People with spinal cord injury (SCI) can and do work—even those who have the most severe physical impairments. However, there are also many people who would like to work but are not employed. It is critical to recognize that employment is an important priority and feasible outcome for most people with SCI. For this reason, the factors that serve as supports and barriers to employment need to be acknowledged and addressed.

For many with SCI, employment brings significant benefits. It provides a means of financially supporting one’s self and family, improves access to health insurance benefits and services, promotes relationships and social networks, and can provide a sense of purpose and accomplishment. Simply put, most people feel better about themselves when they have a reason to get up in the morning, a place to go, and activities to accomplish that they see as important and are valued by others. Research studies have found that there is a relationship between employment status and quality of life after SCI. People with SCI who are employed tend to be more active, have fewer medical treatments and feel that they are healthier and have fewer problems than do those who are unemployed. Employment is associated with greater optimism and self-esteem and less depression.

The amount of time that people spend in employment and other vocational activities also makes a difference. Part-time employment seems to provide significant advantages over unemployment in terms of health insurance and quality of life; however, those who work full-time (at least 30 hours per week) generally get more benefits and resources. Students also report better adjustment and quality of life and fewer physical and psychological problems than do those who are unemployed.

**Modifiable factors and employment – What you can do?**

While a lot of the research on employment after SCI has focused on predictive factors, many of the factors that are examined—things like level of injury, age, gender and race/ethnicity—are not things that can be modified. Far more important and instructive are recognizing those factors that can be changed.

**Modifiable Personal Factors**

**Education** is a modifiable factor that can greatly enhance employment outcomes. Individuals with SCI are more likely to have a job with each educational milestone obtained. Rates of employment are lowest among those without a high school diploma and more than double for those with a high school diploma or GED. Employments rates double again among...
As we enjoy autumn it is a good time to look back and review what we have accomplished so far this year. Our Spinal Cord Injury Model System (SCIMS) project conducts research and educational activities designed to improve the lives of persons with spinal cord injury (SCI). We have embarked on some ambitious research projects to learn about bowel and bladder complications, assessing quality of life, and promoting health behaviors and encouraging self-management after SCI. We are grateful to all of you who have agreed to participate in these projects, providing us with your personal information and perspectives on these issues. The information gained by these projects will be used to set up or test interventions to address health care issues experienced by people with SCI. Above all, we wish to make sure that what we do is relevant and useful to you. This is why your perspective is so important to us.

In this issue, we provide you with information on the Michigan Rehabilitation Services available to you if you are contemplating employment. We cover the psychological benefits of work and real life stories of people with SCI. There is also an update on insurance issues, alumni news for those who have been participants in our SCIMS for some years now, as well as information on recreation, support groups and events.

We would love to hear your thoughts on these articles and suggestions for future issues of this newsletter! Please send a message to SCI-model-system@umich.edu or give us a call at (734)763-0971. Let’s keep in touch.
Employment after Spinal Cord Injury
Continued from page 1

those with an Associate’s Degree, and increase substantially for those with a four-year college degree.

Psychological Factors are internal factors or characteristics of the individual and include things like vocational interests, motivation and mood. One factor that seems to particularly influence return to work among men with SCI is the match between their vocational interests and their current abilities. In particular, many individuals were not interested in formal education or office work before they were injured. After a SCI, their interests have not changed but their impairment may have limited their eligibility to perform jobs with a physical or manual labor component. For these individuals, it is important to determine core elements that help to engage them and to look for jobs that include these elements. Such elements may include helping others and using skills and knowledge to train others or improve systems.

Social support is an important modifiable component that influences finding and keeping jobs. Practical support from family and friends can help individuals with SCI accomplish tasks that are critical for preparing for and getting to work – such as showering, dressing or driving. Emotional support may promote confidence, making it easier to apply for, obtain and keep a job. It also promotes growth and can assist with problem-solving when challenges arise. These benefits can minimize stress and maximize one’s ability to work.

Emotional factors and mood are also critical to successful employment. Fear and mistrust play a significant role in the under-employment of people with SCI. Most adults with SCI report that they want to work. They recognize the social and psychological benefits of work, and express both frustration with being at home and a desire not to be dependent on the system. Often, however, these feelings and beliefs are eclipsed by a fear of losing benefits and a mistrust of the system if they change their vocational status. While some reality may be associated with these feelings, often a lot of the anxiety and fear is based on the unknown. Talking with someone – such as a benefits or vocational rehabilitation counselor – about the specifics of employment, what programs are available, and how employment may impact their specific situation can ease these fears. Individuals with SCI benefit from empowering themselves with information and skills.

Environmental Factors

Environmental factors can also influence one’s ability and motivation to work. In this context, environment refers not just to the physical accessibility of a building or job site, but also to policies and factors like the portability of health insurance, financial disincentives and the presence or lack of suitable jobs.

Concerns about losing economic and health benefits are a frequent reason why people choose not to return to work after SCI. The fear of losing benefits is often tied to a reluctance to separate from Supplemental Security Income (SSI), Social Security Disability Insurance (SSDI) and the safety net that these programs provide. Many people are unaware of programs that can improve their abilities to work without losing their health insurance, or programs such as The Ticket to Work Program, which can provide career counseling, job placement, and ongoing employment support services.

Limited availability of accessible transportation is a significant barrier to return to work, as is accessibility in the built environment. People with SCI, especially wheelchair users, often cannot access buildings, especially bathrooms, limiting their ability to work and participate in the community. Some employers are disinclined to hire people with physical disabilities, fearing the costs that they might face to make accommodations. For the most part, each of these situations has a work-around. Employers can be educated. Buildings and office layouts can be altered – often at low cost – to allow individuals with SCI to get and maintain jobs.

Of all of the barriers to employment among people with SCI, poor health is the largest. It is very hard to either actively look for work or maintain a job when dealing with bowel management problems, adhering to limitations associated with having a pressure ulcer, or experiencing major depression. Learning how to be pro-active with regard to maintaining health and wellness is critical in developing and maintaining a work life after SCI.

In Summary

Employment after SCI – whether returning to work or finding that first real job – is an important decision point that should not be minimized or taken lightly. While some individuals who are injured are at an age when they are winding down their careers and considering retirement, many people with SCI (whether newly injured or many years afterwards) are in their prime working years. For these people, work may not only provide money to support a certain lifestyle (such as having a family, home or car) but also give a sense of identity, social connections and a reason to get up in the morning.

These types of benefits go beyond money. For this reason, it is important that individuals with SCI consider engaging in some type of meaningful activity that provides social contacts even if they

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Michigan Rehabilitation Services: Working for You!
By: Rose Marie Harrell, MA, LLPC; Site Manager, Ann Arbor District Office, Michigan Rehabilitation Services

Michigan Rehabilitation Services (MRS) is a state agency that provides vocational rehabilitation services to eligible persons with disabilities residing in Michigan. Its mission is to partner with individuals and employers to achieve quality employment outcomes and independence. The organizational vision is to promote an inclusive workforce system that provides each individual with a disability the opportunity for employment leading to independence.

To be eligible for MRS services, a customer must have a disability that creates a substantial impediment to employment, need our services to be successful, and be able to benefit from these services. We work with individuals with a wide variety of disabilities, such as: spinal cord injury, amputation, kidney disease, back disability, learning disability, brain injury, mental illness, cancer, mental limitation, cerebral palsy, multiple sclerosis, diabetes, muscular dystrophy, epilepsy, hearing loss, heart disease, and substance abuse.

In partnership with customers, MRS counselors help customers make informed choices regarding their job goals and the services that will be needed to be successful on the job. We offer or support the use of various tools to help with this process, including psychological evaluations, vocational assessments, career testing, transferrable skills analysis, small business feasibility assessment, on-the-job training/evaluation and job coaching. These services are beneficial in preparing thorough vocational needs assessments for customers and in providing planning for employment. Counseling and guidance, job retention and follow-up are provided throughout the process so that customers have support available when they need it.

MRS currently works with approximately 45-50,000 individuals with disabilities and provides services in all 83 counties in Michigan. Some of these customers are receiving SSI and SSDI benefits. Some customers may be part of the Ticket to Work Program offered by the Social Security Administration. The Ticket program is voluntary and gives social security recipients the opportunity to get the services they need to obtain and maintain employment. Social Security may also provide work incentives to assist individuals to increase their level of independence through employment. For more information about these programs, contact your local Social Security office or call the national toll free number at (800) 772-1213 or online at http://www.socialsecurity.gov/disabilityresearch/wi/generalfinfo.htm.

MRS also strives to assist their customers in applying for federal jobs that are a good fit for their skills and abilities. Counselors can complete a “Schedule A” letter, which allows persons with disabilities to apply for competitive and non-competitive jobs and be considered by an appointing authority. The requirement for being considered for these federal positions is that an individual must provide proof of an intellectual disability.

Michigan Rehabilitation Services organizational vision is to promote an inclusive workforce system that provides each individual with a disability the opportunity for employment leading to independence.
severe physical disability or a psychiatric disability. The proof of disability can be obtained from a licensed vocational rehabilitation specialist (state or private) licensed medical professional (a physician or other state-licensed medical professional). If applicants are selected for a job they must be able to meet the requirements and be able to perform the essential job duties with or without reasonable accommodation(s). There are hundreds of federal jobs located on USAJobs.gov that are available for those who are interested and qualified.

When applying for a federal position you will fall into one of two categories. If you have previously been a federal employee or you are a veteran you are considered to have “special status”. Otherwise, you will select the “Open to All US Citizens” option to gain access to employment opportunities. It is important to fill out the application thoroughly or you risk being eliminated for consideration. MRS customers are encouraged to apply for federal jobs for which their skills and abilities are a good match.

The Business Network Unit (BNU) is a division of the Department of Human Services that provides ergonomic assessments and other accommodations that can allow individuals with disabilities to be successful on the job. The services they provide reduce or eliminate job hazards that may cause injury and illness on the job which could lead to missed work days or job loss. MRS customers can be referred to BNU by their MRS counselors. BNU can provide an assistive technology consultation, job analysis, occupational therapy evaluation, work site evaluation, a vocational assessment for Hearing loss, ADA evaluation/consultation and many other additional services.

Michigan Rehabilitation Services is committed to the pursuit of obtaining and maintaining quality employment for persons with disabilities. We are known for our innovative approaches in assisting customers and we are always striving for continuous improvement in providing services to our customers. Rehabilitation counselors are instrumental in providing guidance to customers regarding their vocational goals and objectives which result in successful employment outcomes for the customer, counselor and MRS.

The Center for the Education of Women (CEW) at the University of Michigan is an organization that provides a multitude of services for women as well as the general public. Services include counseling, library access, scholarship programs, and workshops and lectures on relevant topics. Currently, the CEW is offering several lectures and workshops on topics related to career and employment such as: retirement, cover letter and résumé writing, and equal pay for equal work. These and other lectures and workshops are open to both men and women and often are available for free or minimal cost. Registration is required for all programs as space is limited. Please call the CEW for more information (734-764-6005), email at registercew@umich.edu, or visit www.cew.umich.edu.

**Upcoming Events:**

**Career Change Workshop #4:**

**Networking Effectively: In Person and Online**

Topic Area: Career Development

October 28, 2013 - 4:00pm - 6:00pm

CEW, 330 E. Liberty Street, Ann Arbor, MI 48104

Presenters: Zoe Zulakis and Kate Balzer, MSW Counseling Interns

**Career Change Workshop #5:**

**Career Panel - Real Life Stories of Career Transition**

Topic Area: Career Development

November 4, 2013 - 4:00pm - 6:00pm

CEW, 330 E. Liberty Street, Ann Arbor, MI 48104

Panelists TBA

**Leadership: Developing Your Strategic Advantage**

Topic Area: Leadership Development

November 19, 2013 - 5:00pm - 7:00pm

Center for the Education of Women, 330 E. Liberty Street, Ann Arbor, MI 48104

Presenter: Chanel F. DeGuzman, Ph.D., SPH Program Manager

**Wills and Trusts: What do I need??**

Topic Area: Finances

November 21, 2013 - 12:00pm - 1:30pm

Palmer Commons, 6th Floor, Boardroom 4

Presenter: Terrence G. Quinn, Esquire
During the summer when he was 18-years old, John Palmer was working at the Ann Arbor Country Club as a Pool Manager and Life Guard—and was on the verge of starting his college career at Michigan State University (MSU). He was a championship swimmer, having won many awards while in high school, including All State & All American. He certainly knew his way around a swimming pool.

On August 5, 1996, while “messing around” at the edge of the pool in 5 ½ feet of water, John hit his head on the bottom and fractured his C-7 vertebrae, causing an “incomplete” spinal cord injury (SCI). He didn’t lose consciousness, though, and was able to bring himself up to call for help. An ambulance took him to University of Michigan Hospital, where he spent the night in the Emergency Room. The following morning he had surgery to fuse his cervical vertebrae C5-6-7—with the aid of a bone (transplanted from his hip) and the implantation of some titanium. John said the “anterior” approach to the vertebrae was used, thereby avoiding the need for a “Halo” appliance. Three days later he was transferred to the hospital’s 6A unit, for SCI rehabilitation.

In inpatient rehabilitation, John excelled at the physical therapy part of the program due to his good upper body musculature from being a swimmer. The “occupational” therapy part of the program didn’t excite him so much, he says, as he already had a college plan to become a Civil Engineer. He was discharged from 6A by the end of October.

After the delay imposed by the accident and hospitalization, John enrolled at Washtenaw Community College for the Winter/Spring semester and then went on to MSU to start his pre-engineering school courses. Somewhere along the way, he changed his major to telecommunications with a minor in computer networking which has wound up working very well for him.

John’s first job after his SCI was during a summer break from his classes at MSU. With the assistance of an employment agency in Ann Arbor, he applied for some temporary work and got hired by the Director of the Society for College and University Planning; a University of Michigan affiliated organization. The work involved assisting the director in organizing the annual SCUP conference. John coordinated communication between universities, scheduled keynote speakers, helped with graphic design, arranged conference agendas and took care of many other details. John reports this work was important in building his confidence in his post-accident ability to contribute in a professional work environment.

After finishing his B.A. degree, John’s first regular employment was with Electronic Data Systems (EDS). EDS is an American multi-national information technology, equipment and services company, headquartered in Plano, Texas. In this job, John provided IT technical support for US Postal Service and GM Computer Systems, including system upgrades at GM manufacturing plants across the Great Lakes region. John’s work involved extensive periods of travel.

After three years, John accepted a position with Auto-Owners Insurance, which is a Fortune 500 company that writes auto, home, life and business insurance in 26 states. The Lansing, Michigan, home office has over 2,000 employees, including John. There are multiple groups and multiple systems at Auto-Owners, and John works in the Tailored Protection Policy (TPP) Systems group, which handles over two million commercial insurance policies, each tailored to the individualized needs of each business. John and the other fifteen in the TPP group write and maintain computer codes needed to keep track of the information in each policy. John has now been at Auto-Owners for eight years.

John reports that his work environment is a large office building. Both the desk and computer monitors are adjustable, which is very helpful for working from a wheelchair. His work week is Monday to Friday, 8:00 AM to 4:30 PM. John often needs to give
presentations to groups, and so took a “Dale Carnegie” course to sharpen his skills. He doesn’t usually have to take home any work, but he does occasionally have to “solve a problem” from home which can and has happened even in the middle of the night.

When John was asked if his SCI has been a factor in his employment opportunities or choices, he replied that, yes, there had been jobs that he was interested in but that after finding out from the employer precisely what was involved he felt that his physical limitations would preclude him from doing well. And, John emphasized, he is very satisfied with the complex work that he does, which is both interesting and contributing to the well being of our society.

John lives by himself (with his dog, Duffy) in a home that he designed. Built 7 ½ years ago, it has 3 bedrooms, 2 baths and an attached garage. He does his own yard work, including mowing with his Craftsman, 30” cut lawn tractor. He has a “Free-Wheel” attachment that he can attach to the front of his manual wheelchair (lifting the castor wheels) which lets him more easily get around in the yard for doing trimming, chainsaw work if needed, and for snow shoveling in the winter.

His vehicle is a 2009 Toyota Camry with hand-controls. From the driver’s seat, he is able to take his rigid frame wheelchair apart, put the driver’s seat in furthest back position, and pull the chair parts in over his chest.

John does his own shopping and cooking, and works out at a gym 2-3 times weekly to keep himself physically fit. He uses the hand bike, does curls with cable weight machines, uses the EasyStand stander and goes for 3-5 mile “runs” with Duffy. He often lets Duffy pull him in his wheelchair, so Duffy will stay fit, too.

John also plays wheelchair rugby (scrimmages with the Great Lakes Storm), swims laps and occasionally goes scuba diving. He also enjoys boating and fishing, is an avid sports fan and attends MSU football/basketball, Detroit Tigers and Detroit Lions games. He reports that he is fortunate to have had minimal medical problems but also seems to work hard to maintain his health and wellness.

On their “run” together, it’s Duffy’s turn to pull John Palmer (so Duffy can stay fit, too).
Ticket To Work

By: Michelle A. Meade, Ph.D.

The Ticket to Work and Work Incentives Improvement Act of 1999 (TWWIIA) was signed into law by President Clinton in December of 1999 as one of several policies designed to meet the specific employment related needs of individuals with disabilities. TWWIIA contains provisions designed to: (1) eliminate the structural obstacles that have required individuals to choose between working and health insurance coverage; (2) enable individuals to exercise greater choice in choosing service providers and obtaining rehabilitation services; and (3) lessen the dependence of individuals with disabilities on the public benefits system, with its maze of regulations and restrictions.

The provisions of the Act included: (1) expanding the availability of healthcare services, including the ability to maintain Medicaid coverage while working; (2) a Ticket to Work and Self-Sufficiency Program (TWSSP) which allows consumers to exert greater choice and control over the employment services and supports they receive; and (3) the development of community-based work incentive planning and assistance programs, designed to provide accurate information on work incentives to SSA beneficiaries.

The Ticket to Work program also authorized the development of programs to protect the rights of people with disabilities as they returned to work. Protection and Advocacy for Beneficiaries of Social Security (PABSS) projects are funded in all 50 states and US territories to protect the rights of people with disabilities to return to work without jeopardizing their government-assisted benefits. Although PABSS provides legal assistance, this assistance does not extend beyond disability-related employment issues. Also while Protection & Advocacy services are free, P&A providers cannot take on every case.

The Ticket to Work Program has since been amended and updated in response to the needs and feedback of both individuals with disabilities and employment networks. In addition, the Work Incentives Planning and Assistance Program (WIPA) has replaced the benefits developed under TWWIIA. The current work incentives that are covered in amendments to the Social Security Act and TWWIIA include:

- A Trial Work Period (TWP)
- Re-entitlement Period (Extended Period of Eligibility – EPE)
- Revision of definition of Substantial Gainful Activity (SGA)
- Impairment Related Work Expenses (IRWE)
- Unsuccessful Work Attempt (UWA)
- Extended Medicare Coverage
- Continued Payments to Individuals Participating in a VR or Similar Program
- Plan for Achieving Self Support (PASS)
- Property Essential to Self-Support (PESS).
- Special Benefits for SSI Recipients Who Perform SGA Despite Severe Medical Impairment
- Medicaid Eligibility for SSI Individuals Who Work Despite Severe Medical Impairment
- Student Child Earned Income Exclusion
- Expedited reinstatement CDR protection based on work activity

These incentives are not available to all SSA beneficiaries, so it will be important for the individuals with SCI to contact a WIPA program or Advocacy agency to determine what supports they may qualify for. Overall, however, these incentives and policies seem to indicate a significant investment on the part of the federal government to make the employment or re-employment of individuals with disabilities as painless as possible.

More information about the Ticket to Work program can be found online at http://www.ssa.gov/work/overview.html or http://www.chooseworkttw.net . For questions or guidance specific to your situation please call the Ticket to Work Help Line at 1-866-968-7842 / 866-833-2967 (TTY) Monday through Friday from 8:00AM - 8:00PM EST.
Resources and Websites Concerning Employment and Disability

Federal Government Disability Information Online:

http://www.disability.gov is the federal government website for comprehensive information on disability programs and services in communities nationwide. The site links to more than 14,000 resources from federal, state and local government agencies; academic institutions; and nonprofit organizations. You can find answers to questions about everything from Social Security benefits to employment to affordable and accessible housing.

Michigan Rehabilitation Services (MRS)

http://www.michigan.gov/dlhs/0,4562,7-124-5453_25392-272088-00.html or call (517) 335-0399 or 1-800-605-6722; (TTY) Line: 1-888-605-6722 Website provides complete information about services, how to apply, and where offices are located.

Job Accommodation Network (JAN)

http://www.jan.wvu.edu/ or 1-800-526-7234 (V): 1-877-781-9403 (T). A free service funded by the Office of Disability Employment Policy in the U.S. Department of Labor to increase the employability of people with disabilities by providing individualized worksite accommodations solutions and technical assistance regarding the ADA and other disability related legislation, as well as by educating callers about self-employment options.

Federal Employment for Individuals with Disabilities


National Disability Rights Network

http://www.ndrn.org or 1-202-408-9514 (V); 1-202-408-9521 (TTY). The network is a federally-mandated Protection and Advocacy system and Client Assistance Programs for individuals with a range of disabilities. This organization provides legal and client advocacy services to persons with disabilities throughout the U.S. Major topics include advocacy, equal opportunity, informed choice, and self-determination.

Michigan Protection and Advocacy Service, Inc. (MPAS)

http://www.mpas.org or 517-487-1755; (V/TDD); 800-288-5923 or 800-288-5923 (In State) CAP only: 1-800-282-5896 or 1-800-292-5896; Fax: 517-487-0827; Michigan Protection & Advocacy Service, Inc. (MPAS) is the independent, private, nonprofit organization designated by the governor of the State of Michigan to advocate and protect the legal rights of people with disabilities in Michigan. MPAS services include information and referral, short-term assistance, selected individual and legal representation, systemic advocacy, monitoring, and training.

Social Security Administration (SSA)

http://www.ssa.gov/disability/ or 1-800-772-1213 (V); 1-800-325-0778 (TTY). The SSA site includes benefits information for individuals with disabilities including SSI and SSDI. The site is equipped with a benefits screening tool to assist in determining eligibility for various benefits programs. The site includes valuable guides, handbooks, facts, and figures that explains the details of SSA policies and procedures.

Disability and Business Technical Assistance Center (DBTAC)

http://wwwadata.org/ or 1-800-949-4232 (V/TTY). This website is a national network that encompasses 10 U.S. regional ADA centers. The center specializes in providing current referrals, resources, and training services regarding the ADA to governmental agencies, employers, businesses, and individual with disabilities.

Americans With Disabilities Act (ADA) Information Line

http://www.adaaa.org/ or 1-800-514-0301 (V); 1-800-514-0383 (TTY). Provides online information regarding ADA regulations. Callers can receive live assistance from ADA specialists in answering technical questions. Also provides publications and other resource materials.


http://www.eeoc.gov/ or 1-800-669-4000 (V); 1-800-669-6820 (TTY). The EEOC monitors equal opportunity laws and discriminatory practices as they apply to employers, particularly the federal government’s Rehabilitation Act of 1973 and the Civil Service Reform Act of 1978. Other laws covered by the EEOC are the Civil Rights Act of 1964, The ADA of 1990, The Age Discrimination in Employment Act (ADEA), and The Equal Pay Act (EPA).

RRTC on Employment at Virginia Commonwealth University

http://www.worksupport.com/ Provides resources for professionals, individuals with disabilities, and their representatives. The team is committed to developing and advancing evidence-based practices to increase the hiring and retention for individuals with disabilities.

RRTC on Employment Policy for Persons with Disabilities

http://www.anima.org or 1-800-288-5923 (V/TDD); 1-800-514-0383 (TTY). Provides information on employment and economic self-sufficiency policies.

National Center on Secondary Education and Transition (NCSET)

http://www.ncset.org/ or call (612).624-2097 NCSET was established to create opportunities for youth with disabilities to achieve successful futures. NCSET provides technical assistance and disseminates information focused on four major areas of national significance for youth with disabilities and their families —

- Improved access and success in the secondary education curriculum.
- Accessing postsecondary education, meaningful employment, independent living and participation in all aspects of community life.
- Supporting student and family participation in educational and post-school decision making and planning.
- Improving collaboration and system linkages at national, state, and local levels.
Brian Elliott’s SCI/employment story

By Eric A. Appleberry, DDS, MS

Like many college students, Brian Elliott spent his summers working and playing in his hometown. In the summer of 2005, Brian, a twenty year old sophomore at Central Michigan University (CMU) in Mt. Pleasant was studying Sports Administration, and working on the grounds crew at the Tecumseh Country Club. However, on July 20th, his life changed when he was playing with three long-time friends on a pontoon boat in the shallow water of Loch Erin Lake, not far from his home in Tecumseh, Michigan.

Brian doesn’t remember how his accident happened, just that he was under the water but couldn’t move. Fortunately his friends noticed that he wasn’t moving, dove in, got him back onto the boat and headed to shore. Brian was conscious, and breathing but not able to move his body. One of his friends called a relative/physician, Dr. Gordon Guild, who lived nearby and immediately came to help. It took just a brief evaluation for Dr. Guild to see that Brian needed to be quickly taken to a hospital. He called for a “Life Flight” helicopter.

At Ohio’s University of Toledo Medical Center, Brian was diagnosed as having suffered a C-6 vertebral fracture/spinal cord injury. Surgery to do a C5-6-7 fusion was performed and a “Halo” was placed to stabilize the fracture/fusion. [A “Halo” is a circular metal ring that is firmly attached to the person’s skull with screws. A ring is then attached to a padded but firmly fitting “Halo vest” around the person’s upper torso/chest. It is a fixation mechanism that stabilizes a person’s neck/bone positions, while allowing mobility for the rest of his/her body.]

Ten days later the Halo was removed and Brian was transferred to the University of Michigan Hospital’s 6A unit for SCI rehabilitation. He was in the rehab unit until the end of October, 2005, when he moved back to his parents’ home in Tecumseh. His parents had modifications made to the garage, bathroom, laundry room, and doorway to make the home wheelchair accessible.

Brian has a manual wheelchair for use around the house, but for out-and-about mobility he has a power wheelchair, which he also pulls into the driver’s position of his Pontiac Montana minivan conversion. Brian reports that the van conversion and ramp has generally worked well.

After discharge from University of Michigan’s 6A unit, Brian had follow-up physical therapy (PT) at the University’s Outpatient Clinic, MedRehab, located at the Briarwood Mall in Ann Arbor. While at this clinic, Brian got connected to a researcher working with the Functional Electrical Stimulation (FES) program at the Cleveland Clinic, in Ohio. Through this program he has had electrodes implanted in several key leg and lower back muscles used for standing. These electrodes, when activated, cause muscle contractions to straighten the legs. But for Brian to get to the actual standing position, he uses a walker so that he can use his arms to help bring his body up and then maintain balance (see picture on next page). Brian uses this mechanism 3 to 5 times a week, to help maintain his standing muscles and leg bone strength.

The accident and rehab process threw Brian off track in his studies, but not for long. Even though it was too late that fall for him to return to CMU, he was determined to continue his college education. Only there was a new wrinkle—he had become unsure of what he wanted to study. Psychological counseling is a part of the comprehensive rehabilitation program offered at UM’s 6A unit. He had been so impressed by this that he considered changing his major to psychology.

While trying to decide which program to pursue, in January, 2006, he started taking general and transferable classes at Jackson Community College.

In the fall of 2006 Brian returned to his studies at CMU and changed his major to psychology. He was fortunate to find a Mt. Pleasant apartment that needed only minimal modification. He was even able to bring his dog, Zeus, with him. Not missing much of a beat, he graduated with a B.S. degree in May of 2009.

After graduation Brian moved back
to his parents’ home in Tecumseh, and started looking for a job where he could put his psychology degree to good use. It wasn’t forthcoming, so Brian started doing substitute teaching in the Tecumseh/Clinton public school systems. He taught classes from the 3rd grade and up. Initially, he was teaching about once a week, but that increased so that he was regularly teaching 2-3 times a week.

While he enjoyed classroom teaching, he realized that he still really wanted to be in Sports Administration. His original impetus for Sports Administration had come from work, umpiring Little League baseball and refereeing soccer games for kids when he was a teenager.

So Brian re-enrolled at CMU in the fall of 2012, and is on track to finish the M.S. graduate degree in May of 2014. While Brian’s path to his goals was delayed slightly and not as straight as anticipated, there is no doubt that with his tenacity, Brian will, indeed, get that degree in Sports Administration.

Jeff Hines, a DDS Candidate at the University of Detroit Mercy School Of Dentistry, sustained a T9 spinal cord injury in September of 2011. As an avid skier and adventure enthusiast prior to his injury, Jeff was anxious to get back to sports. His first time on an adaptive sit ski was within a few months of his injury, but it wasn’t until this past winter that an “intense passion was ignited.” Through his good friend Jim Munson, a fellow adaptive sit skier, and Michigan Adaptive Sports (M.A.S.), Jeff found the resources that he needed to learn a new method of skiing. M.A.S., an all-volunteer run organization, provided Jeff with equipment, instruction, and guidance to return to a sport that he missed.

Jeff Hines is now a strong advocate for adaptive sports and plans to be an adaptive ski instructor next winter. Jeff believes that adaptive skiing “enables someone to learn how to get past their limitations.” It provides the feeling of “enjoyment while experiencing unrestricted movement out of your wheelchair.” As far as the mental recovery it provided for him after his SCI, he states, “I don’t know where I would be without it.”

### Getting Back Into Sports

**By Patty McTigue, MSE, ATP**

Jeff Hines, a DDS Candidate at the University of Detroit Mercy School Of Dentistry, sustained a T9 spinal cord injury in September of 2011. As an avid skier and adventure enthusiast prior to his injury, Jeff was anxious to get back to sports. His first time on an adaptive sit ski was within a few months of his injury, but it wasn’t until this past winter that an “intense passion was ignited.” Through his good friend Jim Munson, a fellow adaptive sit skier, and Michigan Adaptive Sports (M.A.S.), Jeff found the resources that he needed to learn a new method of skiing. M.A.S., an all-volunteer run organization, provided Jeff with equipment, instruction, and guidance to return to a sport that he missed.

Jeff Hines is now a strong advocate for adaptive sports and plans to be an adaptive ski instructor next winter. Jeff believes that adaptive skiing “enables someone to learn how to get past their limitations.” It provides the feeling of “enjoyment while experiencing unrestricted movement out of your wheelchair.” As far as the mental recovery it provided for him after his SCI, he states, “I don’t know where I would be without it.”

### Adaptive Sports in Michigan

**By Patty McTigue, MSE, ATP**

Although the warm temperatures are disappearing, the fall and winter are still great times to get outside and enjoy the outdoors. Michigan offers various adaptive sport opportunities:

**Michigan Adaptive Sports:**
- Stand up and sit down skiing and snow-boarding: Pine Knob Ski Resort in Clarkston, MI and Schuss Mountain in Mancelona, MI. Please contact michiganadaptablesports@gmail.com
- Cannonsburg Challenged Ski Association: Belmont, MI. Adaptive ski lessons are held weekly during the same two hour time slots each week of the season: 6-8 pm on Tuesday–Thursday evenings, as well as Sunday (1-3 pm, 2-4 pm, 3-5 pm). Contact: 616-874-3060
- Wheelin’ Team 457: Contact wheelinteam457@yahoo.com
- Mary Free Bed Wheelchair and Adaptive Sports Programs Contact 616-242-0351 or sports@maryfreebed.com
- National Resources for Adaptive Sports

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The Affordable Care Act: The Health Insurance Exchange Market in Michigan

By Elham Mahmoudi, PhD

At this point, most people have heard about the Affordable Care Act (ACA) – or Obamacare, as it is often referred to. However, how it may impact you or your family may be less clear. This article was written to provide information about the ACA and specifics about eligibility and the Online Exchange Market in Michigan.

Starting on Jan. 1, 2014, all U.S. citizens will be required to have health insurance. Under the ACA, providers of health insurance will not be allowed to deny coverage because of pre-existing conditions. Beginning in October 2013, adults under the age of 65 who do not have coverage through their employer or a government-sponsored program, such as Medicaid or Medicare, will be able to purchase health insurance and apply for available tax credit subsidies through state-based exchanges. The state exchanges are websites designed to facilitate the purchase of health insurance. They will allow individuals to compare different policies and choose the health insurance that best suits their needs. Information about Michigan’s exchange market can be accessed at: http://www.healthcare.gov

If you or those you know need to find a policy and buy health insurance, it will be important to be familiar with the terms and definitions used in the health insurance market. The following is a summary of some useful definitions:

**Health Insurance Terminologies**

**Monthly Premium:** The amount that you or your employer pays each month.

For example, a single person in Michigan may pay a monthly fee of $200, whether he/she uses any healthcare services or not.

**Deductible:** The amount you have to pay each year before the plan starts to pay.

For example, if your deductible is $500, you would pay 100% of your healthcare charges until the amount you have paid reaches $500; then, some health services you receive might be covered at 100%. For others you might have to make a copayment for additional services.

**Actuarial Value:** The percentage of the total covered expenses that the plan covers, on average, for a typical population. For example, a plan with a 70% actuarial value means that consumers would on average pay 30% of the cost of healthcare expenses through features like deductibles and coinsurance. Additional subsidies for people will raise the actuarial values and limit the cost sharing.

**Out-of-pocket Cost:** Expenditures that are directly paid by the patient; these expenditures, most likely, will not be reimbursed. For example, a $15 copay for a doctor’s visit is an out-of-pocket cost for the patient.

**Copay:** Copay is a fixed amount you pay for a healthcare service, usually when you receive the service. The amount varies by the type of service (physician visits, specialty visits, prescription drug, etc). Usually copays don’t count toward your deductible. For example, for a visit to a specialist you might have a copay of $30. The copay for a prescription drug might be $10 to $20.

**Coinsurance:** Coinsurance is your share of the costs of a healthcare service. It is usually defined as a percentage of the total charge for the service. For example, say you have already paid your $500 deductible and your coinsurance is 20%. For a $100 healthcare bill, you would pay $20 and your insurance company would pay $80.

Individuals looking for insurance and using the exchange market also need to be aware of what different types of coverage involve. Remember that not all plans offer the same level of coverage. The four main categories of insurance - in order of most comprehensive to least comprehensive plans - are platinum, gold, silver, and bronze. In general, more comprehensive plans have higher premiums but lower out-of-pocket costs.

- Gold and platinum plans have the most generous benefits, covering, on average, about 80-90% of total healthcare costs.
- Silver plans offer less generous in benefits, covering, on average, about 70% of the costs; however, they have lower monthly premiums.
- Finally, the bronze plans have the lowest monthly premiums but have the highest out-of-pocket costs and deductibles (covering about 60% of total costs).

Keep in mind that each plan will likely be associated with a specific provider network. Some plans may have narrow provider networks, so your favorite physician or hospital might not be in any particular plan that you might choose.

In addition, be aware that there will be substantial differences in the price tag for a policy based on age, state or region...
where you live, and whether or not you smoke. For instance, a 30-year-old non-smoker in Michigan might buy a plan for far less than his smoker friend who is in the same age group.

The Affordable Care Act has already worked to support many community health centers around the U.S. to educate people and help them select the insurance that best fits their circumstances. Listed below are the 22 (out of 35) community health centers in Michigan that have been funded to provide staff and training materials to help Michigan residents acquire health insurance. These centers should be providing seminars and telephone, online, and in-person assistance to those who are currently without health insurance. Staff at these centers should also be able to help individuals apply for the federal government tax subsidies that are in place to offset health insurance costs. Most people without insurance will be eligible to get help purchasing the health policy they want. To find a health center in your area, visit http://findahealthcenter.hrsa.gov.

Michigan Health Centers Funded by the Affordable Care Act
• Baldwin Family Health Care, Inc., in Baldwin
• Bay Mills Indian Community in Brimley
• Center for Family Health in Jackson
• Cherry Street Services in Grand Rapids
• County of Ingham, Health Department in Lansing
• Covenant Community Care Inc., in Detroit
• Detroit Community Health Connection in Detroit
• Detroit Health Care for the Homeless in Detroit
• Downriver Community Services, Inc., in Algonac
• East Jordan Family Health Center in East Jordan
• Family Health Center, Inc., in Kalamazoo
• Hackley Community Care Center, Inc., in Muskegon Heights
• Health Delivery, Inc., in Saginaw
• Lakeland Immediate Care Center in Cassopolis
• MGH Muskegon Family Care in Muskegon
• Mid Michigan Health Services in Houghton Lake
• Oakland Primary Health Services, Inc., in Pontiac
• Saint Mary’s Health Care in Grand Rapids
• Sterling Area Health Center in Sterling
• Thunder Bay Community Health Service, Inc., in Hillman
• Upper Peninsula Association of Rural Health Services Inc., in Marquette
• Western Wayne Family Health Centers in Inkster

In order to make sure all Americans will have health insurance under the ACA, many states have expanded their Medicaid eligibility law. In Michigan, after months of negotiations, Governor Snyder signed an expansion of Medicaid into law on September 16th, 2013. This will now allow Michigan residents who work at minimum wage jobs or earn less than 138% of the federal poverty level (about $15,800 per year for a single person or $32,500 per year for a family of four) to qualify to receive 100% healthcare coverage as a Medicaid beneficiary, free of charge. This is likely to increase the number of people for whom Medicaid will be the pivotal safety net by more than 300,000 newly eligible individuals.

When an individual fills out an online exchange application and provides information about himself and his family income, the state exchange program will determine if he/she is eligible for Medicaid or for other government subsidies. Furthermore, individuals who earn up to four times the federal poverty level – about $45,900 per year for a single person or $94,200 for a family of four – are now eligible to receive subsidies to help pay for the new health coverage. Those individuals who earn up to 250% of the federal poverty level are eligible for additional cost-sharing subsidies. Cost-sharing refers to out-of-pocket expenses such as insurance deductibles and coinsurance; these may be subsidized based on income level.

To find out if you or a family member may be eligible for a healthcare subsidy or cost-sharing, or to determine how much you might spend on health insurance, the Kaiser Family Foundation provides the following online calculator: http://www.kff.org/interactive/subsidy-calculator/. In order to find out if you are eligible for Medicaid, you might need to fill out a separate online application: https://www.mibridges.michigan.gov/access/.

At least initially, there are likely to be problems with the system. Glitches will occur that will need to be ironed out over time. In addition, health insurance is an expensive commodity, and out-of-pocket costs will remain high, even with federal and state financial assistance. It is important to know, though, that help is available and the annual savings that people can receive from the federal government may be pretty high.

Open enrollment in the new exchange market has begun and will run through March 31, 2014. The new health...
**Josh Marshbanks**  
**Age:** 26  
**Date of Injury:** August 13th 2009  
**Level of Injury:** C5, incomplete

**SCI Access:** Tell us about yourself! Have any significant events taken place since your injury? Do you have any hobbies? What have you accomplished?

**Josh:** In August of 2009, I sustained a C5 spinal cord injury as a result of a diving accident. I am 6’7” and the pool was 4 feet deep. Since that time, I’ve been focused on trying to improve myself both physically and mentally. Because I’ve always been a huge fan of music and video games, I always thought that when I grew up I would do something involving those things. However, never did I think that I would start a company based around helping those in a similar situation as I found myself in.

Music and video games get my creative juices going. A few years ago, I became a consultant on a project with the UM Department of PM&R and 3D Lab to create an iPad game to help those newly injured become more aware of their needs after a spinal cord injury. In the game, we try to introduce what someone in my situation is going to be faced with in daily life - obstacles like the furniture in your apartment or having to monitor your pressure reliefs. The character moves faster as you progress through the game just like one learns to by being active in rehab. We try to keep the dialogue upbeat and snarky. I wasn’t always happy going through rehab and the game is a relatable representation of that.

This experience gave me the opportunity to take ideas that I have had and suggest them to be part of the game. For example, when I went to a concert at the Magic Stick, I soon realized that it was wheelchair inaccessible. Many places are inaccessible just like the Magic Stick but it is something you don’t realize until you’re in a wheelchair. This experience inspired me to suggest a level in our iPad game that involves a concert experience.

In addition to my work assisting with the iPad game, I also started a business. After personally seeing a lack of good, affordable transportation and speaking with others with the same experience, my colleagues and I saw that we could make a difference and started Fare to Freedom. We are a non-emergency transportation service that knows how to work and transport individuals who use wheelchairs from first-hand experience. We are celebrating our first year! What really helped me figure out what I wanted to do was getting out and talking to people. A job is not going to find you. You have to go out and find a job and if you can’t find one, make one. Nothing is stopping you from achieving new goals in life. Not even a wheelchair.

**SCI Access:** Share your advice! What has kept you motivated since your injury? What have you done to overcome the challenges you have met along the way?

**Josh:** After my injury, I was mad at the people around me, my life and especially myself. The physical part was easy to overcome because you find out really quickly what you can and can’t move. It’s the emotional state of mind that is difficult. I didn’t want to sit in a wheelchair when I first came home. We bought a recliner where I sat and checked out celebrity gossip and Facebook games. When I realized I wanted to be more independent, that’s when I got back into a wheelchair.

Each day since I made the decision to get back in a wheelchair I have tried to do something different. Whether cooking, cleaning, putting on a shirt, it was all up for grabs and completely new. Each task was a new puzzle and I like puzzles. Now I can cook my own meals, use the actual controller to play video games, even use a computer without speech software or adaptive tools. I just keep doing things so I don’t dwell on it.

**SCI Access:** Please share your thoughts regarding your return to college. What went into the decision–making process, how are things going regarding classes and your living situation? Can you live independently? Was it difficult finding assistance there?

**Josh:** I realized that before my injury I had stopped going to school leaving an unfinished degree. Years had gone by. But going back to school was part of me bettering myself and it was just another activity that would challenge me. I find it great because I get to be independent by getting out of my home and being active both in mind and body, which I believe everyone needs to do. I’m going to Schoolcraft Community College and the counselors were of great help in assisting me. They gave me an additional push to finish my degree. So far, classes are going great!

**SCI Access:** Thanks, Josh, for sharing your story.

The SCI Access Newsletter would like to include news and advice from you, our alumni, in future newsletters! Please contact us SCI-Model-System@umich.edu or canewman@med.umich.edu for more information.
Adaptive Sports, Continued from page 11

ing fishing, racing, shooting and team sports. Includes a calendar of events and various links.  
http://www.pva.org/site/c.ajJK9NJcJ2E/b.6305961/k.4023/Additional_Adaptive_Sports_Resources.htm

Adaptive Hunting
Buckmasters American Deer Foundation
For sportsmen who have difficulty holding, aiming, or shooting a gun or rifle, there are a variety of adaptive devices available. Since much of the adaptive equipment used is homemade or custom made, Buckmasters American Deer Foundation has put together a website that includes lots of information and videos. Much of the information is from fellow hunters showing what they had devised for themselves. Many people use it for inspiration in developing their own adaptive devices.

The adaptive hunting equipment found through the Buckmasters includes things such as: Pneumatic switch activated converted crossbow, EZ Pull trigger Assist, iScope, the Smartphone Adaptor for your Scope. Also included are gun mounting options and adaptive hunting blinds.

Be Adaptive Equipment LLC
http://www.beadaptive.com/
Sells adaptive firearm equipment for people with limited or no upper extremity function. For example: HQ 100 is designed for individuals with no hand or arm movement. Model HD100 – Finger Control Hand Device – A device to straighten and add support to curled fingers to allow user to pull the trigger of a gun or crossbow.

Employment After Spinal Cord Injury
Continued from page 3

receive disability-related compensations and do not need or even fear a paid employment situation. The meaningful activity does not have to be paid employment – many people find satisfaction from volunteering, raising children or going to school.

The other consideration in making the decision about returning to work is the timing. Some people with new SCI feel that they first need to relearn their bodies and capabilities before going back to work. Others want to first invest time in obtaining additional skills, certifications or education. It is important to consider employment as an option and a right, even if it is not the best one for you right now. Arm yourself with information and make sure not to minimize the psychological importance of employment when making a decision.

Affordable Health Care Act
Continued from page 13

insurance system will mean a big change for many from our current system in the United States; for many uninsured and those who have been denied affordable insurance because of pre-existing conditions, this represents a positive change that is likely to lead to better access, better care, and better health for the country.

RESEARCH PARTICIPANTS NEEDED!
The University of Michigan is conducting a new study to learn more about how neurogenic bladder and bowel in people with spinal cord injury affect quality of life. We’re also very interested in speaking with caregivers/personal attendants. The study is designed for people with neurogenic bladder and bowel due to a SCI which occurred less than a year ago OR whose injury happened more than 10 years ago OR a caregiver for someone with neurogenic bladder and bowel due to SCI. The study involves a one-on-one, face-to-face interview lasting 60 – 90 minutes. For those with SCI, there is also a series of surveys to complete by telephone taking another 60 – 80 minutes. You will be compensated for your time.

If you are interested, please call or email us at (734) 763-6189 or DOD-SCIStudy@umich.edu and mention “DOD SCI Study” to learn more.

Study ID: HUM00068800 IRB: IRBMED Date Approved: 9/23/2013 Expiration Date: 11/19/2013

Insights and Information for People with SCI
The University of Michigan Spinal Cord Injury Model System publishes SCI Access. This newsletter is designed to provide information on research, treatment, and social issues related to rehabilitative care, spinal cord injury and disability. Established in 1985, the University of Michigan Spinal Cord Injury Model System is supported by grant #H133N110002 from the National Institute on Disability and Rehabilitation Research, Office of Special Education and Rehabilitative Services, U.S. Department of Education, Washington, DC

Denise G. Tate, PhD, Co-Director, Co-Principal Investigator
Anthony Chiodo, MD, Medical Director, Co-Director, Co-Principal Investigator
University of Michigan SCI Model System, 300 N. Ingalls, Room N12A09
Ann Arbor, MI 48109-5491
Phone: 734.763.0971; Fax: 734.936.5492
E-mail: SCI-Model-System@umich.edu
Website: http://www.med.umich.edu/pmr/modelsci/

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Editor: Michelle Meade, Ph.D, Co-Editor: Maggie Travin, M.A.
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University of Michigan Comprehensive Wound Care Clinic
We are pleased to inform you that the University of Michigan Comprehensive Wound Care Clinic will open November 18, 2013. The new clinic is a multidisciplinary hub for patients who have outpatient wound management and treatment needs. This multidisciplinary clinic will be staffed by specialists from plastic surgery, general surgery, physical medicine and rehabilitation, family medicine, podiatry, and physical therapy wound care. Consultations with dietitians, social work, and other professionals will also be provided. Our Comprehensive Wound Care Clinic offers outpatient care for any number of wound issues such as pressure ulcers, complications from diabetes, and vascular wounds—or wounds caused by blood flow abnormalities like PAD (peripheral arterial disease) or venous stasis disease. To be seen at the Comprehensive Wound Care Clinic, you will need a referral from your physician.

Our Location:
Domino’s Farms,
Lobby M,
Suite 2800
2951 Earhart Rd.
Ann Arbor, MI 48105

Participants Needed for Research Study
The University of Michigan is conducting a survey study to learn more about bowel and bladder management and complications and their effect on quality of life among people with a spinal cord injury.

In order to participate, you must:
• Be at least 18 years old
• Have had a spinal cord injury for at least five years with associated changes to your bowel and/or bladder functioning
• Receive treatment for your SCI from the University of Michigan Health System or agree to make your medical records available
• Be willing to participate in an interview that will take approximately 1 - 2 hours

If you are eligible and participate, you will be compensated $20.
For more information, call our research office at 734-763-0971