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Headlines from the MSKTC

Connecting consumers to research-based information in
Spinal Cord Injury, Traumatic Brain Injury, and Burn Injury

September 2020
Issue 105

The MSKTC provides:

Consumer Information that offers guidance on treatment, social issues, and daily living after SCI, TBI, and burn injuries.

Systematic Reviews that compile, evaluate, and summarize published research evidence related to a specific medical or health topic.

Databases of research articles posted by the SCI, TBI, and Burn Model Systems.

Upcoming Conferences:

October 4-5, 2020
[American Spinal Injury Association \(ASIA\) Annual Scientific Meeting](#)

October 19-24, 2020
[American Congress of Rehabilitative Medicine \(ACRM\) 97th Annual Conference](#)

October 26, 28, 30, 2020
[2020 Online Knowledge Translation Conference](#)

December 3-6, 2020
[Southern Region BURN](#)

Resource Highlight: Driving after Injury

Drive-thru medical sites are one way that hospitals and health departments provide intermittent medical services (such as administering the flu vaccine) with greater ease and/or safety for their patients. National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR)-funded organizations have published a factsheet, "Accessibility at Drive-Thru Medical Sites." This factsheet lists considerations and strategies to promote accessibility at drive-thru medical sites, including those sites where patients may be asked to exit their vehicles. It includes suggestions for training staff on disability etiquette, ensuring access for wheelchair users and accessible vans, understanding the right to service animals, providing effective communication, and additional measures for greater access. The factsheet also includes resources from federal agencies and community organizations. Learn more [here](#).

The [Model Systems Knowledge Translation Center](#) (MSKTC) has also developed resources to support individuals adapting to driving after injury:

TBI Resource: "Driving After Traumatic Brain Injury" Factsheet

- TBI Model System researchers, in collaboration with the [Model Systems Knowledge Translation Center](#) (MSKTC), developed the consumer factsheet entitled, "Driving After Traumatic Brain Injury." The factsheet was developed by researchers from the [University of Alabama at Birmingham Traumatic Brain Injury Model System](#) (Thomas Novack, PhD) and [JFK Johnson Rehabilitation Institute Traumatic Brain Injury Model System](#) (Eduardo Lopez, MD), with support from the MSKTC. Available in both English and Spanish, this resource explains how TBI may affect driving ability as well as how to adapt to these changes. The factsheet may be reproduced and distributed freely with appropriate attribution. It is available on the MSKTC website [here](#).

SCI Resource: "Driving After Spinal Cord Injury" Factsheet

- SCI Model System researchers, in collaboration with the [Model Systems Knowledge Translation Center](#) (MSKTC), developed the consumer factsheet entitled, "Driving After Spinal Cord Injury." The factsheet was developed by a researcher from the [Southeastern Regional Spinal Cord Injury Model System](#) (John Anschutz), with support from the MSKTC. Available in both English and Spanish, this resource explains how SCI may affect driving ability as well as how to adapt to these changes. The factsheet may be reproduced and distributed freely with appropriate attribution. It is available on the MSKTC website [here](#).

Resource Highlight: MSKTC Knowledge Translation Toolkit — "Create User Friendly Websites"

The Online Knowledge Translation (KT) Toolkit is a collection of resources that supports various stakeholders in implementing KT strategies. The [Model Systems Knowledge Translation Center](#) (MSKTC) KT Toolkit includes, "Create User Friendly Websites." This section of the toolkit provides guidance to improve the accessibility of websites. The ADA

[Conference](#)**March 7-11, 2021**[43rd Annual Boswick Burn & Wound Symposium](#)**April 6-9, 2021**[53rd Annual American Burn Association Meeting](#)**April 8, 2021**[American Occupational Therapy Association Annual Conference](#)

Network Knowledge Translation Center has published a research brief, "Digital Access and Title III of the Americans with Disabilities Act (ADA)," highlighting the impact of the digital divide for people with disabilities and framing digital accessibility as an issue for businesses, agencies, and organizations considered public entities under Title III of the ADA. The report finds that people with disabilities have less access to and benefit less from technology than people without disabilities. In addition, most websites are not fully accessible, nor do access guidelines fully address access needs. The report also discusses how developers can enhance access and usability throughout the development process and highlights the benefits of creating accessible technology, such as attracting a broader customer base. Find the toolkit [here](#).

Traumatic Brain Injury (TBI)

TBI Model System Researcher Recognized with Mitchell Rosenthal Award

Kristen Dams-O'Connor, PhD, from the [New York Traumatic Brain Injury Model System](#), led a team of authors from the TBI Model System to develop a paper that was granted the 2020 Mitchell Rosenthal Award. The team was recognized with this honor for their article, "Functional outcome trajectories following inpatient rehabilitation for TBI in the United States: A NIDILRR TBIMS and CDC interagency collaboration," published in *Journal of Head Trauma Rehabilitation*. The study describes trajectories of functioning up to five years after traumatic brain injury (TBI) that required inpatient rehabilitation in the United States using individual growth curve models conditioned on factors associated with variability in functioning and independence over time. The findings from this study can inform the content, timing, and target recipients of interventions designed to maximize functional independence after TBI. View the abstract [here](#).

TBI Model System Researchers Publish in *Annals of Physical and Rehabilitation Medicine*

Researchers from [Spaulding-Harvard Traumatic Brain Injury Model System](#) (Yelena Bodien, PhD; Kristen Sheau, MS; Andrea Christoforou, PhD; and Joseph Giacino, PhD) published the study, "Which behaviors are first to emerge during recovery of consciousness after severe brain injury?" in *Annals of Physical and Rehabilitation Medicine*. Early detection of consciousness after severe brain injury is critical for establishing an accurate prognosis and planning appropriate treatment. The study aimed to determine which behavioral signs of consciousness emerge first and to estimate the time course to recovery of consciousness in patients with severe acquired brain injury. The study found recovery of consciousness after severe brain injury is most often signaled by reemergence of visual pursuit, reproducible command-following, and automatic movements. Clinicians should use assessment measures that are sensitive to these behaviors because early detection of consciousness is critical for accurate prognostication and treatment planning. View the abstract [here](#).

MSKTC Hosts Virtual Exhibit at SOS Conference

The [Model Systems Knowledge Translation Center](#) (MSKTC) hosted a virtual exhibit at the National Association of State Head Injury Administrators (NASHIA) 2020 Virtual SOS Conference. This event included a combination of live and recorded sessions in a variety of formats and an exhibit hall for event sponsors and attendees to network and collaborate. Learn more about the conference [here](#).

TBI Model System Researcher Interviewed for *Brain Injury Today* Podcast

Jeanne Hoffman, PhD, principal investigator of the [University of Washington Traumatic Brain Injury Model System Center](#), was interviewed for an episode of the [Brain Injury Alliance of Washington](#) *Brain Injury Today* series. In the episode, "From Research to Reality, Improving Outcomes for People with Traumatic Brain Injury," Dr. Hoffman discussed the Center's research and its importance in helping improve the outcomes for people with TBI. Dr. Hoffman also discussed access to healthcare by people with TBI, including adjustment to disability and new healthcare models and health services. Listen to the episode [here](#).

MSKTC Recruiting Participants for TBI Consumer Factsheet Testing

The [Model Systems Knowledge Translation Center](#) (MSKTC) is recruiting individuals with traumatic brain injury and their caregivers to provide feedback on a new factsheet entitled, "Irritability, Anger, and Aggression After TBI." The MSKTC is also recruiting caregivers of individuals with traumatic brain injury to provide feedback on a new factsheet entitled, "Stress Management Strategies for Caregivers." To be eligible, participants must be at least 18 years old. Participants will receive a \$25 gift card for their time. Call (202) 403-5600 or email msktc@air.org to register.

Spinal Cord Injury (SCI)

SCI Model System Researcher Receives Bors Award

Beverly Hon, MD, from the [Northern New Jersey Spinal Cord Injury System Center](#), received the Ernest Bors Award for Scientific Development from the *Journal of Spinal Cord Medicine* and the leadership of the Academy of Spinal Cord Injury Professionals (ASCIP). The Bors Award recognizes the achievements of young investigators whose career paths focus on spinal cord injury. Dr. Hon received the award as the lead author of the paper, "Duplex ultrasound surveillance for deep vein thrombosis after acute traumatic spinal cord injury at rehabilitation admission," published in the *Journal of Spinal Cord Medicine*. View the article [here](#). Dr. Hon presented her research during ASCIP's virtual conference, One Vision Online. Learn more about the award [here](#).

SCI Model System Publications Nominated for the Elizabeth and Sidney Licht Award

Two SCI Model System publications were nominated for the Elizabeth and Sidney Licht Award for Excellence in Scientific Writing for 2020. This award honors Sidney Licht, MD, a longtime ACRM member and former president, and his wife Elizabeth, who was the publisher of the Physical Medicine Library. The Elizabeth and Sidney Licht Award recognizes excellence in scientific writing in rehabilitation medicine. Only articles presenting potentially significant empirical and theoretical contributions to rehabilitation medicine and demonstrating soundness of methodology and data analysis are considered for the award. Learn more about the award [here](#).

Learn more about the publications that were nominated:

- Researchers from the [University of Pittsburgh Model Center on Spinal Cord Injury](#) (Lynn A. Worobey, PhD, DPT, ATP; Stephanie Rigot, DPT; Nathan S. Hogaboom, BS; Chris Venus, MPT, NCS; and Michael L. Boninger, MD), published the article, "Investigating the efficacy of web-based transfer training on independent wheelchair transfers through randomized control trials," in *Archives of Physical Medicine and Rehabilitation*. View the article [here](#).
- SCI Model System researchers published the article, "Wheelchair breakdowns are associated with pain, pressure injuries, rehospitalization, and self-perceived health in full-time wheelchair users with spinal cord injury," in *Archives of Physical Medicine and Rehabilitation*. Authors are from the following currently-funded SCI Model System centers: [University of Pittsburgh Model Center on Spinal Cord Injury](#) (Nathan S. Hogaboom, BS; Lynn A. Worobey, PhD, DPT, ATP; and Michael L. Boninger, MD), [Spaulding New England Regional Spinal Cord Injury Center](#) (Bethlyn V. Houlihan, MSW, MPH), and [Midwest Regional Spinal Cord Injury Care System](#) (Allen W. Heinemann, PhD, ABPP (RP), FACRM). View the abstract [here](#).

SCI Model System Awarded the Small Business Technology Transfer Grant

The [Spaulding New England Regional Spinal Cord Injury Center](#) was awarded a Small Business Technology Transfer grant that funded: 2020-2021 "Functional Electrical Stimulation (FES)-Rowing: Preventing the Secondary Conditions of Paralysis through Vigorous Exercise." Working as co-project investigator, Dr. Andy Taylor will lead the work that is based on the scientific premise that FES-rowing is the most appropriate and effective exercise intervention for improving aerobic capacity in people with SCI. This work seeks to develop a FES-rowing system suitable for commercialization to provide the general population of people with SCI an accessible and effective means for preventing secondary conditions, especially cardiovascular morbidity, and premature cardiovascular mortality.

SCI Model System Researchers Publish in *Disability and Rehabilitation: Assistive Technology*

SCI Model System researchers recently published the article, "Using remote learning to teach clinicians manual wheelchair skills: A cohort study with pre- vs post-training comparisons," in *Disability and Rehabilitation: Assistive Technology*. Authors are from the following currently-funded SCI Model System centers: [University of Pittsburgh Model Center on Spinal Cord Injury](#) (Lynn A. Worobey, PhD, DPT, ATP; Michael L. Boninger, MD; and Rachel Hibbs, DPT), [University of Alabama at Birmingham Spinal Cord Injury Model System](#) (Rachel E. Cowan, PhD), [Northern New Jersey Spinal Cord Injury System Center](#) (Trevor A. Dyson-Hudson, MD; and Mary Shea, OTR/L, ATP), and [Midwest Regional Spinal Cord Injury Care System](#) (Allen W. Heinemann, PhD, ABPP (RP), FACRM; and Jessica Presperin Pedersen, OT, OTD); with R. Lee Kirby, MD, FRCPC. The study found remote learning platforms effective in teaching wheelchair skills to a sample of physical and occupational

therapists. View the article [here](#).

SCI Model System Researchers Publish in *Archives of Physical Medicine and Rehabilitation*

SCI Model System researchers recently published the article, "Modified PRISM and SCI-SET spasticity measures for persons with traumatic spinal cord injury: Results of a Rasch analyses," in *Archives of Physical Medicine and Rehabilitation*. Authors are from the following currently-funded SCI Model System centers: [Southeastern Regional Spinal Cord Injury Model System](#) (W. Mark Sweatman, PhD; Catherine Furbish, DPT; and Edelle Field-Fote, PhD), and [Midwest Regional Spinal Cord Injury Care System](#) (Allen Heinemann, PhD, ABPP (RP), FACRM). The research analyzed the psychometric properties of two self-report instruments designed to measure spasticity: Spinal Cord Injury Spasticity Evaluation Tool (SCI-SET) and Patient-Reported Impact of Spasticity Measure (PRISM). The study found measurement properties of the SCI-SET and PRISM improved from use of Rasch model methods. The SCI-SET required minor revisions, whereas the PRISM required definition of sub-scores. Both modified spasticity measures demonstrated adequate psychometric properties, and correlations among the modified measures were high, providing evidence of convergent validity. The authors recommend use of the Modified SCI-SET and Modified PRISM measures in future studies. View the abstract [here](#).

SCI Model System Researchers Publish in *Disability and Rehabilitation: Assistive Technology*

Researchers from the [University of Pittsburgh Model Center on Spinal Cord Injury](#) (Geoffrey V. Henderson, MD; Michael L. Boninger, MD; Brad E. Dicianno, MD; and Lynn A. Worobey, PhD, DPT, ATP) recently published the article, "Type and frequency of wheelchair repairs and resulting adverse consequences among veteran wheelchair users," in *Disability and Rehabilitation: Assistive Technology*. This study aimed to investigate the type and frequency of wheelchair repairs and resulting adverse consequences in a Veteran population. Ultimately, they found a high number of repairs and resulting adverse consequences occur for wheelchair users, particularly power wheelchair users, in a sample of Veterans. Interventions to prevent breakdowns and to address repairs and adverse consequences in a time-efficient manner are needed. View the abstract [here](#).

MSKTC Hosts Virtual Exhibit at ASCIP

The [Model Systems Knowledge Translation Center](#) (MSKTC) hosted a virtual exhibit in the Academy of Spinal Cord Injury Professionals (ASCIP) 2020 Virtual Exhibit Hall. The conference aimed to meet the continuing educational needs of members and guests. ASCIP designed a creative virtual format that combined live presentations by its 2020 Keynote and awarded speakers, breakout sessions on a wide range of relevant spinal cord injury topics, and poster presentations. View MSKTC's exhibit [here](#).

SCI Model System Hosts Lecture and Webcast in Knowledge in Motion Lecture Series

Researchers from the [Spaulding New England Regional Spinal Cord Injury Center](#) hosted a lecture and webcast, "Getting More Out of Less: Increasing the Signal to Noise Ratio in the Spinal Cord," as part of the Knowledge in Motion lecture series. Dr. Amanda Zimmerman, PhD, Senior Scientist at Axonis Therapeutics, discussed how the inhibitory/excitatory balance in the spinal cord is critical to both movement and sensation, and how it is disrupted after SCI. Preclinical research shows nuanced regulation of inhibition can lead to substantial functional improvements after SCI. Discussion was held about bringing this research into the clinic. You can access the online video of the webcast [here](#).

SCI Model System Hosts 24th Annual MetroHealth SCI Forum

The [Northeast Ohio Regional Spinal Cord Injury System](#) hosted the 24th Annual MetroHealth SCI Forum. The conference was open to individuals with SCI, their family members, and caregivers. The event featured presentations from vendors as well as educational sessions. Session topics included ADA History: Past, Present, and Future; Fitness and Nutrition; Ask the Medical Doc; Caregiver Corner; Sexuality; and a Keynote speaker. Learn more [here](#).

SCI Model System Promotes SCI Awareness Day in Massachusetts

Massachusetts Walks Again is a collaboration of Massachusetts rehabilitation facilities, consumer organizations, legislators, scientists, researchers, policy makers, and advocates working toward a common goal to increase awareness and funding for spinal cord injury cure. The [Spaulding New England Regional Spinal Cord Injury Center](#) staff works with the organization to promote SCI Awareness Day in Massachusetts. This year the event was offered virtually and showcased the work of five researchers in Boston who were awarded \$2.5 million by the SCI Trust Fund. This fund was established in 2004 to provide funding opportunities for SCI research in Massachusetts. Learn more [here](#).

Resource Highlight: "Personal Care Attendants and SCI" Factsheet

SCI Model System researchers, in collaboration with the [Model Systems Knowledge](#)

[Translation Center](#) (MSKTC), recently published the consumer factsheet entitled, "Personal Care Attendants and Spinal Cord Injury." The factsheet was developed by researchers from the following currently-funded SCI Model System centers: [University of Alabama at Birmingham Spinal Cord Injury Model System](#) (Phil Klebine, MA; Casey Azuero, PhD, MPH; and Kelli Arthur, MSW, LICSW) and [Northern New Jersey Spinal Cord Injury System Center](#) (Jeanne Zanca, PhD, MPT), with support from the MSKTC. Available in both English and Spanish, this resource offers suggestions on finding, interviewing, funding, and managing a personal care attendant. The factsheet may be reproduced and distributed freely with appropriate attribution. It is available on the MSKTC website [here](#).

Burn Injury (BURN)

ANA Announced Formal Recognition of Burn Nursing as a Specialty

The American Nurses Association (ANA) announced formal recognition of burn nursing as a specialty within the nursing profession. Burn nurses are specially educated and trained to treat, support, and promote recovery of those sustaining a burn injury. Their care also includes prevention and educational activities. Gretchen J. Carrougher MN, RN, program coordinator of the [Northwest Regional Burn Model System](#) and chair for the American Burn Association (ABA) Professional Certification Committee, stated, "This recognition comes following a six-year effort to identify competencies specific to burn nursing and ultimately in the development of our scope and standards of practice." Members of the ABA Professional Certification Committee authored this new reference, *Burn Nursing: Scope and Standards of Practice*, and submitted to the ANA as the basis for specialty recognition. View the press release [here](#).

This document recognized the [Burn Model System National Database](#) (BMS NDB) as one of the two largest burn injury databases in the US, providing valuable information concerning the population that is served. The other database is the American Burn Association National Burn Repository. Cate Miller, PhD, NIDILRR Rehabilitation Program Specialist, stated, "This is an important acknowledgement of the value of the BMS NDB for the field. The description of the NDB nicely highlights the unique role that the BMS NDB serves... understanding long-term outcomes of persons with burn injury. The NDB will no doubt continue to answer questions that are critical to advancing the field. Finally, the reference to resources available through the MSKTC sends an important message about the full cycle of investment: data collection to scientific discovery to clinical application/knowledge translation and as we know, all with stakeholder guidance and input."

Burn Nursing: Scope and Standards of Practice (2020), an important professional resource, is in production and will be available [here](#).

Burn Model System Researcher Member of NQF Technical Expert Panel

The National Quality Forum recently published, *Patient Reported Outcomes: Best Practices on Selection and Data Collection Final Technical Report*. Dr. Jeffrey Schneider, project director of [Boston-Harvard Burn Injury Model System](#), and Amy Acton, president of the [Phoenix Society](#), were both members of the Technical Expert Panel. The report addresses best practices for selection of patient-reported outcomes (PROMS) in burns and trauma, as well as heart failure and joint replacement. The report can be found [here](#).

Burn Model System Offers Virtual Yoga Class

The [Boston-Harvard Burn Injury Model System](#) is partnering with [Spaulding Adaptive Sports Centers](#) at Spaulding Rehabilitation Hospital in Boston, MA, to offer a free, virtual yoga class for people with disabilities. This class will be offered via Zoom every Tuesday afternoon, 4:00-5:00pm EST. This movement class is rooted in the mindfulness and intentions of yoga designed for the adaptive community and people of all physical abilities. Interested individuals should sign up on the Spaulding Adaptive Sports Centers website by creating a profile and searching the class offerings. Register [here](#).

MSKTC Recruiting Participants for Burn Consumer Factsheet Testing

The [Model Systems Knowledge Translation Center](#) (MSKTC) is recruiting individuals with burn injury and their caregivers to provide feedback on a new factsheet entitled, "Sexuality and Intimacy After Burn Injury." To be eligible, participants must be at least 18 years old. Participants will receive a \$25 gift card for their time. Call (202) 403-5600 or email msktc@air.org to register.

 Share this newsletter on social media

Connect with us by liking us on Facebook and following us on Twitter. We have three injury areas:



The Model Systems Knowledge Translation Center (MSKTC) supports the Model Systems program in meeting the information needs of individuals with spinal cord injury, traumatic brain injury, and burn injury. The MSKTC is funded by National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR) and is operated by the American Institutes for Research (AIR) in collaboration with George Mason University (GMU) and BrainLine at WETA under grant number 90DP0082.

Learn more about the MSKTC at www.MSKTC.org