WHEELCHAIRS AND SEATING

INTRODUCTION

As of 2020, the most recent data available from the National Spinal Cord Injury Statistical Center (NSCISC) reports that there were 17,810 new cases of Spinal Cord Injury (SCI) within the United States in the previous year – which equals about 54 cases per million. The estimated number of people with SCI living in the United States is ~294,000^{1,2,3}.

After the onset of a SCI, the initial acute care stay is approximately eleven days. After an acute care stay, clients with significantly impaired mobility often transfer to an inpatient rehabilitation facility (IRF) for acute inpatient rehabilitation (AIR) where the same individuals have an average length of stay of approximately thirty-one days3. It is common during AIR that a client is evaluated for a wheelchair to use after discharge. Early mobility is critical for clients with SCI. A majority of clients with a SCI experience a change in functional status as a result of their injury and transition to using a wheelchair for mobilityrelated activities of daily living (MRADL). Having an appropriate wheelchair is critical to assist with early mobilization^{4,5}.

The process of acquiring a wheelchair is complex and requires a team effort. Service delivery models have been documented in the literature and involve the client, provider and a number of system level factors.⁶ Upon admission to AIR, the medical team recognizes the need for a wheelchair and the physician enters a prescription for wheelchair evaluation. Then, the client is scheduled for an appointment with two required individuals, a physical or occupational therapist and an Assistive Technology Professional (ATP) from the company that will be providing the wheelchair. An ATP is someone who has advanced education in selection, delivery and training for manual and power wheelchairs, who is employed by a wheelchair supplier. The ATP has passed a national certification exam to obtain this designation. The certification that they hold is awarded by the Rehabilitation Engineering and Assistive Technology Society of North America (RESNA)⁷. The supplier involved with the evaluation may be determined by the insurance

company, a third-party payer, availability of the supplier, convenience, and/or client/family request. It is important to mention, that if the client is going to discharge to another facility prior to discharge, such as a Skilled Nursing Facility (SNF), the wheelchair order cannot be completed until they discharge from the facility. If the client wants to proceed with an evaluation at the SNF, they can feel free to do that. However, if they wish to complete the evaluation with the original clinical team, then they can contact the supplier, arrange for a temporary (loaner) wheelchair to meet their needs until an evaluation with the therapist and ATP can be completed and the new (definitive) wheelchair.

Wheelchair Evaluation Process - The therapist and ATP work with the client/family/caregivers to collect information about the client's functional level, home/vehicle/work/school accessibility and the client's goals for mobility. At this appointment, the therapist and ATP will facilitate a discussion about the various types of technology that are appropriate, safe and available to the client to help meet their goals. In order to assist with determining whether a specific manual or power wheelchair is recommended for a client, there are multiple clinical factors, including client function, body dimensions, cognition, safety awareness and prognosis, which are weighed by the team involved in the recommendation⁸. Wheelchair trials may take place to allow the client to experience the various features of different make and models of wheelchairs. The chair that is recommended and ordered is, as described earlier, the definitive wheelchair. Once recommendations are finalized, the therapist writes a letter of medical necessity, which is signed by the physician. The physician-signed letter of medical necessity and order forms, along with any additional signed forms are sent to insurance for approval. It should be stated that different payer

sources have different requirements for determining medical necessity of recommended equipment, however, many sources use Medicare Guidelines to make the determination.⁹

While the client is waiting for insurance approval, they will likely use a loaner wheelchair that is provided to the client by the supplier. A loaner wheelchair is a chair for temporary use by the client, which is the closest match to the size and type of definitive wheelchair that has been ordered for the client. The client uses this wheelchair while they are waiting for the insurance to approve, the manufacturer to ship, and the supplier to assemble their definitive wheelchair. If there is an insurance denial of parts or the entire chair, a peerto-peer physician call can be set up, an appeal letter can be drafted by the therapist for the insurance company to consider, or the client can decide to pay out of pocket. Once the chair is delivered and fitted, the client can take their chair home, and the process of wheelchair acquisition is complete.

Once the wheelchair is ready for delivery, a fitting appointment is scheduled in the seating clinic. With a client that is seen in the outpatient setting, the process is almost identical, however, the client is coming from home, instead of AIR, and the client may have more of an idea of their preferences/setup with their future chair, due to previous use or exposure. They still need to have an appointment with the ordering physician with a resultant progress note, explaining the need for a wheelchair and a prescription for a manual or power wheelchair.

Delivery of the Wheelchair – During the fitting appointment, when the wheelchair is delivered, a review of the original order is done, components of equipment are fitted and adjusted, and potentially programming of the wheelchair is completed by the therapist and ATP with the client. After this appointment is completed, the client may take their chair with them. For patients who have a power or manual wheelchair recommended, 62% report receiving the wheelchair by discharge from AIR and 98% report receiving it at 6 months post discharge¹⁰.

Follow-up Needs – Any repairs should be referred to the supplier, and any medical/functional/physical changes may warrant a re-evaluation of needs with the therapist and ATP present. If the client's power chair needs programming – it may warrant a clinic visit, but could also be done via a service visit by the supplier in the home.

MANUAL WHEELCHAIRS

A manual wheelchair may be recommended for a client that has mobility needs that cannot be met within the home by an assistive device alone, and is required to perform Mobility-Related Activities of Daily Living (MRADLs).

Manual wheelchairs are coded (K0001-7) by dimensions, weight, seat-to-floor height, types of back/ seat options, weight capacity and chair weight.

While a therapist/ATP can recommend any of these types of chairs, we will focus on the K0004-7 grouping; these wheelchairs are more frequently recommended in the clinic setting. Justifications listed may vary by a client's individual insurance plan coverage.

K0004 – High-Strength Lightweight Manual Wheelchair

For a client that requires a manual wheelchair that is lighter than a K0001-3, may require a semiadjustable axle, may require an angle adjustable back rest, may require a unique seat to floor for sit-stand transition for foot propulsion or hemi-propulsion

Required for Justification:

- Client's mobility is limited and requires a wheelchair to perform one or more Mobility-Related Activities of Daily Living (MRADLs) – toileting, feeding, dressing, grooming, bathing in typical locations in home, in a timely manner, without potential for harm
- Mobility needs cannot be met by a cane or walker and K0001-3 manual wheelchair
- Client will require the wheelchair on a regular basis within the home
- Client is capable (physically, safety awareness, cognition) of safely propelling chair, or has assistance available to help aid propulsion
- Client has not expressed an unwillingness to use the wheelchair provided, in the home.
- Home is determined accessible to recommended wheelchair

Tilt-in-Space Manual Wheelchair

- Coded similarly to a K0004 Manual Wheelchair
- Has same requirements as a K0004, however, have to justify need for tilt:

Chair Type	Weight Capacity	Seat Width	Seat Depth	Seat to Floor Height	Specific Cushion/ Back Rest	Chair Weight
K0001 – Standard	250lbs	16″ or 18″	16″	19.5″	NO	>36lbs
K0002 – Standard Hemi	250lbs	16″, 18″ or 20″	16″ or 18″	17.5″	NO	>36lbs
K0003 – Lightweight	250lbs	16″, 18″ or 20″	16″ or 18″	17.5″ or 19.5″	NO	<36lbs
K0004 – High-Strength Lightweight	250lbs	16″, 18″ or 20″	16″, 18″ or 20″	15.5", 17.5", 19.5", (13.5", 14.5", 16.5" Special Order)	YES	<34lbs
K0005 – Ultra Lightweight	250lbs	Custom	Custom	Custom	YES	<30lbs
K0006 – Heavy Duty	250-300lbs	20″, 22″ or 24″	18″	17.5", 19.5"	NO	N/A
K0007 – Extra Heavy Duty	300lbs +	26", 28", 30" or Special Order	20" or Special Order	19.5″	NO	N/A

Breakdown of Manual Wheelchairs Categories and Corresponding Specifications

May require tilt for dependent pressure reliefs

And/or requires tilt for repositioning and/or transfers

And/or requires tilt for edema/blood pressure management

And/or requires for rest breaks

K0005 – Ultra-lightweight Manual Wheelchair

Lightest and most customizable manual wheelchair – can be folding or rigid frame, but what makes it different from K0001-4 is its weight and it's **fully adjustable axle** – which is important for safe and efficient manual wheelchair propulsion¹¹

Required for Justification:

• Client meets all requirements for a K0004, except they also require an even lighter wheelchair and fully adjustable axle

Therefore, the client must be capable of propelling self, and is not dependent on others for propulsion

• Client requires fully adjustable axle for:

Limiting/preventing upper extremity pain

Improving ability to reach wheel for efficient selfpropulsion

Creating smaller turning radius for improved accessibility

Performing advanced wheelchair skills – ex. Bumping curbs, wheelies and navigating cracks/ gaps in sidewalks

Managing stability of the chair due to unique weight distribution needs – ex. Lower extremity amputation



K0004 Manual Wheelchair Tilt in Space Manual



K0005 Folding



K0005 Rigid



Bariatric Manual Wheelchair





Pediatric Rigid Manual

Pediatric Folding Manual

Pediatrics

Manual wheelchairs tend to be a Tilt-in-Space, or K0005, due to sizing/ weight of chair.

Justification is similar to previously stated requirements for Tilt-in-Space or K0005, however, school setting requirements should be included:

 Client needs a wheelchair to get from class to class, reduce fatigue during the school day, which would improve school performance, and/or is required for school trips and transportation.

It is mandated by insurance companies to make recommendations that demonstrate the potential for frame/chair growth. Without demonstrating the potential for frame/chair growth, it is unlikely that funding will be approved.

School settings typically require a headrest, seat belt, transit tie downs and straps to secure feet for safe school transportation

Bariatric – K0006-7

Justification requirements are similar to K0004 manual wheelchair, however the client must weigh between 250-300lbs for a K0006 and >300lbs for a K0007

POWER ASSIST/POWER ADD-ON DEVICES FOR MANUAL WHEELCHAIRS

Requires justification in addition to justification for a manual wheelchair for why client cannot maintain ability to safely and independently perform MRADLs in home without power assist or power add-on device

Need to check compatibility of manual wheelchair frame with power assist or add-on device

There are many different devices that can be placed on a manual wheelchair to assist with mobility:

Power-Assist Push Rims – Push rims are connected to sensors, motors that propel wheels and batteries for additional power with propulsion for short bursts indoors/outdoors

Pros

Can easily be used in home setting, therefore easier to justify to insurance

Can be switched out for typical manual wheels at any time

Cons

Wheels contain batteries and motors – Can be very heavy to lift

Limited by battery life

Each individual wheel can be programmed to accommodate the client's weaknesses/strengths

Rear-Mounted Power Assist – Client controls the speed of a drive wheel that can connect to the frame underneath the seat to aid with propulsion – can be

used for acceleration and maintained speed indoors for longer, straight paths and outdoors in open spaces

Pros

Can easily be placed/removed on client's wheelchair by self or with assistance

Does not require constant pushing from client, however, client needs to still steer the chair

Cons

Sometimes challenging to control on declines or with larger bumps/cracks/gaps

Certain device controls are counter-intuitive when it comes to use

Joystick-Controlled Power Add-on – Client controls speed/direction of the drive wheels that are mounted on a manual wheelchair via a mounted joystick. Battery, drive wheels and joystick are a part of the system.

Pros

Allows client to propel a manual chair without the weight of a power wheelchair

Limits the need for an accessible vehicle for transportation, since chair can be collapsed and stored in a typical passenger vehicle

Cons

Takes some effort to transition chair back to a manual propulsion setup

Sometimes heavy, due to weight of battery and wheels – may be difficult to independently pickup/load



Power Assist Push Rim



Rear Mounted Power Assist



Joystick Controlled Power Add-On



Bariatric Folding Manual Chair

Pediatrics

- Power assist or power add-on can be recommended, but safety, behavior and cognition should be considered
- 22" push rims are available for push rim power assist

Bariatric

• Need to check for each client device for weight capacity – can vary ~300lbs – 375lbs

Outdoor/Unlevel Surface Mobility

- There are a number of power and non-power add-ons for manual wheelchairs that lift up the front end/casters of the manual wheelchair on a single wheel, which is secured to the frame.
- This type of add-on device allows for improved stability and reduced difficulty accessing areas on compliant or uneven surfaces.
- Insurance approval for this type of device is variable, however, a case can be made in a letter of medical necessity, if the device improves independence while around the home, possibly in a less densely populated area (rural, trails or outdoor camping, etc), or if it facilitates one's ability to perform required work activities.

POWER WHEELCHAIRS

Wheelchair Base

- Front wheel, mid-wheel or rear wheel drive Drive type is determined by position of drive wheel in relation to the front/rear of the wheelchair
- Front/Rear Wheel Drive Provides greater ability to power up/down variable terrain/hills/ramps, larger turning radius
- Mid-Wheel Drive Provides smaller turning radius than front/rear wheel drive systems, does not do as well with variable terrain/hills/ramps – may be more intuitive to control than a front/rear-wheel drive
- Client preference may play a large role in this decision

Controlling a Power Wheelchair

- Is variable, based on client functional status

 what device provides an independent, safe, comfortable and consistent method of controlling the chair.
- Joystick, mini-joystick, head array, sip/puff, chin stick, eye gaze
- Location of control system is dependent on consistent access

Seat Functions

- Tilt, recline, elevating leg rests, seat elevator or standing function
- Based on client needs for pressure relieving, positioning in chair, performance of ADLs or need to attain a functional position.
- Seat elevators and standing function are not frequently approved by insurance

Seating

• Varies, based on group of power wheelchair. Will get into detail when discussing power wheelchair groups, as well as seating and positioning section

Considerations for Justification of Power Wheelchair Mobility Device

• To justify a power wheelchair, one must determine that use of assistive devices and manual wheelchair mobility cannot meet the client's needs of safe, independent functional mobility

Examples – Client cannot propel manual wheelchair due to upper extremity weakness,

pain with propulsion, lack of endurance, lack of coordination to perform manual wheelchair mobility, etc

- Insurance requires that the client has a diagnosis that is neurological in nature
- Must determine ability to access/enter home and transportation with this equipment
- A headrest, seat belt, chest support, and approved lock or tie down system may be recommended for any client who will be transported in a wheelchair.
- Client must be able to maintain safe positioning in the selected device able be able to transfer, by self or with assistance, safely in/out of device
- Client must have sufficient strength/endurance/ coordination/safety awareness/cognition to be able to control safely

Special Populations for Power Wheelchair Mobility

Pediatric

- Self-mobility has been linked to a child's cognitive and psychosocial development^{12,13,14,15,16}, including spatial cognition, emotional skills, self-awareness, increased independence and the development of ability to deal with environmental stressors^{17,18,19,20}.
- There is no set age to begin power mobility training, however, recent research has shown that clinicians are willing to train power mobility with augmented controls, as early as 8mos old²¹.
- Typically, multiple therapy sessions are necessary in order to demonstrate consistency with control and safety

Bariatric

- Typical weight capacity for a power mobility device is ~300lbs
- Heavy-duty power mobility devices can have varying capacities of 450-550lbs

Groups of Power Wheelchairs

- There are multiple groups of power wheelchairs

 each has different capabilities/attributes that separate it from the others categorized between Group 1-5 Power wheelchairs.
- In order to justify a group of chair for your client, you must eliminate manual wheelchairs **and** the lower groups of power wheelchair and explain why it does not meet the client's needs

Group 1 –	Power Wheelchairs – F	ower Operated Vehicle	e (POV)/Scooters	
Seating	Wheelchair Features	Performance	Important Considerations	
Has basic seating with standardized sizes	No seat functions (ex. Tilt or recline)	Has limited speed and battery life	Higher tipping-over potential than other groups of power wheelchairs	
No skin protection or positioning cushions – no off the shelf/3rd party cushions and/or back rests	No programmability	Less maneuverable compared to other group of power wheelchairs	Choices of models of devices may be limited by type of insurance	
	Very limited or no suspension	Good for mobility on leve hard surfaces without elevation or surface varic	el, ıbility	
	Group 2 Po	ower Wheelchairs		
Seating	Wheelchair	Features P	rformance	
Has limited seat sizes and to come with captains seat	ends Can have tilt/r dependent on	recline added – Ir device st 1	Increased speed, power and stability compared to a group 1/POV/scooter	
However, with certain mode can order skin protection ar positioning secting if comp	els, May have very nd programmabi	/ basic Ir lity ir	Increased ability to drive up inclines and navigate minimal variability of surfaces	

positioning seating, it compatible		variability of surfaces	
	Suspension is more advanced than group 1 power wheelchair	Can handle obstacles ~1.5inches high and can handle inclines up to 6 deg	
		Minimum top speed 3mph	
		Longer battery life than a group 1/POV/scooter – minimum of 7 miles from one full charge	



Group 1 Power Wheelchair/Scooter



Group 2 Power Wheelchair



Group 3 Power Wheelchair

		Group 3	Power Wheelchai	irs		
Seating		Wheelchai	ir Features		Performance	
May use almost any type of seat cushion and/or back rest, including custom molded devices		Can have recline, tilt, elevating leg rests and seat elevator		leg /	Much more powerful and faster than group 1 and 2 chairs.	
		Significant amount of programmability available Can have advanced control interfaces – Head array (Figure 14), sip/puff, sip/puff and head array combo (Figure 15) chin drive, etc			Much longer battery life than group 1 and 2 chairs – minimum of 12 miles from one full charge Can handle obstacles up to 2inches high and inclines of up to 7.5deg	
				14), 2 y 7		
				9	Superior suspension compared to group 1 and 2 chairs	
				I	Minimum top speed of 4.5mph	
		Group 4	Power Wheelcha	ir		
Seating	Wheelchair	Features	Performance		Important Considerations	
Similar to group 3 wheelchairs	Has similar se potential (rec elevating leg seat elevator) 3 wheelchairs	eat function line, tilt, rests and of group	More powerful ar than group 1-3 cl	nd faster hairs	While the benefits of standing have been documented for physical, psychological and social well-being, the group 4 power wheelchair and standing features have proven difficult to acquire through insurance reimbursement	
	Advanced sea available incl partial and fu	at functions ude: Il standing	Improved stability balance for advar seat functions and improved suspens navigating more challenging terrai	r/ nced d sion for ins		
		Group 5	Power Wheelcha	ir		
Seating	Wheelchair	Features	Performance	lm	mportant Considerations	
Similar to group 3 wheelchairs	Has similar features/ capabilities of group 3 power wheelchairs			Gro des to e dur	Froup 5 power wheelchairs are esigned for clients that are expected perience significant growth uring the life of the chair	
				Clie	ent must weigh <125lbs	
				Wh floc eas dev	eelchair will have lower seat to or heights to allow for improved se of transferring in/out of the vice.	









SPECIALTY WHEELCHAIRS

- Due to the pressure from wheelchair users and with improvements in technology, we have seen a significant amount of progress with the creation of reliable and increasingly more affordable wheelchairs that can function in more demanding environments – such as off-road/backwoods or the beach.
- For beach environments, there are chairs with wide bases and large/wide tires that can keep the client from being bogged down and tipping on the compliant surface of sand.
- For off-road/backwoods environments, there are tracked vehicles (commonly called "tank chairs") that can provide a powered method of exploring the outdoors or for going hunting/fishing with a decreased potential for getting stuck or tipping.
- For various wheelchair sporting activities specialty chairs may be required.
- While these chairs are incredibly useful in restoring independence in more demanding environments, it is rare that insurance will see the medical need for these devices and may not authorize payment for the equipment.

SEATING AND POSITIONING

- Includes supports, strapping and cushioning to keep clients positioned properly, comfortable and functional.
- Includes: Backrest, seat cushion, head support, pelvic positioning belt, chest strap/harness, upper/lower extremity supports, hip guides, trunk laterals, foot/ankle holders/straps, trays, arm troughs, etc
- Supports client in safe, comfortable and functional position while in wheelchair
- Varies based on client needs ex. Fabric sling back, rigid back, custom seating, pressure relieving and/or positioning cushion

Materials

Foam – Durable, lightweight and stable for sitting. Can have multiple layers of foam with different viscoelastic qualities.

Urethane/Honeycomb – Durable, may or may not be heavier than foam, may or may not have better

Foam Cushion



Urethane Cushion



Hybrid Cushion



Fluid Cushion



Off-Loading Foam

pressure relieving than some foam cushions. Stable sitting surface.

Fluid (Gel) – Designed for improved pressure relief, may have some maintenance for fluid redistribution, heavier than foam or rubber/honeycomb, fluid packet may be ruptured/punctured with rough handling.

Air Cells – Designed for optimal pressure relief, has maintenance for air pressure in cushion, lighter than fluid (Gel), air cells can be torn or punctured, may be less stable for sitting

Hybrid – (Foam with Air or Fluid) – Designed for pressure relief of ischial tuberosities in the rear of cushion with fluid (gel) or air cells, and can have foam contour for improved positioning. Has similar durability concerns as fluid (gel) and air cells alone. More stable than air cells alone. Helps with stability of cushion for transfers.

Off-loading Foam – Designed for pressure relief by off-loading/floating the ischial tuberosities and supporting the weight of the person on non-boney structures, such as adipose tissue and muscle in the client's thighs and buttocks.

Alternating Air Pressure Cushion – has a motor and battery to move air around the cushion and provide the highest level of skin protection. Limited instances of reimbursement. Have to monitor battery levels to keep device from turning off, leaving the client without the same level of pressure relief

Goals for Seat Cushions

- General Use Built for client comfort, however, does not have significant additional contours to keep the client in one position
- Positioning Built for client comfort and proper positioning. Necessary if client tends to move into unsafe or uncomfortable/painful positions
- Skin Protection Built for client comfort, proper positioning and also limits cushion pressure against skin to limit skin breakdown
- Custom Needs Client's needs are not met by offthe-shelf cushions and requires one that supports the client in the safest, most functional and comfortable position

Important Considerations

• One must justify the type of cushion, based on the goals for the cushion – ex. Client is unsafe without proper positioning support and/or skin protection from the cushion

BACK RESTS

Materials

Foam – Lightweight, durable, easy to position, limited to no maintenance

Air Cells – Lightweight, requires adjustment/ maintenance of air pressure, good for backs with protruding bony prominences

Goals for Back Rest

General Purpose – Limited contour, limited adjustability, used for comfort with limited additional postural needs

Lateral (Contoured) Support – Moderate to significant contour, may have adjustment options based on model, designed for keeping client in upright/midline when lacking the ability to do so while in the wheelchair

Custom Needs – Client's body shape is unique and positioning needs are not met by off-the-shelf back rests and requires one that supports the client in the safest, most functional and comfortable position

HEAD RESTS

- Can vary based on client needs/requirements
- May be simple flat pad, contoured, or have a triplanar setup

Flat Pad – Minimal support and can be present, simply for supporting head in tilt/recline or for safety during transportation while in chair

Contoured – Moderate amount of support, used for supporting head in tilt/recline or safety during transportation while in chair, and may help with keeping client's head in upright and midline while in upright

Tri-Planar – Pad posterior and bilateral support for head. Significant amount of support, more aggressive than contoured head rest, significantly limits head movement.

Neck Support Devices – There can be instances where the client cannot keep head in upright/midline with previously mentioned head rests, alone, and padded neck support devices can be added in addition to a head rest

ELEVATING LEG RESTS/RESIDUAL LIMB SUPPORTS

- Elevating leg rests and residual limb supports can be used to position the lower extremities in a safe and supportive fashion.
- Various designs and support, based on client needs

TRUNK LATERALS/HIP GUIDES

- Trunk laterals can be placed on the sides of the client's wheelchair frame, to keep client in upright/ midline – can be flat or contoured, and of various sizes, based on client needs
- Hip guides are pads that are attached to the chair at the sides of the seat to keep the client's legs from sliding into hip abduction or to limit pelvic movement in sitting.

UPPER EXTREMITY SUPPORT

- Clients with limited ability to position their upper extremities in a safe, functional location may need additional support for their arms – ex. flaccid upper extremities from a spinal cord injury or brain injury
- A therapist may recommend either an arm trough, hemi-tray (Figure 31) or full tray, with padded/ unpadded surfaces or with or without specific shapes/contours/built-up supports.



Air Cell Integrated Back Rest



Lateral Contoured Support



Contoured Head Rest



Tri-Planar Headrest



Trunk Laterals



Hip Guides



Arm Trough



Full Tray



Hemi Tray





WHEELCHAIR ACCESSORIES

- The client may have individual needs and requirements that need to be addressed with additional medically-necessary items
- A non-exhaustive list of these items: Ventilator tray, brake extensions, hill holders, anti-tippers, IV pole, oxygen tank holder, under chair netting for carrying medical necessary equipment or supplies





Ventilator Tray

Anti-Tippers



Brake Extension



Oxygen Tank Holder

CONCLUSIONS

Acquiring a wheelchair is a complex process that involves a number of different individuals. Just because a wheelchair is delivered to a client, it does not mean an end to the work involved with keeping a client moving. Regular maintenance is required for any type of wheelchair. Basic maintenance can be performed by most clients and/or family/caregivers (ex. Replacement of flat tire tubes, removing hair from casters or keeping axles lubricated and rust-free). Suppliers may be able to provide repairs with no additional cost to the client. These repairs can include, but are not limited to: tire/ caster replacement, bearings or motors, caster forks, anti-tippers, batteries, joystick panels, worn cushions, backrests and head rests. If something changes with the client, such as function, body shape, height/weight or new onset of pain or wounds, a new evaluation is recommended prior to making any changes to the chair. While many clients have access to purchasing equipment online, it is still recommended that the client be re-assessed by a therapist and ATP before making purchases that would modify their wheelchair. As clients age with a disability, their needs may change, and previous equipment may no longer be meeting their needs, yet again a full evaluation is recommended to facilitate a safe selection of equipment to keep the client safe and independent. It is our hope that you have gained a better general understanding of wheelchairs, and the process for acquiring a wheelchair. This is not an exhaustive source of information when considering wheelchair recommendations. New equipment and processes are always evolving and require a sharp clinical mind to keep up-to-date with what will help us best serve our clients. Please consult your clinical team, ATP, and equipment supplier for recommendations based on one's individual needs as you age with use of your wheelchair.

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