DEPARTMENT OF HUMAN SERVICES

Health Services Advisory Council

January 10th, 2024

Agenda

1. Welcome and Housekeeping
   - Confirming November Minutes
   - Meeting format
     - Topic Introduction
     - Field expert presentations
     - Public comment
     - Council discussion + recommendations

2. JACO Robotic Arm
   - DHS Topic Introduction
     - Matt Vierzba + Rebecca Engberg
   - Stakeholder Presentation
     - Sue Redepenning
   - Place holder – presenter

3. Conclusion and Adjournment
   - Next meeting date
   - Next meeting tentative agenda
   - Adjournment

Housekeeping

- November Minutes Vote
- Meeting format for Robotic Arm Policy
  - Introduction
  - Field expert presentations
  - Public comment, additional information
  - Discussion and recommendations
  - Policy development
- Expiring terms
  - Several council members terms were for 1 year
  - Expiring in March
  - More details in February meeting to reapply

DEPARTMENT OF HUMAN SERVICES

JACO Robotic Arm

Matt Vierzba, MPPA + Rebecca Engberg, DPT I Benefit Policy Specialists

1/11/2024

JACO Robotic Arm Video

Watch Laura in Action With Her Kinova® Jaco® Assistive Robotic Arm (youtube.com)

Kinova Robotics

- JACO Robotic Arm is manufactured by Kinova Robotics
  - Kinova is a Canadian assistive technology company based in Boisbriand, Quebec
  - Company was founded in 2006 by Charles Deguire
- JACO is a landmark creation in assistive technology
  - Pinnacle accomplishment of Kinova
  - Robotic arm was developed in 2008; product is still relatively unknown
  - Kinova has introduced other assistive technologies
- Device pays homage to Jacques Forest, uncle of Kinova's CEO who suffered from muscular dystrophy

Specifications

- JACO is designed for those with limited mobility in arms and upper extremities
- Device is user friendly and versatile
  - Robotic arm can be appended to the side of any power wheelchair
  - Most users can master controls in a relatively short period of time
  - Carbon fiber and aluminum make means it is both lightweight and strong
  - Device weighs 11.5 pounds, can lift up to 3.5 pounds, and reaches up to 35 inches
- Patient controls JACO via a joystick controller
  - There are 16 total possible movements
  - Device composed of 6 interlinked segments, including a 3-fingered hand


KINOVA

Patient Diagnoses

- Kinova has identified several potential diagnoses for JACO
  - Spinal cord injury, cerebral palsy, quadriplegia, spinal muscular atrophy, amputation, muscular dystrophy, amyotrophic lateral sclerosis (ALS), and stroke
- Advocates contend it permits greater independence and autonomy, boosts mobility, and enhances quality of life
- Robotic arm can improve certain ADLs
  - Eating, drinking, leisure, medication management, safety, school, and work
- Some ADLs still require additional support

Research and Coverage

- Research on JACO has yielded mixed results
  - Studies utilizing descriptive statistical methods find high satisfaction and positive psychological impacts on users
  - Studies also show little impact on caregivers
  - More research is necessary to evaluate impacts on caregiver's burden, economic potential, and variability in tasks performed
- Many health insurers and public programs exclude JACO from coverage
  - Device is considered investigative by Aetna, Anthem, and Cigna
  - Medicare does not cover, as do most state Medicaid programs

Alternatives to JACO

- There are several less costly alternatives to JACO
  - Some conditions do not require a robotic arm to perform ADLs
- Kinova offers other assistive technology products
  - Obi is an assistive feeding device that acts as an arm
    - Arm sits on surface and picks up food for patient
  - Arm supports similarly enhance patient experiences
    - Devices equip patients with additional support by reinforcing extremities
- Alternative devices will not ameliorate the most severe conditions

Problems

- Difficult to review and stay consistent without a policy
  - Every case is different based on age, caregiver support, diagnosis, living arrangement, severity of condition, other factors
  - Some conditions are terminal while others improve over time
- Significant variances in pricing on JACO requests
- Kinova does not allow for rentals or trial periods
- Some patients and providers are unaware of JACO

Questions

1. How many hours would a member need to be without caregiver support to qualify for a JACO Robotic Arm?
2. Which patient conditions might benefit the most from this device?
3. When reviewing JACO requests, how long of a minimum economic use lifetime should be necessary?
4. Should the video trial for prior authorizations be required to document the ADLs the recipient will be completing using the device in their own living arrangement? Or is a trial at a facility, such as an outpatient therapy office sufficient?
    a. Member's own living arrangement
    b. Facility
5. How long of a trial period should recipients be required to log ADLs and monitor time used?
    a. Less than one week
    b. One week
    c. Two weeks
    d. More than two weeks
6. Should MHCP require a video trial of less costly alternatives such as mechanical arm support devices?
    a. Yes
    b. No

Jaco –Conditions most helpful

- Spinal Cord Injury-higher level affecting all extremities.
- Multiple Sclerosis
- Muscular Dystrophy
- ALS-Amyotrophic Lateral Sclerosis
- Cerebral Palsy that affects all extremities.
- Parkinson’s
- Any diagnosis that affects all limbs and or is degenerative

Caregiver support

- Set up of the device (many people will move it on/off their chair at times).
- Learning to trouble shoot the device.
- Tech support plan.
- Training.
- Benefit is: Once the person learns the device, and are set up it greatly increased independence throughout the day.

Utilization Process

- Assessment of need is completed first and comparison fully of all devices that might meet the person's needs.
- Once the Jaco device is selected, a full report with details of need/use and functional gain is written.
- A device trial is completed with video.
- A physician order obtained.
- All documents submitted.

Jaco Alternatives:

- There is not a device that is exactly like the Jaco Robotic arm. But there are things we rule out first.
- If the person needs help with only feeding we look at these options: Obi self feeder, tenodesis splint fabricated by orthotist, self feeding support arm on table or attached to wheelchair.
- But if a person needs help to fully get things off the floor, sign their name, feed themselves after set up, push elevator buttons, push automatic door openers, pick up small item on any surface there is not another option to fully do all of these tasks. Case examples.

Conclusion and Adjournment

- Next meeting date
  - February 14th, 2024, 5:30 – 7:30
- Next meeting tentative agenda
  - Requested additional information
  - Public comment
  - Council discussion
  - DHS staff topic selection process
- Adjournment

References

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Adjournment

Thank you