# UPMC Presbyterian

Center for Assistive Technology

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June 20, 2009

To the Medical Insurance Company of Jane Doe:

We had the pleasure of seeing Jane Doe for a comprehensive Mobility Assistive Equipment (MAE) evaluation. She is a 66 year old female with history of multiple strokes and TIAs with left hemiparesis, severe Peripheral Vascular Disease, Peripheral Neuropathy, cardiac insufficiency, and arthritis in spine, hips and knees. She currently uses a wheeled walker or cane for mobility and reports that she falls about once per week of which some falls require emergency room care. Her Timed Up & Go Test took 90 seconds with a walker placing her at significant risk for further falls. She also has an old Group 2 power wheelchair with captain's style seating that used to belong to her neighbor. The chair appears to be about 7 years old and in poor repair however has helped with mobility related ADLs when operational.

Our interdisciplinary team assessment of Jane's seating and mobility needs determined that the Pride J600 Group 2 power wheelchair with a power seat elevator is the most reasonable and cost effective alternative in meeting her needs. This equipment was chosen over other alternatives because it meets her mobility needs and will maneuver in her home to perform mobility related activities of daily living in a more independent, safe, and efficient manner than her current means of mobility. This equipment is needed for the following reasons:

- She cannot ambulate even with the use of an assistive device (including cane or walker) due to poor balance and repeated falls.
- She does not have sufficient upper extremity function to self-propel an optimally configured manual wheelchair due to hemiplegia, arthritis, and cardiac insufficiency.
- She is not a candidate for a scooter as she would not be able to maneuver it in her home per a home assessment by the supplier. It would also be difficult for her to operate the tiller controller due to upper extremity weakness.

- The use of a powered mobility device will significantly improve her ability to participate in mobility related activities of daily living and she has not expressed an unwillingness to use one.
- She is not a candidate for a Group 1 power wheelchair as she will use the device continuously throughout the day as well as on surfaces that a Group 1 power wheelchair is not designed for. She also requires a seat elevator which is not available on a Group 1 power wheelchair.
- A group 2 single power option power option power wheelchair is therefore the most cost-effect option.
- A seat elevator is needed as it will allow her to transfer more independently, safely, and efficiently by being able to raise the seat to stand as she has difficulty pushing up from a low seat to floor height. Likewise, it will also allow her to reach and carry out tasks at different surface heights given she has difficulty standing to counter height activities and she has upper extremity weakness.
- Her need for a seat elevator is also consistent with Rehabilitation Engineering & Assistive Technology Society of North America's (RESNA) Position Paper on Seat Elevating Devices.

Please refer to the attached chart notes including physician and therapy assessments for details as needed. Also attached is a copy of the detailed product description from Johnny Doright, ATP of ACME Seating & Mobility and prescription (seven element physician order) for this device.

Without this device Jane will have no safe, effective, or independent means of mobility or function either within her home or in the community. She would therefore be at risk for decreased ability to participate in any meaningful mobility related activities of daily living such as getting to the kitchen for meal preparation, dinning room for eating, or bathroom for toileting. Also without the use of this device Jane will be at significant risk for falls resulting in costly medical interventions. There are no other treatment alternatives for addressing these seating and mobility needs that we are aware of.

Please give careful consideration in reviewing these recommendations and do not hesitate to contact us should you need clarification of her needs or have any further questions.

Sincerely,

Brad Dicianno, MD Physiatrist & CAT Medical Director Department of Physical Medicine & Rehabilitation

Mark R. Schmeler, Ph.D., OTR/L, ATP

Occupational Therapist / Assistive Technology Practitioner Instructor, Dept. of Rehabilitation Sciences & Technology

Cc: Joe Doc, MD {referring physician} Jane J Doe Johnny Doright, ATP - Supplier

## UPMC Health System CENTER FOR ASSISTIVE TECHNOLOGY CLIENT EVALUATION & IN-TAKE FORM

DATE OF EVALUATION: May 1, 2009 Physician Face to Face Evaluation Date: May 1, 2009 Home Evaluation Date: May 14, 2009 Specifications Received from Supplier: May 31, 2009 Report Completed: June 15, 2009 Report Signed by Physician: June 20, 2009

#### 1. PRE-ASSESSMENT SCREENING:

NAME: Jane Doe **ADDRESS:** 566 Doe Street Pittsburgh, PA 15299 TELEPHONE NUMBER: 412-555-5555 (home) **DATE OF BIRTH:** 3/7/1943 AGE: 66 year old **OCCUPATION:** Retired **PRIMARY DIAGNOSIS:** PVD with history of CVAs & TIAs and Neuropathy SECONDARY DIAGNOSIS: Carpal tunnel syndrome on left, Left rotator cuff injury, arthritis in bilateral hips & knees with left more than right. Cervical & Lumbar spondilytis. She had gastro bypass & surgery and breast reduction in the past. **INSURANCE #1:** Medicare **REFERRAL SOURCE: PM&R** PRIMARY CARE PHYSICIAN & ADDRESS: DOC, MD, JOE A JR **REASON FOR REFERRAL:** New Mobility Assistive Equipment (MAE) **TYPE OF CURRENT MAE:** Wheeled walker and/or straight cane. HOURS PER DAY IN MAE: N/A AGE OF MAE: N/A **PROBLEMS WITH CURRENT MAE:** Mobility non-functional with frequent falls. HEIGHT: 5' 2"

WEIGHT: 210 lbs.

**PREFERRED SUPPLIER:** Johnny Doright, ATP of ACME Seating & Mobility

**TRANSPORTATION RESOURCES:** community has wheelchair accessible van service.

**EDUCATION/EMPLOYMENT:** retired however raising 2 teenaged grandchildren

**LIVING SITUATION:** Lives with her adult son and 2 grandsons aged 13 and 19 in a 2 story house which she reports is wheelchair accessible on the first floor.

## 2. THERAPY ASSESSMENT:

**ADL STATUS:** Jane reports that she is independent with light activities of daily living and has an attendant to assist with heavier activities as follows; **Bath Safety Issues:** Needs moderate assistance of her attendant especially for transfers into the tub. She uses grab bars but has fallen during bathing. **Hygiene:** Independent from seated position

Dressing: Independent sitting to edge of bed

**Self-Feeding:** Independent from seated position.

**Instrumental ADL Status:** Jane reports she needs assistance due to limited mobility.

**Meal Preparation:** Assist due to limited ability to stand and reach in the kitchen.

Housecleaning: Performed by personal care attendant.

Laundry: Performed by personal care attendant.

**TRANSFER STATUS:** Stand and pivot however observed difficulty with sit to stand.

**WEIGHT SHIFT:** Able to perform functional weight shifts and has sensation in buttocks with no history of skin breakdown.

**Functional Mobility**: She ambulates with the assistance of a cane and/or wheeled walker. She has a history of multiple falls (once per week) requiring ER care.

She has poor sensation in her feet which affects her balance. She has pain in both hips & knee, and weakness in her left lower extremity due to CVAs. Her Timed Up & Go Test took her 90 seconds to to stand, walk 3 meters, turn around, walk 3 meters, and sit using a walker. This laces her in the non-functional mobility category with a high risk for falls.

**COMMUNITY MOBILITY:** She remains home-bound for the most-part. Uses scooters when available at large-box stores.

**COGNITION:** Intact

**LEISURE INTERESTS:** Limited to watching TV. Wants to be more involved in grandsons' activities.

**HOME ACCESSIBILITY:** Reports first floor set-up. Refer to supplier home assessment below.

#### Functioning Everyday with a Wheelchair (FEW) TOOL

**DIRECTIONS TO CLIENT:** Please tell me your level of agreement (completely agree, mostly agree, slightly agree, etc.) that best matches your

ability to function with your current Mobility Assistive Equipment. All examples may not apply to you, and there may be tasks you perform that are not listed. (Go to www.few.pitt.edu for additional instructions if necessary as this is a self-rapport questionnaire)

6= completely agree disagree		3= slightly
5= mostly agree 4= slightly agree		2= mostly disagree 1= completely disagree
4 – Singlitty agree	0= does not apply	I = completely disagree

1. The <i>stability, durability, and dependability</i> features of my wheelchair/scooter contribute to my ability to carry out my daily routines as independently, safely, and efficiently as possible Comments: <i>Current loaner power wheelchair in constant</i>	2
<i>disrepair.</i> 2. The size, fit, postural support and functional features of my wheelchair/scooter match my <i>comfort needs</i> Comments: <i>Hurts when I fall and uncomfortable going out in</i> <i>public. Loaner wheelchair cushion hard with coils popping</i>	2
<ul> <li>through so use couch cushion.</li> <li>3. The size, fit, postural support and functional features of my wheelchair/scooter match my <i>health needs</i></li> <li>Comments: <i>Falls are not good for my health.</i></li> </ul>	1
<ul> <li>4. The size, fit, postural support and functional features of my wheelchair/scooter allow me to <i>operate</i> it as independently, safely, and efficiently as possible</li> <li>Comments: <i>Walker and cane difficult to use. Power wheelchair</i></li> </ul>	2
<i>unreliable.</i> 5. The size, fit, postural support and functional features of my wheelchair/scooter allow me to <i>reach</i> and carry out tasks at different surface heights as independently, safely, and efficiently as possible	2
Comments: Difficulty standing and reaching due to weakness	
<ul> <li>and shoulder pain.</li> <li>6. The size, fit, postural support and functional features of my wheelchair/scooter allow me to <i>transfer</i> from one surface to another as independently, safely, and efficiently as possible Comment: <i>Hard to stand from seated position.</i></li> </ul>	2
7. The size, fit, postural support and functional features of my wheelchair/scooter allow me to <i>carry out personal care tasks</i> as independently, safely, and efficiently as possible Comments: <i>Cannot carry objects and walk at the same time.</i>	2
8. The size, fit, postural support and functional features of my wheelchair/scooter allow me to <b>get around indoors</b> as independently, safely, and efficiently as possible	2

Comments: Hard to walk even indoors and fall.

9. The size, fit, postural support and functional features of my wheelchair/scooter allow me to **get around outdoors** as independently, safely, and efficiently as possible Comments: **Avoid outdoors as falls are constant.** 

10. The size, fit, postural support and functional features of my wheelchair/scooter allow me to **use personal or public transportation** as independently, safely, and efficiently as possible Comments: **My son can put cane or walker in the car and I can use the accessible van service in my community for the power chair.** 

#### 3. PHYSICAL MOTOR ASSESSMENT:

#### UPPER EXTREMITY FUNCTION: Muscle strength;

Left hand 4-/5, left biceps 4-/5, left triceps 4-/5, Deltoids 3/5. Right hand 4+/5, right biceps 4+/5, right triceps 4+/5, deltoids 2/5.

Pain in bilateral shoulder with flexion. Decreased sensation bilateral in hands due to carpal tunnel syndrome.

**LOWER EXTREMITY FUNCTION:** Muscle strength; Left quadriceps 4-/5, left hamstring 4-/5, left dorsiflexor 4-/5, left plantar flexor 4-/5, Right quadriceps 4+/5, left hamstring 4+/5, left dorsiflexor 4+/5, left plantar flexor 4+/5.Pain in both hip & knee, more in left side. Less sensation in both feet, edema in both feet

**POSTURE (SITTING & SUPINE):** Symmetrical sitting with no skin breakdown

#### 4. GOALS FOR A NEW SEATING & MOBILITY DEVICE:

- 1. Independent, safe and functional mobility within her home
- 2. Decrease risk of falling

3. Increase mobility related functional activities at home and in the community for IADLs.

4. Allow for increased participation in family activities.

#### 5. PHYSICIAN ASSESSMENT:

Jane J Doe is a(n) 66 year old woman with history of strokes and left hemiparesis, severe PVD, and TIAs who presents with a chief complaint of a need for a mobility device evaluation. She uses a walker and cane. But has a history of falls and has been going to ER constantly for this.

#### PAST MEDICAL/SURGICAL HISTORY:

Gastric bypass

5

peripheral neuropathy

OA in left knee and hip

CholecystecJoenyy

Hernia repair

L rotator cuff tear

Breast reduction

## FUNCTIONAL HISTORY:

Mobility: ambulation is not functional because of falls, poor sensation, poor balance, weakness and pain.

Self Care: The client needs assistance with the following ADL's that could be performed at a more independent level if mobility status were improved: grooming, toileting, dressing, bathing and self-feeding.

## MEDICATIONS:

Omeprazole

Singulair

Flovent

Synthroid

Lipitor

Cymbalta

Protonix

Zofran

Calcium

Fosamax

Dyazide

Vicodin

Xanax

Nitroquick

Neurontin

Temazepam

plavix

#### SOCIAL HISTORY:

Home: Patient lives with two grandsons in a two story house.

#### **REVIEW OF SYSTEMS:**

Denies: chest pain and shortness of breath Endorses: numbness and tingling in legs Pain: moderate in the knee, hip and shoulder joints Skin Issues: no breakdown All other systems are negative.

## **PHYSICAL EXAMINATION:**

General: alert

Heart: Regular S1, S2 and No murmurs or gallops

Lungs: clear to auscultation

Abdomen: Soft, non-tender without organomegaly and bowel sounds are active

Musculoskeletal: both shoulders have limited abduction and external rotation, left worse than right

Strength:

	Right	Left
Biceps (C5)	4+/5	4-/5
Wrist Extension (C6)	4+/5	4-/5
Triceps (C7)	4+/5	4-/5
Finger Flexors (C8)	4+/5	4-/5
Intinsics (T1)	4+/5	4-/5
Hip Flexors (L2)	4+/5	4-/5
Quads (L3)	4+/5	4-/5
Ankle DF (L4)	4+/5	4-/5
Hip Abductors (L5)	4+/5	4-/5

Other Muscle Groups: Deltoids R 3/5 L 2/5

Sensation: Light Touch diminished in a stocking distribution bilaterally

Reflexes: brisk in the hemiplegic arm and leg

Tone: normal throughout

Gait: antalgic on R with cane, slow speed, nonfunctional

Other Neuro: alert & oriented x 3

Skin and Extremities: no breakdown

## ASSESSMENT:

This is a 66 year old who is in need of a new power wheelchair. The client cannot functionally ambulate with conventional assistive devices and cannot propel a chair due to hemiparesis. She also will not be able to fit a scooter in the home. These reasons serve as medical justification for this device.

## PLAN:

I will work along with an OT and/or PT to complete a functional mobility assessment. Specifications will be determined based on this assessment. A home assessment will then be performed by the rehabilitation technology supplier if necessary.

Length of need is likely lifetime/99 months due to the ongoing/lifelong nature of the diagnoses.

## Brad Dicianno, MD

### Physical Medicine and Rehabilitation

## 6. EVALUATION PROCEDURES:

#### CLINICAL TRIALS/SIMULATION:

**Devices Tried:** Jane was provided with an opportunity to try a Pride J600 Group 2 power wheelchair with a seat elevator. She was able to drive the system in a safe and effective manner within the clinic, corridors as well as maneuver in tight spaces such as the bathroom and elevator.

**Client Impressions:** Jane reported that she was satisfied with the performance of the J600 power wheelchair and wishes to pursue it as a reasonable alternative for safe and effective mobility within the home and community.

**Home Assessment:** A visit to the home was conducted by Johnny Doright, ATP of ACME Seating & Mobility on May 14, 2009. Reports from the visit indicate that the J600 is compatible and will fit within the environment. She resides in a 2-story home with an open first floor set-up. There is on step to enter that was modified with a ramp which the J600 was able to negotiate. She was able to maneuver the J600 in the kitchen, living room, dining area, and pantry. She is able to pull up to the powdwe room and stand pivot transfer to the toilet supporting herself on the vanity.

#### 7. RECOMMENDATIONS:

**Mobility Assistive Equipment:** J600 Group 2 Power Wheelchair with power seat elevator

#### Supplier:

Johnny Doright, ATP, CRTS of ACME Seating and Mobility Length of Need: 99 months/Lifetime

INTERVENTION & SPECIFICATION	JUSTIFICATION
seat and back support	Standard option to provide appropriate base support and positioning.

2.	Seat Frame - Power seat elevator	Necessary to allow Jane to be able to transfer more safely and independently. Also allow her to reach and carry out tasks at different surface heights given she has upper extremity weakness and difficulty standing or reaching from a low seated position.
2.	Lap Belt- Auto-style push- button seat belt	Provide safety and stability when operating wheelchair.
2.	<b>Leg /Foot Support-</b> Standard flip-up foot platform.	Provide appropriate foot support
2.	<b>Arm Support-</b> Standard Full- length height adjustable flip-up padded armrests.	Provide appropriate arm support and additional trunk stability through weight bearing in the upper extremities. Provide surface to push from and support for stand pivot transfers.
2.	<b>Tires /Casters-</b> standard tires and casters with flat free inserts	Standard options. Flat free inserts are necessary as Jane does not have the physical capability or resources to repair a flat tire and could become stranded.
2.	<b>Tie Downs-</b> WC-19 approved anchor points.	Provide safety and securement of the device when being transported in a vehicle.
2.	<b>Controller-</b> programmable proportional joystick mounted on the right with retractable mounting hardware	Necessary to operate device. Programmable to configure the driving parameters specific to Jane's needs due to disability
2.	<b>Batteries-</b> Group 22NF gel cell batteries and charger	Necessary to power device.

**IMPLEMENTATION PLAN:** The specifications of this prescription will be submitted to Jane's primary care physician and insurance carrier for authorization. Upon approval the specifications will be provided by Johnny Doright, ATP - Supplier and delivered to the Center for Assistive Technology for fitting and delivery. Upon delivery, she will be trained in the use of the mobility device and will demonstrate safe and effective use. In addition, she will be given information about its maintenance. Follow-up appointments will

be scheduled as needed to modify the equipment as well as to verify that it continues to meet her needs.

Brad Dicianno, MD Physiatrist & CAT Medical Director Department of Physical Medicine & Rehabilitation

Mark R. Schmeler, Ph.D., OTR/L, ATP Occupational Therapist / Assistive Technology Practitioner Instructor, Dept. of Rehabilitation Sciences & Technology

Cc: CAT Medical Records Joe A Doc, MD Jr. - Primary Care Physician Jane Doe - Client Johnny Doright, ATP - Supplier