

VHA PROSTHETIC CLINICAL MANAGEMENT PROGRAM (PCMP) CLINICAL PRACTICE RECOMMENDATIONS FOR ISSUANCE OF MANUAL WHEELCHAIRS

Previously Approved by PCMP Wheeled Mobility Integrated Product Team

I. PURPOSE:

The purpose of this clinical practice recommendation (CPR) document is to provide Department of Veterans Affairs (VA) clinicians and administrative personnel with criteria and guidance for issuing manual wheelchairs. This document serves as a supplement to VHA Handbook 1173.6, *Wheelchairs and Special Mobility Aids* which defines VA policy for provision of WHEELCHAIRS AND SPECIAL MOBILITY AIDS.

II. BACKGROUND

The Under Secretary for Health directed VHA's Prosthetic and Sensory Aids Service (PSAS) Strategic Healthcare Group (SHG) to establish a Prosthetic Clinical Management Program (PCMP). The objectives were to coordinate the development of clinical practice recommendations for prosthetic prescription practices and contracting opportunities to assure technology uniformity and ease of access to prosthetic prescriptions and patient care that will lead to valid outcome measures and analysis for research purposes.

A wheeled mobility device is indicated when the veteran demonstrates a clear functional need that cannot or is not likely to be met by conventional rehabilitation or medical interventions and is not otherwise contraindicated. VA supports the dispensation of wheeled mobility devices to allow the veteran to access medical care and to accomplish necessary tasks of daily living in ordinary home and community environments. A manual wheelchair will be provided when the veteran demonstrates inadequate mobility without a wheelchair and does not require a motorized wheeled mobility device.

Each veteran is entitled to an individualized evaluation. The clinician will take into account the veteran's medical diagnoses, prognosis, functional abilities, limitations, goals, and ambitions. Evaluation of mobility will assess musculoskeletal, neuromuscular, pulmonary, and cardiovascular capacities and response, effort, quality and speed of mobility, and overall function.

A wide range of manual wheelchairs are provided by VA. Manual wheelchairs vary by frame design, weight, durability, adjustability, customization, availability of accessories, intended use and expected lifespan of the device. Dependent on specific client needs identified by a comprehensive evaluation performed by a clinician, the veteran will be provided with a manual wheelchair that fits

appropriately, meets wheeled mobility goals, is safe to operate and is durable over the anticipated term of use.

This document is intended to guide clinicians and administrative staff for providing veterans with manual wheelchairs that meets identified mobility needs.

III. DEFINITIONS

To avoid confusion, terminology used in this document is defined below:

- A. **Standard Manual Wheelchair**: A basic manual wheelchair that is readily available at VA facilities as a stock wheelchair determined by national contract. This folding wheelchair typically weighs more than 35 pounds, is available in three sizes, and has a weight capacity of 250 pounds. Most features on this wheelchair are fixed, with the exception of adjustable length legrests. A limited number of accessories are available.
- B. **Rehab Manual Wheelchair**: An adjustable, light weight manual wheelchair that is readily available at VA facilities as a stock wheelchair determined by national contract. This folding wheelchair weighs less than 34.5 pounds, is available in 6 sizes, and has a weight capacity of 250 pounds. Most features on this chair are adjustable including front and rear seat heights, back height, armrest height and rear wheel orientation. A variety of options and accessories are readily available.
- C. **Ultralight Manual Wheelchair**: A light weight manual wheelchair designed to meet highly individualized postural support and mobility needs. This type of wheelchair is available in folding and rigid styles, weighs less than 30 pounds, and has a weight capacity up to 250 pounds. Ultralights vary from highly adjustable to custom designed with minimal adjustability. A wide range of frame and seat sizes, frame styles, options and accessories are available to meet specified individual needs. Some ultra light wheelchairs are available with suspension or can be reinforced to accommodate a greater weight capacity.
- D. **Heavy Duty Manual Wheelchair**: A manual wheelchair with a weight capacity between 250 and 350 pounds.
- E. **Extra Heavy Duty Manual Wheelchair**: A manual wheelchair with a weight capacity greater than 350 pounds.
- F. **Manual Transport Wheelchair**: A manual wheelchair that is utilized by a caregiver to move an individual from one place to another, typically on level, solid surfaces. The wheelchair is not intended for self propulsion. Typically there are few adjustments and accessories available and limited postural support is provided.

- G. Manual Wheelchair with Tilt- in- Space Seat Function:** A manual wheelchair that includes a mechanism to allow the entire seat to pivot on the frame, while maintaining the seat-to-backrest angle. Tilt in space seat function on a manual wheelchair allows the individual to move into a tilted position and to return to an upright position. Different mechanisms for tilt activation are available, dependent on the specific chair. They include: 1) manual tilt activation by the wheelchair user, 2) manual tilt activation by a caregiver, 3) power tilt activation by the wheelchair user, and 4) power tilt activation by a caregiver. Chair weight, weight capacity, adjustments, and availability of accessories vary by specific wheelchair.
- H. Manual Wheelchair with Recline Seat Function:** A manual wheelchair that includes a mechanism to allow the backrest to pivot posteriorly, increasing the seat-to-backrest angle and allowing the user to assume a more recumbent position. An open seat to back angle can either be maintained in a static position or can be dynamic, allowing the client to move thru the excursion into full recline and back to the upright position. Recline mechanisms on manual wheelchairs utilize a manually activated hydraulic system that is typically managed by a caregiver. Chair weight, weight capacity, adjustments, and availability of accessories vary by specific wheelchair.
- I. Manual Wheelchair with Tilt and Recline Combination Seat Functions:** A manual wheelchair that allows the entire seat to pivot on the frame while maintaining the seat to back angle and allows the backrest to pivot posteriorly, opening the seat to back angle. Chair weight, weight capacity, adjustments, and availability of accessories vary by specific wheelchair
- J. Standing Manual Wheelchair:** A manual wheelchair that includes a mechanism to allow the wheelchair user to move from a sitting position to a standing position. This requires passive hip and knee extension. Chair weight, weight capacity, adjustments, and availability of accessories vary by specific wheelchair.

IV. GENERAL INDICATIONS & CONTRAINDICATIONS

INDICATIONS FOR A MANUAL WHEELCHAIR:

The following criteria indicates appropriate consideration for a manual wheelchair:

- A. Inability or limited ability to ambulate that cannot be sufficiently resolved with use of ambulatory assistive device (s) [cane, walker, crutch(es), rollator]. Walking limitations may be related to quality, efficiency and safety.
- B. Demonstrates physical ability and cognitive function to appropriately use and manage a manual wheelchair including:

- Adequate extremity function [strength, range of motion (ROM), coordination, and functional mobility] to use a manual wheelchair effectively without causing pain or injury or exacerbating existing medical condition(s).
 - Effective propulsion & mobility skills in all anticipated environments.
 - Utilization of safety features such as wheel locks and anti-tip devices.
 - Management of all movable and removable parts.
 - Independent technique for stowing the wheelchair in a vehicle with or without an assistive lift mechanism.
- C. Identified mobility impairments are adequately addressed by a manual wheelchair versus an alternative mobility device (i.e. power mobility device).
- D. Environments of intended use are compatible with manual wheelchair use, or can be reasonably modified for improved accessibility if needed.

OR

- E. Individual who is a primary power mobility user requires a manual wheelchair as a back-up mobility device. The back-up manual wheelchair may be prescribed for either self-propulsion or for dependent mobility, dependent on identified individual needs.

OR

- F. A client meets the criteria listed above (items A, C, D) except the ability to manage the manual wheelchair independently (item B); however a consistent caregiver is available to assist with any identified mobility or equipment management limitations.

CONTRAINDICATIONS FOR A MANUAL WHEELCHAIR

- A. Identified mobility deficits are adequately addressed with an ambulatory assistive device [i.e. cane, walker, crutch(es), rollator]. Justifiable need for a manual wheelchair is not identified.
- B. Lacks adequate extremity function (strength, ROM, coordination, functional mobility) to use a manual wheelchair effectively without causing pain or injury or exacerbating existing medical condition(s).
- C. Does not have adequate physical ability and/or cognitive function to appropriately manage a manual wheelchair (i.e. propulsion and/or equipment management) and does not have a caregiver available to assist.
- D. Environments of intended use are not compatible with manual wheelchair use and cannot be reasonably modified for improved accessibility.

V. SPECIFIC INDICATIONS AND CONTRAINDICATIONS

In addition to all general indications and contraindications above, specific indications and contraindications for each manual wheelchair option must be considered.

A. Standard Wheelchair

Indications: The standard manual wheelchair is indicated for individuals with a short term or minimal physical impairment who require a manual wheelchair part time or intermittently and who do not require wheelchair adjustment for postural support or functional skills. The individual must fit appropriately in one of the three available sizes. Examples include but are not limited to: 1) veteran requires manual wheelchair for less than 3 months due to a temporary physical impairment, 2) veteran requires manual wheelchair less than once a week 3) veteran has limited ability to self-propel; is expected to rely on caregiver for wheelchair mobility and does not have postural support needs.

Contraindications: The standard manual wheelchair is contraindicated for individuals with long term (i.e. more than 3 months) or significant physical impairments necessitating the use of a manual wheelchair more than once/week. It is contraindicated for those who require specific wheelchair adjustment to optimize postural support or functional skills and for those who do not fit in one of the three available sizes.

B. Rehab Wheelchair

Indications: The rehab wheelchair is recommended for an individual with a long term or significant physical impairment who will use a manual wheelchair part-time or intermittent for more than 3 months or is expected to be a full time manual wheelchair user for less than one year. The individual must fit appropriately in one of the six available sizes. The rehab wheelchair is indicated for those who will benefit from the available adjustments to improve postural support and functional skills. It is appropriate for those who require the removable rear wheel feature to allow safe stowing of the wheelchair in a vehicle, which is not available in the standard wheelchair.

Contraindications: The rehab manual wheelchair is contraindicated for individuals who are full time wheelchair users for more than one year whose comprehensive needs are not adequately addressed by this wheelchair. It is contraindicated for those who do not fit in one of the six available sizes. It is likely not necessary for individuals who cannot self propel and do not require wheelchair adjustments to improve postural support or functional skills, as the standard manual wheelchair or a transport chair may adequately meet identified needs. The rehab wheelchair is potentially not appropriate for an individual who is expected to independently stow the wheelchair in a vehicle on a daily basis, as

a lighter weight option may be indicated. The rehab wheelchair is contraindicated for those whose comprehensive needs are better addressed by an ultra light folding or rigid wheelchair.

C. Ultralight Manual Wheelchair

Indications: An ultralight manual wheelchair should be considered for any individual who is expected to use a manual wheelchair full time for one year or longer or for an individual whose comprehensive needs are best addressed by the inherent features of an ultralight. The ultralight is necessary for those with unique needs relative to fit, postural support, functional skills, and selectable accessories which are best addressed with a customizable, very light weight wheelchair. An ultralight should be considered for any individual performing advanced wheelchair skills such as wheelies and consistent negotiation of uneven terrain and for those who independently stow their wheelchair in a vehicle on a daily basis. In addition to being appropriate for the highly active wheelchair user, the ultralight is also often the optimal choice for an individual with marginal ability to self-propel a wheelchair because it is the lightest weight option that can be adjusted or custom configured to optimize support and function.

Contraindications: The ultralight is typically not necessary for an individual with a short-term or minimal physical impairment whose needs can be adequately addressed with the standard or rehab wheelchair.

D. Manual wheelchair with heavy duty or extra heavy duty reinforcement

Indications: A manual wheelchair reinforced to accommodate increased user weight is indicated when the weight capacity of the appropriate alternative wheelchair is exceeded. When a customizable manual wheelchair is most appropriate, options in heavy duty wheelchairs that can be designed and/or adjusted to optimize support and function should be considered.

Contraindications: A reinforced wheelchair is contraindicated when the individual's body weight does not indicate the need for a heavy duty chair. It is also contraindicated if the individual cannot adequately propel the chair or is at increased risk for pain and injury inherent to pushing a heavier wheelchair.

E. Transport chair

Indications: A transport wheelchair is appropriate for a veteran who does not have the ability to self-propel a manual wheelchair and does not have identified need for postural support or skin protection. A caregiver must be available and able to manage the transport chair effectively.

Contraindications: A transport chair is contraindicated when the veteran's identified needs are not adequately addressed, when the veteran is better served by a manual or power wheelchair, or when caregiver support is not available.

Indications and Contraindications for Manual wheelchairs with Seat Functions: Tilt-in-Space, Recline, Combination Tilt and Recline, Standing

In addition to general indications and contraindications for manual wheelchairs, the following considerations apply to manual wheelchairs with seat functions. Clinicians should take into account that these wheelchairs are inherently heavier, often have limited adjustability and customization, and are more difficult to manage and transport. For individuals who are primary power wheelchair users, the appropriate back-up manual wheelchair is potentially one with seat function.

Indications: A manual wheelchair with seat functions is appropriate for the individual whose comprehensive needs are adequately addressed by a manual wheelchair and has specific identified physical and/or physiologic issues that are adequately and appropriately addressed with seat functions. Whether independent, assisted, or dependent in wheelchair mobility, the issued wheelchair must meet identified needs while not limiting functional skills or exacerbating or increasing the risk of secondary medical conditions (i.e. repetitive strain injury, skin compromise, autonomic instability). The veteran must be able to maintain appropriate seated position in the chair and be adequately supported in standard and altered seat orientations.

Contraindications: A manual wheelchair with seat functions is contraindicated if specific needs are not identified that can be addressed by the specific seat function. This type of chair is not appropriate if it limits functional skills, exacerbates or increases risk of secondary medical conditions, does not allow the individual to maintain an appropriate seated position, cannot be adjusted or customized to meet specific client needs, or cannot be reasonably managed. It is contraindicated if the seat function or wheelchair base cannot be adequately managed by the consumer or caregiver. It is not appropriate for those whose comprehensive needs are better addressed with alternative mobility device and/or functional skills training.

In addition to the above, specific considerations for each seat function are as follows:

F. Manual wheelchair with tilt-in-space seat function

Indications: A manual chair with a tilt-in-space seat function is appropriate for an individual who requires the alternative position in space to address identified needs which may include but are not limited to pressure management, management of autonomic dysfunction (i.e. hypotension), control of lower leg edema, cardiovascular management, and respiratory support. The tilt-in-space

feature typically allows postural position to be maintained through the excursion of seat movement which limits shear at the seat and back support.

Contraindications: This type of chair is contraindicated for those who cannot tolerate the tilted position.

G. Manual wheelchair with recline seat function

Indications: A manual wheelchair with a reclining seat function is indicated for those who require recline to meet identified needs which may include but are not limited to restriction in hip flexion range of motion, pressure management, management of autonomic dysfunction (i.e. postural hypotension), cardiovascular management, respiratory support, and bladder management. The recline feature requires hip movement thru the excursion of backrest motion which can cause a shift in seated position or shear at the seat and back support.

Contraindications: This type of wheelchair is contraindicated for those who cannot tolerate the reclined position, cannot correct seated position upon returning to upright, or experience skin compromise as a result of the recline mechanism.

H. Manual wheelchair with tilt/recline combination seat function

Indications: A manual wheelchair with combination tilt and recline seat functions is indicated when the individual's needs are not adequately met by tilt or recline alone.

Contraindications: This type of wheelchair is not appropriate when the relative contraindications for either tilt alone or recline alone are identified.

I. Standing manual wheelchair

Indications: A manual chair with standing function is indicated when the individual has specific medical justification for standing or there are specific self-care, home management or vocational goals that cannot be met with alternative mobility equipment. The individual must be able to safely weight bear in the standing position which should be supported by bone density tests and/or long bone x-rays, range of motion measurements, and autonomic evaluation (i.e. blood pressure response to standing).

Contraindications: A standing manual wheelchair is contraindicated if medical issues are exacerbated or the risk of injury is increased.

VI. MANUAL WHEELCHAIR ACCESSORIES

A wide range of options and accessories are available for most manual wheelchairs which allow additional customization to meet the veteran's unique identified needs. Wheelchair options and accessories include but are not limited to push handles, side guards, armrests, wheels, tires, pushrims, wheel locks, anti-tip devices, casters, legrests and foot supports. Additionally, critical clinical consideration must be given to selection and configuration of the appropriate wheelchair cushion, back support and positioning devices (seating interventions) based on identified needs and equipment trials. Identified items can be provided when it is determined by the clinician that the specific features contribute toward the veteran's health, safety and/or functional use of the wheelchair. The clinician must document the specific justification for the identified options, accessories, and seating interventions when placing the order for the wheelchair and/or specific parts with PSAS.

VII. PROCESS FOR WHEELCHAIR PRESCRIPTION AND ISSUANCE

The following process is recommended for providing manual wheelchairs to veterans:

- A. A consult is generated by a primary care provider (PCP) or specialty care provider to the clinical service that has expertise and competency in providing wheeled mobility equipment. Consult must include client background, reason for referral, anticipated length of time that equipment may be needed, and specific precautions.
- B. A qualified clinician completes a comprehensive client evaluation to determine specific mobility equipment needs. If a wheelchair is indicated, the clinician determines wheelchair selection and specifications that best meet the veteran's needs based on appropriate and adequate equipment trials.
- C. The clinician follows identified local facility process for placing a wheelchair order with PSAS. The clinician's documentation includes justification for the prescribed wheelchair and all associated accessories.
- D. The selected wheelchair with prescribed specifications is ordered or provided (if stock) by PSAS. The wheelchair is delivered to the clinician who confirms that the wheelchair received is the same as that ordered.
- E. The wheelchair is issued to the veteran by the clinician, or by qualified support personnel under the direction and supervision of the clinician. All necessary equipment modifications are determined by the clinician and are completed either by the clinician or by qualified support personnel under the instruction and supervision of the clinician.

- F. The clinician provides or directs qualified support personnel to provide comprehensive education and training to the veteran and/or caregiver regarding features of chair, removable or adjustable components, propulsion techniques, wheelchair skills, equipment management, and process for maintenance and repairs. While the clinician is responsible for ensuring that all necessary client education is complete, he or she may judiciously decide when it is appropriate to utilize qualified support personnel to provide education on specific topics.
- G. All respective documentation by clinical and PSAS staff will reflect comprehensive process regarding client evaluation, equipment trials, wheelchair order, fitting and adjustments, and client education.

** The prescribing clinician provides clinical oversight during the entire process of manual wheelchair issuance - from initial evaluation to final product delivery, fitting and education. When the prescribing clinician decides to utilize support staff at any point in the process, tasks requiring specific clinical expertise, such as mobility skills training, equipment management, and safety should be addressed by a qualified clinical professional. Associated non-clinical tasks, such as equipment assembly, identified adjustments and education regarding equipment maintenance and repairs, may be performed by a qualified professional who is not a clinician, at the discretion and direction of the prescribing clinician.*

VIII. ADDITIONAL INFORMATION

A. Power Mobility Devices

For additional information, see "Clinical Practice Recommendations for Motorized Wheeled Mobility Devices: Scooters, Pushrim-Activated Power-Assist Wheelchairs, Power Wheelchairs, and Power Wheelchairs with Enhanced Function" located at:

<http://vaww1.va.gov/prosthetics/page.cfm?pg=18>

B. Reissue of Manual Wheelchairs

It may be appropriate to provide a prior used manual wheelchair to an individual when the identified wheelchair meets the veteran's comprehensive needs, appears and functions as if it were new, and is accepted by the veteran.

C. Spare Manual Wheelchairs

As stated in VHA Handbook 1173.6 section 5, a back-up manual wheelchair may be provided to a veteran, who is a primary manual wheelchair user or a primary power wheelchair user, when the absence of the primary wheelchair during repair periods creates a severe hardship for the veteran.

When a second wheelchair is significantly different than the primary wheelchair, the clinician's documentation should reflect the rationale for the equipment prescribed.

D. Wheelchairs for Sports

Eligibility for sports wheelchairs is delineated in VHA Handbook 1173.6 section 4(c). At the time of publication of this manual wheelchair document, a separate document regarding clinical practice recommendations (CPR) for adaptive sports and recreation equipment was being compiled. When approved, it will be posted on the VA Intranet.

E. Report of Damaged or Faulty Equipment

VA employees have the responsibility of immediately reporting damaged or faulty equipment by filing an official Quality Improvement Report (QIR). The QIR form and a separate document with instruction for completing the QIR form are available at <http://vawww.va.gov/vaforms/va/pdf/VA0729.pdf>

F. Manual Wheelchair Repairs and Replacement

The criteria and process for manual wheelchair repairs and replacement are clearly identified in Handbook 1173.6, sections 6 and 7. All repairs and replacement parts are coordinated by PSAS through the local VA repair facilities or commercial sources. Commercial repair sources must have qualified/certified repair technicians providing services to our veterans. Prior authorization through PSAS is required before commercial repair sources may proceed with needed repairs.

IX. CASE EXAMPLES

Four case examples to illustrate key points in provision of manual wheelchair to veterans are included in this Clinical Practice Recommendation (CPR).

CASE EXAMPLE: Standard Manual Wheelchair

Background: TW is a 75 year-old male with muscle weakness following recent hospitalization for Coronary Artery Bypass Graft (CABG).

Physical Presentation: TW is 72" tall and weighs 160#. Passive Range of Motion (PROM) is within normal limits (WNL) all extremities. Lower extremity strength is 4/5 bilaterally. Upper extremity (UE) strength not fully tested due to sternal precautions. He is short of breath (SOB) when ambulating greater than 50 feet with a rolling walker and requires a sitting rest to recover.

Functional Presentation: TW is able to ambulate short functional distances within his home with a rolling walker, but are not able to manage long distances outside the home. TW is independent with all functional skills including self care. His endurance is limited since his surgery. While recovering from his surgery, he is in need of a manual wheelchair he can use for short term, mainly for level surfaces (i.e. to attend medical appointments). Patient is able to propel the manual wheelchair for short distances indoors with use of both upper and lower extremities. His wife will assist him with most wheelchair mobility outside the home and equipment management. She is able to safely and independently stow a folding frame manual wheelchair in the trunk of their vehicle.

Equipment Trials: Based on a comprehensive evaluation, the clinician recommended for TW to have a standard folding manual wheelchair for short time use.

Equipment Selection: The client and clinician agreed that a standard manual wheelchair with anti-tip devices will meet his short term needs. The wheelchair in stock was appropriate in size for the client and was appropriate for accommodating his weight.

Equipment Order: The clinician sent a Consult to Prosthetics for a standard in stock manual wheelchair in the appropriate size. The PSAS Purchasing Agent processed the wheelchair order. The wheelchair was delivered to the clinician for issue to the veteran.

Final Equipment Provision to Veteran: TW was seen by the clinician for wheelchair fitting and education. The clinician confirmed that the wheelchair fit the client well and adjusted the footrest length to optimize lower extremity support.

Education: Wheelchair propulsion skills, safe transfers to/from the wheelchair and techniques for stowing the wheelchair in a vehicle were reviewed. The clinician provided education to TW regarding the features of the new wheelchair, management of all moving parts (leg-rests, armrests, and anti-tip devices), and explanation for folding the wheelchair and maintenance recommendations. The process for repairs and/or replacement was reviewed.

Documentation: Clinician documentation included findings of the comprehensive evaluation, assessment with identified client goals, equipment justification for the wheelchair selected, outcome of the final fitting and patient education provided. PSAS documentation included entry of the clinician's order and entry of the new wheelchair (including serial number) in the veteran's electronic equipment record.

CASE EXAMPLE: Rehab Manual Wheelchair

Background: JS is an 82 year old married male with severe degenerative joint disease in bilateral knees, chronic low back pain and chronic renal failure requiring dialysis 3 days per week.

Physical Presentation: JS is 5' 10" and weighs 180 pounds. Bilateral upper extremity active range of motion (ROM) is within normal limits (WNL), and strength is 4/5. Coordination is normal. Lower extremity active ROM is limited to 90 degrees of flexion with pain response. Remainder of lower extremity active ROM is WNL. Strength in lower extremities is 4/5 except at knees, which are 3+/5 within the limited ROM. Trunk strength is WNL.

Functional Presentation: JS is independent in basic activities of daily living, with adaptive equipment for bathroom and dressing. He is able to ambulate short functional distances within his home with a rolling walker, but can no longer walk safely in the community. He is dependent on his wife for transportation by car as he no longer drives. His endurance is limited, especially on dialysis days, and he has fallen leaving dialysis in the past week. He is seeking a manual wheelchair that they can manage, to facilitate community mobility. He has no prior wheelchair use. He is able to propel a manual wheelchair independently over even surfaces, both indoors and outdoors, but requires assistance for inclines and uneven terrain.

Equipment Trials: This client's physical and functional presentation warranted consideration for power mobility; however the veteran and family declined power mobility trials at this time due to limitations in transporting a power mobility device and preference to propel a manual wheelchair when endurance allowed.

JS and wife were educated regarding manual wheelchair safety and functions/features. Based on a comprehensive evaluation and investigation of client preferences/needs, the clinician arranged for JS to trial the Rehab wheelchair, in various configurations of floor to seat height, arm rest style and seat size, to determine best configuration for client to be able to self-propel and independently transfer. As part of the trial process, it was determined that JS would arm propel only, as foot propulsion aggravated knee pain, and lower floor to seat height did not allow for independent transfers. The tension adjustable backrest allowed postural support to minimize back pain while seated. He required assist from wife for stowing wheelchair in trunk of car. After removing the wheels from the frame (quick release wheels), she was able to stow all parts in a vehicle and could independently reassemble the mobility system.

Equipment Selection: The Rehab wheelchair best met the comprehensive identified needs of veteran as 1) he is expected to use wheelchair at least 3 times per week, indefinitely 2) weight of wheelchair allows JS to propel on level surfaces, 3) wife can stow wheelchair in trunk, with removable wheels. Trial

equipment was used to determine optimal dimensions, configuration, and accessory selection. Under the guidance of the clinician, JS participated in selection of all specifications for the wheelchair. The clinician completed the order form, and submitted the specific wheelchair order to PSAS.

Equipment Order: The PSAS Purchasing Agent processed the specific wheelchair order. Once the wheelchair was delivered to the VA facility, PSAS arranged for delivery of the wheelchair to the clinician and payment to the manufacturer was coordinated.

Final Equipment Provision to Veteran: JS was seen by the clinician for wheelchair fitting and education. The chair was adjusted for optimal support and propulsion ease, including back height, floor to seat height, and footrest length. Functional skills were reviewed with JS and his wife, and associated education was provided.

Education: The clinician provided education to JS and his wife regarding wheelchair safety, the functions/features of the wheelchair, explained specific adjustments, reviewed mobility skills, discussed maintenance recommendations and reviewed the process for repairs and replacement parts.

Documentation: Clinician documented findings of the comprehensive evaluation, including physical presentation and objective measurements of the client, client goals, equipment trialed, justification for selected features/options, education provided, and outcome of the final fitting. PSAS documentation included processing of the clinician's specific order, ordering the wheelchair from the manufacturer, processing payment, and documentation of the equipment in the 2319 in the veteran's electronic medical record.

CASE EXAMPLE: Ultralight Manual Wheelchair

Background: CB is a 25 year old male with T2 ASIA Impairment Scale A (T2 AIS A) Spinal Cord Injury (SCI) due to Motor Vehicle Accident (MVA) five years prior.

Physical Presentation: CB is 5' 9" and weighs 160 pounds. Strength in the lower extremities and trunk is 0/5. Lower Extremity (LE) range of motion (ROM) evaluation reveals bilateral hamstring tightness; otherwise unremarkable. Upper extremity strength is 5/5 throughout with full ROM, full hand function, and normal coordination.

Functional Presentation: CB is independent with all functional skills including self care, manual wheelchair propulsion in varied environments, advanced wheelie skills, and transfers to/from wheelchair including off the floor. He drives a vehicle with hand controls and independently stows a rigid frame manual wheelchair with removable wheels.

Equipment Trials: Based on a comprehensive evaluation and investigation of client preferences, the clinician arranged for CB to trial 3 rigid frame ultralight manual wheelchairs with varying frame styles and features. Each trial chair was configured to match the client's identified needs as close as possible. As part of the trial process, CB performed all wheelchair skills and transfers and stowed the wheelchair in his vehicle.

Equipment Selection: Following trials with potentially appropriate ultralight manual wheelchairs, the client and clinician agreed that wheelchair X best met comprehensive identified needs and client preferences. Trial equipment was utilized to determine optimal dimensions, configuration and accessory selection. Under the guidance of the clinician, CB participated in selection of all specifications for the identified selected wheelchair. The clinician completed the extensive wheelchair order form from manufacturer X and submitted the specific wheelchair order to PSAS.

Equipment Order: The PSAS Purchasing Agent processed the specific wheelchair order with the identified manufacturer. Once the wheelchair was delivered to the VA facility, PSAS arranged for delivery of the wheelchair to the clinician and payment to the manufacturer was coordinated.

Final Equipment Provision to Veteran: CB was seen by the clinician for wheelchair fitting and education. The chair was adjusted for optimal postural support (seat angle, back angle and height), lower extremity support (footrest length) and propulsion and wheelie skills (rear wheels as far forward as possible without causing excessive rearward instability). All functional skills were reviewed in the new wheelchair and associated education was provided.

Education: The clinician provided education to CB regarding the features of the new wheelchair, explanation of specific adjustments and configuration, reviewed mobility skills, discussed maintenance recommendations and reviewed the process for repairs and replacement parts.

Documentation: Clinician documentation included findings of the comprehensive evaluation, assessment with identified client goals, equipment trials, justification for wheelchair selected and specified features, outcome of the final fitting, and patient education provided. PSAS documentation included processing of the clinician's specific order, coordination with the manufacturer for wheelchair order and payment and entry of the new wheelchair (including specifications and serial number) in the veteran's electronic equipment record.

CASE EXAMPLE: Manual Wheelchair with Tilt-in-Space Seat Function

Background: GR is an 81 year old married man with Alzheimer's disease, Prostate cancer and history of seizures.

Physical Presentation: GR is 5' 10" and weighs 155 pounds. PROM of all extremities is within normal limits. Unable to test muscle strength or coordination. He has been bed bound on a pressure relieving mattress for approximately one year with no skin compromise.

Functional Presentation: GR is cognitively impaired and is unable to follow verbal and/or demonstrative instruction. He does make eye contact, verbalizes content unrelated to the situation and is pleasant. GR is dependent on his spouse for all functional activities and self-care. Spouse has been trained on safe use of a patient lifter and sling placement. Home Health Aides assist in Activities of Daily Living three times a week.

Equipment Trials: Spouse was shown two manual wheelchair chair options that have tilt-in-space seat functions. Features of the chair were explained to the spouse and the reasoning behind the need for tilt. GR was patient lifted into each of the identified trial tilt-in-space manual wheelchairs. A concave back was utilized for trunk support. Limitations for transportation relative to this type of wheelchair were discussed with spouse. She indicated that she would only be using the chair for their immediate environment and outdoor surroundings.

Equipment Selection: Following trials with the two different wheelchair options spouse and clinician agreed that wheelchair X would be the best choice for GR and his home environment. Trial equipment was utilized to determine optimal dimensions, configuration and accessory selection including the appropriate seat back for trunk support and pressure relieving wheelchair cushion. The clinician completed the order form from manufacturer X. The order form with the appropriate Prosthetic Consult was submitted to PSAS.

Equipment Order: The PSAS Purchasing Agent processed the specific wheelchair order. The wheelchair was dropped shipped to a VA contracted Rehabilitation Engineering Society of North America (RESNA) ATS (Assistive Technology Supplier) certified supplier for delivery and set up at the veteran's home with instructions provided by the prescribing clinician for final fitting. A RESNA ATP (Assistive Technology Provider) certified clinician was also contracted to provide clinical oversight for issuing the wheelchair in the home. This was decided for three reasons: 1) transportation to the VA was a hardship for both veteran and spouse, 2) the couple had no means of transporting the issued wheelchair to their home, and 3) the prescribing clinician was not available to deliver and fit the wheelchair at the veteran's home.

Final Equipment Provision to Veteran: GR and spouse were seen for wheelchair fitting and education by the ATS and ATP in their home. The chair was adjusted for optimal trunk, head, upper extremity and lower extremity support. Spouse was educated on use of features of the chair and associated education was provided. The prescribing clinician was in communication with the ATS, ATP and spouse for a report of the final outcome.

Education: Spouse was educated by the ATS and ATP for minor adjustments to the chair. She was taught how to safely manage the wheelchair in varied environments and to effectively use the tilt system to maintain GR's seated position and to prevent skin compromise. The process for repairs and replacement parts was reviewed.

Documentation: Clinician documentation included findings of the comprehension evaluation, including physical presentation and objective measurements of the client, equipment trialed, justification for selected features, education provided and the outcome of the final fitting. PSAS documentation included processing of the clinician's specific order, coordination with the manufacture for wheelchair order, payment and entry of the new wheelchair (including specifications and serial number) in the veteran's electronic equipment record.

APPROVED DISAPPROVED

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2/11/08
Date