Langston University Rehabilitation Research and Training Center (LU-RRTC) on Research and Capacity Building for Minority Entities NIDILRR Grant-Writing Resource Guide

Langston University
6700 N. Martin Luther King Ave.
Oklahoma City, OK. 73111
Office Number: 405.530.7524
Toll Free Number: 1-855-497-5598
Email: capacitybuildingrrtc@langston.edu

Principal Investigator: Dr. Corey L. Moore
Email: clmoore@langston.edu

LANGSTON
UNIVERSITY

Langston • Tulsa • Oklahoma City
Rehabilitation Research and Training Center (RRTC)
on Research and Capacity Building for Minority Entities
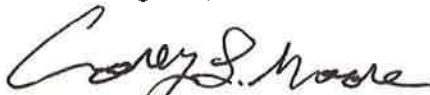
Dear Fellows and Trainees,

The Langston University RRTC (LU-RRTC) on Research and Capacity Building for Minority Entities is pleased to provide you with a copy of the "NIDILRR Grant-Writing Resource Guide", a supplemental module of our introductory "Grant Writing Seminar- 101". This resource is intended to better equip novice and seasoned grant writers at various stages of research methods and grant writing skills development to apply for NIDILRR research and/or development grants. The tool kit includes information pertinent to NIDILRR's new Long-Range Plan (2018-2023), the agency's funding forecast listing under Grants.gov website, previous requests for proposals (RFPs) under its Field Initiated Projects (FIP)-MSI and Switzer Fellowship program, grant outcome sample publications/resources, Section 21 policy information, sample technical review resources, etc.

The guide's intent supports the LU-RRTC's overall minority-serving institution research capacity building mission, and will hopefully serve as a resource that you can use to "get a head start" in developing your grant proposals that will be submitted to NIDILRR grant competitions: (1) FIP-MSI: Research, (2) FIP-MSI: Development, (3) FIP: General Competition [Research], (4) FIP: General Competition [Development], and (5) Switzer Research Fellowship Program. We hope that you find the guide useful in your grant writing endeavors and encourage you to stay connected to the LU-RRTC as a key research skill development resource. We want our Center to remain your first choice for requesting the kind of technical assistance, mentorship, and support that you and/or your institution may need to grow as producers of disability, rehabilitation, independent living and health research and technological innovation aimed at improving the lives of individuals living with disabilities.

We wish you much success as you persevere in your scholarly endeavors. If we can be of assistance, please do not hesitate to contact me directly via telephone at (405) 530-7530 or via email: corey.moore@langston.edu/ capacitybuildingrrtc@langston.edu. Technical assistance requests can also be made through our website's Technical Assistance Request portal: www. Langston.edu/capacitybuilding-RRTC.

Best Regards,

Corey L. Moore, Rh.D.
Principal Investigator and Research Director

FIND THE LION IN YOU

Table of Contents

LU-RRTC on Research and Capacity Building for Minority Entities NIDILRR Grant-Writing Resource Guide

About NIDILRR & LRP
2018-2023

National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR)

2018-2023 Long-Range Plan

ACL
Administration for Community Living

Introduction

The Rehabilitation Act of 1973 states that "disability is a natural part of the human experience and in no way diminishes the right of individuals to live independently, enjoy self-determination, make choices, contribute to society, pursue meaningful careers, and enjoy full inclusion and integration in the economic, political, social, cultural, and educational mainstream of American society." This view of disability guides the National Institute on Disability, Independent Living, and Rehabilitation Research's (NIDILRR) work.

NIDILRR's 2018-2023 Long-Range Plan (the Plan) presents a five-year agenda that will advance the vital work being done in applied disability, independent living, and rehabilitation research.[1] NIDILRR intends for this plan to emphasize consumer relevance and scientific rigor, to present an agenda that is scientifically sound and accountable and, as a result, to contribute to the refinement of national policy affecting people with disabilities.

The Plan builds on the work of the 2013–2017 Long-Range Plan while responding to new developments in the disability, independent living, and rehabilitation research field and in government. Both plans stress the importance of NIDILRR's significant role as a research institute in the public interest, carrying out a scientific research agenda to meet the diverse needs of people with disabilities.

The Plan extends NIDILRR's emphasis on the major outcome domains of community living and participation, health and function, and employment. NIDILRR measures contributions toward improved outcomes in these domains by systematically tracking the outputs and outcomes of grantees, including the new knowledge and products that they have created. NIDILRR measures long-term outcomes by assessing the extent to which this research-based knowledge is used to create new programs, policies, or practices to improve services and supports for people with disabilities. NIDILRR grantees regularly produce the following kinds of outputs based on their research activities including, but not limited to: peer-reviewed publications, research-based fact sheets, tools, measures, intervention protocols, technology products and devices, industry standards and guidelines, and patents. The results of this research are shared through mechanisms such as knowledge translation, technology transfer, training, and technical assistance. These mechanisms are supported by our statutes, regulations, and funding opportunity announcements (FOAs).

The Plan also reinforces the need for investment in three areas that support outcomes across these domains: technology for access and function; disability statistics; and a nationwide network of technical assistance, training, and research centers to support implementation of the Americans with Disabilities Act (ADA). Activities that promote the quality and use of NIDILRR-

---

[1] Throughout the plan, NIDILRR's use of the term "research" includes both research and development activities unless otherwise specified. According to NIDILRR's program regulations (45 CFR Part 1330), NIDILRR grantees carrying out development activities must create—using knowledge and understanding gained from research—models, methods, tools, systems, materials, devices, applications, or standards that are adopted by and beneficial to the target populations (45 CFR 1330.10(b)).

sponsored research—capacity building and knowledge translation—will also continue under the Plan.

This Plan will guide NIDILRR's upcoming research agenda, based on two overarching principles that guide our past, present, and prospective sponsorship of efforts to improve the community living and participation of people with disabilities:

1) The ultimate aim of all NIDILRR research is to enhance the ability of people with disabilities to achieve inclusion and integration into society; and

2) NIDILRR has a legacy and future as a primary funder of rigorous and relevant disability, independent living, and rehabilitation research, recognizing that this spans the continuum from acute settings into home- and community-based services (HCBS) and competitive-employment environments.

Background

In developing the Plan, NIDILRR solicited written comments and public testimony at six in-person regional listening sessions to better understand the experiences and perspectives of people with disabilities, the providers who serve them, caregivers and other support system members (both formal and informal), policymakers, and academic researchers. Hundreds participated in the sessions. Feedback was diverse and often passionate. A number of themes emerged:

- **People with disabilities have high expectations for themselves and the services and supports they receive to achieve their personal goals.** In a post-ADA and post-Olmstead (*Olmstead v. L.C. and E.W.*) decision world, people with disabilities of all ages want to lead active lives in the community and access the same things as their able-bodied peers: a good job, friends, and a social life. They need consistent, high-quality services to accomplish these goals. There is frustration with the lack of information regarding the quality of services available from local providers.

- **Choice and control matters.** Whether it is access to affordable and accessible housing or a ride to the doctor's office, people with disabilities want meaningful choices that respect their desire for safety and security and the value of their time. This is consistent with the trend toward person-centered planning, which prioritizes the goals and wishes of the end user of goods and services rather than the choices offered by a provider or care planner.

- **The current environment of fiscal austerity is negatively impacting people with disabilities and the providers that serve them.** Many states are facing budget deficits even as the economy has rebounded. In this environment of retrenchment, hard-fought gains to improve access to needed services are perceived to be threatened. This was most acutely felt in the area of caregiver support and availability, a key facilitator of community participation and inclusion. Stakeholders also cited reimbursement rates paid to provider agencies and the inability to provide competitive wages for their workforce. Waiting lists for Medicaid-funded

services were also described.

- **The health care system is rapidly changing, getting more complicated, and not always meeting defined needs.** This was noted not just for medical and clinical services, but also for long-term services and supports (LTSS) that are provided in the community. People with disabilities reported feeling overwhelmed and confused by these changes and frustrated that the changes provide treatment for their episodic sickness and symptoms rather than proactively managing their wellness and stability of health. Caregiver shortages and quality issues were of particular concern.

- **Access to technology would make life better.** People with disabilities described frustrations with their inability to gain access to cell phones, durable medical equipment, and assistive technology. They noted that poverty, lack of existing sources of reimbursement, and policy challenges were barriers to access.

- **What works and what doesn't?** All stakeholders were interested in research that showed promising or best practices that could be used in their local communities. Some specifically requested information in a form that is easy to understand. This knowledge translation function is one NIDILRR has devoted increased resources toward since implementation of the previous Long-Range Plan.

Taken together, the feedback received is consistent with findings from the existing research literature. People with disabilities of all ages want to live successfully in the community, with access to the tools and supports they need to lead productive and meaningful lives. Respondents paid specific attention to the areas of employment, housing, health, and transportation and their effects on community participation.

Mission

NIDILRR's mission is to generate new knowledge and promote its effective use to maximize the full inclusion and integration into society, employment, independent living, family support, and economic and social self-sufficiency of individuals with disabilities of all ages.

NIDILRR is governed by the definitions in Title II of the Rehabilitation Act (the Act). Title II describes a person with a disability as: "any person who (i) has a physical or mental impairment which substantially limits one or more of such person's major life activities; (ii) has a record of such an impairment; or (iii) is regarded as having such an impairment."

NIDILRR is required to focus the research it sponsors on the experiences and needs of individuals with the most significant disabilities, as defined in the Act. NIDILRR focuses on individuals across the age continuum, including all disability subpopulations: developmental, cognitive, sensory, psychiatric, and physical.

State of People with Disabilities in the U.S.

People with disabilities, especially those living with significant disabilities, often face barriers that complicate the simple goal of leading a productive life in the community of one's choosing. While some require little or no assistance to achieve this, others require a complex array of services and supports to facilitate social inclusion and participation.

Despite multiple challenges and the often tenuous nature of multiple supports that function in concert to facilitate optimal community living needs of people with disabilities, many people across the United States are thriving. Public testimony and written comments received by NIDILRR indicate that significant progress has been made to support the principles of integration and community living first outlined in the Rehabilitation Act and reinforced by the ADA and the 1999 Olmstead decision. At the same time, not all people with disabilities have access to necessary supports and services. Successful community living can depend on geographic location and disability subpopulation. Interventions span multiple policy areas and governing jurisdictions, each with their own eligibility requirements and procedures.

Improved research-informed policies and interventions in these critical areas would help support improved outcomes for people with disabilities in NIDILRR's three inter-related domains: health and function, employment, and community living and participation.

Agency Context

The Workforce Innovation and Opportunity Act of 2014 (WIOA) transferred NIDILRR to the U.S. Department of Health and Human Services (HHS) from the U.S. Department of Education. Specifically, NIDILRR became a part of the Administration for Community Living (ACL), whose mission is to maximize the independence, well-being, and health of older adults, people with disabilities across the lifespan, and their families and caregivers. Created in 2012, ACL combined the Administration on Aging, the Office on Disability, and the Administration on Intellectual and Developmental Disabilities to create a single agency charged with developing policies and improving supports for older adults and people with disabilities. NIDILRR's addition brought research capacity and competency to a strong policy, program, and services organization. NIDILRR has established collaborations within ACL on topics such as traumatic brain injury and remains committed to exploring collaborative opportunities with Federal and state partners.

WIOA made changes to the NIDILRR statute but did not detract from or remove any responsibilities or program authorities. It did add the words "independent living" to the NIDILRR name, stressing a key philosophy that has long been an organizational priority and is an integral part of the ACL mission. Ultimately, active community living and meaningful social participation for individuals with disabilities is the desired goal and outcome of the research initiatives that NIDILRR sponsors.

Federal Research Planning

While NIDILRR is one of several Federal agencies conducting research on behalf of people with disabilities, it is unique in conducting applied research. Other agencies include the National Institutes of Health (and within it, the National Institute on Aging, the Eunice Kennedy Shriver National Institute of Child Health and Human Development and its National Center on Medical Rehabilitation Research (NCMRR), and the National Institute of Mental Health), the Substance Abuse and Mental Health Services Administration (SAMHSA), the U.S. Department of Defense, the National Center for Special Education Research, and the U.S. Department of Veterans Affairs. Additionally, the Interagency Committee on Disability Research (ICDR), currently chaired by the NIDILRR director, is charged with coordinating disability research across the Federal government. The Plan acknowledges recent strategic planning processes conducted by the ICDR and NCMRR. NIDILRR has also worked with the U.S. Department of Transportation in research efforts to develop new transportation options for people with disabilities.

NIDILRR has a history of formal interagency agreements, where common interests across agencies have resulted in numerous combined funding opportunities. SAMHSA, for example, has partnered with NIDILRR for more than three decades to advance the mental health and community living outcomes of people with disabilities. Similar arrangements have existed with the VA and DOD. These arrangements are not just desirable, but are required by the Rehabilitation Act:

> In order to promote cooperation among Federal departments and agencies conducting research programs, the [NIDILRR] Director shall consult with the administrators of such programs, and with the [ICDR], regarding the design of research projects conducted by such entities and the results and applications of such research. 29 U.S.C. §762 (i)

> The [NIDILRR] Director shall take appropriate actions to provide for a comprehensive and coordinated research program under this subchapter. In providing such a program, the [NIDILRR] Director may undertake joint activities with other Federal entities engaged in research and with appropriate private entities. 29 U.S.C. §762 (j)

Key Accomplishments of NIDILRR Grantees Since Last Long-Range Plan

Since the publication of NIDILRR's Long-Range Plan for 2013–2017, there has been a concerted effort by NIDILRR to increase the number of field-initiated research opportunities. Such opportunities allow researchers to propose innovative research projects to promote improved outcomes among people with disabilities in the broad outcome domains of community living and participation, employment, and health and function. The field-initiated grant opportunities, along with NIDILRR's sponsorship of the development and dissemination of new knowledge and innovative technological devices, prototypes, measurement tools, intervention materials, and other informational products to enhance community living, have resulted in more than 1,200 products, including peer-reviewed publications, intervention protocols, software, and databases that may be used to enhance the community living opportunities of people with disabilities.

NIDILRR has also established requirements for applicants to define progress along a series of stages. This requirement is designed to help applicants refine their rationale for proposed research or development and to help ensure that the knowledge or products generated will contribute to improved outcomes for people with disabilities. This requirement also helps NIDILRR monitor the progress of research initiatives.

I.   Research Agenda

Overview

NIDILRR's research programs have long been aimed at improving outcomes of people with disabilities in the three inter-related domains of: (1) community living and participation, (2) health and function, and (3) employment. Its research agenda for the next five years involves building on current investments and moving them along the stages of research and development while also initiating new research in developing fields. As a component of this, NIDILRR will sponsor translational research to expand the utility of existing evidence-based programs and practices by adapting them for different populations of people with disabilities and the environments in which they live. Research activities will be aligned with the three outcome domains, with each supporting NIDILRR's ultimate goal of enhancing the ability of people with disabilities to achieve their maximum desired participation in the community, with full access to all societal and life activities.

During the next five years, NIDILRR plans to carry out a research agenda that includes three important factors: (1) building on current investments through our stages of research and development, with the goal of both developing new interventions and moving existing findings into evidence-based programs, practices, and policies for people with disabilities; (2) taking advantage of the expertise of our colleagues in ACL to expand our research on issues of aging and disability and community living—viewing aging as a cross-cutting research area relevant to community living and participation, health and function, and employment; and (3) conducting research on health policy issues to inform the national agenda.

It is also NIDILRR's expectation that projects that receive NIDILRR funds will involve people with disabilities in research activities to help ensure that the perspective of the end users is taken into consideration. NIDILRR believes that this input is essential to ensure that the knowledge and products are useful in addressing real issues faced by people with disabilities.

Finally, NIDILRR is interested in research that expands the integration of person-centered planning into decisions affecting people with disabilities. While there have been many small studies of the impact of individual preference in decisions about rehabilitation and other interventions, there remains a need to expand current knowledge by supporting more evidence-generating research for effective implementation of this approach across community, medical, and vocational settings.

Community Living and Participation Domain

While the three outcome domains contain equally important and rich areas of research investment, the domain of community living and participation is the ultimate outcome of all of NIDILRR's research, development, capacity building, and knowledge translation grants. NIDILRR sponsors research on health care and rehabilitation not just to improve health and functional abilities, but because improved health and function allows people with disabilities to be more active and engaged in their communities and families. It sponsors research on employment not just to generate new knowledge that can be used to close the large employment gap between those with and without disabilities, but because employment provides income and the financial means for people with disabilities to have real choices about how they engage and participate in their communities.

While the U.S. continues to create opportunities for integration and inclusion of people with disabilities through implementation of the ADA and the Supreme Court's Olmstead decision, people with disabilities of all ages continue to experience significant barriers to living in the community and participating in typical educational, employment, recreational, civic, and social activities. People with disabilities, especially those with more significant disabilities, report feeling socially isolated and lonely in their communities. They are less satisfied with their community participation than their counterparts without disabilities and participate in fewer community activities than their counterparts without disabilities. Barriers to community living and participation include, but are not limited to, insufficient home- and community-based LTSS, shortages of affordable and accessible housing, inadequate transportation services, and inaccessible built and natural environments.

NIDILRR seeks to improve community living outcomes among people with disabilities by sponsoring research to improve our knowledge of a wide variety of factors that promote or hinder community living. NIDILRR and its grantees will then apply this new knowledge toward improved policies, practices, services, and supports that promote improved community living outcomes for people with disabilities.

Context for Research on Community Living and Participation

NIDILRR's sponsored research in the community living and participation domain is motivated by its statutory mandate to improve community living outcomes for people with disabilities. NIDILRR's research in the community living and participation domain will continue to be influenced and guided by the Act's ultimate aim of full integration for people with disabilities and by the integration mandate that is central to the ADA and the Olmstead decision.

For more than 20 years, the U.S. has been actively shifting its provision of LTSS for people with disabilities into the community and away from institutional settings such as nursing homes. In 1995, fewer than 20 percent of Medicaid LTSS dollars were spent on services and supports in home- and community-based settings. In 2013, that percentage had expanded to more than 50 percent for the first time, and the figure currently rests at approximately 53 percent. The Centers

for Medicare and Medicaid Services (CMS) project the continued growth of home- and community-based LTSS, with expenditures for such services to reach 63 percent of all Medicaid LTSS expenditures by the year 2020. As more people with significant disabilities live in and receive services and supports in the community, new research-based knowledge about individual- and system-level factors that impact community living outcomes is needed to guide and shape the provision of those services.

Proposed New Community Living and Participation Research Agenda

NIDILRR supports the development of new knowledge and products that can be used to increase community living and participation among people with disabilities. It will build upon current and prior investments in this domain, coordinating with its partners in ACL, other HHS components, and the broader Federal government, whenever possible. Given NIDILRR's prior investments and the ongoing U.S. aim of expanding home- and community-based LTSS for people with disabilities, the areas of potential investment include:

- **Community living and participation measurement.** Sponsoring the development, validation, and use of measures of community living and participation among people with disabilities. NIDILRR considers these tools to be critical infrastructure for research that can be used to improve services and supports for, and outcomes of, people with disabilities. With the expansion of home- and community-based LTSS to people with a broad range of disabilities, the need for valid and reliable tools to measure the quality and the ultimate outcomes of these services is growing.

- **Transportation access.** Funding research activities to create knowledge and products that improve access to transportation for people with disabilities. This work may include research activities to support the development of standards for the accessibility and usability of autonomous vehicles for people with disabilities as well as enhanced standards for accessibility and usability of paratransit vehicles, taxis, and emerging ride-share services. These investments may also include research toward reducing the most common transportation barriers experienced by people with disabilities—which occur in the first and last miles of their trip—as well as ensuring that existing and emerging transportation modes, technologies, and infrastructures are accessible, useful, available, and affordable to people with disabilities.

- **Family caregivers.** Sponsoring the development and implementation of a research agenda on family caregivers of people with disabilities. Research in this area can be used to promote the community living outcomes of people with disabilities by better understanding and providing for the economic, social, and health-related well-being of their family caregivers.

- **Community access.** Supporting: (1) research on specific unmet needs for services and supports among people with disabilities who are living in the community, (2) research on promising practices for delivering such services and supports, and (3) development of an evidence base needed for existing services and supports. As opportunities to receive home-

and community-based LTSS expand to new jurisdictions and populations of people with disabilities, there will be an ongoing need to systematically track and understand communities' capacity to provide those services and supports in a way that promotes community living.

- **Accessible homes**. Sponsoring research on ways to promote the accessibility, usability, and visitability of homes for people with disabilities. This research work may include applications of universal design principles to living spaces as well as research toward the development of policies, practices, programs, and incentives to promote accessibility and visitability features in new home construction and home additions.

Health and Function Domain

NIDILRR's focus on health and function stems from its founding as a rehabilitation research agency aimed at developing an evidence base for interventions that maximize independence of people with disabilities. People with disabilities are significantly more likely than individuals without disabilities to be in fair or poor health and to experience a wide variety of diseases and chronic conditions. Health risks vary by condition or type of impairment. For example, individuals with significant vision loss or with an intellectual disability have a greater prevalence of obesity, hypertension, and heart disease than people without disabilities. Such risks often have major adverse health outcomes, including reduced longevity. It is estimated that people with serious mental illness die 10 years earlier than people in the general population due to preventable or treatable chronic diseases. Despite their substantial health needs and elevated risk of adverse health outcomes, people with disabilities experience significant health disparities attributable to poor access to needed health care services.

In addition to having a greater likelihood of being in poor health, people with disabilities experience a wide range of functional limitations that jeopardize their access to employment and other forms of community participation. According to the U.S. Census Bureau, five million adults need assistance from another person to perform one or more activities of daily living, such as getting around inside the home, getting into or out of bed, bathing, dressing, eating, and toileting. Approximately 15 million people have difficulty with one or more instrumental activities of daily living, such as going outside the home, managing money, preparing meals, doing housework, taking prescription medication, and using the phone.

Many individuals with disabilities who possess significant health conditions and functional limitations lack adequate access to health care, personal assistance services, and rehabilitation services. Maximizing the health and function of people with disabilities is critical to their general well-being and their fulfillment of personal aspirations in areas such as employment and community participation. As the number of people with disabilities in the U.S. continues to grow, it is necessary to improve the nation's capacity to meet their needs and access their talents. This will require the development of new and improved rehabilitation strategies and refinement of policies, programs, practices, and technologies that reduce functional limitations and improve health outcomes.

Context for Research on Health and Function

The context for NIDILRR's work in the area of health and function includes its historic role as the principal Federal funder of disability and rehabilitation research. During the period of the last Long-Range Plan, NIDILRR leveraged this position to collaborate with centers within the National Institutes of Health, the Center for Mental Health Services, the Centers for Disease Control and Prevention (CDC), and the VA, among others. For example, most recently, NIDILRR has been a partner in the development of the National Research Action Plan on post-traumatic stress disorder, other mental health conditions, and traumatic brain injury (TBI). This plan is part of a White House initiative designed, among other goals, to "improve the coordination of agency research on these conditions."

NIDILRR's move to ACL has created opportunities for new or expanded research, particularly in the area of aging with long-term disability. ACL provides improved access to service delivery programs that can serve as sites for testing new research-based interventions. Pending changes in how health care, rehabilitation, and social services are implemented, there may be new opportunities for examining access to services and the impact on health and function outcomes of people with disabilities.

Proposed New Health and Function Research Agenda

NIDILRR anticipates continuing to fund research related to rehabilitation interventions and access to rehabilitation and other health care services by people with disabilities. Areas of potential investment include:

- **Aging with and into disability**. Refers to individuals who experience the onset of a disability in early to mid-life as well as individuals for whom aging results in disabilities. NIDILRR's research agenda will emphasize the development of a continuum of promising and evidence-based practices to promote health, support participation, and improve services for the growing population of people who are aging with and into disability. Examples include:

  - Research that results in a portfolio of evidence-based practice and programs that are effective in moderating the negative consequences of aging with and into disability on health, function, participation, and community living.

  - Collaborations that bring together researchers, practitioners, policymakers, and individuals aging with and into disability and their advocates to generate new knowledge that promotes and facilitates the common interests of affordable health care, LTSS, and assistive technologies.

  - Development of analytic models and techniques to examine the differential effects of chronological age, age of onset, and duration of disability on the health and well-being of adults with long-term disability and aging with disability.

- **Development of interventions that improve health and function outcomes.** Develop treatments and other interventions that help improve health and function outcomes for people with disabilities. As people with disabilities rely more on HCBS as a vehicle for maintaining health, minimizing re-hospitalizations, and maximizing community living outcomes, research that investigates the relationship among these services, interventions, and health and function outcomes is also needed. Intervention studies focused on mental health, substance abuse, suicide, and obesity are examples of areas of concern for people with disabilities. These investments toward evidence-based interventions to promote health and function outcomes will take place in NIDILRR's long-standing Model Systems programs as well as other programs and grant mechanisms.

- **Implementation of existing evidence-based practices.** Move proven practices into broader settings that can directly benefit people with disabilities. To do this, NIDILRR proposes to support competitions that build on prior investments that resulted in evidence of efficacy and effectiveness. These competitions will provide funding for further development and testing of practices and interventions in additional settings or among new populations of people with disabilities. These translational research efforts may help develop practical strategies for ensuring more widespread use of new evidence-based findings in the area of disability and rehabilitation research.

- **Policy impacts on access to health care services and outcomes.** Continue research on the impact of health care policy on access to and outcomes of needed health care, rehabilitation, and long-term community supports among people with disabilities. NIDILRR will build on existing research initiatives to determine how policy changes impact the ability of people with disabilities to obtain needed rehabilitation and other health care services and what changes to morbidity, mortality, and independent living are associated with these changes.

Employment Domain

For many people with disabilities, employment is a significant component of community living and participation. It provides income and the opportunity to engage in meaningful, productive activity. In addition, it may enable people with disabilities to reduce their dependence on public benefits.

Employment research funded by NIDILRR is motivated by the need to improve employment outcomes, broadly defined, for people with disabilities. Areas of focus have included improving our understanding of the effects of public policy on the employment and financial well-being of people with disabilities, informing the development of improved policies that support employment for people with disabilities, developing interventions to improve employer practices, and developing employment-related services and supports that maximize employment outcomes.

Context for Research on Employment

The current disability employment environment has been shaped by a number of recent events,

including the Great Recession (2007–2009) and recent changes in legislation and public policy, programs, and services. The research context includes:

- **Great Recession.** Decreased employment rates for U.S. workers with and without disabilities. Since 2010, employment rates for people with disabilities have recovered more slowly than those for people without disabilities.

- **WIOA.** Includes a number of points relevant to people with disabilities including: competitive integrated employment as a preferred employment outcome; transition to employment for students and young adults; use of evidence-based practices in employment and training programs; limitations on sub-minimum wage employment for people with disabilities; required coordination between state vocational rehabilitaion, Medicaid, and Intellectual and Developmental Disability agencies; supports and services to facilitate the transition of people from nursing homes and other institutions to home- and community-based residences; and new definitions of customized and supported employment.

- **Legislation designed to improve employer practices.** The employment gap between people with and without disabilities is due, at least in part, to employer practices. The gap remains despite more recent actions (e.g., sections 501, 503, 504, and 508 of the Rehabilitation Act, Executive Orders 11478, 13160) to eliminate disability-related discrimination in the workplace.

- **Disincentives to employment.** Being a beneficiary of publicly funded programs (e.g., Supplemental Security Income, Social Security Disability Insurance) can serve as a disincentive to employment. Workers who no longer receive such benefits may have insufficient earnings to avoid economic insecurity or poverty. Health care reform, as well as reforms in Social Security programs, could also affect employment outcomes for people with disabilities.
- **Vocational Rehabilitation programs.** Services and supports to help people with disabilities prepare for, obtain, keep, or regain employment. VR services are included in the coordinated programs covered by WIOA. There is, therefore, a need for evidence-based practices for use in VR. In addition, given the current economic situation, many states require that their VR agencies demonstrate adequate returns on investment in their programs, creating a need for valid models of return on investment that are usable by state VR agencies.

- **Collaboration among Federal agencies.** Increasing inter-agency coordination and collaboration. A number of agencies address employment of people with disabilities and have historically worked with NIDILRR to identify critical research questions. NIDILRR is committed to working closely with other agencies to improve employment outcomes for people with disabilities.

Proposed New Employment Research Agenda

NIDILRR's research agenda for the next five years involves building on its current investments and moving them along the series of research stages with the goal of impacting employment

outcomes for people with disabilities. This work will include collaboration with other relevant Federal agencies (e.g., SAMHSA, Rehabilitation Services Administration) that can provide substantive expertise to inform research priorities. Given NIDILRR's previous investments and the current context of employment for people with disabilities, possible areas of research for the next five years include the following:

- **Disability statistics.** Supporting work in employment disability statistics to track the employment status of people with disabilities nationwide.

- **People with psychiatric disabilities.** Advancing research to help people with psychiatric disabilities, who are among the most disadvantaged in terms of employment, prepare for and succeed in employment. NIDILRR has collaborated with SAMHSA for more than 20 years to develop interventions to help people with psychiatric disabilities. The two agencies plan to continue to work together to encourage research-related activities that improve employment outcomes for youth and adults with psychiatric disabilities.

- **Employment disincentives.** Developing research that moves beyond the identification of disincentives to employment with a strategic focus on the relationships among poverty, income assistance, and employment that would inform policies that improve employment outcomes for people with disabilities.

- **Young adults.** Funding research that identifies and develops effective services and programs to improve employment, career, and, relatedly, postsecondary education outcomes for youth and young adults. Disseminating and promoting research findings related to successful transition to adulthood for youth and young adults with disabilities. Of particular interest is research to find methods of meeting the needs of young adults experiencing the onset of serious mental illness.

- **Employer practices.** Funding research on improving employer practices. NIDILRR-funded researchers have begun to develop interventions for employers to improve employment outcomes for people with disabilities. This work will continue for employers across a variety of settings (e.g., small v. large business, private v. public sector) and will include developing and testing a variety of interventions.

- **Return on investment.** Funding research in VR to improve efficiency and effectiveness of services. This includes the identification and development of evidence-based practices and the continuation of development of return-on-investment models that can be used by VR agencies to optimize the services they provide.

II.   Cross-Cutting Research Activities

Technology for Access and Function

NIDILRR supports research, development, and adoption of technology products to promote positive near- and long-term outcomes of people with disabilities in the domains of health and function, community living and participation, and employment. While many Americans are born with, acquire, or age into disability, most will likely experience transient disability at some point in life due to life circumstances or environmental factors. Consequently, NIDILRR's investments in technology products have broadly and positively impacted people with disabilities and American society as a whole.

Technology is the application of knowledge through scientific means to solve practical problems. NIDILRR expects that technology development will employ systematic methods to produce models, methods, tools, standards, applications, devices, and systems that promote and facilitate positive outcomes for diverse populations of people with disabilities. NIDILRR also expects that technology research will result in products that can be made available to people with disabilities and their families and service providers. Technology products are generally transferred through partner organizations including, but not limited to, manufacturers and distributors.

NIDILRR recognizes four key technology research topics that include rehabilitation, assistive, service, and system technologies. Rehabilitation technologies restore, maintain, or slow the decline of function among people with disabilities. Assistive technologies address activity and participation difficulties encountered by people with disabilities by augmenting, compensating for the loss of, or restoring function to improve performance. Service technologies facilitate the provision of rehabilitation, assistive technology, training, and other interventions to people with disabilities. Systems technologies provide improved access to and use of critical infrastructures used by people with disabilities and others in the general population. These include but are not necessarily limited to information and communication technology, the built environment, public transportation, and health care infrastructures.

Members of many engineering and non-engineering disciplines contribute to technology research. However, NIDILRR has long recognized the importance of the field of rehabilitation engineering to people with disabilities. Rehabilitation engineering is concerned with research of technologies to evaluate, diagnose, restore, maintain, or slow the decline of a person's physical, sensory, communicative, or mental functions so as to maximize performance in community living and participation education and employment settings. This includes both rehabilitation and assistive technologies.

Context for Technology for Access and Function

Advances in scientific knowledge and technologies are rapid and accelerating. High-power and energy density batteries, the Internet of Things, cloud computing, machine learning, big data and analytics, rapid design and fabrication, advanced materials, micro electro-mechanical systems,

personal and environmental sensor technologies, pervasive information, computing, and communication technologies may all be adapted or built upon to address problems encountered by people with disabilities. Automation and robotics techniques have the potential to change many aspects of transportation for people with disabilities. The rapid changes happening in technology have the potential to change the lives of people with disabilities in amazing ways; however, like all change, NIDILRR is aware that accessibility must be built into each innovation to ensure that people with disabilities can use the new technology.

Proposed New Technology for Access and Function Research Agenda

NIDILRR will build on current research findings and products as well as invest in emerging opportunities during the next five years. NIDILRR will continue its support of universal design through further research of advanced universal design concepts and their application to all rehabilitation, assistive, service, and systems technologies. Universal design means a concept or philosophy for designing and delivering products and services that are *usable by* individuals with the widest possible range of functional capacities.

NIDILRR will continue to support research of assistive technology devices and software applications that facilitate positive outcomes for people with mobility, cognitive, sensory, and communication disabilities. Such technology products may include, for example, advanced human computer interfaces, personalized exo-prostheses, exo-skeletons that augment muscle function or compensate for the loss of structure and/or function, advanced wheelchair and seating and positioning, rehabilitative and assistive robotics, or advanced sensory technologies. NIDILRR also anticipates continuing research of information and communications technology, built environment, and public transportation systems that maximize the independence of people with disabilities.

Other potential areas of investment include research of standardized evidence-based, interdisciplinary methods and guidelines (and associated outcomes measures) for face-to-face and remote provision of rehabilitation, habilitation, and assistive technology services. Such methods and guidelines would strengthen professional education and interdisciplinary practice; structure the gathering, analysis, and interpretation of service outcomes; and improve access to and efficacy of services provided to individuals living in rural and resource-limited environments. For example, guidelines for mobility assistive technology services could greatly improve the medical and functional outcomes of individuals receiving such services.

NIDILRR supports national and international collaboration on technology research to leverage the knowledge, expertise, and resources of colleagues and institutions. NIDILRR also supports the participation of grant investigators and colleagues on committees to advise the development of Federal, industry, and other technology development standards and guidelines.

Disability Statistics and Demographic Research

Disability statistics research supports outcomes in each of NIDILRR's research domains.

Synthesizing and promoting the use of the vast amount of data collected each year by the Federal government and others allows for a greater understanding of the experiences and outcomes of people with disabilities. The ultimate goal of NIDILRR's disability statistics and demographics effort is to generate new information that can be used by people with disabilities, service providers, policymakers, and others working to identify and eliminate disparities in community living and participation, health and function, and employment.

Valid and reliable demographic data serve as a foundation to the broader mission of NIDILRR and help provide a platform for all agencies in the disability field. High-quality demographic data contribute to NIDILRR's mission and support research in the following ways:

- **Policy decisions.** Informing policies, practices, and programs for people with disabilities.

- **Demographics.** Identifying potential changes in the characteristics and needs of the people with disabilities.

- **Prevalence and context.** Understanding changes in disability prevalence and environmental context.

- **Service delivery.** Informing service delivery.

- **Current and emerging needs.** Planning research to address current and emerging needs.

Context for Disability Statistics and Demographic Research

Several national surveys have adopted the six-question sequence of disability identifiers first included in the American Community Survey (ACS). Based on the International Classification of Functioning, Disability and Health conceptual framework, these questions assess difficulty with hearing, vision, cognition, ambulation, self-help, and independent living. Respondents who report having one or more of the six types of disabilities included in the questions are considered to have a disability. Data can be pooled to analyze outcomes for subgroups. Having these standardized measures included in national surveys, year after year, and across multiple questionnaires with different purposes has greatly expanded the opportunities to create new knowledge about the characteristics, needs, experiences, and outcomes of people with disabilities at the population level. The move to collect disability data throughout federally funded surveys represents substantial progress toward measuring the characteristics, experiences, and outcomes of people with disabilities and will inform the redesign of the National Health Interview Survey (NHIS). NIDILRR staff and grantees have provided input regarding the capacity of the NHIS to produce good knowledge about the health and function of people with disabilities and will continue to track the development of final changes.

Proposed New Disability Statistics and Demographics Research Agenda

The goal of NIDILRR's disability statistics and demographics effort is to increase capacity to generate new information for use by stakeholders who are working to identify and eliminate

disparities experienced by people with disabilities in community living and participation, health and function, and employment. Disability statistics and demographic data are interwoven through virtually all components of the study of disability as quantitative analyses play a key role in understanding population-level needs, impacts, and outcomes. NIDILRR's research agenda for disability statistics and demographics for the next five years includes:

- **Uniform disability identifiers.** Continuing to support work that creates and implements uniform concepts, language, and methods for identifying the number and characteristics of people with disabilities.

- **Adoption of the ACS six-question sequence of disability identifiers.** Including the ACS six-question sequence in a number of surveys to provide additional opportunities for generating new knowledge about the characteristics, experiences, and outcomes of people with disabilities.

- **Data mining.** Sponsoring research that mines existing data to examine the current state of affairs and trends for forecasting future needs of people with disabilities.

- **Policy research.** Supporting research that develops and uses standard measures such as the ACS six-question sequence to assess the effectiveness of policies designed to improve participation among people with disabilities.

- **Methodological quality.** Supporting research that improves the quality of disability data by improving methodological standards in sampling and data collection. This includes, but is not limited to, improvements in sampling methods to better include and identify individuals with intellectual and developmental disabilities in surveys.

- **Usage of measures.** Developing research that creates topical survey modules (e.g., unmet needs, community living, transportation, housing, employment, caregiving) with reliable and valid measures. This work should yield instruments for use in various modes of data collection so that information is available about disability subgroups or the interaction of demographic and social factors.

Americans with Disabilities Act—Technical Assistance, Training, and Research

Since 1991, NIDILRR has supported a network of 10 regional centers to provide technical assistance, training, and information dissemination about the ADA for the benefit of individuals and entities with rights and responsibilities under this law. The ADA regional centers also collaborate with other relevant grants funded across NIDILRR's outcome domains by sharing data and resources relevant to their training and technical assistance efforts. These 10 regional centers, along with the ADA Knowledge Translation Center and the ADA Collaborative Research Project, comprise what NIDILRR calls the ADA National Network.

A number of developments have shaped the context for how the ADA National Network program

has been implemented. In 2006, NIDILRR incorporated a research component into the scope of activities for the ADA National Network in order to develop new knowledge about barriers to ADA compliance, strategies for its effective implementation, and a greater understanding of stakeholders needs for and use of ADA National Network services. Since these changes, ADA National Network grantees have published numerous journal articles, held a series of research conferences, and conducted other knowledge translation activities to share new knowledge. Examples of key research topics include access to postsecondary education among students with disabilities, access to health care services among people with disabilities, and reasonable accommodations in the workplace.

Proposed New ADA National Network Research Agenda

While the work of the ADA National Network leads to improved community participation opportunities and outcomes for people with disabilities, there is still much more progress to be made in improving stakeholder knowledge of their rights and responsibilities under the ADA. There is ongoing need for provision of training and technical assistance for those with rights and responsibilities under the ADA as well as data about the impact of such efforts. In addition, there is continued value derived from supporting research efforts that generate new knowledge that further enhances implementation of the ADA. This new knowledge not only contributes to NIDILRR's mission of improving community participation of people with disabilities, but also has implications for technical assistance, training, and implementation efforts of Federal enforcement agencies. NIDILRR intends to continue its support of the technical assistance, training, research, and data collection activities conducted by the ADA National Network. It will explore ways to expand the impact of the Network to new audiences by fostering innovation in practices that aim to improve community participation and by creating greater linkages with other ACL, HHS, and Federal programs and constituencies.

Stages of Research and Development

NIDILRR continues to promote concepts of stages of research and development as it funds grants in the community living and participation, health and function, and employment domains. NIDILRR uses these stages to emphasize its role as an applied research agency. Through the implementation of this stages framework, NIDILRR emphasized that all of the research it sponsors in the exploration and discovery, intervention development, intervention efficacy, and scale-up evaluation stages leads to new knowledge that can be used to create and implement interventions that improve the lives of people with disabilities. Similarly, the development work that NIDILRR sponsors at the proof of concept, proof of product, and proof of adoption stages leads to products that are used to improve the lives of people with disabilities.

NIDILRR first published and sought public comments on the stages of research as part of its FOAs in 2012 and 2013. Since then, NIDILRR has included the stages in all of its relevant research FOAs and asked applicants to describe and justify the stage or stages of research they propose. NIDILRR formalized the stages of research in its Long-Range Plan published in FY 2013 and in its final program regulations published in FY 2016. NIDILRR first published its stages of development in

the draft NIDILRR program regulations in FY 2012. NIDILRR formalized these stages in the final version of the NIDILRR program regulations in 2016. These final regulations included new review criteria that allow peer reviewers to evaluate the extent to which applicants describe and justify the stage or stages of their proposed research and development projects.

NIDILRR values and funds research at each of these stages because it is essential to derive interventions and develop products systematically and methodically based on scientifically sound foundations and concepts. While NIDILRR's ultimate aim is to sponsor research toward interventions and products to improve the lives of people with disabilities, it does not favor research in the intervention efficacy or scale-up evaluation stages over earlier stages of exploration and intervention development. NIDILRR recognizes that there is a great deal of early-stage exploratory research that must take place to create the foundation of knowledge for new interventions and products. NIDILRR seeks to ensure that the work that it sponsors is appropriate to the levels of knowledge available in specific topic areas.

Requiring applicants and peer reviewers to pay close attention to stages of research and development helps NIDILRR ensure, for example, that it sponsors research that tests the efficacy of an intervention only if there is already research-based knowledge about its relevance and feasibility and if there are measures to properly reflect the intended effects of the intervention. Similarly, use of the development stages helps NIDILRR ensure the transfer and promotion of sponsored technologies only if they have been properly conceptualized, tested for utility and feasibility among users, and refined.

NIDILRR intends to continue to provide training and information to our applicants, grantees, and reviewers to help ensure the proper use of its stages of research and development. Continued implementation and use of these stages in the field will help NIDILRR maximize the efficiency and productivity of its research resources and programs.

III.   Activities That Promote the Quality and Use of NIDILRR-Sponsored Research

Capacity Building

NIDILRR sponsors capacity-building grants and activities to help ensure that the field of disability, independent living, and rehabilitation research has well-trained research personnel as well as tools and methods to support high-quality research activities that result in new knowledge and products. Title II of the Rehabilitation Act, as amended, authorizes NIDILRR to build capacity for conducting high-quality disability, independent living, and rehabilitation research by providing for advanced training in disability and rehabilitation research, including people with disabilities and underserved populations. NIDILRR meets these statutory mandates for training and capacity building primarily through its Research Fellowship Program (Switzer) and its Advanced Rehabilitation Research Training Program (ARRT). Grantees in NIDILRR's Rehabilitation Research and Training Centers (RRTCs) and Rehabilitation Engineering Research Centers (RERCs) programs are also required to provide research training to investigators in the early stages of their research careers.

NIDILRR's Switzer Fellowship Program is designed to build capacity by funding individual researchers to conduct research activities in rehabilitation. These Fellowships provide one year of financial support with which recipients carry out independent research projects that further NIDILRR's mission. Fellowships are awarded competitively through peer review, selected primarily on the basis of the applicant's qualifications and experience and on the strength of the proposed research project. Prospective fellows apply at the "Merit" or "Distinguished" levels. Merit Fellowships are available to individuals who are at the start of their careers in disability, independent living, and rehabilitation research. Distinguished Fellowships are available to individuals with more independent research experience and are funded at a somewhat higher budget level than Merit Fellowships. Over the years, NIDILRR has awarded more than 300 Switzer Fellowships.

NIDILRR also funds institutions of higher education to conduct postdoctoral training under its ARRT program. The primary purpose of the ARRT program is to provide advanced training in disability and rehabilitation research to individuals with doctoral or similar advanced degrees who have clinical or other relevant experience. ARRT grants provide multidisciplinary research training that teaches and enhances research methodology skills. They provide researchers with experience in grant writing, conduct of research, and presentation and dissemination of research findings. The intent of this training is to support NIDILRR's mission by preparing individuals to conduct independent, high-quality research on questions related to disability, independent living, and rehabilitation.

Under Section 21 of the Rehabilitation Act, NIDILRR is mandated to allocate one percent of its annual budget to carrying out activities related to traditionally underserved populations. Under this authority, NIDILRR focuses on building the capacity of minority-serving institutions and their personnel to conduct disability and rehabilitation research and on developing a cadre of researchers who represent underserved populations, including people with disabilities.

Proposed New Capacity-Building Agenda

There is an ongoing need for well-trained researchers in the disability and rehabilitation research fields given the rapidly changing demographics and the growing recognition of the importance of having an evidence base for disability, independent living, and rehabilitation interventions and practice. NIDILRR intends to continue its capacity-building efforts through the Research Fellowship Program and the ARRT program as well as training and mentoring opportunities in the RRTC and RERC programs. NIDILRR will build its capacity to collect and analyze data to capture the long-term impact of these capacity-building efforts.

NIDILRR also intends to highlight and promote the Section 21 program by creating research opportunities for minority-serving institutions and by enhancing data collection and evaluation practices to assess capacity building targeted at minority-serving institutions and minority researchers, including those with disabilities. NIDILRR will continue to implement strategies that result in increased minority representation across NIDILRR's grant mechanisms. Through these

efforts, NIDILRR will help ensure that the new knowledge that our grantees generate reflect the needs, experiences, and outcomes of the diverse population of people with disabilities in the United States.

Knowledge Translation

For NIDILRR, Knowledge Translation (KT) is the multidimensional, active process of ensuring that new knowledge and products gained through the course of research ultimately improves the lives of people with disabilities and furthers their participation in society. KT is applicable to both technological and non-technological knowledge and products. NIDILRR uses KT to promote the effective use of NIDILRR-funded knowledge and products, which is a critical component of our mission.

For KT to be successful, NIDILRR believes that the new knowledge or product must: (1) address real issues faced by people with disabilities, (2) offer helpful information or solutions related to those issues, (3) be presented in ways that make it accessible to and feasible for the intended users, and (4) be disseminated or distributed effectively. When users are aware of the availability of new knowledge or products, they can make an informed decision or take action to change behavior, practice, policy, or systems as appropriate to improve the lives of people with disabilities and further their participation in society.

To maximize the relevance, feasibility, usability, and reach of the new knowledge or products, it is crucial that researchers involve people with disabilities and other stakeholders in all KT components starting from the initial identification of needs for knowledge and products. Stakeholders include not only direct users of the knowledge or product, but also individuals or entities with a stake in the issues because of their role and function within the context in which the knowledge or product will be used. The input, or lack of input of a variety of stakeholders, can influence the likelihood that new knowledge or products will be used in the future. Different kinds of knowledge or products have different stakeholders, determined by the type of knowledge or product, its anticipated use, and the context in which it will be used. Stakeholders may include people with disabilities, their family members, practitioners, policymakers, employers, Centers for Independent Living staff members, disability advocates, educators, assistive device manufacturers, insurance companies, and others as appropriate.

Proposed New Knowledge Translation Agenda

For the next five years, NIDILRR intends to continue its efforts to help ensure that knowledge and products generated by NIDILRR grantees are used to improve the lives of people with disabilities:

- **Expansion**. Fund KT grants in different content areas to provide KT support for NIDILRR grantees and advance understanding and applications of KT in the disability context.

- **Strategic initiative support**. Fund KT contracts to provide support for NIDILRR's KT

strategies and initiatives.

- **Business processes.** Integrate the KT framework into NIDILRR operations such as funding priority requirements, peer review criteria, performance reporting, and other business processes as appropriate.

- **Partnerships.** Strengthen existing connections with, and establish new connections to, disability, independent living, and rehabilitation stakeholders within and outside the Federal government.

- **Awareness and promotion.** Identify and pursue opportunities to raise awareness and promote the use of NIDILRR-funded knowledge and products within ACL, HHS, other Federal agencies, and the broader community in which people with disabilities live. Work closely with ACL and Federal colleagues to disseminate and promote NIDILRR's research findings to state and local agencies and programs that provide services and supports to people with disabilities.

- **Public access.** Fully implement the public access requirements for both peer-reviewed publications and scientific data to ensure that knowledge, products, and data from NIDILRR-funded work can be accessed and used by the public at no cost.

Summary

This Plan acknowledges the current environmental context in which people with disabilities across the lifespan are striving to forge meaningful and active lives in support of their personal goals. It recognizes NIDILRR's place within ACL and the importance of partnership and collaboration with other Federal agencies as well as other stakeholders, with the understanding that research outcomes are increasingly needed to help refine national policy in support of those individual aspirations. By investing in a relevant and robust program of applied research across the domains of community living and participation, health and function, and employment, supported by additional cross-cutting activities and initiatives to promote its quality and use, NIDILRR believes the Plan will significantly improve the social participation and community living outcomes of people with disabilities.

NIDILRR Funding Forecast

How to Locate Federal Grant Forecast on Grants.gov

The Federal Grants Forecast listing will allow you to browse projected NIDILRR funding opportunities weeks or months before they are posted. This feature will allow for you to get a head-start on developing your grant proposal.

Step 1: Go to http://www.grants.gov

Step 2: Check the "Forecasted" option under the "Opportunity Status" heading on the "Search Grants" Page (see screenshot on next page).

Step 3: Check the "All Departments of Health and Human Services [HHS]" option

    OR

Input keyword, opportunity number, or CFDA number.

Step 4: Upon clicking on a forecast opportunity you will be taken to the forecast tab of the "View Grants Opportunity" page.

Step 5: Reference estimated synopsis post date and estimated due date and mark your calendar.

This will allow you to browse projected funding opportunities weeks or months before they are officially posted. The Forecast feature is a great way to get a head start on preparing your next application.

What will you find in a grant forecast? Among other information, the grant-making agency may list the following:

- Expected Number of Awards
- Award Ceiling
- Award Floor
- Estimated Synopsis Post Date
- Estimated Application Due Date
- Estimated Award Date
- Estimated Project Start Date

Watch the above video to learn more about searching for federal grant forecasts.

Please keep in mind that forecasted opportunities may not be posted as planned, or at all, depending on a variety of factors.

Don't see forecasts from your grant-making agency? Reach out to the agency's point of contact and ask them to post forecasts on Grants.gov.

Posted in Applicants, Funding, Training Videos   Tagged federal grant, federal grant forecast, government grants, grant forecast, Grants.gov, how to apply for a grant, how to find a grant, new federal grants, video   Leave a comment

Blog at WordPress.com.

How to Locate Federal Grant Requests for
Proposals/Applications on Grants.gov

Step 1: Go to http://www.grants.gov

Step 2: Check the "Posted" option under the "Opportunity Status" heading on the "Search Grants" Page (see screenshot on next page).

Step 3: Check the "All Departments of Health and Human Services [HHS]" option

     OR

Input keyword, opportunity number, or CFDA number.

How to Locate Federal Grant Requests for Proposals/Applications on Grants.gov

Step 1: Go to http://www.grants.gov

Step 2: Check the "Posted" option under the "Opportunity Status" heading on the "Search Grants" Page (see screenshot on next page).

Step 3: Check the "All Departments of Health and Human Services [HHS]" option

    OR

Input keyword, opportunity number, or CFDA number.

Step 4: Upon clicking on a posted opportunity you will be taken to the posted tab of the "View Grants Opportunity" page.

Step 5: Reference due date, mark your calendar and click on "Package" option to access application package.

RFP FIP-Development
Minority Serving Institutions

Image Description: Administration for Community Living

Administration for Community Living

National Institute on Disability, Independent Living, and Rehabilitation Research

Field Initiated Projects Program: Minority-Serving Institution (MSI) - Development
HHS-2016-ACL-NIDILRR-IF-0161
Application Due Date: 06/14/2016

Field Initiated Projects Program: Minority-Serving Institution (MSI) - Development

HHS-2016-ACL-NIDILRR-IF-0161

TABLE OF CONTENTS

Department of Health & Human Services
Administration for Community Living

ACL Center:	National Institute on Disability, Independent Living, and Rehabilitation Research
Funding Opportunity Title:	Field Initiated Projects Program: Minority-Serving Institution (MSI) - Development
Announcement Type:	Initial
Funding Opportunity Number:	HHS-2016-ACL-NIDILRR-IF-0161
Primary CFDA Number:	93.433
Due Date For Letter of Intent:	[Insert 35 days from date of publication]
Due Date for Applications:	06/14/2016
Date for Informational Conference Call:	05/06/2016

Applications that fail to meet the application due date will not be reviewed and will receive no further consideration. You are strongly encouraged to submit your application a minimum of 3-5 days prior to the application closing date. Do not wait until the last day in the event you encounter technical difficulties, either on your end or, with http://www.grants.gov. Grants.gov can take up to 48 hours to notify you of a successful submission.

Executive Summary

The Administrator of the Administration for Community Living invites applications for new awards for fiscal year (FY) 2016 for the Field Initiated (FI) Projects Program: Minority-Serving Institutions (MSI) (CFDA 93.433), authorized under the Rehabilitation Act of 1973, as amended, to carry out either research or development activities. An award will be made in one of two distinct categories: (1) research, (2) development, for a period of up to three years (36 months).

This is the Funding Opportunity Announcement that applicants should use in order to submit FI development proposals. NIDILRR / ACL is publishing the Funding Opportunity Announcement for FI research proposals separately.

I. Funding Opportunity Description

The purpose of the Field Initiated (FI) Projects program is to develop methods, procedures, and rehabilitation technology that maximize the full inclusion and integration into society, employment, independent living, family support, and economic and social self-sufficiency of individuals with disabilities, especially individuals with the most severe disabilities. Another purpose of the FI Projects program is to improve the effectiveness of services authorized under the Rehabilitation Act of 1973, as amended (Act).

The purpose of this competition is to improve the capacity of minority entities to conduct high-quality disability and rehabilitation research. NIDILRR will accomplish this by limiting eligibility for this competition to minority entities and Indian tribes in a manner consistent with section 21(b)(2)(A) of the Act, which authorizes NIDILRR to make awards to minority entities and Indian tribes to carry out activities authorized under Title II of the Act. NIDILRR makes two types of awards under the FI Projects program: research grants and development grants.

In carrying out a development activity under an FI Projects development grant, a grantee must use

knowledge and understanding gained from research to create materials, devices, systems, or methods, including designing and developing prototypes and processes, that are beneficial to the target population.

NIDILRR plans to make one MSI FIP award. NIDILRR's MSI FIP award may be a research project or a development project, depending on the ranking of applications provided by the peer review panel.

Note: An applicant should consult NIDRR's Long-Range Plan for Fiscal Years 2013-2017 (78 FR 20299) (the Plan) when preparing its application. The Plan is organized around the following outcome domains: (1) community living and participation; (2) health and function; and (3) employment. In concert with the balance principle described in the Plan, applicants for FI projects must specify in their abstract and project narrative which of NIDILRR's major outcome domains of individual well-being their proposed project will focus on: (1) community living and participation, (2) health and function, or (3) employment. Although applicants may propose projects that address more than one domain, they should select the primary domain addressed in their proposed project.

Statutory Authority
29 U.S.C. 762(g) and 764(a)

II. Award Information

Funding Instrument Type:	Grant
Estimated Total Funding:	$200,000
Expected Number of Awards:	1
Award Ceiling:	$200,000 Per Budget Period
Award Floor:	$200,000 Per Budget Period
Average Projected Award Amount:	$200,000 Per Budget Period
Length of Project Period:	36-month project with three 12-month budget periods

We will reject any application that proposes a budget exceeding $200,000 for a single budget period of 12 months. The maximum amount includes direct and indirect costs.

III. Eligibility Information

1. Eligible Applicants

Parties eligible to apply for MSI FI Projects grants are limited to minority entities and Indian tribes as authorized by section 21(b)(2)(A) of the Act. A minority entity is defined as a historically black college or university (a part B institution, as defined in section 322(2) of the Higher Education Act of 1965, as amended), a Hispanic-serving institution of higher education, an American Indian tribal college or university, or another IHE whose minority student enrollment is at least 50 percent.

2. Cost Sharing or Matching

Cost Sharing / Matching Requirement: Yes

Cost sharing is required by 34 CFR 350.62(a). NIDILRR rquires that grantees provide cost sharing in the amount of at least 1% of Federal funds.

3. Responsiveness and Screening Criteria

Application Responsiveness Criteria

To be considered for review under this grant opportunity, applicants must propose to conduct a development project that will generate a product or products (e.g., materials, devices, systems, methods, measures, techniques, tools, prototypes, processes, or intervention protocols) that can be used to maximize the full inclusion and integration into society, employment, independent living, family support, and economic and social self-sufficiency of individuals with disabilities, especially individuals with the most severe disabilities.

Application Screening Criteria

We will screen all applications, and will reject any applications that:

- Are submitted after the established deadline;
- Propose a budget that exceeds $200,000 in any single budget year;
- Propose a project period that exceeds 36 months.

The Project Narrative section of the application must be double-spaced, on 81/2" X 11" pages with 1" margins on both sides, and a standard font size of not less than 11. The project narrative must not exceed 50 double-spaced pages. For project narratives that exceed 50 double-spaced pages, NIDILRR will instruct reviewers to disregard all of the content on the pages beyond the 50th page.

IV. Application and Submission Information

1. Address to Request Application Package

Application materials can be obtained from http://www.grants.gov or http://www.acl.gov/Funding_Opportu nities/ Announcements/Index.aspx.

Please note, ACL is requiring that applications for all announcements be submitted electronically through http://www.grants.gov. The Grants.gov (http://www.grants.gov) registration process can take several days. If your organization is not currently registered with http://www.grants.gov, please begin this process immediately. **For assistance with http://www.grants.gov, please contact** support@grants.gov **or 1-800-518-4726 between 7 a.m. and 9 p.m. Eastern Time.**

- At the http://www.grants.gov website, you will find information about submitting an application electronically through the site, including the hours of operation. ACL strongly recommends that you do not wait until the application due date to begin the application process through http://www.grants .gov because of the time involved to complete the registration process.
- All applicants must have a DUNS number (http://fedgov.dnb.com/webform/) and be registered with the System for Award Management (SAM, www.sam.gov) and maintain an active SAM registration until the application process is complete and, should a grant be made, throughout the life of the award. Applicants should finalize a new, or renew an existing, registration at least two weeks before the application deadline. This action should allow you time to resolve any issues that may arise. Failure to comply with these requirements may result in your inability to submit your application or receive an award. Maintain documentation (with dates) of your efforts to register or renew at least two weeks before the deadline. See the SAM Quick Guide for Grantees at: https://www.sam.gov /sam/ transcript/ SAM_Quick_Guide_Grants_Registrations-v1.6.pdf.

Note: Once your SAM registration is active, you will need to allow 24 to 48 hours for the information to be available in Grants.gov before you can submit an application through Grants.gov. This action should allow you time to resolve any issues that may arise. Failure to comply with these requirements may result in your inability to submit your application or receive an award.

- **Note: Failure to submit the correct suffix can lead to delays in identifying your organization and access to funding in the Payment Management System.**
- Effective October 1, 2010, HHS requires all entities that plan to apply for and ultimately receive Federal grant funds from any HHS Operating/Staff Division (OPDIV/STAFFDIV)or

receive subawards directly from the recipients of those grant funds to be:

1. Registered in SAM prior to submitting an application or plan;
2. Maintain an active SAM registration with current information at all times during which it has an active award or an application or plan under consideration by an OPDIV; and
3. Provide its DUNS number in each application or plan to submit to the OPDIV.

Additionally, all first-tier subaward recipients must have a DUNS number at the time the subaward is made.

- Since October 1, 2003, The Office of Management and Budget has required applicants to provide a Dun and Bradstreet (D&B) Data Universal Numbering System (DUNS) number when applying for Federal grants or cooperative agreements. It is entered on the SF 424. It is a **nine-digit number,** which provides unique identifiers of single business entities. The DUNS number is *free and easy* to obtain.
- Organizations can receive a DUNS number at no cost by calling the dedicated toll-free DUNS Number request line at 1-866-705-5711 or by using this link to access a guide: http://www.whitehouse .gov/ sites/default/files/omb/grants/duns_num_guide.pdf.
- You must submit all documents electronically, including all information included on the SF424 and all necessary assurances and certifications.
- **Your application must comply with any page limitation requirements described in this Program Announcement.**
- After you electronically submit your application, you will receive an automatic acknowledgement from http://www.grants.gov that contains http://www.grants.gov tracking number. The Administration for Community Living will retrieve your application form from http://www.grants.gov.

For further information, please contact:

U.S. Department of Health and Human Services
Administration for Community Living
Marlene Spencer
ACL/NIDILRR
Phone Number: (202) 795-7442
E-mail: marlene.spencer@acl.hhs.gov

2. Content and Form of Application Submission

Letter of Intent

Letter of Intent

Due Date for Letter of Intent: **[Insert 35 days from date of publication]**

Due to the open nature of the priorities in this competition, and to assist with the selection of reviewers, NIDILRR is requesting all potential applicants submit a letter of intent (LOI). The submission is not mandatory and the content of the LOI will not be peer reviewed or otherwise used to rate an applicant's application.

Each LOI should be limited to a maximum of four pages and include the following information: (1) the funding opportunity to which the potential applicant is responding; (2) minority entity status; 3) the title of the proposed project, the name of the applicant, the name of the Project Director or Principal Investigator (PI), and the names of partner institutions and entities; (4) a brief statement of the vision, goals, and objectives of the proposed project and a description of its proposed activities at a sufficient level of detail to

allow NIDILRR to select potential peer reviewers; (5) a list of proposed project staff including the Project Director or PI and key personnel; (6) a list of individuals whose selection as a peer reviewer might constitute a conflict of interest due to involvement in proposal development, selection as an advisory board member, co-PI relationships, etc.; and (7) contact information for the Project Director or PI. Submission of a LOI is not a prerequisite for eligibility to submit an application.

NIDILRR will accept the LOI via email. The LOI must be sent to: Marlene Spencer at <u>marlene.spencer@acl</u> <u>.hhs.gov</u>. For further information regarding the LOI submission process, contact Marlene Spencer at: <u>Marle</u> <u>ne.Spencer@acl.hhs.gov</u>.

Project Narrative

The Project Narrative portion of your application is where you describe your proposed development project, and address each of the review criteria. Each applicant must limit the project narrative to the equivalent of no more than 50 pages, using the following standards:

- A "page" is 8.5" x 11", on one side only, with 1" margins at the top, bottom and both sides.
- Double-space (no more than three lines per vertical inch) all text in the application narrative. You are not required to double space titles, headings, footnotes, references, and captions, or text in charts, tables, figures, and graphs. Use a font that is either 12 point or larger or no smaller than 10 pitch (characters per inch).
- Use one of the following fonts: Time New Roman, Courier, Courier New or Arial.
- Include all critical information in the program narrative, minimizing the need for additional appendices.
- Ensure that you attach .PDF files only for any attachments to your application. While you are able to attach files to your application in formats other than PDF, non-PDF files are converted into .PDF format before reviewers see and evaluate your applicaiton. The conversion to PDF format may not maintain your original formatting. Therefore to ensure the integrity of your application documents --we strongly recommend that you attach only PDF files as you submit your application.

NOTE: The page limit does not apply to the Application for Federal Assistance (SF 424), the budget narrative, the forms, the one-page abstract, the resumes, the bibliography, or the letters of support. However, the page limit does apply to all of the project narrative section.

For project narratives that exceed 50 double-spaced pages, NIDILRR will instruct reviewers to disregard all of the content on the pages beyond the 50th page.

Applicants should provide a Work Plan in their project narrative. The Work Plan should cover all three (3) years of the project period. The Work Plan should include a statement of the project's overall goal(s), anticipated outcome(s), and the major tasks that are proposed to achieve the goal and outcome(s). For each major task, the work plan should identify timeframes involved and the lead person responsible for the task. Please use the "Project Work Plan - Sample Template" format as a reference and resource, if desired. You can find this sample template in the Appendix section of this Funding Opportunity Announcement.

The following application components are not considered part of the Project Narrative section and do not count against an applicant's 50 page-limit for the project narrative:

Table of Contents

The Table of Contents shows where and how the important sections of your proposal are organized. While the application will be submitted electronically, the reviewers may use printed copies during the review process. The Table of Contents will assist reviewers in more efficiently and effectively evaluating your application.

Abstract

The one-page abstract should be a comprehensive description of what the whole (all years) project is, not a description of the competency of the institution or project director. It is not an executive summary. It can be single or double-spaced.

The checkbox next to Project Summary/Abstract under "Optional" **must** be selected in order to upload your Abstract document.

Resume/Vitae
Vitae of staff or consultants should include information that is specifically pertinent to this proposed project.

Budget Narrative/Justification

The Budget Narrative/Justification can be provided using the format "Budget Narrative/Justification – Sample Format" included in this document. Applicants are encouraged to pay particular attention to this document, which provides an example of the level of detail sought. A combined multi-year Budget Narrative/Justification, as well as a detailed Budget Narrative/Justification for each year of potential grant funding is required. This information will be uploaded in the "Budget Narrative/Justification" section under the "Optional" category. The checkbox next to "Budget Narrative/Justification" **must** be selected in order to upload your documentation.

This part requires an itemized budget breakdown for each project year and the basis for estimating the costs of personnel salaries, benefits, project staff travel, materials and supplies, consultants and subcontracts, indirect costs, and any other projected expenditures.

If applicable, address cost share in a separate section of the budget narrative labeled "cost share." Please provide an itemized budget breakdown for each project year. The Appendix section of this Funding Opportunity Announcement includes a sample format for your budget narrative/justification.

Letters of Commitment from Key Participating Organizations and Agencies

Please include letters of commitment from Key Participating Organizations and Agencies after the Budget Narrative/Justification. Also, please submit an appendix that lists every collaborating organization and individual named in the application, including staff, consultants, contractors, and advisory board members. We will use this information to help us screen for conflicts of interest with our reviewers.

3. Submission Dates and Times

Due Date for Applications: **06/14/2016**

Date for Informational Conference Call: 05/06/2016

Pre-Application Meeting: A pre-application teleconference meeting will be held between 1:00 p.m. and 3:00 p.m. on the date listed above for the informational conference call. Interested parties are invited to participate in the pre-application meeting to discuss the funding priority and to receive information and technical assistance. You must contact <u>Carolyn.Baron@acl.hhs.gov</u> by May 5, 2016 in order to participate in this meeting. NIDILRR staff also will be available to provide information and technical assistance via individual phone consultations from 3:30 p.m. to 4:30 p.m. on May 6, 2016. Requests for individual consultations during this one hour window must be made in advance to Carolyn Baron.

Applications must be submitted electronically by 11:59 p.m. Eastern Time on the date listed immediately above for "Due Date for Applications."

Applications that fail to meet the application due date will not be reviewed and will receive no further consideration. You are strongly encouraged to submit your application a minimum of 3-5 days prior to the application closing date. Do not wait until the last day in the event you encounter technical difficulties, either

on your end or with http://www.grants.gov. Grants.gov can take up to 48 hours to notify you of a successful submission.

When you are submitting your application via Grants.gov, you must (1) be designated by your organization as an Authorized Organization Representative (AOR); and (2) register yourself with Grants.gov as an AOR. Details on these steps are outlined at the following Grants.gov Web page: http://www.grants.gov/web/grants /register.html.

After you electronically submit your application, you will receive from Grants.gov an automatic notification of receipt that contains a Grants.gov tracking number. (This notification indicates receipt by Grants.gov only.) If you are experiencing problems submitting your application through Grants.gov, please contact the Grants.gov Support Desk, toll free, at 1-800-518-4726. You must obtain a Grants.gov Support Desk Case Number and must keep a record of it. If you are prevented from electronically submitting your application on the application deadline because of technical problems with the Grants.gov system, please contact the person listed under Agency Contacts in section VII of this notice and provide a written explanation of the technical problem you experienced with Grants.gov, along with the Grants.gov Support Desk Case Number. ACL will contact you after a determination is made on whether your application will be accepted.

Note: We will not consider your application for further review if you failed to fully register to submit your application to Grants.gov before the application deadline or if the technical problem you experienced is unrelated to the Grants.gov system. Unsuccessful submissions will require authenticated verification from http://www.grants.gov indicating system problems existed at the time of your submission. You will be required to provide an http://www.grants.gov submission error notification and/or tracking number in order to substantiate missing the application deadline due to systematic grants.gov problems.

Grants.gov (http://www.grants.gov) will automatically send applicants a tracking number and date of receipt verification once the application has been successfully received and validated in http://www.grants.gov.

4. Intergovernmental Review

This funding opportunity announcement is not subject to the requirements of Executive Order 12372, "Intergovernmental Review of Federal Programs."

5. Funding Restrictions

Note: A recent Government Accountability Office (GAO) report has raised considerable concerns about grantees and contractors charging the Federal government for additional meals outside of the standard allowance for travel subsistence known as per diem expenses. Executive Orders on Promoting Efficient Spending (EO 13589) and Delivering Efficient, Effective and Accountable Government (EO 13576) have been issued and instruct Federal agencies to promote efficient spending. Therefore, if meals are to be charged in your proposal, applicants should understand such costs must meet the following criteria outlined in the Executive Orders and HHS Grants Policy Statement:

- Meals are generally unallowable except for the following:
    - For subjects and patients under study (usually a research program);
    - Where specifically approved as part of the project or program activity, e.g., in programs providing children's services (e.g., Headstart);
    - When an organization customarily provides meals to employees working beyond the normal workday, as a part of a formal compensation arrangement;
    - As part of a per diem or subsistence allowance provided in conjunction with allowable travel.

6. Other Submission Requirements

Protection of Human Subjects

Research activities involving human subjects by awards under these programs are subject to Regulations for the Protection of Human Subjects. You do not need an assurance or IRB approval as a condition of applying for this competition.

If you marked "Yes" for Item 3 on the Supplemental Information for SF 424, you must provide a human subjects "exempt research" or "nonexempt research" narrative. Insert the narrative(s) in the space provided. If you have multiple projects and need to provide more than one narrative, please indicate which project each set of responses addresses.

A. Exempt Research Narrative. If you marked "Yes" for item 3a. and designated exemption number(s), provide the "exempt research" narrative. The narrative must contain sufficient information about the involvement of human subjects in the proposed research to allow a determination that the designated exemption(s) are appropriate. The narrative must be succinct. In addition, narratives are required for each participating partner if research is being conducted at other sites.

B. Nonexempt Research Narrative. If you marked "No" for item 3a., you must provide the "nonexempt research" narrative. The narrative must address the seven points. Although no specific page limitation applies to this section of the application, be succinct.

Human Subject Requirements for HHS grants. If your proposed project(s) involves research on human subjects, you must comply with the Department of Health and Human Services (DHHS) Regulations (Title 45 Code of Federal Regulations Part 46) regarding the protection of human research subjects, unless that research is exempt as specified in the regulation. All awardees and their performance sites engaged in research involving human subjects must have or obtain:

(1) an assurance of compliance with the Regulations, and (2) initial and continuing approval of the research by an appropriately constituted and registered institutional review board. In order to obtain a Federal wide Assurance (FWA) of Protection for Human Subjects, the applicant may complete an on-line application at the Office for Human Research Protections (OHRP) website or write to the OHRP for an application. To obtain a FWA, contact OHRP at: http://www.hhs.gov/ohrp.

V. Application Review Information

1. Criteria

Applications are scored by assigning a maximum of 100 points across five criteria:

A. Importance of the Problem	Maximum Points:15

(1) The Director considers the importance of the problem.

(2) In determining the importance of the problem, the Director considers the following factors:

(i) The extent to which the applicant clearly describes the need and target population;

(ii) The extent to which the proposed activities further the purposes of the Act;

(iii) The extent to which the proposed project will have beneficial impact on the target population.

B. Design of development activities	Maximum Points:50

(1) The Director considers the extent to which the design of development activities is likely to be effective in accomplishing the objectives of the project.

(2) In determining the extent to which the design is likely to be effective in accomplishing the objectives of the project, the Director considers the following factors:

(i) The extent to which the plan for development, clinical testing, and evaluation of new devices and technology is likely to yield significant products or techniques, including consideration of the extent to which--

(A) The proposed project will use the most effective and appropriate technology available in developing the new device or technique;

(B) The proposed development is based on a sound conceptual model that demonstrates an awareness of the state-of-the-art in technology;

(C) The new device or technique will be developed and tested in an appropriate environment;

(D) The new device or technique is likely to be cost-effective and useful;

(E) The new device or technique has the potential for commercial or private manufacture, marketing, and distribution of the product; and

(F) The proposed development efforts include adequate quality controls and, as appropriate, repeated testing of products.

C. Plan of evaluation	Maximum Points:10

(1) The Director considers the quality of the plan of evaluation.

(2) In determining the quality of the plan of evaluation, the Director considers the extent to which the plan of evaluation will be used to improve the performance of the project through the feedback generated by its periodic assessments.

D. Project staff	Maximum Points:15

(1) The Director considers the quality of the project staff.

(2) In determining the quality of the project staff, the Director considers the extent to which the applicant encourages applications for employment from persons who are members of groups that have traditionally been underrepresented based on race, color, national origin, gender, age, or disability.

(3) In addition, the Director considers the extent to which the key personnel and other key staff have appropriate training and experience in disciplines required to conduct all proposed activities.

E. Adequacy and accessibility of resources	Maximum Points:10

(1) The Director considers the adequacy and accessibility of the applicant's resources to implement the proposed project.

(2) In determining the adequacy and accessibility of resources, the Director considers the following factors:

(i) The extent to which the applicant is committed to provide adequate facilities, equipment, other resources, including administrative support, and laboratories, if appropriate.

(ii) The extent to which the facilities, equipment, and other resources are appropriately accessible to individuals with disabilities who may use the facilities, equipment, and other resources of the project.

2. Review and Selection Process

As required by 2 CFR 200 of the Uniform Guidance, effective January 1, 2016, ACL is required to review and consider any information about the applicant that is in the Federal Awardee Performance and Integrity Information System (FAPIIS), https://www.fapiis.gov before making any award in excess of the simplified acquisition threshold (currently $150,000) over the period of performance. An applicant may review and comment on any information about itself that a federal awarding agency has previously entered into FAPIIS. ACL will consider any comments by the applicant, in addition to other information in FAPIIS, in making a judgment about the applicant's integrity, business ethics, and record of performance under federal awards when completing the review of risk posed by applicants as described in 2 CFR § 200.205 Federal Awarding Agency Review of Risk Posed by Applicants (
http://www.ecfr.gov/cgi-bin/text-idx?node=se2.1.200_1205&rgn=div8).

Final award decisions will be made by the Administrator of ACL. In making these decisions, the Administrator's primary consideration will be the ranking of applications by the review panel. The Administrator may also consider the reasonableness of the estimated cost to the government considering the available funding and anticipated results and the likelihood that the proposed project will result in the benefits expected. Under 45 CFR Part 75, Section 205, item (3) history of performance, is an item that is also reviewed. In addition, in making a competitive grant award, the Administrator of ACL also requires various assurances including those applicable to Federal civil rights laws that prohibit discrimination in programs or activities receiving Federal financial assistance from the Department of Health and Human Services 45 CFR Part 75.

3. Anticipated Announcement Award Date

Successful applicants will receive an electronic Notice of Award no later than September 30, 2016. All applicants will receive feedback from the peer review process no later than September 30, 2016.

VI. Award Administration Information

1. Award Notices

If your application is successful, we send you a Notice of Award (NOA); or we may send you an email containing a link to access an electronic version of your NOA. If your application is not evaluated or not selected for funding, we will notify you.

2. Administrative and National Policy Requirements

The award is subject to DHHS Administrative Requirements, which can be found in 45CFR Part 75 and the Standard Terms and Conditions, included in the Notice of Award as well as implemented through the HHS Grants Policy Statement.

A standard term and condition of award will be included in the final notice of award; all applicants will be subject to a term and condition that applies to the terms of 48 CFR section 3.908 to the award, and requires the grantees inform their employee in writing of employee whistleblower rights and protections under 41 U.S.C. 4712 in the predominant native language of the workforce.

3. Reporting

(a) If you apply for a grant under this competition, you must ensure that you have in place the necessary processes and systems to comply with the reporting requirements in 45 CFR Part 75 should you receive funding under the competition. This does not apply if you have an exception under 45 CFR Part 75.

(b) At the end of your project period, you must submit a final performance report, including financial information, as required in your award's terms and conditions. If you receive a multi-year award, you must submit an annual performance report that provides the most current performance and financial expenditure information as required under 45 CFR Part 75.

All NIDILRR grantees will submit their annual and final reports through NIDILRR's online reporting system and as designated in the terms and conditions of your NOA.

4. FFATA and FSRS Reporting

The Federal Financial Accountability and Transparency Act (FFATA) requires data entry at the FFATA Subaward Reporting System (http://www.FSRS.gov) for all sub-awards and sub-contracts issued for $25,000 or more as well as addressing executive compensation for both grantee and sub-award organizations.
For further guidance please see the following link: http://www.acl.gov/Funding_Opportunities/Grantee_Info/FFATA.aspx

VII. Agency Contacts

Project Officer

Shelley Reeves

Office: 202-795-7427

Fax: 202-205-0392

Email: shelley.reeves@acl.hhs.gov

Grants Management Specialist

Marlene Spencer

Office: 202-795-7442

Fax: 202-205-0392

Email: marlene.spencer@acl.hhs.gov

VIII. Other Information

1. Application Elements

a. SF 424, required – Application for Federal Assistance (See "Instructions for Completing Required Forms" for assistance).

b. SF 424A, required – Budget Information. (See Attachment A for Instructions; See "Standard Form 424A – Sample Format" for an example of a completed SF 424A).

c. Separate Budget Narrative/Justification, required (See "Budget Narrative/Justification - Sample Format" for examples and "Budget Narrative/Justification – Sample Template.")

NOTE: Applicants requesting funding for multi-year grant projects are REQUIRED to provide a Narrative/Justification for each year of potential grant funding, as well as a combined multi-year detailed Budget Narrative/Justification.

d. SF 424B – Assurance, required. Note: Be sure to complete this form according to instructions and have it signed and dated by the authorized representative (see item 18d on the SF 424).

e. Lobbying Certification, required

f. Proof of non-profit status, if applicable

g. Copy of the applicant's most recent indirect cost agreement, if requesting indirect costs. If any sub-contractors or sub-grantees are requesting indirect costs, copies of their indirect cost agreements must also be included with the application.

h. Project Narrative with Work Plan, required (See "Project Work Plan – Sample Template" for a formatting suggestions).

i. Organizational Capability Statement and Vitae for Key Project Personnel.

j. Letters of Commitment from Key Partners, if applicable.

k. Abstract

l. Supplemental Information Form for the SF-424

Note: NIDILRR does not require applicants to submit an organizational capability statement outside of their project narrative. NIDILRR assesses organizational capability via the peer review process, including application of criteria related to project staff, and the adequacy and accessibility of applicant resources.

2. The Paperwork Reduction Act of 1995 (P.L. 104-13)

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The project description and Budget Narrative/Justification is approved under OMB control number 0985-0018 which expires on 3/12/17. Public reporting burden for this collection of information is estimated to average 10 hours per response, including the time for reviewing instructions, gathering and maintaining the data needed and reviewing the collection information.

Appendix

Instructions for Completing Required Forms

This section provides step-by-step instructions for completing the four (4) standard Federal forms required as part of your grant application, including special instructions for completing Standard Budget Forms 424 and 424A. Standard Forms 424 and 424A are used for a wide variety of Federal grant programs, and Federal agencies have the discretion to require some or all of the information on these forms. ACL does not require all the information on these Standard Forms. Accordingly, please use the instructions below in lieu of the standard instructions attached to SF 424 and 424A to complete these forms.

a. Standard Form 424

1. **Type of Submission:** (REQUIRED): Select one type of submission in accordance with agency instructions.

- Preapplication
- Application
- Changed/Corrected Application – If ACL requests, check if this submission is to change or correct a previously submitted application.

2. **Type of Application**: (REQUIRED) Select one type of application in accordance with agency instructions.

- New
- Continuation
- Revision

3. **Date Received**: Leave this field blank.

4. **Applicant Identifier**: Leave this field blank

5a **Federal Entity Identifier**: Leave this field blank

5b. **Federal Award Identifier**: For new applications leave blank. For a continuation or revision to an existing award, enter the previously assigned Federal award (grant) number.

6. **Date Received by State**: Leave this field blank.

7. **State Application Identifier**: Leave this field blank.

8. **Applicant Information**: Enter the following in accordance with agency instructions:

a. **Legal Name**: (REQUIRED): Enter the name that the organization has registered with the System for Award Management (SAM), formally the Central Contractor Registry. Information on registering with SAM may be obtained by visiting the Grants.gov website (http://www.grants.gov) or by going directly to the SAM website (www.sam.gov).

b. **Employer/Taxpayer Number (EIN/TIN)**: (REQUIRED): Enter the Employer or Taxpayer Identification Number (EIN or TIN) as assigned by the Internal Revenue Service. In addition, we encourage the organization to include the correct suffix used to identify your organization in order to properly align access to the Payment Management System.

c. **Organizational DUNS**: (REQUIRED) Enter the organization's DUNS or DUNS+4 number received from Dun and Bradstreet. Information on obtaining a DUNS number may be obtained by visiting the Grants.gov website (http://www.grants.gov). Your DUNS number can be verified at http://fedgov.dnb.com/webform/.

d. **Address**: (REQUIRED) Enter the complete address including the county.

e. **Organizational Unit**: Enter the name of the primary organizational unit (and department or division, if applicable) that will undertake the project.

f. **Name and contact information of person to be contacted on matters involving this application**: Enter the name (First and last name required), organizational affiliation (if affiliated with an organization other than the applicant organization), telephone number (Required), fax number, and email address (Required) of the person to contact on matters related to this application.

9. **Type of Applicant**: (REQUIRED) Select the applicant organization "type" from the following drop down

list.

A. State Government B. County Government C. City or Township Government D. Special District Government E. Regional Organization F. U.S. Territory or Possession G. Independent School District H. Public/State Controlled Institution of Higher Education I. Indian/Native American Tribal Government (Federally Recognized) J. Indian/Native American Tribal Government (Other than Federally Recognized) K. Indian/Native American Tribally Designated Organization L. Public/Indian Housing Authority M. Nonprofit with 501C3 IRS Status (Other than Institution of Higher Education) N. Nonprofit without 501C3 IRS Status (Other than Institution of Higher Education) O. Private Institution of Higher Education P. Individual Q. For-Profit Organization (Other than Small Business) R. Small Business S. Hispanic-serving Institution T. Historically Black Colleges and Universities (HBCUs) U. Tribally Controlled Colleges and Universities (TCCUs) V. Alaska Native and Native Hawaiian Serving Institutions W. Non-domestic (non-US) Entity X. Other (specify)

10. **Name Of Federal Agency:** (REQUIRED) Enter U.S. Administration for Community Living

11. **Catalog Of Federal Domestic Assistance Number/Title:** The CFDA number can be found on page one of the Program Announcement.

12. **Funding Opportunity Number/Title:** (REQUIRED) The Funding Opportunity Number and title of the opportunity can be found on page one of the Program Announcement.

13. **Competition Identification Number/Title:** Leave this field blank.

14. **Areas Affected By Project:** List the largest political entity affected (cities, counties, state etc).

15. **Descriptive Title of Applicant's Project:** (REQUIRED) Enter a brief descriptive title of the project (This is not a narrative description).

16. **Congressional Districts Of:** (REQUIRED) 16a. Enter the applicant's Congressional District, and 16b. Enter all district(s) affected by the program or project. Enter in the format: 2 characters State Abbreviation – 3 characters District Number, e.g., CA-005 for California 5th district, CA-012 for California 12th district, NC-103 for North Carolina's 103rd district. If all congressional districts in a state are affected, enter "all" for the district number, e.g., MD-all for all congressional districts in Maryland. If nationwide, i.e. all districts within all states are affected, enter US-all. See the below website to find your congressional district: http://www.house.gov/

17. **Proposed Project Start and End Dates**: (REQUIRED) Enter the proposed start date and final end date of the project. **If you are applying for a multi-year grant, such as a 3 year grant project, the final project end date will be 3 years after the proposed start date.** In general, all start dates on the SF424 should be the 1st of the month and the end date of the last day of the month of the final year, for example 7/01/2014 to 6/30/2017. The Grants Officer can alter the start and end date at their discretion.

18. **Estimated Funding:** (REQUIRED) If requesting multi-year funding, enter the full amount requested from the Federal Government in line item 18.a., as a multi-year total. For example and illustrative purposes only, if year one is $100,000, year two is $100,000, and year three is $100,000, then the full amount of Federal funds requested would be reflected as $300,000. The amount of matching funds is denoted by lines b. through f. with a combined Federal and non-Federal total entered on line g. Lines b. through f. represents contributions to the project by the applicant and by your partners during the total project period, broken down by each type of contributor. The value of in-kind contributions should be included on appropriate lines, as applicable.

NOTE: Applicants should review cost sharing or matching principles contained in Subpart C of 45 CFR Part 75 before completing Item 18 and the Budget Information Sections A, B and C noted below.

All budget information entered under item 18 should cover the total project period. For sub-item 18a, enter the Federal funds being requested. Sub-items 18b-18e is considered matching funds. The dollar amounts entered in sub-items 18b-18f must total at least 1/3rd of the amount of Federal funds being requested (the amount in 18a). For a full explanation of ACL's match requirements, see the information in the box below. For sub-item 18f (program income), enter only the amount, if any, that is going to be used as part of the required match. Program Income submitted as match will become a part of the award match and recipients will be held accountable to meet their share of project expenses even if program income is not generated during the award period.

There are two types of match: 1) non-Federal cash and 2) non-Federal in-kind. In general, costs borne by the applicant and cash contributions of any and all third parties involved in the project, including sub-grantees, contractors and consultants, are considered **matching funds**. Examples of **non-Federal cash match** includes budgetary funds provided from the applicant agency's budget for costs associated with the project. Generally, most contributions from sub-contractors or sub-grantees (third parties) will be non-Federal in-kind matching funds. Volunteered time and use of third party facilities to hold meetings or conduct project activities may be considered in-kind (third party) donations.

NOTE: **Indirect charges** may only be requested if: (1) the applicant has a current indirect cost rate agreement approved by the Department of Health and Human Services or another Federal agency; or (2) the applicant is a state or local government agency. State governments should enter the amount of indirect costs determined in accordance with DHHS requirements. **If indirect costs are to be included in the application, a copy of the approved indirect cost agreement must be included with the application. Further, if any sub-contractors or sub-grantees are requesting indirect costs, a copy of the latest approved indirect cost agreements must also be included with the application, or reference to an approved cost allocation plan.**

Cost sharing is required by 34 CFR 350.62(a). NIDILRR requires that grantees in this program provide cost sharing in the amount of at least 1% of Federal funds. Beyond this NIDILRR cost-sharing requirement of at least 1% of Federal funds, there are no additional ACL cost share requirements that apply to this program.

19. **Is Application Subject to Review by State Under Executive Order 12372 Process?** Please refer to IV. Application and Submission Information, 4. Intergovernmental Review to determine if the ACL program is subject to E.O. 12372 and respond accordingly.

20. **Is the Applicant Delinquent on any Federal Debt?** (Required) This question applies to the applicant organization, not the person who signs as the authorized representative. If yes, include an explanation on the continuation sheet.

21. **Authorized Representative**: (Required) To be signed and dated by the authorized representative of the applicant organization. Enter the name (First and last name required) title (Required), telephone number (Required), fax number, and email address (Required) of the person authorized to sign for the applicant. A copy of the governing body's authorization for you to sign this application as the official representative must be on file in the applicant's office. (Certain Federal agencies may require that this authorization be submitted as part of the application.)

Standard Form 424A

NOTE: Standard Form 424A is designed to accommodate applications for multiple grant programs; thus, for purposes of this ACL program, many of the budget item columns and rows are not applicable. You should only consider and respond to the budget items for which guidance is provided below. Unless otherwise indicated, the SF 424A should reflect a multi-year budget. See Attachment B.Section A Budget Summary

Section A - Budget Summary

Line 5: Leave columns (c) and (d) blank. Enter TOTAL Federal costs in column (e) and total nonFederal costs (including third party in-kind contributions and any program income to be used as part of the grantee match) in column (f). Enter the sum of columns (e) and (f) in column (g).

Section B Budget Categories

Column 1: Enter the breakdown of how you plan to use the Federal funds being requested by object class category (see instructions for each object class category in Attachment C).

Column 2: Enter the breakdown of how you plan to use the non-Federal share by object class category.

Column 5: Enter the total funds required for the project (sum of Columns 1 and 2) by object class category.

Section C – Non Federal Resources

Column A: Enter the federal grant program.

Column B: Enter in any non-federal resources that the applicant will contribute to the project.

Column C: Enter in any non-federal resources that the state will contribute to the project.

Column D: Enter in any non-federal resources that other sources will contribute to the project.

Column E: Enter the total non-federal resources for each program listed in column A.

Section D –Forecasted Cash Needs

Line 13: Enter Federal forecasted cash needs broken down by quarter for the first year only.

Line 14: Enter Non-Federal forecasted cash needs broken down by quarter for the first year.

Line 15: Enter total forecasted cash needs broken down by quarter for the first year.

Note: This area is not meant to be one whereby an applicant merely divides the requested funding by four and inserts that amount in each quarter but an area where thought is given as to how your estimated expenses will be incurred during each quarter. For example, if you have initial startup costs in the first quarter of your award reflect that in quarter one or you do not expect to have contracts awarded and funded until quarter three, reflect those costs in that quarter.

Section E – Budget Estimates of Federal Funds Needed for Balance of the Project (i.e. subsequent years 2, 3, 4 or 5 as applicable).

Column A: Enter the federal grant program

Column B (first): Enter the requested year two funding.

Column C (second): Enter the requested year three funding.

Column D (third): Enter the requested year four funding, if applicable.

Column E (forth): Enter the requested year five funding, if applicable.

Section F – Other Budget Information

Line 21: Enter the total Indirect Charges

Line 22: Enter the total Direct charges (calculation of indirect rate and direct charges).

Line 23: Enter any pertinent remarks related to the budget.

Separate Budget Narrative/Justification Requirement

Applicants requesting funding for multi-year grant programs are REQUIRED to provide a combined multi-year Budget Narrative/Justification, as well as a detailed Budget Narrative/Justification for each year of potential grant funding. A separate Budget Narrative/Justification is also REQUIRED for each potential year of grant funding requested.

For your use in developing and presenting your Budget Narrative/Justification, a sample format with examples and a blank sample template have been included in these Attachments. In your Budget Narrative/Justification, you should include a breakdown of the budgetary costs for all of the object class categories noted in Section B, across three columns: Federal; non-Federal cash; and non-Federal in-kind. Cost breakdowns, or justifications, are required for any cost of $1,000 or for the thresholds as established in the examples. The Budget Narratives/Justifications should fully explain and justify the costs in each of the major budget items for each of the object class categories, as described below. Non-Federal cash as well as, sub-contractor or sub-grantee (third party) in-kind contributions designated as match

---

must be clearly identified and explained in the Budget Narrative/Justification The full Budget Narrative/Justification should be included in the application immediately following the SF 424 forms.

Line 6a: **Personnel**: Enter total costs of salaries and wages of applicant/grantee staff. Do not include the costs of consultants, which should be included under 6h Other.

In the Justification: Identify the project director, if known. Specify the key staff, their titles, and time commitments in the budget justification.

Line 6b: **Fringe Benefits**: Enter the total costs of fringe benefits unless treated as part of an approved indirect cost rate.

In the Justification: If the total fringe benefit rate exceeds 35% of Personnel costs, provide a breakdown of amounts and percentages that comprise fringe benefit costs, such as health insurance, FICA, retirement, etc. A percentage of 35% or less does not require a break down but you must show the percentage charged for each full/part time employee.

Line 6c: **Travel**: Enter total costs of all travel (local and non-local) for staff on the project. NEW: Local travel is considered under this cost item not under Other. Local transportation (all travel which does not requir⟨ per diem is considered local travel). Do not enter costs for consultant's travel - this should be included in line 6h.

In the Justification: Include the total number of trips, number of travelers, destinations, purpose (e.g., attend conference), length of stay, subsistence allowances (per diem), and transportation costs (including mileage rates).

Line 6d: **Equipment**: Enter the total costs of all equipment to be acquired by the project. For all grantees, "equipment" is nonexpendable tangible personal property having a useful life of more than one year and an acquisition cost of $5,000 or more per unit. If the item does not meet the $5,000 threshold, include it in your budget under Supplies, line 6e.

In the Justification: Equipment to be purchased with federal funds must be justified as necessary for the conduct of the project. The equipment must be used for project-related functions. Further, the purchase of specific items of equipment should not be included in the submitted budget if those items of equipment, or a reasonable facsimile, are otherwise available to the applicant or its subgrantees.

Line 6e: **Supplies**: Enter the total costs of all tangible expendable personal property (supplies) other than those included on line 6d.

In the Justification: . For any grant award that has supply costs in excess of 5% of total direct costs (Federal or Non-Federal), you must provide a detailed break down of the supply items (e.g., 6% of $100,000 = $6,000 – breakdown of supplies needed). If the 5% is applied against $1 million total direct costs (5% x $1,000,000 = $50,000) a detailed breakdown of supplies is not needed. Please note: any supply costs of $5,000 or less regardless of total direct costs does not require a detailed budget breakdown (e.g., 5% x $100,000 = $5,000 – no breakdown needed).

Line 6f: **Contractual:** Regardless of the dollar value of any contract, you must follow your established policies and procedures for procurements and meet the minimum standards established in the Code of Federal Regulations (CFR's) mentioned below. Enter the total costs of all contracts, including (1) procurement contracts (except those which belong on other lines such as equipment, supplies, etc.). Note: The 33% provision has been removed and line item budget detail is not required as long as you meet the established procurement standards. Also include any awards to organizations for the provision of technical assistance. Do not include payments to individuals on this line. Please be advised: A subrecipient is involved in financial assistance activities by receiving a sub-award and a subcontractor is involved in procurement activities by receiving a sub-contract. Through the recipient, a subrecipient performs work to accomplish the public purpose authorized by law. Generally speaking, a sub-contractor does not seek to accomplish a public benefit and does not perform substantive work on the project. It is merely a vendor providing goods or services to directly benefit the recipient, for example procuring landscaping or janitorial services. In either case, you are encouraged to clearly describe the type of work that will be accomplished and type of relationship with the lower tiered entity whether it be labeled as a subaward or subcontract.

In the Justification: Provide the following three items – 1) Attach a list of contractors indicating the name of the organization; 2) the purpose of the contract; and 3) the estimated dollar amount. If the name of the contractor and estimated costs are not available or have not been negotiated, indicate when this information will be available. The Federal government reserves the right to request the final executed contracts at any time. If an individual contractual item is over the small purchase threshold, currently set at $100K in the CFR, you must certify that your procurement standards are in accordance with the policies and procedures as stated in 45 CFR Part 75 for states, in lieu of providing separate detailed budgets. This certification should be referenced in the justification and attached to the budget narrative.

Line 6g: **Construction:** Leave blank since construction is not an allowable costs for this program.

Line 6h: **Other:** Enter the total of all other costs. Such costs, where applicable, may include, but are not limited to: insurance, medical and dental costs (i.e. for project volunteers this is different from personnel fringe benefits),non-contractual fees and travel paid directly to individual consultants, postage, space and equipment rentals/lease, printing and publication, computer use, training and staff development costs (i.e. registration fees). If a cost does not clearly fit under another category, and it qualifies as an allowable cost, then rest assured this is where it belongs.

Note: A recent Government Accountability Office (GAO) report number 11-43, has raised considerable concerns about grantees and contractors charging the Federal government for additional meals outside of the standard allowance for travel subsistence known as per diem expenses. If meals are to be charged towards the grant they must meet the following criteria outlined in the Grants Policy Statement:

- *Meals are generally unallowable except for the following:*
- *For subjects and patients under study(usually a research program);*
- *Where specifically approved as part of the project or program activity, e.g., in programs providing children's services (e.g., Headstart);*
- *When an organization customarily provides meals to employees working beyond the normal workday, as a part of a formal compensation arrangement;*
- *As part of a per diem or subsistence allowance provided in conjunction with allowable travel; and*
- *Under a conference grant, when meals are a necessary and integral part of a conference, provided that meal costs are not duplicated in participants' per diem or subsistence allowances (Note: the sole purpose of the grant award is to hold a conference).*

In the Justification: Provide a reasonable explanation for items in this category. For example, individual consultants explain the nature of services provided and the relation to activities in the work plan or indicate where it is described in the work plan. Describe the types of activities for staff development costs.

Line 6i: **Total Direct Charges**: Show the totals of Lines 6a through 6h.

Line 6j: **Indirect Charges**: Enter the total amount of indirect charges (costs), if any. If no indirect costs are requested, enter "none." Indirect charges may be requested if: (1) the applicant has a current indirect cost rate agreement approved by the Department of Health and Human Services or another federal agency; or (2) the applicant is a state or local government agency. **State governments should enter the amount of indirect costs determined in accordance with DHHS requirements.** An applicant that will charge indirect costs to the grant must enclose a copy of the current rate agreement. Indirect Costs can only be claimed on Federal funds, more specifically, they are to only be claimed on the Federal share of your direct costs. Any unused portion of the grantee's eligible Indirect Cost amount that are not claimed on the Federal share of direct charges can be claimed as un-reimbursed indirect charges, and that portion can be used towards meeting the recipient match.

Line 6k: **Total**: Enter the total amounts of Lines 6i and 6j.

Line 7: **Program Income**: As appropriate, include the estimated amount of income, if any, you expect to be generated from this project that you wish to designate as match (equal to the amount shown for Item 15(f) on Form 424). **Note**: Any program income indicated at the bottom of Section B and for item 15(f) on the face sheet of Form 424 will be included as part of non-Federal match and will be subject to the rules for documenting completion of this pledge. If program income is expected, but is not needed to achieve matching funds, **do not** include that portion here or on Item 15(f) of the Form 424 face sheet. Any anticipated program income that will not be applied as grantee match should be described in the Level of Effort section of the Program Narrative.

c. Standard Form 424B – Assurances (required)

This form contains assurances required of applicants under the discretionary funds programs administered by the Administration for Community Living. Please note that a duly authorized representative of the applicant organization must certify that the organization is in compliance with these assurances.

d. Certification Regarding Lobbying (required)

This form contains certifications that are required of the applicant organization regarding lobbying. Please note that a duly authorized representative of the applicant organization must attest to the applicant's compliance with these certifications.

Proof of Non-Profit Status (as applicable)

Non-profit applicants must submit proof of non-profit status. Any of the following constitutes acceptable proof of such status:

- A copy of a currently valid IRS tax exemption certificate.
- A statement from a State taxing body, State attorney general, or other appropriate State official certifying

that the applicant organization has a non-profit status and that none of the net earnings accrue to any private shareholders or individuals.
- A certified copy of the organization's certificate of incorporation or similar document that clearly establishes non-profit status.

Indirect Cost Agreement

Applicants that have included indirect costs in their budgets must include a copy of the current indirect cost rate agreement approved by the Department of Health and Human Services or another Federal agency. This is optional for applicants that have not included indirect costs in their budgets.

Budget Narrative/Justification - Sample Format

NOTE: Applicants requesting funding for a multi-year grant program are REQUIRED to provide a detailed Budget Narrative/Justification for EACH potential year of grant funding requested.

Object Class Category	Federal Funds	Non-Federal Cash	Non-Federal In-Kind	TOTAL	Justification
Personnel	$47,700	$23,554	$0	$71,254	**Federal** Project Director (name) = .5 FTE @ $95,401/yr = $47,700 **Non-Fed Cash** Officer Manager (name) = .5FTE @ $47,108/yr = $23,554 **Total** 　　　　　71,254
Fringe Benefits	$17,482	$8,632	$0	$26,114	**Federal** Fringe on Project Director at 36.65% = $17,482 FICA (7.65%) Health (25%) Dental (2%) Life (1%) Unemployment (1%) **Non-Fed Cash** Fringe on Office Manager at 36.65% = $8,632 FICA (7.65%) Health (25%) Dental (2%) Life (1%) Unemployment (1%)
Travel	$4,707	$2,940	$0	$7,647	**Federal** Local travel: 6 TA site visits for 1 person Mileage: 6RT @ .585 x 700 miles　　　　$2,457 Lodging: 15 days @ $110/day

					$1,650 Per Diem: 15 days @ $40/day $600 Total $4,707 **Non-Fed Cash** Travel to National Conference in (Destination) for 3 people Airfare 1 RT x 3 staff @ $500 $1,500 Lodging: 3 days x 3 staff @ $120/day $1,080 Per Diem: 3 days x 3 staff @ $40/day $360 Total $2,940
Equipment	$10,000	$0	$0	$10,000	No Equipment requested OR: Call Center Equipment Installation = $5,000 Phones = $5,000 Total $10,000
Supplies	$3,700	$5,670	$0	$9,460	**Federal** 2 desks @ $1,500 $3,000 2 chairs @ $300 $600 2 cabinets @ $200 $400 **Non-Fed Cash** 2 Laptop computers $3,000 Printer cartridges @ $50/month $300 Consumable supplies (pens, paper, clips etc…) @ $180/month $2,160 Total $9,460
Contractual	$30,171	$0	$0	$30,171	(organization name, purpose of contract and estimated dollar amount) Contract with AAA to provide respite services: 11 care givers @ $1,682 = $18,502 Volunteer Coordinator =

					Total $11,669 $30,171
					If contract details are unknown due to contract yet to be made provide same information listed above and: A detailed evaluation plan and budget will be submitted by (date), when contract is made.
Other	$5,600	$0	$5,880	$11,480	**Federal** 2 consultants @ $100/hr for 24.5 hours each = $4,900 Printing 10,000 Brochures @ $.05 = $500 Local conference registration fee (name conference) = $200 Total $5,600 **In-Kind** **Volunteers** 15 volunteers @ $8/hr for 49 hours = $5,880
Indirect Charges	$20,934	$0	$0	$20,934	21.5% of salaries and fringe = $20,934 IDC rate is attached.
TOTAL	$140,294	$40,866	$5,880	$187,060	

Budget Narrative/Justification - Sample Template

NOTE: Applicants requesting funding for a multi-year grant program are REQUIRED to provide a detailed Budget Narrative/Justification for EACH potential year of grant funding requested.

Object Class Category	Federal Funds	Non-Federal Cash	Non-Federal In-Kind	TOTAL	Justification
Personnel					
Fringe Benefits					
Travel					
Equipment					
Supplies					
Contractual					
Other					
Indirect Charges					

TOTAL						

Project Work Plan - Sample Template

NOTE : Applicants requesting funding for a multi-year grant program are REQUIRED to provide a Project Work Plan for EACH potential year of grant funding requested.

Goal:

Measurable Outcome(s):

* Time Frame (Start/End Dates by Month in Project Cycle)

Major Objectives	Key Tasks	Lead Person	1*	2*	3*	4*	5*	6*	7*	8*	9*	10*	11*	12*
1.														
2.														
3.														
4.														
5.														
6.														

NOTE: Please do note infer from this sample format that your work plan must have 6 major objectives. If you need more pages, simply repeat this format on additional pages.

Instructions for Completing the Project Summary/Abstract

- All applications for grant funding must include a Summary/Abstract that concisely describes the proposed project. It should be written for the general public.
- To ensure uniformity, limit the length to 265 words or less, on a single page with a font size of not less than 11, doubled-spaced.
- The abstract must include the project's goal(s), objectives, overall approach (including target population and significant partnerships), anticipated outcomes, products, and duration. The following are very simple descriptions of these terms, and a sample Compendium abstract.

Goal(s) – broad, overall purpose, usually in a mission statement, i.e. what you want to do, where you want to be.

Objective(s) – narrow, more specific, identifiable or measurable steps toward a goal. Part of the planning process or sequence (the "how") to attain the goal(s).

Outcomes - measurable results of a project. Positive benefits or negative changes, or measurable characteristics that occur as a result of an organization's or program's activities. (Outcomes are the end-point)

Products – materials, deliverables.

  • A model abstract/summary is provided below:

The Delaware Division of Services for Aging and Adults with Physical Disabilities (DSAAPD), in **partnership** with the Delaware Lifespan Respite Care Network (DLRCN) and key stakeholders will, in the course of this two-year project, expand and maintain a statewide coordinated lifespan respite system that builds on the infrastructure currently in place. The **goal** of this project is to improve the delivery and quality of respite services available to families across age and disability spectrums by expanding and coordinating existing respite systems in Delaware. The **objectives** are: 1) to improve lifespan respite infrastructure; 2) to improve the provision of information and awareness about respite service; 3) to streamline access to respite services through the Delaware ADRC; 4) to increase availability of respite services. Anticipated **outcomes** include: 1) families and caregivers of all ages and disabilities will have greater options for choosing a respite provider; 2) providers will demonstrate increased ability to provide specialized respite care; 3) families will have streamlined access to information and satisfaction with respite services; 4) respite care will be provided using a variety of existing funding sources and 5) a sustainability plan will be developed to support the project in the future. The expected **products** are marketing and outreach materials, caregiver training, respite worker training, a Respite Online searchable database, two new Caregiver Resource Centers (CRC), an annual Respite Summit, a respite voucher program and 24/7 telephone information and referral services.

Instructions for Completing the "Supplemental Information for the SF-424" Form (ED 424 Supplement)

1. Project Director. Name, address, telephone and fax numbers, and e-mail address of the person to be contacted on matters involving this application. Items marked with an asterisk (*) are mandatory.

2. Novice Applicant. Select "Not Applicable To This Program."

3a. Human Subjects Research. Check "No" if research activities involving human subjects are not planned at any time during the proposed project period. The remaining parts of Item 3 are then not applicable. Check "Yes" if research activities involving human subjects are planned at any time during the proposed project period, either at the applicant organization or at any other performance site or collaborating institution. Check "Yes" even if the research is exempt from the regulations for the protection of human subjects.

3b. Human Subjects Research. Check "Yes" if all the research activities proposed are designated to be exempt from the regulations. Check the exemption number(s) corresponding to one or more of the six exemption categories listed in I. B. "Exemptions." In addition, follow the instructions in II. A. "Exempt Research Narrative" below.

Check "No" if some or all of the planned research activities are covered (not exempt). In addition, follow the instructions in II. B. "Nonexempt Research Narrative" in the attached page entitled "Definitions for U.S. Department of Education Supplemental Information for the SF-424."

3b. Human Subjects Assurance Number. If the applicant has an approved Federal Wide Assurance (FWA) on file with the Office for Human Research Protections (OHRP), U.S. Department of Health and Human Services, that covers the specific activity, insert the number in the space provided. **(A list of current FWAs is available at: http://ohrp.cit.nih.gov/search/search.aspx?styp=bsc)** If the applicant does not have an approved assurance on file with OHRP, enter "None." In this case, the applicant, by signature on the SF-424, is declaring that it will proceed to obtain the human subjects assurance upon request by the designated NIDILRR official. If the application is recommended/selected for funding, the designated NIDILRR official will request that the applicant obtain the assurance within 30 days after the specific formal request.

3c. <u>Human Subjects Narratives</u>. If applicable, please attach your "Exempt Research" or "Nonexempt Research" narrative to your submission of the Supplemental Information for the SF-424 form as instructed in item II, "Instructions for Exempt and Nonexempt Human Subjects Research Narratives," below.

Note about Institutional Review Board Approval. NIDILRR does not require certification of Institutional Review Board approval with the application. However, if an application that involves non-exempt human subjects research is recommended/selected for funding, the designated NIDILRR official will request that the applicant obtain and send the certification to NIDILRR within 30 days after the formal request. <u>No covered human subjects research can be conducted until the study has NIDILRR clearance for protection of human subjects in research.</u>

I. Definitions and Exemptions

A. Definitions.

—Research

"a systematic investigation, including research development, testing and evaluation, designed to develop or contribute to generalizable knowledge." Activities which meet this definition constitute research whether or not they are conducted or supported under a program that is considered research for other purposes. For example, some demonstration and service programs may include research activities.

—Human Subject

"a living individual about whom an investigator (whether professional or student) conducting research obtains (1) data through intervention or interaction with the individual, or (2) identifiable private information." *(1) If an activity involves obtaining information about a living person by manipulating that person or that person's environment, or by communicating or interacting with the individual, as occurs with surveys and interviews, the definition of human subject is met. (2) If an activity involves obtaining private information about a living person in such a way that the information can be **directly** or **indirectly** linked to that individual), the definition of human subject is met.*

B. Exemptions.

Research activities in which the <u>only</u> involvement of human subjects will be in one or more of the following six categories of *exemptions* are not covered by the regulations:

(1) Research conducted in established or commonly accepted educational settings, involving normal educational practices, such as (a) research on regular and special education instructional strategies, or (b) research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods. *If an educational practice is being introduced to the site and is not widely used for similar populations, it is not covered by this exemption.*

(2) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: (a) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (b) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation. *If the subjects are children, exemption 2 applies only to research involving educational tests and observations of public behavior when the investigator(s) do not participate in the activities being observed. Exemption 2 does not apply if children are surveyed or interviewed or if the research involves observation of public behavior and the investigator(s) participate in the activities being observed. [Children are defined as persons who have not attained the legal age for consent to treatments or procedures* involved in the research, under the applicable law or jurisdiction in which the research will be conducted.]

(3) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior that is not exempt under section (2) above, if the human subjects are elected or appointed public officials or candidates for public office; or federal statute(s) require(s) without exception that the confidentiality of the personally identifiable information will be maintained throughout the research and thereafter.

(4) Research involving the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens, if these sources are publicly available or if the information is recorded by the investigator in a manner that subjects cannot be identified, directly or through identifiers linked to the subjects. *[This exemption applies only to retrospective studies using data collected before the initiation of the research.]*

(5) Research and demonstration projects which are conducted by or subject to the approval of department or agency heads, and which are designed to study, evaluate, or otherwise examine: (a) public benefit or service programs; (b) procedures for obtaining benefits or services under those programs; (c) possible changes in or alternatives to those programs or procedures; or (d) possible changes in methods or levels of payment for benefits or services under those programs. *[The standards of this exemption are rarely met because it was designed to apply only to specific research conducted by the Social Security Administration and some Federal welfare benefits programs.]*

(6) Taste and food quality evaluation and consumer acceptance studies, (a) if wholesome foods without additives are consumed or (b) if a food is consumed that contains a food ingredient at or below the level and for a use found to be safe, or agricultural chemical or environmental contaminant at or below the level found to be safe, by the Food and Drug Administration or approved by the Environmental Protection Agency or the Food Safety and Inspection Service of the U.S. Department of Agriculture.

II. Instructions for Exempt and Nonexempt Human Subjects Research Narratives

If the applicant marked "Yes" for Item 3.b. of the Supplemental Information for the SF 424, the applicant must attach a human subjects "exempt research" or "nonexempt research" narrative to the Supplemental Information for the SF-424 form. If you have multiple projects and need to provide more than one narrative, be sure to label each set of responses as to the project they address.

A. Exempt Research Narrative.

If you marked "Yes" for item 3.b. and designated exemption numbers(s), attach the "exempt research" narrative to the Supplemental Information for the SF-424. The narrative must contain sufficient information about the involvement of human subjects in the proposed research to allow a determination by NIDILRR that the designated exemption(s) are appropriate. The narrative must be succinct.

B. Nonexempt Research Narrative.

If you marked "No" for item 3.b. you must attach the "nonexempt research" narrative to the Supplemental Information for the SF-424. The narrative must address the following seven points. Although no specific page limitation applies to this section of the application, be succinct.

(1) **Human Subjects Involvement and Characteristics**: Provide a detailed description of the proposed involvement of human subjects. Describe the characteristics of the subject population, including their anticipated number, age range, and health status. Identify the criteria for inclusion or exclusion of any subpopulation. Explain the rationale for the involvement of special classes of subjects, such as children, children with disabilities, adults with disabilities, persons with mental disabilities, pregnant women, prisoners, institutionalized individuals, or others who are likely to be vulnerable

(2) **Sources of Materials**: Identify the sources of research material obtained from individually identifiable living human subjects in the form of specimens, records, or data. Indicate whether the material or data will be obtained specifically for research purposes or whether use will be made of existing specimens, records, or data.

(3) **Recruitment and Informed Consent**: Describe plans for the recruitment of subjects and the consent procedures to be followed. Include the circumstances under which consent will be sought and obtained, who will seek it, the nature of the information to be provided to prospective subjects, and the method of documenting consent. State if the Institutional Review Board (IRB) has authorized a modification or waiver of the elements of consent or the requirement for documentation of consent.

(4) **Potential Risks**: Describe potential risks (physical, psychological, social, legal, or other) and assess their likelihood and seriousness. Where appropriate, describe alternative treatments and procedures that might be advantageous to the subjects.

(5) **Protection Against Risk**: Describe the procedures for protecting against or minimizing potential risks, including risks to confidentiality, and assess their likely effectiveness. Where appropriate, discuss provisions for ensuring necessary medical or professional intervention in the event of adverse effects to the subjects. Also, where appropriate, describe the provisions for monitoring the data collected to ensure the safety of the subjects.

(6) **Importance of the Knowledge to be Gained**: Discuss the importance of the knowledge gained or to be gained as a result of the proposed research. Discuss why the risks to subjects are reasonable in relation to the anticipated benefits to subjects and in relation to the importance of the knowledge that may reasonably be expected to result.

(7) **Collaborating Site(s)**: If research involving human subjects will take place at collaborating site(s) or other performance site(s), name the sites and briefly describe their involvement or role in the research.

RFP Fellowship

Image Description: Administration for Community Living

Administration for Community Living

National Institute on Disability, Independent Living, and Rehabilitation Research

Switzer Research Fellowships Program
HHS-2016-ACL-NIDILRR-SF-0136
Application Due Date: 03/14/2016

Image Description: Administration for Community Living

Administration for Community Living

National Institute on Disability, Independent Living, and Rehabilitation Research

Switzer Research Fellowships Program
HHS-2016-ACL-NIDILRR-SF-0136
Application Due Date: 03/14/2016

Switzer Research Fellowships Program

HHS-2016-ACL-NIDILRR-SF-0136

TABLE OF CONTENTS

<div align="center">

Department of Health & Human Services
Administration for Community Living

</div>

ACL Center:	National Institute on Disability, Independent Living, and Rehabilitation Research
Funding Opportunity Title:	Switzer Research Fellowships Program
Announcement Type:	Initial
Funding Opportunity Number:	HHS-2016-ACL-NIDILRR-SF-0136
Primary CFDA Number:	93.433
Due Date For Letter of Intent:	**02/17/2016**
Due Date for Applications:	**03/14/2016**
Date for Informational Conference Call:	**02/03/2016**

Applications that fail to meet the application due date will not be reviewed and will receive no further consideration. You are strongly encouraged to submit your application a minimum of 3-5 days prior to the application closing date. Do not wait until the last day in the event you encounter technical difficulties, either on your end or, with http://www.grants.gov. Grants.gov can take up to 48 hours to notify you of a successful submission.

Executive Summary

The Administrator of the Administration for Community Living invites applications for new awards for fiscal year (FY) 2016 for the Research Fellowships Program (CFDA 93.433), authorized under the Rehabilitation Act of 1973, as amended.

I. Funding Opportunity Description

The purpose of the Research Fellowships Program is to build research capacity by providing support to highly qualified individuals, including those with disabilities, to conduct research on the rehabilitation of individuals with disabilities. Fellows must conduct original research in an area authorized by section 204 of the Rehabilitation Act of 1973, as amended. Section 204 authorizes research, demonstration projects, training, and related activities, the purposes of which are to develop methods, procedures, and rehabilitation technology that maximize the full inclusion and integration into society, employment, independent living, family support, and economic and social self-sufficiency of individuals with disabilities, especially individuals with the most severe disabilities, and to improve the effectiveness of services authorized under the Act.

For Switzer Research Fellowships, NIDILRR wishes to receive applications from qualified individuals, including those with disabilities, whose areas of interest reflect the breadth of NIDILRR's research agenda across the primary outcomes domains of individual well-being: community living and participation, employment, and health and function.

Note: An applicant should consult NIDRR's Long-Range Plan for Fiscal Years 2013-2017 (78 FR 20299) (the Plan) when preparing its application. The Plan is organized around the following outcome domains: (1) community living and participation; (2) health and function; and (3) employment. In concert with the balance principle described in the Plan, applicants must specify in their abstract and project narrative which of NIDILRR's major outcome domains their proposed project will focus on: (1) community living and

participation, (2) health and function, or (3) employment. Although applicants may propose projects that address more than one domain, they should select the primary domain addressed in their proposed project.

Statutory Authority

29 U.S.C. § 762(e); Section 202(e) of the Rehabilitation Act of 1973, as amended

II. Award Information

Funding Instrument Type:	Grant
Estimated Total Funding:	$290,000
Expected Number of Awards:	4
Award Ceiling:	$80,000 Per Project Period
Award Floor:	$70,000 Per Project Period
Average Projected Award Amount:	$75,000 Per Project Period

12-month project and budget period
Other

- The Award Ceiling (maximum award amount) for Distinguished Fellowships is $80,000.
- The Award Ceiling (maximum award amount) for Merit Fellowships is $70,000.

III. Eligibility Information

1. Eligible Applicants

Eligible Applicants: Only individuals are eligible to apply for Research Fellowship grants. Eligible individuals must: (1) Satisfy the requirements of 45 CFR part 75 and (2) have training and experience that indicate a potential for engaging in scientific research related to improving the rehabilitation outcomes of individuals with disabilities. The program provides two categories of research fellowships: Merit Fellowships and Distinguished Fellowships. (a) To be eligible for a Merit Fellowship, an individual must be in the earlier stages of his or her career in research and have either advanced professional training or experience in independent study in an area which is directly pertinent to disability and rehabilitation. (b) To be eligible for a Distinguished Fellowship, an individual must have seven or more years of research experience in subject areas, methods, or techniques relevant to rehabilitation research and must have a doctorate, other terminal degree, or comparable academic qualifications.

Institutions are not eligible to be recipients of Research Fellowship grants. The person who seeks the Fellowship must sign all forms included in their application. Representatives of the institutions should not sign the forms.

Fellows must not be direct recipients of Federal government grant funds in addition to those provided by the Fellowship grant (during the duration of the Fellowship award performance period). Fellows may, subject to compliance with their institution's policy on additional employment, be the principal investigator of or otherwise work on a Federal grant that has been awarded to the Fellow's institution.

Fellows must work principally on the Fellowship during the term of the Research Fellowship grant.

Applicants must submit an Eligibility Statement describing how they meet the requirements for one of the two eligibility classifications allowed under this program. The Eligibility Statement must also include a description of how the applicant will be able to work principally on the Research Fellowship grant.

Potential applicants who are non-U.S. residents or who receive certain federal and state benefits are cautioned that acceptance of a Research Fellowship may adversely affect their immigration or

non-immigrant visa status or their eligibility for services such as In-Home Supportive Services under Supplemental Security Income Section 1619. This has occurred in the past because Research Fellowships are awarded directly to individuals rather than host institutions, which can affect determinations of employment and income status. Also, a U.S. Social Security Number (SSN) is required for completing and submitting the application materials. Research Fellowship applicants from other countries may be able to obtain a U.S. SSN through the following web site: http://www.ssa.gov/pubs/EN-05-10096.pdf.

2. Cost Sharing or Matching

Cost Sharing / Matching Requirement: No

3. Responsiveness and Screening Criteria

Application Responsiveness Criteria

Application Screening Criteria

We will screen all applications and will reject any applications that:

- Are submitted after the deadline;
- Have narrative sections that are uploaded into grants.gov in formats other than PDF (PortableDocument) read-only, non-modifiable format, or in documents that are password protected.
- Propose a budget that exceeds $80,000 for Distinguished Fellowships or $70,000 for Merit Fellowships;
- Propose a project period that exceeds 12 months;
- Have a project narrative section that exceeds 24 pages.

IV. Application and Submission Information

1. Address to Request Application Package

Application materials can be obtained from http://www.grants.gov or http://www.acl.gov/Funding_Opportunities/ Announcements/Index.aspx.

ACL requires applications for all announcements to be submitted electronically through http://www.grants.gov. The Grants.gov (http://www.grants.gov) registration process can take several days. If you are not currently registered with http://www.grants.gov, please begin this process immediately. **For assistance with http://www.grants.gov, please contact them at** support@grants.gov **or 1-800-518-4726 between 7 a.m. and 9 p.m. Eastern Time.**

At the http://www.grants.gov website, you will find information about submitting an application electronically through the site. ACL strongly recommends that you not wait until the application due date to begin the application process through http://www.grants.gov because of the time that is required to complete the registration process.

All individual applicants must be registered with Grants.gov. When registering as an individual with Grants.gov, you must know the Funding Opportunity Number (FON) of the Grant opportunity you are applying for. You must use this FON to register.

You must submit all documents electronically, including all information included on the SF424 and all necessary assurances and certifications.

Your application must comply with any page limitation requirements described in this Funding Opportunity Announcement.

After you electronically submit your application, you will receive an automatic acknowledgement from http

://www.grants.gov that contains your http://www.grants.gov tracking number. The Administration for Community Living will retrieve your application from http://www.grants.gov.

For further information, please contact:

U.S. Department of Health and Human Services
Administration for Community Living
Patricia Barrett
National Institute on Disability, Independent Living, and Rehabilitation Research
Phone Number: (202) 795-7303
E-mail: patricia.barrett@acl.hhs.gov

2. Content and Form of Application Submission

Letter of Intent

Letter of Intent

Due Date for Letter of Intent: **02/17/2016**

Due to the open nature of this competition for research fellowships, NIDILRR is requesting all potential applicants submit a letter of intent (LOI). These letters will assist NIDILRR in selecting reviewers for this competition. The submission is not mandatory, and the content of the LOI will not be peer reviewed or otherwise used to rate an applicant's application.

Each LOI should be limited to a maximum of four pages and include the following information: (1) the title of the proposed project, the name of the applicant, and the names of any institutions and entities with whom the applicant is affiliated; (2) a brief statement of the vision, goals, and objectives of the proposed project and a description of its proposed activities at a sufficient level of detail to allow NIDILRR to select potential peer reviewers; (3) a list of proposed project collaborators, if any; (4) a list of individuals whose selection as a peer reviewer might constitute a conflict of interest due to involvement in proposal development, selection as an advisory board member, etc.; and (5) contact information for the applicant.

Submission of a LOI is not a prerequisite for eligibility to submit an application.

NIDILRR will accept the LOI via email. The LOI must be sent to: Patricia Barrett at Patricia.Barrett@acl.hhs.gov.

For further information regarding the LOI submission process, contact Patricia Barrett at Patricia.Barrett@acl.hhs.gov.

Project Narrative

The Project Narrative portion of your application is where you describe your proposed project, and address each of the review criteria. The project narrative must be no longer than the equivalent of 24 pages, using the following standards:

- A "page" is 8.5" x 11", on one side only, with 1" margins at the top, bottom and both sides.
- Double-space (no more than three lines per vertical inch) all text in the application narrative. You are not required to double space titles, headings, footnotes, references, and captions, or text in charts, tables, figures, and graphs. Use a font that is not less than size 11.
- Use one of the following fonts: Time New Roman, Courier, Courier New or Arial.
- Include all critical information in the project narrative.
- Submit only .PDF files for any attachments to your application. PDF files are the only

Grants.gov-approved file type. Any attachments uploaded that are not .PDF files or that are password protected files will not be reviewed.

NOTE: The page limit applies only to the Project Narrative section. The page limit does not apply to the Application for Federal Assistance (SF 424), the forms, the one-page abstract, table of contents, assurances, the resumes, the bibliography, or the letters of support.

Abstract

The abstract should include a brief--no more than one page--description of the proposed project, including: goals, objectives, outcomes, and knowledge or products to be developed. The abstrct can be single or double-spaced.

Table of Contents

The table of contents shows how the important sections of your proposal are organized. The table of contents will help reviewers locate information in your application that will assist them in their review of the application.

Other

Please submit an appendix that lists every collaborating organization and individual named in the application, including staff, consultants, contractors, and advisory board members (if any). We will use this information to help us screen for conflicts of interest with our reviewers.

Budget Narrative/Justification

A budget narrative/justification is not necessary.

Project Work Plan

Applicants should include a Project Work Plan as part of their project narrative. This Work Plan should include the project's overall goal, anticipated outcomes, key objectives, and the major tasks and action steps that will be pursued to achieve the goal and outcomes. For each major task and action step, the work plan should identify the timeframes involved (including start- and end-dates). Applicants may wish to use the provided "Project Work Plan - Sample Template" format as a reference and resource. Applicants can find the Sample Template for a Work Plan in the appendix section of this funding opportunity announcement.

3. Submission Dates and Times

Due Date for Applications: **03/14/2016**

Date for Informational Conference Call: 02/03/2016

The deadline for the submission of applications under this Funding Opportunity Announcement is noted above and applications must be submitted electronically by 11:59 p.m. Eastern Time on that date. Applications that fail to meet the application due date will not be reviewed and will receive no further consideration.

Interested parties are invited to participate in a pre-application meeting with NIDILRR staff and to receive information and technical assistance appropriate to the Switzer Research Fellowships. This pre-application meeting will be held on February 3, 2016. Interested parties may participate in one of these meetings by conference call with NIDILRR staff between 1:00 p.m. and 3:00 p.m., Washington, DC time. NIDILRR staff also will be available from 3:30 p.m. to 4:30 p.m., Washington, DC time, on the same day, by telephone, to provide additional information and technical assistance through individual consultation. For further information or to make arrangements to participate in a pre-application meeting via conference call or to

arrange for an individual consultation, contact Carolyn Baron at <u>Carolyn.Baron@acl.hhs.gov</u> or by telephone at (202) 795-7302.

4. Intergovernmental Review

This funding opportunity announcement is not subject to the requirements of Executive Order 12372, "Intergovernmental Review of Federal Programs."

5. Funding Restrictions

Note: A recent Government Accountability Office (GAO) report has raised considerable concerns about grantees and contractors charging the Federal government for additional meals outside of the standard allowance for travel subsistence known as per diem expenses. Executive Orders on Promoting Efficient Spending (E.O. 13589) and Delivering Efficient, Effective and Accountable Government (E.O. 13576) have been issued and instruct Federal agencies to promote efficient spending. Therefore, if meals are to be charged in your proposal, applicants should understand such costs must meet the following criteria outlined in the Executive Orders and HHS Grants Policy Statement:

- Meals are generally unallowable except for the following:
  - For subjects and patients under study (usually a research program);
  - Where specifically approved as part of the project or program activity, e.g., in programs providing children's services (e.g., Headstart);
  - When an organization customarily provides meals to employees working beyond the normal workday, as a part of a formal compensation arrangement;
  - As part of a per diem or subsistence allowance provided in conjunction with allowable travel; and
  - Under a conference grant, when meals are a necessary and integral part of a conference, provided that meal costs are not duplicated in participants' per diem or subsistence allowances. (Note: conference grant means the sole purpose of the award is to hold a conference)

6. Other Submission Requirements

Protection of Human Subjects

Research activities involving human subjects by awards under these programs are subject to Regulations for the Protection of Human Subjects. You do not need an assurance or IRB approval as a condition of applying for this competition.

If you marked "Yes" for Item 3 on the Supplemental Information for SF 424, you must provide a human subjects "exempt research" or "nonexempt research" narrative. Insert the narrative(s) in the space provided.

If you have multiple projects and need to provide more than one narrative, please indicate which project each set of responses addresses.

A. Exempt Research Narrative. If you marked "Yes" for item 3a. and designated exemption number(s), provide the "exempt research" narrative. The narrative must contain sufficient information about the involvement of human subjects in the proposed research to allow a determination that the designated exemption(s) are appropriate. The narrative must be succinct. In addition, narratives are required for each participating partner if research is being conducted at other sites.

B. Nonexempt Research Narrative. If you marked "No" for item 3a., you must provide the "nonexempt research" narrative. The narrative must address the seven points. Although no specific page limitation applies to this section of the application, be succinct.

Human Subject Requirements for HHS grants. If your proposed project(s) involves research on human subjects, you must comply with the Department of Health and Human Services (DHHS) Regulations (Title 45 Code of Federal Regulations Part 46) regarding the protection of human research subjects, unless that research is exempt as specified in the regulation. All awardees and their performance sites engaged in research involving human subjects must have or obtain:

(1) an assurance of compliance with the Regulations, and (2) initial and continuing approval of the research by an appropriately constituted and registered institutional review board. In order to obtain a Federal wide Assurance (FWA) of Protection for Human Subjects, the applicant may complete an on-line application at the Office for Human Research Protections (OHRP) website or write to the OHRP for an application. To obtain a FWA, contact OHRP at: http://www.hhs.gov/ohrp.

For further information, please contact:

Patricia Barrett

National Institute on Disability, Independent Living, and Rehabilitation Research

330 C Street, SW

Washington, DC 20201

V. Application Review Information

1. Criteria

The Director evaluates applications for Fellowships according to the following criteria, which are found in 34 CFR 356.30:

A.1 Quality and level of applicant's formal education	Maximum Points:15
A.2 Applicant's previous work experience	Maximum Points:20
A.3 Recommendations of present or former supervisors or colleagues that include an indication of the applicant's ability to work creatively in scientific research	Maximum Points:15
B.1 Importance of the problem to be investigated to the purpose of the Rehabilitation Act and the Mission of the National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR)	Maximum Points:10
B.2 The research hypotheses or related objectives and the methodology and design to be followed	Maximum Points:30
B.3 Assurance of the availability of any necessary data resources, equipment, or institutional support, including technical consultation and support where appropriate, required to carry out the proposed activity	Maximum Points:10

2. Review and Selection Process

Final award decisions will be made by the Administrator, ACL. In making these decisions, the Administrator's primary consideration will be the ranking of applications by the review panel. The Administrator may also consider the reasonableness of the estimated cost to the government considering the available funding and anticipated results and the likelihood that the proposed project will result in the benefits expected. Under 45 CFR part 75, Section 205, item (3) history of performance, is an item that is also reviewed. In addition, in making a competitive grant award, the Administrator of ACL also requires various

assurances including those applicable to Federal civil rights laws that prohibit discrimination in programs or activities receiving Federal financial assistance from the Department of Health and Human Services 45 CFR part 75.

3. Anticipated Announcement Award Date

Successful applicants will receive an electronic Notice of Award no later than September 30, 2016. All applicants will receive feedback from the peer review process no later than September 30, 2016.

VI. Award Administration Information

1. Award Notices

If your application is successful, we send you a Notice of Award (NOA), or we may send you an email containing a link to access an electronic version of your NOA. If your application is not evaluated or not selected for funding, we will notify you.

2. Administrative and National Policy Requirements

The award is subject to DHHS Administrative Requirements, which can be found in 45CFR Part 75 and the Standard Terms and Conditions, included in the Notice of Award as well as implemented through the HHS Grants Policy Statement.

A standard term and condition of award will be included in the final notice of award; all applicants will be subject to a term and condition that applies to the terms of 48 CFR section 3.908 to the award, and requires the grantees inform their employee in writing of employee whistleblower rights and protections under 41 U.S.C. 4712 in the predominant native language of the workforce.

Other Administrative and National Policy Requirements

N/A

3. Reporting

(a) If you apply for a grant under this competition, you must ensure that you have in place the necessary processes and systems to comply with the reporting requirements in 45 CFR part 75 should you receive funding under the competition. This does not apply if you have an exception under 45 CFR part 75.

(b) At the end of your project period, you must submit a final performance report, as required in your award's terms and conditions.

All NIDILRR grantees will submit their annual and final reports through NIDILRR's online reporting system and as designated in the terms and conditions of your NOA.

4. FFATA and FSRS Reporting

The Federal Financial Accountability and Transparency Act (FFATA) requires data entry at the FFATA Subaward Reporting System (http://www.FSRS.gov) for all sub-awards and sub-contracts issued for $25,000 or more as well as addressing executive compensation for both grantee and sub-award organizations.

For further guidance please see the following link: http://www.acl.gov/Funding_Opportunities/Grantee_Info/FFATA.aspx

VII. Agency Contacts

Project Officer

Kenneth Wood

National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR)

Administration for Community Living (ACL)

330 C Street, SW, Washington, DC 20201

Kenneth.Wood@acl.hhs.gov.

Grants Management Specialist

Patricia A. Barrett,

National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR)

Administration for Community Living (ACL)

330 C Street, SW, Washington, DC 20201

patricia.barrett@acl.hhs.gov, 202-795-7303.

VIII. Other Information

1. Application Elements

a. SF 424, required -- Application for Federal Assistance

b. Eligibility Statement

c. Abstract

d. Project Narrative

e. Supplemental Information Form for the SF-424.

2. The Paperwork Reduction Act of 1995 (P.L. 104-13)

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The project description and Budget Narrative/Justification is approved under OMB control number 0985-0018 which expires on 3/12/17. Public reporting burden for this collection of information is estimated to average 10 hours per response, including the time for reviewing instructions, gathering and maintaining the data needed and reviewing the collection information.

Appendix

Instructions for Completing the "Supplemental Information for the SF-424" Form

1. Project Director. Name, address, telephone and fax numbers, and e-mail address of the person to be contacted on matters involving this application. Items marked with an asterisk (*) are mandatory.

2. Novice Applicant. Select "Not Applicable To This Program."

3a. Human Subjects Research. Check "No" if research activities involving human subjects are not planned

at any time during the proposed project period. The remaining parts of Item 3 are then not applicable. Check "Yes" if research activities involving human subjects are planned at any time during the proposed project period, either at the applicant organization or at any other performance site or collaborating institution. Check "Yes" even if the research is exempt from the regulations for the protection of human subjects.

3b. Human Subjects Research. Check "Yes" if all the research activities proposed are designated to be exempt from the regulations. Check the exemption number(s) corresponding to one or more of the six exemption categories listed in I. B. "Exemptions." In addition, follow the instructions in II. A. "Exempt Research Narrative" below. Check "No" if some or all of the planned research activities are covered (not exempt). In addition, follow the instructions in II. B. "Nonexempt Research Narrative" in the attached page entitled "Definitions for U.S. Department of Education Supplemental Information for the SF-424."

3b. Human Subjects Assurance Number. If the applicant has an approved Federal Wide Assurance (FWA) on file with the Office for Human Research Protections (OHRP), U.S. Department of Health and Human Services, that covers the specific activity, insert the number in the space provided. **(A list of current FWAs is available at: http://ohrp .cit.nih.gov/search/search.aspx?styp=bsc).** If the applicant does not have an approved assurance on file with OHRP, enter "None." In this case, the applicant, by signature on the SF-424, is declaring that it will proceed to obtain the human subjects assurance upon request by the designated NIDILRR official. If the application is recommended/selected for funding, the designated NIDILRR official will request that the applicant obtain the assurance within 30 days after the specific formal request.

3c. Human Subjects Narratives. If applicable, please attach your "Exempt Research" or "Nonexempt Research" narrative to your submission of the Supplemental Information for the SF-424 form as instructed in item II, "Instructions for Exempt and Nonexempt Human Subjects Research Narratives," below.

Note about Institutional Review Board Approval. NIDILRR does not require certification of Institutional Review Board approval with the application. However, if an application that involves non-exempt human subjects research is selected for funding, the designated NIDILRR official will request that the applicant obtain and send the certification to NIDILRR within 30 days after the formal request. **No covered human subjects research can be conducted until the study has NIDILRR clearance for protection of human subjects in research.**

I. Definitions and Exemptions

A. Definitions.

—**Research**

"a systematic investigation, including research development, testing and evaluation, designed to develop or contribute to generalizable knowledge." Activities which meet this definition constitute research whether or not they are conducted or supported under a program that is considered research for other purposes. For example, some demonstration and service programs may include research activities.

—**Human Subject**

"a living individual about whom an investigator (whether professional or student) conducting research obtains (1) data through intervention or interaction with the individual, or (2) identifiable private information." *(1) If an activity involves obtaining information about a living person by manipulating that person or that person's environment, or by communicating or interacting with the individual, as occurs with surveys and interviews, the definition of human subject is met. (2) If an activity involves obtaining private information about a living person in such a way that the information can be directly or indirectly linked to that individual), the definition of human subject is met.*

B. Exemptions.

Research activities in which the **only** involvement of human subjects will be in one or more of the following six categories of *exemptions* are not covered by the regulations:

(1) Research conducted in established or commonly accepted educational settings, involving normal educational practices, such as (a) research on regular and special education instructional strategies, or (b) research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods. If an educational practice is being introduced to the site and is not widely used for similar populations, it is not covered by this exemption.

(2) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: (a) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (b) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation. If the subjects are children, exemption 2 applies only to research involving educational tests and observations of public behavior when the investigator(s) do not participate in the activities being observed. Exemption 2 does not apply if children are surveyed or interviewed or if the research involves observation of public behavior and the investigator(s) participate in the activities being observed. [Children are defined as persons who have not attained the legal age for consent to treatments or procedures involved in the research, under the applicable law or jurisdiction in which the research will be conducted.]

(3) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior that is not exempt under section (2) above, if the human subjects are elected or appointed public officials or candidates for public office; or federal statute(s) require(s) without exception that the confidentiality of the personally identifiable information will be maintained throughout the research and thereafter.

(4) Research involving the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens, if these sources are publicly available or if the information is recorded by the investigator in a manner that subjects cannot be identified, directly or through identifiers linked to the subjects. [This exemption applies only to retrospective studies using data collected before the initiation of the research.]

(5) Research and demonstration projects which are conducted by or subject to the approval of department or agency heads, and which are designed to study, evaluate, or otherwise examine: (a) public benefit or service programs; (b) procedures for obtaining benefits or services under those programs; (c) possible changes in or alternatives to those programs or procedures; or (d) possible changes in methods or levels of payment for benefits or services under those programs. [The standards of this exemption are rarely met because it was designed to apply only to specific research conducted by the Social Security Administration and some Federal welfare benefits programs.]

(6) Taste and food quality evaluation and consumer acceptance studies, (a) if wholesome foods without additives are consumed or (b) if a food is consumed that contains a food ingredient at or below the level and for a use found to be safe, or agricultural chemical or environmental contaminant at or below the level found to be safe, by the Food and Drug Administration or approved by the Environmental Protection Agency or the Food Safety and Inspection Service of the U.S. Department of Agriculture.

II. Instructions for Exempt and Nonexempt Human Subjects Research Narratives

If you selected "Yes" for Item 3.b. of the Supplemental Information for the SF 424, you must attach a human subjects "exempt research" or "nonexempt research" narrative to the Supplemental Information for the SF-424 form. If you have multiple projects and need to provide more than one narrative, be sure to label each set of responses as to the project they address.

A. Exempt Research Narrative.

If you marked "Yes" for item 3.b. and designated exemption numbers(s), attach the "exempt research" narrative to the Supplemental Information for the SF-424. The narrative must contain sufficient information

about the involvement of human subjects in the proposed research to allow a determination by NIDILRR that the designated exemption(s) are appropriate. The narrative must be succinct.

B. Nonexempt Research Narrative.

If you marked "No" for item 3.b. you must attach the "nonexempt research" narrative to the Supplemental Information for the SF-424. The narrative must address the following seven points. Although no specific page limitation applies to this section of the application, be succinct.

(1) **Human Subjects Involvement and Characteristics**: Provide a detailed description of the proposed involvement of human subjects. Describe the characteristics of the subject population, including anticipated number, age range, and health status. Identify the criteria for inclusion or exclusion of any subpopulation. Explain the rationale for the involvement of special classes of subjects, such as children, children with disabilities, adults with disabilities, persons with mental disabilities, pregnant women, prisoners, institutionalized individuals, or others who are likely to be vulnerable

(2) **Sources of Materials**: Identify the sources of research material obtained from individually identifiable living human subjects in the form of specimens, records, or data. Indicate whether the material or data will be obtained specifically for research purposes or whether use will be made of existing specimens, records, or data.

(3) **Recruitment and Informed Consent**: Describe plans for the recruitment of subjects and the consent procedures to be followed. Include the circumstances under which consent will be sought and obtained, who will seek it, the nature of the information to be provided to prospective subjects, and the method of documenting consent. State if the Institutional Review Board (IRB) has authorized a modification or waiver of the elements of consent or the requirement for documentation of consent.

(4) **Potential Risks**: Describe potential risks (physical, psychological, social, legal, or other) and assess their likelihood and seriousness. Where appropriate, describe alternative treatments and procedures that might be advantageous to the subjects.

(5) **Protection Against Risk**: Describe the procedures for protecting against or minimizing potential risks, including risks to confidentiality, and assess their likely effectiveness. Where appropriate, discuss provisions for ensuring necessary medical or professional intervention in the event of adverse effects to the subjects. Also, where appropriate, describe the provisions for monitoring the data collected to ensure the safety of the subjects.

(6) **Importance of the Knowledge to be Gained**: Discuss the importance of the knowledge gained or to be gained as a result of the proposed research. Discuss why the risks to subjects are reasonable in relation to the anticipated benefits to subjects and in relation to the importance of the knowledge that may reasonably be expected to result.

(7) **Collaborating Site(s)**: If research involving human subjects will take place at one or more collaborating sites or other performance sites, name the sites and briefly describe their involvement or role in the research.

Project Work Plan - Sample Template

NOTE : Applicants should provide a Project Work Plan as part of their project narrative. Below is a work plan template that you may use, if desired.

Goals:

Measurable Outcomes:

Timeline: Indicate with an "X" the project month in which each key task will start and the project month in which each key task will end.

Major objectives	Key Tasks	1	2	3	4	5	6	7	8	9	10	11	12
1.	a.												
	b.												
	c.												
	d.												
	e.												
2.	a.												
	b.												
	c.												
	d.												
	e.												
3.	a.												
	b.												
	c.												
	d.												
	e.												
4.	a.												
	b.												
	c.												
	d.												
	e.												
5.	a.												
	b.												
	c.												
	d.												
	e.												
6.	a.												
	b.												
	c.												
	d.												
	e.												

NOTE: Please do note infer from this sample format that your work plan must have 6 major objectives.

Grant Development Process

PART ONE: DEVELOPING A GRANT PROPOSAL

Preparation

A successful grant proposal is one that is well-prepared, thoughtfully planned, and concisely packaged. The potential applicant should become familiar with all of the pertinent program criteria related to the Catalog program from which assistance is sought. Refer to the information contact person listed in the Catalog program description before developing a proposal to obtain information such as whether funding is available, when applicable deadlines occur, and the process used by the grantor agency for accepting applications. Applicants should remember that the basic requirements, application forms, information and procedures vary with the Federal agency making the grant award.

Individuals without prior grant proposal writing experience may find it useful to attend a grantsmanship workshop. A workshop can amplify the basic information presented here. Applicants interested in additional readings on grantsmanship and proposal development should consult the references listed at the end of this section and explore other library resources.

INITIAL PROPOSAL DEVELOPMENT

Developing Ideas for the Proposal

When developing an idea for a proposal it is important to determine if the idea has been considered in the applicant's locality or State. A careful check should be made with legislators and area government agencies and related public and private agencies which may currently have grant awards or contracts to do similar work. If a similar program already exists, the applicant may need to reconsider submitting the proposed project, particularly if duplication of effort is perceived. If significant differences or improvements in the proposed project's goals can be clearly established, it may be worthwhile to pursue Federal assistance.

Community Support

Community support for most proposals is essential. Once proposal summary is developed, look for individuals or groups representing academic, political, professional, and lay organizations which may be willing to support the proposal in writing. The type and caliber of community support is critical in the initial and subsequent review phases. Numerous letters of support can be persuasive to a grantor agency. Do not overlook support from local government agencies and public officials. Letters of endorsement detailing exact areas of project sanction and commitment are often requested as part of a proposal to a Federal agency. Several months may be required to develop letters of endorsement since something of value (e.g., buildings, staff, services) is sometimes negotiated between the parties involved.

Many agencies require, in writing, affiliation agreements (a mutual agreement to share services between agencies) and building space commitments prior to either grant approval or award. A useful method of generating community support may be to hold meetings with the top decision makers in the community who would be concerned with the subject matter of the proposal. The forum for discussion

may include a query into the merits of the proposal, development of a contract of support for the proposal, to generate data in support of the proposal, or development of a strategy to create proposal support from a large number of community groups.

Identification of a Funding Resource

A review of the Objectives and Uses and Use Restrictions sections of the Catalog program description can point out which programs might provide funding for an idea. Do not overlook the related programs as potential resources. Both the applicant and the grantor agency should have the same interests, intentions, and needs if a proposal is to be considered an acceptable candidate for funding.

Once a potential grantor agency is identified, call the contact telephone number identified in Information Contacts and ask for a grant application kit. Later, get to know some of the grantor agency personnel. Ask for suggestions, criticisms, and advice about the proposed project. In many cases, the more agency personnel know about the proposal, the better the chance of support and of an eventual favorable decision. Sometimes it is useful to send the proposal summary to a specific agency official in a separate cover letter, and ask for review and comment at the earliest possible convenience. Always check with the Federal agency to determine its preference if this approach is under consideration. If the review is unfavorable and differences cannot be resolved, ask the examining agency (official) to suggest another department or agency which may be interested in the proposal. A personal visit to the agency's regional office or headquarters is also important. A visit not only establishes face-to-face contact, but also may bring out some essential details about the proposal or help secure literature and references from the agency's library.

Federal agencies are required to report funding information as funds are approved, increased or decreased among projects within a given State depending on the type of required reporting. Also, consider reviewing the Federal Budget for the current and budget fiscal years to determine proposed dollar amounts for particular budget functions.

The applicant should carefully study the eligibility requirements for each Federal program under consideration (see the Applicant Eligibility section of the Catalog program description). The applicant may learn that he or she is required to provide services otherwise unintended such as a service to particular client groups, or involvement of specific institutions. It may necessitate the modification of the original concept in order for the project to be eligible for funding. Questions about eligibility should be discussed with the appropriate program officer.

Deadlines for submitting applications are often not negotiable. They are usually associated with strict timetables for agency review. Some programs have more than one application deadline during the fiscal year. Applicants should plan proposal development around the established deadlines.

Getting Organized to Write the Proposal

Throughout the proposal writing stage keep a notebook handy to write down ideas. Periodically, try to connect ideas by reviewing the notebook. Never throw away written ideas during the grant writing stage. Maintain a file labeled "Ideas" or by some other convenient title and review the ideas from time to time. The file should be easily accessible. The gathering of documents such as articles of incorporation, tax exemption certificates, and bylaws should be completed, if possible, before the writing begins.

REVIEW

Criticism

At some point, perhaps after the first or second draft is completed, seek out a neutral third party to review the proposal working draft for continuity, clarity and reasoning. Ask for constructive criticism at this point, rather than wait for the Federal grantor agency to volunteer this information during the review cycle. For example, has the writer made unsupported assumptions or used jargon or excessive language in the proposal?

Signature

Most proposals are made to institutions rather than individuals. Often signatures of chief administrative officials are required. Check to make sure they are included in the proposal where appropriate.

Neatness

Proposals should be typed, collated, copied, and packaged correctly and neatly (according to agency instructions, if any). Each package should be inspected to ensure uniformity from cover to cover. Binding may require either clamps or hard covers. Check with the Federal agency to determine its preference. A neat, organized, and attractive proposal package can leave a positive impression with the reader about the proposal contents.

Mailing

A cover letter should always accompany a proposal. Standard U.S. Postal Service requirements apply unless otherwise indicated by the Federal agency. Make sure there is enough time for the proposals to reach their destinations. Otherwise, special arrangements may be necessary. Always coordinate such arrangements with the Federal grantor agency project office (the agency which will ultimately have the responsibility for the project), the grant office (the agency which will coordinate the grant review), and the contract office (the agency responsible for disbursement and grant award notices), if necessary.

PART TWO: WRITING THE GRANT PROPOSAL

The Basic Components of a Proposal

There are eight basic components to creating a solid proposal package: (1) the proposal summary; (2) introduction of organization; (3) the problem statement (or needs assessment); (4) project objectives; (5) project methods or design; (6) project evaluation; (7) future funding; and (8) the project budget. The following will provide an overview of these components.

The Proposal Summary: Outline of Project Goals

The proposal summary outlines the proposed project and should appear at the beginning of the proposal. It could be in the form of a cover letter or a separate page, but should definitely be brief – no longer than two or three paragraphs. The summary would be most useful if it were prepared after the proposal has been developed in order to encompass all the key summary points necessary to communicate the objectives of the project. It is this document that becomes the cornerstone of your proposal, and the initial impression it gives will be critical to the success of your venture. In many cases, the summary will be the first part of the proposal package seen by agency officials and very possibly could be the only part of the package that is carefully reviewed before the decision is made to consider the project any further.

The applicant must select a fundable project which can be supported in view of the local need. Alternatives, in the absence of Federal support, should be pointed out. The influence of the project both during and after the project period should be explained. The consequences of the project as a result of

funding should be highlighted.

Introduction: Presenting a Credible Applicant or Organization

The applicant should gather data about its organization from all available sources. Most proposals require a description of an applicant's organization to describe its past and present operations. Some features to consider are:

- A brief biography of board members and key staff members.
- The organization's goals, philosophy, track record with other grantors, and any success stories.
- The data should be relevant to the goals of the Federal grantor agency and should establish the applicant's credibility.

The Problem Statement: Stating the Purpose at Hand

The problem statement (or needs assessment) is a key element of a proposal that makes a clear, concise, and well-supported statement of the problem to be addressed. The best way to collect information about the problem is to conduct and document both a formal and informal needs assessment for a program in the target or service area. The information provided should be both factual and directly related to the problem addressed by the proposal. Areas to document are:

- The purpose for developing the proposal.
- The beneficiaries -- who are they and how will they benefit.
- The social and economic costs to be affected.
- The nature of the problem (provide as much hard evidence as possible).
- How the applicant organization came to realize the problem exists, and what is currently being done about the problem.
- The remaining alternatives available when funding has been exhausted. Explain what will happen to the project and the impending implications.
- Most importantly, the specific manner through which problems might be solved. Review the resources needed, considering how they will be used and to what end.

There is a considerable body of literature on the exact assessment techniques to be used. Any local, regional, or State government planning office, or local university offering course work in planning and evaluation techniques should be able to provide excellent background references. Types of data that may be collected include: historical, geographic, quantitative, factual, statistical, and philosophical information, as well as studies completed by colleges, and literature searches from public or university libraries. Local colleges or universities which have a department or section related to the proposal topic may help determine if there is interest in developing a student or faculty project to conduct a needs assessment. It may be helpful to include examples of the findings for highlighting in the proposal.

Project Objectives: Goals and Desired Outcome

Program objectives refer to specific activities in a proposal. It is necessary to identify all objectives related to the goals to be reached, and the methods to be employed to achieve the stated objectives. Consider quantities or things measurable and refer to a problem statement and the outcome of proposed activities when developing a well-stated objective. The figures used should be verifiable. Remember, if the proposal is funded, the stated objectives will probably be used to evaluate program progress, so be realistic. There is literature available to help identify and write program objectives.

Program Methods and Program Design: A Plan of Action

The program design refers to how the project is expected to work and solve the stated problem. Sketch out the following:

- The activities to occur along with the related resources and staff needed to operate the project (inputs).
- A flow chart of the organizational features of the project. Describe how the parts interrelate, where personnel will be needed, and what they are expected to do. Identify the kinds of facilities, transportation, and support services required (throughputs).
- Explain what will be achieved through 1 and 2 above (outputs); i.e., plan for measurable results. Project staff may be required to produce evidence of program performance through an examination of stated objectives during either a site visit by the Federal grantor agency and or grant reviews which may involve peer review committees.
- It may be useful to devise a diagram of the program design. For example, draw a three column block. Each column is headed by one of the parts (inputs, throughputs and outputs), and on the left (next to the first column) specific program features should be identified (i.e., implementation, staffing, procurement, and systems development). In the grid, specify something about the program design, for example, assume the first column is labeled inputs and the first row is labeled staff. On the grid one might specify under inputs five nurses to operate a child care unit. The throughput might be to maintain charts, counsel the children, and set up a daily routine; outputs might be to discharge 25 healthy children per week. This type of procedure will help to conceptualize both the scope and detail of the project.
- Wherever possible, justify in the narrative the course of action taken. The most economical method should be used that does not compromise or sacrifice project quality. The financial expenses associated with performance of the project will later become points of negotiation with the Federal program staff. If everything is not carefully justified in writing in the proposal, after negotiation with the Federal grantor agencies, the approved project may resemble less of the original concept. Carefully consider the pressures of the proposed implementation, that is, the time and money needed to acquire each part of the plan. A Program Evaluation and Review Technique (PERT) chart could be useful and supportive in justifying some proposals.
- Highlight the innovative features of the proposal which could be considered distinct from other proposals under consideration.
- Whenever possible, use appendices to provide details, supplementary data, references, and information requiring in-depth analysis. These types of data, although supportive of the proposal, if included in the body of the design, could detract from its readability. Appendices provide the proposal reader with immediate access to details if and when clarification of an idea, sequence or conclusion is required. Time tables, work plans, schedules, activities, methodologies, legal papers, personal vitae, letters of support, and endorsements are examples of appendices.

Evaluation: Product and Process Analysis

The evaluation component is two-fold: (1) product evaluation; and (2) process evaluation. Product evaluation addresses results that can be attributed to the project, as well as the extent to which the project has satisfied its desired objectives. Process evaluation addresses how the project was conducted, in terms of consistency with the stated plan of action and the effectiveness of the various activities within the plan.

Most Federal agencies now require some form of program evaluation among grantees. The requirements of the proposed project should be explored carefully. Evaluations may be conducted by an internal staff member, an evaluation firm or both. The applicant should state the amount of time needed to evaluate, how the feedback will be distributed among the proposed staff, and a schedule for review and comment for this type of communication. Evaluation designs may start at the beginning, middle or end of a project, but the applicant should specify a start-up time. It is practical to submit an

evaluation design at the start of a project for two reasons:

- Convincing evaluations require the collection of appropriate data before and during program operations; and,
- If the evaluation design cannot be prepared at the outset then a critical review of the program design may be advisable.

Even if the evaluation design has to be revised as the project progresses, it is much easier and cheaper to modify a good design. If the problem is not well defined and carefully analyzed for cause and effect relationships then a good evaluation design may be difficult to achieve. Sometimes a pilot study is needed to begin the identification of facts and relationships. Often a thorough literature search may be sufficient.

Evaluation requires both coordination and agreement among program decision makers (if known). Above all, the Federal grantor agency's requirements should be highlighted in the evaluation design. Also, Federal grantor agencies may require specific evaluation techniques such as designated data formats (an existing information collection system) or they may offer financial inducements for voluntary participation in a national evaluation study. The applicant should ask specifically about these points. Also, consult the Criteria For Selecting Proposals section of the Catalog program description to determine the exact evaluation methods to be required for the program if funded.

Future Funding: Long-Term Project Planning

Describe a plan for continuation beyond the grant period, and/or the availability of other resources necessary to implement the grant. Discuss maintenance and future program funding if program is for construction activity. Account for other needed expenditures if program includes purchase of equipment.

The Proposal Budget: Planning the Budget

Funding levels in Federal assistance programs change yearly. It is useful to review the appropriations over the past several years to try to project future funding levels (see Financial Information section of the Catalog program description).

However, it is safer to never anticipate that the income from the grant will be the sole support for the project. This consideration should be given to the overall budget requirements, and in particular, to budget line items most subject to inflationary pressures. Restraint is important in determining inflationary cost projections (avoid padding budget line items), but attempt to anticipate possible future increases.

Some vulnerable budget areas are: utilities, rental of buildings and equipment, salary increases, food, telephones, insurance, and transportation. Budget adjustments are sometimes made after the grant award, but this can be a lengthy process. Be certain that implementation, continuation and phase-down costs can be met. Consider costs associated with leases, evaluation systems, hard/soft match requirements, audits, development, implementation and maintenance of information and accounting systems, and other long-term financial commitments.

A well-prepared budget justifies all expenses and is consistent with the proposal narrative. Some areas in need of an evaluation for consistency are: (1) the salaries in the proposal in relation to those of the applicant organization should be similar; (2) if new staff persons are being hired, additional space and equipment should be considered, as necessary; (3) if the budget calls for an equipment purchase, it should be the type allowed by the grantor agency; (4) if additional space is rented, the increase in insurance should be supported; (5) if an indirect cost rate applies to the proposal, the division between

direct and indirect costs should not be in conflict, and the aggregate budget totals should refer directly to the approved formula; and (6) if matching costs are required, the contributions to the matching fund should be taken out of the budget unless otherwise specified in the application instructions.

It is very important to become familiar with Government-wide circular requirements. The Catalog identifies in the program description section (as information is provided from the agencies) the particular circulars applicable to a Federal program, and summarizes coordination of Executive Order 12372, "Intergovernmental Review of Programs" requirements in Appendix I. The applicant should thoroughly review the appropriate circulars since they are essential in determining items such as cost principles and conforming with Government guidelines for Federal domestic assistance.

GUIDELINES AND LITERATURE

United States Government Manual
Superintendent of Documents
U.S. Government Printing Office
Washington, DC 20402

OMB Circular Nos. A-87, A-102, A-110, and A-133, and Executive Order 12372:
Publications Office
Office of Administration
Room 2200, 725 Seventeenth Street, NW.
Washington, DC 20503

Government Printing Office (GPO) Resources

Th government documents identified above as available from the GPO can be requested (supply the ne essary identifying information) by writing to:

Superintendent of Documents
Government Printing Office
Washington, DC 20402

Regional and Federal Depository Libraries

Regional libraries can arrange for copies of Government documents through an interlibrary loan. All Federal Depository Libraries will receive copies of the Catalog directly. A list of depository and regional libraries is available by writing: Chief, Library Division, Superintendent of Documents, Stop SLL, W shington, DC 20402.

General Services Administration
Inte grated Acquisition Environment (IAE

U.S. Department of Health and Human Services

Administration for Community Living

Search: ACL.gov [Go]

Help & Resources   Newsroom   Programs & Activities   Data & Evaluations   Funding Opportunities   About ACL

Home > Programs & Activities > National Institute on Disability, Independent Living, and Rehabilitation Research > Resources > Frequently Asked Questions

🖨 Print A Resize

National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR)

Frequently-Asked General Questions about the National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR)

1. NIDILRR Now Part of HHS
2. It is so hard to find what you are looking for on the NIDILRR or ED.gov Website. Do you have a sitemap?
3. What does NIDILRR stand for?
4. When was NIDILRR created?
5. What is NIDILRR's mission?
6. Is there blueprint or long-range plan to describe its vision for the future?
7. Is there one place that contains the laws, rules and regulations that NIDILRR and its grantees must follow?
8. What does NIDILRR do?
9. What can I expect if I choose to *"donate my brain to science"* and become a peer reviewer for NIDILRR?
10. I am an individual and am looking for money to achieve a specific goal or purpose. Can NIDILRR help me?
11. Do you have a basic guide that explains your programs and how to apply for them?
12. Do you have a place like a "NIDILRR Program Central" where I can learn more about your programs?
13. Does NIDILRR have FAQs for all of its programs in one place?
14. What is NARIC and what can it do for me?
15. Is there a device or product information database for people with disabilities?
16. I have been hearing that NIDILRR is investing in "Knowledge Translation." What is it and where can I learn more about it?

Back to top

About Us

Grant Opportunities

Grant-Funding Programs & Awards

Performance & Evaluation

Resources

   Publications & Products

   Funded Research & Statistics Resources

   Frequently Asked Questions

   Suggested Resources

   REHABDATA Literature Database by Subjecct

   REHABDATA Connection: Rehabilitation Literature Awareness Service

   NARIC's Multimedia Collection

   NARIC's Rehabilitation Literature Database

   National Disability Organization Search

   Chat with a NARIC Disability Information Specialist

   NARIC Social Media Tools

Contact Us

1. NIDILRR Now Part of HHS

Per the *Workforce Innovation and Opportunity Act*, the National Institute on Disability and Rehabilitation Research (NIDRR), now the National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR), has been transferred to the Administration for Community Living (ACL) in the U.S. Department of Health and Human Services. For more information on ACL, please visit **www.acl.gov**. More information on NIDILRR's new Web site will be posted soon. In the meantime, you may continue to find information regarding NIDILRR on **ED.gov**.

Back to top

2. It is so hard to find what you are looking for on the NIDILRR or ED.gov Website. Do you have a sitemap?

Yes. We have something even better than a sitemap. We have a complete guide to our site because we want you to understand how we put our Website together. You can read it **online**.

3. What does NIDILRR stand for?

NIDILRR stands for the National Institute on Disability, Independent Living, and Rehabilitation Research.

4. When was NIDILRR created?

Created in 1978, the National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR) is a national leader in sponsoring research. NIDILRR 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**. NIDILRR operates in concert with the Rehabilitation Services Administration (**RSA**) and the Office of Special Education Programs.(**OSEP**).

5. What is NIDILRR's mission?

The National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR), a component of the U.S. Department of Education's Office of Special Education and Rehabilitative Services (OSERS), is the main federal agency that supports applied research, training and development to improve the lives of individuals with disabilities. Accomplishing NIDILRR's mission is a first step on the journey toward improving the lives of individuals with disabilities. NIDILRR staff and its grantees are therefore committed to:

- Generating new knowledge and promoting its effective use in improving the ability of persons with disabilities to perform activities of their choice in the community, and

- Expanding society's capacity to provide full opportunities and accommodations for its citizens with disabilities.

6. Is there blueprint or long-range plan to describe its vision for the future?

Yes, NIDILRR is required to develop a five-year plan by **29 U.S.C. Section 762(h)**. The latest **five-year plan** is published in the *Federal Register.*

7. Is there one place that contains the laws, rules and regulations that NIDILRR and its grantees must follow?

Yes. We have created a page just for that purpose. To view it **click here.**

8. What does NIDILRR do?

Through its **programs or funding mechansims**, NIDILRR awards federal money to eligible applicants (e.g., institutions of higher education, non-profit organizations, for-profit organizations, etc.)who submit proposals on various applied disability and rehabilitation research and development topics. These proposals are usually written in response to *Notices Inviting Applications (NIAs)* that highlight NIDILRR's funding priority areas and requirements for submitting proposals. These NIA's are published in the federal goernment's daily journal known as the *Federal Register.* For a list of recent NIA and other NIDILRR-related documents appearing in the *Federal Register* since January 01, 2011, **click here.**

Proposals received by NIDILRR go through a **competitive peer review process.** Only the winning proposals get.the government money. After the money is awarded, specific NIDILRR staff are assigned a caseload of grantees that relate to their training and expertise. These NIDILRR staff, known as Project Officers, monitor the work of funded grantees to ensure that they are "doing what they said they could do" in their proposal. NIDILRR Project Officers also ensure that funded grantees are complying with all applicable federal laws and regulations.To facilitate these on-going monitoring efforts, Project Officers use a variety of monitoring tools and strategies which include but are not limited to: regular teleconferences, email correspondence, review of Annual Performance Reports (APRs) submitted to our **Annual Web-Based Reporting System**, and **formative** and **summative** reviews. For more information on how we measure the performance of our grantees, go to our **performance page.**

9. What can I expect if I choose to "*donate my brain to science*" and become a peer reviewer for NIDILRR?

You may have heard our new Director, Charlie Lakin, has developed a new slogan for recruiting peer reviewers: "**Donate your brain to science and become a peer reviewer for NIDILRR.**" When people hear it, they next question they ask is what does really mean and what can I expect if I decide to become a peer reviewer for NIDILRR? We have prepared an answer to that question and it is **available here.**

Back to top

10. I am an individual and am looking for money to achieve a specific goal or purpose. Can NIDILRR help me?

We get that question a lot. Unfortunately NIDILRR does not give out money to individuals who want to use it to achieve a specific goal or purpose. We award grant money to colleges and universities, non-profit and for-profit organizations, and **qualified scholars** who earn the money by submitting a winning research or development proposal that is reviewed by a panel of experts.

While we cannot help you directly with your efforts to obtain money for a specific purpose, we can refer you to several organizations that may be able to help you identify additional resources.

Two of these are organizations are:

- **Reference Services Press**, a publisher of books and directories on financial aid

- **The Foundation Center**, a non library on philantrophic giving with trained funding reference librarians

Back to top

11. Do you have a basic guide that explains your programs and how to apply for them?

Yes, we have created a short **just for that purpose.**

You may also find the links on NIDILRR's **Applicant Information Center Page** helpful.

Back to top

12. Do you have a place like a "NIDILRR Program Central" where I can learn more about your programs?

Yes. We created a **page** just for that purpose. We hope you find it helpful.

Back to top .

13. Does NIDILRR have FAQs for all of its programs in one place?

Yes. Check out our **Programs FAQ Homepage.**

Back to top

14. What is NARIC and what can it do for me?

NARIC stands for the National Rehabilitation Information Center and operates under contract to NIDILRR to serve as the central repository or library for NIDILRR information. Listed below are just some of the things that NARIC can do for you:

- Si usted quiere ver el sitio de NARIC en español, **clique aquí.**

- If you have visited the NARIC Website before, you may have noticed that NARIC got a face lift and want to know **what has changed.**

- If you have reached the NARIC main page but don't know where to start looking for information and resources you want, check out NARIC's **Where Do I Start Page.**

- If you want to search NARIC's databases using an all-in-one search form, **click here.**

- If you want to learn about research or development grants funded by NIDILRR, or contact them for more information, check out the **NIDILRR Online Project Directory.**

- If you want to read up on the latest rehabilitation research abstracts, and order documents, you may want to check out **REHABDATA**, the permiere searchable database of disability and rehabilitation literature maintained by NARIC.

- If you want to find out if you can obtain full text of a document from REHABDATA, check out **Full Text Documents from REHABDATA.**

- If you want to submit a document to REHABDATA, check out **How to Get Your Document Listed in REHABDATA**

- If you want to find contact information for a national disability organization or browse other, check out the **NARIC Knowledgebase.**

- If you want to search for tools produced by NIDILRR grantees check out **The NIDILRR Tools Collection.**

- If you want to view a multimedia collection of audios and videos produced by NIDILRR grantees check out NARIC's **Multimedia Collection.**

- If you want to view a collection of research reviews on rehabilitation topics, generated from queries and questions asked by patrons just like you, check out **reSearch.**

- If you want to view some of the resources that NARIC's own information specialists use to serve patrons, check out **Disability Resources from NARIC.**

- If you want to learn about select achievements of NIDILRR grantees, you may want to check out **NIDILRR Research Spotlight.**

- If you want to receive research updates on a particular topic in your email, subscribe to **REHABDATA Connection.**

- If you want to receive NIDILRR and NARIC-related weekly news and notes in your email, sign up **here.**

- If you use **Facebook** or **Twitter**, check out NARIC's **Facebook** and **Twitter** pages.

Back to top

15. Is there a device or product information database for people with disabilities?

Yes, it is called **ABLEDATA** and it is funded by NIDILRR under a contractual agreement. If you need to talk to someone about your search for the right device or product to meet you needs, check out ABLEDATA's **Contact page.**

Back to top

16. I have been hearing that NIDILRR is investing in "Knowledge Translation." What is it and where can I learn more about it?

Knowledge Translation (KT) is a term that has been popularized by the Canadian Institutes for Health Research (CIHR). Learn what KT is from a staff member at CIHR by reading **Knowledge Translation at the Canadian Institutes of Health Research: A Primer.**

You can learn more about it by emailing NIDILRR staff member **Pimjai Sudsawad** at: **pimjai.sudsawad@ed.gov.**

You can also talk with staff from NIDILRR's newly and currently-funded **Knowledge Translation Grantees and contracts.**

Back to top

Last Modified: 7/6/2015

SITE SUPPORT

Home
Contact Us
Privacy Notice
Accessibility
Viewers & Players
Disclaimers

POINTS OF INTEREST

FOIA
Plain Writing
No Fear Act

PARTNER SITES

The White House
HHS
Alzheimers.gov
LongTermCare.gov
Disability.gov
USA.gov
Grants.gov

STAY CONNECTED

Facebook
Twitter
YouTube
E-mail Updates

Administration for Community Living • Washington, DC 20201

U.S. Department of Health and Human Services

Administration for Community Living

Help & Resources   Newsroom   Programs & Activities   Data & Evaluations   Funding Opportunities   About ACL

Home > Programs & Activities > National Institute on Disability, Independent Living, and Rehabilitation Research > Grant Opportunities > A Guide to Applying for NIDILRR Grants

🖨 **Print** 🔠 **Resize**

National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR)

So You Want To Apply for a NIDILRR Grant?: The Basics of What You Need to Know

Contents

- **Understanding NIDILRR Programs**
- **How to Apply**
- **Writing a Successful Grant Application**

Understanding NIDILRR Programs

NIDILRR's mission is to generate new knowledge and promote its effective use to improve the abilities of people with disabilities to perform activities of their choice in the community, and also to expand society's capacity to provide full opportunities and accommodations for its citizens with disabilities.

NIDILRR accomplishes its mission largely through grants with institutions of higher education, profit making and non-profit organizations and other agencies and organizations. However, individuals are eligible for the **Switzer Research Fellowship program.**

Grants are awarded through eight programs or primary funding mechanisms as described below. To read a brief description of the program or funding mechanism of interest to you just click on it from the menu below. Alternatively, you can **view the number of NIDILRR Grants by Funding Status in Each Program/Funding Mechanism.**

- **90DP: Disability and Rehabilitation Research Projects (DRRPs)**
- **90RT: Rehabilitation Research and Training Centers (RRTCs)**
- **90RE: Rehabilitation Engineering Research Centers (RERCs)**
- **90SF: Research Fellowships Program**
- **90IF: Field-Initiated Projects**
- **90SI : Spinal Cord Injury Model Systems Centers**
- **90AR: Advanced Rehabilitation Research Training Program**
- **90BI: Small Business Innovation Research**

Back to top

How to Apply

The basic steps of applying include:

- **Understanding and using grant related notices**
- **Completing registrations**
- **Writing and submitting your application**
- **Verifying receipt of your application**

These basic steps are described below. We have included a separate section on writing a successful application.

Sidebar

About Us

Grant Opportunities

NIDILRR FY2016 Grant Forecast (Search by 93.433 in search box)

Grants.gov (Search by 93.433 in CFDA Box)

Sign Up for NIDILRR Email Announcements

A Guide to Applying for NIDILRR Grants

Applicant Information Center

Become a Peer Reviewer

Peer Reviewer Online Orientation

Grant-Funding Programs & Awards

Performance & Evaluation

Resources

Contact Us

Understanding and Using Grant-Related Notices

NIDILRR publishes a variety of notices regarding potential and open grant competitions. Understanding each will help you prepare for and write grant applications:

Funding Opportunities:
Not all grant areas are funded every year, so it is important to check regularly to see which areas are likely to be competed in a given year and the dates of the competitions. **The National Rehabilitation Information Center (NARIC)** offers a service that will automatically send you an email within a few days of publication of any NIDILRR-related priority notice or Funding Opportunity Announcement (FOA). You may sign up for this service by going to the following NARIC page: **"About NIDILRR Funding and Other Grant Resources"** Once there, scroll to the middle of the page and locate the heading, "Interested in NIDILRR Grant Announcements?" Then type your email in the white text box and hit the "Submit" button.

Alternatively, NIDILRR is now posting both forecasted and current grant announcements at Grants.gov. To search for NIDILRR grant opportunities use the following link (and bookmark it for future use): **http://www.grants.gov/web/grants/search-grants.html?cfda=93.433**. The results can be sorted by opportunity number, title, status, posted date, and close date. Click the column headers to sort. To view a grant opportunity, click the Opportunity Number to see the full record.

Funding Opportunity Announcements:
All NIDILRR grant opportunities are announced through "Funding Opportunity Announcements" (FOA). In some grant areas, the subject matter rarely changes from year to year. Examples of these competitions are the Switzer Fellowship Program, the Advanced Rehabilitation Research Training Program, Field Initiated Projects and Small Business Innovation Research. In such cases, the opportunity is announced directly through the FOA.

However, subject matter in some of our grant areas changes regularly. This may be true in the DRRP, Rehabilitation Research and Training Centers and Rehabilitation Research and Engineering Centers programs. Before the subject matter, or "priority," of a competition is finalized, NIDILRR often publishes its proposed priority and gives the public time to comment upon it, usually 30 days. In addition to allowing the public to make comments, it provides potential applicants a "heads up" as to a priority that is likely to be used for a grant competition. The final priority is published after reviewing comments, and making changes, if necessary, through the FOA. Only applications that respond to the priority will be considered for funding.

Back to top

Completing Registrations

Complete registrations early. The first step for a new applicant is to obtain certain account numbers and complete registrations—specifically, a **DUNs number**, a **TIN** and a **SAM**, along with registering with **Grants.gov**.

DUNS Number:
A DUNS number is a unique identifier necessary to apply for any government grant or contract. You can obtain a DUNS number free of charge from **Dun and Bradstreet**. A DUNS number can be created within one business day. Individuals applying for the Switzer Fellowship Program may use their social security number in lieu of the DUNs number. This registration must be maintained annually throughout the life of an award.

TIN Number:
If you are a corporate entity, agency, institution or organization, you must have a Taxpayer Identification Number (TIN), which can be obtained free of charge from the **Internal Revenue Service**. If you need a new TIN, please allow 2-5 weeks for your TIN to become active. Individuals applying for the Switzer Fellowship Program may use their social security number in lieu of the TIN.

SAM Registration:
The **System for Awards Management (SAM.gov)** is the primary vendor database for the U.S. Federal Government. SAM collects, validates, stores and disseminates data in support of agency acquisition missions. You must register with the System for Awards Management, or SAM if you wish to apply for a Federal grant or contract. The SAM registration process may take five or more business days to complete. If you are currently registered with SAM, you may not need to make any changes. However, make certain that the TIN associated with your DUNS number is correct. Also note that you will need to update your SAM registration on an annual basis. This may take three or more business days to complete.

Grants.gov Registration:
Finally, you must register with **Grants.gov**, which will allow you to use and upload an application into the application system. This registration may take five or more business days to

complete. You may begin working on your application while completing the registration process, but you cannot submit an application until all of the Registration steps are complete. For detailed information on the Registration Steps, please go to:
http://www.grants.gov/web/grants/register.html

When you submit an application via Grants.gov you must (1) be designated by your organization as an Authorized Organizational Representative (AOR); and (2) register yourself with Grants.gov as an AOR. Details on these steps are outlined at the following Grants.gov page:

http://www.grants.gov/web/grants/register.html.

For assistance with grants.gov, please contact, **support@grants.gov** or call 1-800-518-4726 between 7 a.m. and 9 p.m. Eastern time.

At the **http://www.grants.gov** website, you will find information about submitting an application electronically through the site, including the Help Desk hours of operation. ACL strongly recommends that you not wait until the application due date to begin the application process through **http://www.grants.gov** because of the time involved to complete the registration process.

We can't emphasize strongly enough the importance of *completing these registrations early*.

Back to top

Writing and Submitting Your Grant Application

If you wish to apply for a NIDILRR grant, identify an appropriate grant competition. Not all grant areas are funded every year, so it is important to determine which areas are likely to be competed in a given year and the dates of the competitions.

Information and links to FOAs (which announce the opening of grant competitions), can be found through **http://www.grants.gov/web/grants/search-grants.html?cfda=93.433**, as described above.

Once you locate a competition in which you are interested, you can begin writing your application. See the section **"writing a successful application"** for tips on writing your application.

SUBMIT EARLY:
We strongly recommend that you do not wait until the last day to submit your application. Grants.gov will put a date/time stamp on your application and then process it after it is fully uploaded. The time indicated on this stamp represents your official submission time. Be aware that the time it takes to upload an application will vary depending on a number of factors including the size of the application and the speed of your Internet connection, and the time it takes Grants.gov to process the application will vary as well.

If Grants.gov rejects your application, you will need to resubmit successfully before 4:30:00 p.m. Washington, DC time on the deadline date. We recommend submitting applications the day before the deadline. That way, if there are problems, you will have time to correct them.

TIP: To submit successfully, you must provide the DUNS number on your application that was used when you registered for Grants.gov. This DUNS number is typically the same number used when your organization registered with **SAM (System for Award Management**. If you do not enter the same DUNS number on your application as the DUNS you registered with, Grants.gov will reject your application.

Verifying Receipts

You will want to verify that Grants.gov and the U.S. Department of Health and Human Services, Administration for Community Living received your Grants.gov submission on time and that it was validated successfully. To see the date/time your application was received, follow the instructions on Grants.gov's **"Track My Application"** page. For a successful submission, the date/time received should be earlier than 11:59 p.m., Washington, D.C., time, on the deadline date, *AND* the application status should be: Validated as "Received by Agency," or "Agency Tracking Number Assigned."

If the date/time received through grants.gov is *later* than 11:59 p.m., Washington, D.C., time, on the deadline date, your application is *late*. If your application has a status of "Received" it is still awaiting validation by Grants.gov. Once validation is complete, the status will either change to "Validated" or "Rejected with Errors." If the status is "Rejected with Errors," your application has not been received *successfully*.

Some of the reasons Grants.gov may reject an application can be found on the **Grants.gov FAQ page**. Sometimes the problem relates to an Adobe Reader error. For more detailed information on troubleshooting Adobe errors, you can review the **Adobe Reader Error Messages document**. If you discover your application is late or has been rejected, please see the instructions at grants.gov. Note: You will receive a series of confirmations both online at grants.gov and via e-mail about the status of your application. Please do not rely solely on e-mail to confirm whether your application has been received timely and validated successfully.

Back to top

Writing a Successful Grant Application

Writing a successful grant application can be challenging, especially for a new applicant. Below are some helpful tips for new applicants:

Understand and take advantage of the information in announcement of proposed priorities and FOAs:
Understanding our grant process can give you a head start on grant applications. Many of our grant competitions (especially the DRRPs, RRTCs, RERCs) begin with an announcement of proposed priority. This announcement gives our intention to call for grant proposals on a particular priority and invites comments on that priority. At this point in time, the grant competition is not open. While there is no guarantee that we will actually conduct a grant competition on that topic, the fact is that we do in most cases. This should give you, as a potential applicant, a heads up. Use this time to begin planning your application.

After we have received and analyzed comments on the proposed priority, we issue an FOA that announces our final priority, based upon an analysis of the comments, and opens the competition. This document indicates when NIDILRR will accept applications on that topic, the deadlines, award limits and other key information for that specific grant competition. It will also include information on how to obtain the application kit, usually on the Web. It is important to read the FOA and application kit carefully as it includes important information not only on the subject matter, but on matters such as deadlines and page limits—applications are rejected for not attending to such details.

Keep the peer reviewer in mind:
NIDILRR bases its funding decisions primarily upon the scores of peer reviewers—non-federal subject matter specialists who review each application. An applicant wins a grant award by scoring the most points. *Read the peer review criteria carefully*. These are clearly stated in the application package. As you write your proposal, think like a peer reviewer—ask yourself, "How would I score this section if I were a peer reviewer?" How could I make it easier for the peer reviewer to rate my application and award more points?" If you do not address the priority and selection criteria convincingly, peer reviewers will award fewer points. Also, express your ideas clearly. A peer reviewer must be able to discern the main ideas of your proposal.

Write clearly and convincingly:
Be simple, direct, and clear in your writing. A lucid, compelling proposal will score more points than a poorly written proposal. Make the application exciting. Use of active voice will help. Ask yourself how your proposal will advance the science on this topic—what impact will it have? To help, we suggest you ask colleagues to review and rate you proposal as mock peer reviewers prior to submitting it to NIDILRR.

Address peer reviewer comments:
Address peer reviewer comments: If you are rejected on your first submission to our competitions, study the peer reviewer comments carefully. Even if you think you addressed a particular concern, you probably didn't make the point clearly enough if peer reviewers commented on it. Peer reviewer comments are some of the most important input you can use for improving your application. When a new competition on the same topic is announced, address the comments within the body of a new application narrative.

Serve as peer reviewer:
One of the best ways to understand the peer review process is to serve as a peer reviewer. Read the general overview of what to expect if you decide to **become a peer reviewer for NIDILRR**.

Apply to serve as a NIDILRR peer reviewer by submitting a request and resume to the following address: **NIDILRR-Mailbox@acl.hhs.gov**. While serving on a NIDILRR review panel may be your best learning experience for writing NIDILRR proposals, serving on peer review panels for other agencies, foundations or professional publications are also good experiences.

Talk to NIDILRR:
A discussion with NIDILRR staff can provide insight on what it takes to write a successful application. However, please realize that staff are limited in what they can share about a specific competition once it opens. It is better to call before a competition opens. Call Raina McDowell,

the NIDILRR administrative assistant at **202-795-7398** and she will connect you to the most appropriate NIDILRR staff person to discuss your ideas or how to apply.

Back to top

Last Modified: 8/29/2016

SITE SUPPORT

Home
Contact Us
Privacy Notice
Accessibility
Viewers & Players
Disclaimers

POINTS OF INTEREST

FOIA
Plain Writing
No Fear Act

PARTNER SITES

The White House
HHS
Alzheimers.gov
LongTermCare.gov
Disability.gov
USA.gov
Grants.gov

STAY CONNECTED

Facebook
Twitter
YouTube
E-mail Updates

Administration for Community Living • Washington, DC 20201

REHAB Resources

29 USC 718: Traditionally underserved populations
Text contains those laws in effect on July 10, 2019

From Title 29-LABOR
> CHAPTER 16-VOCATIONAL REHABILITATION AND OTHER REHABILITATION SERVICES
> GENERAL PROVISIONS

Jump To:
> **Source Credit**
> **Prior Provisions**
> **Amendments**

§718. Traditionally underserved populations

(a) Findings

With respect to the programs authorized in subchapters II through VII, the Congress finds as follows:

(1) Racial profile

The demographic profile of America is rapidly changing. While the percentage increase from 2000 to 2010 for white Americans was 9.7 percent, the percentage increase for racial and ethnic minorities was much higher: 43.0 percent for Latinos, 12.3 percent for African-Americans, and 43.2 percent for Asian-Americans.

(2) Rate of disability

Ethnic and racial minorities tend to have disabling conditions at a disproportionately high rate. In 2011-
> (A) among Americans ages 16 through 64, the rate of disability was 12.1 percent;
> (B) among African-Americans in that age range, the disability rate was more than twice as high, at 27.1 percent; and
> (C) for American Indians and Alaska Natives in the same age range, the disability rate was also more than twice as high, at 27.0 percent.

(3) Inequitable treatment

Patterns of inequitable treatment of minorities have been documented in all major junctures of the vocational rehabilitation process. As compared to white Americans, a larger percentage of African-American applicants to the vocational rehabilitation system is denied acceptance. Of applicants accepted for service, a larger percentage of African-American cases is closed without being rehabilitated. Minorities are provided less training than their white counterparts. Consistently, less money is spent on minorities than on their white counterparts.

(4) Recruitment

Recruitment efforts within vocational rehabilitation at the level of preservice training, continuing education, and in-service training must focus on bringing larger numbers of minorities into the profession in order to provide appropriate practitioner knowledge, role models, and sufficient manpower to address the clearly changing demography of vocational rehabilitation.

(b) Outreach to minorities

(1) In general

For each fiscal year, the Commissioner and the Director of the National Institute on Disability, Independent Living, and Rehabilitation Research (referred to in this subsection as the "Director") shall reserve 1 percent of the funds appropriated for the fiscal year for programs authorized under subchapters II, III, VI, and VII to carry out this subsection. The Commissioner and the Director shall use the reserved funds to carry out one or more of the activities described in paragraph (2) through a grant, contract, or cooperative agreement.

(2) Activities

The activities carried out by the Commissioner and the Director shall include one or more of the following:
> (A) Making awards to minority entities and Indian tribes to carry out activities under the programs authorized under subchapters II, III, VI, and VII.
> (B) Making awards to minority entities and Indian tribes to conduct research, training, technical assistance, or a related activity, to improve services provided under this chapter, especially services provided to individuals from minority backgrounds.
> (C) Making awards to entities described in paragraph (3) to provide outreach and technical assistance to minority entities and Indian tribes to promote their participation in activities funded under this chapter, including assistance to enhance their capacity to carry out such activities.

(3) Eligibility

To be eligible to receive an award under paragraph (2)(C), an entity shall be a State or a public or private nonprofit agency or organization, such as an institution of higher education or an Indian tribe.

(4) Report

In each fiscal year, the Commissioner and the Director shall prepare and submit to Congress a report that describes the activities funded under this subsection for the preceding fiscal year.

(5) Definitions

In this subsection:

(A) Historically Black college or university

The term "historically Black college or university" means a part B institution, as defined in section 1061(2) of title 20.

(B) Minority entity

The term "minority entity" means an entity that is a historically Black college or university, a Hispanic-serving institution of higher education, an American Indian tribal college or university, or another institution of higher education whose minority student enrollment is at least 50 percent.

(c) Demonstration

In awarding grants, or entering into contracts or cooperative agreements under subchapters I, II, III, VI, and VII of this chapter, and section 794e of this title, the Commissioner and the Director of the National Institute on Disability, Independent Living, and Rehabilitation Research, in appropriate cases, shall require applicants to demonstrate how the applicants will address, in whole or in part, the needs of individuals with disabilities from minority backgrounds.

(Pub. L. 93–112, §21, formerly §19, as added Pub. L. 105–220, title IV, §403, Aug. 7, 1998, 112 Stat. 1115 ; renumbered §21 and amended Pub. L. 105–277, div. A, §101(f) [title VIII, §402(a)(1), (b)(6), (c)(3)], Oct. 21, 1998, 112 Stat. 2681–337 , 2681-412, 2681-413, 2681-415; Pub. L. 113–128, title IV, §409, July 22, 2014, 128 Stat. 1639 .)

PRIOR PROVISIONS

Provisions similar to this section were contained in section 718b of this title prior to repeal by Pub. L. 105–220.

Prior sections 718 to 718b were repealed by Pub. L. 105–220, title IV, §403, Aug. 7, 1998, 112 Stat. 1093 .

Section 718, Pub. L. 93–112, §19, as added Pub. L. 102–569, title I, §109(a), Oct. 29, 1992, 106 Stat. 4363 ; amended Pub. L. 103–73, title I, §104, Aug. 11, 1993, 107 Stat. 719 , related to carryover of funds. See section 716 of this title.

Section 718a, Pub. L. 93–112, §20, as added Pub. L. 102–569, title I, §110(a), Oct. 29, 1992, 106 Stat. 4363 ; amended Pub. L. 103–73, title I, §105, Aug. 11, 1993, 107 Stat. 719 , related to client assistance information. See section 717 of this title.

Section 718b, Pub. L. 93–112, §21, as added Pub. L. 102–569, title I, §111(a), Oct. 29, 1992, 106 Stat. 4363 ; amended Pub. L. 103–73, title I, §106, Aug. 11, 1993, 107 Stat. 719 , related to traditionally underserved populations.

AMENDMENTS

2014-Subsec. (a)(1). Pub. L. 113–128, §409(1)(A), in first sentence, substituted "demographic" for "racial"; in second sentence, substituted "While the percentage increase from 2000 to 2010" for "While the rate of increase", "was 9.7" for "is 3.2", "percentage increase for racial" for "rate of increase for racial", "was much" for "is much", "43.0" for "38.6", "12.3" for "14.6", and "43.2" for "40.1" and struck out "and other ethnic groups" before period at end; and struck out last sentence which read as follows: "By the year 2000, the Nation will have 260,000,000 people, one of every three of whom will be either African-American, Latino, or Asian-American."

Subsec. (a)(2). Pub. L. 113–128, §409(1)(B), substituted "In 2011-" and subpars. (A) to (C) for second and third sentences which read as follows: "The rate of work-related disability for American Indians is about one and one-half times that of the general population. African-Americans are also one and one-half times more likely to be disabled than whites and twice as likely to be significantly disabled."

Subsec. (b)(1). Pub. L. 113–128, §409(2), substituted "National Institute on Disability, Independent Living, and Rehabilitation Research" for "National Institute on Disability and Rehabilitation Research".

Subsec. (c). Pub. L. 113–128, §409(3), substituted "Director of the National Institute on Disability, Independent Living, and Rehabilitation Research" for "Director".

1998-Pub. L. 105–277, §101(f) [title VIII, §402(b)(6)], made technical amendment in original to section designation and catchline.

Subsec. (a)(3). Pub. L. 105–277, §101(f) [title VIII, §402(c)(3)], substituted "is denied" for "are denied" and "is closed" for "are closed".

National Network
Information, Guidance and
Training on the Americans with
Disabilities Act

Call us toll-free
1-800-949-4232 V/TTY
Find your regional center
at www.adata.org

For the most current and accessible version,
please visit http://adainfo.us/ADANNwriting

Guidelines for Writing about People with Disabilities

Words are powerful.

The words you use and the way you portray individuals with disabilities matters. This factsheet provides guidelines for portraying individuals with disabilities in a respectful and balanced way by using language that is accurate, neutral and objective.

1. Ask to find out if an individual is willing to disclose their disability.

Do not assume that people with disabilities are willing to disclose their disability. While some people prefer to be public about their disability, such as including information about their disability in a media article, others choose to not be publically identified as a person with a disability.

2. Emphasize abilities, not limitations.

Choosing language that emphasizes what people can do instead of what they can't do is empowering.

Use	Don't Use
Person who uses a wheelchair	*Wheelchair-bound; confined to a wheelchair*
Person who uses a communication device; uses an alternative method of communication	*Is non-verbal; can't talk*

3. In general, refer to the person first and the disability second.

People with disabilities are, first and foremost, people. Labeling a person equates the person with a condition and can be disrespectful and dehumanizing. A person isn't a disability, condition or diagnosis; a person has a disability, condition or diagnosis. This is called Person-First Language.

Use	Don't Use
Person with a disability, people with disabilities	*Disabled person; the disabled*
Man with paraplegia	*Paraplegic; paraplegic man*
Person with a learning disability	*Slow learner*
Student receiving special education services	*Special education student*
A person of short stature or little person	*Dwarf, midget*

4. However, always ask to find out an individual's language preferences.

People with disabilities have different preferences when referring to their disability. Some people see their disability as an essential part of who they are and prefer to be identified with their disability first – this is called Identity-First Language. Others prefer Person-First Language. Examples of Identity-First Language include identifying someone as a deaf person instead of a person who is deaf, or an autistic person instead of a person with autism.

5. Use neutral language.

Do not use language that portrays the person as passive or suggests a lack of something: *victim, invalid, defective.*

Use	Don't Use
Person who has had a stroke	*Stroke victim*
Congenital disability	*Birth defect*

Writing about People with Disabilities

Use	Don't Use
Person with epilepsy	Person afflicted with epilepsy, epileptic
Person with a brain injury	Brain damaged, brain injury sufferer
Burn survivor	Burn victim

6. Use language that emphasizes the need for accessibility rather than the presence of a disability.

Use	Don't Use
Accessible parking	Handicapped parking
Accessible restroom	Disabled restroom

Note that 'handicapped' is an outdated and unacceptable term to use when referring to individuals or accessible environments.

7. Do not use condescending euphemisms.

Terms like *differently-abled, challenged, handi-capable* or *special* are often considered condescending.

8. Do not use offensive language.

Examples of offensive language include *freak, retard, lame, imbecile, vegetable, cripple, crazy,* or *psycho.*

9. Describing people without disabilities.

In discussions that include people both with and without disabilities, do not use words that imply negative stereotypes of those with disabilities.

Use	Don't Use
People without disabilities	Normal, healthy, able-bodied, whole
She is a child without disabilities	She is a normal child

10. Remember that disability is not an illness and people with disabilities are not patients.

People with disabilities can be healthy, although they may have a chronic condition such as arthritis or diabetes. Only refer to someone as a patient when his or her relationship with a health care provider is under discussion.

11. Do not use language that perpetuates negative stereotypes about psychiatric disabilities.

Much work needs to be done to break down stigma around psychiatric disabilities. The American Psychiatric Association has new guidelines for communicating responsibly about mental health.

Use	Don't Use
He has a diagnosis of bipolar disorder; he is living with bipolar disorder	He is (a) bipolar; he is (a) manic-depressive
Attempted suicide	Unsuccessful suicide
Died by suicide	Committed suicide
Is receiving mental health services	Mental Health patient/case
Person with schizophrenia	Schizophrenic, schizo
Person with substance use disorder; person experiencing alcohol/drug problem	Addict, abuser; junkie
She has a mental health condition or psychiatric disability	She is mentally ill/emotionally disturbed/ insane

12. Portray successful people with disabilities in a balanced way, not as heroic or superhuman.

Do not make assumptions by saying a person with a disability is heroic or inspiring because they are simply living their lives. Stereotypes may raise false expectations that everyone with a disability is or should be an inspiration. People may be inspired by them just as they may be inspired by anyone else. Everyone faces challenges in life.

1. . Do not mention someone's disability unless it is ssential to the story.

1 .ie fact that someone is blind or uses a wheelchair may or may not be relevant to the article you are writing. Only identify a person as having a disability if this information is essential to the story. For example, say "Board president Chris Jones called the meeting to order." Do not say, "Board president Chris Jones, who is blind, called the meeting to order." It's ok to identify someone's disability if it is essential to the story. For example, "Amy Jones, who uses a wheelchair, spoke about her experience with using accessible transportation."

14. Create balanced human-interest stories instead of tear-jerking stories.

Tearjerkers about incurable diseases, congenital disabilities or severe injury that are intended to elicit pity perpetuate negative stereotypes.

Writing about People with Disabilities

Resources

ople First Language and More, Disability is Natural!
https://www.disabilityisnatural.com/people-first-language.html

Guidelines: How to Write and Report About People with Disabilities, and "Your Words, Our Image" (poster), Research & Training Center on Independent Living, University of Kansas, 8th Edition, 2013.
http://rtcil.org/products/media

Mental Health Terminology: Words Matter and "Associated Press Style Book on Mental Illness," American Psychiatric Association, 2013.
https://www.psychiatry.org/newsroom/reporting-on-mental-health-conditions

Did you know that people with disabilities constitute our nation's largest minority group (one in five Americans has a disability)? It's also the most inclusive and most diverse group: all ages, genders, religions, ethnicities, sexual orientations, and socioeconomic levels are represented.

Contrary to conventional wisdom, individuals with disabilities are not:

• People who *suffer* from the *tragedy* of *birth defects.*

• *Paraplegic heroes* who *struggle* to become *normal* again.

• *Victims* who *fight* to *overcome* their *challenges.*

Nor are they the *retarded, autistic, blind, deaf, ...arning disabled,* etc.—*ad nauseam!*

They are *people:* moms and dads; sons and daughters; employees and employers; friends and neighbors; students and teachers; scientists, reporters, doctors, actors, presidents, and more. People with disabilities are people, *first.*

> *The difference between the right word and the almost right word is the difference between lightning and the lightning bug.*
> Mark Twain

They do *not* represent the stereotypical perception: a homogenous sub-species called "the handicapped" or "the disabled." Each person is a unique individual.

The only thing they may have in common with one another is being on the receiving end of societal ignorance, prejudice, and discrimination. Furthermore, this largest minority group is the only one that *any person can join at any time:* at birth or later—through an accident, illness, or the aging process. When it happens to *you,* will you have more in common with others who have disability diagnoses or with family, friends, and co-workers? How will you want to be described and how will you want to be treated?

WHAT IS A DISABILITY?

Is there a universally-accepted definition of disability? No! First and foremost, a disability descriptor is simply a *medical diagnosis,* which may become a *sociopolitical passport* to services or legal status. Beyond that, the definition is up for grabs, depending on which service system is accessed. The "disability criteria" for early intervention is different from early childhood, which is different from special education, which is different from vocational-rehabilitation, which is different from worker's compensation, which is different from the military, and so on. Thus, "disability" is a governmental *sociopolitical construct,* created to identify those entitled to specific services or legal protections.

—THE POWER OF LANGUAGE AND LABELS—

Words are powerful. Old, inaccurate descriptors and the inappropriate use of medical diagnoses perpetuate negative stereotypes and reinforce a significant and incredibly powerful attitudinal barrier. And this invisible, but potent, force—not the diagnosis itself—is the *greatest obstacle* facing individuals who have conditions we call disabilities.

When we see the diagnosis as the most important characteristic of a person, we devalue her as an individual. Do *you* want to be known for your psoriasis, arthritis, diabetes, sexual dysfunction, or any other condition?

Disability diagnoses are, unfortunately, often used to define a person's value and potential, and low expectations and a dismal future are the predicted norm. Too often, we make decisions about how/where the person will be educated, whether he'll work or not, where/how he'll live, and what services are offered, based on the person's *medical diagnosis,* instead of the person's unique and individual strengths and needs.

With the best of intentions, we work on people's bodies and brains, while paying scant attention to their hearts and minds. Far too often, the "help" provided can actually cause harm—*and can ruin people's lives*—for "special" services usually result in lifelong social isolation and physical segregation: in special ed classrooms, residential facilities, day programs, sheltered work environments, segregated recreational activities, and more. Are other people isolated, segregated, and devalued because of *their* medical conditions? No.

—Inaccurate Descriptors—

"Handicapped" is an archaic term (no longer in federal legislation) that evokes negative images ...ity, fear, and worse. The origin of the word is from an Old English bartering game, in which the loser was left with his "hand in his cap" and was said to be at a disadvantage. It was later applied to other people who were thought to be "disadvantaged." A *legendary* origin of the word refers to a person with a disability begging with his "cap in his hand." Regardless of origin, this antiquated term perpetuates the negative perception that people with disabilities are a homogenous group of pitiful, needy people! But others who share a certain characteristic are not all alike, and individuals who happen to have disabilities are not all alike. In fact, people with disabilities are more *like* people *without* disabilities than different!

"Handicapped" is often used to describe modified parking spaces, hotel rooms, restrooms, etc. But these usually provide *access* for people with physical or mobility needs— and they may provide *no benefit* for people with visual, hearing, or other conditions. This is one ex-...ple of the misuse of the H-word as a *generic descriptor.* ..he accurate term for modified parking spaces, hotel rooms, etc. is "accessible.")

"Disabled" is also not appropriate. Traffic reporters often say, "disabled vehicle." They once said, "stalled car." Sports reporters say an athlete is on "the disabled list." They once said, "injured reserve." Other uses of this word today mean "broken/non-functioning." *People with disabilities are not broken!*

If a new toaster doesn't work, we say it's "defective" or "damaged," and either return it or throw it away. Shall we do the same to babies with "birth defects" or adults with "brain damage"? The accurate and respectful descriptors are "congenital disability" and "brain injury."

Many parents say, "My child has special needs." This term generates *pity,* as demonstrated by the usual response: "Oh, I'm *so sorry,*" accompanied by a sad look or a sympathetic pat on the arm. *(Gag!)* A person's needs aren't "special" to him—they're ordinary! Many adults have said they detested this descriptor as children. Let's learn from them, and *stop using this pity-laden term!*

"Suffers from," "afflicted with," "victim of," "low/ ..gh functioning," and similar descriptors are inaccu-...ate, inappropriate, and archaic. A person simply "has" a disability or a medical diagnosis.

—Disability is *Not* the "Problem"—

We seem to spend more time talking about the "problems" of a person with a disability than anything else. People *without* disabilities, however, don't constantly talk about *their* problems. This would result in an inaccurate perception, and would also be counterproductive to creating a positive image. A person who wears glasses, for example, doesn't say, "I have a *problem* seeing." She says, "I wear [or need] glasses."

What is routinely called a "problem" actually reflects a *need.* Thus, Susan doesn't "have a problem walking," she "needs/uses a wheelchair." Ryan doesn't "have behavior problems," he "needs behavior supports." Do *you* want to be known by your "problems" or by the many positive characteristics that make you the unique individual you are? When will people *without* disabilities begin speaking about people *with* disabilities in the respectful way they speak about themselves?

> **If thought corrupts language, language can also corrupt thought.**
> George Orwell

Then there's the use of "wrong" as in, "We knew there was something *wrong* because..." What must it feel like when a child hears his parents repeat this over and over and over again? How would *you* feel if those who are supposed to love and support you constantly talk about what's "wrong" with you? Isn't it time to stop using words that cause harm?

The Real Problems are Attitudinal and Environmental Barriers

The real problem is *never* a person's disability, but the attitudes of others! A change in our attitudes leads to changes in our actions. Attitudes drive actions.

If educators believed in the potential of *all* children, and if they recognized that boys and girls with disabilities need a quality education so they can become successful in the adult world of work, millions of children would no longer be *segregated and undereducated* in special ed classrooms. If employers believed adults with disabilities have (or could learn) valuable job skills, we wouldn't have an estimated *(and shameful)* 75 percent unemployment rate of people with disabilities. If merchants saw people with disabilities as customers with money to spend, we wouldn't have so many inaccessible stores, theaters, restrooms, and more. If the service system identified people with disabilities as "people we serve," instead of "clients, consumers, recipients," perhaps those employed in the field would

realize *they* are dependent on people with disabilities for their livelihoods, and would, therefore, treat people with disabilities with greater respect and deference.

If individuals with disabilities and family members saw *themselves* as first-class citizens who can and should be fully included in all areas of society, we might focus on what's really important: living a *Real Life in the Real World*, enjoying ordinary relationships and experiences, and dreaming big dreams (like people without disabilities), instead of living a *Special, Segregated Life in Disability World*, where services, low expectations, poverty, dependence, and hopelessness are the norm.

—A New Paradigm—
"Disability is a natural part of the human experience..."
U.S. Developmental Disabilities/Bill of Rights Act

Like gender, ethnicity, and other traits, a disability is simply one of many natural characteristics of being human. Are *you* defined by your gender, ethnicity, religion, age, sexual orientation, or other trait? No! So how can we define others by a characteristic that is known as a "disability"?

Yes, *disability is natural*, and it can be *redefined* as "a body part that works differently." A person with spina bifida may have legs that work differently, a person with Down syndrome may learn differently, and so forth. And the body parts of people *without* disabilities are also different—it's the *way* these differences impact a person that creates the eligibility for services, entitlements, or legal protections.

In addition, a disability is often a *consequence of the environment*. For example, many children with attention-deficit disorder (ADD) and similar conditions are not diagnosed until they enter public school. Why then? Perhaps when they were younger, their learning styles were *supported* by parents and preschool teachers. But once in public school, if the child's learning style doesn't match an educator's teaching style, the child is said to have a "disability," and is shipped off to the special ed department. Why do we blame the child, label him, and segregate him in a special classroom? Shouldn't we, per special ed law, modify the regular curriculum and/or provide supports so he can learn in ways that are best for him? It seems that ADD and other conditions may be "environmentally-induced disabilities"!

When a person is in a welcoming, accessible environment, with appropriate supports, accommodations, -3-

and tools, where she can be successful, does she still have a disability? No. *Disability is not a constant state.* The *diagnosis* may be constant, but whether it's a disability is more a *consequence of the environment* than what a person's body or brain can/cannot do. We don't need to change people with disabilities through therapies or interventions. We need to change the *environment*, by providing assistive technology devices, supports, and accommodations to ensure a person's success.

Using People First Language is Crucial

People First Language puts the person before the disability, and describes what a person *has*, not who a person *is*.

Are you myopic or do you wear glasses?
Are you cancerous or do you have cancer?
Is a person handicapped/disabled
or does she have a disability?

If people with disabilities are to be included in all aspects of society, and if they're to be respected and valued as our fellow citizens, we must stop using language that marginalizes and sets them apart. Numerous historical examples of horrific treatment by the "majority" toward a "minority" demonstrate that the process *begins* with language that devalues and makes others "less than."

> *The greatest discovery of my generation is that human beings can alter their lives by altering their attitudes of mind.*
> William James

The use of disability descriptors is appropriate *only* in the service system, at IFSP, IEP, ISP meetings, and/or in medical or legal settings. Medical diagnoses have no place—*and they should be irrelevant*—within families, among friends, and in the community.

Many people share a person's diagnosis in an attempt to provide helpful information, as when a parent says, "My child has Down syndrome," hoping others will understand what the child needs. But this can lead to disastrous outcomes! The diagnosis can scare people, generate pity, and/or set up exclusion ("We can't handle people *like that*..."). Thus, in certain circumstances, *and when it's appropriate*, we can simply share information about what the person *needs* in a respectful, dignified manner, and *omit the diagnosis*.

Besides, *the diagnosis is nobody's business!* Have individuals with disabilities given us permission to share their personal information with others? If not, how dare we violate their trust? Do *you* routinely tell every Tom, Dick, and Harry about the boil on your spouse's behind? (I hope not!) And we often talk about people with disabilities *in front of them, as if they're not there*. Let's stop this demeaning practice.

My son, Benjamin, is 28 years old. His interests, strengths, and dreams are more important than his diagnosis. He loves politics, American history, classic rock, and movies; he's earned two karate belts, performed in plays, and won a national award for his *Thumbs Down to Pity* film. Benj has earned his Master's degree and is on the job hunt. He has blonde hair, blue eyes, and cerebral palsy. His diagnosis is just one of many characteristics of his whole persona. *He is not his disability, and his potential cannot be predicted by his diagnosis.*

When I meet new people, I don't whine that I'll never be a prima ballerina. I focus on what I *can* do, not what I *can't.* Don't you do the same? So when speaking about my son, I don't say, "Benj can't write with a pencil." I say, "Benj writes on his computer." I don't say, "He can't walk." I say, "He uses a power chair." It's a simple, *but vitally important,* matter of perspective. If I want others to know what a great young man he is—more importantly, *if I want him to know what a great young man he is*—I must use positive and accurate descriptors that portray him as a wonderful, valuable, and respected person.

The words used *about* a person have a powerful impact *on* the person. For generations, the hearts and minds of people with disabilities have been crushed by negative, stereotypical descriptors that, in turn, led to segregation, abuse, devaluation, forced sterilization, and worse. We must stop believing and perpetuating the myths—*the lies*—of labels. Children and adults who have conditions called "disabilities" are unique individuals with unlimited potential, like everyone else!

The Civil Rights and Women's Movements prompted changes in language, attitudes, and actions. The Disability Rights Movement is following in those important footsteps. People First Language was created by individuals who said, "We are *not* our disabilities; we are people, first." It's not "political correctness," but good manners and respect.

We can create a new paradigm of disability. In the process, we'll change ourselves and our world—and also generate positive change in the lives of people with disabilities. It's time to care about how our words impact the people we're talking *about,* and to be mindful of the *attitudes and actions* generated by the words we use.

Isn't it time to make this change? If not now, *when?* If not you, *who?*
Using People First Language is the *right* thing to do, so *let's do it!*

Examples of People First Language

Say:	Instead of:
People with disabilities.	The handicapped or disabled.
Paul has a cognitive disability (diagnosis).	He's mentally retarded.
Kate has autism (or a diagnosis of...)	She's autistic.
Jose has Down syndrome (or a diagnosis of...)	He's Down's; a Down's person; mongoloid.
Sara has a learning disability (diagnosis).	She's learning disabled.
Bob has a physical disability (diagnosis).	He's a quadriplegic/is crippled.
Maria uses a wheelchair/mobility chair	She's confined to/is wheelchair bound.
Tom has a mental health condition	He's emotionally disturbed/mentally ill.
Ryan receives special ed services	He's in special ed; is a sped student/inclusion student.
LaToya has a developmental delay	She's developmentally delayed.
Children without disabilities	Normal/healthy/typical kids.
Communicates with her eyes/device/etc.	Is non-verbal.
People we serve/provide services to.	Client, consumer, recipient, etc.
Congenital disability	Birth defect.
Brain injury	Brain damaged.
Accessible parking, hotel room, etc.	Handicapped parking, hotel room, etc.
She needs . . . or she uses	She has a problem with. . . /She has special needs.

Keep thinking—there are many other descriptors we need to change!

EXAMPLES OF PEOPLE FIRST LANGUAGE

BY KATHIE SNOW; VISIT WWW.DISABILITYISNATURAL.COM TO SEE THE COMPLETE ARTICLE

Remember: a disability descriptor is simply a medical diagnosis.
People First Language respectfully puts the person before the disability.
A person with a disability is more *like* people without disabilities than different.

SAY:	INSTEAD OF:
People with disabilities.	The handicapped or disabled.
He has a cognitive disability/diagnosis.	He's mentally retarded.
She has autism (or a diagnosis of...).	She's autistic.
He has Down syndrome (or a diagnosis of...).	He's Down's; a mongoloid.
She has a learning disability (diagnosis).	She's learning disabled.
He has a physical disability (diagnosis).	He's a quadriplegic/is crippled.
She has a mental health condition/diagnosis.	She's emotionally disturbed/mentally ill.
He uses a wheelchair/mobility chair.	He's confined to/is wheelchair bound.
She receives special ed services.	She's in special ed; a SPED kid.
He has a developmental delay.	He's developmentally delayed.
Children without disabilities.	Normal or healthy kids.
Communicates with her eyes/device/etc.	Is non-verbal.
People we serve	Client, consumer, recipient, etc.
Congenital disability	Birth defect
Brain injury	Brain damaged
Accessible parking, hotel room, etc.	Handicapped parking, hotel room, etc.
She needs... or she uses...	She has problems with/has special needs.

Keep thinking—there are many other descriptors we need to change!

Excerpted from Kathie's People First Language article, available at www.disabilityisnatural.com.

Diffusion of Innovations Theory and Veterans of Color: A Framework for Promoting the Adoption of Effective State Vocational Rehabilitation Agencies, American Indian Vocational Rehabilitation Programs, and Veterans Affairs-Vocational Rehabilitation & Employment Co-Service Practices in Vocational Rehabilitation

Jean E. Johnson
Corey L. Moore
Ningning Wang
Perry Sanders
John Sassin

Abstract -- This article proposes the adoption of co-service practices between state vocational rehabilitation agencies (SVRAs), American Indian vocational rehabilitation programs (AIVRPs), and Veterans Affairs-Vocational Rehabilitation and Employment (VA-VR&E) programs as a means to increase employment outcomes for veterans of color (i.e., African Americans, Latinos, Native Americans, and Asians) with disabilities. Collaborative agency practices are shown to contribute to successful outcomes. However, there is less discussion on how to promote adoption of co-service practices between these agencies. The purpose of this article is to discuss the need for interagency collaborations and Diffusion of Innovations Theory as an approach for promoting adoption of co-service practices across these agency contexts to increase employment services and outcomes for these veterans. Recommended approaches that can be considered for advancing the current state-of-the-science on improving SVRAs and VA-VR&E, and AIVRPs and VA-VR&E co-service strategies for placing these veterans into competitive integrated employment are presented.
Keywords: Veterans of color-minority veterans, co-service practices, employment, diffusion of innovations theory, vocational rehabilitation services

United States (U.S.) Armed Forces veterans of color (i.e., African Americans, Latinos, Native Americans, and Asians) comprise about 20% (N=2,811,856) of the total population of veterans 18 years of age or older (U.S. Census Bureau, 2013). Of these veterans, approximately 10.9% (N=2,375,910) are African American, .7% (N=152,581) are Native American, and 1.3% (N=283,365) are Asian or Pacific Islander. Latinos, who can be of any race, represent about 5.4% (N=1,177,056) of all living veterans. Remarkably, almost 33% and about 20% of veterans serving in Gulf War 1 (8/1990-8/2001) and Gulf War II (9/2001-present) were African American or Latino, respectively (National Center for Veterans Analysis and Statistics, 2013). Many of these

veterans return from the military with varying physical, cognitive, or psychological conditions and disabilities (Madaus, Miller, & Vance, 2009; U. S. Census Bureau, 2013). For example, they have been shown to possess higher rates of health conditions such as diabetes, heart disease, AIDS, and strokes compared to White non-Latinos (National Center for Veterans Analysis and Statistics, 2013). Remarkably, 36.4% of Native American veterans report having one or more disabilities while 18.9% have a service-connected disability rating (Indian Country Today Median Network, 2014). Additionally, Latino and African American veterans report greater odds for Independent Living (IL) service use than White veterans (Sheehan, Hummer, Moore, & Butler, 2012).

Upon return to civilian life, an issue of high importance to veterans of color with disabilities is becoming employed (Moore et al., 2015). The reintegration to occupational functioning and prevention of job loss is a major aspect of success (Bell, Boland, Dudgeon, & Johnson, 2013; Frain, Bishop, & Bethel, 2010; London, Heflin, & Wilmoth, 2011; Moran, Schmidt, & Burker, 2013). Indeed, according to Moran et al. (2013), war veterans perceive a delayed career as one of the most undesirable experiences in transitioning to the civilian workforce. As veterans transition to civilian life, they may require various vocational rehabilitation (VR) services to assist them in returning to work. Determining the most effective means by which to assist these veterans to obtain employment and secure career pathways is a relevant issue for rehabilitation professionals to address. State Vocational Rehabilitation Agencies (SVRAs), American Indian Vocational Rehabilitation Programs (AIVRPs), and the Veterans Affairs-Vocational Rehabilitation and Employment (VA-VR&E) program provide various employment and placement services that assist these veterans to secure employment. To date, scant literature is available relative to the need for effective co-service coordination between SVRAs and VA-VR&E programs, and AIVRPs and VA-VR&E programs.

Moreover, relatively little information is available in the literature as to which approaches are effective for promoting the adoption of such model co-service practices by SVRAs. There may be a need to examine the literature to determine and identify promising theoretical frameworks that might be considered to help promote the adoption of co-service practices by these agencies to enhance successful vocational rehabilitation outcomes for veterans of color with disabilities. The purpose of this review was to discuss the Diffusion of Innovations Theory as a possible framework for promoting the adoption of effective co-service best practice strategies and models within agency context (i.e., SVRAs, AIVRPs, and VA-VR&E programs). This article covers information relating to the following sub-topics: (a) SVRA, AIVRP, and VA-VR&E sponsored services; (b) need for interagency co-service practices; (c) effective existing co-service practices, and (d) Diffusion of Innovations Theory. A set of recommended approaches that can be considered for advancing the current state-of-the science on improving SVRAs and VA-VR&E, and AIVRPs and VA-VR&E program co-service strategies for placing veterans of color into employment and career pathways are presented.

SVRA, AIVRP, and VA-VR&E Sponsored Services

There are both similarities and differences in the vocational rehabilitation services provided by SVRA, AIVRP and VA-VR&E agencies. All three agencies provide the following services: assessment to determine vocational rehabilitation needs, development of Individualized Plan of Employment (IPE), vocational counseling and referral services, vocational or academic training, assistive technology services, and job placement services. Additionally, all three agencies are eligibility programs in which veterans must meet specific criteria to receive services (Chiu, Chan, Bishop, da Silva Cardoso, & O'Neill, 2013).

Eligibility requirements and outcome goals are the major differences among the programs. To be eligible for services from VA-VR&E, veterans must have a disability that is service-connected and determined to be an employment handicap. A service-connected disability is defined as a disability that is the result from or aggravated by injury or illness while serving on active duty in the military. However, Independent Living Services (ILS) can be provided to veterans whose service-connected disability prevents sustained employment (U.S. Department of Veterans Affairs, 2014). Thus, VA-VR&E services can result in employment or increased independence in the community for veterans with a service-connected disability. In contrast, SVRAs provide services to veterans whose disability is service connected or non-service connected that substantially impedes employment. However, services are provided to achieve an outcome goal of employment. Employment is also the outcome goal for AIVRPs; however, to receive the services, veterans with a service-connected or non-service connected disability must also be an American Indian or Alaskan Native, who is a citizen of a state or federally recognized tribe and must reside in an area that is served by an AIVRP (Clay, Seekins, & Castillo, 2010; Oklahoma Department of Rehabilitation Services, 2014). Nonetheless, veterans with disabilities may be able to receive employment services simultaneously from SVRA, AIVRP, and VA-VR&E depending on their eligibility (Boutin, 2011).

Need for Interagency Co-Service Practices

The positive impacts of VR services provided to veterans with disabilities by each of the state-federal rehabilitation programs are well documented (Boutin, 2011; Carter & Leach, 2011; Fleming, Del Valle, Kim, & Leahy, 2013; Moore, Johnson, & Uchegbu, 2011; Salisbury & Burker, 2011). Yet, veterans of color with disabilities continue to experience higher unemployment rates compared to their White counterparts (Moore et al., 2011, 2015). For example, Moore et al. (2015) found that the odds of White vet-

erans successfully returning to work were nearly 1-1/2 times the odds of African American veterans returning to work and African American female veterans had the lowest probability for successfully returning to work. In fact, veterans of all minority status had lower labor force participation rates when compared to non-veterans in the past 12 months (National Center for Veterans Analysis and Statistics, 2013). Further, within the context of a dismal economy, even when employment is provided, far too many employment prospects are short-term, dead-end jobs, rather than an opportunity for a career that includes opportunities for advancement, health insurance, and retirement benefits (Feist-Price & Khanna, 2011). Employment disparities can also be associated with environmental and social support contextual challenges such as homelessness, economic status as well as health and functioning, and mental health issues that further perpetuate the employment crisis (Feist-Price & Khanna, 2011; O'Brien, 2011).

In light of the lower participation rates of veterans of color with disabilities in the labor force and the increasing numbers of veterans who may need VR services to successfully reintegrate into the American civilian workforce, there is a pressing need for research to investigate various methods for increasing successful employment outcomes for these veterans. One such area of exploration could be the effectiveness of co-service practices among SVRAs, VA-VR&E, and AIVRP agencies. Traditionally, SVRAs, VA-VR&E, and AIVRP provide authorized VR services independently, functioning essentially as silos. Consequently, the service delivery process may sometimes become disjointed, and fragmented service provision can lead to veterans becoming confused and unaware of available services and strategies for accessing services. Thus, the implementation of coordinated and collaborative co-service strategies may increase service effectiveness and outcomes.

Co-service practices can be described as collaborative interagency partnerships in which resources are pooled and services are coordinated to maximize benefits to veterans with disabilities (Fleming et al., 2013). In a meta-analysis of studies examining best practice models of effective VR service delivery, Fleming et al. (2013) concluded that collaborative interagency partnerships are effective on several levels:

> On a systems level, interagency collaborations offer a consistent service delivery method leading to employment outcomes. On the practitioner level, interagency collaborations provide access to resources and services that might not be available without an interagency agreement. For customers, interagency collaborations offer choice in training and employment options for VR plan development (p. 149).

Fleming et al. (2013) also reported that interagency collaborations resulted in higher measurable goal attainment, more engagement in work-related experiences, and higher rates of successful employment outcomes.

O'Brien (2011) recommended additional and stronger co-service partnerships between SVRAs and the VA-VR&E programs to address job placement needs of veterans of color with disabilities. Further, such co-service strategies could be developed with the goals of minimizing duplication of services, reducing waste of human and financial resources, and increasing coordination among service providers with shared target populations (Kaiser, 2011; O'Brien, 2011). The federal-state VR programs (i.e., SVRAs, AIVRPs, and VA-VR&E) can become more effective by recognizing and maximizing these connections. Interagency collaboration can perhaps serve as a pivotal mechanism for ongoing communication and coordination among stakeholders (e.g. service providers, rehabilitation education programs, rehabilitation service administration/funders, researchers, and elected officials).

Effective Existing Co-Service Practices

A number of studies report examples of effective interagency collaborations and collaborative practices among rehabilitation professionals such as collaborations between VR agencies and educational systems for students with disabilities (Jun, Kortering, Osmanir, & Zhang, 2015; Oertle, Plotner, & Trach, 2013), VR agencies and community service providers (Bezyak, Gilbert, Walker, & Trice, 2012), VR agencies and developmental disability agencies (Boeltzieg, Winsor, & Haines, 2011). Sparse examples are noted in the literature of collaborations specifically between SVRAs, VA-VR&E, and AIVRP utilizing co-service practices to provide VR services to veterans with disabilities. One example is collaboration between The Texas Department of Assistive and Rehabilitative Services and the Waco VA-VR&E program that began in 2005. A Memorandum of Understanding (MOU) was developed between the two agencies that resulted in the Texas VR providing vocational rehabilitation services to over 4,000 veterans during fiscal year 2006. This MOU included procedures for making referrals, providing case management, and developing a concurrent IPE. Additionally, the MOU indicated which services participating agencies could provide exclusively. This progressive partnership bridged the differences between the two programs and used their commonality to provide an array of services otherwise not available to the veteran (McGuire-Kuletz, Shivers, & Anderson, 2008).

Another example of an effective collaborative co-service partnership in serving veterans can be seen in the Montana Division of Rehabilitation and the Billings, Montana VA-VR&E. In this case, a veteran receiving VA-VR&E services was offered a job for which he had been trained to perform; however, the job site was a 6-hour drive from his current home. The VA-VR&E counselor contacted the SVRA counselor and they were successful in developing a vocational plan that was approved to pay for the veteran to move his family closer to the job location (McGuire-Kuletz et al., 2008). This collaboration resulted in both agencies accomplishing a positive employment outcome for the consumer.

Another case of co-service partnerships between SVRAs and VA-VR&E programs reported by McGuire-Kuletz et al. (2008) highlights collaboration between an SVRA business relations specialist and a local business owner. A veteran who had been offered a job prior to deployment overseas, returned home with injuries that prevented him from being able to perform the duties of that job. The prospective employer's human resource personnel contacted the business relations specialist at the SVRA. The SVRA business relations specialist contacted a VR counselor and the VR counselor contacted a counselor at the VA-VR&E program and a case was opened for the veteran. This collaboration between SVRA and VA-VR&E programs included joint meetings, supportive rehabilitation plans, shared services, job site troubleshooting, direct communications with representatives, and combined resources. This collaboration resulted in the business employing the veteran in an appropriate job.

A final example of a co-service partnership is a cooperative agreement between the Wisconsin Division of Vocational Rehabilitation and Great Lakes Inter-Tribal Council. A unique feature in the partnership between this SVRA and AIVRP is the emphasis on training for the staff of the Wisconsin Division of Vocational Rehabilitation in cultural issues relative to the American Indians. The Great Lakes Inter-Tribal Council provided cultural sensitivity training on cultural issues and the Wisconsin Division of Vocational Rehabilitation agreed to provide ongoing cultural training to its staff and the liaison to the AIVRP. Further, both agencies agreed to joint trainings that included needs assessment of the American Indians to continually improve VR services for the nine Indian Tribes in that area (Wisconsin Department of Workforce Development, 2008).

Indeed, there exists an MOU between The Rehabilitation Services Administration (RSA) and the VA-VR&E that allows for collaboration between VA-VR&E programs and SVRAs and AIVRPs. Essentially, the collaboration allows for VR counselors from VA-VR&E to refer a veteran to a SVRA or AIVRP. VR counselors at each agency collaboratively review the veteran's case to determine what services the SVRA and AIVRP can provide to the veteran. A major advantage of this partnership is the locality of SVRAs and AIVRPs. SVRAs and AIVRPs are dispersed throughout the state while VA-VR&E have offices that are more regionally located. So, SVRAs and AIVRPs are more accessible to veterans, particularly in rural areas. Another advantage of this partnership is that SVRAs are able to provide some services that VA-VR&E cannot legally provide to the veteran, such as clothing allowance and some transportation allowances (U.S. Department of Veterans Affairs, 2014). An additional advantage of this partnership between AIVRP and VA-VR&E is that services are provided in a culturally relevant manner that can include provision of native healing practices and training in making native crafts that can support self-employment (Muskogee Vocational Rehabilitation, 2014). Furthermore, SVRAs have a cooperative agreement with AIVRPs that allows for collaboration

with federal and tribal service providers. This partnership allows for American Indians with disabilities to receive all needed services (Oklahoma Department of Rehabilitation Services, 2014).

However, the literature does not indicate that these collaborations were sustained or contributed to other collaborations being implemented. Literature does suggest some barriers to successful collaborations. For example, several authors have noted lack of information sharing, lack of supportive structures and policies, and unclear processes as barriers (Darlington, Feeney & Rixon, 2005; Kaiser, 2011; Oertle et al., 2013). Other authors pointed out lack of understanding of agencies' perspectives and lack of confidence in the agencies as a major breach in communication that hinders interagency collaboration (Johnson, Zorn, Tam, Lamontagne, & Johnson, 2003; Kaiser, 2011; Packard, Patti, Daly, & Tucker-Tatlow, 2013). Given the effectiveness of interagency collaborations to enhance and increase vocational outcomes for veterans with disabilities (e.g., Bezyak et al., 2012; Boeltzieg et al., 2011; Jun et al., 2015), following is a discussion of Diffusion of Innovations Theory as a framework for promoting the adoption of co-service practices among SVRAs, AIVRPs, and VA-VR&E and how the above barriers can be addressed utilizing this theory.

Diffusion of Innovations Theory: Overview and Application

Diffusion of Innovations Theory (Rogers, 2003) provides a theoretical perspective for understanding how to promote the adoption of effective SVRA and VA-VR&E, and AIVRP and VA-VR&E programs. Diffusion of Innovations Theory has been researched and adopted for use by various disciplines that include education, engineering, business, technology, and economics (Dodd, 2012). Essen-

Figure 1. The relationships among components of Diffusion of Innovations Theory. Adapted from Rogers (2003).
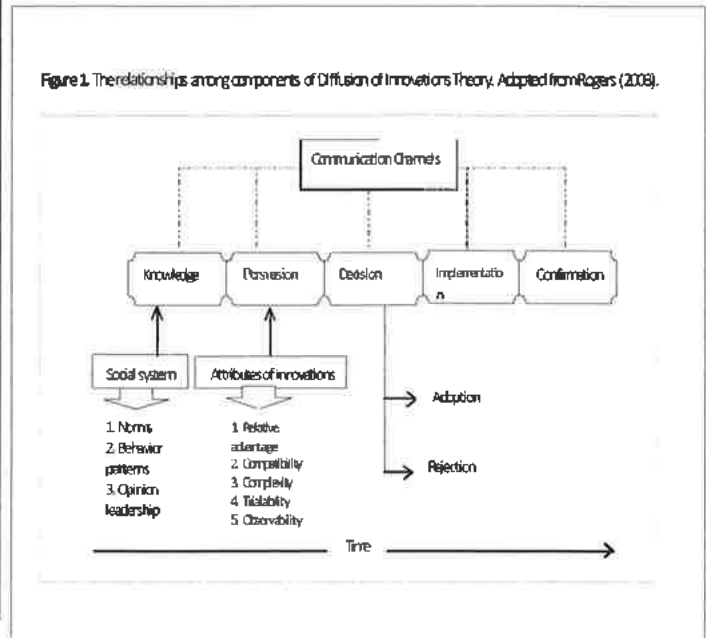
tially, the theory explains how new ideas, practices or strategies are spread into a social system and what will likely increase or decrease adoption of the innovation. Rogers (2003) proposed four (4) main elements that can influence the diffusion of co-service practices: the innovation, communication channels, time, and the social system. Diffusion is the process by which an innovation is communicated through certain channels among the members of a social system over time. An innovation is an idea, practice, or project that is perceived as new by potential adopters. During communication, an innovation is seldom adopted based primarily on scientific, objective information; rather, subjective perceptions of the innovation influence diffusion. Potential adopters move through five stages: awareness, persuasion, decision, implementation, and adoption. Further, five different categories of adopters in the social system determine rate of diffusion, roles of opinion leaders, types of innovation decisions, and norms of the diffusion: innovators, early adopters, early majority, late majority, and laggards. Figure 1 shows the relationships among components of Diffusion of Innovations Theory (Rogers, 2003).

The focus in Diffusion of Innovations Theory is not on how to change the individuals in the social system to accept the innovation, but rather how to shape the innovation to better fit the needs of individuals in the social system (Robinson, 2009), because the ultimate goals of diffusion are adoption, implementation and institutionalization (Murray, 2009). Thus, the goal of the diffusion process would be for SVRA and VA-VR&E, and AIVRP and VA-VR&E organizations to adopt, implement and incorporate co-service strategies into their normal routines and procedures. An understanding of Diffusion of Innovations Theory may aid in the adoption of co-service practices that can improve VR services to veterans of color with disabilities. Following is a discussion of the implications of the main elements of the theory applicable to factors that may facilitate or hinder the adoption of co-service practices by state-federal agencies.

Innovation. Innovations refer to ideas, processes, policies, or procedures that are perceived as new by an individual or an organization. Further, the innovation can be perceived as new even though the idea may have been in existence for some time. Rogers (2003) identified five characteristics of an innovation that affect how quickly the new idea will be adopted (a) relative advantage, (b) compatibility, (c) complexity, (d) trialability, and (e) observability. Specifically, rehabilitation professionals in VR agencies would more likely adopt co-service practices if they can perceive that the new idea is better than current practices and policies and yet is in agreement with their values, norms, and customs. Also, adoption is more likely to occur if the innovation is perceived to be easily understood and utilizes current skills and if the innovation can be implemented on a trial basis or in small steps. The extent to which the outcome of the innovation is visible will also increase the likelihood of adoption.

Similarly, rehabilitation professionals in VR agencies may be more inclined to adopt co-service practices if the five characteristics of an innovation are taken into consideration. For example, adoption is more likely if rehabilitation professionals are able to perceive the relative advantage of co-service practices to enhance their service provision as well increase the number of successful vocational outcomes; if they are able to perceive that co-service practices are compatible with their vision and outcome goals of assisting veterans with disabilities to become employed; if new and combined processes and procedures are not too complex and complicated to implement; and if they are able to pilot co-service practices before final decision to adopt. Attention to these aspects of the innovation of co-service practices can initially begin by establishing a collaborative relationship between the agencies and developing a shared vision of the co-service practices to ensure that mutual needs are being met and no agency is being exploited. A lack of a shared vision, goals and objectives that establish the foundation for the innovation has been identified as a deterrent to adoption of the innovation (Packard et al., 2013).

Communication channels. For Rogers (2003), communication is "a process in which participants create and share information with one another in order to reach a mutual understanding" (p. 5) and a channel is "the means by which a message gets from the source to the receiver" (p. 204). Effective communication is required for diffusion of an innovation. Rogers (2003) noted two types of communication channels that affect the rate of adoption of an innovation: mass media and interpersonal communication. Mass media is a type of communication channel that can include TV, radio, newspaper, and Internet. Using mass media channels is effective in spreading knowledge about the innovation to many potential adopters. Such information is generally scientific, objective knowledge. Yet, because diffusion is a social process that involves interpersonal communication between sender and receiver of the message, utilization of interpersonal channels is more effective in increasing the likelihood that the innovation will actually be adopted. Interpersonal channels include more subjective evaluation by peers and people in the social system generally rely more on the subjective evaluation of peers than scientific research by experts.

Rehabilitation professionals are able to utilize both mass media and interpersonal communication channels in the diffusion of co-service practices. Mass media channels can aid in communicating the innovation of co-service practices to all agencies involved by first opening the lines of communication and then providing accurate and objective information from various sources about co-service practices. Even more importantly, though, are the interpersonal communication channels that will exist between the individual rehabilitation professionals. Peer to peer conversations and peer networks are important to the diffusion of co-service practices. Because the norm for each agency is to function independently, the development of trustworthy relationships is more likely to occur through interpersonal

communication channels. In addition, the adoption of co-service practices involves risk and uncertainty. Having credible and trustworthy colleagues within the agency can help to reduce the uncertainty of the advantage and compatibility of the co-service practices, thereby increasing the likelihood of adoption. In addition to opening the lines of communication, interpersonal channels can also serve as communication links across agencies. Utilizing interpersonal channels can facilitate more cohesive working relationships as well formal and informal communication links. Developing a proactive approach to communication that openly discusses differences and issues and regularly updates all collaborative partners is relevant to the adoption and sustaining of the co-service practices (Johnson et al., 2003).

Time. The element of time refers to the interval between the introduction of an innovation and the subsequent adoption or rejection of the idea (Rogers, 2003). A major aspect in the element of time relevant to the diffusion of an innovation is categories of adopters. Rogers (2003) defined the categories of adopters as the classification of members of a social system on the basis of innovativeness. Innovativeness is the "degree to which an individual or other unit of adoption is relatively earlier in adopting new ideas than other members of a system" (Rogers, 2003, p. 22). Understanding the innovativeness of the potential adopters can help to understand the rate of adoption of an innovation. Additionally, understanding the characteristics and needs of the individuals in the adopter categories can aid in how best to work with each category to shape or re-shape the innovation to best meet the needs of those in the social system (Robinson, 2009).

Rogers (2003) described five categories of classifications of the people involved in the diffusion of an innovation that impact the rate of adoption : (a) *Innovators* are the first to adopt in that they tend to be open to new ideas, willing to take risks, and can cope with high levels of uncertainty related to innovations. However, Innovators have less ability to influence adoption and serve more to introduce an innovation; (b) *Early Adopters* are next to adopt in that they tend to be highly regarded and likely hold leadership roles in an organization; others within an organization often seek the opinions of Early Adopters; (c) The *Early Majority* is not the first or the last group to adopt as they tend to deliberate more than Innovators and Early Adopters before their decision. Yet, they do adopt just ahead of the average members of the organization. They serve as an important link in the diffusion process because they are usually willing to follow the influence of the Early Adopters; (d) The *Late Majority* tend to be cautious and skeptical about whether to adopt due to the uncertainty of an innovation. Peer and social pressure or economic incentives often influence this group. Thus, they are inclined to adopt only after the majority of their peers have adopted the innovation; (e) *Laggards* are the last to adopt an innovation in that they tend to prefer the past and tradition rather than change. Thus, the decision to adopt or reject an innovation depends largely on what was done in the past. Laggards can play a

Figure 2. Characteristics and percentages of adopter categories in the element of time that affect rate of adoption of innovation in Diffusion of Innovation Theory. Adopted from Rogers 2003.
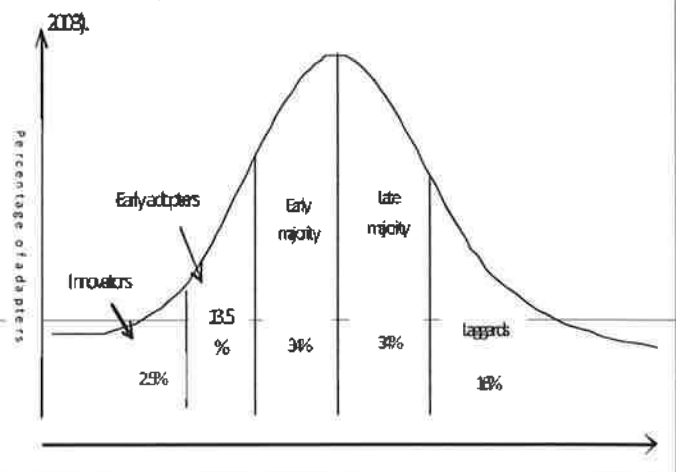
vital role in that they reveal concerns and critiques not considered by other categories and can influence the adoption rate of the Late Majority (Robinson, 2009, Rogers, 2003). Innovators will be the first to adopt a new idea; however, as the innovation starts to spread, the number of adopters increases until adopters outweigh those who reject the innovation and the innovation becomes self-sustaining. Figure 2 depicts the characteristics and percentages of adopter categories in the Diffusion of Innovation Theory that would affect the rate of adoption of co-service practices (Rogers, 2003).

Other researchers have noted factors that can facilitate and factors that can inhibit the successful adoption of co-service practices by potential adopters in the SVRAs, VA-VR&E, and AIVRP vocational rehabilitation programs that relate to the adopter categories in the element of time. Similar to Rogers, Packard et al. (2013) noted membership characteristics as a factor that influences successful interagency collaborations. Johnson et al. (2003) pointed out resistance to change among agency members as a factor that would inhibit successful collaborations. Taking the time to evaluate the rehabilitation professionals in these agencies can help to understand their perspectives, including any resistance to change as they consider adoption or rejection of co-service practices. Indeed, Kaiser (2011) pointed out that a formalized collaborative process may even mitigate interagency conflict. Knowing who fits into which category can facilitate relationship building and rapport. Being aware of the roles of each VR professional in the agencies can help to determine how best to present co-service practices to increase the probability of adoption. Several authors have noted collaborative relationship building as influential in successful interagency collaborations (Bezyak et al., 2012; Kaiser, 2011; Oertle et al., 2013). Further, each role, from Innovators to Laggards is important and valued within the organizations. Appreciating each role allows for identify-

ing strengths and challenges to the adoption of co-service practices.

Social System. The social system can be individuals, a group, an organization, or a subgroup within an organization and comprises the context in which the innovation will be diffused. The organizational structures of the social system, norms, policies, procedures as well as opinion leaders within the social system all affect the diffusion of the innovation. Awareness of the social structure and how changes are made within an organization can help to predict potential barriers. Awareness of the norms of an organization can suggest what other behaviors are acceptable. Opinion leaders are individuals within the organization who have the ability to informally influence others' opinions, attitudes, and behaviors. Identifying and engaging opinion leaders can be helpful in promoting the innovation. In addition, consequences or changes that can occur, whether desirable or undesirable, direct or indirect, anticipated or unanticipated can influence the decision to adopt (Rogers, 2003). The uncertainty of the effects of an innovation can be reduced by identifying and addressing the consequences of the innovation on the social system. Understanding these characteristics is important to the rate of adoption of an innovation within a social system.

Several authors have identified distinct organizational structures, environmental factors, processes and purposes, and agencies policies as factors that can facilitate or hinder successful interagency collaborations (Bezyak, et al, 2012; Oertle et al., 2013; Packard et al., 2013). An exploration of the following questions can help to define these factors as helps or hindrances to adoption. How do co-service practices align with the mission of each of the VR agencies? What existing policies, norms, cultural values in each VR organization support or deter co-service practices? Additionally, it is important to identify the opinion leaders in each of the VR organizations to foster team building and collaboration. Opinion leaders can be invaluable allies in interpersonal communication, and as adopters, persuading others in the agencies to adopt co-services practices. Lastly, in order to reduce the uncertainty that could impede adoption of co-service practices, it would be important to have an open discussion with all of the VR agencies about expected and possibly unexpected consequences. Such a proactive discussion could help the VR agencies to collaboratively prepare a response plan. Following is a generic example of implementing the four elements of Diffusion of Innovations Theory into co-service practices among the VR agencies through the establishment of a Community of Practice of SVRA, AIVRP, and VA-VR&E professionals. A Community of Practice (CoP) can be defined as "a group of people who work along collegial lines, share a concern or passion for something they do, and through regular interaction learn together how to do it better" (Kilbride, Perry, Flately, Turner, & Meyer, 2011, p. 91). Further, CoPs consist of interrelated components: domain, community, and practice (Drouin, Vartanian, & Birk, 2014; Kilbride, et al, 2011; Urquhart et al., 2013). Domain refers to the shared concern or focus that is the basis for the

CoP. Community refers to the group of people who form the social structures that facilitate interaction and learning. Practice refers to the collective learning and resources developed and shared by the CoP. Vocational Rehabilitation professionals in these VR agencies align with this concept of CoPs in that they all provide services to veterans of color with disabilities in a noncompetitive manner with the same concern for successful employment outcomes for these veterans. By forming a CoP, these VR professionals could initiate and implement co-service practices as they increase their knowledge and expertise of co-service practices through ongoing interaction and collaboration.

The components of a CoP and the elements of innovation, communication channels, time and social system in Diffusion of Innovations Theory combine to facilitate establishing a CoP of SVRA, AIVRP, and VA-VR&E VR professionals providing co-service practices to veterans of color with disabilities. The initial introduction of the idea of co-service practices could be accomplished through Innovators meeting with providers of VR services in the VR agencies, including administrators and practitioners. Researchers would identify Innovators within the agencies to propose the innovation. This meeting would serve to establish the focus or *domain* of the CoP, namely, the diffusion of co-service practices, and to initiate the requisite collaborative relationships for co-service practices. This meeting would be an open discussion exploring the meaning and the value for co-service practices for each agency relative to individual missions and established practices as well as how to develop a shared mission and professional identity. Additionally, as the VR professionals share and communicate, their perspectives and adopter status become clearer. The initial goal would be to establish a core of individuals committed to fostering co-service practices.

The next step would be to establish the *community* through including additional rehabilitation professionals, and evaluating the professionals as to which adopter category they may fit, especially Opinion Leaders, so as to better determine the impact and the speed with which co-service practices would be adopted. With the domain goal of diffusing co-service practices between the VR agencies, activities that foster and facilitate mutual engagement in the CoP would occur. Regular meetings both teleconference and face-to-face would allow for development of shared vision and mission and procedural guidelines for co-service practices. Types of procedural guidelines include development of co-hierarchy and levels of co-responsibilities, conflict resolution procedures, determination of resource allocations, joint training manuals of co-service practices, and co-communication procedures. Additional formats for interaction and communication between CoP VR professionals would be email, video chat, and Google Docs. The exploration and co-creation of knowledge and procedures provide for mutual engagement across the VR agencies that will enhance co-service practices in providing VR services to veterans of color with disabilities.

Within the domain of *practice*, the VR professionals would engage in activities that help to create an infrastructure for co-service practices to become diffused and accepted as standard practice. The VR professionals would engage in co-service practices that include collaborative case management, collaborative case review, collaborative job training, job placement and job maintenance services, cross-cultural sensitivity training, joint trainings and webinars, information sharing and referral across agencies for services uniquely offered by each VR agency.

To further foster an environment of co-service practices, the CoP would publish a quarterly newsletter to be disseminated to all providers of VR services across the agencies to update and communicate the progress, successes, and challenges of the CoP in providing co-service practices. The CoP is not intended to be a closed group; thus, an additional purpose of the newsletter would be to promote the CoP as a community that is open to VR members across the agencies interested in supporting the adoption of co-service practices. The CoP is intended to function until such time as co-service practices are established as a standard of practice and policy for the agencies. As communication is a critical element in the diffusion of innovations, developing a CoP for VR professionals across these agencies would greatly facilitate peer-to-peer communication and networking both formally and informally; would provide a forum for consultation and collaboration and would provide synergistic learning from peers which would in turn facilitate the adoption of co-service practices.

Recommendations for Advancing the State-of-the-Science

This review yielded a number of key observations worthy of discussion. First, the literature indicates that relatively little is known about rehabilitation agency co-service practices that lead to positive employment and career outcomes for veterans of color. A small body of literature has documented a few collaborations and partnerships between these agencies (i.e., SVRAs, AIVRPs, and VA-VR&E) that can be used for replication and scale-up evaluations. Such replication and scale-up evaluation could fill the research gap by adding empirical evidence to the body of knowledge about co-service practices between these VR agencies.

Additionally, this review indicates that co-service practices and strategies, although few and far between, have resulted in positive employment outcomes. Future research is needed to develop a best-practice model of promising co-service practices and strategies that could be adopted by SVRAs, AIVRPs, and VA-VR&E nationwide to enhance outcomes and experiences among veterans of color with disabilities. Future research could have policy implications that could bring about systems change. As such, rigorous multi-method (i.e., focus group discussions and survey) and mixed-method (i.e., qualitative and quantitative) data triangulation approaches should be employed to inform the current state-of-the-science on improving rehabilitation agency co-service practices for assisting veterans of color

to obtain employment. Focus group discussions and a follow-up national survey involving personnel in management and counselor positions, and community advocates could help to answer questions emerging from this review such as: (a) What SVRA, AIVRP, and VA-VR&E co-service strategies are effective for assisting veterans of color to obtain employment? and (b) What SVRA, AIVRP, and VA-VR&E co-service strategies for serving veterans of color are adoptable by SVRAs, AIVRPs, and VA-VR&E to assist them to obtain employment? Information gained through data triangulation approaches could be utilized to develop a model of how these promising co-service practices can be integrated into SVRA, AIVRP, and VA-VR&E partnerships to create formal co-service strategies.

Finally, this review discussed the Diffusion of Innovations Theory as a framework for promoting the adoption of co-service best practice strategies and models within agency context. The four primary elements of the Diffusion of Innovations Theory discussed in this review explicate factors that help and hinder the spread and acceptance of a new idea. The Diffusion of Innovations Theory may be an appropriate theoretical framework to promote the adoption of co-service practices. The primary goal of utilizing the theory in this context is to understand how to communicate the need for and effectiveness of co-service practices, and to bring about systems change. Utilization of the theory could aid in understanding how to reinvent the innovation to meet the needs of these agencies as they engage in co-service practices. Future researchers might consider addressing the following relevant questions: (a) Is Diffusion of Innovations Theory an effective framework for promoting the adoption of effective co-service strategies across SVRAs, AIVRPs, and VA-VR&E programs? and (b) Is the theory effective for increasing employment outcomes for veterans of color with disabilities served by these agencies?

Conclusion

SVRAs, AIVRPs, and VA-VR&E programs provide various employment services to veterans of color with disabilities. While these agencies individually provide effective employment services for these veterans, the unemployment rate among veterans of color with disabilities remains high. This review has revealed a few examples of co-service practices among the three agencies that resulted in more effective and comprehensive employment services for veterans. For this reason, investigating and identifying existing co-service practices and strategies could broaden the knowledge base. Further inquiry could also provide SVRA, AIVRP, and VA-VR&E with strategies and best practice co-service models. The customary practice of these agencies is to provide employment services independently as separate agencies. Co-service models would call for SVRAs, AIVRPs, and VA-VR&E to adopt new methods and policies, as well as embrace a possible paradigm shift. Thus, the Diffusion of Innovations Theory serves as a theoretical framework for understanding how innovations are spread between people as well as within and between in-

stitutions, specifically, how to spread co-service practices and strategies between SVRAs, AIVRPs, and VA-VR&E. The elements of innovation, communication channels, time, and social system within Diffusion of Innovations Theory explicate how these vital areas can facilitate or impede the adoption of co-service practices and strategies.

Additionally, Diffusion of Innovations Theory categorizes the individuals within SVRAs, AIVRPs, and VA-VR&E as types of adopters. The theory then explains how the different types can aid in the adoption of co-service practices and strategies because innovations are not adopted based solely on objective, scientific evidence. Rather, individuals in each of these agencies have unique influence on the social system. Thus, Diffusion of Innovations Theory could be used to aid in the initiation and development of collaborative partnerships among these agencies. The ultimate goal of future research is to enhance and increase successful employment of veterans of color with disabilities. With greater knowledge about effective co-service practices and strategies for veterans of color with disabilities, more appropriate plans for employment could be developed to contribute to successful employment outcomes for these veterans.

References

Bell, G. L., Boland, E. A, Dudgeon, B., & Johnson, K. (2013). The Post-9111 GI Bill: Insights From Veterans Using Department of Veterans Affairs Educational Benefits. *Rehabilitation Research, Policy, and Education, 27*(4),246-260. doi: 10.1891/2168-6653.27.4 .246

Bezyak, J. L., Gilbert, E., Walker, A, & Trice, A (2012). Community partnerships: Initial steps for rehabilitation counseling professionals. *Journal of Rehabilitation, 78*(3), 3-10.

Boeltzig, H., Winsor, J., & Haines, K. (2011). *Collaboration between state intellectual and developmental disabilities agencies and state vocational rehabilitation agencies: Results of a national survey.* (Research to Practice Issue No. 50). Retrieved from Institution for Community Inclusion website: http://www.communityinclusion.org/article.php?articleid=329

Boutin, D. L. (2011). Effective vocational rehabilitation services for military veterans. *Journal of Applied Rehabilitation Counseling. 42*(2), 24-32.

Cater, J. K., & Leach, J. (2011). Veterans, military sexual trauma and PTSD: Rehabilitation planning implications. *Journal of Applied Rehabilitation Counseling. 42*(2), 33-41.

Chiu, C.- Y., Chan, F., Bishop, M., da Silva Cardoso, E., & O'Neill, J. (2013). State vocational rehabilitation services and employment in multiple sclerosis. *Multiple Sclerosis Journal, 19*(12), 1655-1664. doi: 10.11771352458513482372

Clay, J., Seekins, T., & Castillo, J. (2010). Community infrastructure and employment opportunities for Native Americans and Alaska Natives. In F. E. Balcazar, Y. Suarez-Balcazar, T. Taylor-Ritzler & C. B. Keys (Eds.), *Race, culture, and disability* (pp. pp. 137-158).

Darlington, Y, Feeney, J., & Rixon, K. (2005). Interagency collaboration between child protection and mental health services: Practices, attitudes and barirers. *Child Abuse and Neglect, 29,* 1085-1098.

Dodd, B. (2012). Innovation and Change. In R. Dionne & B. Dodd (Eds.), *Workforce Development and Occupational Education Theories Handbook* (2nd ed., pp. 30-41). Stillwater, OK: College of Education, Oklahoma State University.

Drouin, M., Vartanian, L., & Birk, S. (2014). A community of practice model for introducing mobile tablets to university faculty. In-

novative *Higher Education, 39,* 231-245. doi: 10.1007 /s1 0755-013-9270-3.

Feist-Price, S., & Khanna, N. (2011). Improving vocational rehabilitation access and employment success for African American homeless veterans with disabilities. In C. L. Moore, J. E. Johnson & A. L. Washington (Eds.), *Improving vocational rehabilitation access and return to work and career outcomes among African American Wounded Warriors, Gulf War and Vietnam War era veterans with disabilities* (pp. 26-44). Oklahoma City: Dept. of Rehabilitation Counseling and Disability Studies/LV.

Fleming, A. R., Del Valle, R., Kim, M., & Leahy, M. J. (2013). Best Practice Models of Effective Vocational Rehabilitation Service Delivery in the Public Rehabilitation Program: A Review and Synthesis of the Empirical Literature. *Rehabilitation Counseling Bulletin, 56*(3), 146-159.

Frain, M. P., Bishop, M., & Bethel, M. (2010). A roadmap for rehabilitation counseling to serve military veterans with disabilities. *Journal of Rehabilitation, 76*(1), 13-21.

Indian Country Today Median Network. (2014). *Native American Veterans by the Numbers.* http://indiancountrytodaymedianetwork.com/2013/03/05/native-american-veterans-numbers-148001

Johnson, L. J., Zorn, D., Tam, B. K. Y., Lamontagne, M., & Johnson, S. A. (2003). Stakeholders' views of factors that impact successful interagency collaboration. *Council for Exceptional Children, 69*(2), 195-209.

Jun, S., Kortering, L., Osmanir, K., Zhang, D. (2015). Vocational rehabilitation transition outcomes: A look at one state's evidence. *Journal of Rehabilitation, 81* (2), 47-53.

Kaiser, F. M. (2011). *Interagency Collaborative Arrangements and Activities: Types, Rationales, Considerations* (Report No. R41803). Retrieved from http://fas.org/sgp/crs/misc/ R41803. pdf

Kilbride, C., Perry, L., Flatley, M., Turner, E., & Meyer, J. (2011). Developing theory and practice: Creation of a community of practice through action research produced excellence in stroke care. *Journal of Interprofessional Care, 25,* 91-97. doi: 1 0.3109113561820.201 0.483024.

London, A. S., Heflin, C. M., & Wilmoth, J. M. (2011). Work-related disability, veteran status, and poverty: Implications for family well-being. *Journal of Poverty, 15*(3), 330-349. doi: 10.1080110875549.2011.589259

Madaus, J. W., Miller, W. K., & Vance, M. L. (2009). Veterans with disabilities in postsecondary education. *Journal of Postsecondary Education and Disability, 22*(1), 10-17

McGuire-Kuletz, M., Shivers, S., & Anderson, P. (Eds.). (2008). *When Johnny (or Jeannie) comes marching home ... and back to work: Linking Veterans Affairs and state vocational rehabilitation services for service men and women* (Institute on Rehabilitation Issues Monograph No. 34). Washington, D. C.: The George Washington University, Center for Rehabilitation Counseling Research and Education.

Moore, C. L., Johnson, J. E., & Uchegbu, N. (2011). Barriers to VR service access and return to work and career outcomes among African American war veterans: The need for evidence-based research and service strategies. In C. L. Moore, J. E. Johnson & A. L. Washington (Eds.), *Improving Vocational Rehabilitation Access and Return to Work and Career Outcomes among African American Wounded Warriors, Gulf War, and Vietnam War Era Veterans with Disabilities* (pp. 71-94). Oklahoma City: Dept. of Rehabilitation Counseling and Disability Studies/LU.

Moore, C. L., Wang, N., Johnson, J, Manyibe, E. O., Washington, A. L., & Muhammad, A. (2015). Return-to-work outcome rates of African American versus White veterans served by state vocational rehabilitation agencies: A randomized split-half cross-model validation research design. *Rehabilitation Counseling Bulletin, 58*(1), 1-14.

Moran, S., Schmidt, J., & Burker, E. J. (2013). Posttraumatic Growth and Posttraumatic Stress Disorder in Veterans. *Journal of Rehabilitation, 79*(2), 34-43.

Murray, C. E. (2009). Diffusion of innovation theory: A bridge for the research-practice gap in counseling. *Journal of Counseling & Development, 87,* 108-116.

Muskogee Vocational Rehabilitation. (2014). *What is section 121 programs?* Retrieved from http://home.rose.net/~mvr/section 121.html

National Center for Veterans Analysis and Statistics. (2013). *Minority Veterans: 2011.* http://www.va.govNETDATA/docs/Special Reports/Minority_ Veterans_2011.pdf

O'Brien, M. (2011). The role of State VR agencies in assisting African American Wounded Warriors, Gulf War and Vietnam War Era Veterans with disabilities to obtain competitive jobs. In C. L. Moore, J. E. Johnson & A. L. Washington (Eds.), *Improving vocational rehabilitation access and return to work and career outcomes among African American Wounded Warriors, Gulf War and Vietnam War era veterans with disabilities* (pp. 20-25). Oklahoma City: Dept. of Rehabilitation Counseling and Disability Studies/LU.

Oertle, K. M., Plotner, A. J., & Trach, J. S. (2013). Rehabilitation professionals' expectations for transition and interagency collabortion. *Journal of Rehabilitation, 79*(3),25-35.

Oklahoma Department of Rehabilitation Services. (2014). American Indian Vocational Rehabilitation Program. http://okrehab.org/ drupalljob-seekers/na-vr

Packard, T., Patti, R., Daly, D., & Tucker-Tatlow, J. (2013). Implementing services integration and interagency collaboration: Experiences in seven counties. *Adminisration in Social Work, 37,* 356-371. doi:10.1080103643107.2012.714719.

Robinson, L. (2009). Enabling change: A summary of diffusion of innovations. from Retrieved from http://enablingchange. com.au/Summary _Diffusion_Theory. pdf

Rogers, E. M. (2003). *Diffusion of innovations* (5th ed.). New York, NY: The Free Press.

Salisbury, A. G., & Burker, E. J. (2011). Assessment, treatment, and vocational implications of combat related PTSD in veterans. *Journal of Applied Rehabilitation Counseling, 42*(2), 42-49.

Sheehan, C. M., Hummer, A. R., Moore, B. L., & Butler, J. C. (2012). *Duty, honor, country, disparity: Race/ethnicity difference in self-reported health and disability among veterans.* Austin: Department of Sociology and Population Research Center/ University of Texas at Austin.

Urquhart, R., Cornelissen, E., Lal, S., Colquhoun, H., Klein, G., Richmond, S., & Witteman, H. (2013). A community of practice for knowledge translation trainees: An innovative approach for learning and collaboration. *Journal of Continuing Education in the Health Professions, 33*(4), 274-281. doi:10.1002/chp.

U. S. Census Bureau. (2013). *American Community Survey 1-year estimate- Veteran status.* Retrieved from http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid =ACS_ 13 _1 YR _ S21 0 1 &prodType=table http://fact finder.census.gov/servlet/STTTable? _ bm=y&-geo _id=O 1 OOOUS&qu _ name=AC

U.S. Department of Veterans Affairs. (2014). *Vocational Rehabilitation and Employment.* Retrieved from http://www.benefits.va.gov /vocrehab/index.asp

Wisconsin Department of Workforce Development. (2008). *Cooperative Agreement with GllTe.* Retrieved from http://dwd.wi.gov/dvr /pdCfiles/coop_agree_glitc.pdf

Jean E. Johnson, Ed.D, CRC, is a Research Analyst at the Langston University Rehabilitation Research and Training Center (LU-RRTC) on Research and Capacity Building for Minority Entities and Assistant Professor in Department of Rehabilitation Counseling and Disability Studies.

Corey L. Moore, Rh.D, CRC, serves as Principal Investigator and Research Director at the Langston University Rehabilitation Research and Training Center (LU-RRTC) on Research and Capacity Building and Delta Sigma Theta Sorority, Inc. Distinguished Professor Endowed Chair within the Department of Rehabilitation Counseling and Disability Studies.

Ningning Wang, Ph.D, is a Research Assistant Professor and Statistician in Residence at the Langston University Rehabilitation Research and Training Center (LU-RRTC) on Research and Capacity Building for Minority Entities.

Perry Sanders, Ed.D, CRC, is a Research Analyst at the Langston University Rehabilitation Research and Training Center (LU-RRTC) on Research and Capacity Building for Minority Entities.

John Sassin, Ph.D, CRC is a Langston University Resident Faculty Scholar at the Langston University Rehabilitation Research and Training Center (LU-RRTC) on Research and Capacity Building for Minority Entities.

Corresponding author: Jean E. Johnson, EdD, CRC Research Analyst, LU-RRTC on Research and Capacity Building for Minority Entities and Assistant Professor in Department of Rehabilitation Counseling and Disability Studies, Langston University, 4205 N. Lincoln Blvd., Oklahoma City, OK 73105. (405)530-7533. E-mail: jejohnson@langston.edu

A national benchmark investigation of return-to-work outcome rates between African American, Native American or Alaskan Native, Latino, Asian American or Pacific Islander, and Non-Latino White veterans served by state vocational rehabilitation agencies: Application of bootstrap data expansion

Corey L. Moore* and Ningning Wang
Rehabilitation Research and Training Center (LU-RRTC) on Research and Capacity Building for Minority Entities, Langston University, OK, USA

Abstract.
BACKGROUND: Research examining the provision of effective state vocational rehabilitation agency (SVRA) sponsored services is pertinent to improving successful return-to-work outcomes among veterans of color (i.e., African Americans, Native Americans or Alaska Natives, Latinos, and Asian Americans or Pacific Islanders versus non-Latino Whites). To date, however, scant attention has been paid to examining these target groups' outcome patterns.
OBJECTIVE: This study employed a stratified bootstrap data expansion approach to assess the relationship between race/ethnicity, gender, level of educational attainment at closure and return-to-work among veterans with a signed individualized plan for employment (IPE).
METHODS: National fiscal year (FY) 2013 Rehabilitation Services Administration (RSA)-911 case records ($N = 11,603$) were extracted and re-sampled across multiple trials using bootstrap procedures to increase logistic regression model accuracy.
RESULTS: The findings indicated that African American and female veterans were statistically significantly less likely to return-to-work compared to non-Latino White and female veterans, respectively. Return-to-work probabilities were 'poorest' for African American veterans followed by Native Americans or Alaska Natives, Asian Americans or Pacific Islanders, Latinos, and then non-Latino Whites.

---

*Address for correspondence: Corey L. Moore, Principal Investigator and Research Director and Delta Sigma Theta Sorority, Inc. Distinguished Professor Endowed Chair, Rehabilitation Research and Training Center (RRTC) on Research and Capacity Building for Minority Entities, Langston University, 4205 N. Lincoln Blvd., Oklahoma City, OK 73105, USA. Tel.: +1 405 530 7530; Fax: +1 405 962 1638; E-mail: clmoore@langston.edu.

CONCLUSIONS: These findings warrant new service (e.g., greater SVRA and U.S. Department of Veterans Affairs' (VA) co-service provision) and policy initiatives.

Keywords: Veterans of color, return-to-work outcomes and probabilities, bootstrap data expansion approaches

1. Background

The reintegration of veterans to occupational function and prevention of job loss is perhaps the most important aspect of success for veterans with disabilities (Frain, Bishop, & Bethel, 2010; Moran, Schmidt, & Burker, 2013). No issue is more important to veterans of color with disabilities than finding a good job. Determining the most effective means by which to assist them to obtain employment and secure career pathways is perhaps one of the most preeminent issues of today's times. Despite the countless sacrifices of these service men and women, their existence beyond their military career is sometimes fraught with bleak employment and economic challenges, and such issues are especially problematic for young veterans of color returning from war (Feist-Price & Khanna, 2011). Some of these challenges are directly associated with service-connected mental and physical disabilities, while other barriers are related to the limitations they experience with employment and career outcomes.

Veterans of color (i.e., African Americans, Native Americans or Alaskan Natives, Latinos, and Asian Americans or Pacific Islanders) comprise about 18% ($N = 4,019,090$) of all veterans ($N = 22,328,279$) residing in the U.S. (National Center for Veterans Analysis and Statistics, 2013). Of the total universe of minority veterans, an estimated 10.8% ($N = 2,411,454$) are African Americans, 0.6% ($N = 133,970$) are Native Americans or Alaskan Natives, 6% ($N = 1,339,697$) are Latinos, and 1.3% ($N = 290,258$) are Asian Americans or Pacific Islanders. Overall, female veterans make up about 7% ($N = 1,562,979$) of all living veterans while males comprise the residual 93% ($N = 20,765,300$) of the total population. Of these female veterans, an estimated 30.4% ($N = 475,146$) are either African American (20.1% or $N = 314,160$), Native American or Alaskan Native (0.7% or 10,940), Latina (7.8% or $N = 121,912$), or Asian American or Pacific Islanders (1.8% or 28,134). Saliently, almost 1 in every 3 veterans serving in Gulf War II (post-September 11, 2001 to present) and Gulf War I (also referred to as the Persian Gulf War) were African American and 1 in 5 was Latino (National Center for Veterans Analysis and Statistics, 2013).

Many of these minority veterans enlist in the U.S. Armed Forces as a means of securing a better life and escaping some of the harsh realities of poverty and unemployment that are pervasive in their daily existence (Feist-Price & Khanna, 2011). Unfortunately, significant numbers return home and are discharged from active duty with various physical and mental disabilities. Post-traumatic stress disorder (PTSD), traumatic brain injury (TBI), and major depression are described as the "signature injuries" of the most recent conflicts (Ainspan, 2011). Other documented prevalent disabilities include substance use disorders (Grossman, 2009; Twamley et al., 2013), chronic pain (Cifu et al., 2013), and hearing and vision impairments (Grossman, 2009; Tennant, 2012). Further, the comorbidity of disabilities has been labeled as polytrauma because of the combined functional limitations of each disability (Cifu et al., 2013). Combat related disabilities oftentimes result in self-care limitations, difficulty with independent living, and work limitations (Tennant, 2012; Twamley et al., 2014). African American and Latino veterans report significantly greater odds of disability when compared to non-Latino White veterans (Sheehan et al., 2012). They are also more likely to develop PTSD; Asian veterans have higher rates of diagnosed schizophrenia; and Native American Vietnam War era veterans still experienced PTSD more than 25 years after that war (National Alliance on Mental Illness, 2014).

Research that examines the provision of effective state vocational rehabilitation agency (SVRA) sponsored services to veterans of color with disabilities desiring to reintegrate into competitive employment and careers is indeed pertinent. SVRAs are eligibility programs mandated to provide various services that assist veterans with disabilities with employment and job placement needs (Alston, Lewis, & Loggis, 2014). To be eligible, a person must have a physical or mental impairment that substantially impedes employment, which is considered a major life activity, can benefit from VR services, and require VR services to become gainfully employed (U.S. Department of Education, 2014). In a recent study, Moore, Wang, Johnson, Manyibe, Washington, and Muhammad (2015) examined the relationship between race and employment outcomes. They found that (a) the odds of White veterans successfully returning to work

were nearly 1½ times the odds of African American veterans returning to work, and (b) African American female veterans had the lowest probability for return-to-work success. While their inquiry included African Americans and Whites as the 2 sole levels of the manipulation or independent variable, relatively few studies have included Native Americans, Asian Americans, Pacific Islanders and Latino veterans in such comparison analysis. Thus, little information is available to assist SVRAs in discerning which target groups might warrant additional attention through training and development.

1.1. Disability public policy context

Section 21 of the Rehabilitation Act Amendments of 1998 documented patterns of inequitable treatment of minorities (i.e., African Americans, Native Americans, Latinos, and Asian Americans) across all stages of the VR process. More specific, congress found that: (a) persons from these traditionally underrepresented populations possessed higher rates of disability, (b) they were underrepresented in the public VR system, and (c) they were less likely to achieve positive employment outcomes when compared to Whites (Lewis et al., 2007). Findings could lead to future scaled-up inquiries and subsequent new policy and promising service initiatives and strategies aimed at eradicating differential experiences.

2. Purpose of the study

To date, scant attention has been paid to examining African American, Native American or Alaskan Native, Latino, and Asian American or Pacific Islander veterans' access and return-to-work outcomes within the SVRA context. This ex-post-facto analysis will contribute toward filling this apparent void of VR research involving these under-explored target populations. The purpose of this analysis was to address Section 21 by examining, discovering, and describing new service outcome patterns and disparities in successful return-to-work outcomes rates based on race/ethnicity, gender, and level of educational attainment at closure among veterans with a signed Individualized Plan for Employment (IPE). The generated national profile was broken out by Rehabilitation Services Administration (RSA) Regions. We compared return-to-work-outcomes between African American, Native American or Alaskan Native, Latino, Asian American or Pacific Islander, and non-Latino

White veterans across the 10 RSA regions, and the national fiscal year (FY) 2013 RSA-911 database benchmark. RSA regional cataloging was accessed through the following website; http://www2.ed.gov/students/college/aid/rehab/catrcep.html. For the purposes of this study, the national benchmark was calculated as the return-to-work outcome rate for all persons regardless of race or ethnicity closed in statuses 26 and 28. The following research questions were addressed:

Research Question 1: What is the national and RSA regional profile (i.e., racial/ethnic cohort frequencies and percentages) of return-to-work outcomes for and between African American, Native American or Alaskan Native, Latino, Asian American or Pacific Islander, and non-Latino White veterans with a signed Individualized Plan for Employment (IPE)?

Research Question 2: What are the return-to-work probabilities for and between African American, Native American or Alaskan Native, Latino, Asian American or Pacific Islander, and non-Latino White veterans with a signed Individualized Plan for Employment (IPE)?

Research Question 3: Are gender, race, and level of educational attainment at closure significantly related to successful return-to-work outcomes among veterans?

3. Method

3.1. Sample

The overall sample for this study consisted of 11,603 VR consumers who were served by the 56 state and territorial VR agencies across the nation during Fiscal Year (FY) 2013 (October 1, 2012, through September 30, 2013), and were (a) reported as being a veteran (veteran status = 1), (b) identified as Latino (ethnicity status = 1), non-Latino and White only (ethnicity status = 0 and race code = 100000), African American only (ethnicity status = 0 and race code = 010000), Native American or Alaskan Native only (ethnicity status = 0 and race code = 00100), or Asian American or Pacific Islander only (ethnicity status = 0 and race code = 00010 or 00001), and (c) reported as having a developed and signed Individualized Plan for Employment (IPE); i.e., closed status 26 (successfully rehabilitated) or 28 (not successfully rehabilitated). Of these 11,603 veterans, 3,072 (26.48%) were African American, 124 (1.07%) were

Native American or Alaskan Native, 723 (6.23%) were Latino, 86 (0.74%) were Asian American or Pacific Islander, and 7,598 (65.48%) were non-Latino White. Overall, males accounted for 10,126 (87.27%) of participants while there were 1,477 (12.73%) females in the study sample.

A race by gender breakout indicated that the sample included 630 Latino male veterans (5.43%) and 93 Latina veterans (0.8%); 105 (0.90%) Native American or Alaskan Native male veterans and 19 (0.16%) Native American or Alaskan Native female veterans; 74 (0.64%) Asian American or Pacific Islander male veterans, and 12 (0.10%) Asian American or Pacific Islander female veterans; 2,602 (22.42%) African American male veterans and 470 (4%) African American female veterans; 6,715 (57.87%) non-Latino White male veterans and 883 (7.6%) non-Latino White female veterans. A plurality of these veterans ($N = 4,781$ or 41.20%) possessed a high school diploma/equivalency or less while those with some post-secondary education ($N = 2,895$ or 24.95%), an associate's degree/vocational technical certificate ($N = 2,297$ or 19.80%), and a bachelor's degree or higher comprised the residual of the sample. The total sample was utilized to generate the profile and analysis of VR service access and successful return-to-work outcomes.

The employment of a single regression analysis absent resample procedures is oftentimes problematic for accurately predicting the analysis to the population (Bleeker et al., 2003; Harrell, Lee, & Mark, 1996; Kromrey & Hines, 1996; Pedhazur, 1982; Steyerberg et al., 2001). Moreover, resample procedures by themselves can be inadequate for addressing unbalanced populations with small sample sizes for respective study target groups (Dupret & Koda, 2001; He & Garcia, 2009). To address the issue of resample or the lack thereof, several approaches (i.e. cross validation and split sampling techniques) have been recommended that help to estimate a model's optimism (Bleeker et al., 2003; Efron & Tibshirani, 1997; Efron & Tibshirani, 1994). For example, Moore et al. (2015) employed a randomized split-half cross-model validation research approach to develop and test of a series of logistic regression models across two samples to identify the best fitting final predictive model. Although applicable, this model may not be optimally suited for producing stable results in the case of unbalanced or small comparison group sample sizes (see Table 1).

The stratified bootstrap method addresses both concerns; resample issues as well as small compari-

son group sample sizes. The concept of resampling data, more commonly referred to as bootstrapping, has been in use for over three decades although it is increasingly being used in medical fields (Henderson, 2005). This technique involves taking a large number of samples with replacement from the original sample by strata and is useful for analyzing small datasets where prior information is sparse (Zhu, 1997). In contrast to cross-validation or split-sample approaches, bootstrap methods are very efficient, as the entire dataset is used for model development, and no new data have to be collected for validation (Steyerberg et al., 2001). The technique provides nearly unbiased estimates of predictive accuracy that are of relatively low variance (Bleeker et al., 2003; Harrell et al., 1996). Moreover, applied bootstrap data expansion has been shown to have good performance in building and testing models for validation across unbalanced sample populations (Gelman et al., 2014). The benefits of this computer-intensive technique is freedom from two major limiting factors that have dominated classical statistical theory from the beginning: (a) the assumption that the data conform to a bell-shape curve, and (b) the need to focus on statistical measures whose theoretical properties can be analyzed mathematically (Zhu, 1997).

The national FY 2013 RSA-911 database ($N = 589,402$) was used in this analysis. It is important to note that this database does not differentiate between veterans by "wartime" era. For example, the "veteran" variable in the database does not distinguish between a Wounded Warrior, a Vietnam War Era, a Persian Gulf War veteran, or non-war time veteran. The "veteran" variable only indicates whether the consumer was a veteran (code = 1) or not a veteran (code = 0). The two data categories for the criterion included statuses 26 (i.e., exited with an employment outcome) and 28. The RSA data in the type of closure category labeled 4 and 5 were combined to reflect status 28, which indicates that a veteran was not successful in returning to work. The category labeled 4 ("exited without an employment outcome, after receiving services") included statuses 14, 16, 18 and 20. The category labeled 5 ("Exited without an employment outcome, after a signed IPE, but before receiving services") included status 12 only.

3.2. Data analysis

Descriptive and multivariate statistics were utilized to analyze data. Access frequencies and return-to-work percentage rates were generated, compared, and

Table 1
Demographic and outcomes of RSA-911

Demographic information	Successfully rehabilitated Closed status 26	Not successfully rehabilitated Closed status 28
Race or Ethnicity		
Latino	341	382
White Only	3970	3628
African American	1294	1778
Native American/Alaskan Native only	54	70
Asian American/Pacific Islander only	42	44
Gender		
Female	673	804
Male	5028	5902
Education at Closure status		
High School Diploma or less	2323	2458
Some Post-Secondary Education	1228	1667
Associate's Degree/Voc Tech	1208	1089
Bachelor's Degree or higher	942	688

reported for the five comparison groups. Next, bootstrap resample techniques were applied to increase the efficiency of validation procedures for predictive logistic regression analyses, and the final predictive model was used to evaluate the return-to-work rates across racial/ethnic target groups, gender, and level of educational attainment at closure. The Statistical Analysis System (SAS), desktop version 9.4, was used in these calculations (SAS Institute, 2014).

3.3. Key observations-profile

Several observed differences across RSA Regions and the nation emerged as key findings and could have future implications for veterans of color with disabilities, and the state-federal VR program that serves them. Many of these differences can be observed in the tables and figures presented and do not require additional response. As such, we will discuss only a select number of key observations. First, as shown in Table 2, nationally African American, Native American or Alaska Native, Latino, and Asian American or Pacific Islander veterans with signed IPEs were less likely to return-to-work successfully than non-Latino White veterans with signed IPEs. More specific, we found that 42.12%, 43.55%, 47.16%, and 48.84% of African American, Native American or Alaskan Native, Latino, Asian American or Pacific Islander veterans, respectively, with a signed IPE successfully returned to work nationally compared to 52.25% of non-Latino White veterans with a signed IPE. This finding represents a remarkable 10.13% and 8.70% national disparity for African Americans and Native Americans or Alaskan Natives, and a 5.09% and 3.41% difference between such outcomes for

Latinos and Asian Americans or Pacific Islanders and non-Latino Whites. Second, as shown in Fig. 1, stark differences in return-to-work outcome benchmark comparisons between target groups across RSA Regions can be gleaned from the results. The national FY 2013 RSA-911 database benchmark for successful return-to-work outcomes was calculated to be 50.89%. Remarkably, African American, Native American or Alaskan Native, Latino, and Asian veterans' return-to-work outcome rates were found to be below this benchmark across 7, 6, 7, and 5, respectively, of the 10 regions while such outcomes for Whites were below this criterion in only 2 of the 10 regions.

3.4. Consumer characteristics and return-to-work outcomes

The association between select characteristics (i.e., race/ethnicity, gender, education level at closure) was tested using multinomial logistic regression and applied bootstrap resample techniques to increase the efficiency of interval validation procedures (Gude et al., 2009; Steyerberg et al., 2001). The procedures are reflected broadly in Fig. 2. The algorithm and detailed description of the procedures employed to bootstrap replicate, resample, build, and test models follow.

Procedure 1. We stratified and selected case records ($n = 50$, 100, 500 each stratum), based on the overall inclusion criteria, representing the total sample ($N = 11,603$) with replacement as a sample. The PROC SURVERYSELECT procedure with ethnicity as the strata in SAS version 9.4 was applied in this procedure (SAS Institute, 2012).
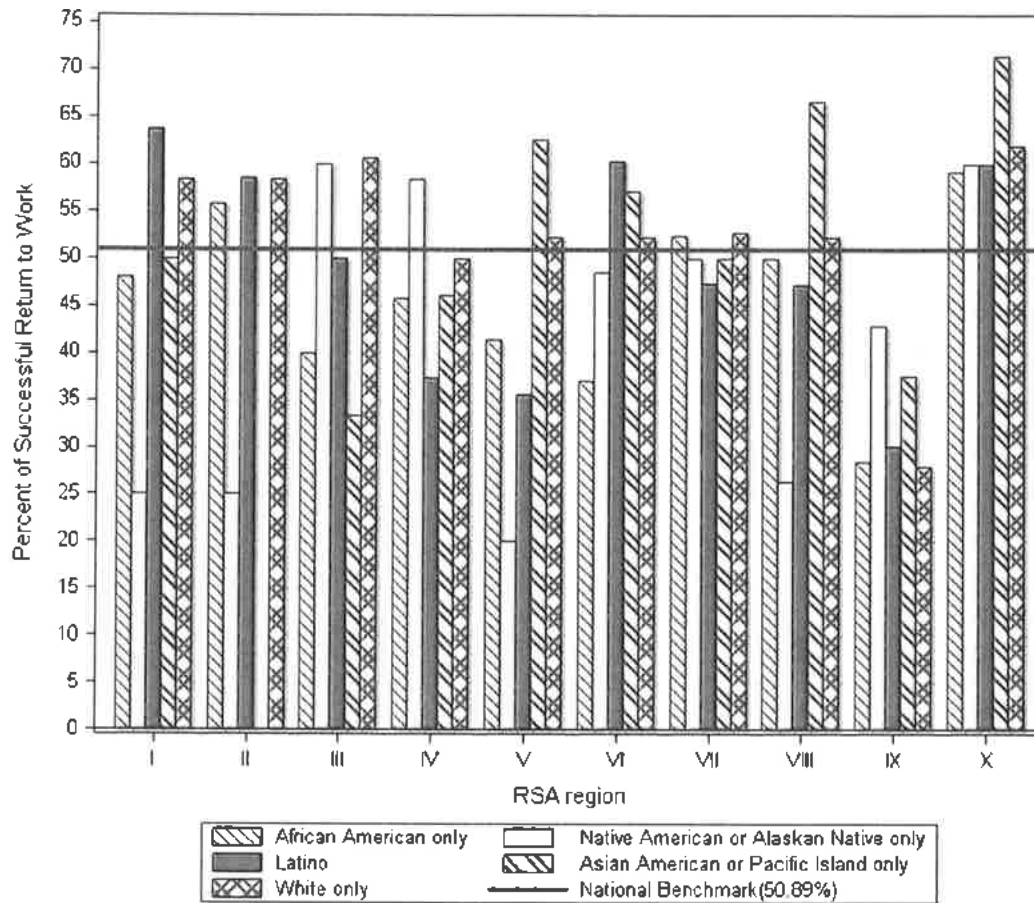
Fig. 1. National benchmark and RSA regional successful return-to-work outcomes (status 26 only) among African American, Native American or Alaskan Native, Latino, Asian American or Pacific Islander and White veterans. Note. RSA = Rehabilitation Services Administration (RSA-911) FY 2013 data source.

Procedure 2. Sample sizes 5*n with B replicate were created, and then a logistic regression with variable selection procedure was applied to each replicate. Logistic regression is a form of statistical modeling and is appropriate for analyzing categorical outcome variables (Agresti, 2013; Chatterjee & Hadi, 2013; Hosmer Jr & Lemeshow, 2004). The PROC LOGISTIC procedure in SAS version 9.4 was applied in these procedures (Stokes, Davis, & Koch, 2012). The data description of the three explanatory variables and the dependent variable is provided in Table 3.

A logistic regression model (1) was conducted on the selected sample with selected predicted variables to find the best fitting model and to estimate the vector $\hat{\beta}$.

$$\log it(P(Y = \text{closed status } 26|X_1, \cdots, X_p))$$

$$= \beta_0 + \beta_1 X_1 + \cdots + \beta_p X_p + \varepsilon. \qquad (1)$$

where β_i $(i = 1, 2, \ldots, p)$ are the coefficients estimated using maximum likelihood estimation., X_i $(i = 1, 2, \ldots, p)$ are explanatory variables, and ε is error. A predicted logit was obtained from the solved logistic regression equation by substituting the explanatory variables' value into the sample estimate of the logistic regression equation

$$\log it(P) = \hat{\beta}_0 + \hat{\beta}_1 X_1 + \cdots + \hat{\beta}_p X_p. \qquad (2)$$

The predicted probability is given by

$$\hat{P} = \exp(\log it)/[1 + \exp(\log it)] \qquad (3)$$

This value which represents veterans' successful return-to-work serves as the binomial distribution of Y at values of X.

Next, we used a three step model selection process to determine the relationship of the independent variables to the dependent variables of intention. The following steps, as reflected in the scenario presented
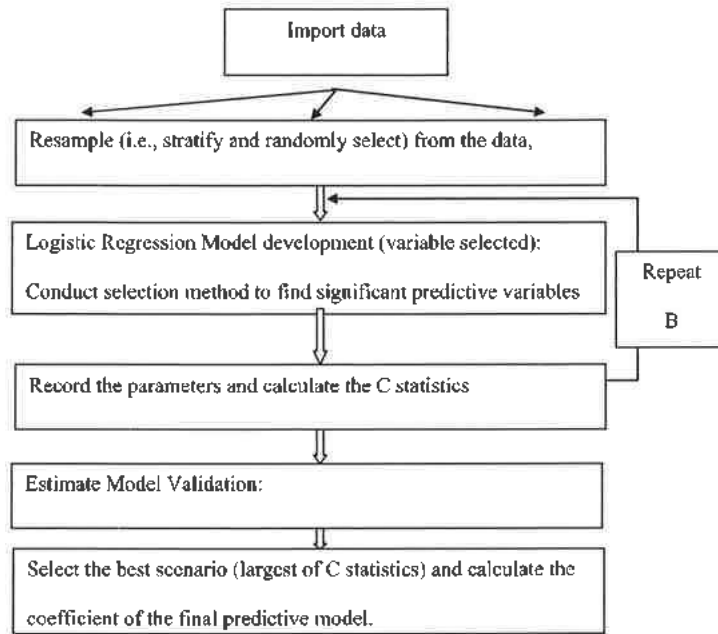
Fig. 2. Research paradigm for stratified bootstrap research design.

Table 2
National RSA-911 data on veterans' access and return-to-work outcome

State/Territory (VR) Region	Race/Ethnicity	Access Comparison after IPE sign		RTW successful	
		f	%	f	%
Region I	African American	25	5.19	12	48.00[a b]
	NA/AN	4	0.83	1	25.00[a b]
	Latino	11	2.28	7	63.64
	AA/PI	2	0.41	1	50.00[a b]
	White	440	91.29	257	58.41
Region II	African American	181	30.73	101	55.80[b]
	NA/AN	4	0.68	1	25.00[a b]
	Latino	77	13.07	45	58.44[b]
	AA/PI	1	0.17	0	0.00[a b]
	White	326	55.35	190	58.28
Region III	African American	388	24.56	155	39.95[a b]
	NA/AN	5	0.32	3	60.00[b]
	Latino	28	1.77	14	50.00[a b]
	AA/PI	12	0.76	4	33.33[a b]
	White	1147	72.59	695	60.59
Region IV	African American	979	42.00	448	45.76[a b]
	NA/AN	12	0.51	7	58.33
	Latino	75	3.22	28	37.33[a b]
	AA/PI	13	0.56	6	46.15[a b]
	White	1252	53.71	625	49.92
Region V	African American	495	25.65	205	41.41[a b]
	NA/AN	10	0.52	2	20.00[a b]
	Latino	45	2.33	16	35.56[a b]
	AA/PI	8	0.41	5	62.50
	White	1372	71.09	716	52.19

(Continued)

Table 2
(Continued)

State/Territory (VR) Region	Race/Ethnicity	Access Comparison after IPE sign		RTW successful	
		f	%	f	%
Region VI	African American	514	28.72	190	36.96[a][b]
	NA/AN	35	1.96	17	48.57[a][b]
	Latino	214	11.96	129	60.28
	AA/PI	7	0.39	4	57.14
	White	1020	56.98	532	52.16
Region VII	African American	124	16.45	65	52.42[b]
	NA/AN	18	2.39	9	50.00[a][b]
	Latino	19	2.52	9	47.37[a][b]
	AA/PI	2	0.27	1	50.00[a][b]
	White	591	78.38	311	52.62
Region VIII	African American	32	5.31	16	50.00[a][b]
	NA/AN	19	3.15	5	26.32[a][b]
	Latino	53	8.79	25	47.17[a][b]
	AA/PI	3	0.50	2	66.67
	White	496	82.26	259	52.22
Region IX	African American	312	27.71	89	28.53[a]
	NA/AN	7	0.62	3	42.86[a]
	Latino	176	15.63	53	30.11[a]
	AA/PI	24	2.13	9	37.50[a]
	White	607	53.91	170	28.01
Region X	African American	22	5.26	13	50.09[a][b]
	NA/AN	10	2.39	6	60.00[b]
	Latino	25	5.98	15	60.00[b]
	AA/PI	14	3.35	10	71.43
	White	347	83.01	215	61.96
Total	African American	3072	26.48	1294	42.12[a][b]
	NA/AN	124	1.07	54	43.55[a][b]
	Latino	723	6.23	341	47.16[a][b]
	AA/PI	86	0.74	42	48.84[a][b]
	White	7598	65.48	3970	52.25

Note. National benchmark/average for successful RTW rate—all veterans = 50.89%. RSA = Rehabiliation Services Administration; VR = Vocational Rehabilitation; IPE = Individualized Plan for Employment; f = Frequency; RTW = Return-to-Work. NA/AN = Native American or Alaskan Native only; AA/PI = Asian American or Pacific Islander only. [a]Minority veteran return-to-work percentages below national benchmark return-to-work averages (50.89%). [b]Minority veteran return-to-work percentages below non-Latino White veteran return-to-work percentages. For region details see the website. http://www2.ed.gov/students/college/aid/rehab/catrcep.html

Table 3
Description on variables

Variable	Type & Definition	Characteristic
Y	Dependent variable	26 = successfully return-to-work
		28 = did not successfully return-to-work
Gender	Dummy variable	1 = Male
		2 = Female
Ethnic	Categorical variable Race/Ethnicity	1 = Latino
		2 = White only
		3 = African American only
		4 = Native American or Alaskan Native only
		5 = Asian American or Pacific Island only
Edu	Categorical variable Level of educational attainment at closure	1 = high school diploma/equivalency or less
		2 = some post-secondary education
		3 = associate's degree/vocational technical certificate
		4 = bachelor's degree or higher

in Table 4, (sample size = 250 (50*5), and $B = 50$) with replicate = 10 (table 4) were used to develop and test the models.

Step 1. To develop Model 1, the following null hypothesis H_0 was tested: There is no significant difference in successful return-to-work outcome rates
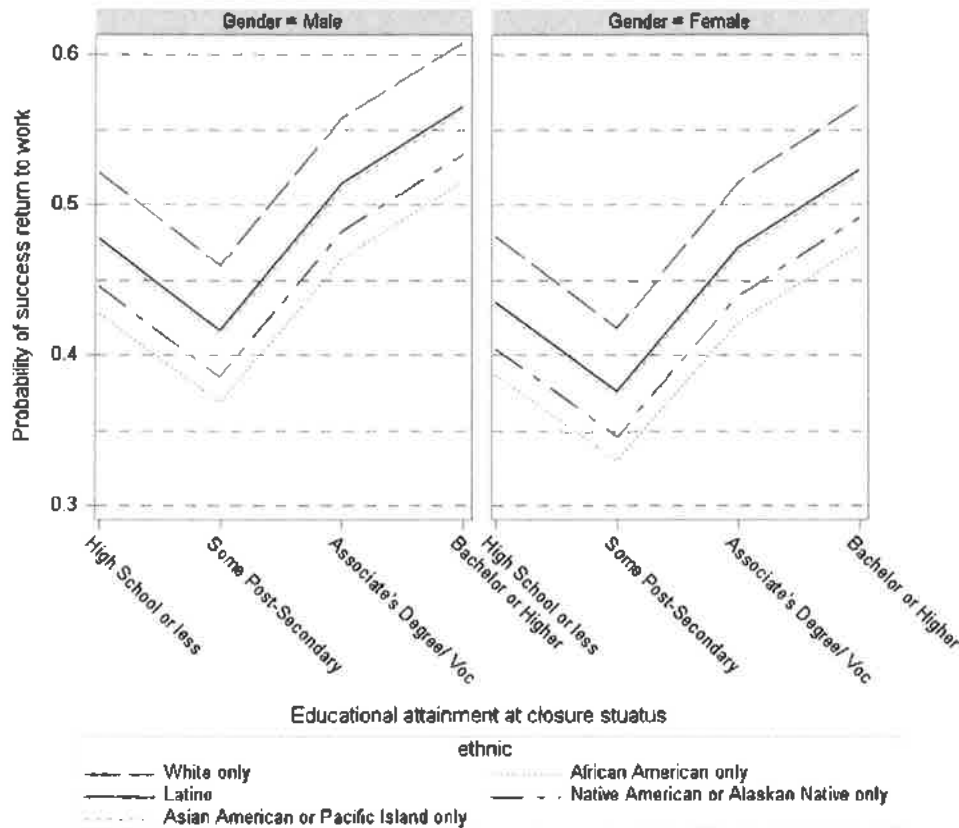
Fig. 3. Predicted probability to successful return-to-work.

Table 4
Multinomial logistic regression models selection in scenario (sample size = 250, and B = 50) with replicate = 10

Model	Model Effects	Chi-square	Degrees of Freedom	P-value
Model 1	intercept, Ethnic	9.82	4	0.04
Model 2	intercept, Gender	3.16	1	0.08
Model 3	intercept, Ethnic, Gender and Edu	14.92	3	0.002

between racial and ethnic target groups. If the p-value of the Wald Chi-square test was less than 0.10 then the null hypothesis would be rejected, otherwise we would remove the race/ethnicity variable from Model 1. The logistic regression results, $\chi^2 = 9.82$, $df = 4$ $p < 0.10$, indicated that race/ethnicity was a significant predictor in Model 1 for this bootstrap sample.

Step 2. To develop Model 2, the gender variable was entered in Model 1. The following null hypothesis H_0 was tested: Model 1 (reduce model) is an adequate model. The alternative hypothesis H_1 was: Model 2 (full model) is an adequate model. If the p-value in the Wald Chi-square test was less than 0.10, yielded significance would provide the research team with the confidence to reject null hypothesis, and Model 2 would be a more adequate fit to the data. The logistic regression results, $\chi^2 = 3.16$, $df = 1$,

$p < 0.10$, indicated that gender was a significant predictor in Model 2.

Step 3. To develop Model 3, the level of education attainment at closure (Edu) variable was entered in Model 2. The following null hypothesis H_0 was assessed: Model 2 (reduce model) is an adequate model. The alternative hypothesis H_1 was: Model 3 (full model) is an adequate model. Similar to step 2, if the p-value of the Chi-square test was less than 0.10 then we would reject the null hypothesis and Model 3 would be a more adequate to fit the data. Chi-square results, $\chi^2 = 14.92$, $df = 3$, $p < 0.10$, yielded significant confidence to reject the null hypothesis indicating that Model 3 made the best fit to the data when compared with Model 2. Overall, Model 3 made the best fit to the data in comparison with Models 1 and 2 in this bootstrap sample.

Through this process we identified the best fitting model in this bootstrap sample, and then recorded the coefficient of the best model.

Procedure 3. We repeated the above procedure B (30, 50 and 100) times to obtain the bootstrap estimates of parameters. We then computed the mean of each of the parameter estimates, which was denoted as $\bar{\beta}_i$ for the predictive model. We used the bootstrap resample technique not only to refine the selections of predictive variables but also to increase the efficiency of internal validation procedures for the final predictive logistic regression model (Duwe & Freske, 2012; Taylor, Ankerst, & Andridge, 2008).

Procedure 4. We estimated model validation as the next procedure. The c-statistics were located in the same area under the receiver operating characteristic curve and was used to measure how well the model discriminated between observed data at different levels of the outcome. The following steps were used to model validate each scenario (Efron & Tibshirani, 1994; Harrell et al., 1996; Ye & Zhao, 2010).

Step 1: We fitted the logistic regression model into the original data, and estimated the c-statistic, denote as C_{app}.

Step 2: For $b = 1, 2, \ldots$ B:

1. We stratified and selected a bootstrap sample with replacement from the original data using race/ethnicity as a stratum with size n for each stratum.
2. We fitted the logistic regression model in the bootstrap dataset, and estimated C using this fitted model and this bootstrap dataset. We denoted the estimate C by $C_{b,boot}$.
3. We estimated C ($C_{b,orig}$) by applying the fitted model from the bootstrap dataset to the original dataset.

Step 3: We calculated the estimate of optimism $O = B^{-1} \sum_{b=1}^{B} C_{b,boot} - C_{b,orig}$.

Step 4: We calculated the optimism adjusted measure of predictive ability as $C_{app} - O$.

Procedure 5. We selected the biggest C statistic as best scenario (see table 5), then calculated the $\bar{\beta}^i$ as the final predictive model. The best fitting model shown in Table 6 was used to analyze the data to address research question #3.

3.5. Analysis results

Logistic regression results indicated that race, African American versus White, (OR = 0.686; 95%

Table 5
Bootstrap measures of predictive

Sample size for each stratum	B = 30	B = 50	B = 100
50	0.5347	0.5350	0.5342
100	0.5652	0.5654	0.5641
500	0.5723	0.5723	0.5725

confidence interval [CI] = [0.630–0.747], $p < 0.05$) and gender, male versus female, (OR = 1.186; CI = [1.061–1.325], $p < 0.05$) were significant predictors of successful return-to-work. The odds ratios (OR) or effect sizes for the final predictive model are shown in Table 6 and provide the estimated coefficients that predict successful return-to-work outcomes. The coefficients (B) were the log odds of the event occurring (i.e., change in the log odds associated with one-unit change in the independent variable). All things being equal, the OR coefficient indicated that a White veteran was 1.5 (1/0.686) times more likely to successfully return-to-work compared to an African American veteran. Similarly, a male veteran was 1.19 times more likely to achieve successful rehabilitation compared to female veteran. In addition, results yielded significance for level of educational attainment and return-to-work success; high school diploma/equivalency or less versus bachelor's degree or higher (OR = 0.702; CI = [0.626–0.788], $p < 0.05$), some post-secondary education versus bachelor's degree or higher (OR = 0.549; CI = [0.485–0.621], $p < 0.05$), associate's degree/vocational technical certificate versus bachelor's degree or higher (OR = 0.814; CI = [0.715–0.925], $p < 0.05$). In short, a veteran who had bachelor's degree or higher was 1.42 (1/0.702) times more likely to successful return-to-work compared to a veteran who had high school diploma/equivalency or less. Similarity, a veteran with bachelor's degree or higher was 1.82 (1/0.549) times more likely to successfully return-to-work compared to a veteran who had some post-secondary education (no degree or certificate). Finally, a veteran with bachelor's degree or higher was 1.23 (1/0.814) times more likely to successful return-to-work compared to a veteran with associate's degree/vocational technical certificate.

The predicted probabilities for the race/ethnicity, gender, and level of educational attainment at closure variables are presented in Fig. 3. Overall, the analysis yielded the following successful return-to-work probabilities:

Table 6
Parameter estimates

Closed status	B	Odd Ratio	95% Confidence Limit		p-value
Intercept	−0.146				
Ethnic = 1 vs Ethnic = 2	0.033	0.839	0.719	0.978	0.69
Ethnic = 3 vs Ethnic = 2	−0.1682	0.686	0.630	0.747	0.01
Ethnic = 4 vs Ethnic = 2	−0.0949	0.738	0.515	1.057	0.53
Ethnic = 5 vs Ethnic = 2	0.0210	0.829	0.540	1.271	0.90
Gender = 1 vs Gender = 2	0.085	1.186	1.061	1.325	0.003
Edu = 1 vs Edu = 4	−0.0632	0.702	0.626	0.788	0.03
Edu = 2 vs Edu = 4	−0.3105	0.549	0.485	0.621	<0.0001
Edu = 3 vs Edu = 4	0.0837	0.814	0.715	0.925	0.02

1. Non-Latino White veterans had the highest probability for successful return-to-work followed by Latinos, Asian Americans or Pacific Islands, Native Americans or Alaska Natives, and African Americans for fixed gender and educational attainment at closure level variables.

2. Male veterans possessed a higher probability for achieving successful return-to-work outcomes compared to female veterans.

3. For all racial/ethnic target groups, veterans who had an associate's degree/vocational technical certificate or bachelor's degree or higher had the highest probability for successful return-to-work followed by those with some post-secondary education and or a high school diploma or less.

3.6. Discussion

This study examined the relationship between race/ethnicity, gender, and level of educational attainment and return-to-work outcomes among African American, Native American or Alaskan Native, Latino, and Asian American or Pacific Islander veterans with a signed IPE. The findings indicated that veterans who are African American, female, and those with an educational attainment below a bachelor's degree were statistically significantly less likely to return-to-work successfully compared to non-Latino Whites, males, and those who have achieved a bachelors' degree or higher, respectively. Moreover, generated predictive probability results for minority veterans represent new field information and point out that (a) African American veterans had the 'poorest' return-to-work probabilities followed by Native American or Alaska Native, Latino, Asian American or Pacific Islander, and non-Latino White veterans, (b) female veterans had lower return-to-work probabilities than their male counterparts, and (c) regardless of the race/ethnicity and gender, those with some post-secondary education had the lowest

probability followed by those with a high school diploma or less, associate's degree/vocational technical certificate, and bachelor's degree or higher.

Several plausible explanations exist for these results. First differential physical and mental health condition incidence among minority veterans with disabilities may contribute to the findings on race/ethnicity. Health disparities are defined as systematic, socially produced, and important differences in health between groups that are not only unnecessary and avoidable but, in addition, unjust and unfair (Goode et al., 2014). In general, adult Latinos, Native Americans or Alaska Natives, and African Americans with disabilities more often report fair or poor health (55.2%, 50.5%, and 46.6%, respectively) compared to non-Latino Whites with disabilities (36.9%) (Wolf, Armour, & Campbell, 2008). Sheehan and colleagues (2012) reported that being a Latino veteran is associated with a 1.32 increase in the odds of being in poor health relative to White veterans. They also found that being a Black veteran is associated with a statistically significant 2.91 increase in odds of being in poor or very poor health. In addition to physical health concerns, mental health issues such as Post-Traumatic Stress Disorder (PTSD) represents a unique challenge for many minority veterans, and the lack of employment itself can act as a trigger for occurrence (Atkins, 2011). Health disparities, whether physical or mental, can have a profound impact on minority veterans' with disabilities potential to obtain or maintain integrated competitive employment (Feist-Price & Khanna, 2011).

Given the devastating effects of poor health realities and negative return-to-work implications for these veterans, proper interventions and treatments are of extreme importance. However, adequate treatment is not always easily obtained. Although the U.S. Veterans Administration (VA) has significantly increased the size and scope of nationwide health services; many African American veterans remain

underserved (Moore, Johnson, & Uchegbu, 2011). Furthermore, many who experience lower socioeconomic status cannot afford health insurance, which is especially problematic because they are sometimes employed at small independent businesses or temporary employment agencies that fail to provide coverage (Feist-Price & Khanna, 2011). As such, SVRA and VA counselors should consider developing IPEs for these consumers that include effective health improvement (i.e., physical and mental) objectives. Health improvement among these consumers could result in greater physical and mental functioning, which could ultimately lead to an increase in their successful return-to-work rates.

Transferrable skills and military occupational specialty (MOS) mix-match might also account for the finding on racial and gender differences in return-work outcomes. For example, many minority veterans often obtain their MOS in areas such as infantrymen, weapons specialties, munitions handlers, and door gunners on helicopters (Feist-Price & Khanna, 2011) although the skills gained from these occupations are not easily transferable to jobs or careers in the U.S. civilian sector (National Coalition of Homeless Veterans, 2010). The occupation of infantryman is problematic because although law enforcement is a great option, job availability is insufficient compared to the large number of job-seeking combat veterans of color who have returned from Iraq and Afghanistan. Also, many law enforcement professional positions require college credits to be eligible for consideration (Feist-Price & Khanna, 2011). Additionally, female veterans often compete with male and female civilians who have more site-based training or more personal contacts with potential employers and their existing workers (National Coalition of Homeless Veterans, 2010). Among veterans who are hired, especially females, they are often at the low end of the wage scale and health benefits can be limited or non-existent. From a policy perspective, these results may warrant a renewed focus on developing new funding priorities that promote the modification of existing job-training programs, especially in urban areas, that can respond more rapidly to the needs of the constantly changing industry market demands and opportunities. The match between minority veterans' competitive skill sets and market demands should remain a policy focal point at the state (SVRAs) and federal (VA Vocational Rehabilitation & Employment Programs) level.

The finding that veterans with an bachelor's degree or higher were more likely to return-to-work successfully compared to those with a high school diploma/equivalency, associate's degree/vocational technical certificate, or some post-secondary education is not surprising. In short, those who are gaining skills and knowledge that prepare them for the workforce are more likely to be successful at obtaining employment. One explanation for this finding is that veterans of color may not be as aware of resources available to support their educational aspirations (Moore et al., 2015). One such research initiative grows out of the Post-911 Veterans Educational Assistance Act of 2008 or what is commonly referred to the as The New Government Issue (G.I.) Bill. This initiative is an effort to pay for veterans' college expenses similar to the extent of the original G.I. Bill after World War II (Madaus, Miller, & Vance, 2009). Veterans are eligible to receive the full amount of tuition and fees charged by a college or university, not to exceed the most expensive in-state public institution (Grossman, 2009). Perhaps SVRA and VA Vocational Rehabilitation & Employment (VR&E) Programs need to develop new initiatives and strategies aimed at reaching into communities of color to educate veterans and their family members about programs that can assist them in pursuing a bachelor's degree or higher or some sort of re-training that matches with the current job market skill demands.

Overall, there is also a need for SVRA counselors to provide culturally appropriate services to veterans of color to address disparate return-to-work outcome rates. Culture, as defined by the 38th Institute on Rehabilitation Issues (IRI) Prime Study Group, is "a system of language, values, and supports that extend and distinguish a group's sense of necessary identify" (IRI, 2015). Service delivery should be grounded in the cultural humility model as described by Tervalon and Murray-Garcia (1998) for the health care field. Applicatin of this model to VR requires counselors to be respectful of consumers' customs and traditions and committed to self-critique to develop mutually beneficial and non-paternalistic service relationships. Technical Assistance and Continuing Education (TACE) Centers and relevant Rehabilitation Research and Training Centers (RRTCs) can provide training resources to SVRAs and their counselors in this regard.

4. Conclusion

This study examined the relationship between race/ethnicity, gender, and level of educational

attainment among veterans of color with a signed IPE. Overall findings indicated that African American, female, and veterans with educational attainment below a bachelor's degree are significantly less likely to achieve return-to-work successfully compared to non-Latino White, male and veterans with a bachelor's degree or higher. Moreover, results indicated that veterans of color (i.e., African Americans, Native Americans or Alaska Natives, Latinos, Asian Americans or Pacific Islanders) return-to-work probabilities were lower than those for non-Latino Whites. Finally, African American, Native American or Alaskan Native, Latino, and Asian veterans' successful rehabilitation rates were below the national benchmark across 7, 6, 7, and 5 of the 10 regions, respectively, while such rates for White veterans were below this criterion in only 2 of the 10 regions. These findings may warrant greater SVRA and VA co-service provision efforts and new policy initiatives targeting veterans of color. To date, scant attention has been paid to understanding and relatively little information is available as to how SVRA and VA co-service practices enhance return-to-work outcomes. As such, there may be a need to examine this phenomenon in an effort to improve overall service provision and outcomes for these veterans.

5. Limitations

Several limitations are inherent in the study due to the nature of the research design. First, the design of this study represents a snapshot of the phenomena rather than an elongated analysis or multi-method approach aimed at observing and identifying meaningful trends. There may be a need for future researchers to address the same research questions in this study while employing a trends analysis approach to assess whether the findings are accurate. In this regard, for example, RSA-911 data could be examined across fiscal years (FY) 2008 through 2013 (5 year trends analysis) to ascertain whether the results are consistent or an apparition of the analysis. There may also be a need for future investigators to employ exploratory and mixed-methods designs (i.e., qualitative and quantitative) in an effort to triangulate the data from multiple data sources to address curiosities and consequently increase the field's understanding return-to-work contributors among veterans of color. For example, multiple data sources such as focus groups discussions and mixed-method (i.e., qualitative and quantitative) surveys designed

to elicit key informant perspectives on return-to-work barriers could be used by future researchers to address worthy research questions. Second, the RSA-911 database does not delineate wartime veterans from non-wartime veterans, or distinguish between those who have served in different combat tours. There may be a need for future research to assess outcomes from those veterans who have solely served during wartime, or to compare them to non-wartime veterans on the criterion. Third, the current study failed to break out and assess outcomes across specific disability type groups and thus did not control for this variable as a possible proxy. Consequently, we cannot rule out the possibility that disability type is responsible for differences on the criterion variable, rather than race and ethnicity. This concern may warrant future research that controls for disability type when assessing the relationship between race and ethnicity and return-to-work outcomes. Finally, information contained in the RSA-911 database is not impervious to counselor errors, and thus we cannot be sure that all data is accurate. The findings, however, may be helpful to SVRA leaders and others as they develop and plan strategically for meeting the needs of veterans with disabilities.

Acknowledgments

Conflict of interest

The authors have no conflict of interest to report.

References

Agresti, A. (2013). *Categorical data analysis* (Third ed.). Hoboken, New Jersey: John Wiley & Sons.

Ainspan, N. D. (2011). From deployment to employment. *U. S. Naval Institute Proceedings, 137*(2), 44-50. http://bbi.syr.edu/events/2011/docs/052511_shaheen/deployment_employment.pdf

Alston, R., Lewis, A., & Loggis, S. (2014). Assistive technology and veterans with severe disablities: Examining the relationship among race, personal factors, medical support, income support, and use. *Medical Care, 52*(10), 17-24.

Atkins, B. J. (2011). African American veterans, post-traumatic stress disorder (PTSD) and Employment. In C. L. Moore, J. E. Johnson & A. L. Washington (Eds.), *Improving vocational rehabilitation access and return to work and career outcomes among African American Wounded Warriors, Gulf War and Vietnam War era veterans with disabilities* (pp. 71-94). Oklahoma City: Dept. of Rehabilitation Counseling and Disability Studies/LU.

Blecker, S., Moll, H., Steyerberg, E., Donders, A., Derksen-Lubsen, G., Grobbee, D., & Moons, K. (2003). External validation is necessary in prediction research: A clinical example. *Journal of clinical epidemiology, 56*(9), 826-832.

Chatterjee, S., & Hadi, A. S. (2013). *Regression analysis by example*. Hoboken, New Jersey: John Wiley & Sons.

Cifu, D. X., Taylor, B. C., Carne, W. F., Bidelspach, D., Sayer, N., Scholten, J., & Campbell, E. H. (2013). Traumatic brain injury, posttraumatic stress disorder, and pain diagnoses in OIF/OEF/OND veterans. *Journal of Rehabilitation Research & Development. 50*(9), 1169-1176.

Dupret, G., & Koda, M. (2001). Bootstrap re-sampling for unbalanced data in supervised learning. *European Journal of Operational Research, 134*(1), 141-156.

Duwe, G., & Freske, P. J. (2012). Using logistic regression modeling to predict sexual recidivism: The Minnesota sex offender screening tool-3 (MnSOST-3). *Sexual abuse: A journal of research and treatment, 24*(4), 350-377. doi: 10.1177/1079063211429470

Efron, B., & Tibshirani, R. (1997). Improvements on Cross-Validation: The.632+Bootstrap Method. *Journal of the American Statistical Association, 92*(438), 548-560. doi: 10.2307/2965703

Efron, B., & Tibshirani, R. J. (1994). *An introduction to the bootstrap*. New York: Chapman & Hall.

Feist-Price, S., & Khanna, N. (2011). Improving vocational rehabilitation access and employment success for African American homeless veterans with disabilities. In C. L. Moore, J. E. Johnson & A. L. Washington (Eds.), *Improving vocational rehabilitation access and return to work and career outcomes among African American Wounded Warriors, Gulf War and Vietnam War era veterans with disabilities* (pp. 26-44). Oklahoma City: Dept. of Rehabilitation Counseling and Disability Studies/LU.

Frain, M., Bishop, M., & Bethel, M. (2010). A roadmap for rehabilitation counseling to serve military veterans with disabilities. *J Rehabil, 76*(1), 13-21.

Gelman, A., Carlin, J. B., Stern, H. S., & Rubin, D. B. (2014). *Bayesian data analysis* (Vol. 2): Taylor & Francis.

Goode, T. D., Carter-Pokras, O. D., Horner-Johnson, W., & Yee, S. (2014). Parallel tracks: Reflections on the need for collaborative health disparities research on race/ethnicity and disability. *Medical Care, 52*, S3-S8.

Grossman, P. D. (2009). Foreword with a challenge: Leading our campuses away from the perfect storm. *Journal of Postsecondary Education and Disability, 22*(1), 4-9.

Gude, J. A., Mitchell, M. S., Ausband, D. E., Sime, C. A., & Bangs, E. E. (2009). Internal validation of predictive logistic regression models for decision-making in wildlife management. *Wildlife Biology, 15*(4), 352-369. doi: http://dx.doi.org/10.2981/08-057

Harrell, F., Lee, K. L., & Mark, D. B. (1996). Tutorial in biostatistics multivariable prognostic models: Issues in developing models, evaluating assumptions and adequacy, and measuring and reducing errors. *Statistics in medicine, 15*, 361-387.

He, H., & Garcia, E. A. (2009). Learning from imbalanced data. *Knowledge and Data Engineering, IEEE Transactions on, 21*(9), 1263-1284. doi: 10.1109/TKDE.2008.239

Henderson, A. R. (2005). The bootstrap: A technique for data-driven statistics. Using computer-intensive analyses to explore experimental data. *Clinica Chimica Acta, 359*(1), 1-26.

Hosmer Jr, D. W., & Lemeshow, S. (2004). *Applied logistic regression*: John Wiley & Sons.

Kromrey, J. D., & Hines, C. V. (1996). Estimating the coefficient of cross-validity in multiple regression: A comparison of analytical and empirical methods. *The Journal of Experimental Education, 64*(3), 240-266. doi: 0.1080/00220973.1996.9943806

Lewis, A. N., Shamburger, A., Head, C., Armstrong, A. J., & West, S. L. (2007). Section 21 of the 1992 Rehabilitation Act Amendments and diversity articles. *Journal of Vocational Rehabilitation, 26*(2), 89-96.

Madaus, J. W., Miller, W. K., & Vance, M. L. (2009). Veterans with disabilities in postsecondary education *Journal of Postsecondary Education and Disability, 22*(1), 10-17.

Moore, C. L., Johnson, J., & Uchegbu, N. (2011). *Barriers to VR service access and return to work outcomes among African American Veterans: The need for evidence-based research and service strategies*. Improving vocational rehabilitation access and return to work and career outcomes among African American wounded warriors, Gulf War and Vietnam era veterans with disabilities. Langston University.

Moore, C. L., Wang, N., Johnson, J., Manyibe, E. O., Washington, A. L., & Muhammad, A. (2015). Return-to-work outcome rates of African American versus White veterans served by state vocational rehabilitation agencies: A randomized split-half cross-model validation research design. *Rehabilitation Counseling Bulletin, 58*(3), 1-14. doi: 10.1177/0034355215579917

Moran, S., Schmidt, J., & Burker, E. J. (2013). Posttraumatic Growth and Posttraumatic Stress Disorder in Veterans. *J Rehabil, 79*(2), 34-43.

National Alliance on Mental Illness. (2014). *Veterans of culturally diverse populations*. www.nami.org/Content/NavigationMenu/Find_Support/Veterans_Resources/Multicultural_Issues/Veterans_of_Culturally_Diverse_Populations.html

National Center for Veterans Analysis and Statistics. (2013). *Minority Veterans: 2011*. http://www.va.gov/VETDATA/docs/SpecialReports/Minority_Veterans_2011.pdf

National Coalition of Homeless Veterans. (2010). Facts and media page. http://www.nchv.org/background.cfm#facts.

Pedhazur, E. J. (1982). *Multiple regression in behavioral research* (Second ed.). Fort Worth, TX: Harcourt Bace Jovanovich,Inc.

SAS Institute. (2012). *SAS/STAT 12.1 User's Guide: Survey Data Analysis (Book Excerpt)*. Cary, NC: SAS Institute.

SAS Institute. (2014). *Base SAS® 9.4 Procedures Guide: Statistical Procedures*. Cary, NC: SAS Institute.

Sheehan, C. M., Hummer, A. R., Moore, B. L., & Butler, J. C. (2012). *Duty, honor, country, disparity: Race/ethnicity difference in self-reported health and disability among veterans*. Austin: Department of Sociology and Population Research Center/ University of Texas at Austin.

Steyerberg, E. W., Harrell, F. E., Borsboom, G. J., Eijkemans, M., Vergouwe, Y., & Habbema, J. D. F. (2001). Internal validation of predictive models: Efficiency of some procedures for logistic regression analysis. *Journal of clinical epidemiology, 54*(8), 774-781.

Stokes, M. E., Davis, C. S., & Koch, G. G. (2012). *Categorical data analysis using SAS* (Third ed.). Cary, NC: SAS institute.

Taylor, J. M., Ankerst, D. P., & Andridge, R. R. (2008). Validation of biomarker-based risk prediction models. *Clinical cancer research, 14*(19), 5977-5983.

Tennant, J. (2012). Disability, Employment, and Income: Are Iraq/Afghanistan-Era U.S. Veterans Unique? *Monthly Labor Review, 135*, 3-10.

Tervalon, M., & Murray-Garcia, J. (1998). Cultural humility versus cultural competence: A critical distinction in defining physician training outcomes in multicultural education. *Journal of Health Care for the Poor and Underserved, 9*(2), 117-125.

Thirty-eight Institute on Rehabilitaion Issues. (2015). *Assume nothing! A monograph from the 38th Institute on Rehabilitation Issues to address underserved populations, including individuals who are deaf-blind.* Hot Springs, AR: University of Arkansas CURRENTS.

Twamley, E. W., Baker, D. G., Norman, S. B., Pittman, J. O., Lohr, J. B., & Resnick, S. G. (2013). Veterans Health Administration vocational services for Operation Iraqi Freedom/Operation Enduring Freedom Veterans with mental health conditions. *Journal of rehabilitation research and development, 50*, 663-670. doi: 10.1682/JRRD.2012.08.0137

Twamley, E. W., Jak, A. J., Delis, D. C., Bondi, M. W., & Lohr, J. B. (2014). Cognitive Symptom Management and Rehabilitation Therapy (CogSMART) for Veterans with traumatic brain injury: Pilot randomized controlled trial. *Journal of rehabilitation research and development, 51*(1), 59-70. doi: 10.1682/JRRD.2013.01.0020

Wolf, L. A., Armour, B. S., & Campbell, V. A. (2008). Racial/ethnic disparities in self-rated health status among adults wih and without disabilities. *Morbility and mortality Weekly Report (MMWR).* Retrieved from http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5739a1.htm

Ye, F., & Zhao, A. (2010). What You See May Not be What You Get--A Brief Introduction to Overfitting, Cancer Biostatistics Workshop. Retrieved from https://medschool.vanderbilt.edu/cqs/files/cqs/media/2010Overfitting_0416.pdf

Zhu, W. (1997). Making bootstrap statistical inferences: A tutorial. *Research quarterly for exercise and sport, 68*(1), 44-55.

New Immigrating Racial and Ethnic Populations and "Trends Impacts" on State Vocational Rehabilitation Agencies

Kenyotta Eugene Cross
Corey L. Moore
Edward O. Manyibe
Fariborz Aref
Andre L. Washington
Ahondju Umadjela
Perry R. Sanders
Hossein Sarjeh Payma
Jyoti Pandey
Dionna Cyprian

Abstract -- Current migration trends and projections indicate that the United States (U.S.) population continues to increase and diversify. Consequently, the numbers of new citizens and legalized permanent residents with disabilities from traditionally underserved racial and ethnic populations are expected to grow at an accelerated rate—roughly 1 million new citizens and legal permanent residents annually. These unceasing migration patterns raise concerns about the capacity of state vocational rehabilitation agencies (SVRAs) across the U.S. to effectively respond to this growing crisis. There exists a serious need to forecast these trends' impacts on SVRA systems capacity to serve persons with disabilities from these new and emerging racial and ethnic populations and communities. The purpose of this review was to synthesize the available peer reviewed literature and policy on multicultural migration trends and select SVRA systems forecast implications. A set of recommended approaches are presented that can be used to inform, guide, and forge future research directions. Keywords: immigration trends and policy, disability, state vocational rehabilitation agencies, multiculturalism

The United States (U.S.) is a nation that is becoming increasingly diverse (Duncan & Trejo, 2011; Xu & Chi, 2013), and to date migration trends have given impetus to an increased growth population and a continuous shift in its demographic structure (Passel, 2011; Rumbaut & Komaie, 2010). The massive influx of new immigrants from Latin America and Asia to the U.S. in the 1990s (Ewing, 2012; Passel & Cohn, 2011; Perez & Hirschman, 2009; Rumbaut & Komaie, 2010) added to the nearly 41 million immigrants residing in the country by 2008 (Rumbaut & Komaie, 2010). Current literature on international migration has emphasized patterns of emigrating populations from territories such as Mexico, the Caribbean, Canada, China, and Europe. Relatively little attention has been paid to tracing U.S. immigration from sub-Saharan Africa, an immigrant population that has been voluntarily added to the U.S. in significant counts since the 1990s. Involuntarily, the first migrants to the U.S. from sub-Saharan Africa were a forced migration, the result of the trans-Atlantic slave trade beginning in the 16th century (Sweet, 2009). Since 1990, the number of foreign-born immigrants from sub-Saharan Africa to the U.S. has increased from 0.4% to 3.7% (Bideshi & Kposowa, 2012; Elo, Mehta, & Huang, 2011).

This migration is primarily attributed to immigrants' pursuit of employment opportunities, meaningful wages, and an improved quality of life (Duval-Couetil & Mikulecky, 2011; Hailu, Mendoza, Lahman, & Richard, 2012). Since the 1990s, the total growth population has increased at a steady rate of roughly 1 million new U.S. citizens and legal permanent residents annually (Passel & Cohn, 2011; Rumbaut & Komaie, 2010), and this population is expected to comprise 82% of the nation's natural increase from 2005 to 2050 (Duval-Couetil & Mikulecky, 2011). These unceasing migration patterns raise concerns about the capacity of the 80 state vocational rehabilitation agencies (SVRAs) in the U.S. (i.e., general, blind and combined) to effectively respond to this growing crisis. SVRAs, funded under the Rehabilitation Act of 1973 as amended (PL 105-2020), provide a variety of employment services to eligible consumers. These agencies are likely to be affected by emerging migration patterns inclusive of new citizens and legal permanent residents with disabilities from racial and ethnic populations (Blacks [e.g., Kenya, Nigeria, South Africa, Cameroon], Asians [e.g., China, the Philippines, India, Vietnam, Korea, Japan], and Latinos/Hispanics [El Salvador, Guatemala, Dominican Republic) with exotic customs, beliefs, values and norms (Bua-Iam & Bias, 2011) unfamiliar to the typical rehabilitation counselor. Whether SVRA systems have the capacity to deliver effective services to and achieve desired outcomes for members of these groups and communities is a question that demands immediate attention. Consequently, there exists a serious need to forecast these trends impacts on SVRAs' systems and develop response strategies.

A set of recommended approaches are presented that can be used to inform, guide, and forge future research directions. The Multi-Level Model of Psychotherapy, Social Justice, and Human Rights (MLM) theory serves as a contextual lens for this synthesis, provides a basis to forecast SVRA implications, and gives credence to the integration of multicultural and social justice considerations in the development of policy and strategic plans and delivery of rehabilitation services to these individuals. This theory's tenets align with the tacit position that SVRAs must be prepared to respond rapidly and effectively to new and emerging service delivery challenges resulting from seismic demographic shifts and emerging federal immigration policy, and integrate "a comprehensive knowledge and sensitivity of the cultural, sociopolitical, and historical background of immigrant clients" (Chung et al., 2008; p.315) into SVRA policy, strategic planning and service initiative formulation and development. The subsequent section discusses the MLM theory as a framework for promoting SVRA responsiveness, while considering cultural context, to new U.S. citizens and legalized permanent resident trends. The literature review covers the following topics: (a) titanic shifts in U.S. racial and ethnic demography; (b) prevalence of disability and health conditions; (c) the historical and policy context of U.S. immigration; (d) socioeconomic factors and U.S. immigration; and (e) state vocational rehabilitation agency (SVRA) forecast context.

Multi-level Model of Psychotherapy, Human Rights, and Social Justice Theoretical Framework

Workplace diversity will continue to be an issue that requires employers' attention as new U.S. citizens and legal permanent residents continue to migrate to the U.S. at active rates to obtain employment. Given that one of every two new workers in the U.S. was an immigrant in the 1990s, employers continue to be faced with workers who are deficient in language skills and educational credentials; workers are faced with a culmination of disadvantages that force them to the underside of the employment and career ladder (Duval-Couetil & Mikulecky, 2011). To this end, a framework is needed to advance cultural context in the development of emerging and new SVRA policy and initiatives aimed at enhancing services to vulnerable populations. New U.S. citizens and permanent legal residents from underserved populations who may be marginalized and experiencing overt and blatantly aggressive forms of racism, subtle forms of racial microaggressions, or sociopolitical and/or socioeconomic injustices may benefit greatly from such policies and initiatives (Chung, 2009; Vespia, Fitzpatric, Fouad, Kantamneni, & Chen, 2010). One such promising theoretical lens is the Multi-level Model of Psychotherapy, Human Rights and Social Justice (MLM), a social justice paradigm that reformulates the role of policy makers and practitioners to include advocacy or support, advisement, indigenous remediation, and heightened cultural responsiveness into policy and strategic planning formulation and culturally competent counseling practices (Chung et al., 2011; Chung et al., 2008). The MLM requires an understanding of historical, sociopolitical, multicultural and social justice issues to help address the challenges of emigrating populations as well as the impact of their pre and post-migration experiences. Within this model, rehabilitation policy makers and practitioners have a well-established appreciation of diverse racial and ethnic identities and culture as well as an ongoing awareness of the urgency to integrate multicultural competencies and social justice consciousness into policy and strategic planning, and services provided to members of these emerging and new emigrating populations (Chung et al., 2008, 2011).

Chung et al. (2011) noted that the MLM consists of five intervention levels. These levels are briefly discussed in the rehabilitation context below:

Level 1: Mental Health Education. This construct uses psycho-educational strategies to facilitate a greater understanding of the counseling process. These strategies provide consumers with an unambiguous understanding of what is expected of them throughout the counseling process. Additionally, consumers learn what to expect of the rehabilitation professional in the service delivery encounter.

Level 2: Individual, Group, and Family Counseling Interventions. In this stage, practitioners and all of the necessary stakeholders work together to include culturally responsive individual, group, and family methods of therapy within a social justice and human rights framework.

Level 3: Cultural Empowerment. In this construct, again, necessary stakeholders including policy makers, advocates and consultants, and practitioners broaden their traditional approaches to practice to boost immigrant consumers and their families to grasp the new culture through policy regulations, service, and therapeutic interventions.

Level 4: Integration of Traditional and Western Healing Practices. This stage invites practitioners and involved stakeholders to come to know and accept "cultural help seeking behaviors and traditional healing practices when providing counseling to migrant populations" (Chung et al., 2011, p.93). A pivotal facet of this construct is to value the traditional healing practices from immigrants' culture of origin and to include such cultural consideration into practice.

Level 5: Social Justice and Human Rights Issues. Immigrants confront a number of political, social, and systematic obstacles as a result of migrating to a different country. This stage instructs stakeholders and rehabilitation practitioners to develop strategies and techniques for working with immigrant consumers to improve fair and equal treatment and equivalent access to VR resources and opportunities.

The MLM has been found to be a strikingly impressive model for working with immigrant populations by incorporating multicultural consideration to counseling practices, social justice, human rights, cultural empowerment, and conventional therapeutic interventions (Chung et al., 2011; Chung et al., 2008). Another component of the MLM is the critical need for immigrants to successfully find integrated competitive employment. This element suggests that immigrants have the fortitude to adapt culturally to change, and concurrently, they should develop the knowledge and skills necessary to seek employment. Further, it implies the need for immigrants to integrate different cultures; that is, having the determination to navigate the intricacies of the dominant culture while maintaining devotion to their own in their quest for securing work (Chung et al., 2008). By working out how they need to alter, adapt, change, and modify their cultural ways and try out what works in the U.S., new emigrating populations learn culturally specific employment skills that work in the U.S. job market. Figure 1 lists the five intervention levels of the MLM that can be considered by SVRAs for developing new policies and initiatives, applying cultural context to better serve these underrepresented groups. The depiction is a simple model that does not precisely represent the intricacies and complexities of reality, but serve to illustrate the relationships between the consumers' needs and SVRAs' preparedness to accommodate such needs.
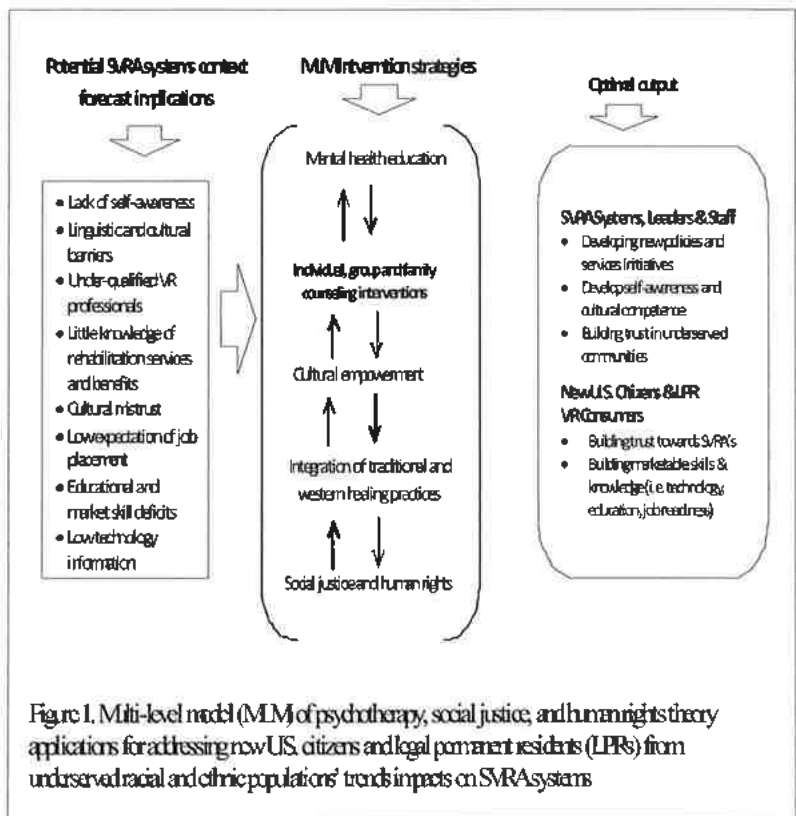

Figure 1. Multi-level model (MLM) of psychotherapy, social justice, and human rights theory applications for addressing new US citizens and legal permanent residents (LPRs) from underserved racial and ethnic populations' trends impacts on SVRA systems

Titanic Shifts in U.S. Racial and Ethnic Demography

Major racial and ethnic demographic shifts in the U.S. have resulted in different constituencies for which new and expanded multicultural disability research agendas are warranted. The U.S. Census Bureau of Labor Statistics (BLS) projects that minorities, who currently account for 37% of the U.S. population, will comprise 57% of the population in 2060 (BLS, 2012). The Hispanic population is projected to increase from 53.3 million in 2012 to 128.8 million in 2060. In that same period, the African American population will increase from 41.2 million (13.1%) to 61.8 million (14.7%); the Asian population from 15.9 million (5.1%) in 2012 to 34.4 million (8.2%); and American Indians/Alaska Natives will increase by more than half from 3.9 million (1.2%) to 6.3 million (1.5%) (BLS, 2012). The Native Hawaiian/Pacific Islander population will nearly double, from 706,000 to 1.4 million. One in five Americans (19%) will be foreign born in 2050 (Pew Hispanic Center, 2011).

Undoubtedly, immigration continues to contribute to this titanic ethnic and racial demographic shift. It is projected that migration of new immigrants (i.e. citizens and legal permanent residents) to the U.S. will exceed natural population increases (births minus deaths) as the leading cause of population growth by 2050 (U.S. Department of Homeland Security, 2013). If this international migration trend continues, the U.S. population is expected to grow faster, to become younger and much more diverse. The

Center for Immigration Studies profiled new U.S. immigrants in a 2010 report, and noted the following related health care, education, and social service systems challenges:

> New immigration plus births to immigrants added more than 22 million people to the U.S. population in the last decade, equal to 80 percent of total population growth. Immigrants and their young children (under 18) now account for more than one in five public school students, one-fourth of those in poverty, and nearly one-third of those without health insurance, creating very real challenges for the nation's schools, health care systems, and physical infrastructure (Camarota, 2012).

Table 1

Immigrants by Region and Year of Arrival

		Year of Arrival			
	Total	2000-2010	1990-1999	1980-1989	Pre-1980
Mexico	11,746,539	4,050,077	3,608,247	2,209,189	1,879,026
East Asia	7,567,622	2,449,318	1,989,082	1,734,919	1,394,303
Europe	4,917,429	1,212,306	1,220,426	589,899	1,894,798
Caribbean	3,739,121	1,130,330	901,999	782,122	917,670
Central America	2,989,433	1,181,830	787,721	701,502	318,380
South America	2,757,449	1,117,620	709,738	500,860	429,231
South Asia	2,417,059	1,145,531	702,579	343,943	225,006
Middle East	1,471,211	578,767	340,114	253,381	298,949
Sub-Saharan Africa	1,307,588	687,706	348,742	171,068	100,072
Canada	785,595	214,282	158,145	76,699	336,469
Australia/Oceania/Other	217,829	89,725	52,898	34,988	40,218

*Source: Center for Immigration Studies, 2010 American Community Survey public-use file

Further, a 2010 American Community Survey (ACS) conducted by the Center for Immigration Studies reported on nearly 40 million new U.S. immigrants by region and country of birth and year of arrival. As depicted in Table 1, new immigrants from Mexico, East Asia and Europe accounted for nearly 61% migrants to the U.S. from 1980 through 2010 (Camarota, 2012).

New Immigrants and Overpopulation

By itself, the issue of overpopulation due to a rapid increase of new immigrants to the growth population has changed many facets of American society (Passel, 2011). It is projected that migration of new immigrants (i.e. citizens and legal permanent residents) will exceed natural increase (births minus deaths) as the leading cause of U.S. population growth by 2050 (U.S. Department of Homeland Security, 2013). This will be the first time that natural increase will not be the main driver of population increase since at least 1850, when the census began collecting information about residents' country of birth (U.S. Department of Homeland Security, 2013).

The DHS reported that more than 6.6 million people became naturalized citizens in the last decade. The annual number of persons who became citizens through naturalization increased from approximately 120,000 during the 1950s and 1960s to 210,000 during the 1980s. Table 2 shows that the number of U.S. naturalizations increased from 694,193 in 2011 to 757,434 in 2012. In 2013 through

Table 2

Persons Naturalized by Regions and Country of Birth FY 2010 to 2012

(Countries ranked by 2012 persons naturalized)

Region & country of birth	2012		2011		2010	
Region	**Number**	**%**	**Number**	**%**	**Number**	**%**
Total	757,434	100	694,193	100	619,913	100
Africa	74,775	9.9	69,738	10	64,022	10.3
Asia	257,035	33.9	249,940	36	251,598	40.6
Europe	82,714	10.9	82,309	11.8	78,011	12.6
North America	261,673	34.5	217,750	31.4	163,836	26.4
Caribbean	109,762	14.5	79,820	11.5	62,483	10.1
Central America	40,592	5.4	33,784	4.9	25,706	4.1
Other North America	111,319	14.7	104,146	15	75,647	12.2
Oceania	1,846	0.5	3,734	0.5	3,646	0.6
South America	76,992	10.2	70,405	10.2	58,474	9.4
Unknown	359		337		326	0.1

*Source: U.S. Department of Homeland Security, Annual Flow Report March 2013

the month of May, an estimated 503,104 individuals became naturalized. This upsurge in naturalization was not only due to the increase of migration over the last few decades, but was also attributable to tremendous growth rates among new populations. From 1996 to 2002, the number of legal immigrants who were naturalized increased from 39% to 49% (Mazzolari, 2009). As migration trends continue to advance, the issue of citizenship and understanding the conditions for naturalization becomes increasingly important. Permanent residency status is a matter that not only impacts new immigrants individually, but it is also a significant influence to the nation's socioeconomic landscape.

Legal Permanent Residents (LPRs)

In 2012, a total of 1,031,631 persons became LPRs in the U.S. The majority of these new LPRs (53%) already

lived in the U.S. when they were granted lawful permanent residence. According to the DHS, LPRs increased from 250,000 during the 1950s to more than 1 million between 2000 and 2012. In 2012, the average age for persons becoming legal permanent residents (LPRs) was 31 years, females constituted 55% of persons granted LPR status (U.S. Department of Homeland Security, 2013). The presence of new immigrants and their families adds to the nation's vibrancy and youthfulness. Migration to the U.S. assists the nation's long-term population growth. For example, advantages to an overpopulation of racially and ethnically diverse groups in the U.S. include improved labor shortages and reduced demographic crises (e.g., low birth rates, aging populations, etc.). Conversely, the perceived consequences to the overpopulation of diverse groups tend to overshadow the advantages; they are overstated, greatly pronounced and observed as grave disadvantages to the nation's population growth (e.g., scaled down wages, destroyed social solidarity, and beliefs that new immigrants maintain allegiance to their "family, religion, or country of origin rather than the U.S." (Gold, 2009, p. 408). Such perceptions create barriers to VR access for new U.S. citizens and legal permanent residents with disabilities from racial and ethnically diverse populations.

The count of new citizens emigrating to the U.S. is moving upwards at an accelerated rate, which has caused the nation's demographic landscape to undergo a radical change. Political stakeholders are forced to address policy regarding immigrants' citizenship acquisition and the implications for such policy given this threat of overpopulation (Fox & Guglielmo, 2012; Mazzolari, 2009). As previously mentioned, naturalized citizens in the U.S. increased from 6.5 million in 1990 to 7.5 million in the mid-1990s, the first of such totals that had been seen in prior decades. This increase was due to the tremendous numbers of immigrants to the U.S. during the 1980s and 1990s; it was also due to the increase of legal immigrants who naturalized during that time (Mazzolari, 2009). Regarding the naturalization process, immigrants who meet the age, admission and residency requirements may apply for U.S. citizenship; however, U.S. immigration laws and the changes to said policies significantly impact immigrants' rights to citizenship and their rights to naturalize directly, a facet that is informally regarded as 'the immigration multiplier' (Mazzolari, 2009, p.269). That is, "the number of future immigrants who come to the United States as the result of the admission of one current immigrant" (Mazzolari, 2009, p. 169). The decision of immigrants to naturalize is one of importance, as its impact may have weighty effects on new immigrants to the U.S. and their host country. A greater immigrant population to the U.S. may cause severe political and economic threat to the nation and much demand for policy makers' immediate attention .

Prevalence of Disability and Health Conditions Among Underserved Groups

Different disability prevalence rates exist among Americans belonging to various racial and ethnic groups. Among individuals between the ages of 18 and 64, 10.4 % of non-Hispanic Whites, 7.9% of Hispanics, and 4% of Asians reported having a disability in 2011 compared to 13.6 % of African Americans, and 17.1 % of Native Americans or Alaskan Natives (Erickson, Lee, & van Schrader, 2012). In addition to higher rates of disability, members of these populations also experience poorer health when compared to non-Hispanic Whites. For example, adult Hispanics, Native Americans or Alaska Natives, and Blacks or African Americans with disabilities are significantly more likely to report fair or poor health (55.2%, 50.5 %, and 46.6 %, respectively) when compared to non-Hispanic White individuals with disabilities (36.9% and 24.9%, respectively) (Wong & Miles, 2014).

Adding to these statistics is the sudden growth population of new U.S. citizens and legalized permanent residents. These individuals have been found to experience lower economic status and are less likely to access health related services when compared to native-born citizens (Huang et al., 2011). Huang and colleagues investigated the "healthy migrant" hypothesis; that is, the idea that upon leaving their host countries immigrants migrate to the U.S. with a significantly higher health advantage over native-born citizens of similar ethnic backgrounds. The study sample included new immigrants of working age (18-64 years) that migrated to the U.S. after the implementation of the Immigration Act of 1990. This investigation sought to "quantify the potential health heterogeneity across immigrants from different regions of origin; while also examin-

Table 3

Legal Permanent Resident Flow by Regions and Country of Birth FY 2010 to 2012

(Countries ranked by 2012 LPR)

Region & county of birth	2012		2011		2010	
Region	Number	%	Number	%	Number	%
Total	1,031,631	100	1,062,040	100	1,042,625	100
Africa	107,241	10.4	100,374	9.5	101,355	9.7
Asia	429,599	41.6	451,593	42.5	422,063	40.5
Europe	81,671	7.9	84	7.9	88,801	9
North America	327,771	31.8	333,902	31.4	336,553	32.3
Caribbean	127,477	12.4	133,680	12.6	139,951	13.4
Central America	40,675	3.9	43,707	4.1	43,951	4.2
Other North America	159,619	15.5	156,515	14.7	152,651	14.6
Oceania	4,742	0.5	4,980	0.5	5,345	0.5
South America	79,401	7.7	86,096	8.1	87,178	8.4
Unknown	1,206	0.1	1,245	0.1	1,330	0.1

*Source: U.S. Department of Homeland Security, Annual Flow Report March 2013

ing the roles of socioeconomic status and acculturation in patterning health disparities" (Huang et al., 2011, p.401). The researchers concluded that while immigrants were less likely to disclose information regarding an acquired mental or physical disability as compared to native-born citizens, they were more likely to report limitations related to employment (Huang et al., 2011).

Health and functional limitations may have the proclivity to cause consequential psychological impediments to employment for this emerging group that may be daunting (Hill & Fritz, 2011). In regards to securing competitive employment, such psychosocial limitations may bring about crushing obstacles that immigrant consumers find difficult to overcome. Chung, Bemak and Grabosky (2011) describe eight challenges that immigrants experience when considering their options for securing employment: language and communication barriers, little or no educational attainment, little or no consideration for formal education attained outside of the U.S., loss of occupational status, limited knowledge and access to U.S. employment resources, information, and networks, transportation barriers, acculturative stress, and cultural barriers. Such challenges, if unaddressed, oftentimes force new U.S. citizens and permanent legal residents to pursue desperate work choices that may be risky to their health status and harmful in task; and if injured, immigrants may acquire work related medical or mental health disabilities.

The majority of new citizens and permanent residents find jobs in the areas of retail, manufacturing, and services; those jobs that require very arduous or consistent use of low or unskilled labor that can significantly impact what the Americans with Disabilities Act (ADA) defines as major life activities (e.g., performing manual tasks, seeing, hearing, walking, standing, lifting, bending, and etc.) (Liu & Painter, 2012). The type and frequency of movements performed at general labor jobs have been attributed to certain health outcomes. For example, immigrants working in a poultry processing plant, which involved manual, repetitive and rapid body movements, reported more upper body musculoskeletal symptoms in the form of pain or strain in the back, wrist/hands and other body sites than workers who did not perform similar types of work (Schulz et al., 2013).

Additionally, other work related stressors such as the stigma associated with being an immigrant, work environment, work benefits package(s) (i.e., health insurance access), work schedule and available resources to perform the job itself can significantly impact immigrants' health status. According to Flynn et al. (2013) work is considered to be an important social determinant of health, and remarkably Latino immigrants are "50% more likely than all workers in the U.S. to be fatally injured at work" (p. 34). In addition to this probability and language barrier challenges, immigrants face other barriers such as lack of knowledge about safety practices that help prevent or reduce work injuries. In light of these employment obstacles, there exists the need for practitioners and other stakeholders to advocate for this emerging population (Chung et al., 2011).

Historical Policy Context of U.S. Immigration

Modern history records the U.S. as experiencing exponentially high numbers of new immigrants from diverse corners of the world during two distinct periods. The first period occurred during the middle of the nineteenth century and culminated in 1900 with almost nine million legal immigrants, while the second wave began in 1950 and has not yet come to an end (Chojnicki, Docquier, & Ragot, 2011).

The U.S was settled by immigrants who by definition migrated for the purpose of establishing an improved quality of life, exploring new opportunities and/or retreating from problematic political situations in their country of origin(Duncan & Trejo, 2011; Hailu, Mendoza, Lahman, & Richard, 2012; Hombrados-Mendieta, Gomez-Jacinta, & Dominguez-Fuentes, 2009; Ojeda & Penz-Watson, 2013; Wiley, Deaux, & Hagelskamp, 2012). As the host country, the U.S. represents to its residents a land of opportunity where they are free to express their political views and participate in their religious and cultural practices. However, adjoined to these freedoms are the possibilities for social, cultural, educational, vocational, economic, and emotional adjustments that can be linked to the immigration experience (Hombrados-Mendieta et al., 2009; Kelly & Morton, 2004a; Ojeda & Pina-Watson, 2013; Perez & Hirschman, 2009; Xu & Chi, 2013). Since the "New World" discovery by Christopher Columbus in 1492, the U.S.'s preeminent position is one of "cultural and phenotypic diversity" (Perez & Hirschman, 2009, p.1). The current and emerging demographic shift and composition of the population has assumed a new label, the "browning of America" (Perez & Hirschman, 2009, p.1), which suggests that racial and ethnic boundaries are becoming obscure as a result of the vast number of non-White immigrants who have migrated to the U.S. over the past few decades (Duncan & Trejo, 2011; Perez & Hirschman, 2009). As projected by the U.S. Census Bureau of Labor Statistics, this phenomenon will continue to trend forcing policy makers to pay closer attention to looming challenges to the nation's economic and socio-political landscapes (Passel, 2011; Peri, 2012).

Perhaps due to the Immigration Act of the 1990s, policymakers in the U.S. began to pay closer attention to the issue of immigration related to employment. The Immigration Act of 1990 granted immigrants to the U.S. permanent residency and waived many of the strict documented residency restrictions. It also allowed for more immigrants to secure work visas. The immediate goal of the Act was to add to the number of skilled workers in the U.S. Subsequently, in 1991, President George H.W. Bush approved the development of employment verification systems for the purpose of authenticating permanent residency status of prospective employees by using a telephone hotline (Newman et al., 2012).

Some six years later, President Bill Clinton signed the Illegal Immigration Reform and Immigrant Responsibility Act of 1996 (IIRIRA) to address border patrol and the overall border patrolling processes. The IIRIRA outlined

very strict rules regarding the amount of time that immigrants were allowed to spend in the country as well as repercussions for those not adhering to such rules (Newman et al., 2012). One of the main provisions of this piece of legislation included the stiffening of deportation regulations for persons who were found to be illegal immigrants (Newman et al., 2012). A slight respite to such stringent deportation regulations came about recently under President Barack Obama's administration in the form of the Development, Relief, and Education for Alien Minors (DREAM) Act.

Section 21 of the Rehabilitation Act Amendments

Section 21 of the Rehabilitation Act Amendments is predicated on Congress' findings that persons from traditionally underserved racial and ethnic populations (i.e., African Americans, Latinos, Native Americans, and Asians) differ on rehabilitation experiences across all junctures of VR system (Lewis, Shamburger, Head, Armstrong, & West, 2007; Moore et al., 2009; Moore et al., 2012a; Moore et al., 2012b), and they continue to face numerous challenges in terms of achieving successful rehabilitation outcomes (Manyibe, Moore, & Kampfe, 2012; Schneider, 2011; Velcoff, Hernandez, & Keys, 2010). For example, Zanskas, Lustig, and Ishitani (2011), in a study of perceived barriers to employment success, reported that African American VR consumers perceived significantly more barriers to obtaining a job or succeeding in employment when compared to their White counterparts.

The Section 21 mandate documented such differential experiences and related challenges that continue to complicate the state-Federal VR program. Legislative priorities and policies such as *RSA Standard and Indicator 2.1* continue to hold VR agencies accountable for achieving prescribed benchmarks; .80 or 80% ratio of minority to non-minority service rate. This performance indicator is the ratio of the percent of individuals with a minority background to the percent of individuals without a minority background exiting the program who received services (U.S. Department of Education, 2013). Consequently, state VR agencies must constantly monitor this ratio and compliance standard. Rehabilitation access and outcome disparities and *RSA Standard and Indicator 2.1 non-compliance*, in many instances, result from failures within SVRA systems and policies, and the lack of responsiveness to the realities of many PWDs from underserved groups.

Socioeconomic Factors, Trends, and U.S. Immigration

The scholarly discourse on legal immigration and socioeconomics is complex and multifaceted. On one hand social and economic forces motivate immigrants to migrate to the U.S. in search of better circumstances while their impacts on the social and economic fiber of the county is hotly debated by academics, researchers, advocates, and policy makers at the national, state, and local levels.

Undoubtedly, there is much debate with regards to immigrants and their interface with the American workforce. Much of the discussion has been unfavorable centering on the viewpoint that immigration negatively impacts the overall U.S. economy, has a negative fiscal impact on the tax economy, and compromises employment opportunities and wages for U.S. born workers (Camarota, 2013; Fernandez, 2010; Jones & Lewis, 2011; Levine, 2007). Unfavorable review or not, the fact remains that the impact of immigration on the workforce is pivotal and undeniable. The Hudson Institute reported the following key related observations in its report on employment trends and immigrants in *Workforce 2000:*

> Immigrants will represent the largest share of the increase in the population and the workforce since the First World War: Even with the new immigration law, approximately 600,000 legal and illegal immigrants are projected to enter theUnited States annually throughout the balance of the [20th] century. Two-thirds or more of immigrants of working age are likely to join the labor force. (Jones & Lewis, 2011, pp.229-230)

Passel (2011) points out that many facets of American society will change tremendously at the hands of international migration. Over the next forty years, the American labor force is projected to continue to grow and change in its ethnic composition because of today's immigrants and their children (Passel, 2011). By 2008, about 41 million foreign-born men and women were residing in the U.S. Of those 41 million men and women, 44% migrated as young adults between the ages of eighteen and thirty-four, and another 40% were children under the age of eighteen (Passel, 2011; Rumbaut & Komaie, 2010). The soaring numbers of immigrant youth and the complexity of incorporating them into the American labor force and the greater society is an added issue that requires much attention from researchers and policy makers (Passel, 2011; Rumbaut & Komaie, 2010).

With regard to the workplace, immigrants who choose the U.S. for socioeconomic mobility are oftentimes prepared to take employment that native-born Americans are unwilling to secure because of low earnings, little to no benefits, and/or unfavorable work environments (Khatutsky, Wiener, & Anderson, 2010; Ojeda & Pina-Watson, 2013). Moreover, research on occupational downgrading, or an immigrant's loss of employment status between home country and first employment position in receiving country, indicate that over-education and over-qualifications adversely impact immigrants in the workplace and are associated with occupational trajectory (Crollard, de Castro, & Tsai, 2012; Peri, 2012). Nearly half of immigrants migrating to the U.S. are occupationally downgraded (Crollard et al., 2012). Albeit socioeconomic mobility, on trend and dynamic is the occurrence of occupational downgrading; these episodes negatively impact immigrant's work experiences and thrust the American labor market in a direction that is less than invariable.

Immigration has both micro and macro level impacts on the overall American economy and individuals' earning power, respectively. From a macro-economic perspective, the influx of immigrants to the U.S. for the purpose of securing employment is beneficial to the American labor force particularly in instances where major employment gaps are evident (e.g., critical shortages of certified nursing assistants [CNAs] in nursing homes) (Khatutsky et al., 2010). Khatutsky and colleagues (2010) reported a 2007 industry study that recorded approximately 60,300 unfilled CNA jobs, that is a 9.5% vacancy rate. The need to employ CNAs is expected to increase by a rate of 14% to 20% between 2006 and 2016, quicker than the statistics for all other occupations during this time period. The IOM tied this crisis to the increased number of aged adults with more complex health concerns and the limited number of health care professionals with the requisite knowledge and skills to effectively care for them (Khatutsky et al., 2010). Khatutsky et al. (2010) state the following:

> Given existing high turnover and vacancy rates, increased demand for these para-professionals will be hard to satisfy. To alleviate this labor crisis, policy makers and the industry have turned to populations not traditionally employed in long-term care settings, such as older workers, transitioning Temporary Assistance for Needy Families (TANF) participants, former military personnel, and immigrants. (p.268)

From a micro-economic perspective, citizenship acquisition shows a positive effect of naturalization on the potential for growth in earnings and wages for immigrants. For example, Bratsberg, Ragan, and Nasir (2002) analyzed cross-sectional and longitudinal data and reported a positive significant effect of naturalization on immigrants' income growth. These findings were corroborated by DeVoretz and Pivnenko (2005, 2008) who reported similar findings in the Canadian context; that is, naturalized immigrants earn more wages and made larger contributions to the Canadian federal treasurer than non-naturalized immigrants (Bevelander & Pendakur, 2012). Mazzolari (2009) noted that Latin American immigrants naturalized to the U.S. gained employment and higher wages as a result of passed legislation regarding dual citizenship to their host country (Bevelander & Pendakur, 2012; Mazzolari, 2009). Whereas the naturalization status of new immigrants to their host countries have significant impact on employment gains and potential job earnings, SVRAs will also be impacted by the naturalization status of immigrants to the U.S. who seek competitive employment through VR services.

State Vocational Rehabilitation Agency Forecast Context

Rehabilitation counseling has been described as the premier service of the VR process. In fact, "for almost 90 years, public VR and rehabilitation counseling have been closely tied together in an almost symbiotic relationship" (O'Brien & Graham, 2009, p.124). Since the passage of the Smith Fess Act of 1920, the U.S. government has provided prodigious support to establish the practice of rehabilitation counseling, and consequently the future of the profession and the public state-federal VR program has been linked. The mission of the federal Rehabilitation Services Administration (RSA) is "to provide leadership and resources to assist state and other agencies in providing VR, independent living and other services to individuals with disabilities to maximize their employment, independence and integration into the community and the competitive labor market" (Moore, Johnson, & Uchegbu, 2011, p.18).

Consistent with this mission, SVRAs are designed to fortify these efforts by providing a multitude of comprehensive services to a diverse group of consumers. More specific, the aim of SVRAs under the state-federal VR program is to help individuals with physical or mental disabilities who meet eligibility criteria to obtain employment and live more independently through the provision of supports such as counseling, medical and psychological services, job training and other individualized services. Serving diverse racial and ethnic group and community members create compelling SVRA systems challenges. As such, it is necessary for SVRAs to forecast the impacts of demographic changes and manifested cultural nuances on service systems capacity in an effort to be appropriately responsive to new and emerging trends and needs.

The increasing population growth numbers of new U.S. citizens and permanent residents coupled with higher disability and health condition prevalence rates is likely to result in an increase in the number of these individuals seeking SVRA sponsored services. As such, it is critical that SVRAs be able to effectively forecast growth trends impacts on service delivery systems capacity (Bua-Iam & Bias, 2011; Collin, Arthur, & Wong-Wylie, 2010; Mwachofi, York, & Lewis, 2009) while considering cultural context. Currently, the importance of cultural context is vital to SVRA policy makers and rehabilitation professionals, respectively, whose common goal is to increase consumers' integrated competitive employment outcomes. Such outcomes can be influenced by dimensions of diversity (i.e., race and ethnicity, socioeconomic status, gender, education and health services) (Vespia et al., 2010).

Migration trends continue to increase the number of PWDs from such groups and communities, this will likely lead to additional challenges that SVRAs must be ready and able to address. While disabilities vary across races, research indicates that African Americans, Latinos, Native Americans, and Asians with disabilities lack access to or do not receive comprehensive VR services (Mwachofi et al., 2009; Taylor-Ritzler, Balcaza, Suarez-Balcazar, & Garcia-Iriarte, 2008). Further, practitioners, policy makers, and researchers have failed to understand and consider the importance of the myriad of multicultural issues that intersect with disability and employment and manifest complex SVRA policy and service dynamics and challenges. The lack of cultural context in policy initiative development and formulation and service delivery may pose additional chal-

lenges to SVRA systems' effectiveness in serving diverse populations (Mwachofi et al., 2009). The section that follows discusses select dimension that can be considered for developing strategic responses and informing a future SVRA forecast framework.

Lack of self-awareness in VR. Self-awareness skills should be acquired and leveraged accordingly by rehabilitation policy makers and practitioners when developing new initiatives and delivering services, respectively. Within the multiculturalism human service context, the literature is replete with scholarship highlighting that "self-awareness of values, personal assumptions, and biases is the foundation for enhancing multicultural counseling competence" (Collins et al., 2010, p.340). Self-awareness supports the practitioner-client alliance, and serves as a fundamental multicultural counseling component critical to effective practice and ethical decision making (Collins et al., 2010). Within the VR context, rehabilitation counselors are expected to provide services to consumers while considering their own cultural awareness and understanding of external challenges that consumers may face in their pursuit of successful rehabilitation outcomes (Commission on Rehabilitation Counselor Certification, 2010; Glosoff & Cottone, 2010).

The Code of Professional Ethics for Rehabilitation Counselors (CRCC) (2010) maintains that VR counselors should understand the demand for professional development "to acquire and maintain a reasonable level of awareness of current scientific and professional information in their fields of activity" (Commission on Rehabilitation Counselors Certification, 2010, p.11). Additionally, VR counselors should work towards the development and maintenance of competency in the skills that are required to do their jobs effectively, they should be unclosed to fresh ideas and practices, and they should stay abreast of developments in the field as it relates to "diverse populations and specific populations with whom they work" (Commission on Rehabilitation Counselors Certification, 2010, p.11). In doing so, Collins et al. (2010) suggest the use of innovative strategies that consider a cultural perspective for meeting the unique needs of persons with disabilities in order to encourage successful rehabilitation outcomes (Commission on Rehabilitation Counselors Certification, 2010; Collins et al., 2010; Cote, Jones, Sparks, & Aldridge, 2012; Glosoff & Cottone, 2010). Such strategies may include cultural auditing, a multicultural reflective counseling technique that "provides counselors with focused reflection about the influences of culture on their work with individual clients, groups and systems" (Collins et al., 2010, p.342). Similar methods should be infused into practice in order to improve VR counselors' professional and personal cultural identities as a framework for constructing a productive working relationship the consumers (Collins et al., 2010; Cote et al., 2012).

Linguistic and cultural barriers. An important aspect of the international immigration is that a greater number of Americans speak a language other than English at home. Language categories spoken in the U.S. include: 134 Native American categories, 19 African language categories, 8 Chinese language categories, 22 other Asian language categories, 39 Pacific Island language categories, and 12 Indic language categories (U.S. Census Bureau, 2012). Studies have shown that language barriers and lack of understanding about cultural values and beliefs among immigrants with disabilities are challenges that impact employment outcomes (Perryman Group, 2008). New U.S. citizens and permanent residents with disabilities from diverse populations who speak a language other than English as their first language can sometimes face insurmountable challenges to obtaining integrated employment and careers. Although immigrants' pursuit of meaningful careers drastically adds to the labor supply, fills employment gaps, and improves the socioeconomic landscape by creating a very attractive labor pool for employer, discordantly this attractiveness is greatly diminished by the resistance of employers to reconcile their language and cultural differences (Ojeda & Pina-Watson, 2013). Communication barriers due to language issues and lack of interpreters are some factors identified as barriers to employment (Velcoff et al., 2010).

Indeed, language differences oftentimes act as a disincentive for underserved populations who speak a language other than English to participate in VR programs. Velcoff et al. (2010) investigated the impact of English proficiency on employment and VR experiences of Latinos with disabilities. Their findings indicated the following: (a) participants with lower identification with the U.S. cultural domain (USCD) struggled more with employment and VR outcomes than those with stronger identification (i.e., lower identification was associated with limited English proficiency and educational attainment and increased acculturative stress; (b) among participants with higher identification with the USCD, familial support was an important factor when seeking employment; and (c) irrespective of acculturation pattern, cultural mistrust toward the VR system was evident and may be a barrier to seeking such services. Failure to understand and manage language and cultural differences may have significant VR consequences for new immigrants with disabilities.

Language and cultural differences can sometimes create positions of resistance on the part of potential employers in industry. Effective on-the-job communication, adaptation to the work environment, professional and social interaction, and worker productivity are integral considerations of day-to-day work activities; all together, these elements make up the true dynamics of a working environment (Jones & Lewis, 2011). The powerful overtones of such considerations force societal views on language and culture in a negative direction; however, for the purpose of this discussion, language and culture is a matter that is considered on trend because of its significance and consistency with the migration of new citizens and permanent legal residents to the U.S.

Under-qualified VR professionals. The issues of service delivery and under qualified personnel present dynamic barriers that can be seen as parallel in their impact on

minority populations and creating impediments to the state VR system. Disparities in employment status and outcomes also result from failures within the disability and state VR system. The state-federal VR system has been found to be unresponsive to the realities of many people from underserved racial and ethnic backgrounds. For example, there are not enough rehabilitation counselors who have requisite cultural and linguistic competencies necessary to provide appropriate services. Research has shown that bicultural, bilingual VR professionals may be better suited to make VR more accessible to minorities (Balcazar, Suarez-Balcazar, Taylor-Ritzler, & Keys, 2010). New immigrants also experience barriers such as differing attitudes and beliefs about concepts such as disability, independence, and success (Velcoff et al., 2010).

Little knowledge of rehabilitation services and benefits. Persons with disabilities face consequential barriers that impede their pursuit of competitive employment, independent living and overall improved quality of life, self-determination and inclusion in American society. In order to help mediate such barriers, significant legislation and vital agencies and organizations were created to provide a wide range of services; specifically, the Rehabilitation Act of 1973. This mandate was the first notable legislative effort to assure an equal playing field for persons with disabilities. Additionally, SVRAs play an integral role in the effort to provide state-supported specialized employment services to persons with physical and/or mental disabilities. Inasmuch as there is opportunity for persons with disabilities to benefit from such efforts, there is a lack of knowledge of the VR process and its advantages among most persons from minority racial and ethnic groups (Serrata & Fischer, 2013).

Cultural mistrust. Candidly defined as the movement of persons, or rather, the act of persons coming to live in a foreign country, immigration is not just a word; when in context, immigration is an issue that educes much pause to those whom are directly and indirectly affected by its implications. When cultural groups encounter one another, their attitudes, behaviors, and cultural identities can be either altered or preserved (Serrata & Fischer, 2013). The immigration process is described by variegated pressure that influences the mental health and quality of life of emigrating populations (Chung et al., 2008). Immigrants' "premigration experiences" and "postmigration challenges" may have a host of psychosocial implications that can manifest in clinical mental health disorders, substance abuse disorders, or maladaptive behaviors that can sometimes lead to brutal violence or death (Chung et al., 2008, p.311). Immigrants' experiences, particularly those whom endure "premigration trauma" before emigrating to the U.S., may develop a level of uncertainty or doubt towards the dominant culture of their new home (Chung et al., 2008, p. 311). Such encounters can cause immigrants to adopt an attitude of skepticism and mistrust towards SVRAs and other agencies that provide social services assistance.

Low expectation of job placement. In the U.S. persons with disabilities from underserved populations are commonly forestalled from participating in the nation's workforce for purposes that are incited by potential employers and because of reasonable apprehension that they, themselves, come to know in their pursuits of competitive employment. The literature is transpicuous in its presentment of workers with disabilities in the U.S.—persons with disabilities do not secure jobs at the same rates as do persons without disabilities (Kaye, 2010). In fact, persons with disabilities are less likely to obtain competitive employment opportunities; and once employed, they earn significantly less employment wages than persons without disabilities (Kaye, 2010). Researchers have pinpointed the lack of education and differences in skill sets as a major influencing factor to low employment rates for persons with disabilities. Additionally, potential employers' attitudes towards persons with disabilities in that of their overall prejudices and discriminatory thoughts and negative behaviors within the context of work are less than encouraging when employment opportunities become available; and to this uninviting corporate climate add the needs for cultural considerations, employers are circumspectly discrete with whom they offer employment opportunities from these traditionally underrepresented populations (Ali, Schur, & Blanck, 2011; Chan et al., 2010; Jones, 2008). It is because of such negative experiences that persons within these groups do not expect fair or equitable treatment in their employment pursuits (Jones, 2008).

Technology. The issue of technology is two-fold and deserves considerable attention. First, a chief development in the American economy is that information technology, particularly the World Wide Web, is changing the economic market and labor organizations in relevant ways. Bernstein (2011) asserts that the nation's economic system has changed drastically. Its transition from an "Old Economy Business Model" (OEBM), that is the period during World War II in which emphasis was placed on heavy industry to a "New Economy Business Model" (NEBM) of more recent years (p. 204) marks the imprint of an economy that has been "reframed and reconfigured " around the world (Bernstein, 2011, p.204). In an interview with Ed Gordon, Docksai (2013) revealed that because of such developments, there is a formative disconnect between potential employees and the requisite knowledge and skills that are necessary to secure competitive employment in the US. It was estimated that in August 2013, 7 million new jobs that require advanced skills would become available in areas of science, technology, engineering and math-related (STEM) disciplines (Docksai, 2013). Moreover, this demand has indubitably called for jobs in the IT industry, as new products continue to develop, the computer-age continues to advance and persons whom lack technological savvy require overwhelming levels of support (Salzman, 2013). The conundrum is that while there seems to be an abundance of jobs to fill, most businesses are unsuccessful because they refuse to provide the level of training that is required for such advanced skills (Docksai, 2013).

Persons with disabilities are at a grave disadvantage when competing for jobs that require advanced education and complex skill sets. They represent a great

percentage of working age adults in the US and other countries (Jones, 2008). Mwachofi et al. (2009) noted that according to the US Census Bureau's 2006 report, 41.3 million non-institutionalized Americans, or 15.1% of the population over the age of four reported having one or more disabilities. Of that number of persons whom were working competitively, ages 16 to 64, 23.9 million reported having at least one disability, and 62.8% of them were unemployed (Mwachofi et al., 2009). Mwachofi et al. (2009) also noted that persons with disabilities experience significant impediments to employments at rates that exceed the rest of the population. As such, persons with disabilities may require the use of technology as an accommodation to meet their unique needs to function independently, and to enable them to participate in competitive employment that matches their "strengths, resources, priorities, concerns, abilities, capabilities, interests, and informed choices" (Mwachofi et al., 2009, p.170). Hence, the second issue of technology is that VR counselors will need to be prepared to address the needs of persons with disabilities and technology as it relates to Labor Market Information (LMI) and employment opportunities, as well as its use help mediate persons' with disabilities barriers to employment.

Educational and market skill deficits. Working age new U.S. citizens and legal permanent residents differ greatly in terms of educational attainment levels and experiences, secondary (i.e., school-to-work transition eligible students) and post-secondary pursuits alike (Crosnoe & Turley, 2011). In general, they tend to be less educated than persons born in the U.S. (Congressional Budget Office [CBO], 2013). In 2012, a majority of immigrants from Central America did not have a high school diploma or GED credential (CBO, 2013). What is clear is that higher educational levels are consistently associated with access to VR services, gainful employment, and increased earnings (Manyibe et al., 2012; Schneider, 2011). Conversely, low education attainment levels limit one's access to employment opportunities (Manyibe et al., 2012; Schneider, 2011) and thus reduced earnings.

Inasmuch as educational attainment significantly impacts immigrants' competitive employment pursuits, the exigencies of the U.S. labor market demand more sophisticated skill sets as the American economy continues to change and mature. As such, most new immigrants to the U.S. lack highly developed work skills and are at a grave disadvantage as competitors in the American workforce (Gordon, 2013). "Technology's increasing impact across all job sectors has continuously raised employers' demands for more intelligent, well-educated, career-ready workers" (Gordon, 2013, p.43); the urgency to fill these refined positions is greatly anticipated. Unfortunately, most new immigrants are not qualified to compete for jobs that require advanced skill sets; they are then left to secure unskilled labor jobs, which are typically characterized by arduous manual work tasks, low education levels and minimum wages. SVRAs will not only be forced to address the job placement concerns of this emerging population, they will also need to be cognizant of the psychosocial implications of such con-

cerns. "Immigrant workers often report feelings of loss as they encounter working life in their new country. This loss often occurs because they are regarded as unqualified and lacking in workplace initiative" (Pasca & Wagner, 2011, p.698).

Recommendations for Advancing the State-of the-Science

The purpose of this review was to synthesize the available peer review and grey literature and policy on multicultural migration trends and select SVRA systems forecast implications. One observation derived from this synthesis of the literature highlights the tremendous increase of new U.S. citizens and legal permanent residents to the U.S. over the past three decades. These incessant migration patterns have given impetus to an increased growth population, a titanic shift in the demographic landscape of the U.S., and could potentially represent a precipice of migration trends' impacts on the state-federal VR program, the likes of which have never seen considering the importance of cultural context. A set of recommended approaches are presented that can be used to inform, guide, and forge future research directions.

New U.S. citizens and permanent legal residents migration is mainly attributed to their pursuit of employment opportunities, meaningful wages, and an improved quality of life. Emanating from the immigration phenomenon are several dubious challenges that are unique to these emerging and new populations raising concerns about the capacity of the 80 SVRAs to effectively respond to this potential and growing crisis. As such, SVRAs must be prepared to: (a) respond rapidly and effectively to new and emerging service delivery challenges resulting from seismic demographic shifts and emerging federal immigration policy, and (b) integrate "a comprehensive knowledge and sensitivity of the cultural, sociopolitical, and historical background of immigrant clients" (Chung et al., 2008, p.315) into SVRA policy and strategic planning and service initiatives. Currently, the scholarly literature on forecasting new and emerging population trends' impacts on SVRAs systems capacity to respond rapidly and appropriately them is severely limited. Consequently, SVRA leaders and policy makers have little information available to help them plan strategically to meet such unforeseen service demands (i.e., access, service delivery, and outcomes) of these groups. This rapidly changing demographic landscape provides disability, health, and rehabilitation researchers with a unique opportunity to investigate the potential macro-level (i.e., SVRA policy and systems issues) and micro-level (i.e., VR counselor dynamics) challenges that these populations could present.

Other key observations derived from this analysis denote that: (a) disability and health conditions are prevalent among new U.S. citizens and permanent residents from underserved populations due to types of employment secured (i.e., arduous labor), and non-adherence to workplace safety precautions due to language barriers; (b) titanic shifts

in the demographic landscape is forcing policy makers to pay closer attention to looming challenges for U.S. rehabilitation systems; and (c) Contextualized SVRA systems implications of emerging and new service populations trends impacts on emerging and new target populations include, but are not limited to lack of self-awareness in VR, linguistic and cultural barriers, under-qualified VR professionals, little knowledge of VR services and benefits, cultural mistrust, low expectation of job placement, technology access issues, and educational attainment level and job market skills deficit.

These findings may warrant the implementation of an empirical approach (i.e., Delphi Technique) designed to inform the development of a five-year forecast of new emigrating racial and ethnic populations and trends impacts on SVRAs. Questions emerging from this review that are worthy of scientific investigation include, but may not be limited to: (a) What is the priority of importance for impacts of emerging and new U.S. citizen and permanent residency population trends on SVRAs' capacity to serve immigrants with disabilities from traditionally underserved racial and ethnic populations?; (b) What is the priority of significance for strategies that could be implemented by SVRAs to address micro and macro level impacts of emerging and new immigration trends on service capacity to new U.S. Citizens and permanent residents from racial and ethnic populations?; and (c) what are the strategies used by states that are successfully meeting the needs of new immigrants and other traditionally underserved racial and ethnic populations? In doing so, data should be collected to identify foreseen challenges to effective VR service provision to this emerging group and possible recommendations for methods for improvements.

Conclusion

The vast racial and ethnic demographic increase in new citizens and permanent residents with the propensity for increased disability and health conditions is expected to result in larger numbers of these individuals seeking VR services (Chung et al., 2011; Groomes, Kampfe, & Mapuranga, 2011). The principal challenge for SVRAs in this regard filters down to a key element— policy and service initiative responsiveness. Challenges are not only presented within the context of service provision, but are also realized in service determination protocols and decisions. These issues can be exacerbated in SVRA systems due to a lack of cultural sensitivity in the policy development and formulation context, and limited multicultural competencies in rehabilitation service delivery approaches.

These policy and service related issues present a myriad of problems and resulting research questions and hypotheses that call for forecasting methods that consider a poignant SVRA personnel context. SVRAs have the closest ties to consumer households. Mid-level managers and top administrators are experienced in the formulation of policy and strategic initiatives relating to service access and outcomes. Given VR counselors day-to-day interaction with such consumers, they are in a position to share valuable insights about service provision nuances. These personnel should be included as research participants in future forecasting studies. The use of the MLM theoretical framework could prove useful in developing such forecasting models that identify macro and micro level population trends impact issues within SVRA systems.

References

Ali, M., Schur, L., & Blanck, P. (2011). What types of jobs do people with disabilities want? *Journal of Occupational Rehabilitation, 21*(2), 199-210.

Balcazar, F. E., Suarez-Balcazar, Y., Taylor-Ritzier, T., & Keys, C. B. (2010). *Race, Culture and Disability: Rehabilitation Science and Practice*: Jones & Bartlett Learning.

Bernstein, M. (2011). Sustainable Prosperity in the New Economy? Business Organization and High-Tech Employment in the United States. By William Lazonick. Kalamazoo, Mich.: Upjohn Institute, 2009. xvii+ 357 pp. *Business History Review, 85*(01),203-207.

Bevelander, P., & Pendakur, R. (2012). Citizenship, co-ethnic populations, and employment probabilities of immigrants in sweden. *Journal of International Migration and Integration, 13*(2), 203-222.

Bideshi, D., & Kposowa, A. J. (2012). African immigrants and capital conversion in the U.S. labor market: Comparisons by race and national origin. *Western Journal of Black Studies, 36*(3), 181-200.

BLS. (2012). U.S. Census Bureau projections show a slower growing, older, more diverse nation a half century from now. Retrieved from http://www .census.gov/newsroom/releases/archives/population/cb 12-243 .11tm I.

Bratsberg, B., Ragan Jr, J. F., & Nasir, Z. M. (2002). The effect of naturalization on wage growth: A panel study of young male immigrants. *Journal of Labor Economics, 20*(3), 568-597.

Bua-lam, P., & Bias, T. K. (2011). Economic impacts of west virginia division of rehabilitation services on consumers with significant disabilities: Realistic return-on-investment models for state-federal VR programs. *Journal of Rehabilitation, 77*(3), 25-30.

Camarota, S. A. (2012). Immigrants in the United States, 2010: A profile of America's foreign-born population: Center for Immigration Studies.

Camarota, S. A. (2013). The fiscal and economic impact of immigration on the United States Center for Immigration Studies.

Center, P. H. (2011). Unauthorized Immigrant Population: National and state trends, 2010. Retrieved from http://www.pewhispanic.org/files/reports1133.pdf.

Chan, F., Strauser, D., Maher, P., Lee, E.-J., Jones, R., & Johnson, E. T. (2010). Demand-side factors related to employment of people with disabilities: a survey of employers in the Midwest region of the United States. *Journal of Occupational Rehabilitation, 20*(4),412-419.

Chojnicki, X., Docquier, F., Ragot, L., & (2011). Should the US have locked heaven's door?: Reassessing the benefits of postwar immigration. *Journal of Population Economics, 24*(1),317-359.

Chung, R. C. Y. (2009). Cultural perspectives on child trafficking, human rights & social justice: A model for psychologists. *Counselling Psychology Quarterly, 22*(1),85.

Chung, R. C. Y., Bemak, F., & Grabosky, T. K. (2011). Multicultural-social justice leadership strategies: Counseling and advocacy with immigrants. *Journal for Social Action in Counseling and Psychology, 3*(1),57-69.

Chung, R. C. Y., Bemak, F., Ortiz, D. P., & Sandoval-Perez, P. A. (2008). Promoting the mental health of immigrants: A multicultural-social justice perspective. *Journal of Counseling and Development, 86*(3),310-317.

Collins, S., Arthur, N., & Wong-Wylie, G. (2010). Enhancing reflective practice In multicultural counseling through cultural auditing. *Journal of Counseling and Development: JCD, 88*(3), 340-347.

Commission on Rehabilitation Counselors Certification (2010). Code of professional ethics for rehabilitation counselors (pp. 1-37). Retrieved from http://www. crcertification.com/filebin/pdf/CRCCodeEthics.pdf.

Congressional Budget Office (2013). A description of the Immigrant population--2013 update. Retrieved from http://www.cbo.gov/publication/ 44134.

Cote, D. L., Jones, V. L., Sparks, S. L., & Aldridge, P. A. (2012). Designing transition programs for culturally & linguistically diverse students with disabilities. *Multicultural Education, 20*(1), 51-55.

Crollard, A., de Castro, A. B., & Tsai, J. H. (2012). Occupational trajectories and immigrant worker health. *Workplace Health and Safety, 60*(11),497-503.

Crosnoe, R., & Turley, R. N. L. (2011). K-12 education outcomes of Immigrant youth. *The Future of Children, 21*(1),129-152.

DeVoretz, D. J., & Pivnenko, S. (2005). The economic causes and consequences of Canadian citizenship. *Journal of International Migration and Integration/Revue de l'integration et de fa migration internationale, 6*(3-4),435-468.

Djamba, Y. K., & Kimuna, S. R. (2011). The labor force participation and earnings gap among african immigrant women in the U.S.A. *Journal of International Migration and Integration, 13*(4),481-501.

Docksai, R. (2013). Game Plan for a Future-Ready Workforce. *The Futurist, 47*(6),43-46.

Duncan, B., & Trejo, S. J. (2011). Tracking intergenerational progress for immigrant groups: The problem of ethnic attrition. *American Economic Review: Papers & Proceedings, 101*(3), 603-608.

Duval-Couetil, N., & Mikulecky, L. (2011). Immigrants, English and the workplace: Evaluating employer demand for language education in manufacturing companies. *Journal of Workplace Learning, 23*(3),209-223.

Elo, I. T., Mehta, N. K., & Huang, C. (2011). Disability among native-born and foreign-born blacks in the united states. *Demography, 48*(1),241-265.

Erickson, W., Lee, C., & von Schrader, S. (2012). *Disability Statistics from the 2010 American Community Survey (ACS)*. Ithaca, NY: Cornell University Rehabilitation Research and Training Center on Disability Demographics and Statistics (Stats RRTC).

Ewing, W. A. (2012). Opportunity and exclusion: A brief history of U.S. immigration policy. Immigration Policy Center.

Fernandez, L. (2010). Of immigrants and migrants: Mexican and Puerto Rican labor migration 111 comparative perspective, 1942-64. *Journal of American Ethnic History, 29*(3),6-37.

Fox, C., & Guglielmo, T. A. (2012). Defining America's racial boundaries: Blacks, Mexicans, and European immigrants, 1890-1945. *The American Journal of Sociology, 118*(2), 327-379.

Glosoff, H. L., & Cottone, R. R. (2010). Rehabilitation Counselor Education and the New Code of Ethics. *Journal of Applied Rehabilitation Counseling, 41*(2), 48-53. doi: 10.1177/003435520004300403

Gold, S. J. (2009). Immigration benefits America. *Society, 46*(5), 408-411.

Gordon, E. (2013). Game Plan for a Future-Ready Workforce: World Future SOC 7910 Woodmont Ave, Ste 450, Bethesda, MD 20814 USA.

Groomes, D. A., Kampfe, C. M., & Mapuranga, R. (2011). The relationship between race and acceptance of disability when considering services through vocational rehabilitation. *Journal of Vocational Rehabilitation, 34*(1),57-65.

Group, P. (2008). An essential resource: An analysis of the estimated effects by State and by industry. Retrieved from http://americansforimmigrationreform.com/files/Impact of the Undocumented W orkforce.pd#page=69.

Hailu, T. E., Mendoza, B. M., Lahman, M. K. E., & Richard, V. (2012). Lived experiences of diversity visa lottery immigrants in the United States. *The Qualitative Report, 17*(102), 1-17.

Hill, J. C., & Fritz, J. M. (2011). Psychosocial influences on low back pain, disability, and response to treatment. *Physical therapy, 91*(5), 712-721.

Hombrados-Mendieta, I., Gomez-Jacinta, L., & Dominguez-Fuentes, J. M. (2009). The impact of immigrants on the sense of commun ity. *Journal of Community Psychology, 37*(6), 671-683.

Huang, C., Mehta, N. K., Elo, I. T., Cunningham, S. A., Stephenson, R., Williamson, D. F., & Narayan, K. M. (2011). Region of birth and disability among recent U.S. immigrants: Evidence from the 2000 census. *Population Research and Policy Review, 30*(3),399-418.

Jones. J. R., & Lewis, D. M. H. (2011). Let's not go down that path again: Lessons from the past applied to immigrant-targeted discrimination. *Employee Responsibilities and Rights Journal, 23*(4), 229-247.

Jones, M. K. (2008). Disability and the labour market: a review of the empirical evidence. *Journal of Economic Studies, 35*(5), 405-424.

Kaye, H. S. (2010). The impact of the 2007-09 recession on workers with disabilities. *Monthly Labor Review, 133*(10), 19-30.

Kelly, S., & Morton, S. (2004a). Annie Moore and the archives of displacement: towards an immigrant history of the present. *Social & Cultural Geography, 5*(4),633-650.

Kelly, S., & Morton, S. (2004b). Calling up Annie Moore. *Public Culture, 16*(1), 119-130.

Khatutsky, G., Wiener, J. M., & Anderson, W. (2010). Immigrant and non-immigrant certified nursing assistants in nursing homes: How do they differ? *Journal of Aging & Social Policy, 22*(3), 267-287.

Levine, E. (2007). Mexican migrants to the US and the perspectives for socioeconomic mobility. *The Journal of Latino-Latin American Studies, 2*(4), 117-143.

Lewis, A. N., Shamburger, A., Head, C., Armstrong, A. J., & West, S. L. (2007). Section 21 of the 1992 rehabilitation act amendments and diversity articles. *Journal of Vocational Rehabilitation, 26*(1), 89-96.

Liu, C. Y., & Painter, G. (2012). Immigrant Settlement and Employment Suburbanisation in the US: Is There a Spatial Mismatch? *Urban Studies, 49*(5),979-1002.

Manyibe, E. O., Moore, C. L., & Kampfe, C. M. (2012). Competitive Employment Outcomes and Spinal Cord Injury: Relationship between Race/Ethnicity, Gender, Age, Education and Rehabilitation Services. *Rehabilitation Professional, 20*(1).

Mazzolari, F. (2009). Dual citizenship rights: Do they make more and richer citizens? *Demography, 46*(1), 169-191.

Moore, C. L., Ferrin, J. M., Haysbert, N., Brown, S., Cooper, P., Deibel, J., ... Cantrell, C. (2009). Employment outcome rates of African American versus White consumers of vocational rehabilitation services: A meta-analysis. *Journal of Applied Rehabilitation Counseling, 40*(3), 3-10.

Moore, C. L., Johnson, J. E., Manyibe, E. O., Washington, A. L., Uchegbu, N., & Eugene Cross, K. (2012a). *Barriers to the participation of Historically Black Colleges and Universities in the federal disability and rehabilitation research and development enterprise: The researcher's perspective.* Oklahoma City, OK: Department of Rehabilitation Counseling and Disability Studies/Langston University.

Moore, C. L., Johnson, J. E., Manyibe, E. O., Washington, A. L., Uchegbu, N., Eugene Cross, K., Edwards, Y. (2012b). Policy and Systems Issues Limiting the Participation of Historically Black Colleges and Universities in the Federal Disability Research Agenda. *Rehabilitation Research, Policy, and Education, 26*(1), 67-82.

Moore, C. L., Johnson, J. E., & Uchegbu, N. (2011). The need for evidence-based research and service strategies. In C. L. Moore, J. E. Johnson & A. L. Washington (Eds.), *Improving vocational rehabilitation access and return to work and career outcomes among African American Wounded Warriors, Gulf War and Vietnam War era veterans with disabilities* (pp.71-94).

Oklahoma City, OK: Department of Rehabilitation Counseling and Disability Studies/Langston University.

Mwachofi, A. K., York, K. D., & Lewis, B. M. (2009). Enhancing service delivery to minority farmers: VR counselors' perceptions and recommendations. *Journal of Rehabilitation, 75*(2), 12-24.

Newman, B. 1., Johnston, C. D., Strickland, A. A., & Citrin, I. (2012). Immigration crackdown in the american workplace: Explaining variation in E-verify policy adoption across the U.S. states. *State Politics & Policy Quarterly, 12*(2), 160-182.

O'Brien, M., & Graham, M. (2009). Rehabilitation Counseling in the State or Federal Program: Is There a Future? *Rehabilitation Counseling Bulletin, 52*(2), 124-128.

Ojeda, L., & Piña-Watson, B. (2013). Day laborers' life satisfaction: The role of familismo, spirituality, work, Health, and discrimination. *Cultural Diversity & Ethnic Minority Psychology" 19*(3),270-278.

Pasca, R., & Wagner, S. L. (2011). Occupational stress in the multicultural workplace. *Journal of Immigrant and Minority Health, 13*(4), 697-705.

Passel, J. S. (2011). Demography of immigrant youth: Past, present and future. *The Future of Children, 21* (1), 19-41.

Passel, J. S., & Cohn, D. (2011). Unauthorized immigrant population: National and state trends 2010. Pew Research Center.

Perez, A. D., & Hirschman, C. (2009). The changing racial and ethnic composition of the US population: Emerging American identities. *Population and Development Review, 35*(1), 1-51.

Peri, G. (2012). Immigration, labor markets, and productivity. *The CatoJournal, 32*(1),35-53.

Rumbaut, R. G., & Komaie, G. (2010). Immigration and adult transitions. *The Future of Children, 20*(1), 43-66.

Salzman, H. (2013). What shortages? The real evidence about the STEM workforce. *Issues in Science and Technology, 29*(4), 58-67.

Schneider, J. A. (2011). Who are the long term unemployed in this recession and what can be done to help them? Policy report 1. Retrieved from http://www.thecyberhood.net/documents/papers/unemployment. pdf.

Schulz, M. R., Grzywacz, J. G., Chen, H., Mora, D. C., Arcury, T. A., Marin, A. J., ... Quandt, S. A. (2013). Upper body musculoskeletal symptoms of Latino poultry processing workers and a comparison group of Latino manual workers. *American Journal of Industrial Medicine, 56*(2), 197-205.

Serrata, C., & Fischer, J. (2013). Stages of Displacement: The Immigration Experience of Latinos. *Journal of Applied Rehabilitation Counseling, 44*(4), 10-16. doi: 10.1177/0739986303253626

Sweet, J. W. (2009). The subject of the slave trade: Recent currents in the histories of the Atlantic, Great Britain, and West Africa. *Early American Studies: An Interdisciplinary Journal, 7*(1), 1-45.

Taylor-Ritzier, T., Balcaza, F. E., Suarez-Balcazar, Y., & Garcia-Iriarte, E. (2008). Conducting disability research with people from diverse ethnic groups: Challenges and opportunities. *Journal of Rehabilitation, 74*(1),4-11.

U.S. Bureau of Labor Statistics (2012). Persons with a disability: Labor force characteristics--2012 [Data file]. Retrieved from http://www.bls.gov/news.release/pdf/disabl.pdf.

U.S. Department of Education (2013). Evaluation standards and performance indicators for the vocational rehabilitation services program [Data file]. Retrieved from http://www2.ed.gov/rschstat/evallrehab/2008-indicators/index.htm\.

U.S. Department of Homeland Security (2013). U.S. naturalizations: 2012 [Data file]. Retrieved from http://www.dhs.gov/sites/default/files/publica tions/ois natz fr 2012.pdf.

Velcoff, J., Hernandez, B., & Keys, C. (2010). Employment and vocational rehabilitation experiences of Latinos with disabilities with differing patterns of acculturation. *Journal of Vocational Rehabilitation, 33*(1), 51-64.

Vespia, K. M., Fitzpatric, M. E., Fouad, N. A., Kantamneni, N., & Chen, Y.-L. (2010). Multicultural career counseling: A national survey of competencies and practices. *The Career Development Quarterly, 59*(1), 54-71.

Wiley, S., Deaux, K., & Hagelskamp, C. (2012). Born in the USA: How immigrant generation shapes meritocracy and its relation to ethnic identity and collective action. *Cultural Diversity and Ethnic Psychology, 18*(2), 171-180.

Wong, E.C., & Miles, J. (2014). Prevalence and correlates of depression among new US Immigrants. *Journal of Immigrant and Minority Health, 16*(3), 422-428.

Xu, L., & Chi, I. (2013). Acculturative stress and depressive symptoms among Asian immigrants in the United States: The roles of social support and negativ interaction. *Asian American Journal of Psychology, 4*(3), 217-226.

Zanskas, S., Lustig, D., & Ishitani, T. (2011). Perceived barriers to employment success: Are there differences between Caucasian and African American VR consumers? *Rehabilitation Research, Policy, and Education, 25*(3&4), 127-134.

Kenyotta Eugene Cross, EdD, CRC, is Research Analyst and Assistant Professor at the Langston University Rehabilitation Research and Training Center (LU-RRTC) on Research and Capacity Building for Minority Entities.

Corey L. Moore, RhD, CRC, serves as Principal Investigator and Research Director at the LU-RRTC on Research and Capacity Building for Minority Entities and Delta Sigma Theta Sorority, Inc. Distinguished Professor Endowed Chair within the Department of Rehabilitation Counseling and Disability Studies.

Edward Manyibe, PhD, CRC, is a Research Assistant Professor and Capacity Building Director at the LU-RRTC on Research and Capacity Building for Minority Entities.

Fariborz Aref, PhD, is a Research Assistant Professor at the LU-RRTC on Research and Capacity Building for Minority Entities.

Andre Washington, PhD, CRC, is a Research Analyst and Assistant Professor at the LU-RRTC on Research and Capacity Building for Minority Entities.

Ahondju Umadjela, MS, is a Resident Faculty Scholar at the LU-RRTC on Research and Capacity Building for Minority Entities.

Perry Sanders, EdD, CRC, is a Research Analyst and Assistant Professor at the LU-RRTC on Research and Capacity Building for Minority Entities.

Hossein Sarjeh Payma, PhD, is a Resident Faculty Scholar at the LU-RRTC on Research and Capacity Building for Minority Entities.

Jyoti Pandey, MSN, is a Resident Faculty Scholar at the LU-RRTC on Research and Capacity Building for Minority Entities.

Dionna Cyprian, BS, is a Graduate Student and National Advisory Panel Member at the LU-RRTC on Research and Capacity Building for Minority Entities.

Technical Review Form
Field Initiated Projects Program:
Minority Serving Institution (MSI) -
Research

TECHNICAL REVIEW FORM

Field Initiated Projects Program: Minority-Serving Institution (MSI) - Research

This form is for informational purposes only. It is intended to inform the reviewer of the selection criteria used for evaluating an application under the "Field Initiated Projects Program: Minority-Serving Institution (MSI)-Research" grant competition. The reviewer will also find these selection criteria in the on-line "Technical Review Form" via Grant Solutions. **Reviewers are required to enter their scores and rationales directly in the on-line version of this form.**

Please be aware of the following when reviewing the selection criteria below:

1. Reviewers will assign a <u>score</u> (whole numbers only) for each criterion. The reviewer may adjust his/her score at any time before or immediately following the reviewer teleconference if he/she deems it appropriate.

2. Use the selection criteria that you have received for evaluating an application under the **FIELD INITIATED <u>"RESEARCH"</u> PROJECTS PROGRAM: MINORITY-SERVING INSTITUTION (MSI).**

Scoring Criteria	
A. Importance of the problem	(15 Points Total)
B. Design of research activities	(50 Points Total)
C. Plan of evaluation	(10 Points Total)
D. Project staff	(15 Points Total)
E. Adequacy and accessibility of resources	(10 Points Total)
Maximum Total Points	100 Points

CRITERION: (A) Importance of the problem
(15 points total)

FACTORS:

(1) The Director considers the importance of the problem.

(2) In determining the importance of the problem, the Director considers the following factors:

(i) The extent to which the applicant clearly describes the need and target population.

(ii) The extent to which the proposed activities further the purposes of the Act.

(iii) The extent to which the proposed project will have beneficial impact on the target population.

STRENGTHS:

WEAKNESSES:

GENERAL:

CRITERION: (B) Design of research activities
(50 points total)

<u>FACTORS:</u>

(1) The Director considers the extent to which the design of research activities is likely to be effective in accomplishing the objectives of the project.

(2) In determining the extent to which the design is likely to be effective in accomplishing the objectives of the project, the Director considers the following factors:

(i) The extent to which the methodology of each proposed research activity is meritorious, including consideration of the extent to which--

(A) The proposed design includes a comprehensive and informed review of the current literature, demonstrating knowledge of the state-of-the-art;

(B) Each research hypothesis or research question, as appropriate, is theoretically sound and based on current knowledge;

(C) Each sample population is appropriate and of sufficient size;

(D) The data collection and measurement techniques are appropriate and likely to be effective; and

(E) The data analysis methods are appropriate.

STRENGTHS:

WEAKNESSES:

GENERAL:

CRITERION: (C) Plan of evaluation
(10 points total)

FACTORS:

(1) The Director considers the quality of the plan of evaluation.

(2) In determining the quality of the plan of evaluation, the Director considers the extent to which the plan of evaluation will be used to improve the performance of the project through the feedback generated by its periodic assessments.

STRENGTHS:

WEAKNESSES:

GENERAL:

CRITERION: (D) Project staff
(15 points total)

FACTORS:

(1) The Director considers the quality of the project staff.

(2) In determining the quality of the project staff, the Director considers the extent to which the applicant encourages applications for employment from persons who are members of groups that have traditionally been underrepresented based on race, color, national origin, gender, age, or disability.

(3) In addition, the Director considers the extent to which the key personnel and other key staff have appropriate training and experience in disciplines required to conduct all proposed activities.

STRENGTHS:

WEAKNESSES:

GENERAL:

CRITERION: (E) Adequacy and accessibility of resources
(10 points total)

FACTORS:

(1) The Director considers the adequacy and accessibility of the applicant's resources to implement the proposed project.

(2) In determining the adequacy and accessibility of resources, the Director considers the following factors:

(i) The extent to which the applicant is committed to provide adequate facilities, equipment, other resources, including administrative support, and laboratories, if appropriate.

(ii) The extent to which the facilities, equipment, and other resources are appropriately accessible to individuals with disabilities who may use the facilities, equipment, and other resources of the project.

STRENGTHS:

WEAKNESSES:

GENERAL:

Technical Review Form
Field Initiated Projects Program:
Minority Serving Institution (MSI) -
Development

TECHNICAL REVIEW FORM

Field Initiated Projects Program: Minority-Serving Institution (MSI) - Development

This form is for informational purposes only. It is intended to inform the reviewer of the selection criteria used for evaluating an application under the "Field Initiated Projects Program: Minority-Serving Institution (MSI)-Development" grant competition. The reviewer will also find these selection criteria in the on-line "Technical Review Form" via Grant Solutions. **Reviewers are required to enter their scores and rationales directly in the on-line version of this form.**

Please be aware of the following when reviewing the selection criteria below:

1. Reviewers will assign a **score** (whole numbers only) for each criterion. The reviewer may adjust his/her score at any time before or immediately following the reviewer teleconference if he/she deems it appropriate.

2. Use the selection criteria that you have received for evaluating an application under the **FIELD INITIATED "DEVELOPMENT" PROJECTS PROGRAM: MINORITY-SERVING INSTITUTION.**

Scoring Criteria	
A. Importance of the problem	(15 Points Total)
B. Design of development activities	(50 Points Total)
C. Plan of evaluation	(10 Points Total)
D. Project staff	(15 Points Total)
E. Adequacy and accessibility of resources	(10 Points Total)
Maximum Total Points	100 Points

CRITERION: (A) Importance of the problem
(15 points total)

FACTORS:

(1) The Director considers the importance of the problem. (2) In determining the importance of the problem, the Director considers the following factors: (i) The extent to which the applicant clearly describes the need and target population. (ii) The extent to which the proposed activities further the purposes of the Act. (iii) The extent to which the proposed project will have beneficial impact on the target population.
STRENGTHS:
WEAKNESSES:
GENERAL:

CRITERION: (B) Design of development activities
(50 points total)

<u>FACTORS:</u>

(1) The Director considers the extent to which the design of development activities is likely to be effective in accomplishing the objectives of the project.

(2) In determining the extent to which the design is likely to be effective in accomplishing the objectives of the project, the Director considers the following factors:

(i) The extent to which the plan for development, clinical testing, and evaluation of new devices and technology is likely to yield significant products or techniques, including consideration of the extent to which-

(A) The proposed project will use the most effective and appropriate technology available in developing the new device or technique;

(B) The proposed development is based on a sound conceptual model that demonstrates an awareness of the state-of-the-art in technology;

(C) The new device or technique will be developed and tested in an appropriate environment;

(D) The new device or technique is likely to be cost-effective and useful;

(E) The new device or technique has the potential for commercial or private manufacture, marketing, and distribution of the product; and

(F) The proposed development efforts include adequate quality controls and, as appropriate, repeated testing of products.

STRENGTHS:

WEAKNESSES:

GENERAL:

CRITERION: (C) Plan of evaluation
(10 points total)

<u>FACTORS:</u>

(1) The Director considers the quality of the plan of evaluation.

(2) In determining the quality of the plan of evaluation, the Director considers the extent to which the plan of evaluation will be used to improve the performance of the project through the feedback generated by its periodic assessments.

STRENGTHS:

WEAKNESSES:

GENERAL:

CRITERION: (D) Project staff
(15 points total)

FACTORS:

(1) The Director considers the quality of the project staff.

(2) In determining the quality of the project staff, the Director considers the extent to which the applicant encourages applications for employment from persons who are members of groups that have traditionally been underrepresented based on race, color, national origin, gender, age, or disability.

(3) In addition, the Director considers the extent to which the key personnel and other key staff have appropriate training and experience in disciplines required to conduct all proposed activities.

STRENGTHS:

WEAKNESSES:

GENERAL:

CRITERION: (E) Adequacy and accessibility of resources
(10 points total)

FACTORS:

(1) The Director considers the adequacy and accessibility of the applicant's resources to implement the proposed project.

(2) In determining the adequacy and accessibility of resources, the Director considers the following factors:

(i) The extent to which the applicant is committed to provide adequate facilities, equipment, other resources, including administrative support, and laboratories, if appropriate.

(ii) The extent to which the facilities, equipment, and other resources are appropriately accessible to individuals with disabilities who may use the facilities, equipment, and other resources of the project.

STRENGTHS:

WEAKNESSES:

GENERAL:

Technical Review Form
Field Initiated Projects Program-
Research (General Competition)

TECHNICAL REVIEW FORM

Field Initiated Projects - Research

This form is for informational purposes only. It is intended to inform the reviewer of the selection criteria used for evaluating an application under the "Field Initiated Projects" grant competition. The reviewer will also find these selection criteria in the on-line "Technical Review Form" via Grant Solutions. **Reviewers are required to enter their scores and rationales directly in the on-line version of this form.**

Please be aware of the following when reviewing the selection criteria below:

1. Reviewers will assign a **score** (whole numbers only) for each criterion. The reviewer may adjust his/her score at any time before or immediately following the reviewer teleconference if he/she deems it appropriate.

2. Use the selection criteria that you have received for evaluating an application under the **FIELD INITIATED "RESEARCH" PROJECTS**.

Scoring Criteria	
A. Importance of the problem	(15 Points Total)
B. Design of research activities	(50 Points Total)
C. Plan of evaluation	(10 Points Total)
D. Project staff	(15 Points Total)
E. Adequacy and accessibility of resources	(10 Points Total)
Maximum Total Points	100 Points

CRITERION: (A) Importance of the problem
(15 points total)

FACTORS:

(1) The Director considers the importance of the problem.

(2) In determining the importance of the problem, the Director considers the following factors:

(i) The extent to which the applicant clearly describes the need and target population (5 points).

(ii) The extent to which the proposed activities further the purposed of the Act (4 points).

(iii) The extent to which the proposed project will have beneficial impact on the target population (6 points).

RATIONALE:

TOTAL SCORE FOR CRITERION A:	**15**

CRITERION: (B) Design of research activities
(50 points total)

FACTORS:

(1) The Director considers the extent to which the design of research activities is likely to be effective in accomplishing the objectives of the project.

(2) In determining the extent to which the design is likely to be effective in accomplishing the objectives of the project, the Director considers the following factors:

(i) The extent to which the methodology of each proposed research activity is meritorious, including consideration of the extent to which--

(A) The proposed design includes a comprehensive and informed review of the current literature, demonstrating knowledge of the state-of-the-art (10 points);

(B) Each research hypothesis is theoretically sound and based on current knowledge (10 points);

(C) Each sample population is appropriate and of sufficient size (10 points);

(D) The data collection and measurement techniques are appropriate and likely to be effective (10 points); and

(E) The data analysis methods are appropriate (10 Points).

RATIONALE:

TOTAL SCORE FOR CRITERION B:	50

CRITERION: (C) Plan of evaluation
(10 points total)

<u>FACTORS:</u>

(1) The Director considers the quality of the plan of evaluation.
(2) In determining the quality of the plan of evaluation, the Director considers the extent to which the plan of evaluation will be used to improve the performance of the project through the feedback generated by its periodic assessments.

RATIONALE:	
TOTAL SCORE FOR CRITERION C:	**10**

CRITERION: (D) Project staff
(15 points total)

FACTORS:

(1) The Director considers the quality of the project staff.

(2) In determining the quality of the project staff, the Director considers the extent to which the applicant encourages applications for employment from persons who are members of groups that have traditionally been underrepresented based on race, color, national origin, gender, age, or disability (2 points).

(3) In addition, the Director considers the extent to which they key personnel and other key staff have appropriate training and experience in disciplines required to conduct all proposed activities (13 points).

RATIONALE:

TOTAL SCORE FOR CRITERION D:	**15**

CRITERION: (E) Adequacy and accessibility of resources
(10 points total)

FACTORS:

(1) The Director considers adequacy and accessibility of the applicant's resources to implement the proposed project.

(2) In determining the adequacy and accessibility of resources, the Director considers the following factors:

(i) The extent to which the applicant is committed to provide adequate facilities, equipment, other resources, including administrative support, and laboratories, if appropriate (5 points).

(ii) The extent to which the facilities, equipment, and other resources are appropriately accessible to individuals with disabilities who may use the facilities, equipment, and other resources of the project (5 points).

RATIONALE:

TOTAL SCORE FOR CRITERION E:	**10**

Technical Review Form
Field Initiated Projects Program-
Development (General Competition)

TECHNICAL REVIEW FORM

Field Initiated Projects - Development

This form is for informational purposes only. It is intended to inform the reviewer of the selection criteria used for evaluating an application under the "Field Initiated Projects" grant competition. The reviewer will also find these selection criteria in the on-line "Technical Review Form" via Grant Solutions. **Reviewers are required to enter their scores and rationales directly in the on-line version of this form.**

Please be aware of the following when reviewing the selection criteria below:

1. Reviewers will assign a **score** (whole numbers only) for each criterion. The reviewer may adjust his/her score at any time before or immediately following the reviewer teleconference if he/she deems it appropriate.

2. Use the selection criteria that you have received for evaluating an application under the **FIELD INITIATED "DEVELOPMENT" PROJECTS.**

Scoring Criteria	
A. Importance of the problem	(15 Points Total)
B. Design of development activities	(50 Points Total)
C. Plan of evaluation	(10 Points Total)
D. Project staff	(15 Points Total)
E. Adequacy and accessibility of resources	(10 Points Total)
Maximum Total Points	100 Points

FY16 (93.433)

CRITERION: (A) Importance of the problem
(15 points total)

FACTORS:

(1) The Director considers the importance of the problem.

(2) In determining the importance of the problem, the Director considers the following factors:

(i) The extent to which the applicant clearly describes the need and target population (5 points).

(ii) The extent to which the proposed activities further the purposed of the Act (4 points).

(iii) The extent to which the proposed project will have beneficial impact on the target population (6 points).

RATIONALE:

TOTAL SCORE FOR CRITERION A:	**15**

CRITERION: (B) Design of development activities
(50 points total)

FACTORS:

(1) The Director considers the extent to which the design of development activities is likely to be effective in accomplishing the objectives of the project.

(2) In determining the extent to which the design is likely to be effective in accomplishing the objectives of the project, the Director considers the following factors:

(i) The extent to which the plan for development, clinical testing, and evaluation of new devices and technology is likely to yield significant products or techniques, including consideration of the extent to which-

(A) The proposed project will use the most effective and appropriate technology available in developing the new device or technique (10 points);

(B) The proposed development is based on a sound conceptual model that demonstrates an awareness of the state-of-the-art in technology (10 points);

(C) The new device or technique will be developed and tested in an appropriate environment (5 points);

(D) The new device or technique is likely to be cost-effective and useful (10 points);

(E) The new device or technique has the potential for commercial or private manufacture, marketing, and distribution of the product (5 Points); and

(F) The proposed development efforts include adequate quality controls and, as appropriate, repeated testing of products (10 points).

RATIONALE:

TOTAL SCORE FOR CRITERION B:	50

CRITERION: (C) Plan of evaluation
(10 points total)

<u>FACTORS:</u>

(1) The Director considers the quality of the plan of evaluation. (2) In determining the quality of the plan of evaluation, the Director considers the extent to which the plan of evaluation will be used to improve the performance of the project through the feedback generated by its periodic assessments.
RATIONALE:

TOTAL SCORE FOR CRITERION C:	10

CRITERION: (D) Project staff
(15 points total)

FACTORS:

(1) The Director considers the quality of the project staff.

(2) In determining the quality of the project staff, the Director considers the extent to which the applicant encourages applications for employment from persons who are members of groups that have traditionally been underrepresented based on race, color, national origin, gender, age, or disability (2 points).

(3) In addition, the Director considers the extent to which they key personnel and other key staff have appropriate training and experience in disciplines required to conduct all proposed activities (13 points).

RATIONALE:

TOTAL SCORE FOR CRITERION D:	15

CRITERION: (E) Adequacy and accessibility of resources
(10 points total)

<u>FACTORS:</u>

(1) The Director considers adequacy and accessibility of the applicant's resources to implement the proposed project.

(2) In determining the adequacy and accessibility of resources, the Director considers the following factors:

(i) The extent to which the applicant is committed to provide adequate facilities, equipment, other resources, including administrative support, and laboratories, if appropriate (5 points).

(ii) The extent to which the facilities, equipment, and other resources are appropriately accessible to individuals with disabilities who may use the facilities, equipment, and other resources of the project (5 points).

<u>**RATIONALE:**</u>

TOTAL SCORE FOR CRITERION E:	**10**

Technical Review Form
Switzer Research Fellowship
Program

TECHNICAL REVIEW FORM

Switzer Research Fellowships Program

This form is for informational purposes only. It is intended to inform the reviewer of the selection criteria used for evaluating an application under the "Switzer Research Fellowships Program" grant competition. The reviewer will also find these selection criteria in the on-line "Technical Review Form" via Grant Solutions. **Reviewers are required to enter their scores and rationales directly in the on-line version of this form.**

Please be aware of the following when reviewing the selection criteria below:

1. Reviewers will assign a **score** (whole numbers only) for each criterion. The reviewer may adjust his/her score at any time before or immediately following the reviewer teleconference.

2. Use the selection criteria that you have received for evaluating an application under the **SWITZER RESEARCH FELLOWSHIPS PROGRAM.**

Scoring Criteria	
A.1	(15 Points Total)
A.2	(20 Points Total)
A.3	(15 Points Total)
B.1	(10 Points Total)
B.2	(30 Points Total)
B.3	(10 Points Total)
Maximum Total Points	**100 Points**

CRITERION: (A)
(50 points total)

FACTORS:

	Max. Points	Score
The Director evaluates applications for Fellowships according to the following criteria, which are found in 34 CFR 356.30:		
A.1 Quality and Level of applicant's formal education.	15	
RATIONALE:		
A.2 Applicant's previous work experience.	20	
RATIONALE:		
A.3 Recommendations of present or former supervisors or colleagues that include an indication of the applicant's ability to work creatively in scientific research.	15	
RATIONALE:		
TOTAL SCORE FOR CRITERION A	**50**	

CRITERION: (B)
(50 points total)

FACTORS:

	Max. Points	Score
B.1 The importance of the problem to be investigated to the purpose of the Rehabilitation Act of the mission of the National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR)	10	
RATIONALE:		
B.2 The research hypotheses or related objectives and the methodology and design to be followed	30	
RATIONALE:		
B.3 Assurance of the availability of any necessary data resources, equipment, or institutional support, including technical consultation and support where appropriate, required to carry out the proposed activity	10	
RATIONALE:		
TOTAL SCORE FOR CRITERION B:	50	
TOTAL SCORE FOR CRITERION A AND CRITERION B:	100	

FY 16 (93.433)