V. DISSEMINATION AND UTILIZATION

Responsible Staff: Douglas Hobson, Elaine Trefler, Jean Webb, Ashli Molinero, Patricia Karg and Task Leaders

Goals

1. To disseminate the results of RERC activities
2. To serve as an information resource on wheelchair technology

Approach

Information on wheeled mobility technology was disseminated to consumers, manufacturers and professionals. The planned content and target groups for dissemination and utilization activities are summarized in the diagram below.

Outcomes Summary

The information dissemination and utilization activities continued throughout the five years of the RERC on Wheeled Mobility. These took the form of: peer reviewed journal publications (25); extended abstracts in conference proceeding papers (66); books/chapters (7); technical reports (6); presentations at local, national and international meetings (24); and formally organized instructional courses or workshops (7). A complete reference listing of the above dissemination activities follows. Utilization of many of these activities was facilitated by workshops, focus groups, conferences and direct communication with industry representatives.

In 1995, the RERC also launched its WWW pages as

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Figure 58 - Dissemination plan focusing on three primary groups
an extension of its dissemination activities. Research activities, status reports, publication listings, downloadable technical reports and standards documents, and contact information were all made available via the RERC’s site. Requests for information on varied aspects of wheelchair technology came to the RERC almost daily. Students, researchers, consumers and clinicians all contacted members of the RERC team for information. Electronic communications, such as faxes, emails and the RERC’s WWW site postings, all facilitated timely responses to the majority of these requests.

Dissemination Listings:

Publications/Workshops/Grants/Patents and Awards

Peer Reviewed


Angelo, JA, Buning, ME, Schmeler, MR and Doster, S. Identifying best practices in the occupational therapy assistive technology evaluation: An analysis of three focus groups. American Journal of Occupational Therapy Accepted and pending publication 1997


Brienza, DM, Cooper, RA, Brubaker, CE. Wheelchairs and seating. Current Opinion in Orthopaedics 1996:7 (vi)


Brienza, DM, Karg, PE and Brubaker, CE. Seat cushion design for elderly wheelchair users based on minimization of soft tissue deformation using stiffness and pressure measurements. IEEE Transactions on Rehabilitation Engineering 1996 4(4) pp 320-328


Cooper, R.A., A Perspective on the Ultralight Wheelchair Revolution, Technology and Disability, 1996.

Hobson, D.A. RESNA: Yesterday, Today and Tomorrow, Assistive Technology, August 1996

Jones, D., Cooper, R., Albright, S., DiGovine, M. Powered wheelchair driving performance using force and position sensing joysticks, IEEE, April 1998

Schmeler, MR. Strategies in documenting the need for assistive technology: An analysis of documentation procedures. American Occupational Therapy Assoc., Technology Special Interest Section Quarterly 7(13) pp. 1-4, 1997

Trefler, E. and Angelo, J. Comparison of Anterior Trunk Supports for Children with Cerebral Palsy, Assistive Technology, Vol 1, No 9, 1997


Extended Abstracts/Proceedings/Articles


Cooper RA, Cooper R, Selecting a Rural Outdoor Mobility Device, Proceedings 21st Annual RESNA Conference, Minneapolis, Minnesota, June 1998


Books/Chapters

Brienza, DM, Ostrander, LE. Mechanical loading and pressure ulcers. Surgical Management of cutaneous ulcers and pressure sores, eds. Lee and Herz, chapter 10, 1997


Presentations and Seminars


Cooper, RA, Approach to rehabilitation, Ankara Numune Hospital & University of Pittsburgh Medical Center 1st Joint Symposium, Ankara, Turkey, May 1997

Cooper, RA, Wheelchair Selection-Using Standards Information in the Process, RESNA ‘97, Pittsburgh, PA ‘97

Cooper, RA Design of Power Wheelchairs, Int. Conf on Wheelchairs and Seating, Dundee, Scotland, Sept 1997


Cooper, RA Secondary Disability and Wheelchair Use, International Conference on Wheelchairs and Seating, Dundee, Scotland, Sept 1997

Cooper, RA Sports fitness equipment for people with disabilities, Sports and Fitness for Individuals with Disabilities, Springfield College, Springfield, MA May 1997


Technical Reports


Standards Documents


Grants

Bertocci, G, Crash Performance Evaluation Injury Risk Assessment and Recommendations for Wheelchair Seating Systems Used in Motor Vehicles, Center for Disease Control and Prevention, $615, 550, 9/1/98-8/31/03

Bertocci, G, Development of a Gait Powered Battery Charged System, SBIR, 9/96-1/97, $100,000

Bertocci, G, Influence of Wheelchair Seating System Characteristics/Positioning on Wheelchair Occupant Injury Risk, $216,836, PVA, 1/1/99-12/31/01

Brienza, D, Scientific Visits To National and International Seating Labs, Barco Faculty Development Funds, School of Health and Rehabilitation Sciences, 1995-96, $5,000.


Brienza, D, An Innovative Wheelchair Cushion Contour Generator, Ben Franklin Technology Center of Western Pennsylvania, SW.S11514R-1, Sept. 1994 to August 1995. $34,797

Brienza, D, A Pilot Study for the Clinical Evaluation of Pressure Relieving Seat Cushions for Elderly Stroke Patients, Dept of Ed, $249,249, July 1997-June 1999

Brubaker, C and Brienza, D, Research Training in Rehabilitation Science with Special Emphasis on Disability Studies, Dept of Ed, $706,525, Sept 1997-August 2002


Cooper, R, Center for Injury Research Control, $265,000, January 1998-August 2003


Hobson, DA and Brubaker, C, Rehabilitation Engineering and Research Center on Technology to Improve Wheeled Mobility, National Institute on Disability and Rehabilitation Research, HE133005, $3,500,000, August 1993 to July 1998.

Hobson, DA, Development of a Docking System for Wheelchair Securement, SBIR, 11/29/95, NIH, $57,384, Oct 97-Sept 98


Trefler, E, Staff Development for Rehab Technology Supplier Education, Barco Faculty Development Funds, School of Health and Rehabilitation Sciences, 1995-96, $20,000.

Trefler, E, Rehabilitation Supplier Education, Frost Foundation, 1995-96, $20,000.

**Honors and Awards**

Bertocci, Gina - RESNA/Whitaker Scientific Paper Competition Award, June 1997

Brienza, David - RESNA Sore Butts Cushion Design Competition, First Place, June 1996

Brienza, David - The PinDot Award for outstanding paper published in *Assistive Technology*, 1995

Cooper, Rory – PVA John Farkas Leadership Award, ‘97

Cooper, Rory – Certificate of Recognition, Federal Employee Disability Program Committee, Federal Executive Board, Pittsburgh, PA, ‘97

Cooper, Rory – American Institute of Medical and Biological Engineering (AIMBE) Fellow ‘98

Hobson, Douglas - Everest & Jennings Distinguished Lecturer Award, RESNA, ‘96

Trefler, Elaine - Mundy Award, Canadian Adaptive Seating and Mobility Association, ‘95

Trefler, Elaine – Fellow, RESNA, ‘96

**Patents**


**Disclosures**

D.A. Hobson, High “g” wheelchair securement device, 1998.