

Community Integration

Showcasing the Evidence for Therapeutic Recreation Services

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Abstract: Community integration (CI) is an important aspect of therapeutic recreation services for many client groups. CI speaks to the full social, physical, and psychological presence of individuals with disabilities and/or illnesses in their communities, whether that may be their personal homes, group homes, halfway houses, or long-term care facilities. The benefits of CI are numerous and include physical, social, psychological, health, and quality of life related outcomes. The purpose of this paper is to review the recent research regarding CI for individuals with (a) cerebrovascular accidents and traumatic brain injury, (b) intellectual and/or developmental disabilities, (c) mental illnesses, and (d) spinal cord injuries, and for (e) aging individuals with chronic diseases and/or illnesses. Specific implications for therapeutic recreation practice from this research are highlighted.

Keywords: *community integration, cerebrovascular accident, traumatic brain injury, mental illness, intellectual and/or developmental disability, spinal cord injury, older adults with chronic conditions and/or illnesses, therapeutic recreation practice*

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Originally, community integration (CI) focused on just the physical integration or presence of individuals with disabilities in the community. In more recent years, however, it has evolved to equate with social integration, such that the person lives, participates, and socializes in his or her community. As such, CI should be viewed as the penultimate goal of rehabilitation services (Brock et al., 2009; Gulcur, Tsemberis, Stefanic, & Greenwood, 2007; Parvaneh & Cocks, 2012; Townley, Miller, & Kloos, 2013; Wong & Solomon, 2002; Yasui & Berven, 2009).

Arguably, the overarching goal of the rehabilitation process, community integration, involves the acquisition or resumption of roles appropriate for a given age, gender, or culture with respect to decision making and performance of productive behaviors as part of multivariied relationships in the community. (Gontkovsky, Rusalem, & Stokie, 2009, p. 185)

Fuller CI or re-integration, as some authors have termed it, allows individuals to become more productive, useful members of society and more independent in their life choices, while at the same time reducing the level of community expenditure and burden. Simply put, CI refers to the notion that individuals with disabilities and/or illnesses have comparable opportunities to live, work, engage with others, and enjoy recreation and leisure activities in a similar manner to their cohorts without disabilities and/or illnesses (Townley et al., 2013). CI has been shown to promote positive mental health, improve life satisfaction, reduce loneliness, and increase the sense of acceptance from community peers (Townley et al.).

Indeed, CI has been validated as a significant predictor of quality of life for individuals with disabilities (Chun, Lee, Lundberg, McCormick, & Heo, 2008).

However, for far too many individuals in modern society, these goals are a significant challenge that necessitates the acquisition of specific skills and knowledge through their purposeful involvement in well-designed and evidence-based programs (Parvaneh & Cocks, 2012). However, teaching individuals the skills necessary to build social networks and to become fully engaged in their communities is a much more complex issue than it might first appear. The purpose of this paper is to identify the latest evidence-based practice in CI for a number of groups, including individuals with (a) cerebrovascular accidents and traumatic brain injuries, (b) intellectual disabilities, (c) mental health issues, and (d) spinal cord injuries, and for (e) aging individuals with chronic conditions and/or illnesses. Specific research with respect to CI intervention outcomes as related to therapeutic recreation (TR) services is presented.

What is Community Integration?

A community can be defined by the physical boundaries that describe where a person resides (e.g., streets, buildings, or hallways) or by the social institutions, rituals, and traditions of a group of people (Putnam, 2000). A community brings people together and helps them form a common identity. Townley and Kloos (2009) noted that, “The psychological sense of community. . . describe[s] the phenomena that one belongs to and is an integral part of a larger collectivity. . . it represent[s] the strength of bonding among community members . . . important for personal and collective well-being” (p. 363). They contended that, “The

absence of a psychological sense of community [is] the single most disintegrating aspect of contemporary life and [it is associated] with loneliness, alienation, psychological distress, and a feeling of impotence regarding social forces” (p. 363). When people do not feel as if they are part of their social environment, they feel separate and in no manner integral to the fabric of the community.

Kim and Colantonio (2010) discussed the earlier research effort of Winkler, Unsworth, and Sloan (2006) and how the World Health Organization’s (WHO’s) International Functional Classification (ICF) system showcased “participation” as a vital part of patient rehabilitation (p. 710). Participation, as defined by the WHO, is a significant component of an individual’s well-being and certainly can be addressed meaningfully by therapeutic recreation specialists (TRSs). More and more, health care professionals generally are finding that through the ongoing process of health care reform, there is an ever increasing emphasis being placed on the implementation of community programs in order to discourage hospital readmissions, and to decrease their associated costs (Kocher & Adashi, 2011).

McCull et al. (1998) concluded that most definitions have essentially three common elements: (a) relationships with others, (b) independence in one’s living situation, and (c) activities to fill one’s time. The researchers noticed broadly that this included “having ‘something to do’ (occupation), ‘someone to love’ (social support), and ‘somewhere to live’ (independent living)” (p. 26).

It is within a community that an individual participates in recreation and leisure experiences. Yet for many individuals with disabilities and/or illnesses,

their community may be limited both geographically and socially. The intent of CI programs is to help individuals become more enmeshed in the tapestry of the wider and nondisabled community. In the past, many individuals with disabilities, especially those with severe disabilities, resided in large institutional settings. CI has often meant helping individuals make the transition from a very institutionalized and segregated environment to more inclusive or typical environments (Bond, Salyers, Rollins, Rapp, & Zipple, 2004).

Today, CI is applied and offered to a much wider variety of individuals with disabilities, such as those discharged from acute medical care or rehabilitation or those leaving substance abuse treatment centers and returning to their own homes, group homes, or halfway houses. Because this involves a major life transition, many individuals, their families, and support personnel consider it to be challenging, unpredictable, and fraught with uncertainty (Jivanjee, Kruzich, & Gordon, 2009). As such, TRSs have a significant role to play in teaching individuals the necessary skills to make these transitions in order to live as independently as possible, and in whatever setting the person seeks to reside. It should also be noted that specialists also have a significant role to play in advocating accessibility, acceptance, and accommodation to the larger community.

The following sections highlight the latest evidence-based research related to CI for a variety of individuals with illnesses and disabilities typically served by TRSs. Much of this research has practical applications for improving outcomes-based TR service delivery across a broad range of settings and groups.

Individuals with Cerebrovascular Accidents and Traumatic Brain Injury

This section highlights recent outcomes-based, best practice research on CI for individuals with cerebrovascular accidents (CVA) and traumatic brain injury (TBI). In this paper, these two disabling conditions are combined since the results of brain dysfunction from these two conditions often mimic one another.

Client Needs

Repeatedly, the research highlights psychological and social needs to be addressed post-inpatient rehabilitation for individuals with CVA or TBI. The literature identifies the treatment needs including recreation, depression and withdrawal, intimate relationships, control of life and future, volunteer activities, family involvement, and anger management (Huebner, Johnson, Bennett, & Schneck, 2003; Kim, Colantonio, Dawson, & Bayley, 2013; Sabaz, Simpson, Walker, Gillis, & Strettles, 2014). For the purpose of simplifying the multiple dimensions, these have been categorized into psychological and social needs.

Sabaz et al. (2014) followed 507 survivors of TBI across 12 different community reintegration programs. Fifty four percent of respondents ($n=432$) reported challenging behaviors. Those behaviors that were most commonly reported were inappropriate social behavior, aggression, and adynamia/lack of initiation. The data showed that the presence of challenging behaviors significantly increased care needs and significantly decreased participation in life roles.

Length of time post injury is also associated with differing needs for clients with TBI. During early intervention clients had greater amounts of energy depletion and cell death. During the intermediate phase clients have more neu-

ro-inflammation associated with pain. However, during the late state of injury (five years post injury) clients encountered more seizures and epilepsy (Algatas & Huang, 2014). The late state of injury is often associated with the presence of more “challenging behavior.” In one study, 67.1% of clients who were more than five years post injury exhibited challenging behaviors compared to 38.2% of clients with less-time-since-injury (Sabaz et al., 2014). These findings document a few of the unique needs that individuals with CVA or TBI may experience. Research shows that psychological and social needs are often manifest after clients have been released from the hospital and are living in the community. The longer time post-injury, the more these needs may manifest. As a result of their research, Sabaz et al. recommended more community (re)integration programs for individuals with severe TBI address the following outcomes, “anger management, social skills and motivation” (p. E27). TRSs practicing within community (re) integration programs are in a unique position to address such needs.

Ryan, Stiell, Gailey, and Makinen (2008) researched community (re)integration in relationship to survivors of stroke; a pre, post and eight month follow-up evaluations were conducted utilizing the Leisure Diagnostic Battery (LDB). The program was an eight-week program that included leisure education and recreation participation, specifically with spouses. Ryan et al. found that participants in the program increased the perception of their leisure competence, increased their participation in community-based activities, and greatly improved the spouse’s perceptions of barriers, abilities, and relationship satisfaction.

Treatment Strategies

As mentioned above, psychological

and social needs of individuals who have experienced CVA or TBI may exacerbate post-rehabilitation. Goal-oriented programs, based on careful assessment, planning, implementation, and evaluation are essential to the TR process. Careful assessment of the stage post-injury should be noted, along with an effort to include family and significant others within the planning and implementation process.

Eicher, Murphy, Murphy, and Malec (2012) conducted a study of 604 patients with TBI comparing four programs: intensive outpatient and community based rehab (IRC), intensive residential rehabilitation (IRR), long-term residential supported living (SLR), and long-term community-based supported (SLC). The community (re)integration program focused on acquisition of skills; development of strategies to support cognition, communication, mood and behavior stability; and development of stable activity pattern elements. The researchers found the following recovery rates: IRR at 5.1 years; IRC at 6.0 years; SLC at 6.8 years, and SLR at 9.1 years. Participants who were involved in either IRR or IRC programs showed significant functional improvement on the Mayo-Portland Adaptability Inventory. In addition, they found individuals who participated one-year post-injury or multiple years post-injury showed significant improvements participating in the IRC programs. This suggests that individuals who are one-year post-injury or several years post-injury can be positively impacted through participation in community (re)integration programs.

Cicerone, Mott, Azulay, and Friel (2004) utilized both the Community Integration Questionnaire (CIQ) and the Quality of Community Integration Questionnaire (QCIQ) as measurement tools. The researchers found that individuals

with TBI participating in an intensive holistic community (re)integration program showed greater improvement than individuals participating in a standard neuro-rehabilitation program. The holistic program consisted of cognitive rehabilitation, psychosocial-interpersonal therapies, and both group and individualized programming.

Huebner et al. (2003) followed 25 survivors of TBI who participated in CI programs. They utilized three CI assessments: (1) Community Integration Questionnaire (CIQ), (2) Quality of Life Rating (QOLR), and (3) Functional Improvement Measure (FIM). The researchers wanted to measure home integration, social integration, productivity, and quality of life, to specifically examine self-esteem and well-being, interpersonal attachment, economics, recreation/leisure, and spirituality. Data showed that Total FIM Change and FIM Discharge Scores were positive predictors of community participation.

The presence of fewer activity limitations correlated with more home integration and productivity and overall CI but not with social integration. Fewer activity limitations and higher social integration were associated with higher self-esteem, spirituality, economic, and recreation aspects of quality of life Quality of life was highly related to all aspects of community integration (Huebner et al., p. 182).

Doig, Fleming, and Tooth (2001) studied the CI patterns of 208 persons with TBI two to five years post-discharge from rehabilitation units. Their sophisticated statistical analysis reviewed three patterns ("clusters") of individuals. Those who concentrated on work with fewer

home or social activities; those who were balanced working part-time or volunteered and were involved in a wider variety of social and home activities; and those who were isolated and poorly integrated, with low levels of participation in work, leisure, and home activities. The latter group had experienced more severe injuries and had greater functional deficits. The authors noted that, even for those with the most severe brain injuries, rehabilitation professionals need to focus on “productive alternatives for those not able to return to competitive employment” (p. 759).

Data supporting the need for continued treatment in late injury was collected by Kolakowsky-Hayner, Wright, Englander, Duong, and Ladley-O’Brien (2013). Twenty-five TBI survivors were surveyed, five to 13 years post-injury. Research participants predominantly responded that the increase in seizures in the late state of injury negatively impacted recovery, activity, and participation. Findings reflect a need for continued goal-oriented treatment that focuses on increased independence.

In addition, Doig, Fleming, Cornwell and Kuipers (2001) completed a qualitative study of individuals with TBI who participated in a 12-week goal-oriented CI program. Participants, caregivers, and family members were interviewed. Common themes were: “(1) challenges, (2) family involvement, and (3) satisfaction and progress” (p. 564). Findings reflected respondents’ high satisfaction with participation in the goal-oriented program. However, cautions were noted. Individuals with severe cerebral damage noted that lack of memory often resulted in not remembering goals that, in turn, created frustration. Lack of self-awareness (individual recognition of actual abilities and limitations) also was reported as a bar-

rier. Respondents recommended greater support in goal setting and involving the individual’s support network in the goal setting process.

Schönberger et al. (2014) researched treatment pertaining to adjustment models. In a study of 57 adults and adolescents with TBI, the investigators found that “poor functional status had a more minor impact on psychological adjustment in individuals with poor self-awareness than in individuals with high levels of self-awareness” (p. 204). This supports the assertion that goal refinement is essential to meeting the needs of clients.

Research has shown that CI is effective and, in many cases more effective, than traditional in-patient rehabilitation approaches for individuals who have sustained CVA or TBI. CI programs for these individuals need to be planned and structured to address specific psychological and social needs. TRSs need to be mindful of the injury stages of their participants as well as their existing and potential support networks. CI programming for this population needs to be deliberate and thoughtful, as well as evidence-based, in order to be most efficacious.

Implications for TR Practice

The above review of client needs and treatment strategies produced several recommendations for CI programming for TR. Among these recommendations are:

- Individuals with CVA or TBI benefit from CI programming that is planned and structured.
- Because of the unique pathophysiology of CVA or TBI, TRSs must be mindful of the client’s stage of injury.
- Individuals with CVA or TBI prefer well formulated goals. These goals, with the permission of the client, should be shared with individuals within that client’s social network.

- CI programming for psychological and social needs is an essential need for CVA or TBI populations, as these areas are by far the most heavily reported as areas of need that continue to create discord for clients.

Individuals with Intellectual and/or Developmental Disabilities

The focus of this section is on evidence-based research on CI interventions with individuals with intellectual and/or developmental disabilities (I/DD). A brief review of client needs will be followed by a review of research on treatment strategies.

Client Needs

In considering the desired outcomes associated with CI among persons with intellectual and/or developmental disabilities (I/DD), it is important to acknowledge that valued outcomes are likely to be influenced by the individual's life stage. For example, adolescents in high school are addressing transition from school-based supports and goals and possibly preparing to move into more independent community living, attaining employment, and engaging in post-secondary education (Wilder, Craig & Frye, in press). Young adults may be attempting to cultivate a social niche, establishing intimate relationships and starting families, and hopefully, launching careers. In later life stages, older persons may be experiencing functional decline associated with the long-term effects of chronic conditions, maintaining established and socially valued roles, and remaining in the homes of their choice (Boyd, 1997).

Successful CI for people with I/DD is impacted by their living situations. The dominant living arrangement for persons with I/DD (greater than 60%) is at home with a family caregiver (Heller & Factor, 1993; Rizzolo, Hemp, Brad-

Stumbo et al., 2004). This demographic reality, along with legislative mandates such as the Olmstead Act, virtually ensure that demand for services in the community, where the majority of people with I/DD reside, will remain strong (U. S. Department of Health and Human Services, 2002; Wilder, 2011).

Funding for I/DD services has been trending toward greater and greater allocations going to fund community-based supports versus institutional or nursing home care. For example, between 1997 and 2006, all 50 states increased the amount of money allocated to community-based services for people with I/DD (Braddock, 2010). The movement toward providing services in the community is clear and TRSs must be available and prepared to deliver intervention services where they are needed.

Multiple health disparities exist for persons with I/DD (Haveman et al., 2009). For example, there is evidence that persons with I/DD experience as high, and in certain disability groupings, higher rates of obesity than peers without I/DD. This places individuals with I/DD at risk for many obesity-related secondary conditions such as diabetes, hypertension, osteoarthritis, depression, and other related conditions (Haveman et al.; Rimmer, Yamaki, Davis Lowry, Wang, & Vogel, 2010). Community-based interventions aimed at addressing health conditions, meaningful engagement in activity, inclusion, and/or establishing and sustaining a social support network potentially contribute to one's perceived quality of life. TRSs are encouraged to consider these elements in determining how best to apply treatment services to facilitate attainment of valued outcomes (Chun, et al., 2008).

Within the developmental disability services community, calls for meaningful inclusion in community life have

been myriad and sustained (Austin & Lee, 2013; Boyd, 1997; Bullock, Mahon, & Killingsworth, 2010; Janicki & Ansello, 2000; Mayer & Anderson, 2014; Schleien, Meyer, Heyne, & Brandt, 1995). The right to access and inclusion in the mainstream of society has been directly impacted by a variety of laws and policy initiatives. The Americans with Disabilities Act, The Individuals with Disabilities Education Act of 2004, The Developmental Disabilities Assistance and Bill of Rights Act of 2000, The Olmstead Act, The New Freedom Initiative, and most recently the establishment of the Administration for Community Living under the Department of Health and Human Services, all represent national attempts to ensure broad access to community living for all Americans.

Treatment Strategies

The trend toward opening access to community-based supports and services clearly drives the need for TRSs in integrated community settings. A longitudinal study conducted in Australia determined that children and adolescents with dual diagnosis of autism and severe ID were particularly vulnerable to poor CI and living skills as adults (Gray et al., 2014). Their research suggested that living skills, which include working, independent living, and social engagement within the community were key contributors to successful CI. They found, however, that the majority of their research participants continued to experience restricted CI and living skills despite the trend toward increasing rates of residing in the community.

Increasing access to meaningful inclusion and engagement in the community for persons with I/DD is critical (Drum et al., 2009) to successful CI. Chun et al. (2008) found that individuals with disabilities (31.7% of study participants comprised persons with develop-

mental disabilities) who participated in a community-based adaptive sports program perceived a strong sense of CI that was positively correlated to increased quality of life.

Thorn, Pittman, Myers, and Slaughter (2009) changed the nature of their large, custodial institution for individuals with intellectual disabilities (it housed 556 individuals at the start of the study) and implemented a sweeping reform that included community-based training and 'real-life' community experiences. Over several years, their recreation program transitioned from 'outings' to teaching functional and independence skills.

The results of this study indicate that increased functional skills enhance relationship opportunities by creating a sense of ability and commonality in social settings. Increased functional skills in areas such as social interaction, safety, dining etiquette, money management, etc. enhance social relationships by highlighting abilities and unifying common interests. (p. 899)

The authors planned to continue to provide programs that teach and utilize skills in the community in which they are needed.

The message from a research study on individuals with intellectual disabilities with high support needs by Vine and Hamilton (2005) echoed Thorn et al.'s results. They studied 37 males who formerly resided in large institutions but now resided in smaller community settings by use of support staff proxies. They reported clear correlations between scores on community skills, daily living skills, social skills, and CI scores. As skill sets decrease, the degree of CI also decreases. They noted that individuals with

severe levels of intellectual disability risk having limited community involvement, but their particular study did not suggest the best way to improve these life circumstances.

Facilitating successful transition from school to work and community living is a primary directive of public education for individuals with disabilities. The Federal Partners in Transition opened a national online dialogue to seek input on how federal agencies could best facilitate successful transition (U.S. Department of Labor, 2013). Disability professionals across the country generated ideas that directly impact TR services with the call to 1) lower the age of transition services, and 2) mandate TR in schools. Our field has generated several successful models for incorporating TR services in public schools. One that is aimed specifically at starting transition services early is Northeast Passage's *TREK* program. *TREK*, Therapeutic Recreation Empowering Kids, is a school and community-based therapeutic recreation program designed to support the educational, developmental, and transitional needs of students with disabilities in the K-12 public school system. The *TREK* program purposefully facilitates transition. "By integrating important life skills into the existing curriculum, students who participate in *TREK* have the opportunity to develop critical competencies that enhance the likelihood of successful transition to adult roles" (Wilder et al., in press, p. 2). Utilizing the inherently motivational aspects of recreation and leisure involvement, coupled with specific transition-based goals identified in the student's Individualized Education Plan (IEP), the TRS serves as a key agent in promoting successful transition from school to work and community living.

Multiple health disparities exist for persons with I/DD (Haveman et al., 2009). As mentioned earlier, many studies have shown that individuals with I/DD on the whole are less fit, more sedentary, and have high amounts of body fat as compared to peers without disabilities (Rimmer, Rowland, & Yamaki, 2007). Lack of physical activity and inadequate nutritional intake that lead to being overweight or obese are modifiable with proactive and preventive measures (Haveman et al.). Public policy initiatives specifically identify the need to remove barriers to physical activity for people with disabilities (U.S. Department of Health and Human Services, 2008). Researchers have called for program staff to be trained and/or skilled in delivering programs that incorporate various approaches and modifications to facilitate engagement of participants with disabilities (Gray et al., 2014; Kunstler, Thompson, & Croke, 2013; Mayer & Anderson, 2014).

Kunstler et al. (2013) found that youth with disabilities (23% of research participants had I/DD) who engaged in the *FreshenUp* program became knowledgeable of their own fitness, were able to identify behaviors that lead to healthier states, demonstrated increased involvement in physical activity, improved fitness levels, and enhanced self-esteem and satisfaction. The 10-week *FreshenUp* program involved college students, under the guidance of a CTRS, employing the TR process to design and implement programs that assist young people with disabilities to develop recreation skills that would facilitate not only health and wellness outcomes, but also skills to participate in inclusive recreation. The program specifically targeted "overcoming barriers to participating in physical activities" including access to programs, information, and qualified staff (Kunstler et al., p. 125).

Another promising approach to increasing physical activity and healthy eating among persons with I/DD is the *I Can Do It, You Can Do It* (ICDI) program document. Using a mentor-mentee model (mentors included TR staff), participants of ICDI were involved in an eight-week community-based physical activity and nutrition program. Using a multi-site design, the study sought, in part, to determine whether there was a significant difference in physical activity level, nutritional intake, and changes in sedentary behavior as well as BMI upon conclusion of the ICDI program. Significant findings among mentees included increased physical activity and enjoyment of physical activity, improved nutrition, changes in sedentary behaviors, and reduction in BMI (Kemeny & Arnold, 2012).

As noted above, the majority of persons with I/DD live at home with family caregivers. Intervention services that include the caregivers and/ or support staff as an integral part of a successful treatment plan provide a more effective and valued approach to service delivery (Rimmer & Yamaki, 2006). Wilhite, Biren, and Spencer (2012) conducted an outcomes study of *Get FIT* (Fitness, Integration, and Training), a 12-week community-based physical activity program for adults with I/DD and their caregivers. For persons with I/DD significant improvements were noted between pre- and post-intervention on a variety of physical health indicators including total cholesterol, blood pressure, flexibility, strength, and cardiovascular fitness. Sleep patterns, alertness, and socialization were also improved among persons with I/DD. Caregivers also benefitted by engaging in activity that both afforded them the opportunity to be with their child or sibling and by doing activity they perceived as positive for themselves.

Inadequate levels of physical activity are a primary driver in the costly burden of chronic disease. Community-based health promotion programs that target physical activity and proper nutrition are essential to improving the health of all Americans. Programs such as *TREK*, *FreshenUp* or *I Can Do It, You Can Do It*, and *Get FIT* that are designed to address barriers to physical activity, provide adequately trained and knowledgeable staff, and that promote the benefits of social and relational fitness and social activities combine the most effective and evidence-based strategies for improving the health and wellness of all people, including persons with I/DD (Kemeny & Arnold, 2012; Kunstler et al., 2013; U.S. Department of Health and Human Services, 2008). Collaboration among the various providers is a critical component of a successful program. The TRS is ideally situated to engage in collaborative practice and by virtue of training and expertise can be the pivotal person in facilitating cross-system and cross-disciplinary collaboration (Kemeny & Arnold, 2012; Kunstler et al., 2013; Wilder et al., in press; Wilhite et al., 2013).

Implications for TR Practice

This review of client needs and treatment strategies produced several recommendations for CI programming for TRSs. Among these recommendations are:

- Being a valued and integral member of a community enhances one's quality of life; TR services should be geared toward facilitating this status among persons with I/DD.
- The majority of persons with I/DD live in the community and will continue to do so; TR service delivery must be available where prospective clientele live.

- CI is most successful when key partnerships and services providers are linked together; TRSs can and should take on the role of facilitating these collaborative relationships for the benefit of those we serve.
- Obesity is a major health threat to our entire populace and persons with I/DD may be at particular risk for experiencing obesity-related illnesses. TRSs are well situated to provide effective, evidence-based interventions to address this threat to our collective health and well-being.
- In addition to viewing health as a holistic concept, it is also an ecological construct. TRSs should seek to involve the person's key social support network when developing a treatment strategy.

Individuals with Mental Illnesses

Client needs of individuals with mental illnesses and successful treatment strategies with regard to CI programs are the focus of this section. This includes CI interventions that have been shown to be efficacious for individuals with mental illnesses.

Client Needs

Past research provides clear evidence to support leisure as a principal life domain in terms of one's health and well-being. Leisure engagement is particularly important for those who for various reasons lack positive life experiences. This is particularly true for persons with mental health problems as many of the negative symptoms, stereotypes, and stigma associated with different clinical diagnostic categories make the attainment of positive life experiences an ongoing daily challenge. The need to provide greater access to positive TR experiences cannot be overstated. Person-centered factors such as locus of control contribute the most

to the multifaceted nature of well-being (Pegg & Moxham, 2000). Globally, however, services for individuals with a mental illness remain fragmented, disconnected, and largely inadequate (Iwasaki, Coyle, & Shank, 2010).

Research to date has suggested that when individuals take greater control of their lives, they suffer less illness, are better able to cope with life stresses, and have lower rates of recidivism (Coleman, 2000). Appropriately planned TR programs need to be a key component of any health service as such interventions serve as potential sources of social support for people with a mental illness, offering opportunities for individuals to relax with peers, make friends, and improve relations with family and spouse (Bruseker & O'Halloran, 1999; McCormick & Hale-Fought, 1999). The manner with which TR services support the individual becomes a critical consideration as stress and lack of social supports are key factors that can lead to an exacerbation of symptomatology and deterioration in mental wellness.

Treatment Strategies

Researchers found that independent living skills, social skills, self-advocacy, and being proactive all aided the 18 research participants with schizophrenia in their movement toward successfully integrating back into community living (Wong, Metzendorf, & Min, 2006). The researchers also noted that the formation of supportive consumer networks and the promotion of mutuality and reciprocity in any form of treatment were also important considerations. Similarly, in a study conducted by Murugesan et al. (2007), with respect to the delivery of psychosocial rehabilitation program in a regional community of Australia, there were significant improvements for program participants reported in terms of

psychiatric symptomatology, psychosocial functioning, and psychological distress as a consequence of their involvement in the planned intervention.

Providing further support for the value of appropriate intervention programs, McCorkle, Dunn, Mui Wan, and Gagne (2009) conducted a study of 20 individuals (nine with serious mental illness with numerous barriers toward developing and maintaining friendship and 11 volunteers) in an intentional friendship program. Researchers reported that as a consequence of their involvement, participants became more outgoing, sociable and active, with increased self-esteem, self-worth, and self-confidence. Moreover, the researchers concluded that the intentional friendship program was a cost-effective strategy that could improve the clients' development of social networks and also serve to improve their overall quality of life.

In a study designed to determine perceived barriers to CI for individuals with mental health problems, Mallick, Reeves, and Dellario (1998) found that financial and employment resources along with vocational adjustment were the three largest barriers individuals with mental illness faced. These same respondents also rated social supports, relationships, communication, transportation, time management, problem solving, and money management skills as problematic. The authors reported that practitioners viewed person variables and lack of skills as the greatest barriers, whereas the consumers themselves rated environmental barriers as the most significant concerns.

Gulcur et al. (2007) completed a four-year study of individuals with severe mental illnesses and their experiences with homelessness and identified similar issues. In this study, 82 participants were assigned to the experimental group and 101 to the control group. Among

the researchers' many findings were that (a) CI has physical, social, psychological and independence/self-actualization factors; (b) having choice and being in dispersed housing units positively predicted psychological and social integration; (c) having been hospitalized prior to integration produced greater psychological integration; (d) greater psychopathology decreased psychological (but increased social and self-actualization) aspects of integration; and (e) participation in substance abuse treatment programs positively influenced physical integration, but negatively influenced social integration. They concluded that housing needs resemble that of the general population more closely, and that programmers should note that factors such as participation in substance abuse treatment, often can have positive effects on some forms of integration while negatively affecting others. This line of argument was also supported more recently by Muir et al. (2010), who contended that facilitating social and community participation among individuals with mental illness had to start and finish with the provision of affordable, secure, and stable housing.

A recent study explored the perceptions of returned service personnel suffering combat-related disabilities, inclusive of post-traumatic stress disorder (PTSD), about the benefits and importance of a nature-based TR program (Bennett et al., 2014). The researchers reported a range of positive outcomes such as a reconnection with relevant others, a conducive atmosphere to relax and engage, and successfully learning new skill sets that could influence other domains of life. Francis, Giles-Corti, Wood, and Knuiman (2012) noted that engaging people with enduring mental health problems in such outdoor-based therapeutic mediums was one means by which health professionals could assist individuals to enhance their

identity development and overall quality of life. As reported in other studies with individuals with mental illnesses, the opportunity to gain confidence via their involvement in a structured program, to again feel “normal” and the prospect of moving forward in life were seen as positive individual outcomes which served to assist each to integrate more successfully back into the mainstream.

Implications for TR Practice

Recovery from mental illness is about peers, social inclusion, and a unique path that needs to be followed by each individual on the journey of mental health recovery—“a journey of healing and transformation that enables individuals with mental health problems to live in the community of their choice while striving to achieve their full potential” (Power, 2010, p. 114). Clearly, TR services can be an integral part of that journey for many individuals and is one that need be embraced more fully if individuals with mental illnesses are to be successfully integrated back into community life.

TRs need be mindful of the following when developing interventions involving individuals with mental illnesses:

- Positive social interaction is a critical dimension of any intervention with a particular emphasis needing to be placed on the active involvement of friends and familial supports wherever possible.
- Health itself cannot be considered in any modern health service outside of a multidimensional stance. As such, TRs need be cognizant of the community assets that can serve to support the individual and aid in their recovery instead of focusing only on the deficits and limiting the potential outcomes.
- Empowering individuals to take

greater control and allowing them to make choices with respect to their own treatment is a proven and successful means of improving the desired health outcomes. The involvement of individuals with mental illnesses in TR interventions that meet their individual needs can be no different.

Individuals with Spinal Cord Injury

This section highlights needs of individuals with spinal cord injuries (SCI) as well as treatment options regarding CI interventions. After reviewing pertinent CI research, the section ends with a list of important implications for therapeutic recreation specialists serving individuals with SCI.

Client Needs

The ultimate goal of physical medicine and rehabilitation is CI (Charlifue & Gerhart, 2004; Consortium for Spinal Cord Injury Medicine, 2000; Gontkovsky et al., 2009). Rehabilitation professionals prepare individuals newly injured to be included and participating within their physical and psychological environment (Charlifue & Gerhart, 2004; Kirshblum, Groah, McKinley, Gittler, & Stiens, 2002). It is anticipated that individuals with newly acquired SCI would (re)integrate into former or new social roles; be independent in living; and be physically independent in self-care, accessing the environment, and in social interactions in the community. Heinemann, Steeves, Boninger, Groah, and Sherwood (2012) recommended that more be done in analyzing and improving the person-environment interactions that may occur for persons with SCI. This includes learning more about and advocating for (a) improved accessibility, (b) personal adaptation and negotiation skills, and (c) appropriate technology that may reduce

environmental barriers. They stated that these important skills may impact one's community participation and QOL.

In addition, the body responds to CI positively. A number of health benefits are associated with engagement in community activities including reduced risk of general mortality and mortality caused by coronary heart disease, reduced risk of coronary heart disease, and reduced risk of cardiovascular disease risk factors (obesity, elevated blood pressure, and raised heart rate) (Dalgard & Håheim, 1998; Ellaway & Macintyre, 2007; Eng, Rimm, Fitzmaurice, & Kawachi, 2002). Furthermore, regular participation in community activities appears to reduce the risk of mental health issues, which influences successful coping and protects against negative effects associated with decreased isolation (Dalgard & Håheim, 1998; Kawachi & Berkman, 2001).

The majority of individuals who sustain an SCI return to home or to a home-like setting in the community after rehabilitation. Rehabilitation professionals coordinate care with the patient to identify, develop, and practice functional skills for CI. The goal is to have the individual integrate in his/her community by participating within his/her physical and psychological environment (Charlifue & Gerhart, 2004; Kirshblum et al., 2002) as well as re-integrate into former or new social roles.

Quality of life and life satisfaction have become important topics when discussing CI of individuals with SCI. It appears CI is a predictor of QOL among individuals with SCI (Kuipers, Kendall, Amsters, Pershouse, & Schuurs, 2011). Moreover, Dijkers (2010) found that higher scores on measures of CI were associated with higher levels of life satisfaction. In a study of quality-of-life issues, results from 270 Australians with SCI surveyed indicated that societal

participation was key to improved social relationships and psychological domains (Barker et al., 2009). CI has also been found to positively impact physiological and psychological well-being (Fuhrer, Rintala, Hart, Clearman, & Young, 1992; Kennedy et al., 2010).

Again, while much is being learned about the lifelong processes of integrating into one's community with a SCI, much still needs to be investigated. More needs to be known about the varying needs of newly injured versus long-term injured individuals as well as the variance in types of environments they return to and the skill sets they may need.

Treatment Strategies

In recent years, the focus on CI research is moving away from the benefits of CI to investigating community skill-based programs on CI. Due to shortened length of stays, many individuals with SCI are learning the basics to live within their home with little attention to integration within the community, their social roles, and other aspects of CI. Moreover, the impact the World Health Organization's (WHO) International Classification of Functioning, Disability, and Health (ICF) view of health and disability has shed some light on the need for continued skill building for activity and participation. Activity and participation as defined by the ICF most aligns with CI (Song, 2005).

One of the most common practices within rehabilitation of individuals with SCI involves peer mentors. Peer mentors are individuals who are a few years or more post injury and successfully living in the community (Ljungberg, Kroll, Libin, & Gordon, 2011). "Key elements of peer mentoring programme include the provision of social support, the strengthening of self-efficacy beliefs, CI and monitoring secondary conditions

in people with SCI” (Ljungberg et al., p. 352). Ljungberg and colleagues investigated the effects of a community-based peer mentor program on individuals’ newly injured self-efficacy beliefs and prevention of medical complications. Their quasiexperimental pre- /posttest of 24 individuals receiving peer mentorship showed an increase in self-efficacy beliefs between two measurement times as well as a decrease in medical complications between testing times. Peer mentors went through extensive training and received ongoing supervisory support by clinical psychologists.

Another peer mentoring study conducted by Kolakowsky-Hayner, Wright, Shem, Medel, and Duong (2012) found that successful completion of the program resulted in mentees returning to work or obtaining employment. Their peer mentoring program goal was to “improve the ability of youth/young adults with disabilities to navigate through the disparate services and programs available to individuals with disabilities” (p. 65). Of the 77 mentees, 42 successfully completed the program with 29 returning to school and 13 becoming employed. Employment or school is considered a social role, thus indicating the benefit of a peer mentor program on CI among individuals with SCI.

CI involves the fulfillment of participating in life activities such as employment and school; however another area is the participation in recreation and sport. The use of sport or active recreation in the rehabilitation of individuals with SCI is increasingly becoming apparent in SCI treatment (Hanson, Nabavi, & Yuen, 2001). These investigators conducted a study with athletes and non-athletes who participated in an exploration sport camp. This exploration camp involved individuals with SCI participating in different adaptive sport activities. It was

reported that athletes had significantly higher scores of CI than nonathletes. Furthermore, “personal characteristics such as supporting a family, maintaining a job, and going to school were observed more frequently with the athlete group” (Hanson et al., p. 335). Thus, it is posited that higher level of CI implies fulfillment in social roles (Hanson et al.). In addition, participation in sport among individuals with SCI has shown protective factors for disease prevention (Martin Ginis, Jørgensen, & Stapleton, 2012). If individuals are not healthy it becomes more difficult to participate in social roles and community activities.

Mobility among individuals with SCI is critical to CI. Being able to navigate one’s environment as well as get from place to place is helpful when integrating into the community. The use of wheelchair skills is imperative to mobility for individuals with SCI. The excessive upper extremity use involved with wheelchair mobility can create problems with CI (Hubert, Tousignant, Routhier, Coriveau, & Champagne, 2013). One way to combat overuse of upper extremities is service dogs. “Potentially service dogs can be used to prevent excessive use of upper limbs and facilitate achievement of certain lifestyles, helping to overcome environmental obstacles” (Hubert et al., p. 342). Hubert and colleagues conducted a study investigating the use of service dogs on manual wheelchair user’s mobility and shoulder pain, social participation, and quality of life. Not only did service dogs receive specific training but also subject participants received training with the service dog. They found that after seven months of working with the service dog that shoulder pain significantly decreased and social participation and ability to return to life significantly improved (Hubert et al.). The value of service dogs in regard to CI has shown significant effects

on CI. Specifically, Allen and Blascovich (1996) found that within six months of receiving a service dog, individuals with SCI increased their socialization and CI.

There is evidence supporting community-based programs to facilitate CI for individuals with SCI. The impact of CI on the fulfillment of social roles, increased quality of life, and overall healthy lifestyle appears to be supported by the literature. However, there appears to be more opportunity for further investigation of different interventions to facilitate CI especially since the length of rehabilitation stays is decreasing.

Implications for TR Practice

This review of client needs and treatment strategies produced recommendations for CI programming for TRSs. Among these recommendations are:

- Identifying with similar others is important to individuals with SCI. TR services could incorporate peer mentors during treatment times.
- Being as independent as possible after rehabilitation is an important outcome for individuals with SCI. The TRS can facilitate developing independence by incorporating service dogs within treatment.
- Involvement in physical activity is important for successful CI. TRSs can facilitate this process prior to discharge by bringing patients to actual recreation activities (e.g., wheelchair basketball, adaptive swimming) during and after rehabilitation.
- Community engagement is most successful when individuals feel efficacious in their abilities to participate and engage in and with the community. The TRS should facilitate self-efficacy through the vicarious experiences and using verbal persuasion during all treatment times.

Aging Individuals with Chronic Conditions

CI is becoming increasingly more important for some older adults as people live longer with more chronic conditions or illnesses. Additionally, a stronger emphasis on “aging in place,” living in the least restrictive setting, and remaining in the community are making CI significant to older adults who have experienced a life changing medical event. However, research is limited on CI as an intervention specifically with older adults with chronic limitations or illnesses.

Client Needs

CI is designed to “promote the development and application of new knowledge, skills, and attitudes necessary for successful participation on community living” (Armstrong & Lauzen, 1994, p. 5). Often after an acute episode, disabling condition, or even following a period of deconditioning, older adults in acute and sub-acute settings are faced with numerous barriers. Some barriers that interfere with older adult’s involvement in community living include decreased functional abilities, lack of a companion, safety concerns, discrimination and stereotypes, lack of transportation or finances, and/or lack of awareness of resources (Administration for Community Living, n.d.; Jansen, 2005; Substance Abuse & Mental Health Services Administration [SAMHSA], 2004; UPenn Collaborative, n.d.). Additionally, “a survey by Tompkins County (Ithaca, NY) Office for the Aging found that 19% of older adults interviewed had no contact with anyone in the past week and 22% had had only one contact” (UPenn Collaborative, n.d., p. 1). Research has demonstrated that social isolation contributes to decreased physical and mental health, including increased depression (UPenn Collaborative, n.d.). For individuals facing barriers

and social isolation, the intervention and treatment services of a TRS may be required to overcome barriers and integrate the older adult with chronic conditions back into community living.

Treatment Strategies

TRSs have several opportunities to facilitate successful community participation with older adults with chronic conditions. First, working on CI and life skills during an inpatient stay or hospitalization assists the individual to practice and demonstrate his or her ability to function independently and safely. To support this, the SAMHSA (2005) acknowledged the benefits of community based services to “keep people in the community, and help those who have recently been in a hospital or nursing home make a successful transition back to the community” (p. 1). Part of successful integration includes skill training for community living, prevention of secondary disabilities, health promotion activities, and educational opportunities (SAMHSA, 2005, p. 22-23, 25).

Secondly, providing education about community resources enables successful return to the community. Organizations such as senior centers, churches, and social service agencies assist in reducing or eliminating barriers, further enabling continued CI (UPenn Collaborative, n.d.). Involvement in adult day care programs, which include recreation, has been suggested as “cost effective in terms of delaying institutionalization, and that participants show improvement in some measures of mood and functioning” (U.S. Department of Health and Human Services, 1999, p. 373). Furthermore, being active has proven to decrease depression, as well as the onset of certain conditions and improve overall health (UPenn Collaborative, n.d.).

Efforts are being made to provide support and services to older adults with chronic limitations or illnesses living in their homes to engage them in the community and assist them in community living rather than moving into a residential setting. Partnerships and relationship-building efforts are developing between physicians, community nursing, and/or community social workers to enhance health services to such older adults living in the community who are at risk of experiencing additional health problems (Davey, Levin, Iliffe, & Kharicha, 2005; Korabek, Slauenwhite, Rosenau, & Ross, 2004). Also, studies on older adults with chronic conditions participating in community recreation experiences demonstrated the importance of maintenance of abilities, chances to contribute, resumption of past roles, and improved self-concept (Dupuis, Smale, & Wiersma, 2005).

In the US, the growth of Medicare and Medicaid funding for the Program of All-Inclusive Care for the Elderly (PACE) demonstrates the emphasis on keeping at-risk older adults in the community rather than moving to institutional settings. The PACE program, as well as similar community-based older adult services around the globe, has demonstrated better functional outcomes and improved quality of life, including decreased institutionalization, improved mortality rates, shorter hospital stays, and improved self-reported health status (Administration for Community Living, n.d.; Chan, Cheng, & Su, 2008; Davey et al., 2005; Mukamel et al., 2007; Petigara & Anderson, 2009; SAMHSA, 2004). Furthermore, TR is a recognized component of service delivery within PACE programs (Petigara & Anderson, 2009). Community living and integration of services within the community (versus an institution) are essential components of PACE.

A recent CI trend for older adults with chronic conditions living within institutional settings is a concept referred to as “open environments.” Dupuis et al. (2005) studied open environments in long term care settings in Canada. The researchers defined an open environment as one that “emphasizes the availability of a wide variety of options, freedom of choice to select options, open access to options and/or information, and rich human contact” (p. 279). It is a person-centered approach to care designed to provide a higher quality of living for those residing in institutional settings. The focus is on bringing residents who live in institutional settings into recreation programs in the community, reintegrating residents back into community life even though they live in a nursing home. The authors highlighted the role of recreation and leisure in open environments as well as discussed the provision of access to community programs for those living in nursing homes. Recreation directors identified a range of benefits for residents of long term care settings to be involved in community recreation programs including: feeling connected to the community, maintaining independence, and making a contribution to the community (Dupuis et al., p. 286). The authors indicated that

the extent to which residents living within long-term care facilities are provided with opportunities to maintain valued relationships, roles, routines, and experiences in the community will influence the degree to which self-concept can be maintained, enhanced, or destabilized in that environment. (p. 279)

When residents in nursing homes can select their involvement and activi-

ties, they experience greater autonomy, choice and control. Yet, due to a number of real and perceived barriers, access to community programs is limited despite the identified benefits. Further study is needed on the concept of “open environments” but it could serve as a method of integrating older adults with chronic conditions into their communities even if they reside in institutional settings. Related to this is the need for further research on inter-professional collaboration between community-based and institution-based providers relative to maintaining older adult’s health and well-being in the least restrictive, most inclusive environment.

Other research has focused on older adults with mental health issues and CI. For example, Hebblethwaite and Pedlar (2005) discussed the importance of CI for older adults with mental health issues. This qualitative study found that older adults with psychiatric disorders reported improved emotional health related to independence, stress management, feelings of self-worth, and experiencing a slow transition home following participation in a CI program. In talking about feelings of independence, the researchers concluded:

Ultimately, because these older adults were able to continue to live in their homes in the community and maintain their physical and psychological well-being, they felt in control of their lives and ability to be independent. This feeling of independence was central to participants’ experience of reintegration into their communities which [sic] they pursued on their own. (p. 274)

Older adults in this study also reported improved ability to be by them-

selves and greater social supports. These findings demonstrated the impact of CI upon emotional and social well-being as well as continued independence in the community.

The benefits of community participation for older adults with chronic limitations are significant and range from improved social networks and connectedness (Ashida & Heaney, 2008), to life satisfaction and quality of life (Mathieu, 2008; Ruffing-Rahal, 1994), to physical functioning (Austin, Johnston, & Morgan, 2006; Harrington et al., 2010), and to cognitive functioning (Chow, 2002; Kunstler, 2002). It is essential for TRSs to facilitate and teach older adults with chronic conditions community skills for integration into their communities, to enhance their quality of life, and decrease the risk of secondary disabilities related to depression or declining physical health.

Implications for TR Practice

There are significant physical, cognitive, and emotional benefits to engaging older adults in CI. Among these are:

- TRSs should work on creating open environments within institutional settings, partnering with community recreation and other agencies to engage older adults with chronic conditions in their communities, highlighting their past roles and relationships.
- For TRSs working in sub-acute and acute rehabilitation, the provision of CI programs is critical to transitioning to lesser levels of care, improving community involvement and enhancing knowledge of community resources.
- For residents living within long-term institutional settings, TRSs should engage and involve them in the community through regular outings.

Summary of Implications for TR Practice

The purpose of this paper was to review recent research on CI programs across selected populations served by TRSs. Although research concerning these groups is widely varied, some commonalities can be found among client needs, treatment strategies, and implications for TR practice. For all populations, it was found that community living is the norm but that CI is not necessarily an automatic service provided to those who might need it most. Among all populations and settings, CI was found to promote overall health and well-being, decrease the likelihood of secondary disabilities, and increase quality of life (Chun et al., 2008; Townley et al., 2013). Further, recreation activities within the community, particularly of a social and/or physical activity nature, facilitated these positive aspects of CI (Chun et al., 2008; Drum et al., 2009). In terms of the delivery of TR services, the following specifically appeared to foster CI: sports programs conducted in the community, incorporation of social network members and trained peer mentors in treatment sessions, use of social network members and peer mentors to facilitate actual CI, provision of knowledge about community resources and overall healthy lifestyles, community outings, development of needed skills (e.g., mobility, social interaction), and self-efficacy (Kim et al., 2013; Thorn et al., 2009; Wong et al., 2006). Depending on the population, goal directed programs that focused on the development of skills and knowledge were more beneficial than simply the provision of recreation activities (Heinemann et al., 2012; Ryan et al., 2008; Thorn et al.). It appears that the former was more important for persons with disabilities and chronic conditions residing in the community whereas the latter

appears more important for persons not currently living in the community (e.g., clients residing in inpatient rehabilitation or hospital settings, long-term care facilities) (Eicher et al., 2012). Additionally, it was demonstrated that treatment is needed beyond the original onset of the disability including at later stages in the individual's life (Eicher et al.).

The following recommendations are made for TR practice. TR services need to focus more on CI and providing transitional services as well as possibly ongoing community services (Cicerone et al., 2004). Consequently, TR practice needs to have a stronger presence in the community, involve collaborative partnerships among a variety of community assets, and be available to individuals beyond the onset of the disability (Heinemann et al., 2012; Huebner et al., 2003). TR treatment needs to begin in the institution setting and continue into the community across the lifespan of the individual as needed (Boyd, 1997; Doig et al., 2001; Gray et al., 2014; Kolakowsky-Hayner et al., 2013). Across settings, TR treatment should include training and use of peer mentors, incorporate social support network members, focus on generic skill development such as mobility and social interaction as well as on recreation activity skills, be goal directed, provide education about community resources, and promote self-efficacy (Chun et al., 2008; Doig et al.; Heinemann et al., 2012; Ljungberg et al., 2011). Additionally, TR services within the institution setting should provide skill-based community outings. In conclusion, successful CI programs need to be well-designed, goal-oriented, client-centered based on skill and stage-of-life, multidimensional, strength-based, and focused on individual empowerment and engagement (Schönberger et al., 2014).

Implications for TR Research

TR-specific CI research is much needed. Some research topics to be addressed include evidence-based practice (EBP) research that addresses (a) timing, content, structure, and setting of treatment for CI-related outcomes, (b) roles of the TRS (e.g., leader, consultant, facilitator), (c) provision of recreation programs in the community with and without the involvement of TRSs, and (d) alternative means of successfully obtaining CI (e.g., peer mentors, social support network members, service dogs, community resource knowledge). Additionally, descriptive studies are needed to better understand (a) the role of TRSs and TR services in CI, (b) potential community inclusion protocols for persons with different disabilities at different ages and possibly from different socioeconomic and cultural backgrounds, (c) the role of peer mentoring in relationship to CI, and (d) the relationship among community assets and CI. Other research is also needed to explore the relationship among TR services, community leisure engagement, healthy lifestyles, and overall wellness.

As the health care system continues to evolve in the United States (e.g., continued shortening of hospital stay, increased delivery of services in the community, increased acuity of persons living in the community, and increased focus on prevention) and as individuals with disabilities are aging and increasingly living in the community, it will be even more important than ever that TRSs focus practice and research on CI and the delivery of TR services beyond the institution setting.

Summary

The purpose of this paper was to review the recent research on CI programs across selected roles and settings served

Community Integration

by TRSs. Although the research concerning these groups is widely varied, some commonalities can be found between the recommendations for planning and implementing TR services.

The first common thread is that CI is important to a number of individuals for a number of reasons. These reasons include resultant higher quality of life; better physical, social, and mental health; better psychological adjustment to disability; and increased opportunity for social engagement. A second thread is that most individuals with disabilities and/or illnesses live in their families' homes or within community-based settings such as group homes. TRSs need to consider that the majority of CI programming will be

for individuals who actually live in non-institutionalized settings, but have yet to be fully accepted or integrated into society. Thirdly, CI services often require collaborative partnerships between a variety of community assets (individuals and agencies), perhaps including the individual's family and key social support network. The TRS can be a prime strategist in developing these partnerships. Successful CI programs are well-designed, goal-oriented, based on skill- and stage-of-life, multidimensional, and focused on individual empowerment. Types of successful CI programs may range from skill instruction to the use of service animals to recreation and sport.

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