TECHNOLOGIES IN SEATING AND WHEELED MOBILITY

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INTRODUCTION

Advances in seating and wheeled mobility technology should benefit the aging population, and facilitating more independence with mobility for daily activities, at home and in the community. Learn about the benefits and limitations of these technologies, common coverage criteria, and additional resources.

OBJECTIVES

1. Discuss benefits and limitations of new technologies in seating and wheeled mobility
2. Identify common coverage criteria for different technologies
3. Share resources for additional information

TECHNOLOGIES

Power Assist Wheels:
Power Assist Wheels are designed to help individuals who are having difficulty with everyday mobility in their manual wheelchair but aren’t ready to use a power wheelchair. Power assist is effectively a manual wheelchair accessory which includes motorized rear wheels and a battery-operated unit mounted to the back or underside of a manual wheelchair. The motorized rear wheels increase the force you apply to the hand rim by up to four times, increasing your range of mobility and reducing energy expenditure. Another benefit of power assist wheels is that the electronically synchronized rear wheel units continually communicate with each other and adjust their speeds to allow for smooth, straight propulsion. This will compensate for those who may have one arm stronger than another.

Benefits:
• Use of Power Assist Wheels can help the user to conserve energy and propel the wheelchair faster for longer distances with less physical effort
• Power Assist Wheels can reduce the risk of injury to the user’s arms because it requires less force to propel and reduces the number of pushing power needed to go the same distance in a manual wheelchair

Limitations:
• Power Assist Wheels are heavy, may add 20-50 pounds to the weight of the wheelchair, and may increase width
• Propulsion is more difficult when the system is turned off or if the battery is not charged

Connected Control Systems on Power Wheelchairs:
We live in a work where connection is everything. Remotely connecting users and service technicians through a single intuitive platform on your power wheelchair improves communication for diagnosing, programing and updating; and helps you be better prepared for the unexpected.

• Diagnostics from error codes and battery usage can be assessed remotely
• Can track function usage (such as lift in-spare)
• Bluetooth can connect with other technologies through the wheelchair

Independent Repositioning Mode:
• Using a sequence of tilt, elevating leg rests, and then recline is helpful to reposition and manage pressure injury risk. This feature can be programmed for a specific transfer, a comfortable, pressure-relieving position, or a functional position

Cushions:
• ROHO Smart Check - has sensor that can verify that pneumatic cushion inflation is correct
• Amitylar CG Air - durable, washable pneumatic cushion

Juditta Chair:
• An easily adjustable and comfortable manual chair that tilts and reclines

COMMON COVERAGE CRITERIA

• Medicare is focused on what is required inside the home
• Equipment must be needed for mobility-related ADLs (used in daily activities: dressing, eating, toilet activities, bathing...)
• Must rule out least expensive options (cane, walker, basic manual wheelchair, scooter, basic power wheelchair...)
• For power assist wheels, person must have used a manual wheelchair for a year and have an upper extremity over-use diagnosis

RESOURCES

Equipment:
Power Assist Wheels:
• Invacare: https://www.invacare.com/Power-Assist
• Permobil: https://www.permobil.com/en-us/power-products-brands
• Yamaha: https://www.yamahaortho.com/

Control systems: connecting end users to service:
• Invacare: https://www.youtube.com/watch?v=Q2y7WS6xWYU
• Permobil: https://www.permobil.com/en-us/products/power-wheelchairs/functions/permobil-connected

Independent Repositioning Mode:

Cushions:
• Amylar CG Air: https://www.amylar.com/cg-air-cushions/

Juditta Chair:
• https://redibility-usa.com/products/juditta-series.php

Coverage Resources:

Here is a link that is helpful in determining the appropriate cushion and finding out if the member qualifies: https://www.permobil.com/us/wp-content/uploads/2017/01/MedicareCodes_Booklet-113716.pdf

Here is a link that may be helpful when determining what is covered in a SNF: https://www.medicare.gov/contentdownload/11045-Medicare-Coverage-of-DME-PDF

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