

**VHA PROSTHETIC CLINICAL MANAGEMENT PROGRAM (PCMP) CLINICAL
PRACTICE RECOMMENDATIONS FOR THE PRESCRIPTION OF COMPUTERS,
COMPUTER COMPONENTS, ACCESS DEVICES, AND SOFTWARE TO VETERANS
WITH DISABILITIES**

I. Purpose

The purpose of these clinical practice recommendations is to assist practitioners in clinical decision-making, to standardize and improve the quality of patient care, and to promote cost-effective prescribing.

II. Background

The Veterans Health Administration (VHA) Prosthetic and Sensory Aids Service Strategic Healthcare Group was directed by the Under Secretary for Health to establish a Prosthetic Clinical Management Program (PCMP). The objectives are to coordinate the development of clinical practice recommendations for prosthetic issuance practices to be used by clinicians to standardize issuance criteria, evaluation and training; and to assure technology uniformity; to provide patient care that will lead to valid outcome measures and analysis for research purposes.

A work group with input from selected clinicians, therapists, prosthetic representatives and National Acquisition Contracting Officers convened to recommend clinical practice recommendations regarding issuance criteria for computers, computer components, access devices and software for veterans with disabilities including Electronic Aids for Daily Living (EADL) or environmental controls, Telehealth systems, etc. Please refer to the CPR Computers and Peripheral Devices to Blind and Visually Impaired Veterans, CPR Augmentative and Alternative Communication (AAC), and CPR Cognitive Prosthetic Devices as necessary.

III. Population Served

The veterans with disabilities population primarily served by this Clinical Practice Recommendation includes, but is not limited to: spinal cord injured, stroke, cognitively impaired, traumatic brain injured, progressive disease, veterans with upper extremity amputation, and visually impaired though not blind veterans. It is understood that the above is not an exhaustive list. **Visually impaired veterans, whose only impairment is visual, are covered by a separate CPR. However, polytrauma patients with visual impairment are covered by this CPR.**

IV. Issuance Criteria

The following criteria must be met for veterans to be evaluated and trained on computers (including laptops), computer components, access devices and/ or software for veterans with disabilities:

- A. Determined by the medical provider working with the patient following evaluation by the qualified clinician to have significant impairment (s) that would benefit from intervention with computer technology to include but not limited to desktop computers, laptops, computers components, access devices and/ or software as delineated under Section III Population Served.
- B. A trained, qualified clinician (i.e. occupational therapist (OT), speech pathologist, physical therapist (PT), etc must complete the comprehensive assistive computerized technology evaluation.
- C. The veteran requires the use of computer technology to facilitate functioning and assist in rehabilitation.
- D. A comprehensive audiology evaluation should be completed for veterans requiring voice activation or speech output for access if it is felt necessary during the evaluation process. This will ensure that the veteran has maximized his or her ability to hear the speech output or his voice input.
- E. Following training, the veteran demonstrates the ability to use the prescribed computer technology and software to effectively meet the documented stated goal(s).
- F. Veterans determined by medical providers or clinicians to have difficulty using a standard input device (i.e. keyboard, pointing device, etc) may be considered for voice or other specialized input options.

V. Medical/necessity justification for physical, communicative and cognitive deficits include, but are not limited to:

- A. **Access to medical care:** 1) Independent and private communication with health care providers; 2)Independent decision making; 3) Prescription refill; 4) Travel arrangements; 5) Patient education (i.e. Myhealthyevet under www.VA.gov (apply online); VA website, benefits, etc)
- B. **Attendant Care Management:** 1) Interviewing; 2) Care plan; 3) Overall decreased attendant care needs/costs;
- C. **Access to Communication:** Augmentative Communicative systems (AACs) that may have a laptop as a component or other computer components or peripherals as discussed in a separate CPR, but are considered medically justified. Additionally, e-mail and internet access can be used for communication.
- D. **Access to Basic Independent Living Skills** including Electronic Aids to Daily Living (EADLs) or environmental controls that may be based on a laptop or have computer components incorporated.
- E. **Self Care/Higher Level Living Skills:** 1) Reading; 2) Writing; 3) Grocery Shopping; 4) Retail Shopping; 5) Child Care; 6) Banking; 7) Balancing

Checkbook; 8) Taxes; 9) Time Management; 10) Leisure time activity development.

- F. **Psychosocial:** 1) Relationships; 2) Access to support/peer groups; 3) Counseling
- G. **Restorative Rehabilitation:** 1) Cognitive tx; 2) Aphasia/ stroke rehabilitation; 3) etc.
- H. **Other:** 1) Telehealth systems; 2) Education/Schooling; 3) Work; 4) Virtual Reality such as on line training programs for mobility devices; 5) etc.

VI. Clinical Practice Recommendations for Evaluation/Training

The computer, computer components, access devices and/ or software may be issued through an outpatient or inpatient program, i.e., OT, Speech Pathology, PT, Assistive Technology Provider or Assistive Technology Program, etc.

- A. **Veterans with disabilities** unable to attend a VA program for the assistive technology evaluation due to special circumstances (e.g. medical complications, family issues, etc.) may be considered for local Fee Basis services, if eligible. If Fee Basis service will not cover cost, local Prosthetic and Sensory Aids Service (P&SAS) is permitted to procure computer equipment including laptops and peripherals, software, evaluation, and training according to VHA Handbook 1173.5 (dated September 9, 2002), Section 4D(3)(b) and 1173.5, section 10. The veteran needs to be enrolled and vested.
- B. **Evaluation and Training Procedures:** The prescribing program must have an evaluation and training program that is outlined in a policy and procedure manual that addresses evaluation, training and issuance procedures for computers, computer components, access devices, and/or software for veterans with disabilities. Please see Attachment B for a sample assistive technology policy and procedures manual.
- C. **Referral:** Veterans, both in and outpatients, are referred to the Computer Assessment and Treatment Program (understanding that it may have a different title at different VAMCs) utilizing an electronic consult for evaluation of their overall, communication and cognition, computer access and/ or computer literacy needs, capabilities, and potential benefit from intervention.
- D. **Evaluation:** The evaluation includes interview, psycho-social, visual, communicative, cognitive, reading, motoric, educational and/or avocational /vocational assessments as appropriate. Consideration should also be given to ergonomics, comfort, health status, hearing impairment, physical limitations, special learning needs, patient preferences as well as performance level when determining efficiency and effectiveness. Any training needs and/or modifications necessary for the veteran to successfully achieve his/her stated goals should also be addressed.

- E. **Intervention/Treatment:** Individualized intervention begins once the assessment has been completed. Intervention may begin at bedside if the veteran is hospitalized with a system that would be permanently issued to the veteran for use following discharge. Electronic consults and notes document test results and progress in treatment.
- F. **Training** should be designed and paced to meet the specific goals, objectives and capabilities of each veteran.
- G. **Training necessary** will be determined by qualified provider completing the assessment. Training is required if a veteran is unable to demonstrate the ability to functionally use the computer technology in an effective manner to meet stated goals. There is no requirement for formal training if the veteran can demonstrate the ability to meet the standard outcome measures outlined in this document during the evaluation process.
- H. **Portable Computer Systems:** When the veteran presents with vocational, educational, and/or avocational goals requiring portability that cannot be adequately accomplished with a conventional computer, then the appropriate portable alternative may be evaluated, trained, and issued. These alternatives include, but are not limited to, portable laptop computers suitable for use by a disabled veteran. These may also be incorporated into the EADL (Electronic Aids for Daily Living or environmental controls) or the AAC (Augmentative Communicative Systems)(as discussed in separate CPR).
- I. **Scanners:** The provision of a scanner is authorized when the goals of any eligible veteran involve the need to use a scanner to input documents and/or use OCR software to scan and read.
- K. **Replacement Printer Cartridges:** The veteran will be responsible for replacement printer ink and toner cartridges beyond the initial cartridge.
- L. **Request for Upgraded Equipment:** Veterans requesting upgraded computer systems or components must have a specific need or reason for an upgraded system. Veterans requesting additional training for an upgraded system may be trained in the local community or return to a regional or local VA program for training. The decision to upgrade a computer component or system is the responsibility of the local program and Prosthetics Manager when a veteran does not return to a local VA hospital for additional training.
- M. **Service, Repairs and Replacements:** The local Prosthetics Activity will be responsible for servicing or replacing computer equipment not covered by the warranty section of the national contract. This includes arranging a service call or shipping the computer equipment to a vendor when necessary.

When issuing new equipment, upgrades, or replacement components, the local Prosthetics Activity will work in conjunction with the clinical providers to ensure set-up and delivery as needed. This may include configuring the equipment, setting up e-mail, and providing instruction to ensure proper use of the new equipment.

- N. **Appeals:** Each program-issuing computer related equipment must have an appeal process in place.
- O. **Return and Reissue:** The VA will have a mechanism in place to accept returned equipment when it is no longer meeting the needs of the veteran. This equipment can be reissued as appropriate.

VII. Documentation

Appropriate documentation will be maintained in the medical record that clearly identifies the veteran's stated goals; the evaluation and training provided; and the veteran's functional ability to use the prescribed equipment and software effectively to meet the stated goals.

VIII. Quality Management

Prescribing programs will maintain documentation of an active quality management program that regularly identifies issues, concerns and problems and strives to provide the highest quality of care.

IX. Outcomes

Veterans with disabilities must demonstrate the ability to operate the computers, computer components, access devices and/or software to achieve their stated goal(s). Outcome monitors, for example, may assess the number of discharged veterans who do any of the following:

- A. Achieve targeted treatment goals;
- B. Increase overall independence through computer access;
- C. Pursue educational and vocational goals;
- D. Report an increase in socialization and participation; and/or
- E. Report an improved sense of self worth. The use of assistive technology should reduce functional limitations and increase activity participation.

X. References

- A. VHA Prosthetic Clinical Management Program (PCMP) Clinical Practice Recommendations for the Prescription of Computers and Peripheral Devices to Blind and Visually Impaired Veterans
- B. National Contract Specifications
- C. Supplemental guidelines for the Provision of Local Services for Computers, Peripherals and Software
- D. Computer Instructor Competencies Checklist
Z-ACT and Z-ACT Loaner Donor Policies and Procedures (available from NMVAHCS Speech Pathology Department).

Attachment A: Assistive Computerized Technology Procedures (sample)

Attachment B: Definitions

APPROVED/DISAPPROVED:

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Date: 6/4/07

ATTACHMENT A:

VETERANS AFFAIRS MEDICAL CENTER

**ASSISTIVE COMPUTERIZED TECHNOLOGY
PROGRAM PROCEDURES (sample)**

I. PURPOSE: The primary purpose of the Assistive Computerized Technology Program is to provide comprehensive and quality patient care utilizing an integrated interdisciplinary approach to technology service delivery while also improving overall cognitive / communicative and/or functional independence status of persons served.

II. VISION: We will be the assistive computerized technology program of choice for all eligible veterans in our region because of the quality and availability of our patient care services.

III. MISSION: The mission of the Assistive Computerized Technology Program is to expose veterans to a wide array of available augmentative communicative, computer access and assistive technology and to improve their overall cognitive/ communicative and/or functional independence status. This will enable them to be as independent as possible in order to increase overall functional status, increase overall quality of life, and maximize community reintegration and reentry opportunities while reducing re-hospitalizations and decreasing physical dependency on other individuals and the VA.

IV. ASSISTIVE COMPUTERIZED TECHNOLOGY TEAM RESPONSIBILITIES: The Assistive Computerized Technology Team will provide comprehensive evaluation and training to enable veterans to effectively use computer based as well as low tech systems to maximize cognitive/ communicative, education, vocation, recreation, and independent living potentials.

V. PROCEDURE:

- A. **Referral:** Veterans, both in and outpatients, are referred to the **Assistive Computerized Technology Program** utilizing an electronic consult for evaluation of their overall augmentative communication, communication and cognition, computer access and/ or computer literacy needs, capabilities, and potential benefit from intervention.
- B. **Advanced Clinical Access:** The veteran will be sent a letter indicating that he/she is to call in within 30 days to schedule his Evaluation. Veterans who call will be scheduled in the next available evaluation slot. The veterans who have not called will require a new consult to be seen and the existing consult will be discontinued following ACA guidelines.
- C. **Evaluation:** The evaluation includes interview, communication, visual, cognitive, reading, motoric, educational and/or avocational /vocational assessments as appropriate. In addition, future educational and vocational goals.
- D. **Intervention/Treatment:** Individualized intervention begins once the assessment has been completed. Intervention begins with the appropriate system being set up at bedside for the acutely injured or for patients with an older injury who are on bedrest. Patients are encouraged to begin treatment in the Assistive Computerized Technology Clinic as soon as they are cleared by the

medical staff. TX is scheduled individually on a daily or 2/3/4 times per week basis based on individual need. Electronic consults and notes document test results and progress in treatment.

- E. **Prosthetics Requests:** Prosthetics requests are submitted for the prescription of computers, computer components, access devices, and software to veterans with disabilities. Recycled systems are issued as appropriate. The veteran is then contacted when their system arrives.

IV. CRITERIA FOR *Assistive Computerized Technology* PROGRAM

EVALUATION: Outcome monitors will assess the number of discharged veterans who do any of the following:

- A. Achieve targeted assistive computerized technology treatment goals;
- B. Increase overall independence through computer access;
- C. Pursue educational and vocational goals;
- D. Report an increase in socialization and participation; and/or 5) report an improved sense of self worth.

Attachment B: DEFINITIONS

Assistive Technology (AT): is any item, piece of equipment, or product system, whether acquired commercially off the shelf, modified, or customized, that is used to increase, maintain, or improve the functional capabilities of individuals with disabilities. (29 U.S.C. Sec 2202(2). (Reference: <http://www.resna.org/taproject/at/atinformation.html>)

Assistive Technology Practitioner (ATP): a specialist in assistive technology application who typically has a professional background in engineering, occupational therapy, physical therapy, recreational therapy, special education, speech-language pathology, or vocational rehabilitation counseling who is certified by RESNA. ATPs may present themselves to the public as service providers who are involved in the analysis of a consumer's needs and training in the use of a particular assistive technology device. (reference: <http://www.resna.org/taproject/library/atq/erlyint.htm>)

Augmentative and Alternative Communication Devices (AAC Devices): an area of clinical and educational practice that attempts to compensate temporarily or permanently, for the impairment and disability patterns of individuals with severe communication disorders (American Speech-Language-Hearing Association Committee on Augmentative Communication, (1989).

Cognitive Prosthetic Devices: can be any electronic based product or system, whether acquired as a retail item, a modified retail item, or a customized one that is used by an individual to compensate for cognitive-communication impairments that affect his/her ability to participate in activities of daily living (ADLs) and higher level ADLs (IADLs), including work. Examples are Personal Digital Assistants (PDAs), pocket Personal Computers (pocket PCs), watches with alarm features, pagers with reminder features, web based products, specially developed individualized systems, etc. (reference: CPR for Cognitive Prosthetics Devices)

Computer Assessment/Treatment Program: a prescribing program that has a working policy and procedure document outlining its evaluation, training, and issuance procedures for computers, computer components, access devices, and/or software in accordance with VHA Prosthetic clinical practice recommendations

Computer Components: functional components that contribute to the characteristics of the total computer (e.g. central processing unit, computer storage, input devices, output devices, peripheral devices, graphical user interfaces, and software). Any one computer may have different individual components.

Electronic Aid to Daily Living (EADL): device that allows control of appliances (e.g., radio, television, CD player, telephone) through the use of one or more access device including voice activation and/ or single or multiple switches.

Personal Digital Assistants (PDA's): handheld devices that integrate the functions of a small computer with features such as a cell phone, personal organizer, electronic mail, pager, etc. Information may be input via a pen-based system using a stylus and

handwriting recognition software, keyboard, or downloaded from a personal computer using special cables and software.

RESNA (Rehabilitation Engineering & Assistive Technology Society of North America): (www.resna.org) an interdisciplinary association of people with a common interest in technology and disability whose purpose is to improve the potential of people with disabilities to achieve their goals through the use of technology.

Telehealth: Use of technologies to provide clinical care, patient education, provider education and hospital administration in circumstances where distance separates those receiving services and those providing services. (Reference: VA: Telehealth Initiatives)

VA Independent Living Program: is managed by VARO/ VR&C and is typically for service connected veterans who are not candidates for returning to school or getting a job. This program is individualized and incorporates such options as assistive technology, independent living skills training, and/ or connection to community-based support services to assist the veteran in becoming as independent as possible in the community. (Reference: Voc Rehab and Employment Service)