

## XVIII. Miscellaneous

### [623] Development of a DHCP Database and Quality Assurance Information System for Audiology and Speech Pathology: A Pilot Study

---

Vernon D. Larson, PhD; Allen E. Boysen, PhD; James C. Malpass

VA Medical Center, Augusta, GA 30910; Audiology and Speech Pathology Service, VA Central Office, Washington, DC 20240

Sponsor: VA Rehabilitation Research and Development Service (Project #C979-PA)

**Purpose**—The purpose of this project is to assemble a databased and quality assurance information program on mainframe computers used in VA medical centers. Capitalizing on patient information usually entered into medical center computers, three additional and essential elements are required. These are: 1) the speech, hearing, or language problem presented by the patient; 2) the procedure applied in the assessment and treatment of the problem; and, 3) the assessment and/or treatment outcome.

**Progress/Methodology**—After soliciting end-user preference data and information from 10 VA medical centers, an alpha test version was constructed and developed. This version, written in MUMPS, is centered around problem codes (ICD-9) and procedural codes (CPT) and was released to four medical centers for testing. Based on user input, the design of the package was

enhanced and was made ready for beta testing. A reports package centering around patient visits, patient problems, and patient procedures has been implemented and has been found to complement a variety of recurring reporting requirements of Audiology and Speech Pathology Programs.

Ten medical centers have been selected to participate in a 60-day beta test. A review of the treatment-outcome literature in speech-language pathology has begun with the goal of making a judgment of the feasibility of uniform coding of treatment outcomes.

**Future Plans**—After the beta test has been completed, user information will be reevaluated and the package again modified. The electronic collation of data from the 10 beta sites will be a focus of the beta test. A review of the treatment-outcomes literature in audiology is planned.

### [624] National Invitational Conference on the Development of a Health Services Research Capacity in Physical Disability and Rehabilitation

---

Gerben DeJong; Andrew I. Batavia, JD, MS

National Rehabilitation Hospital Research Center, Washington, DC 20010

Sponsor: National Institute on Disability and Rehabilitation Research

**Purpose**—This conference will assemble the leading researchers, consumers, providers, payers, and policy-makers who address issues concerning health services research (HSR) as it relates to the needs of disabled persons and the concerns of medical rehabilitation providers. The conference will: 1) identify and prioritize the leading HSR issues; 2) determine the adequacy of the current HSR capacity in disability and rehabilitation; 3) identify innovative approaches to the development of an HSR capacity in disability and rehabilitation; 4) make

recommendations on organizational approaches to the development of an HSR capacity; and, 5) make recommendations on the essential components of an HSR agenda in disability and rehabilitation.

**Results**—It is hoped that the conference will have assisted several agencies and foundations in setting their respective health services research agendas in the areas of physical disability and medical rehabilitation. Conference proceedings are now available.

## [625] A Model for the Production of Low Demand Assistive Devices

William C. Mann, OTR, PhD; Joseph C. Mollendorf, PhD, MSME; Joseph Lane, MBA, MPA  
Center for Therapeutic Applications of Technology, University at Buffalo, Buffalo, NY 14214

Sponsor: *Office of Special Education Programs, U.S. Department of Education*

**Purpose**—The value of assistive technology devices for persons with disabilities is widely acknowledged. However, the potential value of a device to an individual is not sufficient reason for the device to be designed, produced, and made available in the marketplace. Further, the more specialized the assistive device, the less likely it will ever be mass produced. Increasing the incentives for producing an assistive device will increase the likelihood that the device will be created, supplied, and supported. Increasing the economic incentives is not feasible for low demand devices, due to a lack of available resources and the inefficiency of tracking service provision for low demand items. The purpose of the University at Buffalo Applied Study Project is to direct incentives within the not-for-profit sector—universities and service agencies—to develop assistive devices.

**Methodology**—The Applied Study Model uses three elements to increase the availability of assistive technology devices: 1) existing technical knowledge (university faculty and service agency personnel); 2) available labor (students, consumers and faculty) compensated through non-profit systems; and, 3) existing fabrication resources (university workshop space). Within the model, consumers of assistive devices identified and referred by

service agencies and ongoing projects at the University of Buffalo, work with students in occupational therapy, engineering, and architecture enrolled in credit-bearing courses, to design and fabricate assistive devices that meet the needs of consumers. University workshops are used to fabricate the devices. Devices that appear to meet a broader set of needs will be made available for production by private corporations. The model includes a plan to establish a not-for-profit enterprise affiliated with the university and the private corporate community to sustain the project.

Within the model, participating departments offer an applied course on assistive technology for undergraduate and graduate students. The course involves student projects which design and produce assistive technology devices, for specific persons in need of an assistive device. Faculty with clinical experience and technical skills cooperate in directing student projects. The occupational therapy students bring clinical experience on human factors, the architecture students bring an understanding of design and environments, while the engineering students bring experience in materials, design, and fabrication. Students also conduct thesis research on assistive devices.

## [626] Health Insurance Coverage of Disability Beneficiaries

Gerben DeJong; Andrew I. Batavia, JD, MS  
National Rehabilitation Hospital Research Center, Washington, DC 20010

Sponsor: *Social Security Administration, U.S. Department of Health and Human Services*

**Purpose**—This study examined the disincentives to work associated with concerns of Social Security disability income (SSDI) beneficiaries who would lose their Medicare benefits and might not be able to obtain comparable employment-based health insurance benefits if they obtain gainful employment.

The objectives of the study were to: 1) develop a theoretical framework for deriving a greater understanding of the relationship between health insurance coverage and employment for SSDI beneficiaries; 2) examine the relationship between health insurance coverage of SSDI

beneficiaries and their decisions and capacities to seek, obtain, and maintain employment; and, 3) examine the private health insurance coverage available to SSDI beneficiaries, including gaps in coverage resulting from insurance exclusions, “pre-existing condition” clauses, and policy “riders.”

**Results**—This 2-year study was completed September 30, 1990. Four existing data sets involving SSDI beneficiaries were analyzed: 1) the 1982 New Beneficiary Survey, conducted on behalf of the Social Security Administration;

2) the Survey of Income and Program Participation, conducted by the U.S. Census Bureau in stages since 1983; 3) the 1985 Louis Harris Survey of Disabled Americans, conducted for the International Center for the Disabled in cooperation with the National Council on the Handicapped; and, 4) the 1988 National Rehabilitation Hospital Survey of Persons With Severe Physical Disabilities.

During the first year, the project staff created SPSS work files with key variables to be examined using data tapes for each of the above sources of data; computed frequency distributions on all key variables; computed cross tabulations of outcomes by predictor variables; and performed factor analyses to identify data patterns that suggest groupings of variables to be further examined. In the second year, the project staff performed stepwise regression analyses on outcome variables (i.e., employment status and desire to work) on key predictor variables

(including various demographic factors and insurance coverage); constructed causal models; and tested models using linear structural relations programs, such as LISREL. The staff also examined a variety of different private health insurance plans to determine the adequacy of coverage for persons with disabilities.

Results from the preliminary descriptive statistical analyses indicate that the greatest disincentives are for persons who return to part-time work, as opposed to full-time work. Part-time workers are less likely to obtain the private health insurance they need when they lose public coverage through Medicare or Medicaid.

**Implications**—Part-time employment is often part of the transition from income assistance to full-time employment. Health insurance coverage for part-time workers is an important part of the bridge from SSDI to full-time work.