

NUTRITION CARE PROCESS HANDBOOK

- 1. REASON FOR ISSUE:** This Veterans Health Administration (VHA) Handbook establishes policy for the use of a Nutrition Care Process (NCP) in Department of Veterans Affairs (VA) medical facilities.
- 2. SUMMARY OF CONTENTS:** This new VHA Handbook:
 - a. Provides an overview of a NCP and Model to be used in the nutritional assessment of Veteran inpatients and outpatients receiving medical care at VA medical facilities.
 - b. States the purpose of utilizing a NCP in the nutritional assessment of inpatient and outpatient Veterans and provides direction and procedures for the use of a NCP in VA medical facilities. Refer to Appendices A through D of this VHA Handbook for information on recommended methods and systems of malnutrition screening and nutrition risk identification.
- 3. RELATED ISSUES:** VHA Directive 1109 and VHA Handbook 1109.02.
- 4. RESPONSIBLE OFFICE:** The Director, Nutrition and Food Services (10P4E), Office of Patient Care Services, is responsible for the contents of this Handbook. Questions may be addressed to 202-461-7120.
- 5. RESCISSIONS:** VHA Handbook 1109.01, dated August 14, 2006, is rescinded.
- 6. RECERTIFICATION:** This VHA Handbook is scheduled for recertification on or before the last working date of March 2019.

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NUTRITION CARE PROCESS (NCP)

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NUTRITION CARE PROCESS

1. PURPOSE: The purpose of this Veterans Health Administration (VHA) Handbook is to provide standardization to the process of nutrition care and the tools used by nutrition professionals in the Department of Veterans Affairs (VA). This VHA Handbook defines the use of a Nutrition Care Process (NCP) in VA medical facilities and establishes mandated procedures for using a Nutrition Care Process in the nutritional care of inpatient and outpatient Veterans.

AUTHORITY: 38 United States Code (U.S.C.) 7301(b).

2. BACKGROUND: Use of a NCP is fundamental to the provision of quality nutrition care as it provides a solid framework for demonstrating the connection between high-quality nutrition care and improved inpatient and outpatient Veteran outcomes. Keys to providing high-quality care include the use of a consistent, systematic structure and methodology, standardized language, and evidence-based approaches. Adoption of a NCP helps assure high-quality performance by nutrition professionals. Ultimately, a NCP seeks to promote the profession of nutrition and dietetics by allowing the Registered Dietitian Nutritionist to function at the top of their approved scope of practice within the health care team and to demonstrate individualized, inpatient and outpatient Veteran-centered care that results in positive clinical outcomes, supports the use of evidence-based practices, and improves the health and lives of our Nation's Veterans. VA is authorized, under 38 U.S.C. 7301, to provide a complete medical and hospital service for the medical care and treatment of Veterans. This medical care includes operation of Nutrition and Food Services (NFS) and the provision of nutrition care and nutrition education. Use of a NCP by Registered Dietitian Nutritionists, Dietetic Technicians (DT), and Dietetic Technicians, Registered (DTR), meets The Joint Commission (TJC) requirements for clinical nutrition documentation.

3. DEFINITIONS:

a. **Nutrition Screening.** Nutrition screening is a process used to identify any individual who is at nutrition risk. Nutrition screening is usually completed within a specific time frame as part of the interdisciplinary admissions process, as required by applicable Joint Commission standards. Each VA facility is authorized, under VHA Handbook 1109.08, to determine the process and criteria it uses to identify Veteran inpatients and outpatients at nutrition risk. Inpatient and outpatient Veterans in all areas of care identified through the nutrition screening process as being at potential risk for malnutrition are referred to a Registered Dietitian Nutritionist or to a DT/DTR for further evaluation. (Refer to Appendix C).

b. **Nutrition Referral.** Nutrition referral is the process of directing an inpatient or outpatient Veteran to another health professional for nutrition care beyond one's own expertise. Referral to the Registered Dietitian Nutritionist, based on the results of the nutrition screening process, ensures that timely and appropriate nutrition interventions can be made by the health care team's nutrition resource experts.

c. **Nutrition Care Process.** Nutrition Care Process (NCP) is a systematic, problem-solving process dietetic professionals use to critically think and make decisions to address nutrition-related problems and to provide safe, effective, and high-quality nutrition care. NCP consists of four interrelated but distinct steps, including: nutrition assessment, nutrition diagnosis, nutrition intervention and nutrition monitoring and evaluation. The use of a NCP improves the care of

Veterans by moving nutrition professionals beyond experience-based practice to evidence-based practice. (See Appendix D).

d. **Problem, Etiology, Signs or Symptoms Statement.** The Problem, Etiology, Signs / Symptoms statement (PES) statement is a three-part diagnostic statement used to document the nutrition diagnosis within a NCP, derived from the synthesis of information gathered during the nutrition assessment.

e. **Nutritional Status.** Nutritional status is defined as an individual's condition at a specific point in time. It is the product of a focused review of selected nutrition-related factors and is subject to changes as nutrition parameters and health factors change. An inpatient or outpatient Veteran's nutritional status and local policy determine the priorities and timelines for nutrition intervention and reassessment.

4. RESPONSIBILITIES:

a. **Medical Facility Director.** The medical facility Director, or designee, is responsible for:

(1) Ensuring the facility develops and implements an evidenced-based nutrition screening process and procedure that promptly identifies inpatient or outpatient Veterans who are nutritionally compromised or at nutrition risk.

(2) Ensuring a NCP is implemented by the facility's qualified clinical nutrition staff on each inpatient or outpatient Veteran identified as at nutrition risk.

b. **Chief or Program Manager, Nutrition and Food Services and Veteran Canteen Service Integrated Sites.** The Chief or Program Manager, NFS and Veterans Canteen Service (VCS) Integrated Sites is responsible for the administration of a nutrition care process within the clinical nutrition program and supervision of Registered Dietitian Nutritionists, Dietetic Technicians and Dietetic Technicians, Registered.

(1) The Chief or Program Manager, NFS and VCS Integrated Sites may delegate the administrative responsibility to the Chief, Clinical Nutrition Section or Clinical Nutrition Manager at local medical facilities, where this position exists.

(2) Administering the clinical nutrition program includes ensuring professional practice is standardized throughout the facility by locally coordinating the use of an evidenced-based nutrition screening process for inpatients and outpatients conducted by the Inter-Disciplinary Care Team, and implementing a NCP as the standardized process for providing care.

c. **Registered Dietitian Nutritionist.** The Registered Dietitian Nutritionist is responsible for:

(1) Ensuring full implementation of a NCP, determining appropriate methods and criteria for nutritional screening, and providing for the Veteran's overall nutritional care.

(2) Overseeing the NCP planned and provided by the Clinical DT and DTR. Clinical DT and DTRs are utilized at medical facilities and health care systems where local management

determines such positions are available to support and augment the role of the Registered Dietitian Nutritionist.

(3) The Registered Dietitian Nutritionist and the Clinical DT and DTR are the primary providers of nutrition care for Veterans requiring an assessment using a NCP. In medical facilities and health care systems where the Registered Dietitian Nutritionists are in care lines, the lines of communication are locally defined.

5. PROCEDURES:

a. **Nutrition Screening.** Although not a component of a NCP, nutrition screening is a critical antecedent step to the NCP. The specific method and process of nutrition screening is determined by local policy and is not typically completed by food and nutrition professionals. See Appendix A for information on recommended systems and methods of malnutrition screening or nutrition risk identification.

b. **Nutrition Care Process.** The NCP is a systematic approach to providing high quality nutrition care. The NCP consists of four distinct, interrelated steps:

(1) **Nutrition Assessment.** The Registered Dietitian Nutritionist collects and documents information such as food or nutrition-related history; biochemical data, medical tests and procedures; anthropometric measurements, nutrition-focused physical findings and client history.

(2) **Diagnosis.** Data collected during the nutrition assessment guides the Registered Dietitian Nutritionist in selection of the appropriate nutrition diagnosis (i.e., naming the specific problem).

(3) **Intervention.** The Registered Dietitian Nutritionist then selects the nutrition intervention that will be directed to the root cause (or etiology) of the nutrition problem and aimed at alleviating the signs and symptoms of the diagnosis.

(4) **Monitoring Evaluation.** The final step of the process is monitoring and evaluation, which the Registered Dietitian Nutritionist uses to determine if the inpatient or outpatient Veteran has achieved, or is making progress toward, the planned goals.

NOTE: See Appendix D for more information on the process of applying the four steps of a NCP the nutritional care of Veterans.

6. REFERENCES:

a. Flood A, Chung A, Parker H, Kearns V, O'Sullivan A. The Use of Hand Grip Strength as a Predictor of Nutrition Status in Hospital Patients. *Clinical Nutrition*, 2014. 33, 106-114.

b. American Dietetic Association. *International Dietetics & Nutrition Terminology (IDNT), Reference Manual, 4th ed.*, August 2012. Chicago.

c. Writing Group of the Nutrition Care Process/Standardized Language Committee. Nutrition care process and model part I: the 2008 update. *Journal of the American Dietetic Association*. July 2008, 108(7):1113-1117.

- d. Writing Group of the Nutrition Care Process/Standardized Language Committee. Nutrition care process part II: using the International Dietetics and Nutrition Terminology to document the nutrition care process. *Journal of the American Dietetic Association*. August 2008, 108(8):1287-1293.
- e. The Academy Quality Management Committee and Scope of Practice Subcommittee of the Quality Management Committee. Academy of Nutrition and Dietetics: Revised 2012 Standards of Practice in Nutrition Care and Standards of Professional Performance for Dietetic Technicians, Registered. *Journal of the American Dietetic Association*. June 2012, 113(6):S56-S71.
- f. British Association for Parenteral and Enteral Nutrition. 2006. *The 'MUST' Toolkit*, <http://www.bapen.org.uk/musttoolkit.html>, Last updated on April 10, 2013.
- g. Barbosa-Silva MC, Barros AJ. Indications and limitations of the use of subjective global assessment in clinical practice: an update. *Current Opinion in Clinical Nutrition and Metabolic Care*. May 2006. 9(3):263-269.
- h. Guigoz Y. The Mini Nutritional Assessment (MNA) review of the literature: What does it tell us? *The Journal of Nutrition, Health & Aging*. November-December 2006. 10(6):466-485; discussion 485-487.
- i. Jacobs EJ, Newton CC, Wang Y, Patel AV, McCullough ML, et al. Waist circumference and all-cause mortality in a large US cohort. *Archives of internal medicine*. August 2010. 170(15):1293-1301.
- j. VHA National Center for Health Promotion and Disease Prevention. 2010. *Eat Wisely Healthy Living Messages*. http://www.prevention.va.gov/Eat_Wisely.asp.
- k. Nestle Nutrition Institute. *MNA - Mini Nutritional Assessment*, <http://www.mna-elderly.com/> Accessed April 11, 2012.
- l. Oliveira MR, Fogaca KC, Leandro-Merhi VA. Nutritional status and functional capacity of hospitalized elderly. *Nutrition Journal*. November 17, 2009. 8:54.
- m. Silva LF, Matos CM, Lopes GB, Martins MT, Martins MS, et al. Handgrip strength as a simple indicator of possible malnutrition and inflammation in men and women on maintenance hemodialysis. *Journal of Renal Nutrition*. May 2011. 21(3):235-245.
- n. Title 38 U.S.C. Chapter 73, Veterans Health Administration - Organization and Functions.
- o. VHA Handbook 1120.01. *MOVE! Weight Management Program for Veterans (MOVE!)*. http://www1.va.gov/vhapublications/ViewPublication.asp?pub_ID=2403.
- p. White, Jane V. et al. Consensus Statement: Academy of Nutrition and Dietetics and American Society for Parenteral and Enteral Nutrition: Characteristics Recommended for the Identification and Documentation of Adult Malnutrition (Undernutrition). *Journal of Parenteral and Enteral Nutrition*. May 2012. 36(3):275-283.

q. World Health Organization. 2003. Diet, Nutrition and the Prevention of Chronic Diseases 916, WHO Technical Report Series, No. 916. Geneva, Switzerland, January 28-February 1, 2002.

r. Hiller L, Lowery J, Davis J, Shore C, Striplin D. Nutritional Status Classification in the Department of Veterans Affairs. 2003. *Journal of the American Dietetic Association*. 101 (7): 786-792.

MALNUTRITION SCREENING / NUTRITION RISK IDENTIFICATION: SYSTEMS AND METHODS

1. PURPOSE: Malnutrition screening or nutrition risk identification is an integral antecedent step to the effective use of the Nutrition Care Process (NCP). The systems and methods of malnutrition screening or nutrition risk identification discussed herein enable the health care team to participate with the clinical nutrition staff in identifying and addressing malnutrition. With a focus on health promotion and disease prevention, the early identification of modifiable health-related nutrition risk factors and the use of early interventions to address those risks has become one of the Department of Veterans Affairs (VA's) top organizational priorities.

a. An interdisciplinary, coordinated approach to malnutrition screening or nutrition risk identification enables informed, cost effective resource allocation and utilization (clinical nutrition staffing needs) and serves as a means to demonstrate positive clinical outcomes (e.g., improved wound healing, reduced risk of infection, reduced length of hospital stay and increased inpatient and outpatient satisfaction) by the provision of more timely and appropriate nutrition interventions.

b. The malnutrition screening or nutrition risk identification tools and systems identified in this Veterans Health Administration (VHA) Handbook are validated and evidence-based, their application and use to be determined by the Veteran population being served, as well as by the care setting and coordination of the interdisciplinary health care team.

2. RECOMMENDED SYSTEMS AND METHODS:

a. Title 38 United States Code (U.S.C.) 7301(b) authorizes VA to provide "a complete medical and hospital service for the medical care and treatment of Veterans." This service includes the operation of the Nutrition and Food Services (NFS) and the provision of nutrition care and nutrition education to Veterans. The Joint Commission standards PC.2.210, PC.2.130, and PC.2.150 require that a nutrition assessment and plan of care be completed on each inpatient or resident identified from the admissions screening process as being at nutrition risk. Documentation of the malnutrition screening or nutrition risk identification method used, should be located in the electronic medical health record (CPRS) so that facility and aggregate data can be extracted and reported, delineating the incidence and magnitude of malnutrition in the Veteran population.

b. This Appendix establishes recommended procedures for VA interdisciplinary health care teams, as well as for clinical nutrition staff to identify and address nutrition risk and malnutrition in both inpatient and outpatient Veteran populations. Each local VA medical facility's interdisciplinary health care team, with support, guidance, and direction by clinical nutrition staff, is responsible for determining the most collaborative and functional approach for health care team malnutrition screening or nutrition risk identification and dietetic professional response and intervention.

3. RECOMMENDED SYSTEMS AND METHODS:

a. **Mini Nutritional Assessment Short Form.** The Mini Nutritional Assessment is a validated, sensitive, specific and accurate malnutrition screening tool that can identify persons age 65 and

above who are malnourished or at nutrition risk. The Mini Nutritional Assessment (MNA) form can be found at the following website: http://www.mna-elderly.com/forms/mini/mna_mini_english.pdf.

(1) Six review aspects are included in this screening tool and are as follows:

- (a) Appetite.
- (b) Weight loss.
- (c) Mobility.
- (d) Acute illness or stress.
- (e) Neuropsychological problems, including dementia or depression.
- (f) Body mass index (BMI) or calf circumference, if BMI is not available.

(2) Each review aspect is scored, and the total screening score is used to classify a person as well-nourished with a score of twelve to fourteen, at risk of malnutrition with a score of eight to eleven points, or malnourished with a score of zero to seven points.

(3) A low MNA score is associated with an increase in mortality, prolonged length of hospital stay, and greater likelihood of discharge to a nursing home. Malnutrition is associated with functional and cognitive impairment and difficulty eating. Timely intervention can stop weight loss in aging patients at risk of malnutrition and is associated with improvements in MNA scores.

(4) No special training is needed to use this tool; therefore, it can be administered by any member of the interdisciplinary health care team. It can be used in a variety of settings and is easy to use, taking less than five minutes to complete. Additionally, no labs or blood tests are required. The MNA is identified in the Evidence-Based Guidelines on “Unintended Weight Loss in Older Adults” as the recommended instrument for assessment of nutritional status of older adults. VA-specific areas in which it is an ideal tool for malnutrition screening include Home Based Primary Care (HBPC), geriatric outpatient clinics, Community Living Centers (CLC), respite programs, Acute Care for the Elderly (ACE) units and all other VA care areas that provide services for the aging Veteran.

b. **Malnutrition Screening Tool.** The Malnutrition Screening Tool (MST) accurately predicts risk of malnutrition and promotes early nutrition intervention(s) in those determined to be at risk ([http://www.health.vic.gov.au/older/toolkit/05Nutrition/docs/Malnutrition%20Screening%20Tool%20\(MST\).pdf](http://www.health.vic.gov.au/older/toolkit/05Nutrition/docs/Malnutrition%20Screening%20Tool%20(MST).pdf)). It is a simple and quick screening tool that is easy to implement. It is most appropriate for use in Veterans under the age of 65. The MST is a simple, two-question tool that asks about appetite and unintentional weight loss. Each question is scored, and the total score is used to identify the level of malnutrition risk. The three categories of malnutrition risk defined in this tool are low risk with a score of zero to one, medium risk with a score of two to three, and high risk with a score of four to five. This screening tool takes only 3 to 5 minutes to administer, and it is valid and reliable to identify risk of malnutrition in both inpatient and selected outpatient settings in Veterans less than 65 years of age.

c. **Subjective Global Assessment.** The Subjective Global Assessment (SGA), a clinical technique initially developed for nutrition assessment of surgical patients, can be used to determine level of nutrition risk as well as to assess nutritional status. The main components of the SGA are the inpatient or outpatient Veteran's medical history (changes in weight, dietary intake, gastrointestinal symptoms, metabolic stress and functional capacity) and a nutrition-specific physical examination (for the presence of subcutaneous fat loss, muscle wasting, and / or ankle / sacral edema). As a method for nutrition problem identification, it is often too detailed and time consuming to complete on all patients admitted to the hospital. It also requires additional training and must be completed by a trained health care professional. Another limitation of this tool is that it is subjective in nature and much of it relies on the patient or proxy report, which may or may not be accurate or reliable. Because of this, the SGA is generally used by nutrition professionals as an assessment tool rather than as a malnutrition screening / risk identification tool administered by other members of the interdisciplinary health care team. Based on the medical history and nutrition physical examination, clinicians then identify a SGA rating which indicates an inpatient or outpatient Veteran's current level of nutritional risk or nutritional status. SGA rating categories include the following:

- (1) A = Well nourished;
- (2) B = Moderately (or suspected of being) malnourished; or
- (3) C = Severely malnourished.

d. **Scored Patient-Generated Subjective Global Assessment.** The Scored Patient – Generated Subjective Global Assessment (PG-SGA) was adapted from the SGA and developed specifically for patients with cancer. Link to the Scored Patient-Generated Subjective Global Assessment: <http://www.vdito.be/documenten%20nodig%20voor%20website/PG-SGA.pdf> or http://www.acc-cancer.org/oncology_issues/supplements/pgsga.pdf. It includes additional questions regarding the presence of nutritional symptoms and short-term weight loss. It was designed so that the components of the medical history could be completed by the inpatient or outpatient Veteran using a check-box format. The physical examination is then performed by a health professional (e.g., Physician, Registered Nurse, or Registered Dietitian Nutritionist). The PG-SGA incorporates a numerical score in addition to providing a global rating of well-nourished, moderately (or suspected of being) malnourished, or severely malnourished. For each component of the scored PG-SGA, points zero (0) to four (4) are awarded depending on the impact of the symptom on nutritional status. A total score is then summed, which provides guidelines as to the level of nutrition intervention required and facilitates the collection of quantitative outcomes data. The scored PG-SGA, unlike the SGA which is categorical, is a continuous measure. The higher the score, the greater the risk of malnutrition. A score of nine (9) or greater indicates a critical need for nutrition intervention. Nutrition triage includes Veteran inpatient or outpatient and family education, symptom management, and nutrition intervention such as additional or fortified foods, oral nutrition supplements, and nutrition support (enteral or parenteral nutrition). The scored PG-SGA has been accepted as the standard for nutrition assessment for patients with cancer. Studies have shown that the high sensitivity and specificity of the PG-SGA score indicates that it strongly predicts nutritional status as defined by SGA.

e. **Malnutrition Universal Screening Tool.** Malnutrition Universal Screening Tool (MUST) is a reliable, five-step nutrition screening tool that is used to identify adults who are malnourished, at risk of malnutrition, or obese (<http://www.health.gov.il/download/ng/N500-19.pdf>; British Association for Parenteral and Enteral Nutrition, 2006). MUST has been validated for use in adults and has been designed for use in all care settings by all health care workers. MUST also includes guidelines that can be used in the development of a nutrition care plan. These guidelines are based on best practice and currently available evidence for the benefits of nutritional intervention. These guidelines can be used to replace or supplement local guidelines or established standards of care. The five steps of MUST are as follows:

(1) Step 1: Measure height and weight to get a BMI and score using chart provided. **NOTE:** *If unable to obtain height and weight, use the alternative procedures shown in this guide.*

(2) Step 2: Note percentage unplanned weight loss and score using tables provided.

(3) Step 3: Establish acute disease effect and score.

(4) Step 4: Add scores from steps 1, 2, and 3 to obtain overall risk of malnutrition. A score of zero (0) = low risk, one (1) = medium risk, and three (3) = high risk of malnutrition.

(5) Step 5: Use management guidelines and / or local policy to develop care.

f. **VA Nutrition Classification Scheme.**

(1) The VA Nutrition Classification Scheme requires some training and has been used by VA non-nutritional and nutritional professionals for many years (Hiller et al., 2003). The VA Nutrition Status Classification scheme was developed as a quick method of inpatient nutrition screening. Its primary purpose is to identify patients who could benefit from a more comprehensive nutrition assessment, and to rank patients in order of the magnitude of benefit they would be likely to obtain from nutrition intervention, thereby assisting in the prioritization of workload.

(2) This tool can be used as an assessment of nutrition risk or assessment of nutrition status. A subcommittee of the Clinical Nutrition Subcommittee (CNS) of the Nutrition and Food Advisory Council (NFAC) simplified this process and changed categories based on the most up-to-date evidence based research available (see Appendix B).

g. **Nutrition Referral Considerations.** In addition to those Veterans identified as being at risk of malnutrition per any of the previously mentioned malnutrition screening/nutrition risk identification tools, any Veteran who presents with nutrition risk factors that are beyond the scope of prevention or that require more detailed nutrition intervention should be triaged to a Registered Dietitian / Nutritionist according to local referral criteria or consult protocol for appropriate Medical Nutrition Therapy (MNT) and / or specialized nutrition education. Nutrition risk factors can include, but are not limited to, physical changes and/or weight concerns, oral or gastrointestinal concerns, environmental and/or functional barriers to nutrition, behavioral concerns and / or unusual eating patterns and metabolic or other medical conditions.

4. ADDITIONAL NUTRITION ASSESSMENT TOOLS:

a. **Nutrition-Related Physical Examination Tool(s)**. Tools may include tape measures, stadiometers, magnifying glass, dynamometer, tongue depressor, etc., that assist Registered Dietitian/ Nutritionists in performing nutrition-related physical examinations of inpatient and outpatient Veterans identified in the nutrition screening process as at risk of malnutrition provide valuable guidance in the determination of nutritional status.

b. **Hand Grip Strength**. Determining hand grip strength using a dynamometer is a simple, inexpensive, and effective method to detect malnutrition. Hand grip strength has been validated as an indirect mean for assessment of lean body mass and is an important functional parameter in assessing for malnutrition. Assessment of grip strength is performed via a dynamometer.

VA Nutrition Classification Scheme

Nutrition Status Indicators						
	SECTION INDICATORS	Score =1	Score = 2	Score = 3	Score = 4	Section Score
A	Nutrition History	Appetite, good; No eating or digestion problems	Appetite, Fair; Chewing problems; Constipation	Appetite, poor; Diarrhea; Dysphagia; Vomiting	Appetite, none; Severe Diarrhea; Severe Dysphagia; Severe Vomiting	
B	Unintended Wt loss m=month w = week	Stable weight (no Wt loss).	<10% in 6 m	10-15% in 6 m <7.5% in 3 m <5% in 1 m <2% in 1 w	>15% in 6 m >=7.5% in 3 m >=5% in 1 m >=2% in 1 w	
C	% IBW or Body Mass Index(BMI)	90 - 100% <119%	81 - 89% 120 - 129%	75 - 80% 130 - 149%	< = 74% > = 150%	
		18.5 – 24	17 - 18 or 25	15 - 16 or 26 - 29	<15 or >30	
D	Diet/Intake	Nutrition needs met by diet alone. Minimal Diet Modifications	Nutrition needs met by diet + oral supplements Mild Diet Modifications	Nutrient needs are met by EN or PN Moderate Diet Modifications	Nutrient needs are not met by EN or PN Significant Diet Modifications	
E	Metabolic Stress/ Medical Issues	No significant metabolic stress.	Mild metabolic stress.	Moderate Metabolic stress	Significant metabolic stress.	
F	Functional Capacity (nutrition related) Reduced Handgrip strength	Independent activities of daily living (ADL)	Limited ADL feeding assistance; Restricted ambulation	Moderate limitations - bed or chair less than half of day Moderate Pain	Severe limitations bed or chair most of day Severe Pain	
		None or above expected	Mildly below expected	Moderately below expected	Severely below expected	

G	Physical Assessment	Well Nourished	Evidence of mild altered body composition	Evidence of moderately altered body composition	Evidence of severely altered body composition	
	Fluid Status	Fluid status wnl	Evidence of mild fluid alterations	Evidence of moderate fluid alterations	Evidence of severe fluid alterations	
Overall Rating: Sum the 3 highest scores from the section score boxes and place in the sum box						
SUM__						
Sum box score	3 – 5	6 - 8	9 - 11	12		
Overall Nutrition Status	Non-Compromised Nutrition Status	Mildly Compromised Nutrition Status	Moderately Compromised Nutrition Status	Severely Compromised Nutrition Status		

2003, (Hiller, Lowery, J., Davis, J., Shore, C., Striplin, D., *Nutritional Status Classification in the Department of Veteran Affairs*, J Am Diet Assoc. Vol. 101, 7, 786-792.

Nutrition Risk and Status Screening Tools

<i>Tool</i>	<i>Purpose</i>	<i>Assessor(s)</i>	<i>In- and Outpatient / Criteria</i>
MNA-SF®	Nutrition Risk	Any Health care Worker*	> or = 65 Year Old Patients
MST	Nutrition Risk	Any Health care worker	< 65 Year Old Patients
SGA	Nutrition Risk Nutrition Status	Trained Personnel**	All Patients Targets Protein-Calorie Malnutrition
PG-SGA	Nutrition Risk	Trained Personnel**	All Patients Targets Protein-Calorie Malnutrition
MUST	Nutrition Risk	Any Health care Worker*	< 65 Year Old Adult Patients
VA Classification Scheme	Nutrition Risk Follow-up Criteria Nutrition Status	Trained Personnel** F/U & Status =Registered Dietitian Nutritionists and DT/DTRs	All Patients
Physical Exam Tools	Nutrition Status	Status =Registered Dietitian Nutritionists	All Patients
Hand Grip Strength	Nutrition Status	Status =Registered Dietitian Nutritionists	All Patients

***Any Health Care Worker:** No specific training is required to complete the MNA-SF® and MUST nutrition screening tools. Any health care worker can utilize these to screen Veterans for nutrition risk. Although nurses are the health care workers most likely to complete these screening tools, nurse aides, dietetic technicians, and other health care workers, as determined by local policy and procedure, can also complete them. Typically, the role of nutrition screening is not conducted by the Registered Dietitian Nutritionist.

****Trained Personnel:** Specific training is required to accurately perform the VA Classification Scheme, SGA and PG-SGA. These trained personnel are most likely to be nurses, but could also be nurse aides, dietetic technicians, or other health care workers as determined by local policy and procedure.

NUTRITION CARE PROCESS (NCP)

The four steps of the NCP are as follows: 1. Nutrition Assessment, 2. Nutrition Diagnosis, 3. Nutrition Intervention, and 4. Nutrition Monitoring and Evaluation. Appendix D provides specific information and methods of utilizing a NCP in practice.

1. STEP 1: NUTRITION ASSESSMENT:

a. The first step of the NCP is defined as a systematic method for obtaining, verifying, and interpreting data needed to identify nutrition-related problems and their causes and significance. It is an ongoing, nonlinear, dynamic process that involves initial data collection as well as continual reassessment and analysis of the inpatient or outpatient Veteran's status compared with specified criteria.

b. Nutrition assessment data are obtained from a variety of sources, including, but not limited to the following:

- (1) Screening or referral form;
- (2) Inpatient or outpatient interview;
- (3) Observation;
- (4) Medical or health records;
- (5) Consultation with other caregivers, including family members;
- (6) Community-based surveys and focus groups;
- (7) Statistical reports, administrative data, and epidemiological studies; and
- (8) Resident Assessment Instrument Minimum Data Set (RAI/MDS).

c. Usual types of data gathered for the nutrition assessment include, but are not limited to, food and nutrition-related history, anthropometric measurements, biochemical data, medical tests and procedures, nutrition-focused physical examination findings and inpatient or outpatient Veteran history.

2. STEP 2: NUTRITION DIAGNOSIS:

a. In the second step of the NCP, the Registered Dietitian Nutritionist identifies and labels an existing nutrition problem utilizing standardized terminology and is responsible for treating this problem independently. To diagnose a nutritional problem, the Registered Dietitian Nutritionist organizes the assessment data, clusters nutrition signs and symptoms, and compares them with the defining characteristics of suspected nutrition diagnoses. The nutrition diagnosis is then expressed using standardized nutrition diagnostic terms and the etiologies, signs, and symptoms that have been identified in reference sheets describing each potential diagnosis. Reference sheets that define each nutrition diagnosis are found on the following web

site: <http://vaww.nutrition.va.gov/clinicalNutrition/index.asp>. **NOTE:** *This is an internal VA Web site that is not available to the public. The use of a standardized language potentially improves the reliability and quality of nutrition care by providing for a more effective comparison of nutrition assessment findings.*

b. There are three distinct parts to a nutrition diagnostic statement, also called a PES Statement:

(1) **P: Problem.** The nutrition diagnosis describes alterations in an inpatient or outpatient Veteran's status. A diagnostic label may be accompanied by a descriptor such as "altered," "excessive," or "inadequate."

(2) **E: Etiology.** Etiology is a factor gathered during the nutrition assessment that contributes to the existence or maintenance of pathophysiological, psychosocial, situational, developmental, cultural or environmental problems. Major and minor etiologies may result from medical, genetic or environmental factors. The etiology is preceded by the words "related to." Identifying the etiology will lead to the selection of a nutrition intervention aimed at resolving the underlying cause of the nutrition problem, whenever possible.

(3) **S: Signs and symptoms (defining characteristics).** The defining characteristics are typical clusters of signs and symptoms that provide evidence that a nutrition diagnosis exists. Signs are the observations of a trained clinician. Symptoms are changes reported by the Veteran inpatient or outpatient. In the PES statement, the signs and symptoms are preceded by the words "as evidenced by." A well-written nutrition diagnostic statement should have the following characteristics: clear and concise, specific to an inpatient or outpatient Veteran, limited to a single client problem, accurately related to one etiology, based on signs and symptoms from the assessment data, and measurable.

c. In formulating the nutrition diagnosis, the Registered Dietitian Nutritionist (DTR) uses critical thinking to find patterns and relationships among the data and possible causes of the nutrition problem. Critical thinking is also used to make inferences, clearly and singularly state the nutrition problem, make interdisciplinary connections, and rule-in or rule-out specific nutrition diagnoses. Since the nutrition diagnosis step involves identifying and describing the nutrition problem, the determination for continuation of care follows the nutrition diagnosis step. If the DTR does not discover a nutrition diagnosis, the inpatient or outpatient Veteran may be referred back to the primary provider or referred to the Dietetic Technician (DT) or DTR for follow-up. If the potential exists for a nutrition diagnosis to develop, the Registered Dietitian Nutritionist establishes an appropriate method and interval for follow-up. It is the responsibility of the Registered Dietitian Nutritionist to diagnose nutrition problems. DTs/DTRs, under the direct clinical supervision of a Registered Dietitian Nutritionist, may also determine nutrition diagnoses.

3. STEP 3: NUTRITION INTERVENTION: The third step of the NCP is defined as purposefully planned action(s) designed with the intent of changing a nutrition-related behavior, risk factor, environmental condition or aspect of health status. The nutrition intervention is directed toward resolving the nutrition diagnosis by focusing on the etiology of the problem.

a. Sources of data and tools for nutrition intervention include but are not limited to the following:

(1) Evidence-Based Nutrition Practice Guidelines or guidelines from other professional organizations.

(2) Evidence Analysis Library or other secondary evidence sources.

(3) Current research literature; or

(4) Results of outcome-management studies or quality improvement projects.

b. Nutrition intervention consists of two interrelated processes, planning and implementing which are described as follows:

(1) **Planning.** The **planning** phase is the first component of the nutrition intervention(s) includes formulating and determining a plan of action. In this step, the Registered Dietitian Nutritionist may identify nutrition diagnoses for immediate treatment and nutrition diagnoses for which treatment should be delayed until a more favorable environment is available or more resources exist. The Registered Dietitian Nutritionist makes nutrition recommendations based on the inpatient or outpatient Veteran's individualized recommended dietary intake of energy and/or selected foods or nutrients based on current reference standards and dietary guidelines and the inpatient or outpatient Veteran's health condition and nutrition diagnosis. At this step, the Registered Dietitian Nutritionist determines the inpatient or outpatient Veteran-focused expected outcomes for each nutrition diagnosis. Expected outcomes are those desired changes to be achieved over time. Further, the Registered Dietitian Nutritionist collaborates with the inpatient or outpatient Veteran throughout the planning step, defining an intervention plan and strategies (time and frequency of care, duration and follow-up) that are focused on the etiology of the problem and are known to be effective based on the best current knowledge and evidence.

(2) **Implementation.** The **implementation** phase is the second component of nutrition intervention and is considered the action phase of the NCP.

(a) During implementation, the Registered Dietitian Nutritionist is responsible for collaborating with the inpatient or outpatient Veteran and other caregivers to carry out the nutrition plan of care, communicating and modifying the nutrition care plan as needed, ensuring and verifying that the plan of care is being implemented, and revising strategies based on changes in condition or response to intervention.

(b) In the nutrition intervention step, the Registered Dietitian Nutritionist uses critical thinking skills to set goals and prioritize them, to define the nutrition prescription or basic plan of care, to make interdisciplinary connections, and to match intervention strategies with the inpatient or outpatient Veteran's need, preferences, values, and nutrition diagnoses. Critical thinking is utilized to determine a course of action and specify the time and frequency of care. If the inpatient or outpatient Veteran has met intervention goals, or it is determined that they are not currently able nor ready to make needed changes, the inpatient or outpatient Veteran may be discharged from that episode of care. The Registered Dietitian Nutritionist supervises the

nutrition intervention but may delegate aspects of the nutrition intervention to appropriately trained support personnel, including DTs and DTRs.

4. STEP 4: NUTRITION MONITORING AND EVALUATION:

a. In the fourth step of the NCP, the Registered Dietitian Nutritionist identifies the amount of progress made and whether goals or expected outcomes are being met. Nutrition monitoring and evaluation identifies outcomes relevant to the nutrition diagnosis, intervention plans, and goals. Data sources and tools for nutrition monitoring and evaluation include, but are not limited to, the following:

- (1) Self-monitoring data or data from other records, including but not limited to forms, spreadsheets, and computer programs;
- (2) Anthropometric measurements, biochemical data, medical tests, and procedures;
- (3) Inpatient and outpatient Veteran surveys, pretests, posttests, and/or questionnaires; and
- (4) Mail or telephone follow-up.

b. Types of outcomes measured during the nutrition monitoring and evaluation step can include but are not limited to the following:

- (1) Nutrition-related history, including food and nutrient intake;
- (2) Anthropometric measurements;
- (3) Biochemical data;
- (4) Medical tests and procedures;
- (5) Nutrition-related physical signs and/or symptoms; and
- (6) Other nutrition-related inpatient and outpatient Veteran-centered outcomes.

c. There are three distinct and interrelated processes to the fourth step of the NCP.

(1) **Monitoring progress.** Monitoring progress includes checking inpatient or outpatient Veteran understanding and compliance with the nutrition plan of care, determining if the intervention is being implemented as prescribed, providing evidence that the plan or intervention strategy is or is not changing inpatient or outpatient Veteran behavior or status, identifying other positive or negative outcomes, gathering information, indicating reasons for lack of progress, and supporting conclusions with evidence.

(2) **Measuring outcomes.** The Registered Dietitian Nutritionist determines outcome indicators that are relevant to the nutrition diagnosis or signs or symptoms, nutrition goals, medical diagnosis, and outcomes and quality management goals. The NCP utilizes specific language descriptors to be used by the nutrition professional within nutrition assessment follow-

up documentation. Nutrition outcomes and progress toward resolution of the nutrition diagnosis should be included within the Registered Dietitian Nutritionist's follow-up documentation with one of the following descriptors:

- (a) Resolved (nutrition problem no longer exists),
- (b) Improvement Shown (nutrition problem still exists),
- (c) Unresolved (no improvement shown), or
- (d) No Longer Appropriate (change in condition).

(3) **Evaluating outcomes.** Evaluating outcomes encompasses comparing current findings with previous status, intervention goals, and/or reference standards.

***NOTE:** The Nutrition Assessment and Nutrition Monitoring and Evaluation domains, classes, and terms are combined. Substantial overlap of both sections occurs in identification and approach and, therefore, all of the indicators are used for both Nutrition Assessment and Nutrition Monitoring and Evaluation.*