

NIDRR Projects

Research in the New Millennium

Northern New Jersey Spinal Cord Injury System, *Kessler Medical Rehabilitation Research and Education Corp.* (H133N000022) led by Joel A. DeLisa, MD. Theresa San Agustin, MD, Project Officer.

Abstract: The Northern NJ Spinal Cord Injury System (NNJSCIS) attempts to improve outcomes for persons with SCI through novel interventions and expanded service delivery options. The NNJSCIS has an interdisciplinary system of rehabilitation care specifically designed to meet the needs of individuals with SCI. It includes emergency medical services; acute care; psychological, social, and vocational services; peer support; independent living services; community and job placement; long-term community follow-up; and health maintenance. Some of the research and demonstration projects target three of the most common secondary conditions (pressure ulcers, shoulder pain, and urinary tract infections). Other studies promote wellness by helping to reduce obesity, examine the relation between health literacy and outcomes, and identify risk factors and prevent potential problems. One project operationalizes the newly developed Clinical Practice Guidelines. The NNJSCIS contributes to the National Statistics Data Center.

Find out more at: <http://www.kmrrec.org/KM/nnjscis2000>

Mount Sinai Spinal Cord Injury Model System, *Mount Sinai School of Medicine* (H133N000027) led by Kristian T.

Ragnarsson, MD. Constance Pledger, EdD, Project Officer.

Abstract: The Mount Sinai Spinal Cord Injury Model System (MS-SCI-MS) provides comprehensive care to meet the diverse needs of persons with SCI. The comprehensive clinical program stresses interdisciplinary care, and employs a primary team model to enhance coordination among caregivers. Comprehensive outpatient rehabilitation services and long-term follow-up at Mount Sinai Hospital are also included. Rehabilitation services include a high-tech wheelchair and seating system evaluation program, a lower extremity functional electrical stimulation ergometry program, psychosocial services, extensive vocational rehabilitation services, a consumer-directed program to promote community reintegration (DO IT!), and a women's peer group. Specialty medical and surgical services available include a fertility program for males with ejaculatory dysfunction, intrathecal pumps for treatment of spasticity, upper extremity reconstruction, and cutting edge technology. A preventive healthcare demonstration project for screening and early intervention of secondary medical conditions is included as a collaborative effort of the MS-SCI-MS and the Spinal Cord Damage Research Center at the Bronx Veterans Affairs Medical Center. The research program of MS-SCI-MS consists of two studies relevant to one of the most disabling secondary conditions of SCI: chronic pain: (1) meta-analyses of pain reports and pain treatments; and (2) a prospective study of pain.

Find out more at: <http://www.mssm.edu/rehab/spinal>

Northern New Jersey Traumatic Brain Injury System (NNJTBIS)/NIDRR TBI Model Systems National Database, *Kessler Medical Rehabilitation Research and Education Corp.* (H133A980030) led by Mark V. Johnston, PhD, Project Director, TBIMS and Mitchell Rosenthal, PhD, Project Director, TBI National Database. Ruth Brannon, Project Officer.

Abstract: NNJTBIS is a comprehensive set of projects designed to improve the quality of care for people with traumatic brain injury (TBI) in New Jersey and to answer selected research questions. In both research and development projects, the NNJTBIS emphasizes the interplay of medical, neuropsychological, social, and economic factors. Three small randomized clinical trials include: an intervention program to train caregivers to manage behavior problems in the home or other natural settings, a program of cognitive remediation and cognitive-behavioral therapy for people with TBI living in the community, and an improvement to a cognitive remediation program involving enhanced choice by the person with TBI. Other research addresses issues of: how to improve outcome measures by incorporating the expressed values and perceptions of people served, financial issues and costs, the implications of violence in the etiology of TBI, substance abuse, and consequences of delay or refusal of Medicaid coverage for people with severe TBI injuries.

Demonstration projects fill gaps in vocational rehabilitation in New Jersey by providing augmented work trials and education of vocational rehabilitation counselors regarding TBI, develop trial cognitive remediation and social support tools for the Internet, and educate emergency room personnel regarding mild TBI. Educational offerings for people with TBI, their families, and professionals are provided through conferences, retreats, talks, support groups, and development of a TBI resource center. Local advisory boards advise System staff, and plans include a task force to improve the system of care in New Jersey. The project currently manages the national

statistics database for the Model TBI System projects. Additional goals include coordinating research and dissemination activities with other NIDRR TBI grantees to optimize research output, minimize redundancy of effort, and engage in collaborative dissemination.

Find out more at: <http://www.kmrrec.org/KM/nnjtbis/index.html>

While only three centers are located in or around New York City, the research generated by these programs will help doctors, therapists, counselors, and therapists as they aid their patients in transition from hospital to home and back into the community.

Information on the other Model Systems projects can be found at <http://www.naric.com/search/pd/browse.html> and <http://www.ncddr.org/rpp/hf/index.html>.

In light of recent events, it seems appropriate to focus this issue of RehabWire on the research of NIDRR's trauma related projects, especially those in the NYC metro area. These projects include the Model SCI Centers at Mount Sinai and Kessler. The staff at these projects will see many of the casualties in the coming weeks. We extend our deepest thanks for their efforts.

Selections from REHABDATA

Fauerbach, J.A., Engraz, L., Kowalske, K., Brych, S., Bryant, A., Lawrence, J., Li, G., Munster, A., de Lateur, B. (2001) **Barriers to employment among working-aged patients with major burn injury.** *Journal of Burn Care & Rehabilitation*, 22(1), 26-34. Johns Hopkins University Burn Injury Rehabilitation Model System, Baltimore Regional Burn Center, Johns Hopkins Bayview Medical Center University of Washington Burn Injury Rehabilitation Model System, University of Washington, Harborview Medical Center Model System for Burn Injury Rehabilitation, University of Texas, Southwestern Medical Center Medical and Rehabilitation Department. Accession Number: J41643.

Abstract: Study to determine the prevalence of preexisting and burn-related impairments among burn patients that represent actual or possible barriers to employment, and examining associations between these impairments, preburn employment status, injury patterns, and clinical outcomes. The authors conclude that the greater prevalence of preexisting impairments among burn patients who were unemployed before the injury helps explain why preburn employment status is a powerful predictor of postburn work outcomes, and suggests a need to include psychosocial services in a program of comprehensive burn rehabilitation.

Esselman, P.C., Ptacek, J.T., Kowalske, K., Cromes, G.F., deLateur, B.J., Engrav, L.H. (2001) **Community integration after burn injuries.** *Journal of Burn Care & Rehabilitation*, 22(3), 221-227. Model System for Burn Injury Rehabilitation, University of Texas, Southwestern Medical Center Medical and Rehabilitation Department. Accession Number: J42252.

Abstract: Study examining changes in Community Integration Questionnaire (CIQ) scores for burn injury survivors, and injury and demographic predictors of CIQ changes. CIQ total, home integration, social integration, and productivity scores were determined for 463 individuals 6, 12, and 24 months after burn injury. Results show that CIQ scores did not improve over the time examined. Home integration scores were best predicted by sex and living situation. Social integration scores were best predicted by marital status. Productivity scores were best predicted by functional outcome, burn severity, age, and preburn work factors.

Zafonte, R.D., Wood, D.L., Harrison-Felix, C.L., Millis, S.R., Valena, N.V. (2001) **Severe penetrating head injury: A study of outcomes.** *Archives of Physical Medicine and Rehabilitation*, 82(3), 306-310. Southeastern Michigan Traumatic Brain Injury System/NIDRR TBI Model Systems National Database, Wayne State University, and Rehabilitation Institute of Michigan. Accession Number: J41667.

Abstract: Study examining the demographics and functional outcomes of persons who require inpatient rehabilitation for severe penetrating head injury resulting from a gunshot wound to the head. Results show that participants were demographically similar to other groups at high risk for violent injury. Those who survived to receive inpatient rehabilitation showed functional improvement sufficient to allow discharge to a private residence.

Putzke, J.D., Richards, J.S., Devivo, M.J. (2001) **Gunshot versus nongunshot spinal cord injury: Acute care and rehabilitation outcomes.** *American Journal of Physical Medicine and Rehabilitation*, 80(5), 366-370. Model Spinal Cord Injury System, University of Alabama/Birmingham, Spain Rehabilitation Center. Accession Number: J41972.

Abstract: Study examining the impact of gunshot etiology on outcomes of acute and rehabilitation care for spinal cord injury (SCI). Patients with gunshot-caused SCI were matched with patients with non-gunshot-caused SCI with respect to age, education, sex, race, marital status, occupational status at time of injury, and injury level. There were significant differences between the two groups in rates of spinal surgery and charges for acute care, but no differences in length of stay, charges for rehabilitation care, or postrehabilitation discharge placement.

Bogner, J.A., Corrigan, J.D., Mysiw, W.J., Clinchot, D., Fugate, L. (2001) **A comparison of substance abuse and violence in the prediction of long-term rehabilitation outcomes after traumatic brain injury.** *Archives of Physical Medicine and Rehabilitation*, 82(5), 571-577. Ohio Regional Traumatic Brain Injury Model System, Ohio Valley Center for Brain Injury Prevention and Rehabilitation, Department of Physical Medicine and Rehabilitation. Accession Number: J42001.

Abstract: Study examining the relative contributions of substance abuse history and violent etiology to the prediction of outcomes for individuals who sustained a traumatic brain injury (TBI) requiring inpatient rehabilitation. It was found that 80 percent of persons with injuries from violence-related causes had a history of substance abuse. Substance abuse was found to contribute to the prediction of life satisfaction and productivity, while violent etiology was not a significant contributor to predictive models. The authors conclude that it is necessary to include substance abuse history in all studies of outcomes after TBI, and to increase prevention efforts to limit the effects of such a history.



So many organizations have come together to lend on-scene assistance, clothing, money, machinery, and support. You can help by visiting any of the sites listed below and choosing to donate to one of the many organizations listed:

American Liberty Partnership
(www.libertyunites.org)

Amazon.com (www.amazon.com)

Yahoo Shopping (shop.yahoo.com)

Petco Search and Rescue Dog Relief
(www.petco.com)

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