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Part II

Department of Education

National Institute on Disability and Rehabilitation Research; Final Funding Priorities for Fiscal Years 2000–2001; Invitation for Applications for Model Spinal Cord Injury Centers and Research Centers; Notice

DEPARTMENT OF EDUCATION

National Institute on Disability and Rehabilitation Research

AGENCY: Department of Education.

ACTION: Notice of Final Funding Priorities for Fiscal Years 2000–2001 for Certain Centers.

SUMMARY: The Assistant Secretary for the Office of Special Education and Rehabilitative Services announces final funding priorities for fifteen Model Spinal Cord Injury Centers and two Rehabilitation Engineering Research Centers (RERCs) under the National Institute on Disability and Rehabilitation Research (NIDRR) for fiscal years 2000–2001. The Assistant Secretary takes this action to focus research attention on areas of national need. These priorities are intended to improve rehabilitation services and outcomes for individuals with disabilities.

DATES: These priorities take effect on April 17, 2000.

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Individuals with disabilities may obtain this document in an alternate format (e.g., Braille, large print, audiotape, or computer diskette) on request to the contact person listed in the preceding paragraph.

SUPPLEMENTARY INFORMATION: This notice contains final priorities under the Special Projects and Demonstrations for Spinal Cord Injuries (SCI) Program and two RERCs related to Low Vision and Blindness and Children with Orthopedic Disabilities. The final priorities refer to NIDRR's Long-Range Plan (the Plan). The Plan can be accessed on the World Wide Web at: http://www.ed.gov/legislation/FedRegister/other/1999–12/68576.html.

These final priorities support the National Education Goal that calls for every adult American to possess the skills necessary to compete in a global economy.

The authority for the Secretary to establish research priorities by reserving funds to support particular research activities is contained in sections 202(g) and 204 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 762(g) and 764).

Note: This notice of final priorities does *not* solicit applications. A notice inviting applications is published elsewhere in this issue of the **Federal Register**.

Analysis of Comments and Changes

On December 9, 1999 the Assistant Secretary published a notice of proposed priorities for the Model Spinal Cord Injury Centers in the **Federal Register** (64 FR 69154). The Department of Education received 25 letters commenting on the notice of proposed priorities by the deadline date. On December 17, 1999 the Assistant Secretary published a notice of proposed priorities for two Rehabilitation Engineering Research Centers in the **Federal Register** (64 FR 70956). The Department of Education received 8 letters commenting on the notice of proposed priorities by the deadline date. Technical and other minor changes—and suggested changes the Assistant Secretary is not legally authorized to make under statutory authority—are not addressed.

Model Spinal Cord Injury Centers

Priority 1: Model Spinal Cord Injury Centers

Comment: Several commenters discussed the issue of the national database, with a range of questions and recommendations. Some asked whether it was a given that the national database would be continued as is, or whether the requirement might be to contribute to a national database not yet configured. Many commenters asked whether the number or type of variables in the current database (MSCIS) would be maintained or altered for the next five-year period. One commenter suggested that only large Centers should be required to contribute to the database. Several commenters asked whether there would be changes in the selection criteria or funding levels related to database participation.

Discussion: All Centers will be required to contribute to the national database as designated by the Secretary. The database has evolved over its entire existence, and will continue to evolve to meet current needs. NIDRR intends to evaluate the existing database within the next twelve months, and prescribe modifications as necessary. These modifications may include changes in the number and type of variables or limits on follow-up samples. However, for the purpose of responding to this notice, prospective applicants should base their proposals on the database as currently configured. If those modifications require changes to the proposed scope of work or budget of any funded Center, these changes can be negotiated with the funding agency.

Changes: None.

Comment: A number of commenters stated that the proposed research priority areas were either unclear or too limiting. Several questioned whether the Centers were to be limited to one area or topic. Some questioned why the Associated Research Areas section of the Plan, as well as other specific priorities in the Plan, were not referenced, and others proposed that each Center be encouraged to undertake one research project addressing Health and Function and one project addressing a second chapter of the Plan.

Discussion: This priority encourages focused, cohesive, and integrated research programs that will make a substantial contribution to the knowledge base in SCI rehabilitation, while simultaneously discouraging fragmented programs with numerous discrete and disparate projects. The Plan presents an integrated approach to research. NIDRR recognizes that disability and rehabilitation are both holistic phenomena. Investigations of major issues in one area, for example Health and Function, may involve issues of technology or independent living. Applicants have the freedom to investigate any issues prioritized in the Plan, including those in the associated areas chapter and issues that cut across areas of the Plan. The priority encourages studies that will capitalize on each Center's population and programmatic characteristics to make significant contributions to SCI rehabilitation. Applicants should carefully justify the likelihood of achieving the proposed research objectives.

Changes: The list of priorities for the research projects has been modified to include the associated areas chapter of the Plan, and to incorporate investigation of any long-range plan priority areas, including cross-cutting issues.

Comment: Several commenters discussed the mechanism of running a separate competition for collaborative research projects. Most commenters supported this idea, although one contended that large Centers should be funded to do site-specific research, while Centers with smaller patient loads could collaborate on research projects.

Discussion: A major advantage of supporting a Model Systems program is the ability to conduct studies with large samples on populations that are geographically, ethnically, culturally, and otherwise diverse. This is an important justification for the common data collection system. In the past, Centers have been required to propose both collaborative and site-specific research. This was an administrative problem, because applicants would have to propose collaborations with

other applicants who might not be chosen for funding. After the Centers were funded, many had to drop or alter proposed collaborative studies because some of the partners did not receive funding. Also, the peer review process in the past did not give adequate attention to the research proposals, as they were focused on evaluating the comprehensiveness and quality of the systems of care. A separate competition for collaborative research projects in Fiscal Year 1998 for the NIDRR Traumatic Brain Injury program led to awards of substantial and meaningful research projects. It should be noted that collaboration is not precluded in the current competition. Applicants can form collaborative relationships with any appropriate entity as required to address their particular research.

NIDRR acknowledges the concerns of Centers that are tracking large patient populations. Projects will be funded at varying amounts up to the maximum allowed based on individual factors in proposals. Proposed budgets should reflect costs associated with data collection, proposed research, and administration. Funding will be determined individually for each successful applicant up to the maximum allowed based upon documented workload, the peer review process, and the overall budgetary limits of the program.

Changes: None.

Comment: Many practitioners and researchers in SCI rehabilitation point out that the individuals with SCI of non-traumatic origins now comprise a large portion of the individuals treated in rehabilitation units. There have been strong arguments for expanding the scope of the SCI Model Systems beyond traumatic SCI.

Discussion: This is an important change to consider. However, there has not been sufficient examination of the ramifications of changing the inclusion criteria of the database. NIDRR requires more data concerning the populations to be considered, proposed inclusion criteria such as time of onset and extent of lesion, and comparison of characteristics of traumatic vs. the non-traumatic SCI populations, including natural course, coexisting conditions, and socio-demographic variables. Applicants remain free to treat non-traumatic SCI in clinical settings and to include these patients in research projects. However, the parameters of the MSCIS will not be expanded at this time to include these non-traumatic patients. The peer review process will evaluate the merits of each proposal.

Changes: None.

Comment: Some respondents were concerned that there were too few points being awarded to adequacy of facilities, as the new selection criteria award a large number of points for project design. Respondents were unclear as to whether project design refers only to the design of the research portion. Other commenters objected to the inclusion of additional points for employment of individuals with disabilities on the project, arguing that applicants would tend to give pro forma responses, that the requirement is antithetical to the direction of current affirmative action practices, or that institutions may be forced into a bidding war for the relatively few qualified disabled researchers.

Discussion: The new thrust of the model systems program is to emphasize research. NIDRR believes there are sufficient points allowed for a comprehensive, integrated system of care to supplement the importance of high quality facilities. The Project Design criteria refer to the research project, and the Service Comprehensiveness criteria refer to the model demonstration.

NIDRR encourages employment of persons with disabilities on research projects not only as a measure of equal opportunity, but because individuals with disabilities bring important perspectives and concerns to research. The disability research field is also encouraged to find innovative ways to build research capacity among persons with disabilities.

Changes: The Project Design criteria section has been renamed Research Project Design.

Comment: Several commenters discussed the need for a specified minimum number of new injuries to be considered for inclusion in this program.

Discussion: NIDRR agrees that a ''critical mass'' of new injuries is important for an SCI Center of Excellence. This is important for maintaining a high level of clinical skill and for having enough subjects to perform meaningful research. However, NIDRR views this requirement as contextual. It is expected that applicants will document their history of new patients, and the likelihood of obtaining sufficient numbers to maintain a center of excellence for SCI care and to conduct research. It is the responsibility of the applicants to demonstrate that they have sufficient admissions to maintain a clinical Center of excellence and to conduct significant research.

Changes: None.

Comments: Two commenters were concerned that the priority did not discuss the geographic distribution of the Centers.

Discussion: When making funding determination, both the legislation (Section 204(b)(4) of Rehabilitation Act of 1973, as amended (29 USC 764(b)(4)) and the regulations (34 CFR Part 359) specify that the Director must take into account the location of any proposed SCI Center and the appropriate geographical and regional allocation of such Centers. This geographic distribution is considered in making the final determination of the awards.

Changes: None.

Rehabilitation Engineering Research Centers—General

Comment: What criteria does NIDRR use for selection of RERCs?

Discussion: NIDRR publishes selection criteria in the Notice Inviting Applications. The selection criteria are used by peer reviewers to evaluate the proposals submitted to NIDRR under this competition.

Changes: None.

Comment: Do RERCs have the authority to establish linkages with other agencies in order to achieve the necessary outcomes?

Discussion: RERCs are required to collaborate with specific RERCs and RRTCs as identified in each priority. In addition to these requirements, an applicant could propose to coordinate with other agencies or organizations. The peer review process will evaluate the merits of each applicant's proposed activities.

Changes: None.

Comment: Are the proposed RERCs required to establish partnerships between product manufacturers and practitioners to design and implement innovative technologies?

Discussion: NIDRR encourages applicants to include manufacturers, practitioners and consumers, as appropriate, in the design process. Each RERC is required to develop and implement, in consultation with the NIDRR-funded RERC on Technology Transfer, a utilization plan to ensure that all new and improved technologies developed by the RERC are successfully transferred to the marketplace. The peer review process will evaluate the merits of each application.

Changes: None.

Priority 2: Low Vision and Blindness

Comment: Four commenters suggested that a new activity should be added that requires the RERC to research and develop technologies that address jobsite adaptation, employment and daily living problems among the target population.

Discussion: NIDRR agrees that unemployment for persons who are blind or visually impaired is a very serious problem, as referenced in the first paragraph of the background statement.

Changes: A new activity has been added requiring the RERC to investigate, develop, and evaluate new vocational and daily living technologies and approaches.

Comment: Two commenters expressed concern that the word ''screening'' in the first required activity may be interpreted to imply merely the detection of a problem, whereas the real need is for more detailed assessment and analysis of the complex problems. Substituting ''assessment'', ''analysis'' or ''evaluation'' for ''screening'' would clarify and focus this priority.

Discussion: NIDRR agrees that ''assessment'' is a more appropriate term.

Changes: The first required activity has been revised by substituting the word ''assessment'' for ''screening.''

Comment: One individual commented that the main mandate of RERCs, as stated in the Rehabilitation Act, as amended, is to focus on research and development ''to produce new scientific knowledge, and new or improved methods, equipment, and devices.'' This theme is very well represented in the third required activity, which refers to ''technologies and approaches,'' but the other activities may be somewhat limiting in their focus. This would easily be remedied by inserting ''technologies and approaches'' or ''technologies and methods'' in each activity where the word ''technologies'' appears.

Discussion: NIDRR agrees that the priority would be strengthened by replacing ''technologies'' with ''technologies and approaches'' where applicable.

Changes: Required activities 1, 2, and 4 have been revised by replacing ''technologies'' with ''technologies and approaches.''

Comment: The third required activity does not accurately reflect the background statement and the broad language used might suggest that any and all studies of vision and aging apply.

Discussion: NIDRR believes that the background statement adequately supports each activity. However, while NIDRR agrees with the commenter that the third required activity would be strengthened by limiting the number of potential vision screening and assessment technologies investigated, NIDRR does not agree that the commenter's specific language recommendations accomplish this purpose.

Changes: The third required activity 3 has been revised by adding the words ''and practical'' after the word ''simple.''

Priority 3: Technologies for Children with Orthopedic Disabilities

Comment: Two goals for this RERC are to enable children to negotiate their environment and to enhance interactive play and social skill development. To accomplish these goals, the RERC must include typically developing peers.

Discussion: An applicant could propose research methodologies that include the use typically developing peers. NIDRR elects to leave the choice of research methodologies to be proposed to the applicants. The peer review process will evaluate the merits of each proposal.

Changes: None.

Comment: Parental involvement should be a requirement in the design and use of technologies developed by this RERC.

Discussion: NIDRR agrees that parental involvement is necessary for an RERC such as this one. There is mention of parental expectations in the first paragraph of the background statement. Furthermore, there is a general requirement that all RERCs involve persons with disabilities and their family representatives in planning and implementing their research and development activities. The peer review process will evaluate the merits of each applicant's proposed activities.

Changes: None.

Model Spinal Cord Injury Centers

The authority for Model Spinal Cord Injury Centers is contained in section 204(b)(4) of the Rehabilitation Act of 1973, as amended (29 U.S.C. 764(b)(4)). The Secretary may make awards for up to 60 months through grants or cooperative agreements. This program provides assistance to establish innovative projects for the delivery, demonstration, and evaluation of comprehensive medical, vocational, and other rehabilitation services to meet the wide range of needs of individuals with spinal cord injuries.

Description of Special Projects and Demonstrations for Spinal Cord Injuries

This program provides assistance for projects that provide comprehensive rehabilitation services to individuals with Spinal Cord Injury (SCI) and conduct spinal cord research, including clinical research and the analysis of standardized data in collaboration with other related projects.

Each SCI Center funded under this program establishes a multidisciplinary system of providing rehabilitation services, specifically designed to meet the special needs of individuals with spinal cord injuries. This includes acute care as well as periodic inpatient or outpatient follow up and vocational services. Centers demonstrate and evaluate the benefits and cost effectiveness of such a system for the care of individuals with SCI and demonstrate and evaluate existing, new, and improved methods and equipment essential to the care, management, and rehabilitation of individuals with SCI. Grantees demonstrate and evaluate methods of community outreach and education for individuals with SCI in connection with the problems of such individuals in areas such as housing, transportation, recreation, employment, and community activities.

Projects funded under this program ensure widespread dissemination of research findings to all SCI Centers, and to rehabilitation practitioners, individuals with SCI, and the parents, family members, guardians, advocates, or authorized representatives of such individuals. They engage in initiatives and new approaches and maintain close working relationships with other governmental and voluntary institutions and organizations to unify and coordinate scientific efforts, encourage joint planning, and promote the interchange of data and reports among SCI researchers.

The Department is particularly interested in ensuring that the expenditure of public funds is justified by the execution of intended activities and the advancement of knowledge and, thus, has built this accountability into the selection criteria. Not later than three years after the establishment of any Center, NIDRR will conduct one or more reviews of the activities and achievements of the Center. In accordance with the provisions of 34 CFR 75.253(a), continued funding depends at all times on satisfactory performance and accomplishment.

Priority

Under 34 CFR 75.105(c)(3) the Assistant Secretary gives an absolute preference to applications that meet the following priority. The Assistant Secretary will fund under this competition only applications that meet this absolute priority.

Priority 1: Model Spinal Cord Injury Centers

Background

Estimates of the number of people living with traumatic spinal cord injury (SCI) range from 183,000 to 230,000, with an incidence of approximately 10,000 new cases each year (''Spinal Cord Injury Facts and Figures at a Glance,'' National Spinal Cord Injury Statistical Center (NSCISC), University of Alabama at Birmingham). Although SCI predominately affects young adults (56% of SCIs occur among people aged 16–30 years), there is an increasing proportion of new SCI cases in the population over 60 years of age (NSCISC, ibid.). The true significance of traumatic SCI lies not primarily in the numbers affected, but in the substantial impact on individuals' lives and the associated substantial health care costs and living expenses. A traumatic SCI has far-reaching repercussions on the lives of the injured persons and their families that can be devastating if not addressed effectively. According to a report from the Agency for Health Care Policy and Research (Hospital Inpatient Statistics, 1996, AHCPR Publication No. 99–0034), SCI is the most expensive condition or diagnosis treated in U.S. hospitals. The estimated lifetime costs for an individual injured at the age of 25 range from $365,000 for an incomplete injury to more than $1.7 million for an individual with a high cervical injury (NSCISC, op cit).

The Model SCI program was developed in 1970 to demonstrate the value of a comprehensive integrated continuum of care for SCI. Twenty-six sites have been designated, at various times, as Model SCI Centers through funding initially from the Rehabilitation Services Administration, and subsequently from the National Institute on Handicapped Research, and its successor, the National Institute on Disability and Rehabilitation Research (NIDRR). For the period 1995–2000 there are 18 funded Model SCI Centers. (Additional information is available on the World Wide Web at *http://www.ncddr.org/mscis/).* The clinical components of the Model Centers are specified in the program regulations, and include ''* * * emergency medical services, acute care, vocational and other rehabilitation services, community and job placement, and long-term community follow up and health maintenance'' (34 CFR 359.11). In addition to demonstrating and evaluating the benefits of such a system the centers are required to contribute data on their patients to the National Spinal Cord Injury Database (NSCID), and engage in research both within the center, and in collaboration with other centers.

During the past 30 years, there have been substantial improvements in outcomes following SCI (Stover, S.L., et al., *Spinal Cord Injury: Clinical Outcomes From the Model Systems,* and Special Issue, Spinal Cord Injury: Current Research Outcomes from the Model Spinal Cord Injury Care Systems, *Archives of Physical Medicine and Rehabilitation,* Vol. 80, No. 11, November, 1999). Enhanced emergency medical services have led to increased preservation of neurologic function. Mortality during the first year following injury has continuously declined. Life expectancy, while still below that for those without SCI, has significantly increased for all levels of injury. The ideal of a comprehensive multi-disciplinary system of care for SCI has gained widespread acceptance.

However, significant challenges and opportunities remain for SCI rehabilitation. Recent statistics from the National Spinal Cord Injury Statistical Center (NSCISC) suggest that as the length of stay in rehabilitation settings has progressively decreased (1993–1998), there has been an increase in re-hospitalization during the first year after injury. In addition, mortality after the first anniversary of injury declined continuously from 1973–1992, but now has increased for the period 1993–1998. Secondary medical complications, including, but not limited to, respiratory complications, pressure ulcers and autonomic dysreflexia, continue to be significant problems. Injuries due to interpersonal violence have increased as a proportion of the total SCI incidence and are more likely to be neurologically complete injuries.

There is a need to identify, evaluate, and eliminate barriers in the natural, built, cultural, and social environments to enable people with SCI to achieve the goal of fully reintegrating into their community. Particular focus is required to address the needs of minority and underserved populations. Although employment for the U.S. population is at historically high levels, employment for the SCI population remains low. Individuals with SCI due to inter-personal violence have an employment rate approximately half of the average for all individuals with SCI (NSCISC, op cit).

NIDRR shares the concerns of the rehabilitation community about the impact of changes in health care delivery and financing upon the continuum of care for SCI. People with SCI often have more difficulty in obtaining adequate primary health care than non-disabled individuals. The unique needs of women with SCI in cardiac rehabilitation, reproductive health, and early cancer screening are special issues that need to be addressed.

There are also new and developing opportunities for improving SCI care. Medical and pharmacological therapies show promise for preserving and enhancing function. There is a need to identify and evaluate therapeutic interventions, including prevention and wellness programs, and complementary and alternative therapies using evidence-based evaluation protocols.

Advancing technology has the potential to enhance access and function for individuals with SCI. There is a need to develop and evaluate service delivery models incorporating telerehabilitation strategies and technologies to provide services for people with SCI. Assistive technologies may reduce the likelihood of secondary complications in SCI. For example, improved wheelchair and seating systems may reduce musculoskeletal trauma associated with long term wheelchair use. Technological advancement has the promise of providing greater accessibility to information, telecommunications, and employment. The adoption of universal design methodologies will enhance access to the built environment as well as rapidly developing electronic and information technologies.

The development of strong collaborations by SCI centers with community and social support organizations has the potential to impact positively the independence and community integration for individuals with SCI. Peer support beginning early in the rehabilitation process may enhance return to participation in the community. The causes of unemployment in SCI include lack of education and skills, lack of prior work experience, and policy disincentives. Pending changes in legislation and policy to permit retention of some medical insurance during employment, together with the high demand for skilled individuals in the workforce, represents an opportunity to foster education and employment of individuals with SCI.

NIDRR has published the Plan that is based upon a new paradigm for rehabilitation that identifies disability in terms of the relationship between the individual and the natural, built, cultural, and social environments (63 FR 57189–57219). The Plan focuses on both individual and systemic factors that have an impact on the ability of people to function. The elements of the Plan include employment outcomes,

health and function, technology for access and function, and independent living and community integration. As part of the Plan to attain the goals in these areas, NIDRR is committed to capacity building for research and training, and to ensure knowledge dissemination and utilization. Each area of the Plan includes objectives at both the individual and system levels. For example, the health and function objectives include research to improve medical rehabilitation interventions, as well as research to ensure access to an integrated continuum of quality health care services that address the unique needs of persons with disabilities. It is clear that the challenges and opportunities for SCI care reflect all of the priority areas of the Plan.

NIDRR has recently completed Program Reviews of all current Model SCI Centers. Based upon presentations by the Centers, and discussion with the external reviewers, NIDRR has concluded that the value of a comprehensive integrated system of care for SCI has been demonstrated. Because this conclusion is widely accepted, NIDRR is shifting the focus of the program from demonstration, to place a greater emphasis upon research. Participants in the Program Reviews observed that the comprehensive continuum of quality care should continue to be a requirement for participation in the Model SCI Centers Program. There is significant diversity among the Centers, however, in research interests and capacities. This diversity extends across the priority areas of the Plan, and represents a strength of the program.

Reviewers noted that uniformly comprehensive, high quality care, together with a common data collection system and administrative infrastructure makes the Model SCI Centers Program a valuable platform for various collaborative studies, including multi-center trials of therapies and technologies. To further the enhancement of the research mission, participants recommended a separate competition for the collaborative research portion of the program. A separate competition will facilitate focused, considered proposals, a higher level of scientific review, and the development of significant research projects in the Model SCI Centers. The competition for collaborative research projects will be conducted subsequent to the identification of the Model SCI Centers, and funds will be reserved for that purpose.

During the Program Reviews, there was considerable discussion of the NSCID. It is clear that the database is a valuable resource and that participation in the NSCID is an essential element for the Model SCI Centers. For the purpose of the present competition, the data collection activities will be maintained without change. NIDRR expects that applicants will include historical documentation of numbers of patients as well as expected new patients and expected annual follow-up submissions based on current eligibility criteria for the NSCID. However, it is anticipated that, through discussion among the newly identified Model SCI Centers, NIDRR staff, and external reviewers, details of data collection may be modified following the award. This process should not result in increased data collection workloads above current levels.

Priority 1

The Assistant Secretary will establish Model Spinal Cord Injury Centers for the purpose of generating new knowledge through research, development, or demonstration to improve outcomes for SCI through improved interventions and service delivery models. A Model SCI Center must:

(1) Establish a multidisciplinary system of providing rehabilitation services specifically designed to meet the special needs of individuals with SCI, including emergency medical services, acute care, vocational and other rehabilitation services, community and job placement, and long-term community follow up and health maintenance;

(2) Participate as directed by the Assistant Secretary in national studies of SCI by contributing to a national database and by other means as required by the Assistant Secretary; and

(3) Conduct a significant and substantial research program in SCI that will contribute to the advancement of knowledge in accordance with the Plan. Applicants may select from the following examples of research objectives related to specific areas of the Plan or other research objectives, including those that cut across areas of the Plan:

- (Chapter 3, Employment Outcomes): Either (1) Assess the impact of legislative and policy changes on employment outcomes; or (2) test direct intervention strategies for improving employment outcomes.
- (Chapter 4, Maintaining Health and Function): Either (1) Study interventions to improve outcomes in the preservation or restoration of function or the prevention and treatment of secondary conditions; or (2) Design and test service delivery models that provide quality care under constraints imposed by recent changes in the health care financing system.
- (Chapter 5, Technology for Access and Function): Either (1) Evaluate the impact of selected innovations in technology and rehabilitation engineering on service delivery; or (2) Evaluate the impact of selected innovations in technology and rehabilitation engineering on outcomes such as function, independence, and employment.
- (Chapter 6, Independent Living and Community Integration): Assess the value of peer support and early onset of services from community and social support organizations to improve outcomes such as independence and community integration, employment function, and health maintenance.
- (Chapter 7, Associated): Either (1) Refine measures of medical rehabilitation effectiveness in SCI to incorporate environmental factors in the assessment function; or (2) Investigation of the impact of national telecommunications and information policy on the access of persons with SCI to related education, work, and other opportunities.

(4) Provide for the widespread dissemination of research and demonstration findings to other SCI centers, rehabilitation practitioners, researchers, individuals with SCI and their families and representatives, and other public and private organizations involved in SCI care and rehabilitation. In carrying out these purposes, the SCI center must:

- Incorporate culturally appropriate methods of community outreach and education in areas such as health and wellness, housing, transportation, recreation, employment, and other community activities for individuals with diverse backgrounds with SCI;
- Demonstrate the research and clinical capacity to participate in collaborative projects, clinical trials, or technology transfer with other model SCI centers, other NIDRR grantees, and similar programs of other public and private agencies and institutions; and
- Demonstrate the likelihood of having a sufficient number of individuals with SCI, including newly injured persons, to conduct statistically significant research.

Final Selection Criteria

The Assistant Secretary will use these selection criteria to evaluate applications under this program. The maximum score for all the criteria is 100 points. The new emphasis on research and NIDRR's Plan, plus the importance of the NSCID, require some

modifications to the selection criteria for this program. The Secretary will redistribute points to reflect the increased emphasis on research, and to add references to the Plan and NSCID.

(a) *Research Project design* (30 points). The Secretary reviews each application to determine to what degree—

(1) There is a clear description of how the objectives of the project relate to the purpose of the program and the Plan;

(2) The research is likely to produce new and useful information;

(3) The need and target population are adequately defined and are sufficient for meaningful research and demonstration;

(4) The outcomes are likely to benefit the defined target population;

(5) The research hypotheses are sound; and

(6) The research methodology is sound in the sample design and selection, the data collection plan, the measurement instruments, and the data analysis plan.

(b) *Service comprehensiveness* (20 points). The Secretary reviews each application to determine to what degree—

(1) The services to be provided within the project are comprehensive in scope, and include emergency medical services, intensive and acute medical care, rehabilitation management, psychosocial and community reintegration, and follow up;

(2) A broad range of vocational and other rehabilitation services will be available to individuals with severe disabilities within the project; and

(3) Services will be coordinated with those services provided by other appropriate community resources.

(c) *Plan of operation* (10 points). The Secretary reviews each application to determine to what degree—

(1) There is an effective plan of operation that ensures proper and efficient administration of the project;

(2) The applicant's planned use of its resources and personnel is likely to achieve each objective;

(3) Collaboration between institutions, if proposed, is likely to be effective;

(4) Participation in the National Spinal Cord Injury Database is clearly and adequately described; and

(5) There is a clear description of how the applicant will include eligible project participants who have been traditionally underrepresented, such as—

(i) Members of racial or ethnic minority groups;

(ii) Women;

(iii) Individuals with disabilities; and

(iv) The elderly.

(d) *Quality of key personnel* (10 points). The Secretary reviews each application to determine to what degree—

(1) The principal investigator and other key staff have adequate training or experience, or both, in spinal cord injury care and rehabilitation and demonstrate appropriate potential to conduct the proposed research, demonstration, training, development, or dissemination activity;

(2) The principal investigator and other key staff are familiar with pertinent literature or methods, or both;

(3) All the disciplines necessary to establish the multidisciplinary system described in § 359.11(a) are effectively represented;

(4) Commitments of staff time are adequate for the project; and

(5) The applicant is likely, as part of its non-discriminatory employment practices, to encourage applications for employment from persons who are members of groups that traditionally have been underrepresented, such as—

(i) Members of racial or ethnic minority groups;

(ii) Women;

(iii) Individuals with disabilities; and

(iv) The elderly.

(e) *Adequacy of resources* (5 points). The Secretary reviews each application to determine to what degree—

(1) The facilities planned for use are adequate;

(2) The equipment and supplies planned for use are adequate; and

(3) The commitment of the applicant to provide administrative and other necessary support is evident.

(f) *Budget/cost effectiveness* (5 points). The Secretary reviews each application to determine to what degree—

(1) The budget for the project is adequate to support the activities;

(2) The costs are reasonable in relation to the objectives of the project; and

(3) The budget for subcontracts (if required) is detailed and appropriate.

(g) *Dissemination/utilization* (10 points). The Secretary reviews each application to determine to what degree—

(1) There is a clearly defined plan for dissemination and utilization of project findings;

(2) The research results are likely to become available to others working in the field;

(3) The means to disseminate and promote utilization by others are defined; and

(4) The utilization approach is likely to address the defined need.

(h) *Evaluation plan* (10 points). The Secretary reviews each application to determine to what degree—

(1) There is a mechanism to evaluate plans, progress, and results;

(2) The evaluation methods and objectives are likely to produce data that are quantifiable; and

(3) The evaluation results, where relevant, are likely to be assessed in a service setting.

Final Additional Selection Criterion

The Assistant Secretary also will use the following criterion so that up to an additional ten points may be earned by an applicant for a total possible score of 110 points:

Within this absolute priority, we will give the following competitive preference to applications that are otherwise eligible for funding under this priority:

Up to ten (10) points based on the extent to which an application includes effective strategies for employing and advancing in employment qualified individuals with disabilities in projects awarded under these absolute priorities. In determining the effectiveness of those strategies, we will consider the applicant's success, as described in the application, in employing and advancing in employment qualified individuals with disabilities in the project.

For purposes of this competitive preference, applicants can be awarded up to a total of 10 points in addition to those awarded under the published selection criteria for this priority. That is, an applicant meeting this competitive preference could earn a maximum total of 110 points.

Rehabilitation Engineering Research Centers

The authority for RERCs is contained in section 204(b)(3) of the Rehabilitation Act of 1973, as amended (29 U.S.C. 762(b)(3)). The Secretary may make awards for up to 60 months through grants or cooperative agreements to public and private agencies and organizations, including institutions of higher education, Indian tribes, and tribal organizations, to conduct research, demonstration, and training activities regarding rehabilitation technology in order to enhance opportunities for meeting the needs of, and addressing the barriers confronted by, individuals with disabilities in all aspects of their lives. An RERC must be operated by or in collaboration with an institution of higher education or a nonprofit organization.

Description of Rehabilitation Engineering Research Centers

RERCs carry out research or demonstration activities by:

(a) Developing and disseminating innovative methods of applying advanced technology, scientific achievement, and psychological and social knowledge to (1) solve rehabilitation problems and remove environmental barriers, and (2) study new or emerging technologies, products, or environments;

(b) Demonstrating and disseminating (1) innovative models for the delivery of cost-effective rehabilitation technology services to rural and urban areas, and (2) other scientific research to assist in meeting the employment and independent living needs of individuals with severe disabilities; or

(c) Facilitating service delivery systems change through (1) the development, evaluation, and dissemination of consumer-responsive and individual and family-centered innovative models for the delivery to both rural and urban areas of innovative cost-effective rehabilitation technology services, and (2) other scientific research to assist in meeting the employment and independent needs of individuals with severe disabilities.

Each RERC must provide training opportunities to individuals, including individuals with disabilities, to become researchers of rehabilitation technology and practitioners of rehabilitation technology in conjunction with institutions of higher education and nonprofit organizations.

The Department is particularly interested in ensuring that the expenditure of public funds is justified by the execution of intended activities and the advancement of knowledge and, thus, has built this accountability into the selection criteria. Not later than three years after the establishment of any RERC, NIDRR will conduct one or more reviews of the activities and achievements of the Center. In accordance with the provisions of 34 CFR 75.253(a), continued funding depends at all times on satisfactory performance and accomplishment.

General RERC Requirements

The following requirements apply to these RERCs pursuant to these absolute priorities unless noted otherwise. An applicant's proposal to fulfill these requirements will be assessed using applicable selection criteria in the peer review process.

The RERC must have the capability to design, build, and test prototype devices and assist in the transfer of successful solutions to relevant production and service delivery settings.

The RERC must evaluate the efficacy and safety of its new products, instrumentation, or assistive devices.

The RERC must involve individuals with disabilities and, if appropriate, their representatives, in planning and implementing its research, development, training, and dissemination activities, and in evaluating the Center.

Priorities

Under an absolute priority we consider only applications that meet one of these absolute priorities (34 CFR 75.105(c)(3)).

Priority 2: Low Vision and Blindness

Background

According to recent estimates there are more than 3 million Americans with low vision, and almost one million who are legally blind (National Eye Institute, ''Vision research: A national plan 1999–2003,'' A report of the National Advisory Eye Council, National Institutes of Health, 1999). Approximately 7.8% of persons over 65 cannot see well enough to read newspaper print (Nelson, K.A., ''Statistical brief #35: Visual impairment among elderly Americans: statistics in transition,'' *Journal of Visual Impairment and Blindness,* vol. 81, pgs. 331–334, 1987), and the number of persons in this age group is projected to increase twice as fast as the population as a whole (Schmeidler, E. and Halfman, D., ''Statistics on visual impairment on older persons, disability in children, life expectancy,'' *Journal of Visual Impairment and Blindness,* vol. 91, pgs. 602–606, 1997). Blind and visually impaired individuals face major barriers in information access and handling, orientation and mobility, and access to jobsites and public facilities, resulting in very high rates of unemployment (Kirchner, C. and Schmeidler, E., ''Prevalence and employment of people in the United States who are blind or visually impaired,'' *Journal of Visual Impairment and Blindness,* vol. 91, pgs. 508–511, 1997; Hagemoser, S.D., ''The relationship of personality traits to the employment status of persons who are blind,'' *Journal of Visual Impairment and Blindness,* vol. 90, pgs. 134–144, 1996). There is also a growing and underserved group of individuals with a combination of multiple sensory, physical, and cognitive impairments (Malakpa, S., ''Job placement of blind and visually impaired people with additional disabilities'' *RE:View,* vol. 26, pgs. 69–77, 1994).

The leading causes of vision impairment in children in the U.S. are cortical visual impairment (35%), retinopathy of prematurity (ROP), optic nerve hypoplasia, and other retinal conditions (Murphy, D. and Good, W.V., ''The epidemiology of blindness in children in California,'' *American Academy of Opthalmology*, pg. 157, 1997; *Oxford Register of Early Childhood Impairments Annual Report, The National Perinatal Epidemiology Unit, Ratcliffe Infirmary*, pgs. 32–36, 1998). As a result of improvements in medical diagnosis, treatment and technologies, more premature infants are surviving birth. However, a significant number of newborn infants experience traumatic conditions that include blindness and cognitive and motor deficits. New approaches and technologies are needed to identify and separate the sensory and cognitive deficits so that habilitation can be planned and monitored more effectively (Good, W.V., Jan, J.E., deSa, L., Barkovich, A.J., Groenveld, M. and Hoyt, C.S., ''Cortical visual impairment in children: A major review,'' *Survey of Opthalmology*, vol. 38, pgs. 351–364, 1994). Intervention in the very young age groups offers maximum promise of cost effectiveness and independent functioning throughout life.

Wayfinding refers to the techniques used by persons who are blind or visually impaired as they move from place to place independently. Wayfinding is commonly divided into orientation and mobility skills. Orientation refers to the ability to monitor one's position in relation to the environment. Mobility refers to one's ability to move safely, from one location to the next with a limited amount of veering. Orientation and mobility are prerequisites to success at school, on the job, and in daily living. Various electronic devices and environmental modifications have been used in attempts to improve wayfinding and to reduce veering. Current technologies, including clear-path and drop-off detectors, do little to prevent veering.

Low vision or blindness frequently coexists with other disabilities including hearing loss, cognitive impairments and mobility limitations. Individuals with multiple disabilities present technological challenges and require complex adjustments to achieve functionality in and across environments (Greenbaum, M.G., Fernandes, S. and Wainapel, S.F., ''Use of a motorized wheelchair in conjunction with a guide dog for the legally blind and physically disabled,'' *Archives of Physical Medicine and Rehabilitation*, vol. 79(2), pgs. 216–217, 1998).

The most common cause of visual impairment among the aging population is Age Related Maculopathy (ARM) (Fletcher, D.C. and Schucard, R.A.,

''Preferred retinal loci relationship to macular scotomas in a low-vision population,'' *Opthalmology*, vol. 104, pgs. 632–638, 1997). Visual impairments among this population impact a wide variety of activities of daily living. Further, visual impairment is often accompanied by hearing loss, cognitive deficits, and motor dysfunction. Many older individuals reside in congregate care settings (i.e., nursing homes) where the prevalence of eye disorders can be as high as 90% (Marx, M.S., Werner, P., Feldman, R. and Cohen-Mansfield, J., ''The eye disorders of residents of a nursing home,'' *Journal of Visual Impairment and Blindness*, vol. 88(5), pgs. 462–468, 1994; Whitmore, W.G., ''Eye disease in a geriatric nursing home population,'' *Opthalmology*, vol. 96, pgs. 393–398, 1989; Horowitz, A., ''Vision impairment and functional disability among nursing home residents,'' *The Gerontologist*, vol. 34, pgs. 316–323, 1994). These facilities could be a platform for reaching many consumers with simple vision screening technologies that would permit non-clinical personnel to rapidly screen residents for visual impairments and make appropriate referrals. Currently, methods for assessing ARM include, but are not limited to, residual visual function and identifying optimal locations on the retina for reading and other tasks (Fletcher, D.C. and Schucard, R.A., op. cit., 1997). These methods address one eye at a time, and the advantages of binocular vision are often lost (Paul, W., ''The role of computer assistive technology in rehabilitation of the visually impaired: A personal perspective,'' *American Journal of Opthalmology*, vol. 127(1), pgs. 75–76, 1999; Schuchard, R.A. and Kuo, K., ''Retinal correspondence and binocular perception characteristics in low vision people with binocular eccentric PRLs,'' *Investigative Opthalmology and Vision Science*, vol. 91, pgs. 602–606, 1999).

Chapter 5 of the Plan (64 FR 68575) discusses the importance of directing research and development activities toward the problems faced by individuals who have significant visual, hearing, and communication impairments. The number of individuals with both severe hearing and visual impairments (deaf-blind) is small but increasing. The greatest challenges persons with multiple sensory impairments face are communication and access to information technology (Engelman, M.D., Griffin, H.C. and Wheeler, L., ''Deaf-blindness and communication: Practical knowledge and strategies,'' *Journal of Visual Impairments and Blindness*, vol. 92(11), pgs. 783–798, 1999). Individuals who are deaf-blind rarely use Braille for communication purposes. To date, technologies for individuals who are deaf-blind have focused primarily on tactile interpreting for face-to-face communication.

In today's complex and multifaceted electronic world, access to graphical and spatial information is critical for persons who are blind or visually impaired to be successful in school and work (Kent, D., ''Book review: Let's learn shapes with Shapely-Cal,'' *Journal of Visual Impairment and Blindness*, vol. 92(4), pgs. 245–247, 1998). Tactile graphical information and spatial and geometric concepts are difficult to represent for persons who are blind. Converting pictures or signs into raised tactile form has proven to be costly and time-consuming (Horsfall, B., ''Photopolymers, computer-aided design, and tactile signs,'' *Journal of Visual Impairment and Blindness*, vol. 92(11), pgs. 823–826, 1998). Audio and audio-tactile methods of graphics presentation and spatial and geometric concepts may promote parity between individuals who are blind or visually impaired and others in a variety of environments including school, work, and recreation.

Priority 2

The Assistant Secretary will establish an RERC that will identify and develop technologies that will improve assessment of vision impairments and promote independence for individuals with low vision and blindness. The RERC must:

(1) Investigate, develop, and evaluate new assessment technologies and approaches that will identify and differentiate between vision and cognitive impairments in infants;

(2) Develop and evaluate new wayfinding technologies and approaches that can be used by persons with coexisting disabilities;

(3) Investigate, develop, and evaluate simple and practical vision screening and assessment technologies and approaches for identifying visual impairments associated with aging;

(4) Investigate, develop, and evaluate new technologies and approaches to facilitate face-to-face communication for individuals who are deaf-blind and methods that will enable individuals who are blind or deaf-blind to navigate and interpret graphical, spatial and geometric information;

(5) Investigate, develop, and evaluate new technologies and approaches that will assist individuals who are blind or visually impaired in vocational and daily living environments; and

(6) Develop and implement, in consultation with the NIDRR-funded RERC on Technology Transfer, a utilization plan for ensuring that all new and improved technologies developed by this RERC are successfully transferred to the marketplace.

In carrying out the above required activities, the RERC must:

- Develop and implement, during the first year of the grant and in consultation with the NIDRR-funded National Center for the Dissemination of Disability Research (NCDDR), a plan to effectively disseminate the RERC's research outcomes to all appropriate target audiences including: clinicians, engineers, manufacturers, individuals with disabilities, families, disability organizations, technology service providers, businesses, journals, organizations representing minorities and other underrepresented groups;
- In the third year of the grant, conduct a state-of-the-science conference on technologies for individuals with low vision and blindness and publish a comprehensive report in the fourth year of the grant;
- Collaborate on research projects of mutual interest with NIDRR-funded RERCs on Information Technology Access and Telecommunications Access, RRTCs on visual disabilities and appropriate professional organizations; and
- Address the needs of children with vision disabilities from minority backgrounds and cultures.

Priority 3: Technologies for Children with Orthopedic Disabilities

Background

It is estimated that 6 million children, age 18 and younger, in the United States have some type of disability. The prevalence of children with orthopedic impairments in the U.S., including paralysis and congenital anomalies, is roughly 420,000 (8.4 percent) (LaPlante, M. and Carlson, D., ''Disability in the United States: Prevalence and Causes,'' *1992 Report of the Disability Statistics Rehabilitation Research and Training Center,* NIDRR, U.S. Department of Education, 1995). The majority of these children are unable to perform a major activity or are limited in the amount or types of major activities, including education and play, they can perform (Wenger, B.L., Kaye, H.S. and LaPlante, M.P., ''Disabilities among children,'' *Disability Statistics Abstract* (No. 15), NIDRR, U.S. Department of Education, 1996). Children with disabilities present unique challenges for health care

professionals when compared to adults with similar disabilities. For example: children experience periods of accelerated growth affecting shape, strength and body alignment; their body sizes are disproportionate to adults, they are not scaled-down adults; they experience developmental stages that affect their fine and gross motor skills; their capabilities change as they mature and as they learn to control their bodies and their environment; and parental expectations about their child's disability can influence medical treatment and therapeutic interventions.

Chapter 5 of the Plan (64 FR 45766) discusses the importance of research and development activities that will enhance mobility and improve manipulation for individuals with orthopedic impairments. Children with orthopedic impairments present unique challenges for rehabilitation specialists. The technology to 'replace' a child's missing limb does not exist today. It is possible, however, to restore considerable function with a prosthesis. The usefulness of such a device depends largely upon its weight, how well it fits, how easy it is to control and its durability, reliability and aesthetics. Continual developmental changes, including physical, emotional, and social growth, make it difficult to fit a child with a prosthesis and to determine the most appropriate time for introducing a prosthesis to a child. For example, the importance of fitting a child early with a prosthesis is well cited. However, there continues to be discussion about which developmental milestones to consider when determining the most suitable prosthesis for a child (Patton, J.G., ''Development approach to pediatric upper-limb prosthetic training,'' *Atlas of Limb Prosthetics: Surgical, Prosthetic, and Rehabilitation Principles,* Mosby, St. Louis, pgs. 778–793, 1992).

In addition to congenital and acquired amputations there are other conditions that can cause orthopedic impairments in children. Cerebral palsy (CP) is a motor disorder originating from a central nervous system injury that occurs before, during or shortly after birth. Children under the age of five who sustain brain injuries are also classified as having CP. The disability ranks third among childhood disabilities (LaPlante, M.P., *Disability risks of chronic illness and impairments,* Disability Statistics Program, San Francisco, CA., 1989) and is the most common cause of paralysis in children (Wenger, B.L., Kaye, H.S. and LaPlante, M.P., op. cit., 1996). The reported prevalence of CP in the U.S. is two per thousand and the incidence is approximately one per thousand live births (Turk, M.A., ''Early development-related conditions,'' *Assessing Medical Rehabilitation Practices: The Promise of Outcomes Research,* Marcus J. Fuhrer, ed., pgs. 371–372, 1997). Individuals with CP typically have abnormal muscle tone, muscle weakness, primitive reflexes, or uncoordinated movements requiring seating and orthotic interventions for postural control and alignment (Cook, A.M. and Hussy, S.M., *Assistive Technologies: Principles and Practice,* Mosby, St. Louis, pg. 237, 1995). Spina bifida is a congenital anomaly in which the neural tube that forms the spinal cord does not fully develop, leading to a number of lower extremity problems, including muscle paralysis, hip dislocations, knee hypertension, and club feet. The reported incidence of spina bifida is between 0.5 and 1 per thousand (Turk, M.A., op. cit., pgs. 378–379, 1997).

The most common management strategy for motor impairments caused by cerebral palsy and spina bifida is developmental therapy (*i.e.,* physical, occupational, speech and language therapies). However, orthotics, specific spasticity-reducing regimens (Baclofen pumps, botulinum toxin injections), orthopedic surgery, and adaptive equipment also are used in intervention. Orthotics are used on both upper and lower extremities to improve function, to prevent or compensate for anomalies, and to control muscle weakness, spasticity and structural instability. Most orthotic devices (*e.g.,* ankle-foot orthoses) are designed to be rigid. Dynamic orthoses and splints for gait, spasticity and contracture management may have significant application.

Adaptive equipment is used to improve functional independence in mobility, self-care, communication, environmental control, and school activities. There is no definitive study on how to make the best choice among all the options or which improves function the most (Turk, M.A., op. cit., pg. 376, 1997).

Composite materials have much to offer in prosthetic and orthotic design. They are strong, lightweight, and durable. However, these materials require different and more costly manufacturing techniques than those used with traditional materials such as metal and thermoplastics. A problem associated with composite materials is that they are difficult to postform, a process whereby prosthetic or orthotic devices are adjusted slightly during final fittings (White, M., ''Development of an advanced lightweight composite orthosis,'' Presented at ASM International—Aeromat 1992, New Trends in Advanced Composites, Anaheim, CA., May 20, 1992).

Leisure time is critical to a child's well-being and development. Play is one means for children to master developmental tasks and learn important behavioral and social skills. The ability to interact effectively with the environment through play can affect a child's self-esteem, behavior, self-awareness, confidence, and competency (Masten, A.S., ''The development of competence in favorable and unfavorable environments: Lessons from research on successful children,'' *American Psychologist,* vol. 53, pgs. 205–220, 1998). Children with disabilities, including those with amputations, cerebral palsy and spina bifida, encounter many challenges in their attempts to engage in learning and play activities. Often sensory and motor impairments severely limit the degree to which they are able to negotiate their environment and interact with others. Facilitating play for these children involves adapting the environment and providing appropriate technologies that will enhance interactive play and social skill development. The product market is challenged to meet the demands of millions of children with disabilities and their families who need alternative strategies in order to engage in recreation and social activities.

Priority 3

The Assistant Secretary will establish a RERC on technologies for children with orthopedic disabilities to identify and develop technologies that will help children with orthopedic disabilities to overcome functional deficits and to support their ability to learn, play and interact socially. The RERC must:

(1) Develop and evaluate new, lightweight upper and lower limb prosthetic and orthotic devices for children;

(2) Investigate the use of dynamic orthoses for controlling spasticity and contractures for children with orthopedic impairments including those with cerebral palsy and spina bifida;

(3) Identify, develop, and evaluate models for determining when during children's development to introduce assistive technologies and prosthetic and orthotic devices;

(4) Investigate, develop, and evaluate technologies, and strategies for their use, that will enable young children, including children with cerebral palsy and spina bifida, to participate in interactive play and socialization activities; and

(5) Develop and implement, in consultation with the NIDRR-funded RERC on Technology Transfer, a

utilization plan for ensuring that all new and improved technologies developed by this RERC are successfully transferred to the marketplace.

In carrying out the above required activities, the RERC must:

- Develop and implement, during the first year of the grant and in consultation with the NIDRR-funded National Center for the Dissemination of Disability Research (NCDDR), a plan to effectively disseminate the RERC's research outcomes to all appropriate target audiences including: clinicians, engineers, manufacturers, individuals with disabilities, families, disability organizations, technology service providers, businesses, and journals;
- In the third year of the grant, conduct a state-of-the-science conference on technologies for children with orthopedic disabilities and publish a comprehensive report in the fourth year of the grant;
- Collaborate on research projects of mutual interest with the RERC on Prosthetics and Orthotics, the RERC on Wheeled Mobility, and the RRTC on Children with Special Health Care Needs; and
- Address the needs of children with orthopedic disabilities from minority backgrounds and cultures.

Final Additional Selection Criterion

The Assistant Secretary will use the selection criteria in 34 CFR 350.54 to evaluate applications under this program. The maximum score for all the criteria is 100 points; however, the Assistant Secretary also will use the following criterion so that up to an additional ten points may be earned by an applicant for a total possible score of 110 points:

Within these absolute priorities, we will give the following competitive preference to applications that are otherwise eligible for funding under these priorities:

Up to ten (10) points based on the extent to which an application includes effective strategies for employing and advancing in employment qualified individuals with disabilities in projects awarded under these absolute priorities. In determining the effectiveness of those strategies, we will consider the applicant's success, as described in the application, in employing and advancing in employment qualified individuals with disabilities in the project.

For purposes of this competitive preference, applicants can be awarded up to a total of 10 points in addition to those awarded under the published selection criteria for these priorities. That is, an applicant meeting this competitive preference could earn a maximum total of 110 points.

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Applicable Program Regulations: 34 CFR Part 350.

Program Authority: 29 U.S.C. 760–762.

(Catalog of Federal Domestic Assistance Number 84.133N, Model Spinal Cord Injury Centers and 84.133E, Rehabilitation Engineering Research Centers)

Dated: March 8, 2000.

Judith E. Heumann,

Assistant Secretary for Special Education and Rehabilitative Services.

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DEPARTMENT OF EDUCATION

[CFDA Nos.: 84.133N and 84.133E]

Office of Special Education and Rehabilitative Services, National Institute on Disability and Rehabilitation Research, Notice Inviting Applications for New Model Spinal Cord Injury Centers and New Rehabilitation Engineering Research Centers for Fiscal Year 2000

Note to Applicants: This notice is a complete application package. Together with the statute authorizing the programs and applicable regulations governing the programs, including the Education Department General Administrative Regulations (EDGAR), this notice contains information, application forms, and instructions needed to apply for a grant under these competitions.

These programs support the National Education Goal that calls for all Americans to possess the knowledge and skills necessary to compete in a global economy and exercise the rights and responsibilities of citizenship.

The estimated funding levels in this notice do not bind the Department of Education to make awards in any of these categories, or to any specific number of awards or funding levels, unless otherwise specified in statute.

Applicable Regulations: The Education Department General Administrative Regulations (EDGAR), 34 CFR Parts 74, 75, 77, 80, 81, 82, 85, and 86; Disability and Rehabilitation Research Projects and Centers—34 CFR Part 350, and the Notice of Final Priority published elsewhere in this issue of the **Federal Register**.

Rehabilitation Engineering Research Centers in Subpart D; and Disability and Rehabilitation Research Special Projects and Demonstrations for Model Spinal Cord Injury—34 CFR Part 359 and the Notice of Final Priorities published elsewhere in this issue of the **Federal Register**.

Pre-Application Meetings: Interested parties are invited to participate in a pre-application meeting to discuss the funding priority for a RERC on Low Vision and Blindness and a Technologies for Children with Orthopedic Disabilities and to receive technical assistance through individual consultation and information about the funding priorities. The pre-application meeting will be held on April 4, 2000.

A pre-application meeting for the Model Spinal Cord Injury Centers will be held on April 5, 2000 at the Department of Education, Office of Special Education and Rehabilitative Services, Switzer Building, Room 3065, 330 C St. SW, Washington, DC between 10:00 a.m. and 12:00 a.m. NIDRR staff will also be available at this location from 1:30 p.m. to 5:00 p.m. on that same day to provide technical assistance through individual consultation and information about the funding priorities. NIDRR will make alternate arrangements to accommodate interested parties who are unable to attend the pre-application meeting in person. For further information contact William Peterson, Switzer Building, room 3425, 400 Maryland Avenue, SW, Washington, DC 20202. Telephone (202) 205–9192, or Joel Myklebust, Switzer Building, room 3042, 400 Maryland Avenue, SW, Washington, DC 20202. Telephone (202) 401–2071. If you use a Telecommunication Device for the Deaf (TDD), you may call (202) 205–4475.

Assistance to Individuals With Disabilities at the Public Meetings

The meeting site is accessible to individuals with disabilities, and a sign