

Legislative Report
SFY 2019 (7/1/18 to 6/30/19)

Spinal Cord Injury (SCI) and Brain Injury (BI) Rehabilitation Fund

FINAL YEAR REPORT

A. Utilized prioritization process to provide post-acute-care services for clients qualifying for the Traumatic SCI and TBI Rehabilitation Fund. Include number of:

| | |
|--|--------------|
| · Individual Intakes | 55 |
| · Individual clients served (an unduplicated count) | 46 |
| · Physical therapy services billed by CPT codes | 3,531 |
| · Occupational therapy services billed by CPT codes | 941 |
| · Speech therapy services billed by CPT codes | 80 |
| · Wellness Program services billed by CPT codes | 43 |
| · FUND clients receiving equipment loan | 15 |
| · Equipment pieces loaned to FUND clients | 23 |
| · FUND clients referred elsewhere for equipment loan | 4 |

B. Every 90 days the individual client's progress is monitored and tracked. Report the number of individual clients that:

| | |
|---|------------|
| · Demonstrated improvement in transfer skills | 97% |
| · Demonstrated improvement in wheelchair mobility skills, either manual, power-assist, or power | 83% |
| · Demonstrated improvement in ambulation with or without assistive devices | 87% |
| · Returned to work and/or school | 64% |
| · Participated in recreational, leisure, and/or sports activities | 97% |
| · Demonstrated improved quality of life | 96% |
| · Participated in the Extended Sustainable Rehab Services | 68% |

Kristi's Story



Kristi is a 33 year old homemaker and mother of four children. She sustained a spinal cord injury in a bouldering accident October 2018. She was in the hospital for one month and then discharged home wheelchair dependent. She was evaluated by Neuroworx November 2018 and was provided 6 ½ months of 70 physical therapy and 7 occupation therapy visits. She now drives independently and can ambulate short distances with assistive devices. She has returned to participating in her outdoor activities like camping, backpacking and hiking with the use of a trek chair. She is an independent mother and homemaker, volunteers at her children's school and is a mentor at local hospital for people who have paralysis.

Will's Story



Will is a 30 year old that was injured during a mountain bike accident August of 2018. He sustained a spinal cord injury and was discharged from the hospital in September 2018. Because of the Fund he was able to receive 7 months of additional physical and occupational therapy. He is independent with all mobility and self-care. He ambulates without assistive devices and is driving independently. He is able to ski, bike and hike and is hoping to return to work as a ski instructor.

SCI and BI Rehabilitation Fund (Section 26-54)

The Fund was established during the 2012 Utah Legislative Session (Section 26-54) as a restricted special revenue fund that consists of gifts, grants, donations, etc. that may be made to the fund from private sources; The fund shall be administered by the executive director of the Department of Health in consultation with the advisory committee. Funds shall be used to assist "qualified IRC 501(c)(3) charitable clinics" to provide physical, occupational, and speech therapy; and equipment necessary for daily living activities for people with spinal cord and brain injuries.

State Fiscal year 2019 was the start of a new 5 year cycle for the SCI/BI Rehabilitation Fund. The providers continue to treat patients that qualify for the Fund and provide outreach to other professionals to provide information about the Fund.

SCIs in Utah (2010-2014)

- In 2014 there were 95 Utah residents who were hospitalized due to a traumatic spinal cord injury (SCI).
- SCI cost of hospitalization from 2010-2014 totaled over \$54 million. This does not include the cost of care after hospitalization.
- The average length of stay for an SCI was 8.5 days.
- Males accounted for three-fourths (72%) of all hospitalization.
- Falls were the leading cause of SCI hospitalizations inform 2010-2014, followed by motor vehicle traffic crashes.
- Ages 85 and older had the highest rates of SCI.

TBI's in Utah

- Traumatic Brain Injuries is a leading cause of death and disability in Utah. Every day 60 people are admitted to the ER, seven are admitted to the hospital, and at least one person dies due to a TBI.
- TBIs resulted in nearly \$118 million in hospitalization charges in 2014; a 24.2% increase from \$95 million in 2013. This does not include costs for disability and long-term care, nor lost wages.
- Falls are the leading cause of TBI, followed by motor vehicle crashes.
- Age 85 and older have the highest rate of TBI

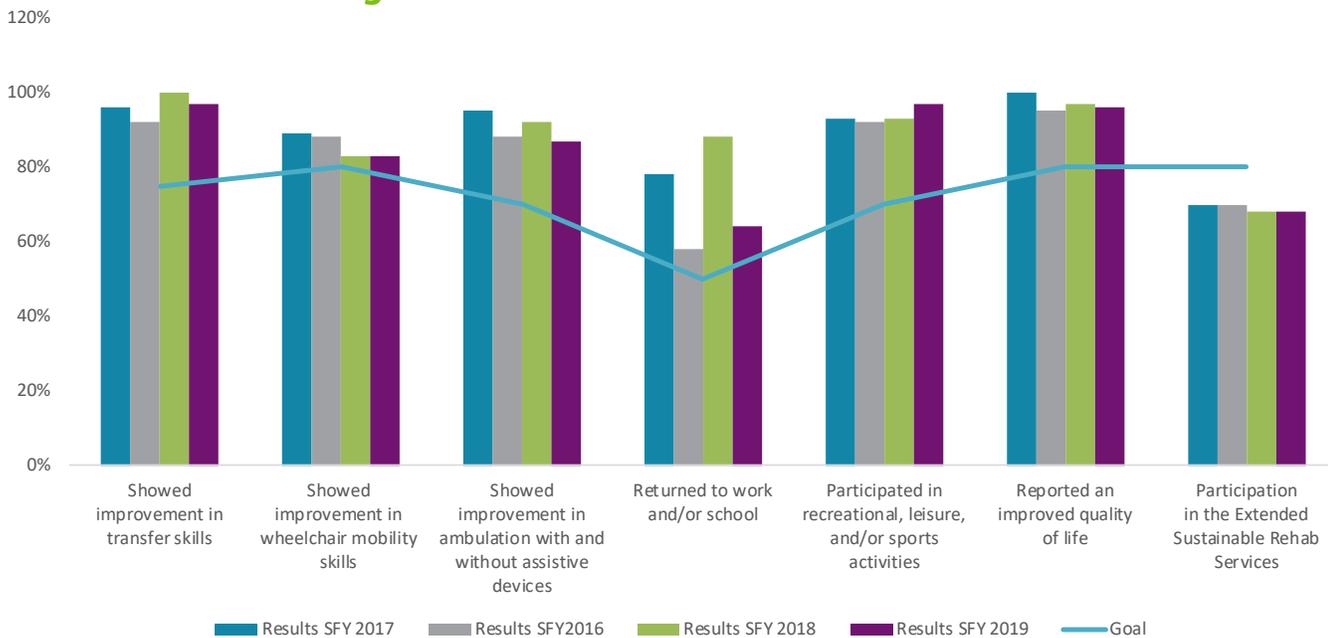
During SFY 2019 the SCI and BI Rehabilitation Fund has made a positive impact on people living with Traumatic Spinal Cord injuries and Traumatic Brain Injuries (TBI).

The contractors provided an intake assessment on 55 individuals. Because the Fund is payor of last resort each individual goes through a screening process. The contractors found alternative funding sources for 9 of the 55 individuals screened making it a total of 46 people served by the Fund. The outcomes reported by the service provider are:

- 96% Demonstrated improved quality of life
- 97% Demonstrated improvement in transfer skills
- 83% Demonstrated improvement in wheelchair mobility skills, either manual, power-assist, or power
- 87% Demonstrated improvement in ambulation with or without assistive devices
- 64% Returned back to work and/or school.
- 97% Participated in recreational activities
- 68% Participated in the Extended Sustainable Rehab Services (ESR)*

*ESR Focus on important, repetitive tasks for the experienced patient that does not require 1:1 care. It is goal-oriented, metric and therapist driven and patient initiated.

Figure 1: SCI/TBI Rehabilitation Fund Goal Chart



John's Story



John is 77 and sustained a spinal cord injury resulting from an abscess. When John started occupational and physical therapy he was not able to use his right hand or arm for any functional tasks, was dependent for all transfers and seated balance. He has progressed to being able to use his right hand to hold a regular spoon/fork and eat. He can use both hands to finger feed. John can now assist with transfers using a sliding board, and activate his trunk. He has progressed to holding a small cup with either left or right hand. John has progressed to using his left hand to hold his phone and right hand to touch and operate the phone functions. He can now write using a built up pencil/pen in his right hand. He has improved his arm strength to where he can reach his meal tray on his bedside table and get to his food. He has progressed from using head controls to drive his wheelchair to having controls at the end of each arm rest and only using his hands to control his power wheel chair. John is also a consistent participant in the Extended Sustainable Rehabilitation program which further advances his rehab potential.

Ryan's Story



Ryan regularly attends the Extended Sustainable Rehabilitation that is provided through the Fund 2 times a week for the last year and a half. Ryan utilizes equipment purchased through the Fund to stretch, work on strengthening and also uses the Crank Cycle and FES Bike for cardiovascular fitness and maintaining his range of motion. "I had my injury in 2015. Going to therapy regularly helps keep me loose and keeps my strength up so I can be more independent at home and maintain my quality of life. Without the SCI/BI Rehabilitation Fund I wouldn't have been able to have any therapy. My insurance benefits were maxed out and I would have been at risk of losing more function or even getting worse and ending up back in the hospital. Without therapy my tone gets out of control, but thanks to this grant I'm able to see a therapist and come to wellness (ESR) regularly to help keep it under control!"

Contractors provided a total of 3,531 units of physical therapy, 941 units of occupational therapy, 80 units of speech therapy and 43 unit of extended sustainable rehab services. This translates into about 1,155 one hour visit or about 25 visits per person.

Figure 2: SCI/TBI CPT SFY 2019

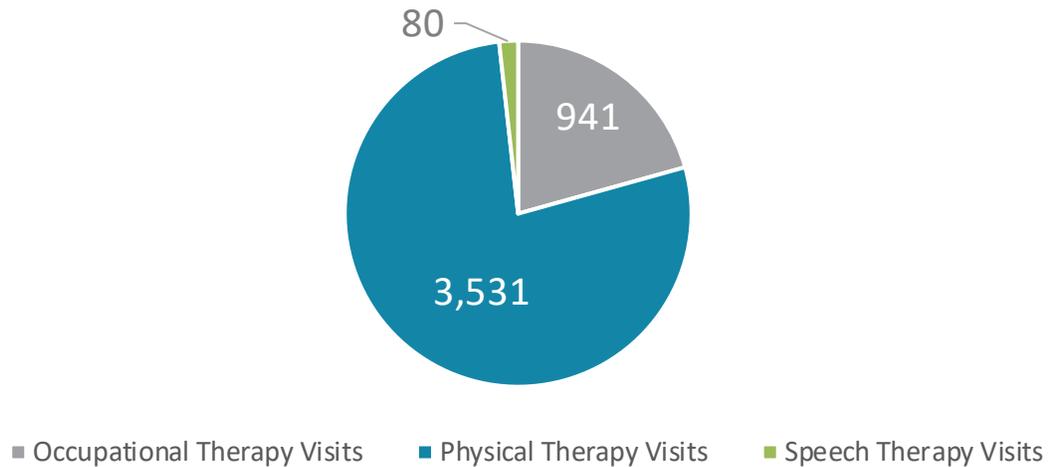


Figure 2: Speech, Physical and Occupational Therapy Visits SFY2015-2019



Accomplishments of Contractors University of Utah

- Approximately 63,000 minutes were spent by Fund recipients in wellness. This is equivalent to 4,200 CPT codes and time spent is estimated to be valued at \$364,476.
- 79% (19/24) clients required loaner equipment and 23 pieces of equipment were loaned.
- At least 10 presentations were completed during SFY 2019. Reaching over 670 professionals.
- Professionals reached: Utah Speech and Hearing Association, Social Work College of Health, College of Physical Therapy, case managers and Utah Valley grand rounds trauma doctors.
- Vendors at many conferences to promote the SCI/BI Rehabilitation Fund including the Brain Injury Alliance of Utah annual conference and TRAILS Expo.

Neuroworx

- Hosted a hands on seminar at their facility for physical therapy students attending the University of Utah and Rocky Mountain University.
- Neuroworx clinicians have developed relationships with local vendors to provide short term equipment as needed. They referred 4 people for necessary ADL equipment to other locations.
- Neuroworx clients of the Fund had no overnight hospital stays and a total of 9 visits to a primary care provider or other medical doctor. Two visits for pain management, two visits for urinary track infections, three visits for skin integrity issues and two visits for follow up care.
- Provided 9 presentations reaching approximately 534 people.
- Twenty-six people were provided an assessment to see if they qualify for the Fund and four of them were denied and found other ways to pay.

Brenden's Story



Brenden 27, sustained a traumatic brain injury in a motorbike accident while completing a jump in August of 2018. He was thrown from his bike, landing face first, losing his helmet and consciousness for an unspecified amount of time. Prior to his injury Brenden worked as a welder and in the oil industry. He enjoyed dirt biking and spending time with his 4 year old son when he was not working. Following this injury, Brendon presented with difficulty paying attention, remembering, learning new information and problem solving. All of these areas precluded him from returning to work or productively completing tasks around the house, community or caring for his son. Brendon participated in 7 telehealth speech therapy sessions to address these areas of difficulty. During that time, Brendon began tinkering with

his snowmobile engine. Brendon applied strategies to focus and shift his attention when faced with distractions, such as people walking by and talking to him. He was able to return to the task at hand, remembering where he left off. He was eventually able to recall details from the conversation which distracted him. Brendon improved his ability to recall instructions without cueing to the point where he was working in a friend's mechanic shop for a half day, without forgetting his assignments. Brendon also demonstrated problem solving skills, being able to apply measurements and mathematical calculations to complete mechanical projects. At the time of his discharge, Brendon continued to have mild insight limitations, not independently recognizing safety concerns regarding return to work in the oil industry. Brenden is now working Part Time, completed his Driving Evaluation and has been cleared to drive independently. Brenden is now pursuing going back to school to work towards his mechanic certificate.

Table 1: SCI/TBI Rehabilitation Fund Potential Cost Savings

| Outcome of services | Number of clients SFY 2019* | Savings per client | Total savings |
|--|-----------------------------|--------------------|--------------------|
| Return to work and/or school | 16 | \$14,808 | \$236,928 |
| <i>Average Social Security disability is \$1,234 monthly</i> Improvement in transfer skills | 29 | \$8,103 | \$234,987 |
| <i>Average wage of one CNA to visit 2 times a day</i> Improvement in wheelchair mobility | 15 | \$5,000-\$7,000 | \$105,000 |
| <i>Cost savings moving from power chair to manual chair</i> Improvement in ambulation | 25 | \$14,000 | \$226,825 |
| Improvement in quality of life (n = 36) | 31** | \$2,625 | \$81,375 |
| <i>Average cost of one hospital stay</i> <i>Average SCI rehospitalization stay is 23 days</i> | | | |
| Possible Yearly Savings*** | | | \$1,205,115 |

Source: Utah TBI Rehabilitation Fund

*Clients that demonstrated improvement

** Number of clients participating in the ERS program

***Cost to the Fund per person \$3,203 with total cost \$147,372 in services

Needs and Concerns Documented by Contractors

- More education and awareness about the SCI/BI Rehabilitation Fund services are needed among providers outside the Wasatch Front.
- Reaching rural communities to provide care.
- Barriers in the scope of work to provide tele-health services.
- Barriers to services continue to be transportation from rural areas of the State.
- Limited use of the fund to participants along the Wasatch Front. Providers are continuing their efforts with extending services in rural areas outside the Salt Lake City area.
- Limited money for marketing or outreach of the Fund.

Advisory Committee

The advisory committee met four times during SFY 2019 and conducted business according to the Open and Public Meetings Act. Minutes are posted at pmn.utah.gov. Reports from the contractors were received and reviewed with the Committee. After reviewing reports the advisory committee voted to open a new request for proposals to target certain areas outside of Salt Lake City. These cities are Logan, Ogden, Provo, Cedar City and St. George or other areas off the Wasatch front. The RFP was awarded to Intermountain Health Care. Current contract negotiations are underway.

Members of the Advisory Committee are as follows:

Andy Curry, SFY 2018 Chair and spinal cord injury representative
 Kris Sanford, spinal cord injury representative
 Nita Smith, current Chair and TBI representative
 Trisha Keller, TBI representative
 Dr. David Ryser, TBI/SCI professional
 Representative Eric Hutchins
 Senator Ann Milner
 Dr. Joseph Miner, Executive Director of the Utah Department of Health