

# Journal of Life Care Planning



Volume 18, Number 4, 2020

*Elliott & Fitzpatrick, Inc.*

# Recreational Therapy: Implications for Life Care Planning

*Betsy Kemeny<sup>1</sup>*  
*Heidi Fawber<sup>2</sup>*  
*Joanne Finegan<sup>3</sup>*  
*Debbe Marcinko<sup>4</sup>*

*<sup>1</sup>Recreational Therapy Program, Slippery Rock University*

*<sup>2</sup>HLF Consulting, LLC*

*<sup>3</sup>ReMed and Learning Services Organization*

*<sup>4</sup>Marcinko Consulting, LLC*

## Author Note

Betsy Kemeny,  
ORCID <https://orcid.org/0000-0001-5313-6698>

Correspondence regarding this article should be addressed to Betsy Kemeny, Department of Recreational Therapy at Slippery Rock University, 106 Patterson Hall, Slippery Rock, PA 16057, Email: [Elizabeth.kemeny@sru.edu](mailto:Elizabeth.kemeny@sru.edu)

## Abstract

Precedence exists for life care planners to consider the optimization of health, the minimization of medical complications, autonomy, and quality of life of their evaluatees. Recreational Therapy (RT) should be considered for life care plans to support health promotion, prevention of secondary conditions, and quality of life. Recreational Therapy is a treatment service that restores or rehabilitates the person's level of functioning and independence through the use of leisure and recreational interventions (American Therapeutic Recreation Association [ATRA], 2020). Recreational Therapy can contribute to positive outcomes for individuals with various chronic health conditions in the community. Although Recreational Therapy can enhance the life care plans for individuals with a wide range of disabling conditions, for the purpose of this article discussion will be limited to spinal cord injury and traumatic brain injury. Based on an individualized assessment, RT optimizes cognitive, social, psychological, and physical outcomes.

**Key Words:** Life Care Plan, Recreational Therapy, Quality of Life, Health Outcomes

## Introduction

In the United States, more than 21 million adults (ages 18-64) have a disability (Centers for Disease Control [CDC], 2020), which may impact an individual's mobility, cognitive, sensory or social functioning. For life care planners, the optimization of health and quality of life, and the minimization of medical complications are fundamental considerations in the formulation of an evaluatee's plan (American Association of Nurse Life Care Planners

[AANLCP], (2015). Life care planners look to the inclusion of allied health and rehabilitation therapies to attain those guiding principles. Recreational therapy is a core member of the rehabilitation team that life care planners should include in the life care plan (LCP) to further address behavior, cognition, function, pain management, physical activity, socialization, recreation, and leisure (Commission on Accreditation of Rehabilitation Facilities [CARF], 2020). Life care planners are not only concerned about the current status and all the domains (physical, cognitive, psychosocial) of the evaluatees but also the long-term consequences of disability (AANLCP, 2015).

Most people with chronic health conditions and disabilities have unequal access to health promotion and prevention opportunities, compared to their typical-aged peers, making them three times more likely to have comorbid conditions (e.g., diabetes, heart disease), secondary conditions (e.g., osteoporosis, pain), high-risk behaviors (e.g. physical inactivity, poor diet), and premature death (CDC, 2020; Marrocco & Krouse, 2017; World Health Organization [WHO], 2015). Healthy People 2030 (US Department of Health and Human Services [USDHHS], 2020), reports 9 percent of adults with disabilities experienced serious psychological distress. Moreover, loneliness and social isolation are prevalent problems (Lee, et al., 2018; Leigh-Hunt, 2017). Fortunately, correlational studies suggest that active engagement in leisure and recreation promotes positive psychosocial status (improved mood), better cognition, and physical health indicators (lower blood pressure, body mass index, total cortisol) (Cripps & Hood, 2020; Nimrod et al., 2012; Pressman et al., 2009; Sala et al., 2019). Likewise, the CDC (2020) states that aerobic physical activity can reduce the impact of chronic disease and psychological distress, but less than half of adults with disabilities get leisure-time physical activity. Healthy People (2020) reports 25% of people with a disability have high levels of sedentary behavior (USDHHS, 2010). One positive indicator is that adults with disabilities are 82% more likely to increase their leisure-time physical activity level when

recommended by a health care provider (CDC, 2020).

The life care planner considers and seeks to promote optimal function in all domains of an individual's health. Integrating RT into the life care plan will promote improved functioning by increasing the individual's engagement in preferred leisure and recreation (Harden, 2009). In order to provide services that address "impairments, activity limitations, participation restrictions, environmental needs, and personal preferences of the person," the Commission on Accreditation of Rehabilitation Facilities (CARF) (2020), section 2B, indicates the need for personnel who have the competencies to evaluate and facilitate the achievement of outcomes in behavior, cognition, recreation and leisure, social and spiritual realms. Individuals receiving rehabilitation services report that participation in leisure and recreation supports their relationships, autonomy, and competence (Webb & Karlis, 2017). However, the perceived quality of the leisure or recreational activity is more important than the type of activity pursued (Merims et al., 2018). Recreational therapists have the competencies to assess, plan, and implement in these realms to promote improved health and function, quality of life, and prevent secondary conditions (Hawkins, et al., 2020; Kinney, 2020; Sorenson & Luken, 1999).

### **What is Recreational Therapy?**

Although RT is well-established in Canada and other parts of the world, for the purpose of this discussion, this article will focus on RT in the United States. The American Therapeutic Recreation Association (ATRA) (2020) states:

recreational therapy, otherwise known as therapeutic recreation, is a systematic process that utilizes recreation and other activity-based interventions to address the assessed needs of individuals with illnesses and/or disabling conditions, as a means to psychological and physical health, recovery, and well-being. ("What is Recreational Therapy" section, para. 1)

ATRA (2020) defines recreational therapy as a "treatment service designed to restore, remediate, and rehabilitate the person's level of functioning and independence in life activities" ("What is Recreational Therapy" section, para. 1). The National Rehabilitation Information Center (NIRIC) (2014) explained that recreational therapy engages an individual or a group of individuals in preferred activity to enhance their functioning, independence, and well-being. The National Council on Therapeutic Recreation Certification (NCTRC) (2020) describes recreational therapists as those who "treat and maintain the physical, mental, and emotional well-being of clients by seeking to reduce depression, stress, anxiety; recover basic motor functioning, and reasoning abilities; build confidence; and socialize effectively" ("What is Recreational Therapy" section, para. 3). Using evidence-based practice, the ultimate goal of the process is to use assessment, planning, and implementation to support the

individual's independence in managing their own illness and/or disability so they may have optimal levels of productivity, well-being, and quality of life (Snethen et al., 2016; NCTRC, 2020). Sorenson and Luken (1999) explain that recreational therapy for a person who is suddenly incapacitated is "cost-effective, relevant to recovery goals, and conducive to improved functional outcomes" (p. 48). In terms of specific interventions, recreational therapists most often use community re-integration, creative arts, inclusion strategies, leisure education, physical activity/sport, relaxation/stress management, team building, and transition (Hawkins, et al., 2020). National Rehabilitation Information Center [NIRIC], 2014) indicates that some of the general outcomes of RT include adaptive recreation skills, time management education, socialization, pain management, physical conditioning and exercise activity, wheelchair training, attention, memory, perception, orientation, adjustment to disability, stress management, and community resource education.

### **Education and Certification**

In the United States, recreational therapists at a minimum, have a bachelor's degree in recreational therapy or therapeutic recreation or related field (NCTRC, 2020). Coursework includes anatomy and physiology, medical terminology, assessment, salient characteristics of illness and disabilities, the therapeutic process, and 560 hours of field work (Bureau of Labor Statistics, 2020). The certification of a recreational therapist by NCTRC (2020), the CTRS\* credential, indicates that the recreational therapist has passed the national certification exam and possess extensive knowledge and skill-based training in core therapy skills (assessment, planning, implementation, documentation, and evaluation), a team-oriented approach to care delivery, and training in group processes (NCTRC, 2020). Future reference to RT will assume the individual has the CTRS\* credential, signifying entry-level competence required for practice as a recreational therapist in Veteran's Affairs (U.S. Department of Veterans Affairs, 2019) and designated as the accepted certification for recreational therapists by the Centers for Medicare and Medicaid Services (2020) federal guidelines for skilled nursing facilities. Ethical conduct is mandated by the ATRA code of ethics (Pollack & Montgomery, 2018) and quality in recreational therapy practice is supported by the ATRA Standards of Practice (West et al., 2013).

### **Recreational Therapy Outcomes**

Diverse health-related outcomes of recreational therapy treatment, as a result of a goal-directed approach, promote health, well-being, and quality of life (ATRA, 2020; NCTRC, 2020; NIRIC, 2014). Any outcome is dependent on the client's assessed need, the goals and objectives of treatment, and the intervention chosen. In treatment, recreational therapists integrate the client's previous and desired life roles within their community (Ponsford et al., 2013). While a myriad of

interventions in RT practice have been researched for outcomes, some particular interventions that show evidence of efficacy for people with disabilities include: adaptive sports (Bedini et al., 2019; Smith & Hsieh, 2017), animal-assisted therapies (Anderson et al., 2019; Hallyburton & Hinton, 2017; Hawkins et al., 2014; Kemeny, et al., 2019; Kemeny, et al., 2020); aquatic therapy (Broach, 2012; Scott et al., 2020), bibliotherapy (DeVries et al., 2019; Pola, & Nelson, 2014), biking (Mishin et al., 2015), dance-movement interventions (Crumbie et al., 2015), drama (Ross & Nelson, 2014), electronic games (Fish, 2017; Kenuk et al., 2015), fishing (Craig et al., 2020), guided imagery (Bonadies, 2009), inclusive sports (Craig et al., 2019), massage (Browlee & Dattilo, 2002); music expression (DeVries et al., 2015), mindfulness (Fiore et al., 2014), Tai Chi (Crew et al., 2015), physical activity (Kemeny & Arnhold, 2012; Nocera et al., 2018; Spencer-Cavaliere et al., 2014), therapeutic art (Cuomo et al., 2020), and yoga (Adams et al., 2019; Crowe et al., 2020; Curtis, 2015; Fiore et al., 2014; McCrane & Hsieh, 2017).

Research indicates recreational programs can improve social, emotional and physical aspects. In particular, RT significantly improved social performance in a summer community program (Alsop et al., 2013), increased social independence through therapeutic riding (Abihisira et al., 2020), promoted community integration, employment, and inclusion (Stumbo et al., 2015) and improved family leisure functioning (Wenzel et al., 2020). Research also reports that RT when compared to typical diversional activities increases self-esteem and self-efficacy (Kemeny et al., 2019), shows improvements in relaxation, coping skills, and PTSD (Craig, 2019; Pola, & Nelson, 2014), decreases neuropsychiatric symptoms, such as maladaptive behaviors or thought processes (Sardina et al., 2019), and decreases anger (Marcus, & Mattiko, 2007; Seaton et al., 2018). Strong evidence exists that regular physical activity for people with disabilities improves cardiovascular fitness, muscle fitness, brain health, and functioning in activities of daily living (U.S. Dept of HHS, 2018). Moreover, evidence exists that RT interventions have improved physical health by 1) increasing frequency and duration of physical activity (Kemeny & Arnhold, 2012); 2) improving physical or leisure fitness (Mikula, & Smith, 2012); 3) improving balance (Anderson et al., 2019); 4) decreasing obesity (Hirst, & Porter, 2015); 5) decreasing salivary cortisol (Kemeny et al., 2020); and 6) decreasing pain (Bonadies, 2009).

### **Life Care Planning and Recreational Therapy**

The importance of RT was recognized and has been included for life care planning consideration in: 1) The Guide to Rehabilitation (Deutsch, & Sawyer, 1985) with a category originally titled *Leisure Time and/or Recreational Equipment*, 2) The Rehabilitation Consultant's Handbook (Weed & Field, 1994), with the category titled *Health and Strength Maintenance*, 3) later in the Life Care Planning and Case

Management Handbook (Weed, 1998), and also appearing in the Fourth Edition (Weed & Berens, 2018), as well as numerous other publications related to generally accepted tenets of the life care plan (Weed & Owen, 2018). Weed (1991) suggested that life care planner should consider recreation and leisure in the life care plan in order to optimize health, minimize medical complications, reduce psychological effects of injury/disability, and promote productive life activity (i.e., competitive employment, meaningful day activities, or avocational activities). According to the Standards of Practice for Life Care Planners (International Association of Rehabilitation Professionals [IARP], 2015), section II Goal A involves achieving optimal outcomes by developing an appropriate plan of rehabilitation, prevention, and/or reduction of complications. The item #78 of the Consensus and Majority Statements derived from the Life Care Planning Summits state the "life care planner shall study the impact of life care plans upon quality of life" (Johnson et al., 2018, p.17). The American Association of Nurse Life Care Planners (AANLCP) 2015 Standards of Practice (Standard 5B, p.57) state, "The nurse life care planner provides strategies to promote health and safety." Similarly, the American Academy of Physician Life Care Planners (AAPLCP) (2017), in their Clinical Objectives, include the importance of helping the individuals to 1) reach and maintain the highest level of function; 2) prevent complications; and 3) afford the best possible quality of life.

### **Inclusion of Recreational Therapy in Life Care Plans**

For many life care planners, even at the time of referral, a rehabilitation team may no longer be involved at the time of referral, nor does the evaluatee always have the benefit of a comprehensive inpatient or outpatient team. Shorter lengths of stay in acute inpatient rehabilitation programs, 31 days for individuals with spinal cord injury (National Spinal Cord Injury Statistical Center (NSCISC), 2019) and 26 days for individuals with traumatic brain injury (TBIMS Model Systems, 2011) create gaps in service. By the time of referral for life care planning services, the evaluatee may be living in the community with only limited support, often totally reliant upon their immediate family for care and support, and sometimes lost to any follow up by the initial treatment specialists. In this case, the life care planner may need to identify a skilled team of professionals to support the evaluatee's quality of life in their current setting, as well as the identification of resources available to the evaluatee within their geographic vicinity. Due to these particular needs, the life care planner may wish to consider an evaluation by RT to develop a plan of services for intervention. Integrating RT into home and community-based services can be well-supported by the impact on quality of life, as well as physical and mental health benefits (ATRA, 2020). Not everyone with a life care plan returns to competitive employment or meaningful leisure and recreational pursuits (Reid & Riddick-Grisham, 2015). Recreational opportunities can help

improve cognitive, emotional, physical, and social functioning (Pressman et al., 2009; Sala et al., 2019). Moreover, the RT plan supports self-determinism and inclusion which recognizes that each person is unique and can make a contribution whether in paid employment or not (Redmon, 2004). Recreational therapy evaluations and interventions to identify and implement appropriate recreational and leisure activities can be projected at intervals over the evaluatee's lifetime.

### **Benefit to Specific Populations Served by Life Care Planners**

Recreational therapists practice in a variety of settings that include acute care, physical rehabilitation, skilled nursing facilities, assisted living, adult day programs, adapted sports programs, and home and community-based care (ATRA, 2020). While RTs have been serving individuals in home care and private practice for more than 30 years (Kunstler & Sokoloff, 1993), home-based private practice has increased to the point where a separate private practice section was recently established (ATRA, 2019). While many populations pertinent to life care planners could be considered, individuals with spinal cord injury (SCI) and traumatic brain injury (TBI) are two significant examples.

#### **Spinal Cord Injury**

Barriers to leisure are not only physical. Social and emotional barriers also impact involvement in preferred activities. Individuals who are living with SCI are also particularly susceptible to secondary conditions and other health problems (i.e., altered sexual functioning, autonomic dysreflexia, neurogenic bowel and bladder, pressure ulcers, respiratory problems, urinary tract infections, reactive depression and anxiety disorders (Hitzig, et al., 2010; Tulsy et al., 2015). At one-year post SCI, only 17% are employed (National SCI Statistical Center, 2020; Tomassen et al., 2000). With the decreased length of stay in rehabilitation hospitals, patients with SCI may leave the hospital without enough time to gain necessary self-management skills (Gassaway, et al., 2019) nor adequate motivation for physical or social activities (Ferri-Caruana, 2020). According to Magee Rehabilitation Hospital (2009), for individuals with SCI, a continuum of RT interventions can address community re-integration, leisure education, adaptation of activities, strategies for overcoming barriers, community-based resources for pursuits, and peer mentoring.

Efficacy research on recreational therapy with individuals with SCI can be found in both the hospital and community settings. Cahow et al. (2013) found that RT interventions, which included leisure education, recreation/leisure skill building, outings to build community or leisure skills, and social activity, contributed to the improvement in the Functional Independence Measure (FIM) scores during the hospital stay and to home and community-based participation at 1 year post discharge as measured by

the Craig Handicapped Assessment and Reporting Technique (CHART). Gassaway, et al. (2011) describes inpatient settings with 75% of patients receiving RT as involved in community re-integration (self-advocacy, accessibility, problem solving techniques, social skills, transportation, and personal care in the community). Furthermore, five years post hospitalization, when compared to control group, the individuals who received RT had higher rates of employment/school attendance, community participation (CHART scores), life satisfaction, less hospitalizations, fewer depressive symptoms, and greater recreation participation (Gassaway, et al., 2019).

Recreational therapy also benefits individuals with SCI post-discharge. Individuals with SCI who participated in a RT cottage program using outdoor experiential therapy, when compared to a control group, improved self-efficacy and positive affect (Hitzig, et al., 2012). An RT program of adaptive rock climbing for ten weeks, in particular, improved strength, flexibility, happiness, self-esteem, and socialization (Richman, 2020). Likewise, a modified yoga program designed for individuals with a SCI, reported improvements in emotional, mental, and physical domains (Curtis et al., 2015). Virtual reality is another intervention that can be used to promote improvement in physical function while exposing the individual to various sports and physical activities (De Miguel-Rubio et al., 2020; Guzik, 2018; Villiger, 2017).

When working with an evaluatee with a SCI, RT assessments consider medical history, past interests, modifications, specialized equipment and particular community reintegration techniques that will promote independence in recreational pursuits, such as adaptive sports or fitness (Lundenberg et al, 2011). The RT can make recommendations for a wide range of adaptive equipment and planning for intermittent leisure time (Torphy et al., 2020; United Spinal, 2020). With the involvement of RT, the evaluatee with spinal cord injury (as well as with other disabilities) can make appropriate connections to adaptive sports programs (Easter Seals, 2010; Paralyzed Veterans Association, 2020). At first, the RT may attend initial visits to sports programs or fitness centers until the evaluatee /family / personal care staff can promote transition to independence.

Since changes occur with age, environment, and support systems, ongoing reassessments throughout the lifespan are essential (Krause & Coker, 2006). In long-term follow up studies on individuals with SCI, the effects of aging have been noted to characteristically affect the musculoskeletal, neurologic, cardiovascular, pulmonary, and other systems such as gastrointestinal and endocrine (Pili et al., 2018). Krause and Coker (2006) describe functional declines in major life areas, such as recreation, independent ADLs, and employment, as compared with the general population. While no one ages the exact same way, the life care planner must anticipate how activity participation and functional changes will impact ongoing service and care needs, including recreation and leisure (Boyce & Fleming-

Castaldy, 2012). Although continuous lifelong RT, as a rehabilitation therapeutic modality, may not be reasonable to include in the life care plan, consideration should be made for the overall health maintenance and reduction of secondary conditions related to immobility through periodic reassessments to determine changes needed for community-based activities and potential additional hours of supportive care.

### **Traumatic Brain Injury**

Moderate to severe traumatic brain injury (TBI) is considered a lifelong condition, affecting physical, cognitive, emotional and behavioral functioning (CDC, 2020; National Institute on Disability, Independent Living and Rehabilitation Research (NIDILRR), 2020). Cognitive deficits may also progress as the person ages (Konrad et al., 2011). The CDC (2020) identifies TBI as a chronic health condition and supports the importance of lifelong disease management promoting health and well-being. According to the CDC's Report to Congress on Traumatic Brain Injury (2015), the goal of TBI rehabilitation is to improve the overall quality of life of the individual, to improve independence, socialization, and community participation. A key recommendation is the connection of evaluatees to services that support lifelong needs (CDC, 2020). Temkin et al. (2009) found a strong correlation between individuals with moderate to severe head injuries and poor social, employment, and functional outcomes. Gregory et al. (2018) reports that individuals with TBI show functional improvements in the first year of recovery. However, after one-year post injury, cognitive and emotional impairments that remain can lead to long-term disability. People with TBI themselves identify problems with emotional health and social participation (including interpersonal relationships, leisure, and independence) as the most important influences on quality of life post-injury (Carlozzi et al., 2011). Individuals with TBI indicate that living an independent lifestyle with autonomy in decision-making as the most important aspect to quality of life (Carlozzi et al., 2011).

Unfortunately, due to impaired self and social awareness, it is often very difficult for persons with brain injury to reintegrate into the community (Finegan, 2006; Tate et al., 2014). They have increased amounts of 'spare time' yet often find it difficult to engage in meaningful activity. For example, after 12 months post-trauma, only 19% of those with TBI returned to their previous levels of leisure participation (Wise et al., 2010). Wise et al. (2010) found an increase in sedentary activities such as watching television and a decrease in physical activity and sports-related pursuits. Five years post-injury, Mahoney et al. (2019) found that individuals with moderate-to-severe TBI have unmet needs in the areas of various psychological needs, engaging in recreation, solving problems, and getting around the community. During post-acute care, traditional treatment services may be inadequate to address overall quality of life and more intensive one-to-

one therapeutic approaches, beyond a home health aide, may be necessary due to extensive cognitive and/or behavioral deficits (Jacobs et al., 2017).

The Commission on Accreditation Rehabilitation Facilities (CARF) (2020) standards within the Brain Injury Rehabilitation Specialty Program indicate that the rehabilitation team should provide or arrange for resources, services, supports and/or interventions aligned with the person's individual preferences to include community access, life-long learning, adjustment to disability, peer support, fitness, leisure/recreation, volunteerism, and wellness. In an info-graph about living well with a TBI, Hawley and Hart (2018) support increasing socialization, community involvement, and physical activity. Leisure and recreational activities are one way in which meaningful activity can be increased (Tate et al., 2014). Consideration of these themes is consistent with the life care planning principles of optimization of health and quality of life. Again, while RT is certainly not the only service that can help address these important elements of ongoing needs over the lifetime of persons with TBI, RT is one strategic service that can be considered for inclusion within the life care plan that routinely address these principles within their discipline (Andrews et al., 2010; Hodges et al., 2001).

Given the perspective of lifelong disability following TBI, the life care planner may wish to expand the inclusion of additional RT services into the life care plan, not only within the context of intermittent re-evaluations to address changing leisure and community-based activity options over the evaluatee's lifetime, but also further therapeutic interventions of RT to support the identification of activity options as well as the implementation of the RT plan. The recreational therapist's role can be a viable part of the services needed to support the plan for re-entry/reintegration (Abate et al., 2013). Not only considered a therapeutic modality, RT is a complement to home-based care services. Direct care workers and family members can be transitioned to manage community-based meaningful activities identified and established by a recreational therapist.

In addition to supports such as life coaching and mentoring, a recreational therapist may be needed to provide assessment and treatment intermittently during the lifespan. Tate et al. (2014) found evidence that leisure-based interventions are effective for improving mood and quality of life in individuals living in the community with TBI. Approaches or models used for intervention included active leisure programs, social peer mentoring, individual leisure services and a therapeutic recreation model. In particular, Torphy et al. (2020) found that daily involvement in adaptive fitness for people with physical disabilities supported improvements in instrumental activities of daily living (IADLS), emotional improvement, and social community. Recreational therapy interventions have an impact on overall social capital (Krych & Finegan, 2011). Interventions by the recreational therapist may include mindfulness (Kenuk &

Porter, 2017) and electronic games (Kenuk et al., 2015) and support anger management (Seaton et al., 2018). According to Finegan (2006), following the recreational therapist's assessment of the individual's interests and abilities, experiential trials can be established to begin to create a plan of leisure or recreational activity options. Three critical areas of the RT's role concern: the development of self-awareness, the promotion of self-determination, and the reintegration into the community. Since impaired self and social awareness is often very difficult for persons with brain injury to reintegrate into the community, the role of RT can be a viable part of the services needed to support the plan for re-entry/reintegration.

### Conclusion

Recreational therapy is a therapeutic modality often omitted or only included in a cursory fashion in the life care plan, but the benefits are undervalued. Recreational therapy is a modality that uses recreation and leisure as a means of therapy and education. The recreational therapist individualizes the plan and interventions based on the particular client and their abilities while supporting a family-centered model. The life care planner may wish to routinely consider the inclusion of recreational therapy to assess and plan for leisure activity, physical activity, sports, and community participation in order to support both psychosocial and physical health benefits (Pressman et al., 2009; Sala et al., 2019). It is well known that inactivity results in debilitation and risk for additional injury, decreased range of motion, contractures, muscle atrophy, depression and anxiety, poor sleep, and multisystem complications (urinary tract infections, kidney stones, skin breakdown, respiratory complication, osteoporosis). The therapeutic effects of participation in life's meaningful community and leisure activities optimize physical, cognitive and emotional health, promote function and independence, minimize complications, and improve the quality of life. With the support of the recreational therapist, community reintegration promotes the evaluatee's social skills that improve communication, connects with resources, and promotes community living and social belonging.

### References

- Abate, M., Berryman, A., Hosak, K., & Ikard, A. (2013). The brain injury program at Craig Rehabilitation Hospital. *Rehabilitation Management: The Interdisciplinary Journal of Rehabilitation*, 8-13.
- Abihisira, N., Brown, E. & Breslin, C.F. (2020). Therapeutic Horseback Riding and Social Independence in Children with Autism Spectrum Disorder. *Therapeutic Recreation: Practice and Research Journal of Therapeutic Recreation Ontario*, Vol. 14, pp. 84-95.
- Adams, E.V., Crowe, B.M., Van Puymbroeck, M., Allison, C.K., Schmidt, A.A. (2019). Yoga as a community-based recreational therapy intervention for older adults. *Therapeutic Recreation Journal*. 53(4): 368-380. 13p.
- Alisop, J., Negley, S., & Sibthorp, J. (2013). Assessing the social effect of therapeutic recreation Summer camp for adolescents with chronic illness. *Therapeutic Recreation Journal*, 47(1), 35-46.
- American Academy of Physician Life Care Planners (AAPLCP) (2017). Clinical Objectives. <https://www.aaplcp.org/>
- American Association of Nurse Life Care Planners (AANLCP) (2015). Nurse Life Care Planning Scope and Standards of Practice. <https://www.aanlcp.org/nurse-life-care-planning-standards-of-practice/>
- American Therapeutic Recreation Association (2019). ATRA Board of Directors Minutes 6-16-20. Retrieved at <https://www.atra-online.com/page/boardMinutes>
- American Therapeutic Recreation Association (2020). *What is Recreational Therapy?* [www.Atra-online.com](http://www.Atra-online.com).
- Anderson, S.K., Loy, D.P., Janke, M.C., & Watts, C.E. (2019). The effects of therapeutic horseback riding on balance. *Therapeutic Recreation Journal*, 53(4), 307-321.
- Andrews, S.S., Gerhart, K.A., Hosack, K.R., & Virden, J.S. Therapeutic Recreation in Traumatic Brain Injury Rehabilitation in Ashley, M.J. (ed.) (2010). *Traumatic Brain Injury Rehabilitation: Treatment and Case Management* (3rd ed.). Boca Raton, FL: CRC Press.
- Bedini, L. A., Kelly, L. E., McKenzie, K., & Mitchell, K. L. (2019). Impact of a Pilot Adaptive Sports Intervention on Residents at a Skilled Nursing Facility. *Therapeutic Recreation Journal*, 53(4), 340-367.
- Bonadies, V. (2009). Guided imagery as a therapeutic recreation modality to reduce pain and anxiety. *Therapeutic Recreation Journal*, 43(2), 43-55.
- Boyce, K.O., & Fleming-Castaldy, R.P. (2012). Active recreation and well-being: The reconstruction of the self-identity of women with Spinal Cord Injury. *Occupational Therapy in Mental Health*, 28: 356-378.
- Brethauer, C. & Brethauer, M. (2003). Quality of life care issues in life care planning. *Journal of Life Care Planning*, 2(1), 3-12.
- Broach, E. (2012) Evidence based practice and techniques in aquatic therapy for recreation therapy. *African Journal for Physical, Health Education, Recreation & Dance*, 18, 40-51.
- Brownlee, S.; Dattilo, J. (2002) Therapeutic massage as a therapeutic recreation facilitation technique. *Therapeutic Recreation Journal*, 36, (4), 369-381.
- Bureau of Labor Statistics, U.S. Department of Labor. Occupational Outlook Handbook, Recreational Therapists, <https://www.bls.gov/ooh/healthcare/recreational-therapists.htm>.
- Cahow, C., Gassaway, J., Rider, C., Joyce, J.P., Bogenschutz, A., Edens, K., Kreider, S.E., & Whiteneck, G. (2013). Relationship of therapeutic recreation inpatient

- rehabilitation interventions and patient characteristics to outcomes following spinal cord injury: The SCIR rehab project. *The Journal of Spinal Cord Medicine*, 35(6), 547-564
- Carlozzi, N., Tulskey, D., and Kisala, P. (2011). Traumatic brain injury patient-reported outcome measure: Identification of health-related quality-of-life issues relevant to individuals with traumatic brain injury. *Archives of Physical Medicine and Rehabilitation*, 92(1), 552-560.
- Centers for Disease Control (2020). Increasing physical activity among adults with disabilities. <https://www.cdc.gov/ncbddd/disabilityandhealth/pa.html>.
- Centers for Disease Control (2015). Report to Congress on Traumatic Brain Injury: Epidemiology and Rehabilitation. Retrieved at [https://www.cdc.gov/traumaticbraininjury//TBI\\_Report\\_to\\_Congress\\_Epi\\_and\\_Rehab\\_Snapshot-a.pdf](https://www.cdc.gov/traumaticbraininjury//TBI_Report_to_Congress_Epi_and_Rehab_Snapshot-a.pdf)
- Centers for Medicare and Medicaid Services (2020). Medicare provider guidance for laws and regulations for nursing homes. <https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/GuidanceforLawsAndRegulations/Nursing-Homes>
- Commission on Accreditation of Rehabilitation Facilities (2020). 2020 Medical Rehabilitation Standards Manual. CARF International: Author.
- Craig, P. J., Barcelona, B., Aytur, S., Amato, J., & Young, S. J. (2019). Using inclusive sport for social change in Malawi, Africa. *Therapeutic Recreation Journal*, 53(3), 244-263.
- Craig, P. J.; Alger, D. M.; Bennett, J. L.; Martin, T. P., (2020). The transformation nature of fly-fishing for veterans and military personnel with Posttraumatic Stress Disorder. *Therapeutic Recreation Journal*, 54(2), 150-172.
- Crew, A., Petrosky, J., Byrnes, K., & Nelson, R. (2015). The effects of Tai Chi on physical functioning in older adults with Parkinson's disease. *Therapeutic Recreation Journal*, 49, (1), 80-83.
- Cripps, L. & Hood, C. (2020). Recovery and mental health: Exploring the basics of living well with mental illness. *Therapeutic Recreation Journal*, 54 (2), 108-127.
- Crowe, B.M., Allison, C., Van Puymbroeck, M., Adams, E.V., & Schmid, A. (2019). Exploring the physical and psychosocial benefits of yoga for individuals with intellectual and developmental disabilities. *American Journal of Recreation Therapy*, 18(4), 38-48.
- Crumbie, V., Olmos, F., Watts, C, Avery, J., Nelson, R. (2015) The impact of dance interventions on mood and depression in older adults. *Therapeutic Recreation Journal*, 49 (2):187-190.
- Cuomo, S., Anderson, L., & Sarich, A.M. (2020). Exploratory evaluation of therapeutic art program in Adult Day Health Center. *Therapeutic Recreation Journal*, 44(3),303-311.
- Curtis, K. J. B., Hitzig, S. L., Leong, N., Wicks, C.E., Ditor, D.S., & Katz, J. (2015). Evaluation of a Modified Yoga Program for Persons with Spinal Cord Injury. *Therapeutic Recreation Journal*, 49 (2), 97-117.
- Deutsch, P.M. (2020). The Tenets of Life Care Planning. <http://www.paulmdeutsch.com/LCP-tenets-of-life-care-planning.htm>
- Deutsch, P.M., & Sawyer, H.W. (1985) *The Guide to Rehabilitation*. White Plains, New York: Ahab Press.
- De Miguel-Rubio, A., Rubio, M.D., Salazaar, A., Moral-Munoz, J.A., Requena, F., Camacho, R., & Lucena-Anton, D. (2020). Is virtual reality effective for balance recovery for patients with spinal cord injury? *Journal of Clinical Medicine*, 9, 2691, 1-13.
- DeVries, D. Beck, T., Stacey, B., Winslow, K., & Meines, K. (2015). Music as a therapeutic intervention with Autism: A systematic review of the literature. *Therapeutic Recreation Journal*, 49, (3), 220-237.
- DeVries, D. Bollin, A., Brouwer, K., Marion, A., Nass, H. Pompilius, A. (2019). The impact of reading groups on engagement and social interaction for older adults with dementia: A literature review. *Therapeutic Recreation Journal*, 53, (1), 53-75.
- Easter Seals (2010). Easter Seals Living with Disabilities Study: Key Findings. [http://www.easterseals.com/shared-components/documentlibrary/key\\_findings\\_living\\_with\\_disabilities\\_study\\_low\\_res.pdf](http://www.easterseals.com/shared-components/documentlibrary/key_findings_living_with_disabilities_study_low_res.pdf).
- Ferri-Caruana, A., Millan-Gonzalez, L., Garcia-Masso, X., Perez-Nombela, S., Pellicer-Chenoll, M., Serra-Ano, P. (2020). Motivation to physical exercise in manual wheelchair users with paraplegia. *Spinal Cord Injury Rehabilitation*, 26(1): 1-10.
- Finegan, J. (2006). Is recreation really therapy? *ReMed Topics in Brain Injury Rehabilitation*, 1 (4), 1-2.
- Fiore, R.; Nelson, R.; Tosti, E. (2014) The use of yoga, meditation, mantram, and mindfulness to enhance coping in veterans with PTSD. *Therapeutic Recreation Journal*, 48, (4), 337-340.
- Fish, M.T. (2017). Video games: How and why recreational therapists should implement them. *American Journal of Recreation Therapy*. 16(1): 31-36.
- Gassaway, J., Dijkers, M., Rider, C., Edens, K., Caho, C., & Joyce, J. (2011). Therapeutic recreation treatment time during inpatient rehabilitation. *Journal of Spinal Cord Medicine*, 34(2), 176-185. doi: 10.1179/107902611X12+71826988138
- Gassaway, J., Sweatman, M., Rider, C., Edens, K., & Weber, M. (2019). Therapeutic recreation outcomes during inpatient SCI rehabilitation: Propensity score analysis of SCIR rehab data. *Therapeutic Recreation Journal*, 53(2), 99-116. <https://doi.org/10.18666/TRJ-2019-V53-I2-9144>.
- Gregory, D., Hawkins, B., & Chan, L. (2018). Functional independence 6 months and 5 years after traumatic brain



- injury: Opportunities for recreational therapy. *American Journal of Recreation Therapy*, 17(1), 29-36.
- Guzik, T. (2018). The benefits of augmented and virtual reality in Therapeutic Recreation: Tools for motor control, competence, and presence. *Journal of Therapeutic Recreation Ontario*, 13, 77-86.
- Hallyburton, A. & Hinton, J. (2017) Canine-Assisted therapies in autism: A systematic review of published studies relevant to recreational therapy. *Therapeutic Recreation Journal*, 51, (2), 127-142.
- Harden, (2009). Interdisciplinary management for complex regional pain syndrome. In H. Smith(ed), *Current Therapy in Pain*. 309-316. New York: Elsevier, Inc.
- Hawley, L., & Hart, T. (2018). Living well after Traumatic Brain Injury. *Archives of Physical Medicine and Rehabilitation*, 99(7), 1441-2.
- Hawkins, B. L. Ryan, J.B., Cory, A.L., & Donaldson, M.C. (2014). Effects of equine-assisted therapy on gross motor skills of two children with Autism Spectrum Disorder. *Therapeutic Recreation Journal*, 48, (2), 135-149.
- Hawkins, B.L., Kemeny, B., & Porter, H. (2020). Recreational therapy competencies, Part 2: Findings from the ATRA competencies study, *Therapeutic Recreation Journal*, 54(4), 402-406.
- Hirst, J.; & Porter, H. (2015) Obesity management in Spinal Cord Injury through leisure time physical activity. *Therapeutic Recreation Journal*, 49, (1), 76-79.
- Hitzig, S.L., Alton, C., Leong, N. & Gatt, K. (2012). The evolution and evaluation of therapeutic recreation cottage program for people with spinal cord injury. *Therapeutic Recreation Journal*, 46(3), 218-233.
- Hitzig, S. L., Campbell, K. A., McGillivray, C. F., Boschen, K. A., & Craven, B. C. (2010). Understanding age effects associated with changes in secondary health conditions in a Canadian spinal cord injury cohort. *Spinal Cord*, 48(4), 330-335. doi: 10.1038/sc.2009.135
- Hodges, J.S., Luken, K., & Zook, B. (2001). Recreational therapy can help adult brain injury survivors get back into the community. *North Carolina Medical Journal*, 62(6), 360-363.
- International Association of Rehabilitation Professionals (IARP) (2015). *Standards of Practice for Life Care Planners*, (3rd Ed.). Glenview, IL: IARP.
- Jacobs, J., Katz, H., & Berens, D. (2017). Life care planning for the adult with Traumatic Brain Injury. *Brain Injury Professional*, 14, 8-12.
- Johnson, C., Pomeranz, N., & Stetten, J. (2018). Consensus and majority statements derived from Life Care Planning Summits held in 2000, 2002, 2004, 2006, 2008, 2010, 2012, 2015, and 2017 and updated via delphi study in 2018. *Journal of Life Care Planning*, 16(4), 15-18.
- Katon, W. J. (2011). Epidemiology and treatment of depression in patients with chronic medical illness. *Dialogues in Clinical Neuroscience*, 13(1), 7.
- Kemeny, E. Gramlich, C., Hutchins, D., Dietrich, J., Jones, E., & Kronyak, A. (2020). Comparative effectiveness of therapeutic riding and stress management class on cortisol levels and HRV in Youth on the Autism Spectrum. *ATRA Research Institute Oral Presentation Abstracts*, Reston, VA: American Therapeutic Recreation Association.
- Kemeny, B., Hutchins, D., Gramlich, C., Crane, C., & Crandell, L. (2019). Identifying the best protocol: Social engagement or groundwork prior to therapeutic riding? *American Journal of Recreation Therapy*, 18(1), 19-30.
- Kemeny, E., & Arnhold, R. (2012). "I Can Do It, You Can Do It": Collaborative practices for enhancing physical activity. *Therapeutic Recreation Journal*, 46(4), 268-283.
- Kemeny, E., Hutchins, D., Gramlich, C., Russell, S., & Kerr, R. (2017). Comparative effectiveness of goal-directed approach to non-goal directed approach for social outcomes in adolescents with autism spectrum disorder. *American Journal of Recreation Therapy*, 16(3), 17-28.
- Kenuk, S., Borders, R., Palmer, K., & Nelson, R. (2015). Using the Wii for functional improvements in individuals with Brain Injuries. *Therapeutic Recreation Journal* 49, (3), 261-264.
- Kenuk, S. & Porter, H.R. (2017). The outcomes of mindfulness-based interventions for adults who have experienced traumatic brain injury: A systematic review of the literature. *American Journal of Recreation Therapy*, 16(2), 9-19.
- Kinney, J.S (2020). Analysis of services performed by recreational therapists. *Therapeutic Recreation Journal*, 54(3), 227-242.
- Konrad, C., Geburek, A.J., Ris, F., Blumenroth, H. (2011). Long-term cognitive and emotional consequences of mild traumatic brain injury. *Psychological Medicine*, 41(6):1197-1211.
- Krause, J.S. & Coker, J.L. (2006). Aging after spinal cord injury: A 30-year longitudinal study. *The Journal of Spinal Cord Medicine*, 29(4), 371-376.
- Krych, D. & Finegan, J. (2011). Balancing the "cost" of contra-social behavior with one's social capital: Considerations for Brain Injury professionals. *Brain Injury Professional*, 8(3), 16-20.
- Kunstler, R., & Sokoloff, S. (1993). Clinical effectiveness of intensive therapeutic recreation: a multiple case study of private practice intervention. *Loss, Grief & Care*, 6(4), 23-30.
- Lee, E. E., Depp, C., Palmer, B. W., Glorioso, D.K., Daly, R., Liu, J., Tu, X.M., Kim, H., Yasunori, Y., & Jeste, D. V. (2018). High prevalence and adverse health effects of loneliness in community-dwelling adults across the lifespan: Role of wisdom as a protective factor. *International Psychogeriatrics*, 18:1-16. doi:10.1017/S1041610218002120.

- Leigh-Hunt, N., Bagguley, D., Bash, K., Turner, V., Turnbull, S., Valtorta, N., & Caan, W. (2017). An overview of systematic reviews on the public health consequences of social isolation and loneliness. *Public Health*, 152, 157–171.
- Lundberg, N. R., Taniguchi, S., McCormick, B. P., & Tibbs, C. (2011). Identity negotiating: Redefining stigmatized identities through adaptive sports and recreation: Attitude Change and International Adaptive Sports Training participation among individuals with a disability. *Journal of Leisure Research*, 43(2), 205–225. <http://doi.org/10.1080/19406940.2011.627363>
- McCrane, K. M.; & Hsieh, P.C. (2017) Effect of yoga on QOL in individuals with Multiple Sclerosis. *Therapeutic Recreation Journal*, 51 (1), 81–88.
- Magee Rehabilitation Hospital (2009). *Recreational Therapy-Spinal Cord Injury Manual*. Manual 15. [http://jdc.jefferson.edu/spinalcordmanual\\_eng/15](http://jdc.jefferson.edu/spinalcordmanual_eng/15).
- Mahoney, E., Silva, M., Dams-O'Connor, K., Chung, J., Giacino, J., Hammond, F., Kumar, A., Reljic, T., Nakase-Richardson, R., Monden, K., Dillahunt-Aspillaga, C. (2019). Unmet rehabilitation needs five years post traumatic brain injury: A VA TBI model systems study. *Archives of Physical Medicine & Rehabilitation*, 100(10), E 138. Retrieved at DOI: <https://doi.org/10.1016/j.apmr.2019.08.423> (need a title)
- Marcus, D., & Mattiko, M. (2007). An anger management program for children with attention deficit, hyperactivity disorder. *Therapeutic Recreation Journal*, 41(1), 16–28.
- Marrocco, A. & Krouse, H.J. (2017). Obstacles to Preventive Care for Individuals with Disability: Implications for Nurse Practitioners. *Journal of the American Association of Nurse Practitioners*, 29(5), 282-293. DOI: 10.1002/2327-6924.12449
- Merims, D., Ben Natan, M., & Seleznev, I. (2018). The effect of leisure activities, purpose in life, and spirituality on short-term outcomes of geriatric rehabilitation. *Topics in Geriatric Rehabilitation*, 34(3), 207–212.
- Mikula, J. and Smith, P. (2012). Leisure fitness: A recreation therapy concept design. *American Journal of Recreation Therapy*, 11(4), 19-26.
- Mishin, Y. Hunt, B.; Decker, K.; Coley, M.; Nelson, R. (2015) Promoting Health through Biking Programs for Youth with Developmental Disabilities. *Therapeutic Recreation Journal*, 49, (2),183–186.
- National Council for Therapeutic Recreation Certification (2020). The CTRS is the qualified provider of Recreational Therapy Services. Retrieved at [www.nctrc.org](http://www.nctrc.org) on 6-15-20.
- National Institute on Disability, Independent Living and Rehabilitation Research (NIDILRR) (2020). Key Indicators of Well Being. Retrieved at <https://acl.gov/aging-and-disability-in-america/data-and-research/key-indicators-well-being>
- National Rehabilitation Information Center (NRIC) (2014). What are the benefits of recreational therapy? Retrieved at <https://naricspotlight.wordpress.com/2014/05/06/what-are-the-benefits-of-recreational-therapy>.
- National Spinal Cord Injury Statistical Center (2020). *Facts and Figures at a Glance*. Birmingham, AL: University of Alabama at Birmingham.
- Nimrod, G., Kleiber, D., & Berdychevsky, L. (2012). Leisure in coping with depression. *Journal of Leisure Research*, 44(4), 419-449.
- Nocera, V.G., Wozencroft, A.J., & Coe, D.P. (2018). A systematic review of the effect of physical activity on cognitive performance in youth with Down Syndrome. *American Journal of Recreation Therapy*. 17(4), 27-35.
- Paralyzed Veterans Association (2020). *Adaptive Sports*. [pva.org/adaptivesports](http://pva.org/adaptivesports)
- Pili, R., Gaviano, L., Pili, L., & Petretto, D.R. (2018). Ageing, disability, and spinal cord injury: Some issues of analysis. *Current Gerontology & Geriatrics Research*, Retrieved at <https://doi.org/10.1155/2018/4017858>
- Pola, A. & Nelson, R. (2014). The Impact of Bibliotherapy on Positive Coping in Children Who Have Experienced Disaster. *Therapeutic Recreation Journal*, 48, (4), 341–344.
- Pollack, W. & Montgomery, N.D. (2018). ATRA Guidelines for the Ethical Practice of Recreational Therapy: A Training Manual. Champaign, IL: Sagamore Publishing.
- Ponsford, J., Sloan, S., and Snow, P. (2013). *Traumatic Brain Injury: Rehabilitation for Everyday Adaptive Living* (2nd Edition). Hove and New York: Psychology Press.
- Pressman, S.D., Matthews, K.A., Cohen, S., Martire, L.M., Scheier, M., Baum, A., & Schulz, R. (2009). Association of enjoyable leisure activities with psychological and physical well-being. *Psychosomatic Medicine*, 71(7), 725-732.
- Redmon, S.J. (2004). *Pediatric Life Care Planning and Case Management*. Boca Raton, FL: CRC Press.
- Reid, C. & Riddick-Grisham, S. (1995). The importance of work or productive activity in life care planning and case management. *NeuroRehabilitation*. 36, (3), 267-274.
- Richman, M. (2020). Adaptive rock climbing has physical, psychological benefits, for people with disabilities. Retrieved at <https://www.research.va.gov/currents/0520-Adaptive-rock-climbing-has-physical-and-psychological-benefits-for-people-with-disabilities.cfm>
- Ross, G.; & Nelson, R. (2014) Using Theater and Drama Interventions to Reduce Bullying in School-Aged Children. *Therapeutic Recreation Journal*, 48, (4), 334–336.
- Sala, G., Jopp, D., Gobet, F., Ogawa, M., Ishioka, Y., Masui, Y., Inagaki, H., Nakagawa, T., Yasumoto, S., Ishizaki, T., Arai, Y., Ikebe, K., Kamide, K. & Gondo, Y. (2019). The impact of leisure activities on older adults' cognitive function, physical function, and mental health. *PLoS One*, 14(11): e0225006. doi: 10.1371/journal.pone.0225006

- Sardina, A., Fitzsimmons, S., Hoyt, C., & Buettner, L. (2019). A mentally-stimulating activities program for the treatment of neuropsychiatric symptoms in Alzheimer's disease. *American Journal of Recreation Therapy, 18*(4), 27-37.
- Scott, J., Wozencroft, A., Nocera, V., Webb, K., & Anderson, J. (2020). Aquatic therapy interventions and disability: A recreational therapy perspective. *International Journal of Aquatic Research and Education, 12*(3), 1-12.
- Seaton, M., DeFazio, V., & Porter, H. (2018). Efficacy of anger management interventions for individuals with traumatic brain injury: A systematic review. *American Journal of Recreation Therapy, 17*(1), 27-36.
- Smith, K. & Hsieh, P.C. (2017). Sports participation and re-integration of persons with Spinal Cord Injury. *Therapeutic Recreation Journal, 51* (1), 75–80.
- Snethen, G., Bilger, A., Maula, E. C., & Salzer, M. S. (2016). Exploring personal medicine as part of self-directed care: Expanding perspectives on medical necessity. *Psychiatric Services, 67*(8), 883–889.
- Sorenson, B., & Luken, K. (1999). Improving functional outcomes with recreational therapy. *The Case Manager, 10*(5), 48-53.
- Stumbo, N. J. Wilder, A., Zahl, M., DeVries, D., Pegg, S., Greenwood, J. Ross, J.E (2015) Community Integration: Showcasing the Evidence for Therapeutic Recreation Services. *Therapeutic Recreation Journal, 49*, (1), 35–60.
- Spencer-Cavaliere, N., Bowtell, D., & Langager, M. L. (2014). Informing therapeutic practice through the walking program experiences of rehabilitation clients with stroke and Traumatic Brain Injury. *Therapeutic Recreation Journal, 48*(3), 247–261.
- Tate, R., Wakim, D., & Genders, W. (2014). A systematic review of the efficacy of community-based leisure/social activity programmes for people with Traumatic Brain Injury. *Brain Impairment, 15*(3), 157-176.
- Temkin, N. R., Corrigan, J. D., Dikmen, S. S., & Machamer, J. (2009). Social functioning after traumatic brain injury. *The Journal of Head Trauma Rehabilitation, 24*(6), 460–467. <https://doi.org/10.1097/HTR.0b013e3181c13413>
- Tomassen, P., Post, M., & van Asbeck, F. (2000). Return to work after spinal cord injury. *Spinal Cord, 38*:51–55.
- Torphy, H., Townsend, J., & Hawkins, B. (2020). Perceived outcomes of adaptive fitness participation for individuals with physical impairments: An examination of daily and competitive involvement. *American Journal of Recreation Therapy, 19*(1), 35-43.
- Tulsky, D.S., Kisala, P.A., Victorson, D., Tate, D.G., Heinemann, A.W., Charlifue, S., Kirshblum, S.C., Fyffe, D., Gershon, R., Spungen, A.M., Bombardier, C. H., Dyson-Hudson, T.A., Amtmann, D., Kalpakjian, C.Z., Choi, S.W., Jette, A. M., Forchheimer, M., & Celia, D. (2015). Overview of the spinal cord injury-Quality of Life (SCI-QOL) measurement system. *Journal of Spinal Cord Medicine, 38*(3), 257-269.
- United Spinal (2020). United Spinal TechGuide. <https://unitedspinal.org/wheelchair-reviews-views/>
- U.S. Department of Health and Human Services (2010). *Healthy People 2020*. Available at: <http://www.healthypeople.gov/2020/default.aspx>
- U.S. Department of Health and Human Services (2018). *Physical Activity Guidelines for Americans*, 2nd edition. Washington, DC: U.S. Department of Health and Human Services.
- U.S. Department of Health and Human Services (2020). *Healthy People 2030 Objectives and data*. Retrieved at <https://health.gov/healthypeople/objectives-and-data/browse-objectives/people-disabilities/reduce-proportion-adults-disabilities-who-experience-serious-psychological-distress-dh-02>.
- U.S. Department of Veterans Affairs (June, 2019). VA Handbook 5005, Part II, Appendix G60. The Recreation and Creative Arts Therapist. [https://www.va.gov/vapubs/search\\_action.cfm?dType=2](https://www.va.gov/vapubs/search_action.cfm?dType=2)
- Villiger, M.; Liviero, J.; Awai, L.; Stoop, R.; Pyk, P.; Clijsen, R.; Curt, A.; Eng, K.; Bolliger, M. (2017). Home-based virtual reality-augmented training improves lower limb muscle strength, balance, and functional mobility following chronic incomplete spinal cord injury. *Frontiers in Neurology, 8*, 635.
- Webb, E., & Karlis, G. (2017) Theoretical developments in leisure studies: A look at perceived freedom and intrinsic motivation. *Loisir et Société/Society and Leisure, 40*(2), 268–283. doi: 10.1080/07053436.2017.1328790
- Weed, R.O. (1991). Support for recreation and leisure activities in life care plans. *The Rehab Consultant, 3*(1), 1-3.
- Weed, R. O. (1998). *Life Care Planning and Case Management Handbook*. Boca Raton, FL: CRC Press.
- Weed, R.O., & Berens, D.E. (2018). *Life Care Planning and Case Management Handbook*. (4th ed.). New York, N.Y.: Taylor & Francis, Inc.
- Weed, R.O. & Field, T.F. (1994). *The Rehabilitation Consultant's Handbook*. Athens, GA: Elliott & Fitzpatrick, Inc.
- Weed, R.O. & Owen, T.R. (2018). *Life Care Planning: A Step-by-Step Guide* (2nd Ed.). Athens, GA: Elliott & Fitzpatrick, Inc.
- Wenzel, K.; Townsend, J.; Hawkins, B. L.; & Russell, B. (2020). Changes in family leisure functioning following a camp for children with autism spectrum disorder. *Therapeutic Recreation Journal, 54* (1), 17-31.
- West, R., Barrett, J., & Smith, M. (Eds.). (2013). *Revised standards for the practice of recreational therapy & self-assessment guide*. American Therapeutic Recreation Association.
- Whalen, C.N., & Case-Smith, J. (2012). Therapeutic effects of horseback riding therapy on gross motor function in

---

children with cerebral palsy: *A systematic review. Physical and Occupational Therapy in Pediatrics*, 32(3), 229-242.

Wise, E.K., Mathews-Dalton, C., Dikmen, S., Temkin, N., Machamer, J., Bell, K., & Powell, J.M. (2010). Impact of traumatic brain injury on participation in leisure activities. *Archives of Physical Medicine and Rehabilitation*, 91(9), 1357–1362.

World Health Organization (WHO) (2015). *Global Disability Action Plan 2014-2021: Better Health for all people with disability: Geneva, Switzerland.*

### Sample Life Care Plan Therapeutic Recreational Services

**Case overview:** *Evaluee Jones is a 25 y.o. male who sustained a severe TBI at age 23. At the time of injury, he was working as an athletic trainer. Past interests / hobbies included: skiing (water and snow) and photography. Given the residual disability from the TBI, he has been found to be totally disabled from competitive employment options. His residual impairments include: right hemiparesis, balance limitations, significant problems with motor coordination, visual limitation (field cut), significant cognitive and behavioral deficits including problems with initiation, attention, short term memory, information processing, judgment and reasoning, irritability and agitation, and impulse control. He has a seizure disorder and walks with the assist of right KAFO and quad cane. For distance mobility he relies on a lightweight, manual wheelchair which he is unable to propel independently. He lives with his parents; has been assessed to need 24-hour supervision and assistance; his parents provide 8-hour overnight supervision and the state Waiver program covers 16 hours of attendant care services per day.*

*A recreational therapy assessment is recommended to help establish a plan for meaningful life activities in the community for Mr. Jones to participate in, in lieu of the provision of 1:1 attendant care within the home with no community-based activities / limited opportunity for socialization.*

*RT service provision may involve (Option 1 below) the recreational therapist developing the community-activities plan, implementing the plan, and then transitioning the plan over to a parent or caretaker to continue with the direct supervision of the plan.*

*RT service provision may involve (Option 2 below) the recreational therapist developing the community-activities plan, implementing the plan, and then maintaining the plan to include providing the 1:1 direct supervision of the plan, thereby replacing the parent or caretaker / aide services.*

#### Projected Evaluations:

Evaluation	Initiate	Suspend	Frequency	Base Cost
Recreational therapy consultation	Age 25	Life expectancy	Initial evaluation @ age 25 Followed by re-evaluations every 5 years	Evaluation @ \$480 - \$1000 (8-10 hours @ \$60 - \$100 per hour)

*Pricing and number of hours needed for an assessment are based upon local CTRS services. Re-evaluations are needed intermittently over the evaluee's lifetime to adapt and adjust program services to changes influenced by aging, level of functioning, social/residential factors, varying interests over time, and other factors. The initial RT evaluation will identify community placement opportunities / options for Mr. Jones. Example may be volunteering at a local YMCA or other community activity center, based upon the CTRS assessment of leisure interests, social network, physical/sports preferences, strengths & weaknesses.*

**Projected Therapeutic Modalities (Option 1):**

Therapy	Initiate	Suspend	Frequency	Base Cost
Recreational therapy	Age 25	Age 26	Implement recreational / leisure services plan. 6 hours / week x 12 weeks; then transition to 3 hours / week x 12 weeks (108 hours)	\$60 - \$100 per hour; \$6480 - \$10,800

*Pricing based upon local CTRS services. Implementation of recreational / leisure program may be an ongoing services (replacing caretaker hours) or can be established as part of a plan to transition the program over to the evaluatee's family / caretaker's for ongoing management of the plan, as is represented in this chart.*

**Home / Community Based Care (Option 2):**

Home Care Services	Initiate	Suspend	Hours/Days	Base Cost per Year
Home health aide	Age 25	Life expectancy	16 hours per day 4 days per week and 10 hours per day 3 days per week (154 hours / week)	\$21-\$23 per hour; \$3234 - \$3542 per week
Recreational therapist	Age 25	Life expectancy	6 hours per day 3 days per week (18 hours per week)	\$60-\$100 per hour; \$1080 - \$1800 per week

*Pricing based on local sources of home health aide services and CTRS services. This is an example of recreational therapy as part of a community-based services plan as well as part of the home care program for Mr. Jones. Direct activities may involve supervision / direction of a volunteer placement and routine exercise program at a local YMCA or similar health fitness center, participation in an adaptive sports program, and involvement in a local community arts center to name just a few.*



**THERAPEUTIC RECREATION EVALUATION**

<b>Client Name:</b>	<b>Date:</b>
<b>Date of Injury:</b>	<b>Date of Birth:</b>
<b>Report By:</b>	

**1. Information Obtained From (check all that apply)**

- Observation \_\_\_\_\_
- Interview \_\_\_\_\_
- Family Interview \_\_\_\_\_
- Tests Used/Administered:
  - Social Network Inventory
  - Community Assessment
  - Planning Skills Assessment
  - Swimming Assessment
  - Public Transportation Assessment
  - Leisure Interests/Leisure Choices Inventory
- Other Document(s) \_\_\_\_\_

**2. Client/Family Input**

**A. Leisure Involvement/Social Patterns:**

Please describe a typical week for yourself:

<b>Pre-Injury:</b>	<b>Post-Injury:</b>

What do you do to relax?

<b>Pre-Injury:</b>	<b>Post-Injury:</b>

How much money do you typically spend on your recreation and leisure interests each week?

<b>Pre-Injury:</b>	<b>Post-Injury:</b>

What recreation resources have you used in your community? Please list:

<b>Pre-Injury:</b>	<b>Post-Injury:</b>

How do you locate recreation resources or find out what is available in your community?

<b>Pre-Injury:</b>	<b>Post-Injury:</b>

**Frequently spent time with:**

	<b>Pre-Injury</b>	<b>Post-Injury</b>
Family	<input type="checkbox"/>	<input type="checkbox"/>
Friends	<input type="checkbox"/>	<input type="checkbox"/>
Spouse	<input type="checkbox"/>	<input type="checkbox"/>
Significant other	<input type="checkbox"/>	<input type="checkbox"/>

**Enjoyed contacting others by:**

	<b>Pre-Injury</b>	<b>Post-Injury</b>
Phone	<input type="checkbox"/>	<input type="checkbox"/>
Cards/Letters	<input type="checkbox"/>	<input type="checkbox"/>
Email	<input type="checkbox"/>	<input type="checkbox"/>
In person	<input type="checkbox"/>	<input type="checkbox"/>
No Contact	<input type="checkbox"/>	<input type="checkbox"/>

**Social Preferences:**

	<b>Pre-Injury</b>	<b>Post-Injury</b>
Spent time alone	<input type="checkbox"/>	<input type="checkbox"/>
Spent time with only a few close friends/family members	<input type="checkbox"/>	<input type="checkbox"/>
Spent time with others	<input type="checkbox"/>	<input type="checkbox"/>

**Enjoyed spending time with pets:**

	<b>Pre-Injury</b>	<b>Post-Injury</b>
Cat	<input type="checkbox"/>	<input type="checkbox"/>
Dog	<input type="checkbox"/>	<input type="checkbox"/>
Bird	<input type="checkbox"/>	<input type="checkbox"/>
Fish	<input type="checkbox"/>	<input type="checkbox"/>
No Pets	<input type="checkbox"/>	<input type="checkbox"/>
Other:	<input type="checkbox"/>	<input type="checkbox"/>

**Social Settings:**

	<b>Pre-Injury</b>	<b>Post-Injury</b>
Primarily stayed at home	<input type="checkbox"/>	<input type="checkbox"/>
Enjoyed going out / visiting others	<input type="checkbox"/>	<input type="checkbox"/>
Preferred having others come to own home	<input type="checkbox"/>	<input type="checkbox"/>

Special aptitudes: \_\_\_\_\_

Interests/hobbies: \_\_\_\_\_

**B. Family / Friends/ Social Network**

1.	<b>Relationship:</b>
2.	<b>Relationship:</b>
3.	<b>Relationship:</b>
4.	<b>Relationship:</b>
5.	<b>Relationship:</b>

**Current Transportation Resources / Community Access:**

Licensed Driver  Licensed Non Driver  No Longer Licensed  Never Licensed

**Public Transportation:**

Fixed Route (e.g. bus, train, trolley)  Para transit  Taxi  Other

Family / Friends provide transportation?: <select>

Specify: \_\_\_\_\_ If yes, where? \_\_\_\_\_



**What, if anything, prevents you from participating in leisure interests?**

**What are your leisure goals?**

**Goal #1:**

**Goal #2:**

**Goal #3:**

**How can we help you reach your leisure goals?**

**C. Prior Life Roles / Routines**

**Level of Education:**

**Clubs / Organizations:**

**Religious Affiliation:**

**Religious/Cultural Traditions:**

**Occupation:**

**Full or Part Time: <select>**

**Military Services?** <select>

**If Yes, Branch:** <select>

**Length of Service:**

**Interested in Voting?** <select>

**Registered to Vote?** <select> **If so, where?** \_\_\_\_\_

**Preferred method of voting?** <select>

**D. Substance Use Information:**

Do you have a history of alcohol or drug use? &lt;select&gt;

If yes, are you committed to sobriety? &lt;select&gt;

If committed to sobriety, what is your sobriety plan? &lt;select&gt;

Hours per week: \_\_\_\_\_

How long have you been clean and sober? \_\_\_\_\_

Have you relapsed within the last year? &lt;select&gt;

If Yes, what triggered your relapse? \_\_\_\_\_

When you are using have you noticed that you;

Are you less active in recreation / leisure? &lt;select&gt;

Are less social? &lt;select&gt;

Other issues: \_\_\_\_\_

Have you used alcohol or drugs to:

Be more "sociable" &lt;select&gt;

Reduce "shyness" &lt;select&gt;

Feel more "playful" &lt;select&gt;

Give me "courage" to take risks &lt;select&gt;

To feel more "relaxed" &lt;select&gt;

To change my "mood" &lt;select&gt;

To help express my "feelings" &lt;select&gt;

To overcome "boredom" &lt;select&gt;

To "fit in" &lt;select&gt;

**3. Health Information**

Precautions for activity (check all that apply)

 Seizures Dietary High Blood Pressure Medication Side Effects Diabetes Other: \_\_\_\_\_ High Cholesterol Allergies (including animals) Balance Visual Perceptual

Do you smoke? &lt;select&gt; If Yes, how much? \_\_\_\_\_

Adaptive Equipment: \_\_\_\_\_

Assistive Device (s) &lt;select&gt; \_

Given that you have (high blood pressure, diabetes, high cholesterol etc.), are you open to assistance with managing this (i.e. Healthy eating, exercise?)

--

#### 4. Therapy Assessment & Summary:

(Include key findings from all TR Assessments completed)

##### Brief Leisure Interest Summary

###### Cognitive/Games:

- Card Games  
 Board Games  
 Bingo  
 Computer Games  
 Video Games  
 Internet  
 Reading  
 Puzzles  
 Writing  
 Crossword puzzles/Find a word  
 Other: \_\_\_\_\_

###### Creative:

- Arts & Crafts  
 Listening to Music: \_\_\_\_  
 Playing an Instrument: \_\_\_\_  
 Painting  
 Pottery/Ceramics  
 Sewing  
 Crochet/ Knitting  
 Photography  
 Drama  
 Indoor Plants  
 Other: \_\_\_\_\_

###### Physical/Sports:

- Sports (i.e. Baseball, basketball, golf hockey, soccer, football): \_\_\_\_  
 Fitness (i.e. Home program, gym, aerobics weights): \_\_\_\_  
 Walking  
 Swimming  
 Bike Riding  
 Bowling  
 Pool  
 Skiing  
 Jogging  
 Gardening  
 Fishing  
 Hunting  
 Camping  
 Other: \_\_\_\_\_

###### Social/Group Activities:

- Church  
 Social Clubs: \_\_\_\_  
 Volunteering: \_\_\_\_  
 Shopping  
 Eating out (i.e. fast food rest.): \_\_\_\_  
 Movies  
 Concerts  
 Community Center: \_\_\_\_  
 Sporting Events: \_\_\_\_  
 Spending time with family: \_\_\_\_  
 Spending time with friends: \_\_\_\_  
 TV/Movies  
 Pets

What do you consider barriers to leisure? (C = Client response; S = staff response)

- |                            |   |                            |   |                            |   |
|----------------------------|---|----------------------------|---|----------------------------|---|
| <input type="checkbox"/> C | <input type="checkbox"/> S              | <input type="checkbox"/> C | <input type="checkbox"/> S                                | <input type="checkbox"/> C | <input type="checkbox"/> S                        |
| <input type="checkbox"/>   | <input type="checkbox"/> Planning       | <input type="checkbox"/>   | <input type="checkbox"/> Motivation                       | <input type="checkbox"/>   | <input type="checkbox"/> Mobility/Accessibility   |
| <input type="checkbox"/>   | <input type="checkbox"/> Transportation | <input type="checkbox"/>   | <input type="checkbox"/> Pain                             | <input type="checkbox"/>   | <input type="checkbox"/> Physical Skills/symptoms |
| <input type="checkbox"/>   | <input type="checkbox"/> Social Skills  | <input type="checkbox"/>   | <input type="checkbox"/> Initiation                       | <input type="checkbox"/>   | <input type="checkbox"/> Self-Image               |
| <input type="checkbox"/> C | <input type="checkbox"/> S              | <input type="checkbox"/> C | <input type="checkbox"/> S                                | <input type="checkbox"/> C | <input type="checkbox"/> S                        |
| <input type="checkbox"/>   | <input type="checkbox"/> Work           | <input type="checkbox"/>   | <input type="checkbox"/> Friends Support                  | <input type="checkbox"/>   | <input type="checkbox"/> Communication            |
| <input type="checkbox"/>   | <input type="checkbox"/> Emotionality   | <input type="checkbox"/>   | <input type="checkbox"/> Family Support                   | <input type="checkbox"/>   | <input type="checkbox"/> Money                    |
| <input type="checkbox"/>   | <input type="checkbox"/> Endurance      | <input type="checkbox"/>   | <input type="checkbox"/> Children's Support               | <input type="checkbox"/>   | <input type="checkbox"/> Substance Abuse          |
| <input type="checkbox"/>   | <input type="checkbox"/> Limited Time   | <input type="checkbox"/>   | <input type="checkbox"/> Parental Support                 |                            |   |
| <input type="checkbox"/>   | <input type="checkbox"/> Mood           | <input type="checkbox"/>   | <input type="checkbox"/> Spouse/Significant Other Support |                            |   |
| <input type="checkbox"/>   | <input type="checkbox"/> Behavior       | <input type="checkbox"/>   | <input type="checkbox"/> Openness to new experience       |                            |   |

Rev. 11/2020

ReMed has authorized the use of this form for this article.  
Copyright ©2009 ReMed . All rights reserved.

5

Other/Comment:

**5. Current Level of Functioning / Ability (For staff use in planning)**

**Benefits most from: (please check)**

- Written Instructions
- Verbal Direction / Cueing
- Demonstration
- Physical assistance / prompting

**Ability to follow directions:**

- Multiple steps
- One step directions
- With verbal / physical cues
- Unable to follow

**Attention Span:**

- Unlimited time
- Up to 40 minutes
- Up to 20 minutes
- Limited to 10 minutes
- Very limited, less than 5 minutes

**Adaptations to Promote Successful Engagement**

(Check all that apply)

- Small groups
- 1: 1
- Single step task activity
- Verbal Prompts
- Demonstration
- Time Limited
- Needs Reminders
- Programs using retained long term memory
- Placement near speaker / leader
- Use of amplifiers or headphones
- Written instructions / gestures
- Large print items
- Magnifier / telescopic glasses
- Descriptive verbal instructions
- Requires assistance w/transportation needs
- Needs increased time to get to/from activities
- Adaptive equipment
- Other: \_\_\_\_\_

**6. SUMMARY & RECOMMENDATIONS:**

Strengths:

Barriers:

Summary:

**Recommendations for Treatment:**

1.	
2.	
3.	

**Goal:**

--

**Objectives:**

1.	
2.	
3.	

**Submitted by:**

\_\_\_\_\_  
**Signature/Degree  
Recreation Therapist**

## Recreational Therapy Resources

**Accessible Journeys** <https://www.accessiblejourneys.com/> - vacation planner and tour operator exclusively for individuals with mobility issues.

**American Art Therapy Association (AATA)** <https://arttherapy.org/> - non-profit professional and educational organization dedicated to the art therapy profession. Includes information about the profession of art therapy and an art therapist locator.

**American Camp Association** – find accredited camps. Includes specific search for disabilities or other special needs.

**American Music Therapy Association (AMTA)** <https://www.musictherapy.org/> - the professional organization for the progressive development of the therapeutic use of music in rehabilitation, special education and community settings. Maintains an online directory of music therapists.

**American Therapeutic Recreation Association (ATRA)** <https://www.atra-online.com/> -national professional organization representing recreational therapists. Can search RT/TR academic programs by state. Can search for CTRS's by state.

**Brain Injury Association (BIAUSA)** [www.biausa.org](http://www.biausa.org). National website with directory of state and local Brain Injury Associations and Support Groups.

**BlazeSports America** - <http://www.blazesports.org>. adaptive sports and recreation programs for youth and adults with disabilities based in Atlanta, GA.

**Connections Therapy Center** <http://www.thectcenter.com/> - therapy practice in the Washington DC area dedicated to children and adolescents with special needs. Their clinical services include a Recreational Therapy Department.

**Creekside Recreational Therapy Services** [www.creeksiderts.org](http://www.creeksiderts.org) – offers recreational and educational opportunities for children, adolescents, and adults with and without disabilities. Based out of New Bern, NC.

**Christopher & Dana Reeve Foundation** <https://www.christopherreeve.org/> Along with the exceptional Paralysis Resource Guide, this organization's website offers information and discussion groups (Reeve Connect) about maintaining mental and physical health following spinal cord injury and paralysis. Along with links to clinical treatment centers (NeuroRecovery Network), community fitness and wellness facilities are provided.

**DisabilityInfo.org** – Recreation Opportunities for People with Disabilities resource list primarily covering New England. <https://disabilityinfo.org/fact-sheet-library/recreation/recreationopportunities-for-people-with-disabilities/>

**Easter Seals** – Provider - Camping and Recreation for People with Disabilities <https://www.easterseals.com/our-programs/camping-recreation/>

**Four Star Alliance** – A community of adaptive sports, therapeutic recreation and wellness organizations that are part of America's Warrior Partnership, committed to serving transitioning service members, veterans, military families and their caregivers with excellence. <https://www.fourstaralliance.org/>

**Help-U-Bridge** is a social, leisure, recreational provider in the Philadelphia area that provides support for persons with disability or illness. Providing consultation and direct services to agencies and individuals in the community through Home and Community based funding or private hire. <http://www.help-u-bridge.com/about-us.html>

**International Brain Injury Clubhouse Alliance (IBICA)** <https://braininjuryclubhouses.net> The mission of IBICA is to support and advance an international collaborative network of standardsbased Brain Injury Clubhouses for people impacted by brain injury. The vision of IBICA is that people impacted by brain injury worldwide will have access to life-long support and highest quality of life through Brain Injury Clubhouses.

**Jackson Therapeutic Recreation** <https://www.jacksontr.com/> - In home therapeutic recreation services based out of Ontario, CA for adults and children.

**Kelly Brush Foundation** <https://kellybrushfoundation.org/> Believes in the power of being active, independent, and free. Provides grants to buy adaptive sports equipment.

**Limbless Association (LA)** providing support to amputees and the limb-loss community. Includes resources for amputee sport, recreation and wellbeing <http://www.limblessassociation.org/index.php/information/amputee/amputee-sport>

**Logan Center** an organization that serves individuals with intellectual and developmental disabilities based out of South Bend, IN. They offer year-round recreational programming for teens and adults that may include classes, field trips and camps. <https://www.logancenter.org/adults/recreation/>

**Miracle League** – an organization that provides opportunities for children with disabilities to play Miracle League baseball, regardless of their abilities. Can search local Miracle Leagues. <https://www.miracleleague.com/>

**My Recreation Therapist (MYRT)** <https://www.myrecreationtherapist.com/> - this website will identify registered, licensed recreation therapists in your area. All recreation therapists must possess the credentials LRT or CTRS and have met or exceeded the requirements and standards established by NCTRC.

**Move United** <https://www.moveunitedsport.org/> Disabled Sports USA and Adaptive Sports USA have merged under this one organization. This nonprofit organization provides national leadership and opportunities for individuals with disabilities to develop independence, confidence and fitness through participation in community sports, competition, recreation, high performance sport and educational programs. Includes over 150 community-based chapters in more than 40 states with over 50 different sports being offered that can be accessed through this website.

**Nancy Lurie Marks Family Foundation** – Recreational Programs for Adults. Provides a listing of recreational and community enrichment program resources for adults with autism. <https://www.nlmfoundation.org/recreational-programs-for-adults/>

**National Ability Center** <https://discovernac.org/> A non-profit organization dedicated to empowering persons of all abilities by building self-esteem, confidence and lifetime skills through sport, recreation and education programs. Wide variety of adaptive recreational and sports activities available, as well as adaptive equipment. Based out of Park City, UT

**National Amputee Golf Association (NAGA)** Helping amputee golfers get back into the game. <http://nagagolf.org/>

**National Center on Health, Physical Activity and Disability (NCHPAD)** primarily focuses on improving health, wellness, and quality of life of persons with disability. Promotes the inclusion of children and adults with mobility limitations into public health practices. “Building Healthy Inclusive Communities”. <https://www.nchpad.org/>

**NCHPAD directory** <https://www.nchpad.org/Directories/Programs> website that includes a directory of programs for persons with disability and health conditions, by state, directory of organizations related to various disabilities and health conditions including adapted sports and recreation by state, directory of equipment companies that supply exercise, fitness, recreational and sports equipment for persons with various abilities to allow their participation, and Directories of U.S. Parks (with accessibility features), Personal Trainers with self-reported experience working with clients with disability, and Youth Events directory with state by state programs and camps.

**National Centers on Health Promotion for People with Disabilities (National Centers on Disability)** to prevent disease and promote health and wellness for people with disabilities. <https://www.cdc.gov/ncbddd/disabilityandhealth/national-programs.html>

**National Council for Therapeutic Recreation Certification (NCTRC)** <https://www.nctrc.org/> certification credentialing organization for Therapeutic Recreation Specialists. Offers 5 areas of specialty certifications: behavioral health, community inclusion, developmental disabilities, geriatrics, and physical medicine/rehabilitation. Provides verification of CTRS certification.

**National Institute of Health Clinical Center** – about Recreational Therapy and their Clinical Services at the Center in Bethesda MD. <https://clinicalcenter.nih.gov/rmd/rt/index.html>

**National Parks Foundation** Individuals will connect with their local parks through canoeing, camping and land-based activities. <https://www.nationalparks.org/our-work/programs/nationalpark-recreation-and-disability-accessibility-program>

**New Horizons Un-Limited** A grassroots, non-profit organization for our families, friends and neighbors impacted by disability since 1994. Resource information includes – the Arts, Recreation/Sports, and Education. <https://new-horizons.org/>

**North American Riding for the Handicapped Association, Inc. (NARHA)** <http://www.narha.org/> - “a membership organization that fosters safe, professional, ethical and therapeutic equine activities through education, communication, standards and research for people with and without disabilities”. Includes equine assisted therapies, recreational riding for persons with disability, hippotherapy, equine assisted psychotherapy, among other therapeutic interactions with horses.

**Northeast Passage (NEP)** a nonprofit organization, part of the University of New Hampshire Recreation Management and Policy Department, dedicated to empowering persons living with disability to pursue and achieve whole life health, community engagement and fulfillment through purposeful use of sports and recreation. <https://www.nepassage.org/>

**Our Kids** – website to find camps for children with disabilities. <https://www.ourkids.net/disability-camps.php>

**Professional Association of Therapeutic Horsemanship (PATH)** <https://www.pathintl.org/> - non profit organization to promote equine-assisted activities and therapies (originally the North American Riding for the Handicapped Association). Listing of nearly 4800 certified instructors and equine specialists and 873 centers.

---

- Rails to Trails** Our mission is to create a nationwide network of trails from former rail lines, connecting corridors to build healthier places for healthier people. <https://www.railstotrails.org/build-trails/trail-building-toolbox/design/accessibility/>
- Recreational Respite** – Recreational therapy program in Canada that serves children, youth and adults with disabilities and mental health concerns. Services include individual and group settings, as well as virtual services. <https://recrespite.com/>
- RT Wise Owls** <https://sites.temple.edu/rtwiseowls/> – a free databased and information resource center developed by the RT program at Temple University that contains evidence-based research and resources relevant to the scope of RT practice.
- SCI Factsheets – Adaptive Sports and Recreation** - [https://msktc.org/sci/factsheets/adaptive\\_sports](https://msktc.org/sci/factsheets/adaptive_sports)
- Special Programs & Resource Connection (SPARC)** <https://www.sparcinc.org/> - in Westchester County NY, offering recreational, arts, athletics and wellness programs for the special needs community ages 5 through adulthood.
- Sports ‘N Spokes Magazine** - <https://sportsnspokes.com/magazine/> Magazine that covers adaptive sports and recreation.
- Strive Recreational Therapy** <https://striverts.com/> Private RT services in Michigan and Florida, but also able to connect individuals with RTs in other states. They provide in-home and community-based approach to recreational therapy to allow clients to thrive within their own living environment. Also has a non-profit organization to bring RT services to the community for individuals with disability, including bowling, track, field, cycling, bocchia, slalom, table tennis, and power lifting.
- Therapeutic Recreation Journal (TRJ)** - quarterly publication by Sagamore Publishing LLC addressing needs of persons with disability and issues relevant to the profession of therapeutic recreation.
- Understanding the long-term challenges of disability.** Key findings from Easter Seals “Living with Disabilities” study in 2010. Reviews the life-long challenges surrounding everyday life and future concerns for parents of adult children with disabilities, including employment, housing, transportation, social interactions, recreation, healthcare and financial security. [https://www.massmutual.com/mmfg/pdf/Living\\_with\\_Disabilities\\_Study.pdf](https://www.massmutual.com/mmfg/pdf/Living_with_Disabilities_Study.pdf)
- U.S. Paralympics Sports Clubs** - <http://findaclub.usparalympics.org>
- Wheelchair Dancers Association** - Our mission is to create an avenue whereby the mobility challenged can enhance and strengthen their mind, body and spirit through dance. To quote Beverly “We have no limitation except those we place on ourselves.” <https://www.wheelchairdancers.org/>

*\*Disclaimer – the authors wish to note that this resource list does not include every recreational therapy resource available in the U.S. States and regions may have a multitude of programs available to children and adults with a disability/ medical conditions. These sources are provided as a list of helpful sites for life care planners to explore for additional information. At the time of writing this article, the above-cited websites and hyperlinks were active. We do not have any control over website contents and by including these resources we are not implying support or endorsement of individual programs and services.*



## Sample Recreational Therapy Assessment Format

1. Referral to CTRS (may include prescription by the physician)
  2. CTRS performs medical record review for demographic and past medical history
  3. Interview of the evaluatee, family, caretaker
    - a. Review of social and community supports and services
    - b. Transportation consideration
    - c. Supervision and assistance needs
    - d. Pre and Post injury (if appropriate) leisure, recreational, sports, social interests and activities
    - e. Review goals of evaluatee / family for leisure, recreation, sports, socialization
  4. Administration of standard measures, such as:
    - a. CIQ – Community Integration Questionnaire  
(<https://www.midss.org/content/community-integration-questionnaire-ciq>)
    - b. Farrington Leisure Interest Inventory  
(<http://carepartnermentoring.com/Leisure%20Interest%20Inventory-Public%20share%20version.pdf>)
    - c. QOLIBRI – Quality of Life After Brain Injury ([www.qolibrinet.com](http://www.qolibrinet.com))
    - a. RNLI – Reintegration to Normal Living Index  
(<https://www.sralab.org/rehabilitation-measures/reintegration-normal-living-index>)
    - b. LSM - Leisure Satisfaction Measure ([www.idyllarbor.com](http://www.idyllarbor.com))
    - c. WHO-QOL-BREF (<https://www.who.int/healthinfo/survey/whoqol-qualityoflife/en/index5.html#:~:text=The%20WHOQOL-BREF%20contains%20two%20items%20from%20the%20Overall,thereby%20creating%20four%20domains%20of%20quality%20of%20life>)
    - d. WHODAS 2.0 – WHO Disability Assessment Schedule 2.0  
(<https://www.who.int/classifications/international-classification-of-functioning-disability-and-health/who-disability-assessment-schedule>)
  5. Complete written assessment report with recommendations and goals
-

## CONTENTS

Tanya Rutherford Owen	1 Editor's Message
Debra Berens	3 Foundation for Life Care Planning & Rehabilitation Research Presents Annual Awards
Carol Fricks Lisa Gay Keeli Fricks	7 Telehealth: New Considerations for Life Care Planners
Ann Maniha	13 Components of a Cost/Charge Scenario as Utilized in the Life Care Plan
Betsy Kemeny Heidi Fawber Joanne Finegan Debbe Marcinko	35 Recreational Therapy: Implications for Life Care Planning
Carolyn Hanson Jamie L. Pomeranz Dug Jones Carlyn Ellison	59 An Overview of Wheelchair Basketball with Implications for Life Care Planning
Nancy Mitchell	65 Ethics Interface
Nick Choppa	69 Book Review