

ACADEMY OF SPINAL CORD INJURY PROFESSIONALS

Creating a Sustainable, Effective Assistive Technology and Adaptive Equipment Program for the Spinal Cord Injury Population in a Rehabilitation Setting

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Introduction: Process for Creating an Assistive Technology and Adaptive Equipment Program

- Following a spinal cord injury (SCI), one can be left with feelings of helplessness, isolation, and dependency. Assistive technology and adaptive equipment (AT/AE) can increase a person's ability to engage in meaningful occupations. This can improve quality of life and wellbeing. People can experience a sense of safety, normalcy, and freedom when utilizing AT/AE to compensate for a loss of function following SCI.^{1,2} This poster presentation will demonstrate how to create a sustainable, effective AT/AE program in a rehabilitation setting to promote the use of AT/AE amongst the SCI population.
- AT is "any item, piece of equipment, software program, or product system that is used to increase, maintain, or improve the functional capabilities of persons with disabilities."¹

1. Designate a Program Leader

- Clinical specialist
- Occupational Therapist
- Certified Assistive Technology Practitioner (ATP)
- Knowledgeable of latest advances in the field of AT/AE³
- Key strengths: organization, leadership, communication, creativity



2. Create an Initial List of Items Needed

Client factors to consider:

- Emotional state and readiness³
- Functional abilities:
 - Physical abilities based on neurological level of injury
 - Cognition
 - Vision
 - Hearing
- Caregiver role and support⁴
- Caregivers' needs⁴

AT/AE factors to consider:

- Aesthetics of AT/AE³
- Ease of use¹
- Amount of training required¹
- Accessibility from different positions¹
- Financing for patients to procure items⁵
- Item availability⁵
- Cost of upkeep¹

Consider primary occupations addressed in your setting: (self-care, home access, driving, leisure, work, school, etc.)

Utilize available resources:

- Complete AT/AE continuing education courses
- Attend AT/AE conferences
- Read evidence-based journals
- Find a mentor
- Interview past patients and peer mentors
- Reach out to other facilities
- Obtain ATP certification

3. Procure AT/AE

- Department funds
- Fundraisers Foundation donations
- Donated gently used equipment (assist me)
- Apply for grants (Christopher Reeves Quality of Life Grant)
- State/federally funded programs (NCATP, CAP/DA, CAP/C)
- Write letters of medical necessity
- Borrow/trial equipment from vendors



4. Develop process for AT/AE distribution

Loaner Process:

- Patient evaluation
- Sign AT/AE out from lab
- Perform weekly reassessment
- Track patient discharge dates
- Assign person responsible for pickup
- AT/AE returned and logged in
- Weekly AT/AE inventory

Reusable Dishware Process:

- Patient evaluation
- Therapy orders AE in EMR
- Dietary receives order
- Dietary responsible for placing AE on tray, retrieving AE, and sanitizing AE

Distribution Process:

- Patient evaluation
- ATP distributes AT/AE for discharge home

5. Program Sustainability

- Determine ongoing funding for AT/AE
- Identify reusable versus single use items
- Identify priorities versus wish list items
- Create par levels for stocked items
- Create spreadsheet for simple ordering



6. Program Evaluation

- Staff and patient homegrown satisfaction surveys
- Evaluate total cost of program
- Outcome measures:
 - Jebsen-Taylor-Hand-Function²
 - Toronto Rehabilitation Institute Hand Function Test²
 - Grasp and Release Test²
 - Action Research Arm Test²
 - Functional Independence Measure²
 - SCIM III²
 - SCI-FI SFs⁶
 - Matching Person & Technology assessment process

7. Additional Recommendations

- Teach patients self-advocacy
 - Teach AT/AE users to train others on setting up and troubleshooting their devices¹
- Educate patients on need for perseverance³
- Prescribers need to be transparent on difficulties clients might encounter³



References

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