

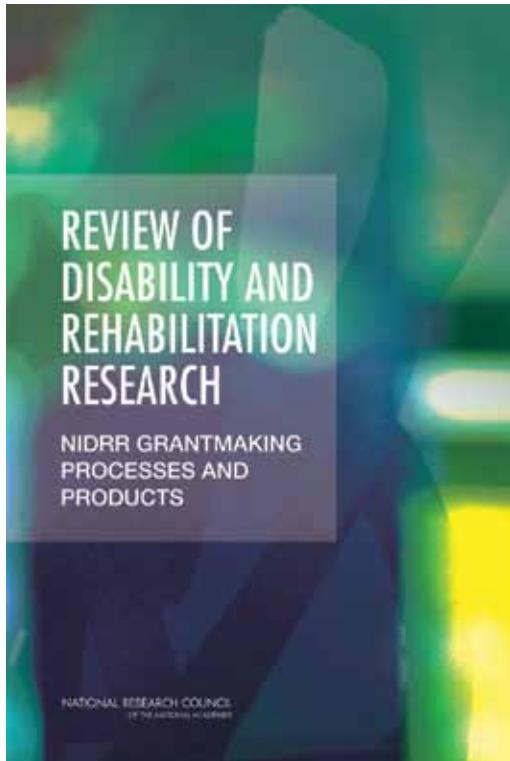
HUMAN-SYSTEMS INTEGRATION

AT THE NATIONAL RESEARCH COUNCIL
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REPORT BRIEF • FEBRUARY 2012
BOARD ON HUMAN-SYSTEMS INTEGRATION

REVIEW OF DISABILITY AND REHABILITATION RESEARCH:

NIDRR GRANTMAKING PROCESSES AND PRODUCTS



The National Institute on Disability and Rehabilitation Research (NIDRR) is a federal agency that supports research and development designed to improve the lives of persons with disabilities. The agency's mission is tied to improving long-term outcomes for these individuals in terms of independence, employment, and participation in their communities.

As part of an effort to assess and improve its performance, NIDRR asked the National Research Council to (1) evaluate the processes by which it establishes priorities and awards and monitors grants; and (2) examine the quality of the results of agency-funded research based on a sample of publications, devices, and other "outputs" produced by NIDRR grantees.

To conduct the evaluation, a 16-member committee appointed by the National Research Council reviewed legislation and NIDRR policies and procedures and interviewed the agency's managers. The committee also surveyed NIDRR staff, stakeholder organizations, principal investigators, and peer reviewers. In addition, the committee reviewed a sample of outputs from 30 grantees funded through a variety of NIDRR's program mechanisms.

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IMPROVING NIDRR'S GRANTMAKING PROCESS

Long-Range Planning and Priority Setting

The committee found that NIDRR's priority-setting and long-range planning processes are successful in producing grants aligned with the agency's mission. However, NIDRR should do more to engage its stakeholders—persons with disabilities and their families, scientists, federal agencies, professional associations, and advocacy organizations—in long-range planning and priority setting, and the agency should make these processes more systematic and transparent. In addition, once NIDRR has identified its priorities, it should communicate them to the research community in a way that attracts a larger pool of the best scientists to conduct disability and rehabilitation research.

Among the specific steps, the committee recommends the following:

- NIDRR should form an advisory council, as it has been mandated to do, to provide the agency with advice as it sets priorities for research and development. A standing advisory group is likely to add stability and continuity to the agency's long-range planning and priority setting.
- The agency should use a structured, consistent process to develop its long-range plans and priorities. This process should include a regular mechanism for incorporating input from stakeholders.
- Standard calendars should be established for setting priorities, publishing notices inviting applications for grants, and holding peer review meetings.
- NIDRR should expand its efforts to disseminate notices about available grants and should develop a communication strategy to ensure that the notices reach new audiences of researchers.

Peer Review

Panels of experts review applications for grants to help NIDRR determine which applications are strongest and aligned with the agency's priorities. Although NIDRR's peer review process is generally good, the committee identified important opportunities to improve the process:

- NIDRR should expand the pool of high-quality reviewers and establish standing panels or formal "cohorts" of reviewers with specialized expertise instead of forming new panels for each review.
- The peer review process should be streamlined to reduce the burden on reviewers, which would make it easier to attract high-quality reviewers.
- NIDRR should continue to have consumers—persons with disabilities or their representatives—among its peer reviewers. The agency should establish procedures to guide the participation of those without scientific expertise.

Grant Management

The report examines how grantees plan and budget for their research and the way NIDRR oversees the implementation of its grants. The agency appears to have a good plan for upgrading its routine monitoring of grants and for identifying those at risk of noncompliance with agency requirements or performance expectations. In addition, grantees generally commented that NIDRR's processes helped them facilitate the management of their grants.

However, grantees expressed a need for greater flexibility in managing certain types of grants, since some of them focus on developing technology innovations that may not lend themselves to strict up-front planning or timelines. Similarly, large, multisite studies may not follow the standard template and might require more or different supervision, monitoring, or technical assistance. For their part, NIDRR staff expressed the need for smaller caseloads, more training for new project officers, and additional travel funds for on-site monitoring of grants that need higher levels of technical assistance.

The committee recommends the following steps to strengthen grant management:

- NIDRR should continue its ongoing efforts to improve grant monitoring procedures, especially the elements that affect grantee-level planning and budgets, and the quality of the research results.
- The agency should review the requirements placed on technical innovation grants and large multisite studies to ensure that planning, reporting, and other requirements fit the studies' particular circumstances.

ENSURING THE QUALITY OF RESEARCH OUTPUTS

The National Research Council was also asked to assess the quality of the outputs of NIDRR-funded research from four categories: publications, technology products and devices, new tools and measures, and informational products.

One challenge faced by the committee was developing a set of criteria for assessing quality that could appropriately be applied across a diverse range of outputs. Criteria were established in four domains of quality: technical quality, advancement of knowledge or the field, likely or demonstrated impact, and appropriate dissemination. Outputs were rated on each of the four quality criteria and were

assigned an overall score. In each of these domains, about 75 percent of the reviewed outputs received scores in the "good to excellent" range, while about 25 percent fell in the lower-quality range.

NIDRR should take the following steps to strengthen the quality of outputs:

- The agency should make it clear that it expects all of its grantees to produce the highest-quality outputs. As one indicator of higher quality, the agency should establish clear expectations for grantees to publish in high-impact journals. For outputs other than publications, the agency should establish quality standards and appropriate metrics to gauge adherence to them.
- As one part of performance measurement, NIDRR should consider undertaking routine bibliometric analyses of its grantees' publications. These metrics could provide indicators of the scientific impact of publications and the extent to which research results are being disseminated and used.

In conclusion, NIDRR grants have produced valuable research, tools, and other products for advancing the field of disability and rehabilitation research. However, the agency could further improve its processes and strengthen the quality of research results.

RESOURCES ON DISABILITY AND REHABILITATION RESEARCH

More information on disability and rehabilitation research is available at the following websites:

National Institute on Disability and Rehabilitation Research:

<http://www2.ed.gov/about/offices/list/osers/nidrr/index.html>

National Rehabilitation Information Center:

<http://www.naric.com>

Disability Statistics:

<http://www.disabilitystatistics.org>

National Center for the Dissemination of Disability Research:

<http://www.ncddr.org>

National Center for Medical Rehabilitation Research:

<http://www.nichd.nih.gov/about/org/ncmrr>

Veterans Administration Rehabilitation Research and Development Service:

<http://www.rehab.research.va.gov>

COMMITTEE ON THE EXTERNAL EVALUATION OF NIDRR AND ITS GRANTEES

David H. Wegman (*Chair*), Department of Work Environment, University of Massachusetts, Lowell (*Emeritus*); **Thomas J. Armstrong**, Center for Ergonomics, University of Michigan; **Burt S. Barnow**, Trachtenberg School of Public Policy and Public Administration, George Washington University; **Leighton Chan**, Rehabilitation Medicine Department, Clinical Center, National Institutes of Health; **Peter C. Esselman**, Department of Rehabilitation Medicine, University of Washington, Seattle; **Walter R. Frontera**, University of Puerto Rico, School of Medicine; **Glenn T. Fujiura**, Department of Disability and Human Development, University of Illinois at Chicago; **Bruce M. Gans**, Kessler Institute for Rehabilitation, West Orange, New Jersey; **Ian D. Graham**, Knowledge Translation, Canadian Institutes of Health Research; **Lisa I. Iezzoni**, Mongan Institute for Health Policy, Massachusetts General Hospital, Boston; **Alan M. Jette**, School of Public Health, Boston University; **Thubi H.A. Kolobe**, Department of Rehabilitation Sciences, University of Oklahoma Health Sciences Center; **Pamela Loprest**, Urban Institute, Washington, D.C.; **Kathryn E. Newcomer**, Trachtenberg School of Public Policy and Public Administration, George Washington University; **Patricia M. Owens**, Government Accountability Office, Minisink Hills, Pennsylvania; **Robert G. Radwin**, Department of Biomedical Engineering, University of Wisconsin.

NATIONAL RESEARCH COUNCIL STAFF

Jeanne C. Rivard, Co-Study Director (from September 2010); **Mary Ellen O'Connell**, Co-Study Director (from September 2010); **Molly Follette Story**, Study Director (through September 2010); **Laudan Y. Aron**, Senior Program Officer (until April 2010); **Tina Winters**, Associate Program Officer; **Matthew D. McDonough**, Research Associate; **Mary Beth Ficklin**, Research Associate; **Eric Chen**, Senior Program Assistant; **Gary Fischer**, Senior Program Assistant; **Jatryce Jackson**, Senior Program Assistant.

For More Information . . . This brief was prepared by the Board on Human-Systems Integration (BOHSI) based on the report *Review of Disability and Rehabilitation Research: NIDRR Grantmaking Processes and Products* (National Research Council, 2012), which was overseen by BOHSI. The study was sponsored by the National Institute on Disability and Rehabilitation Research, Office of Special Education and Rehabilitative Services, U.S. Department of Education. Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the authors and do not reflect those of the Department of Education. Copies of the report are available from the National Academies Press, 500 Fifth Street, NW, Washington, DC 20001; (800) 624-6242; <http://www.nap.edu> or via the BOHSI web page <http://www.nationalacademies.org/bohsı>.

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