



NATIONAL INSTITUTE ON DISABILITY
AND REHABILITATION RESEARCH

NIDRR

People with disabilities want the best that science and engineering can offer. They also want research that takes a collaborative approach, incorporating issues of self-help, consumer control and respect for life experiences into the broader study of health care, rehabilitation and independent living. The National Institute on Disability and Rehabilitation Research (NIDRR) is a national leader in sponsoring research to help bring about this synthesis of scholarship, talent and practical life experience.

People can become disabled at any point in their lives. Disability may be present from birth, or result from an accident in youth, a work-related injury, the aging process or a multitude of other causes. If we, ourselves, do not experience a disability, perhaps we will be caring for a disabled child, spouse, parent or friend. The chances that we will be affected by a disability have increased due to advances in medical technology that have expanded our life expectancies. At this point, disability ranks among the nation's biggest public health concerns, encompassing an estimated 52 million Americans.

NIDRR'S MISSION

It is the mission of NIDRR to generate, disseminate and promote new knowledge to improve the options available to disabled persons. The ultimate goal is to allow these individuals to perform their regular activities in the community and to bolster society's ability to provide full opportunities and appropriate supports for its disabled citizens.

Toward this end, NIDRR conducts comprehensive and coordinated programs of research and related activities to maximize the full inclusion, social integration, employment and independent living of individuals of all ages with disabilities. NIDRR's focus includes research in areas such as employment; health and function; technology for access and function; independent living and community integration; and other associated disability research areas.

Balanced between the scientific and consumer communities, NIDRR plays a unique role in federally funded research activities. As part of the scientific community, NIDRR makes an important contribution to the overall knowledge in rehabilitation medicine, engineering, psychosocial rehabilitation, integration, vocational outcomes and the virtual and built environments. In addition, NIDRR's work helps to integrate disability research into our nation's policies regarding science and technology, health care, and economics.

Created in 1978, NIDRR is located in Washington, D.C., and is one of three components of the Office of Special Education and Rehabilitative Services (OSERS) at the U.S. Department of Education. NIDRR operates in concert with the Rehabilitation Services Administration and the Office of Special Education Programs, which are service programs. This juxtaposition between service and science enhances NIDRR's role.

NIDRR has unique institutional relationships with the scientific community through

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the Interagency Committee on Disability Research (ICDR), which the director of NIDRR chairs. In addition, NIDRR co-sponsors research programs with other federal government agencies and with foreign governments and international agencies.

NIDRR-SPONSORED ACTIVITIES

NIDRR's research is extramural, conducted through a network of individual research projects and centers of excellence located throughout the country. Most NIDRR grantees are universities or providers of rehabilitation or related services. NIDRR's largest funding programs are the Rehabilitation Research and Training Centers (RRTCs) and the Rehabilitation Engineering Research Centers (RERCs). NIDRR also makes awards for information dissemination and utilization centers and projects, field-initiated projects, research and development projects, advanced research training projects, Switzer fellowships and model systems of research.

Rehabilitation Research and Training Centers (RRTCs)

The RRTCs conduct coordinated programs of research targeted toward the production of new knowledge that will improve rehabilitation methodology and service delivery systems, alleviate or stabilize disabling conditions and promote the maximum social and economic independence of individuals with disabilities. The RRTCs also conduct training and information dissemination

activities. Some disabling conditions that are currently the subject of individual centers include deafness, low vision, spinal cord injury and long-term mental illness. Other RRTCs focus on cross-disability perspectives such as aging with a disability, the management of independent living centers, drugs and disability, or the particular needs of American Indians. The RRTCs also train rehabilitation personnel and other individuals to provide rehabilitation services and to conduct additional research. In addition, the RRTCs serve as a resource for researchers, people with disabilities, their families, service providers, and advocates by disseminating information and providing technical assistance through workshops, conferences and public education programs.

Rehabilitation Engineering Research Centers (RERCs):

The RERCs plan and conduct research leading to new scientific knowledge and new or improved methods, procedures and devices to benefit people with disabilities. They are engaged in developing and disseminating innovative methods of applying advanced technology, scientific achievement, and psychological and social knowledge, with the goal of solving rehabilitation problems and removing environmental barriers. The RERCs work at the individual level, focusing on technology to lessen the effects of sensory loss, mobility impairment, chronic pain, and communication difficulties. They also work at the systems level in such areas as eliminating barriers to fully acces-

sible transportation, communications and housing. Partnering with industry, product developers, private sector entrepreneurs and even hobbyists, the RERCs embody the potential to make sweeping changes affecting public policy and the nature of the built and virtual environments.

ADVANCES IN RESEARCH SUPPORTED BY NIDRR

Research supported by NIDRR has had a tremendous impact on the lives of persons with disabilities and, at the same time, has made an essential contribution to scientific knowledge in the United States and around the globe. In addition to being responsive to the changing needs of disabled individuals, research has kept pace with medical advancements, new technology, community support initiatives, and new statutory definitions of civil rights.

NIDRR-supported research also has helped encourage and educate policymakers to envision and design a society that is universally accessible and functional for all people in every stage of life.

As a result, it is now possible for people with significant disabilities to live full and fulfilled lives. It is already commonplace to find people who are blind using computers, people who are deaf attending the theater, and people in wheelchairs traveling in planes and driving their own cars. The future holds even more promise.

Medical Rehabilitation Research

Taking a broader look at just one area of NIDRR-funded research — medical rehabilitation research — provides evidence of profound changes. Due to the concerted efforts of medical disability researchers, the lives, outlooks and opportunities for people with disabilities have greatly improved. By supporting research on model systems, NIDRR has enhanced the ability of rehabilitation hospitals and centers to care for, rehabilitate and reintegrate patients with spinal cord injury, traumatic brain injury, and severe burns in a shorter period of time than before. Advancements over the past 25 years have resulted in a steady rise in the life expectancy of individuals with paralysis from spinal cord injuries. Improved medical diagnoses, treatment methods and behavioral protocols, as well as enhanced rehabilitation engineering technologies for seating, cushioning, and positioning, have reduced the occurrence of decubitus ulcers, a severe secondary complication of paralysis. Similarly, due to research, a major reduction in the incidence of severe urinary tract infections has eliminated renal failure as the top-ranking cause of death for people with paralyzing conditions.

Rehabilitation Engineering Research

One focus of rehabilitation engineering research over the last decades has been the adaptation of new, light-weight, but durable materials for wheelchairs and for orthotic and prosthetic devices. A primary objective

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of engineering research is to make this equipment more serviceable and comfortable for the user. Advances in this area have allowed people with disabilities to enhance their lives, not only at home and work, but also in recreational activities. Wheelchair racers using the newest sports wheelchairs now can finish races longer than 800 meters at speeds faster than those of Olympic runners. Hundreds of athletes with disabilities compete in the Paralympic Games every two years, many through the use of state-of-the-art prosthetic arms and legs. Progress in researching these technologies has been enhanced as NIDRR has increased its RERC research portfolio.

ADDITIONAL WORK FUNDED BY NIDRR

With the passage of the Americans with Disabilities Act (ADA) in 1990, new requirements were placed on employers, transit and telecommunications systems, state and local governments, and public accommodations. To help businesses and public agencies comply with the ADA mandate, NIDRR funds a network of Regional Disability and Business Technical Assistance Centers that provide technical assistance, training and resource referral.

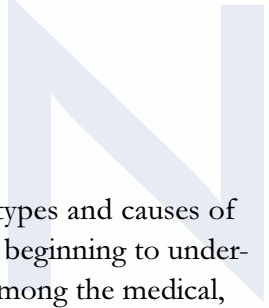
NIDRR also administers the Assistive Technology Act of 1998 (Tech Act). The Tech Act provides grants to states to help bring about systems change to increase the availability of, access to, and funding for assistive technology. It also helps states provide services to rural and

underrepresented populations and provide legal advocacy to disabled individuals in regard to assistive technology issues.

In regard to independent living, NIDRR funds research on personal assistance services, independent living and disability policy, and such critical issues as community integration. NIDRR's agenda also includes research on employment issues and vocational rehabilitation. One continuing objective is to make the labor market more amenable to full employment for people with disabilities. Another is to help students with disabilities make the transition from school to work.

Other Projects, Training Programs and Fellowships

The Disability and Rehabilitation Research Projects carry out one or more of NIDRR's activities: research, development, demonstration, training, dissemination, utilization, and technical assistance. Dissemination and Utilization grants are provided to help transfer research and other products to policymakers, the rehabilitation community, educators, technology developers, and persons with disabilities. The topics are reflected in specific NIDRR priorities. Some examples might include: developing model care systems, the creation of a specialized dataset for the collection of clinical and scientific information, or job development and placement for agricultural workers with disabilities.



Field-Initiated Projects advance rehabilitation knowledge to improve the lives of people with disabilities, complement research already planned or funded by NIDRR, or address the research in a new and promising way. The researcher proposes the topics of these projects. Some topics recently funded are aging and life adjustment after spinal cord injury, assessing the impact of managed care on rehabilitation research, and a clinical evaluation of pressure-relieving seat cushions for elderly stroke patients.

The Advanced Rehabilitation Research Training Program trains physicians, therapists, rehabilitation engineers, and other professionals in research methods and statistical analysis.

Small Business Innovative Research contracts help support the production of new products from development to market readiness.

NIDRR also administers two types of one-year Switzer fellowships. Distinguished fellowships are for individuals of doctorate or comparable academic status with seven or more years experience relevant to rehabilitation research. Merit fellowships are for persons with considerable research experience, but who do not meet the above requirements.

THE FUTURE OF DISABILITY RESEARCH

Now and in the years to come, NIDRR will continue to expand its activities to reflect the

emerging universe of types and causes of disability. We are only beginning to understand the interaction among the medical, environmental and societal factors that link to disability. New illnesses and conditions are constantly evolving, many of which are associated with poverty, such as low birthweight, poor medical care, lack of prenatal care, substance abuse, violence, and isolation. These factors have a high correlation to impairments and disabilities.

NIDRR also will provide leadership to the scientific community and society as a whole to conceptualize disability in a new way. The disability paradigm that undergirds NIDRR's research strategy maintains that disability is an interaction between characteristics (e.g. conditions or impairments, functional status, or personal and social qualities) of an individual and characteristics of the natural, built, cultural, and social environments. NIDRR also recognizes the continuing importance of medical rehabilitation and health within the context of disability. Further, it recognizes that people with disabilities are entitled to accommodations as a civil right under the Americans with Disabilities Act.

In addition, NIDRR programs will focus on health and wellness strategies for people with disabilities to continue to increase their quality of life. They will capitalize on new techniques such as telerehabilitation to increase the numbers and types of services offered to people in rural or underserved areas. NIDRR also will work to increase the

capacity of personnel through education and training to provide better and more responsive service.

Finally, NIDRR will continue to expand its activities in the international arena. Through its international authority, NIDRR currently works with collaborative research centers in India and other countries. These activities abroad help improve the skills of rehabilitation personnel in the United States through international data, and help strengthen disability leadership around the globe.

For additional information, contact:

**THE NATIONAL INSTITUTE
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The full text of this public domain publication is available at the Department's Website at:

<http://www.ed.gov>

and in alternate formats upon request.

Consult these sites on the World Wide Web for further information:

<http://www.ed.gov/offices/OSERS/NIDRR>

<http://www.ncddr.org>

<http://www.naric.com>



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