

OF PROFESSIONAL INTEREST

The American Society for Parenteral and Enteral Nutrition (A.S.P.E.N.) Standards of Practice for nutrition support dietitians

M. PATRICIA FUHRMAN, MS, RD, FADA; MARION WINKLER, MS, RD; CHRISTINE BIESEMEIER, MS, RD

Registered dietitians (RD) who specialize in nutrition support face unique challenges in today's dynamic healthcare environment. Downsizing, shrinking education dollars, and reimbursement issues often result in staff reductions. Many nutrition support dietitians have large patient assignments and receive limited training to enable them to accomplish their duties and responsibilities. Developing and maintaining expertise in nutrition support can be challenging.

Given these circumstances, what course should the nutrition support RD take? The RD has two professional responsibilities:

Use of evidence-based practice and evidence-based tools for patient care, e.g. the Medical Nutrition Therapy (MNT) Protocols and other available protocols that are patient care focused.

■ ADA "Tool Kit" for Developing and Validating Evidence-Based Guides for Practice (1).

■ Dietitians in Nutrition Support (DNS) has been involved in the development of MNT Protocols (2) for nutrition support in acute care and alternate sites. The enteral and parenteral feeding MNT protocols are currently under revision. The Acute Care/Adults MNT protocol will be used by DNS to design and perform a nutrition support outcomes project so that we can provide evidence-based practice guidance to dietetic professionals.

■ Development of a model for effective nutrition care will provide a template from which outcomes can be defined and measured (3)

Self-evaluation using the Commission on Dietetic Registration model (Professional Development [PD]—2001), ADA's Standards of Professional Practice (SOPP)(4), and SOPP that are applicable to the nutrition support practice

M. Patricia Fuhrman is chair of the Dietitians in Nutrition Support (DNS) dietetic practice group; Marion Winkler is director of clinical practice, A.S.P.E.N.; Christine Bieseemeier is the ADA Quality Management Chair.

setting, e.g. the American Society for Parenteral and Enteral Nutrition (A.S.P.E.N.) Standards of Practice (SOP) (5).

■ A.S.P.E.N. has published Interdisciplinary Core competency statements that provide a model for self or peer review (6). Based on A.S.P.E.N.'s SOPs, these competencies can be incorporated into job descriptions and performance appraisals. A.S.P.E.N. also offers self-assessment programs in general nutrition, nutritional assessment, enteral nutrition, and parenteral nutrition.

The A.S.P.E.N. Standards of Practice for Nutrition Support Dietitians were based on a recent role delineation study conducted by the National Board of Nutrition Support Certification (NBNSC) (7). The study population included Certified Nutrition Support Dietitian (CNSDs), members of A.S.P.E.N., and members of DNS. In the development process, the A.S.P.E.N. SOPs were widely circulated and reviewed by the NBNSC, DNS, Clinical Nutrition Management DPG, the Commission on Dietetic Registration and ADA's Quality Management Team. As such, DNS decided to adopt these standards, rather than develop new SOPP for nutrition support dietitians. DNS submitted the published A.S.P.E.N. SOP for Nutrition Support Dietitians to the ADA QM committee for approval and adoption by ADA.

■ Adoption versus creating new SOPP avoids duplication and member confusion about which standards to use.

■ Many DNS members and leaders collaborated in the development of the A.S.P.E.N. SOP.

■ The A.S.P.E.N. SOP incorporate all 6 ADA SOPP, as determined by the QM Committee during a recent review/approval process.

A.S.P.E.N.'s revised Standards of Practice for Nutrition Support Dietitians (5) encompass the following topics:

- Scope of Practice
 - defining the nutrition support dietitian competency*
- Standards of Care
 - screening* and assessment
 - MNT care plan implementation
 - monitoring
 - reassessment, updating, and termination of MNT care plan*

- Management of nutrition support services*
- Promotion of nutrition support*
education, training, communication*
research.*

Each of the 2000 Nutrition Support Dietitian Standards is followed by an explanation of the intent of the standard. The 2000 standards are more global and comprehensive with emphasis on the evolving professional role of the registered dietitian involved in nutrition support. The importance of lifelong learning through continuing education and mentoring are incorporated into the standards. The standards emphasize the importance of interdisciplinary communication, education and cooperation. Nutrition support dietitians practice in a variety of healthcare settings and are challenged daily to provide optimal nutrition care amidst a whirlwind of new technology and scientific findings. Incorporation of research into clinical duties as well as critical evaluation of research in order to provide evidence-based nutrition support is encouraged. The standards look to the future and promote expansion of skills by addressing bedside placement of feeding tubes, parenteral nutrition order writing, and performance of nutrition-focused physical assessment. Ethical issues are addressed as well as the participation of the registered dietitian in developing practice guidelines, selecting infusion devices and equipment, and directing the nutrition support service. The standards are designed to provide guidance for the nutrition support registered dietitian and do not supersede the clinician's professional judgement or the policies and procedures of the healthcare institution in which the dietitian practices.

A "nutrition support team" can be a formal assembly of designated personnel or an association of interested clinicians who share information and informally discuss patient care. Today's communication capabilities do not require that the

"team" be in the same physical location. As a member of a nutrition support team or as a sole practitioner, it is imperative that there be standards by which clinical practice is guided in order for patients to receive effective and efficient nutrition care. This is an empowering document for the nutrition support dietitian. You can integrate the SOP into your professional development portfolio. The SOP can facilitate the professional development process to maintain/increase competency and maintain dietetic registration, as well as in facility performance evaluation process. We encourage each of you to read the standards carefully, share them with your supervisor and hospital administrator and begin today to incorporate the standards into your practice.

References

1. Splet PL. *Developing and Validating Evidence-Based Guides for Practice: A Tool Kit for Dietetics Professionals*. Chicago, IL: American Dietetic Association, 2000.
2. *Medical Nutrition Therapy Across the Continuum of Care 2nd ed.* and *Medical Nutrition Therapy Across the Continuum of Care: Supplement 1*. American Dietetic Association and Morrison Health Care, Chicago, IL: American Dietetic Association, 1998;1997.
3. Splet P, Meyers EF. A proposed model for effective nutrition care. *J Am Diet Assoc*. 2001;101:357-363.
4. American Dietetic Association. Standards of Professional Practice for Dietetics Professionals. *J Am Diet Assoc*. 1998;98:83-87.
5. American Society for Parenteral and Enteral Nutrition, Board of Directors: Standards of Practice for Nutrition Support Dietitians. *Nutr Clin Prac*. 2000;15:53-59.
6. Board of Directors, American Society for Parenteral and Enteral Nutrition. Interdisciplinary nutrition support core competencies. *Nutr Clin Prac*. 1999;14:331-333.
7. Nutrition Support Dietitian Role Delineation Survey. Prepared by Professional Testing Corporation, New York, NY, for the National Board of Nutrition Support Certification, September, 1997.

* denotes standards not previously included in 1990 publication

Standards of Practice for Nutrition Support Dietitians

American Society for Parenteral and Enteral Nutrition, Board of Directors

Introduction

The American Society for Parenteral and Enteral Nutrition (A.S.P.E.N.) is a professional Society of physicians, nurses, dietitians, pharmacists, and nutritionists committed to promoting quality patient care, education, and research in the field of nutrition and metabolic support in all health care settings. The diversity of our membership emphasizes both the importance of good nutrition in clinical practice and the necessity for a team approach. These "Standards for Nutrition Support Dietitians" represent an update of a similar 1990 set of standards from A.S.P.E.N. The activities described in this document also reflect information obtained from a 1997 survey of practice activities performed by board-certified nutrition support dietitians.(1)

A.S.P.E.N. has developed these standards as the general guidelines for registered dietitians in the provision of specialized nutrition support. Their application in any individual case should be determined by the best judgment of the professional. The standards represent a consensus of A.S.P.E.N.'s members as to the range of activities (as appropriate to the individual's position, education, and practice environment) a Nutrition Support Dietitian may perform at the minimal level of practice necessary to assure safe and effective enteral and parenteral nutrition care. Use of the word "shall" within this document indicates standards strictly to be followed to conform to the standard; use of "should" indicates that among several possibilities one is particularly suitable, without mentioning or excluding others or that a certain course of action is preferred but not necessarily required. "May" is used to indicate a course of action that is permissible within the limits of recommended practice.

These standards do not constitute medical or other professional advice and should not be taken as such. To the extent that the information published herein may be used to assist in the care of patients, this is the result of the sole professional judgment of the attending health professional whose judgment is the primary component of quality medical care. The information presented in these standards is not a substitute for the exercise of such judgment by the health professional.

These standards have been developed, reviewed, and approved by the A.S.P.E.N. Dietetics Practice Section and the A.S.P.E.N. Board of Directors.

These Standards of Practice for Nutrition Support Dietitians (NSDs) should be used in conjunction with the following publications:

The American Dietetic Association. Standards of Professional Practice for Dietetics Professionals. *J Am Diet Assoc.* 1998;98:83-7.

Definitions of Terms Used in A.S.P.E.N. Guidelines and Standards. NCP 1995;10:1-3.

Standards for Nutrition Support: Hospitalized Patients. NCP 1995;10:208-18.

Standards for Nutrition Support: Hospitalized Pediatric Patients. NCP 1996;11:217-28.

FIG: American Society for Parenteral and Enteral Nutrition (A.S.P.E.N.) Standards of Practice for Nutrition Support Dietitians. Reprinted with permission of the American Society for Parenteral and Enteral Nutrition (A.S.P.E.N.) from Nutrition in Clinical Practice 15:53-59, 2000.

Standards of Nutrition Support for Adult Residents of Long Term Care Facilities. NCP 1997;12:284-93.

Standards for Home Nutrition Support. NCP 1999;14:151-62.

Standards for Nutrition Support Physicians. NCP 1996;11:235-40.

Standards of Practice: Nutrition Support Nurse. NCP 1996;11:127-34.

Standards of Practice for Nutrition Support Pharmacists. NCP 1999;14:275-81.

Safe Practices for Parenteral Feeding Formulations. JPEN 1998;22(Suppl).

CHAPTER I: SCOPE OF PRACTICE

As the importance of specialized nutrition support continues to be recognized, and the technology of enteral and parenteral nutrient delivery advances, the role of the NSD continues to expand. The NSD's role has clearly emerged as a specialty practice within professional dietetics. The goal of the NSD, working in conjunction with other health care professionals, which include a pharmacist, a nurse, and a physician, is to support, restore, and maintain optimal nutritional health for those individuals with potential or known alterations in nutritional status.

The NSD is a registered dietitian with clinical expertise or credentialing in nutrition support obtained through education, training, or experience in this field. The NSD assures optimal nutrition support through (a) individualized nutrition screening and assessment; (b) development of a medical nutrition therapy (MNT) care plan and its implementation²; (c) monitoring and reassessment of an individual's response to the nutrition care delivered; and (d) development of a transitional feeding care plan or termination of a nutrition support care plan, as appropriate. Other activities may include management of nutrition support services, including developing policies and procedures and supervising personnel and budgets; recommending and maintaining enteral and parenteral formularies; evaluating equipment for enteral feeding delivery; participating in nutrition support committees; and assuring optimal reimbursement for nutrition support activities.

The NSD should provide or assist with the education and training of patients, caregivers, and health care professionals concerning theories, principles, and practices of specialized nutrition support. Furthermore, the NSD may take an active role in research activities to include participation in or generation of research and outcomes studies, with evaluation, interpretation, and application of research results.

The NSD may practice in a variety of settings (eg, acute and subacute facilities, ambulatory/outpatient clinics, long-term care facilities, home care) for all age groups and across all developmental stages along the continuum of care. The NSD may not always work with a formal nutrition support service because the NSD practice may vary on the basis of the individual's position and practice environment, allowing the NSD to have independent, interdependent, and collaborative functions.

Standard 1: Competency

The NSD shall demonstrate competence to practice nutrition

support. Education, knowledge, experiences, and abilities shall circumscribe the NSD's competence.

Intent of Standard

The practice of nutrition support varies with the specialty practice of the dietitian (eg, critical care, pediatrics, home care). Minimum qualifications are required of all dietitians who practice nutrition support and include:

- 1.1 Current, valid registration to practice as a professional Registered Dietitian in the United States of America by the Commission on Dietetic Registration (CDR).
- 1.2 A current, valid license or certification to practice professional dietetics in those states with regulatory requirements.
- 1.3 Documentation of three or more of the following:
 - 1.3.1 Certification by the National Board of Nutrition Support Certification, Inc as a Certified Nutrition Support Dietitian (CNSD);
 - 1.3.2 Formal education, training, or continuing professional education in nutrition support;
 - 1.3.3 A minimum of 30% to 50% professional practice time devoted to the practice of nutrition support (1);
 - 1.3.4 Participation in the health care institution's nutrition support activities;
 - 1.3.5 Membership in professional societies devoted to nutrition support.

CHAPTER II: STANDARDS OF CARE

Standard 2: Screening and Assessment

The NSD shall work in collaboration with other health care professionals to assess the nutritional state of a patient (3).

Intent of Standard

The intent of assessing nutritional state is to establish baseline subjective and objective nutritional parameters, identify nutrition deficits, and determine nutritional risk factors for individual patients. The assessment of nutritional requirements establishes daily energy, macronutrient, micronutrient, and fluid requirements, based on subjective and objective findings. Nutrition assessment is documented in the medical record to facilitate subsequent communication, monitoring, and quality improvement.

- 2.1 The NSD may participate in the collection of data to determine if individuals are nutritionally-at-risk.(3)
 - 2.1.1 The NSD works with other health care professionals to ensure that a mechanism for nutrition screening and rescreening, with established criteria for identifying a patient who is or may become malnourished, is operational and effective. The screening may include the patient's age, gender, diagnosis, past medical/surgical history, weight history or growth history, history of nutrient intake, special dietary requirements, current use of specialized nutrition support, drug-nutrient interactions, and food allergies; the ability to obtain food; and any factors

that may interfere with nutrient intake.

- 2.1.2 The NSD should assure that results of the nutrition screening are documented in the medical record.
- 2.2 All patients who are classified as nutritionally-at-risk should undergo a comprehensive assessment.(3) The NSD should review the medical and nutrition history and evaluate the following:
 - 2.2.1 Anthropometric measurements;
 - 2.2.2 Physical assessment (eg, fluid balance, functional status, clinical signs of malnutrition);
 - 2.2.3 Biochemical indices;
 - 2.2.4 Clinical factors that may interfere with ingestion of optimal nutrients (mechanical, physiologic, or psychological);
 - 2.2.5 Alterations in digestion, absorption, or metabolism of nutrients;
 - 2.2.6 Dietary intake history, including consumption of nutrition/herbal supplements;
 - 2.2.7 Medication usage (both physician-prescribed and self-prescribed);
 - 2.2.8 Socioeconomic status and access to medical care.
- 2.3 The NSD shall complete a quantitative and qualitative nutrition assessment before initiation of specialized nutrition support. This includes:
 - 2.3.1 Determination of nutrient and fluid needs based upon the patient's resting energy expenditure, activity, hemodynamic status, metabolic demands, disease state and treatment, organ system function, current nutritional state, medications, and goals of medical nutrition therapy;
 - 2.3.2 Documentation of the results of nutrition assessment and recommendations in the medical record with appropriate communication to the health care team.

Standard 3: Medical Nutrition Therapy Care Plan

The NSD shall share in the development of a medical nutrition therapy care plan based on the results of the nutrition assessment.(3)

Intent of Standard

Patient-specific outcomes are achieved through the implementation of the nutrition care plan. Goals are defined, documented, monitored, and modified to facilitate the most efficient and effective clinical outcome(s). The medical nutrition therapy care plan addresses the specific patient needs identified in the nutrition assessment and serves as a guide to all health care professionals who collaborate in the care of the patient. All medical nutrition therapy care plans should be based on the most current medical evidence as it pertains to each patient's disease state and clinical condition.

- 3.1 The NSD shall establish a medical nutrition therapy care plan based upon the results of the comprehensive nutrition assessment.

FIG cont'd.



3.2 The NSD shall recommend the appropriate route of nutrition support based upon the patient's current medical condition. The recommendation shall provide the assessed nutrient and energy requirements and should ideally achieve nutrition objectives safely and cost-effectively.

3.2.1 The gastrointestinal (GI) tract should be used when there is no contraindication.

3.2.2 Parenteral nutrition should be initiated when nutrient and energy needs cannot be met by the enteral route.

3.2.3 The route of nutrition support should be reassessed periodically during the course of therapy, as indicated by the patient's physiologic/anatomic condition or response to therapy.

3.3 The NSD may recommend, write orders, or obtain verbal orders for enteral and parenteral formulations (as guided by professional licensure or delineated by clinical privileges of an institution); and adjust regimens on the basis of response to therapy, clinical condition, and nutritional parameters. The nutrition formulation recommended/selected shall be appropriate for the medical condition and estimated nutrient and energy needs and compatible with the route of access.

3.3.1 The medical nutrition therapy care plan should include recommendations for oral diets, enteral tube feedings, and parenteral formulations as appropriate.

3.3.2 The selection of disease-specific solutions should be based on established criteria.

3.3.3 Feeding formulations should be tailored to current medical condition constraints and clinical status that affect tolerance and nutrient utilization.

3.3.4 Recommendations for feeding formulations should be made with consideration of compatibility issues.

3.3.4.1 Enteral formulations: addition of modular nutrients and medications with regard to physical compatibility and drug-nutrient interactions.

3.3.4.2 Parenteral formulations: compatibility issues per the National Advisory Group's Safe Practices for Parenteral Feeding Formulations.(4)

3.3.5 When similarly effective preparations that meet patient nutrient requirements are available, the most cost-effective product shall be selected.

3.4 The NSD shall provide and document education/information regarding nutrition support techniques and nutrition intervention to the health care team, patient, or caregiver to assist them in making informed decisions before initiating therapy.

3.4.1 Short- and long-term goals of medical nutrition therapy should be established and re-evaluated.

3.4.2 Educational needs of the patient and caregiver should be evaluated and met accordingly.

3.4.3 Medical necessity for specialized nutrition support in

alternative sites should be documented.(5)

3.4.4 The individual's progress toward achieving nutrition goals should be detailed in the medical record and communicated to appropriate health care professionals.

Standard 4: Implementation

The NSD shall participate in the implementation of a medical nutrition therapy care plan to ensure appropriate, safe, and cost-effective nutrition care.

Intent of Standard

Provision of nutrition care may involve many health care professionals. The NSD may be involved at several levels of the medical nutrition therapy care plan implementation, dependent upon job responsibilities, professional licensure, and credentialing and delineated by clinical privileges of an institution.

4.1 The NSD shall participate in an interdisciplinary process for recommendation of placement and management of enteral access devices.

4.2 The NSD with specialized training, demonstrated competency, and delineated clinical privileges may place nasoenteric access devices.

4.3 The NSD with specialized training and delineated clinical privileges may recommend or perform proper maintenance of enteral feeding devices (eg, tube patency) and tube site care.

4.4 The NSD may recommend placement of access devices for parenteral nutrition.

4.5 The NSD should assure that enteral formulations are prepared according to established guidelines (Hazard Analysis Critical Control Point) for safe, aseptic, and effective nutrition therapy.(6)

4.5.1 The NSD shall assure that enteral feeding formulations are prepared to prevent contamination and incompatibility of ingredients (eg, medications, modular components).

4.5.2 The NSD shall assure that written guidelines for the preparation and storage of enteral feeding formulations are maintained, to include proper labeling (eg, including patient's name, type of formula, and date the formula expires). Policies and procedures shall specify allowable hang time for enteral formulations.

4.6 The NSD shall verify that specialized nutrition support is administered in accordance with the prescribed medical nutrition therapy care plan and consistent with patient tolerance.

4.7 The NSD should participate in the monitoring of written orders for specialized nutrition support by verifying comprehension of written orders with other health care professionals to minimize errors in formulation composition or administration.

4.8 The NSD should collaborate with other members of the health care team to develop protocols that ensure the administration and delivery of safe and effective nutrition support to provide optimal patient care.

FIG cont'd.



4.8.1 Protocols will be established and should include guidelines for administration, monitoring, and infection control.(4)

4.8.2 Protocols will be reviewed regularly to ensure that they are consistent with current knowledge of feeding formulations and access devices.

Standard 5: Monitoring

The NSD, in collaboration with other members of the health care team, shall monitor and evaluate the patient's clinical status, the effectiveness and appropriateness of medical nutrition therapy, and progress toward attainment of desired outcomes.(3) The NSD shall participate in the development and implementation of policies and procedures for monitoring patients receiving specialized nutrition support.

Intent of Standard

Patient monitoring is essential for determining the success of the medical nutrition therapy care plan. It is imperative in the evaluation of the patient's progress toward fulfilling the medical nutrition therapy goals.

5.1 The NSD, with interdisciplinary collaboration, shall monitor the clinical and metabolic response to specialized nutrition support to provide a basis for modifying the medical nutrition therapy care plan. The evaluation shall include use of multiple sources of data, including patient interview, medical records, clinical and nutritional status, laboratory indices, and discussion with caregivers as appropriate.

5.1.1 The NSD's role in monitoring patients may include any of the following: A nutrition-focused physical examination (including but not limited to signs of fluid, energy, or nutrient depletion or excess); inspection of nutrition access devices; assessment of adequacy of nutrient intake (eg, oral, enteral, parenteral); evaluation of weight changes; fluid balance; acid/base balance; review of pertinent, nutrition-related laboratory data; review of medications; assessment of organ function and hemodynamic status; tolerance of nutrition therapy (see 5.4.1); substrate tolerance (eg, glycemic control, triglyceride levels); evaluation of appropriateness of medical nutrition therapy (use of oral, enteral, or parenteral route); scheduling of formula administration; transitional feeding; functional performance status; and discontinuation of therapy.

5.1.2 The NSD shall monitor patients for physical, social, psychological, cognitive, and environmental factors that may influence the response to nutrition support.(3)

5.1.3 The NSD shall evaluate and document drug-nutrient and nutrient-nutrient interactions in order to minimize adverse side effects.

5.2 The NSD shall be involved in the development of protocols for timely review and documentation of the patient's clinical, metabolic, and nutritional status.

5.3 The NSD, based upon delineated clinical privileges, may recommend or order laboratory tests and other monitoring methods (eg, intake and output, body weight measurements, blood gases) necessary for evaluating and adjusting the medical nutrition therapy care plan.

5.4 The NSD shall document that the feeding formulation

progresses toward or meets the nutrient needs of the patient. Feeding formulation progression will be based on patient tolerance.

5.4.1 GI tolerance to the initiation and advancement of tube feedings should be reviewed. GI tolerance includes evaluation of stool frequency and consistency, gastric residuals, reflux, abdominal distention, presence or quality of bowel sounds, presence of flatulence, aspiration, nausea, vomiting, and malabsorption. Recommendations for alteration in the feeding plan (route, formula, amount) based on GI tolerance should be made as appropriate.

5.4.2 The frequency of monitoring shall increase for patients who are critically ill, have debilitating diseases or infections, are at risk for refeeding syndrome, or are transitioning between parenteral, enteral (tube), and oral nutrition.(3)

5.5 The NSD should recommend adjunctive services for optimization of nutrition care (eg, physical, occupational, or speech therapy; social services; psychology; or dental services) as indicated.

5.6 The NSD should evaluate compliance of patient, family, and health care professionals with nutrition care protocols or medical nutrition therapy plans.

5.7 The NSD shall document results of the evaluation in the medical record and communicate them to the appropriate health care professionals. The plan of care shall be reviewed and modified accordingly. Modifications of energy or nutrient delivery to the patient will be based upon the specific disease state, current clinical condition, medical/surgical therapy, nutritional status, and the anticipated duration of inadequate oral intake or need for specialized nutrition support.

Standard 6: Reassessment, Updating, and Termination of Medical Nutrition Therapy Care Plan

The NSD will participate in the reassessment and updating of the medical nutrition therapy care plan (3) and changes in stated goals of the patient and family when appropriate. Reassessment promotes the continued provision of adequate and appropriate nutrition support.

Intent of Standard

The NSD plays a key role in reassessment and transitioning the patient between the different methods of nutrient delivery. The nutritional regimen is modified as dictated by the patient's clinical status and monitoring parameters. Determining the optimal mode of nutrient delivery, evaluation of nutrient consumption, and identifying the appropriateness of termination of specialized nutrition support is important for providing optimal and cost-effective patient care.

6.1 The NSD shall monitor the transition from parenteral to enteral (tube) nutrition/oral diet, from enteral (tube) nutrition to an oral diet, and for the termination of specialized nutrition support.

6.1.1 Parenteral nutrition should not be discontinued until a desired amount of energy, nutrient, and fluid requirements are met and documented by enteral intake.

6.1.2 Enteral (tube) nutrition should not be discontinued until a desired amount of energy, nutrient, and fluid requirements are

FIG cont'd.

met and documented by oral intake.

6.1.3 Recommendations should be made for the gradual decrease or cycling of parenteral nutrition or enteral (tube) nutrition in order to maintain adequate energy and nutrient delivery.

6.2 The NSD shall assure and document adequacy of energy and nutrient intake (approximately 60% of estimated requirements) before discontinuing parenteral or enteral nutrition support and progressing to the next stage of nutrition intervention (eg, oral diet).

6.2.1 A quantitative and qualitative estimate of intake should be determined.

6.2.2 Tolerance of enteral (tube) nutrition should include assessment of GI function (see 5.4.1); adequacy of energy, nutrient, and fluid intake; and metabolic status.

6.2.3 Tolerance of adequate oral intake and consistency of foods should include assessment of sucking ability in infants, chewing or swallowing difficulties, gag reflex, pain with eating, changes in elimination patterns, and GI function.

6.2.4 If appropriate, oral nutrition supplements should be recommended to improve oral nutrient intake.

6.3 The NSD shall play an active role in facilitating communication of the patient/resident/client's nutrition care plan between care sites to assure continuity of care.

6.4 The NSD shall assist with decisions regarding termination of specialized nutrition support when clinically indicated or when an advance directive is activated.

6.4.1 Protocols shall be developed that address the termination of nutrition support for patients with irreversible neurologic damage, metastatic and untreatable cancer, severe intractable end-organ failure, or other conditions not likely to benefit from nutrition therapy. Patients or their durable power of attorney for health care should be involved in the decisions regarding the withdrawal of specialized nutrition support.(3)

6.4.2 Protocols should provide latitude of clinical judgment in permitting the discontinuation of specialized nutrition support in accordance with local practice standards and current local, state, and federal law.

CHAPTER III: MANAGEMENT OF NUTRITION SUPPORT SERVICES

Standard 7: Administrative Management

The NSD may provide administrative management of the nutrition support program. The NSD may participate in management activities, to include directing the nutrition support service, as appropriate to the individual's job responsibilities, education, and practice environment.

Intent of Standard

The NSD may contribute to the development of practice guidelines and institutional policies and procedures that ensure that a patient receives an appropriate nutrition care plan and safe delivery of parenteral and enteral nutrition

support.

7.1 The NSD shall participate in the development of policies and procedures (guidelines for use) for patient care aspects of specialized nutrition support.

7.1.1 There shall be documentation of the regular review and revision of policies and procedures for the provision of specialized nutrition support.

7.2 The NSD may participate in the development of policies and procedures for operational aspects of nutrition support, including continuous quality and process improvement (CQI).

7.2.1 The NSD may develop CQI indicators that help facilitate continuity of care throughout the health care delivery system.

7.2.2 The NSD may collect data for analysis of whether standards have been met over the course of a patient's therapy.

7.2.3 The NSD may participate in the review of collected data and the appropriate plan of action resulting from CQI.

7.3 The NSD may serve as a member of the nutrition support service, committee, or team to coordinate the provision of specialized nutrition support.

7.4 The NSD may direct, coordinate, or manage all or some of the activities of an interdisciplinary nutrition support team/ service/committee (eg, rounds, human resources, financial resources, educational programs).

7.5 The NSD should participate in the development, review, and maintenance of an adequate and cost-effective nutrition support formulary and should participate in the selection of nutrition support devices (eg, feeding systems, enteral access devices).

CHAPTER IV: PROMOTION OF NUTRITION SUPPORT

Standard 8: Education, Training, and Communication

The NSD shall actively participate in nutrition support-related educational and training activities. The NSD will disseminate information regarding current accepted nutrition support techniques and practices through organizational education efforts.

Intent of Standard

Patient care issues are often complex and need interdisciplinary collaboration to solve problems and improve processes. It is important to work as a team to support continual learning that promotes optimal patient care. This education process may be achieved by presenting educational lectures or inservices or by publishing articles related to nutrition support practice standards or advancements.

8.1 The NSD shall assess learning needs of patients/ caregivers, provide education on the basis of needs, and evaluate effectiveness of teaching. The NSD shall develop or use patient/caregiver educational materials related to nutrition support administration and management applicable to the patient/caregiver's learning ability and needs and inform the

FIG cont'd.

patient/caregiver about community resources.(3)

8.2 The NSD should contribute to the educational and professional development of other dietitians, students, and health care professionals through formal and informal teaching activities.

8.3 The NSD shall maintain professional competence by participating in formal education and continuing education programs.(3)

8.4 The NSD shall supervise or mentor other dietitians interested in pursuing a certification in nutrition support, along with incorporating and coordinating their help, and assist physicians or other health care providers in pursuing a nutrition-related fellowship or training.

Standard 9: Research

The NSD should actively participate in nutrition support related research activities as related to the individual's job responsibilities, education, experience, and practice environment.

Intent of Standard

The NSD needs to retrieve and evaluate available scientific findings regarding nutrition in order to advance individual patient care, oversee management of services, and provide education to the patient, health care professional, and others.

9.1 The NSD shall critically evaluate and apply research findings to assess, provide, and improve patient care, manage services, and educate patients, health care professionals, and others. The NSD should identify or develop research-based policies, procedures, and clinical pathways as a basis for medical nutrition therapy.

9.2 The NSD may perform and collaborate with others to perform nutrition support research. The NSD may identify research issues, participate in designing and implementing research projects, facilitate research activities, or disseminate research findings.

9.3 The NSD may participate in studies designed to examine clinical outcomes for medical nutrition therapy in specific patient populations.

9.4 The NSD may present research findings to the lay public, hospital administrators, and at national, state, and local meetings (eg, oral presentation, publication).

9.5 The NSD shall participate in the evaluation of new nutrition support products and equipment to assure optimal and cost-effective medical nutrition therapy.

Definitions

Medical nutrition therapy. The assessment of the nutritional status of a patient followed by nutrition therapy, ranging from diet modification to the administration of enteral and parenteral nutrition.(2)

Specialized nutrition support. Provision of specially formulated and/or delivered parenteral or enteral nutrients to maintain or restore optimal nutrition status.(7)

References

1. Nutrition Support Dietitian Role Delineation Survey. Prepared by Professional Testing Corporation, New York, NY, for the National Board of Nutrition Support Certification, September, 1997.
2. MNT Across the Continuum of Care. The American Dietetic Association, Chicago, IL, 1996.
3. JCAHO Board of Directors: Comprehensive Accreditation Manual for Hospitals. Oakbrook Terrace, IL, JCAHO, 1999.
4. National Advisory Group on Standards and Practice Guidelines for Parenteral Nutrition: Safe practices for parenteral feeding formulations. JPEN 22:49-66, 1998.
5. A.S.P.E.N. Board of Directors: Standards for Home Nutrition Support. Nutr Clin Pract. 14:151-62, 1998.
6. Loken JK: The HACCP Food Safety Manual. New York, John Wiley & Sons, 1995.
7. A.S.P.E.N. Board of Directors: Definitions of terms used in A.S.P.E.N. guidelines and standards. Nutr Clin Pract 10:1-3, 1995.

Correspondence and reprint requests: American Society for Parenteral and Enteral Nutrition, 8630 Fenton Street, Suite 412, Silver Spring, MD 20910.

Reprinted with permission of the American Society for Parenteral and Enteral Nutrition (A.S.P.E.N.) from Nutrition in Clinical Practice 15:53-59, 2000.

Figure addendum: Please note the following references that are updated from the citation given above:

*2. Medical Nutrition Therapy Across the Continuum of Care 2nd ed. and Medical Nutrition Therapy Across the Continuum of Care: Supplement 1. American Dietetic Association and Morrison Health Care, Chicago, IL: American Dietetic Association, 1998;1997.

*3. JCAHO Board of Directors: Comprehensive Accreditation Manual for Hospitals. Oakbrook Terrace, IL, JCAHO, 2000.

FIG cont'd.