITIONAL CARE—CHRONIC AND HOME TRAINING DIALYSIS UNITS

**22-1. Interview of the patient.** The registered dietitian will interview the patient within 1 week of admission to the facility.

**22-2. Documentation.** The registered dietitian will document the patient's nutritional assessment in the medical record within 1 month of the admission to the unit. The assessment will include—

*a. Height and weight.*

- (1) Patient's present weight.
- (2) Patient's usual weight.
- (3) Statement of patient's weight stability.
- (4) Ideal weight or weight goal.
- (5) Estimated calories and proteins.

*b. Estimated intake based on 24-hour recall.*

- (1) Calories.
- (2) Protein.
- (3) High biological value protein.
- (4) Sodium.
- (5) Potassium.
- (6) Calcium.
- (7) Phosphorous.
- (8) Fluids.
- (9) Ethyl alcohol.

*c. Statement of patient's previous dietary modifications and/or counseling.*

**22-3. Team collaboration and consultation.** *a.* The registered dietitian documents participation in the patient's long-term care plan development or revision at a minimum of once a year.

*b.* The registered dietitian documents participation in the patient's short-term care plan. At a minimum these are reviewed and revised monthly for unstable chronic patients, quarterly for stable chronic patients, and quarterly or at scheduled clinic visits for home training patients.

The patient care plan should include one or more of the following:

- (1) Statement about the patient's nutritional status.
- (2) Statement about the goals regarding the patient's nutritional status.

*c.* The dietitian will participate in the formal ESRD team review to develop short- and long-term care plans.

*d.* The dietitian attends all staff meetings relative to patient care and makes recommendations for treatments based on nutritional needs.

*e.* The dietitian presents inservice educational programs for staff development.

*f.* The dietitian consults with the physician and/or patient care staff and patient, upon request, in the development or revision of the patient's long-term care plan at a minimum of once a year. The patient approves set goals.

**22-4. Progress report.** The registered dietitian will document in the patient's medical record every 3 months a progress report that includes—

*a.* Excessive interdialytic weight gains for the patient.

*b.* Present dry weight.

*c.* Present 24-hour urine output.

*d.* Ten pound gain or loss of dry weight.

*e.* Blood chemistries:

(1) Two consecutive predialysis blood urea nitrogen (BUN) tests above 100 mg percent or below 40 mg percent.

(2) Two consecutive monthly predialysis serum potassium levels above 5.5 mEq/l.

(3) Two consecutive monthly predialysis serum albumin levels below 3.0 mg percent.

(4) Two consecutive monthly predialysis serum phosphorous levels above 6.0 mg percent or below 2.0 mg percent.

(5) Two consecutive monthly triglyceride levels above 300 mg/dl.

(6) Two consecutive monthly blood glucose levels above 250 mg/dl.

(7) Magnesium and aluminum levels.

*f.* Patient's stable nutritional status.

**22-5. Diet instruction.** The registered dietitian will document that appropriate diet instruction was given to the patient within 2 months of admission to the dialysis program.

**22-6. Patient's and/or significant other's ability to follow diet instruction.** The registered dietitian will document the patient's level of understanding and ability of the patient and/or significant other to follow the prescribed diet within 2 months of admission to the unit.

**22-7. Special problems on nutritional assessment.** The registered dietitian will document any special problems the patient may have requiring nutritional assessment (i.e., community contacts, special diet studies, nursing home and hospital transfers, and dietary supplements).

### **TB MED 3**

**22-8. Changes in diet prescription.** The registered dietitian will document in the medical record any changes in the diet prescription with notation that appropriate diet instruction was given.

**22-9. Nephrology consultation.** The dietary prescription for the patient will be discussed with the nephrologist caring for the patient.

## PART SIX

## SCOPE OF PRACTICE FOR DIALYSIS HOME TRAINING UNIT NURSES

## CHAPTER 23

THERAPY OF CHOICE AND STANDARDS

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**23-1. Therapy of choice.** The DHTU nurse participates in the delivery of renal replacement therapy to those patients with ESRD for whom home dialysis (continuous ambulatory peritoneal dialysis, continuous cycling peritoneal dialysis, and home hemodialysis) is deemed to be the therapy of choice. Independent and interdependent nursing functions are based upon written, unit specific protocols and contracts. The role of the nurse includes but is not necessarily limited to—

*a.* Dispensing of medical advice both in-center and during patient phone consultations.

*b.* Independent assessment of the adequacy and quality of therapy being delivered per objective and subjective data.

*c.* Assessment of actual and potential health care problems and appropriate reporting or intervention attendant to chronic dialytic therapy.

*d.* Dispensing and writing of specific prescriptions per unit protocols.

*e.* Nursing consultant and advisor to other members of the health care team requiring the expertise attendant to the delivery of home dialysis.

*f.* Assessment of the patient's home environment requisite for self-care.

**23-2. Standards contract.** The functions described above require an acute sense of judgment and independent and interdependent practice. The nurse will establish a contract with a physician preceptor who will work closely with the nurse to ensure adequacy of care. Such a contract will be reviewed by the physician preceptor, DHTU nurse, and chief, department of nursing per AR 40-48. This contract will be reviewed no less frequently than quarterly and will not supersede performance standards. The contract is intended to act as an extension of established standards and to reflect the spirit of the team approach to the delivery of care to the ESRD patient.

## APPENDIX A

### REFERENCES

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#### Section I. RELATED PUBLICATIONS

AR 40-48  
Nonphysician Health Care Providers.

AR 385-10  
Army Safety Program.

AR 385-30  
Safety Color Code Markings and Signs.

AR 623-105  
Officer Evaluation Reporting System.

AR 623-205  
Enlisted Evaluation Reporting System.

AR 690-400  
Employee Performance and Utilization.

DA Pam 40-5  
Army Medical Department Standards of Nursing Practice.

NFPA Standard 99  
Standard for Health Care Facilities. (National Fire Prevention Association, Batterymarch Park, Quincy, MA 02269.)

#### Section II. PROFESSIONAL PUBLICATIONS

The Association for the Advancement of Medical Instrumentation. American National Standards for Hemodialysis Systems, 1982, Technical Development Section, AAMI, 1901 N. Ft Myer Drive, Suite 602, Arlington, VA, 22209.

AAMI, Technology Assessment Report, #6-83, 1983.

American Dietetics Association, Renal Dietetic Practice Group, Standards of Practice, 1982.

American Nephrology Nurses' Association, Nephrology Nursing Standards of Clinical Practice, 1982.

American Nurses' Association Code for Nurses, 1976.

American Association of Critical Care Nurses. Standards for Nursing Care of the Critically Ill. Reston, VA, 1981, Reston Publishing Co.

American National Standard Safe Current Limits for Electromedical Apparatus.

Council of Renal Nutrition, Standards for Nutritional Care in ESRD Treatment Settings, December, 1982.

Federal Register, Vol 41, Number 108, Thursday, June 3, 1976, 405.2163(b), 405.2171(b), and 405.2102(r)(6)(1).

Joint Commission on Accreditation of Healthcare Organizations Manual. Special Care Units, p. 181-191, 1984. JCAHO, 875 N. Michigan Ave., Chicago, IL 60611.

National Association of Social Workers. Standards for Social Work in Health Care Settings, 1982, page 22. The NAS: W Building, 7981 Eastern Avenue, Silver Spring, MD, 20910.

Hospital Hemodialysis Units, Minimal Criteria and Guidelines. Revised December 1972. Michigan Department of Public Health Bureau of Health Facilities.

Patient and Family Education, McCormick, R., Parkevich, T. (1979), pp. 43-46. John Wiley and Sons, New York.

Pocket Guide to Nursing Diagnosis. Kim, MJ; McFarland, GK; McLane, AM. (1984.) The C. V. Mosby Company, St. Louis, MO.

Proposals, Standard Procedures. End-Stage Renal Disease Network 5, 1981-1985.

10.25.01., Regulations Governing the Kidney Disease Program. 1972. Maryland State Department of Health and Mental Hygiene.

#### Section III. REFERENCED FORMS

SF 522  
Medical Record—Request for Administration of Anesthesia and for Performance of Operations and Other Procedures.

SF 600  
Health Record—Chronological Record of Medical Care.

## GLOSSARY

### Section I. ABBREVIATIONS

**AAMI**

Association for the Advancement of Medical Instrumentation

**AMEDD**

Army Medical Department

**ANA**

American Nurses Association

**AV**

arteriovenous

**BUN**

blood urea nitrogen

**CAPD**

continuous ambulatory peritoneal dialysis

**CAVH**

continuous arterial venous hemofiltration

**CCPD**

continuous cycling peritoneal dialysis

**CME**

continuing medical education

**DHTU**

dialysis home training unit

**ECG**

electrocardiogram

**EER**

enlisted evaluation report

**ESRD**

end stage renal disease

**JCAHO**

Joint Commission on Accreditation of Healthcare Organizations

**mEq/l**

milliequivalent(s) per liter

**mg/dl**

milligram(s) per deciliter

**MSW**

master of social work

**NCOIC**

noncommissioned officer in charge

**NFPA**

National Fire Prevention Association

**OER**

officer evaluation report

**PAD**

patient administration division

**SOP**

standing operating procedure

### Section II. TERMS

**Acute dialysis**

Hemodialysis or peritoneal dialysis employed in the treatment of acute reversible renal failure, the expectation being that such dialysis will usually be necessary for 10 weeks or less. This form of dialysis includes procedures such as CAVH and hemoperfusion. Recovery sufficient to obviate the need for dialysis is expected in this category of renal disease unless the patient succumbs from causes other than renal failure.

**Chronic dialysis**

Hemodialysis or peritoneal dialysis employed to substitute for the permanent loss of renal function. It represents a long continuing permanent undertaking unless supplemented by renal transplantation. Such treatment may be provided in any of the dialysis facilities defined and described in these standards. The undertaking of such treatment should be preceded by adequate studies to ensure that the renal failure is irreversible.

**Classification of facilities**

*a. Inpatient dialysis center.* Physically discrete unit or division within a hospital approved by the JCAHO having the staff and facilities capable of evaluating potential candidates for dialysis and/or transplantation. Its function includes the initiation and maintenance of dialysis with the capability of supervising complicated chronic dialysis. It has all the facilities necessary to care for any complications or emergencies that may arise. Transplantation facilities may be administratively and physically separate from the dialysis facility, but must work in close cooperation and be available to the dialysis program. Self-care dialysis training (patient assuming responsibility within assessed capabilities for his or her own dialysis procedure accomplished and supervised by a dialysis unit staff member) should be emphasized.

*b. Dialysis home training unit.* A dialysis unit specifically designed and planned to train patients and their partners to perform dialysis at home.

Capabilities for both hemodialysis and peritoneal dialysis should be available. The unit must work in close cooperation with and be available to dialysis center patients.

**Complicated chronic dialysis**

Refers to chronic dialysis performed on a patient whose irreversible renal failure is complicated by some illness. It also includes hemodialysis or peritoneal dialysis provided to patients with complications arising from their ESRD or dialytic therapy. This category includes all dialysis where complications are such that the facilities of a complete dialysis center are required.

**Conservative management of ESRD**

The implementation of the medical plan of care, psychological support and educational process required to prepare the ESRD patient for renal replacement therapy and to prolong the pre-dialysis or transplant time period.

**Home dialysis**

Chronic hemodialysis or peritoneal dialysis performed regularly in the home by the patient or by the patient assisted by a member of his or her family or some other person after a period of training in a DHTU.

**Home training dialysis**

Instructional chronic hemodialysis or peritoneal dialysis to include CAPD and continuous cycling peritoneal dialysis (CCPD). This form of dialysis is conducted in a center and involves simultaneous dialysis and instruction provided to the patient or some member of the family or responsible third party in the technique of performing dialysis. The period required for such training will be 2 weeks to 2 months depending upon the individual circumstances and will require the facilities necessary for providing adequate home training.

**Renal replacement therapy**

Includes acute dialysis, chronic dialysis, complicated chronic dialysis, home dialysis, and home training dialysis.

The proponent agency of this bulletin is the Office of the Surgeon General. Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) direct to HQDA (SGPS-CP-N), 5109 Leesburg Pike, Falls Church, VA 22041-3258).

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