

Research to Practice in the NIDILRR Community

*A Multidisciplinary Approach to Translating New
Knowledge Into Practice to Promote Health and
Well-Being After Spinal Cord Injury*

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Knowledge Translation for Employment Research Center

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A Multidisciplinary Approach to Translating New Knowledge Into Practice to Promote Health and Well-Being After Spinal Cord Injury



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Background



- Spinal cord injury (SCI) is a traumatic injury that generally results in permanent sensory and motor loss. The long-term consequences of SCI are profound, as there is an increased risk of the development of secondary health conditions (SHCs).
- There are factors that lead to risks of development of SHCs, including demographic, behavioral, psychological, and socioenvironmental.
- It's important to translate findings from research into materials that promote utilization.

Need for Knowledge Translation



- There is a need for people to have easy access to information so that it can be utilized by stakeholders and practitioners.
- Clinicians need to be able to assess patients quickly and know who is at risk. Assessments need to be efficient.
- Policymakers need to know pragmatically what factors affect outcomes so that they can allocate resources.
- People with SCI need information so that they know what changes they can make to their behaviors or lifestyle to help change their outcomes.

Purpose



To translate new scientific knowledge relating to health and function to reduce risk of SHCs and other health complications after SCI by developing automated, individualized risk profiles and creative ways of presenting information for use by consumers with SCI and interdisciplinary healthcare providers.

Knowledge Translation Strategies



- Consumer involvement is at the heart of this project.
- We have engaged stakeholders, including those with SCI, health professionals, and those who work with SCI registries in identifying the conditions on which to focus, through the following activities:
 1. Convene stakeholder groups to identify the most important areas of focus.
 2. Develop the automated tools and fact sheets.
 3. Reconvene stakeholder groups throughout the project and evaluate the tools.
 4. Disseminate the tools through stakeholder, institutional, and public health agencies.
 5. Evaluate the utility of the tools within those settings.

Process



- Use standing and new collaborations to fully engage stakeholders, including those with SCI, health professionals, and those who work with SCI registries.
- Stakeholders are being utilized to identify
 - conditions on which to focus,
 - the types of formats and appropriateness of the tools for different end-users and environments, and
 - the usefulness of the materials developed.
- Stakeholders will identify additional information to include, such as recommendations for practice for the healthcare provider.

Stakeholder Focus Group Assessments



- Multiple stakeholder groups have taken place. These include consumers with SCI in South Carolina and Minnesota, health professionals in South Carolina, and the SCI Association.
- Group members were presented with our research findings and identified the health outcomes they felt are the most relevant to maintaining their health (SCI group) or to providing service.
- Ongoing discussions have taken place to obtain additional professionals, including those who work with state-based departments of public health.

Proposed Development of Materials



- With the stakeholder feedback, we are developing individualized, automated tools and more traditional materials that do not require Internet access to translate knowledge on SHCs into usable formats tailored for consumers with SCI, health and rehabilitation professionals, public health officials, and policymakers.
- These materials will provide guidance as to factors associated with health outcomes in the SCI population and be used by consumers and healthcare providers to directly reduce the probability of health issues and to prevent SHCs.

Proposed Development of Materials



- Development of five automated individualized risk calculators:
 - Three on SHCs
 - One global index
 - One treatment index
- Print materials:
 - Newsletters
 - Fact sheets
 - *Research alerts*
 - *Research brief*
- Web:
 - Utilize our website and social media
 - At least three webcasts
 - Instructional videos on how to use risk calculators

Evaluation of Materials Before Dissemination



- Each user will be asked about the quality of the materials.
- Mock cases will be presented during the stakeholder groups for stakeholders to review and to see how it affects the prediction of the probability of the outcome and the associated information regarding recommendations for behavioral or environmental change (SCI) and any potential treatment recommendations (healthcare providers).
- In addition to stakeholders evaluating the utility of our materials, we will actively seek out feedback from individuals who have downloaded our materials to help determine whether the materials have had a self-reported effect on their behavior or practice.
- We will use social media outlets to ask individuals to review our materials and provide feedback.

Progress



- We have convened multiple stakeholder groups, including both individuals with SCI and health professionals.
- We have identified the first target for outcome, which will be life expectancy.
- We are conducting analyses to serve as the basis for calculators.
- We have developed a new type of alert that may be used to get information with direct implications quickly to stakeholders.

Moving Forward

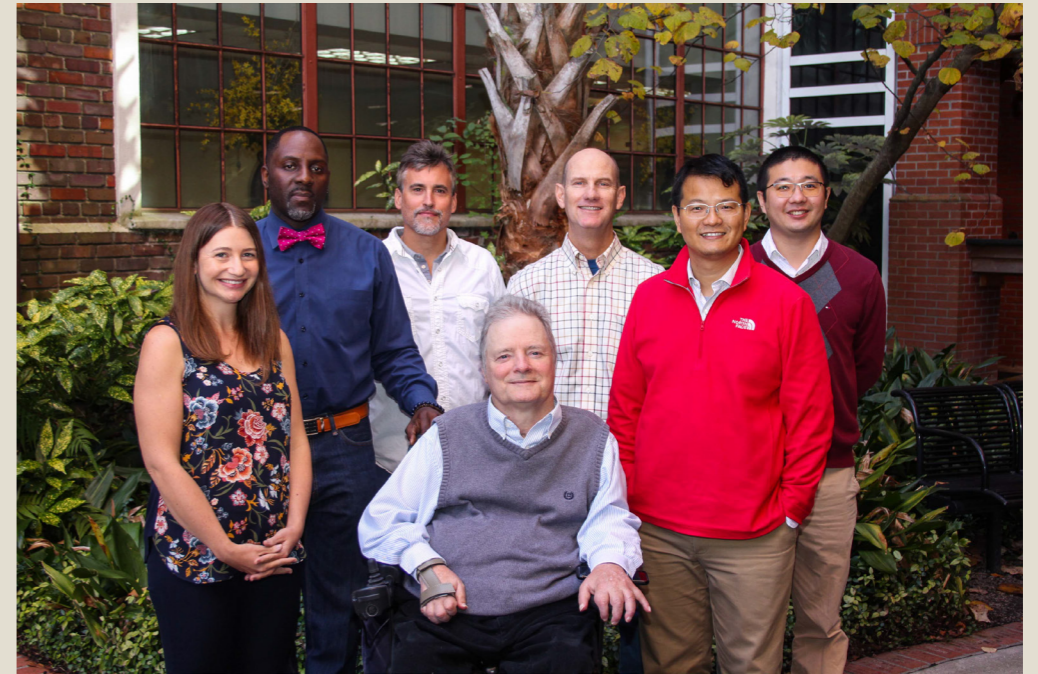


- The calculator development is new to us, and we have vested a lot of efforts in how to best do it (associated information, recommendations).
- The results of studies that would serve as the basis of calculators often require different data analytic methods to be used as a calculator (conversion of the findings to a calculation).
- Some variables of importance are from scales that would require multiple items to complete.
- Getting together with consultants and working to identify the best ways of doing it.
- Developing the other KT tools while we work toward the calculators.

Contact Information



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Websites:

<https://education.musc.edu/colleges/health-professions/research/help>

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