**Journal of Nurse Life Care Planning**

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Neither the Journal nor the Association guarantees, warrants, or endorses any product or service advertised in this publication nor do they guarantee any claims made by any product or service representative.
We have received positive feedback on including possible nursing diagnoses with our articles. As nurse life care planners, we differentiate ourselves (by using the nursing process) from others whose professional background and licensure lacks basis for developing diagnoses and treatment plans independently. Our nursing licenses require us to do exactly that. Therefore it is critical to keep the nursing process at the core of our practice and entirely appropriate to include this in our professional organization’s Journal, even as we welcome, as in this issue, useful articles from collaborative members of other allied health disciplines.

I have received some questions, though, about how to describe the nursing process to others, notably members of other professions using our services and lay persons who have only heard the words “diagnosis” and “treatment” related to medical practice. While many reading these words are familiar with this debate, others don’t know that nursing diagnosis is based on the nursing process, which in turn has its basis in evidence and a validated taxonomy.

What is evidence-based nursing practice? Evidence-based practice allows nurses to enrich their clinical training and experience by using up-to-date research. With the large amount of research and information now in the health care arena, learning principles and skills of evidence-based practice allows nurses to search for, assess, and apply the literature to their clinical situations. (Kessenich 1997)

Assessment is integral to the nursing process; it means that the nurse has collected objective and subjective data, has developed a nursing diagnosis, and is able to develop and prescribe a nursing plan of care.

What is a taxonomy? Taxonomy is the practice and science of categorization and classification. The NANDA-I taxonomy currently includes 206 nursing diagnoses that are grouped (classified) within 13 domains (categories) of nursing practice: Health Promotion; Nutrition; Elimination and Exchange; Activity/Rest; Perception/Cognition; Self-Perception; Role Relationships; Sexuality; Coping/Stress Tolerance; Life Principles; Safety/Protection; Comfort; Growth/Development.

We use nursing diagnosis as the framework for our practice; we do so with confidence that we have a body of research and publication for support.

Cordially,

Wendie Howland
Editor, Journal of Nurse Life Care Planning
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AANLCP℠ invites interested nurses and allied professionals to submit article queries or manuscripts that educate and inform the Nurse Life Care Planner about current clinical practice methods, professional development, and the promotion of Nurse Life Care Planning within the medical-legal community. Submitted material must be original. Manuscripts and queries may be addressed to the Editorial Committee. **Authors should use the following guidelines for articles to be considered for publication. Please note capitalization of Nurse Life Care Plan, Planning, etc.**

**Text**

Manuscript length: 1500 – 3000 words

- Use Word® format only (.doc)
- Submit only original manuscript not under consideration by other publications
- Put the title and page number in a header on each page (using the Header feature in Word)
- Set 1-inch margins
- Use Times, Times New Roman, or Arial font, 12 point
- Use double-spacing, using the Word formatting feature
- Place author name, contact information, and article title on a separate title page, so author name can be blinded for editorial review
- Use APA style (Publication Manual of the American Psychological Association)

**Art and Figures**

All photos, figures, and artwork should be in JPG or PDF format (JPG preferred for photos). Line art should have a minimum resolution of 1000 dpi, halftone art (photos) a minimum of 300 dpi, and combination art (line/tone) a minimum of 500 dpi.

Each table, figure, photo, or art should be on a separate page, labeled to match its reference in text, with credits if needed (e.g., Table 1, Common nursing diagnoses in SCI; Figure 3, Time to endpoints by intervention, American Cancer Society, 2003)

**Editing and Permissions**

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- The author, not the Journal, is responsible for the views and conclusions of a published manuscript.
- Submit your article as an email attachment, with document title articleName.doc, e.g., wheelchairs.doc

**Manuscript Review Process**

Submitted articles are peer reviewed by Nurse Life Care Planners with diverse backgrounds in life care planning, case management, rehabilitation, and the nursing profession. Acceptance is based on manuscript content, originality, suitability for the intended audience, relevance to Nurse Life Care Planning, and quality of the submitted material. If you would like to review articles for this journal, please contact the Editor.

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Contributing To this Issue

Jennifer Frye (“Frequently Asked Questions about Recreational Therapy”) is a Licensed & Certified Therapeutic Recreation Specialist working in the Therapeutic Recreation field for eleven years. Ms. Frye is currently adjunct faculty at the University of New Hampshire and works at Northeast Passage, a privately funded therapeutic recreation program located at the University of New Hampshire. Her expertise is in physical disability and catastrophic injuries including amputations, brain injury, stroke, spinal cord injury and multiple sclerosis. She spoke at the American Association of Nurse Life Care Planners annual conference in 2010.

Reg L. Gibbs, Ashley Waldmann, and Andrew M. O’Brien (“Vocational Rehabilitation Considerations in the Nurse Life Care Plan”)
Reg Gibbs is the founder and President of Rocky Mountain Rehab, P.C. of Billings, Montana and Brightsun Technologies, Inc., adjunct professor of rehabilitation counseling at Montana State University-Billings, and a former expert witness for the Social Security Administration. Andrew O’Brien has provided vocational rehabilitation services for nearly 40 years. He is a certified rehabilitation counselor providing consultations, evaluations and trial testimony in personal injury and medical malpractice cases as well as maintaining a private practice. He has had extensive experience working in the area of spinal cord injuries, traumatic brain injuries, blindness and amputations. Ashley Waldmann is a certified rehabilitation counselor for Rocky Mountain Rehab, P.C. as well as is the lead researcher for Brightsun Technologies, Inc. She has previously published in the Rehabilitation Counseling Bulletin as well as in the Journal of Applied Rehabilitation Counseling.

Susanne Morgan Morrow is a Deaf-Blind Specialist and dually certified Sign Language Interpreter. She has developed educational manuals and multi-media training materials on best practices regarding deaf-blind interpreting strategies as well as publications on self-determination, transition planning and outcome and performance indicators. She has acted as the chairperson for the Deaf-Blind Member Section with the Registry of Interpreters for the Deaf for almost a decade and is the co-chair of the National Task Force on Deaf-Blind Interpreting (NTFDBI). In these roles she acts as the national liaison for deaf-blind related issues in the field of interpreting. She is currently the Project Coordinator for the New York Deaf-Blind Collaborative (NYDBC), a federally funded project that provides technical assistance on behalf of children and young adults who are deaf-blind.

Irmo Marini (“Vocational Damages in Life Care Planning”) is Professor and Ph.D. Coordinator of the rehabilitation counseling doctoral program at the University of Texas Pan-American. Aside from his academic position, Dr. Marini is CEO of Marini & Associates forensic rehabilitation consultants, primarily offering vocational and life care planning expert services to attorneys in Canada, the US and Mexico. Dr. Marini has numerous national and faculty research and teaching awards, over a hundred presentations and one co-edited counseling book as well as over 65 refereed journal publications.
Keith Sofka (“Technology Corner: Grab This!”) is a principal of Caragonne and Associates, Ajijic, Jalisco, MX. He has practiced the provision of assistive technology services for the past 30 years. Mr. Sofka provides consultation to hundreds of companies, schools, Government Agencies and individuals. A major focus of Mr. Sofka’s work has been to provide recommendations for and implementation of school and workplace reasonable accommodation recommendations for individuals and organizations. This work typically includes housing and commercial building access as well as transportation, mobility and completion of daily living needs as well as modifications to the individual worksite. He has also taken training and practiced in other areas of assistive technology including custom seating and positioning for individuals with severe orthopedic involvement. His work has always been focused on ways to use technology to increase the independence of the individual.

Valerie Jeannette Rodriguez (“Vocational Damages in Life Care Planning”) is currently a PhD. student in the Rehabilitation Counseling program at the University of Texas Pan-American. She has worked as a vocational rehabilitation counselor for the past three years, in San Antonio, TX and now McAllen, Texas. Ms. Rodriguez is a Certified Rehabilitation Counselor and Licensed Professional Counselor. She has three publications to include two journal articles and a book chapter. She has also given several national presentations. She has been employed as a forensic rehabilitation consultant, life care planner, and vocational expert with Marini & Associates since 2006.

Victoria Powell (“High Tech Assistive Devices and Resources for the Visually Impaired”) is CEO/President of VP Medical Consulting. She is a Nurse Case Manager, Nurse Life Care Planner, Medical Set Aside Allocator, Legal Nurse Consultant, and Ergonomic Assessment Specialist. She has done previous articles on adaptive technology in nurse life care planning and served as contributing editor for the issue on amputations. A self-described “technology geek,” she can also be read at her blog at http://www.vp-medical.com/wordpress/.

Derrick Stowell (“Recreational Therapy and Life Care Planning”) received his master’s degree in Therapeutic Recreation from the University of Tennessee in 2006. He has a bachelor’s degree in Outdoor Recreation and Environmental Studies from Maryville College. He has over ten years of experience in the recreation industry and has been involved in therapeutic camping for seven years. He currently coordinates a national camping program for the Amputee Coalition. You can learn more about the Amputee Coalition and its programs and services at www.amputee-coalition.org.

Lindsay Standish (Hole in the Wall Camps”) serves as Program Manager of the Camp Support Services department at The Association of Hole in the Wall Camps. She has worked within the Association of Hole in the Wall Camps for 5 years, including directing leadership programs for teens with life-threatening illnesses and serving as a behavior specialist. She has previously worked in the Child Life departments at The Children’s Hospital of Scott & White Memorial Hospital, Dell Children’s Medical Center, and The Children’s Hospital of Philadelphia. With a B.S. in Special Education and a M.S. in Therapeutic Recreation, Lindsay’s area of interest is serving individuals with diverse abilities through inclusive and adaptive programming. In her current role, Lindsay cumulates her experiences to provide support and education to the camps within the Association of Hole in the Wall Camps.
Adaptive technology
The issue on adaptive technology was very helpful. Could we perhaps have a regular feature on technology in every issue?

From the Internet
Yes. We have asked an expert to contribute brief articles on common or important technologies or adaptations. The first in the series appears on page 396. Please let us know what problems, challenges, or questions you've encountered in your cases and we'll address them in future issues. Ed.

Nursing diagnoses
I think this is the best Journal ever! Adding the Nursing Diagnoses consideration information is a wonderful way to help CNLCPs improve their use of nursing diagnoses in their LCPlans. Thank you for the hard work and a fine, professional Journal.

Glenda Evans-Shaw
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For all articles, nursing diagnoses are suggested by our peer reviewers, not by the authors themselves. Ed.

Index now available
Please feel free to spread a compliment. As a new member to your professional association, and having just completed my training, I was delighted to see your online archive of older articles and easy access. They will be a very helpful resource as I prepare for the certification exam.

Suzanne Q. Langroth RN LNCC
Legal Nurse Consultant Certified
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High-Frequency Chest Wall Oscillation
Very thorough and well written. I wish we could have 5 or 6 questions with multiple choice answers, so we could have people get CEUs.

From the Internet
We would like to be able to offer CEUs in this way. Other readers interested in this should contact us. Ed.

Letters on any topic are welcome and may be sent to the Editor at whowland@howlandhealthconsulting.com. Letters may be edited for brevity.
Greetings from the Conference Committee!  
Save the Date!

No trip to Kansas City is complete without a visit to the Plaza, the venue for this year’s AANLCP Annual Conference October 21-24, 2011. This 14-square-block outdoor shopping and entertainment district is filled with romantic Spanish architecture, European art and dazzling fountains. Designed in 1922, the Plaza features boutiques and fashionable national stores as well as distinctive restaurants, outdoor cafes and nightlife hotspots. Two nationally-renowned art museums are located nearby, The Nelson-Atkins Museum of Art and the Kemper Museum of Contemporary Art. Pack your bags and get ready for some great nursing education and networking at the AANLCP Annual Conference held in Kansas City, Missouri, October 21st through the 24th at the Intercontinental Hotel.

For full agenda, hotel info, and registration, go to www.aanlcp.org and click on “Learn More.”
Recreational Therapy and Life Care Planning

Derrick R. Stowell MS CTRS

In the mid-1800s, the father of American psychiatry, Benjamin Rush, used recreation activities as therapeutic interventions for patients at the Pennsylvania Hospital. Florence Nightingale also used recreational activities in hospitals for wounded soldiers (Carter, Van Andel, & Robb, 1995). However, it was not until much later that the profession of recreational therapy developed. Before the 1940s recreation was used mostly to “satisfy social and emotional needs of institutionalized children and adults” (Carter et al 1995). In the 1940s and 50s recreation changed from just a way to occupy a patient’s time; several professional organizations began to develop use of recreation as a therapeutic modality. The Hospital Recreation Section of the American Recreation Society published the Basic Concepts of Hospital Recreation in 1954 and several volumes of Recreation in Treatment Centers (Carter et al. 1995).

The need for qualified individuals to provide recreational therapy services lead to the creation of The National Council for Therapeutic Recreation Certification (NCTRC) in 1981. NCTRC is the international organization that provides professional recognition for those who are practicing recreational therapy. The NCTRC has established a certification program to help protect consumers and ensure the profession of recreational therapy meets tough standards. An individual that meets the requirements of NCTRC is recognized as a Certified Therapeutic Recreation Specialist (CTRS). In 1984 the American Therapeutic Recreation Association was established as the leading professional organization for

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Derrick Stowell has over ten years of experience in the recreation industry and has been involved in therapeutic camping for seven years. He currently coordinates a national camping program for the Amputee Coalition. You can learn more about the Amputee Coalition and its programs and services at www.amputee-coalition.org. Contact Mr. Stowell at Derrick.stowell@yahoo.com

Recreational therapy has been shown to help improve overall physical, cognitive, social and emotional functioning.
Recreational Therapists. It is currently the largest membership organization representing recreational therapist in the country (ATRA 2011).

Few can argue that recreation plays an important role in almost everyone’s life. The benefits of recreation are well-documented in research and well-known by professionals. Although most people don’t think about the benefits of recreation, they recognize its positive effects. These include reduced stress, increased physical health, improved self-esteem, and increased quality of life. For most individuals recreation comes easily. The ability to choose and participate in a recreational activity is as simple as thinking about it and planning to do it: What am I interested in doing today? Do I have time? Can I afford any costs? Should I invite any friends? Where do I need to go? Most people can answer without any hesitation.

For individuals who have experienced serious injury, sickness, disability, or like major life-changing event, recreational activities are far from the first thing that comes to mind. The first few days, months and possibly years post-injury are spent in survival mode trying to overcome and heal, and attempting to regain lost physical and mental functioning. With the numerous doctor appointments, therapy appointments, treatments, and medicines, recreational pursuits can be overlooked and forgotten.

Life care planning plays an important role in helping individuals and families make decisions about treatment for individuals affected by illness, injury and disabling conditions. One critically-important therapy is recreational therapy, sometimes referred to therapeutic recreation.

Recreational therapy has been shown to reduce overall healthcare costs for clients (ATRA 2011). More importantly, recreational therapy has been shown to help improve overall physical, cognitive, social and emotional functioning. Many research studies have been conducted to show how effective recreational therapy interventions are in working with a variety of clients. One study performed in partnership with the National Institute of Disability and Rehabilitation and Temple University found that recreational therapy services:

- are an effective means for improving physical, cognitive, social, and emotional functioning
- develop the skills needed to enhance functional independence for community living and to promote a higher quality of life for the individual and their family.
- provide mechanisms to individuals with disabilities to prevent declines in physical, cognitive, and psychosocial functioning and as a result reduce the need for health care services.

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• reduce secondary disability and association higher health care costs. (ATRA 2011)

An individual who has experienced a major illness, injury, or disability often experiences barriers to recreation participation. These barriers can include, but are not limited to

• lack of accessibility
• lack of knowledge of resources available
• lack of skill to participate
• lack of knowledge of how to modify activities to meet physical changes

Without help and education these barriers may be difficult for people to overcome. It is important to realize that “many individuals with disabilities and/or illnesses need the additional help of a therapeutic recreation specialist to help eliminate, reduce, overcome, or compensate for their leisure barriers.” (Stumbo and Peterson, 2004)

Costs of Recreational Therapy

Recreational therapy is everywhere: hospitals, rehab facilities, community settings, and private practice. Because there are so many different delivery settings, costs can vary greatly. When provided in a healthcare setting, RT is often part of a patient’s overall therapy program, and costs will be included in overall services. Many Parks and Recreation programs around the country have therapeutic recreation programs and departments. Community programs can include adaptive sports, programs for seniors, and special needs camps. Costs vary, but one could expect to pay typical participant fees.

Private RT practices are less common. To find a private practicing recreational therapist, talk with local rehabilitation facilities, or check the local phone book for listings. A short list of several private-practice recreational therapists is included in the references. Most private practice recreational therapists offer group or individual sessions. Costs for individual sessions tend to be more expensive than group sessions.

In facility-based therapy departments, adding recreational therapy increases the number of qualified healthcare providers and helps to lead to a more cost-effective mix of treatments. Salaries for recreational therapists average 22.5% less than other therapists, and recreational therapists can at times deliver programs in group settings; these help reduce overall personnel costs. Further financial impact of recreational therapy is due to individuals’ improved com-

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Community living skills and reduced extended hospital stays (ATRA 2011)

In October 2010 the Centers for Medicare and Medicaid Services implemented the MDS 3.0. This has important implications on billing for services for recreational therapists working in long term care settings. Recreational therapy services are now included in Section O. This change means that long term care facilities’ use of activities/recreation will change from an activity model to a therapeutic model, impacting the future reimbursements in these settings. The recognition of recreational therapy in the MDS 3.0 may allow more reimbursement from insurance companies in the future. (DRTH 2010)

Conclusion
Recreational therapy can be a very valuable addition to a life care plan. Recreational therapy has been shown to reduce overall healthcare costs and has many other positive benefits. When used in conjunction with a mix of therapies, recreational therapy can help to break down barriers for individuals to participate in recreational activities both during the rehabilitation stage and after returning home or moving to a long term care facility. Research and history has shown the positive impact recreation has on individuals with and without disability, including improved self-image, transferrable skills for work activities, and fitness. Life care planners should inquire about all available therapies for their patents. Even if a rehabilitation facility does not employ a Certified Therapeutic Recreation Specialist, take a look around the community to see what recreation therapy programs are available including local parks and recreation and private practice recreational therapy services.

References

Links of interest
American Therapeutic Recreation Association: www.atra-online.com
National Council for Therapeutic Recreation Certification: www.nctre.org
Recreational Therapy Website: www.recreationtherapy.com/
Some Private Practice Recreational Therapy Programs
(This is only a small sampling of private practicing recreational therapists. Some smaller companies may not have a website. Check local listings and rehabilitation facilities for private-practice recreational therapists in your area.)

Jackson Services, Hamilton Ontario:
www.jacksonservices.ca/

RecCare Inc., Jenkintown PA: reccare.com

Re-Creative Resources Inc.:
www.recreativeresources.com/index.htm

Creekside Recreational Therapy Services, New Bern NC: www.creeksiderts.org

Strive RTS Inc., Michigan and Florida:
www.striveonline.org

Therapeutic Recreation Services, Washington state:
therapeuticrecreationservices.com

Therapeutic Recreation Consultants, NC:
www.therapeutic-recreation.com/company
What is Therapeutic Recreation/Recreational Therapy?

The terms therapeutic recreation and recreational therapy are equivalent; for the purpose of this article, recreational therapy will be used. The term adaptive sports is often used interchangeably with RT, but this is incorrect (see below, Ed.). Recreational therapy (RT) is the provision of treatment and recreation services to people with illness or disabling conditions. The primary purpose of RT is to re-store, remediate or rehabilitate in order to improve function and independence, and to reduce or eliminate effects of illness or disability (ATRA, 2009). The goal of these services is to improve health and well-being with recreation resources. The RT profession’s core values are the importance of self-determination, quality of life, and the pursuit of a healthy lifestyle with the opportunity to express unique interests and to pursue, develop, and improve talents and abilities to the person’s greatest potential.

Recreational therapists use recreation as a tool to improve quality of life for people with illness or disabling conditions. Looking at the emotional, cognitive, social and physical components of each person, the therapist looks to find the individual’s intrinsic motivation to make interventions relevant and meaningful, to help the client reach personal and functional goals.

Who are Recreational Therapists?

A recreational therapist has a minimum of four years of specialized education and training in recreational therapy service provision and the use of recreation to improve functional independence, quality of life, health, access, and community involvement. Recreational therapists are members of

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the treatment team in a variety of clinical and community-based settings.

The profession offers national certification through the National Council for Therapeutic Recreation Certification (NCTRC) for practicing therapists, the gold standard in many settings. To become a Certified Therapeutic Recreation Specialist (CTRS) one must hold a bachelor’s degree (or higher) from an accredited college or university. An individual must complete a set of core recreational therapy content courses. Additional support courses must include anatomy and physiology, abnormal psychology, and human development among others. The individual must complete a minimum of a 12-week internship under the supervision of a practicing CTRS. Finally, the individual must pass a national certification examination administered by Educational Testing Services. To continue active certification, the CTRS must participate in continuing professional development and obtain the required continuing educational (CEU) credits every five years. The NCTRC maintains a website where the public can check a person’s credentials. Visit the NCTRC website at www.nctrc.org and in the bottom, left corner you will find an “online verification” tab where you can look up an individual by last name, certification number, or Social Security number.

Like other allied health professions, RT is moving towards state licensure as another standard for practice. Currently, four states require licensure to practice recreational therapy: North Carolina, New Hampshire, Utah, and Oklahoma, with approximately a dozen other states currently exploring licensure.

Several states have a state certification/registration process in lieu of state licensure. Texas, California, and Washington State offer this opportunity for certified therapeutic recreation specialists. Your state government will be able to assist you in determining the licensing and certifying standards for practicing RTs in your state.

**Where Can You Find a Recreational Therapist?**

Recreational therapists work in a variety of health-care and community-based settings: inpatient and outpatient rehabilitation, mental health, long-term care facilities, correctional facilities, schools, community recreation programs, private practice, municipal recreation departments, and many others.

The Commission on Accreditation of Rehabilitation Facilities (CARF) accredits organizations that include, but are not limited to, aging services, medical/physical rehabilitation and behavioral health. CARF requires that RT be included as part of treatment in accredited facilities; all CARF accredited organizations must have a CTRS on staff. Most major rehabilitation hospitals in the US are CARF accredited. The Joint Commission for the Accreditation of

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Healthcare Organizations (JCAHO) recognizes recreational therapy as rehabilitation therapy service.

**How Does Billing Work for Recreational Therapy?**

Some RT practices receive third party reimbursement from workers compensation, automobile insurance settlements, and long-term disability settlements with support from case managers. Reimbursement is also provided in some school districts (as a related service in Individualized Education Plans), the Veterans Administration, and through Medicaid waivers. Some RTs provide private-pay services. Although it is not listed specifically, the Centers for Medicare and Medicaid Services (CMS) includes recreational therapy in the mix of treatment and rehabilitation services in skilled nursing, rehabilitation, and long-term care facilities. The American Therapeutic Recreation Association (ATRA) is working with Congress to have the language changed to specifically list recreational therapy as a covered service.

Expect a cost range of about $125-$300 for a comprehensive assessment and treatment plan and approximately $75-$100 per hour for continued treatment to follow. These approximate figures vary from agency to agency and region to region.

**Typical Frequency or Duration of Recreational Therapy Treatment**

Recreational therapy is typically not a long-term intervention for individuals with disabilities. Depending on the setting and diagnosis of the client, goals will range from functional skill development to full recreation participation. In a community setting, a primary goal of recreational therapy is to develop skills and connect individuals with resources so they can participate in recreation activities, independently or with support of friends and family. Therefore, RT intervention at the outpatient/community level is typically very focused, identifying the goals and areas of interest, finding specific resources within the existing community, and finding ways to afford and access adaptive recreational equipment needed to achieve those goals.

**What Types of Clientele Work With Recreational Therapists?**

Depending on the agency specialty or therapist expertise, RTs work with a variety of clients with physical, mental, developmental and behavioral di-
agnoses and chronic illnesses, from early childhood to end of life.

**How is Recreational Therapy Different From Adaptive Sports Programs?**

Most traditional adaptive sports programs offer a single activity, or a limited number of activities, and are staffed primarily by volunteers who provide specific instruction (Fig. 1). For example, an adaptive skiing program at a local mountain will invite many individuals to participate in skiing but that is the only program they offer to participants.

Therapeutic Recreation Specialists use an individualized, person-centered approach. CTRSs evaluate individuals and envision how their worlds could expand with exposure to multiple programs. Recreational therapists consider many variables and resources to create holistic treatment plans. These may include referrals to specific adaptive sports programs, but also community and familial resources beyond the scope of traditional adaptive sports programs. Recreational therapy programs are also staffed by certified recreational therapists with an extensive educational background in both recreation and disability.

Helping to evaluate whether an adaptive sports or recreational therapy program is both legitimate and safe for your client is an essential part of your role as a Life Care Planner. It is important to know whether the program is going to meet your client’s needs completely and professionally to ensure success and follow-through.

Staff training and expertise are important. If there’s no CTRS on staff, ask what other trainings and certifications the staff have completed. For example, if you are interested in connecting your client with a therapeutic horseback riding program, check to see if the program and instructors are certified through the

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**Common CPT codes used by recreational therapists:**

- Therapeutic Procedure (97110)
- Aquatic Therapy (97113)
- Therapeutic Activities (97530)
- Development of Cognitive Skills (97532)
- Community/Work Reintegration (97537)

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North American Riding for the Handicapped Association (NARHA, www.narha.org). NARHA has over 3,500 certified riding instructors and 800 member centers around the world. Other examples include the Professional Ski Instructors of America certification for adaptive skiing (http://www.thesnowpros.org/index.php/PSIA-AASI/info-center/about http://tinyurl.com/4xsgt7m) and Adaptive Paddling Instructor certifications for canoeing and kayaking (American Canoe Association, http://tinyurl.com/3pq6pto). Most recreation activities have a professional organization affiliation to ensure safe, ethical, and meaningful participation in all recreation-based programming.

Why is Recreational Therapy Different From Other Allied Health Professions?

Recreational therapy looks to expand quality of life and health potential from the World Health Organization’s definition of health, i.e., not just the absence of disease or illness, but also the state of complete mental, physical, and social well-being. The RT profession’s long-term goal is for disabled persons to be able to participate fully and independently in life pursuits, in whatever way they choose.

Treatment goals may be similar to those of other professions (e.g., increased balance, improved attention skills, home and community safety) but the process used to achieve them is significantly different. Recreational therapists develop specific goals by incorporating client interests (past, present, and future), family support, family interests, and community involvement to customize the treatment and make it relatable and individualized to each client and their specific needs.

Recreational therapists also tend to be well-versed in adaptive recreation equipment. This can vary from

Nursing Diagnoses to Consider NANDA International Nursing Diagnosis, 2009-2011

- **Deficient Diversional Activity** (Domain 4, Activity/Rest; Class 2, Activity/Exercise)
- **Unilateral Neglect** (Domain 5, Perception/Cognition; Class 1, Attention)
- **Ineffective Activity Planning** (Domain 5, Health Promotion; Class 5, Cognition)
- **Readiness for Enhanced Self-concept** (Domain 6, Self-Perception; Class 1, Self-Concept)
- **Hopelessness**: (Domain 6, Self-Perception; Class 1: Self-Concept)
- **Powerlessness** or **Risk for Powerlessness**: (Domain 6, Self-Perception; Class 1: Self-Concept)
- **Situational** or **Chronic Low Self-Esteem**: (Domain 6, Self-Perception; Class 2: Self-Esteem)

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something as simple as an extended handle on a gardening tool or a modification to be able to knit one-handed to an elaborate adaptive cycle for someone with hemiplegia costing thousands of dollars. Many recreational therapy departments and programs also have access to vendors. A recreational therapist can help fit the person to the recreational equipment and make necessary adjustments to encourage independence with the equipment.

Where Can I Find More Information?
For more information about RT, speak to a Recreational Therapist in your community and visit the following websites:

- American Therapeutic Recreation Association: [http://www.atra-online.com](http://www.atra-online.com)
- National Council for Therapeutic Recreation Certification: [http://www.nctrc.org](http://www.nctrc.org)

References:

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*St. Croix River, Maine*
Hole in the Wall Camps

Lindsay Standish MS CCLS

In 1988 Paul Newman, actor and philanthropist, founded the Hole in the Wall Gang Camp to serve children with life-threatening illnesses. Since then Paul’s vision expanded to become the Association of Hole in the Wall Camps that includes 14 camps, 8 Global Partnership Initiatives Programs, and 6 camps and programs in development, serving children from 5 continents and over 50 countries. More than 300,000 children and families have experienced a Hole in the Wall Camp or program since the first one opened, always free of charge.

Hole in the Wall Camps
Our 14 camps are located in California, Colorado, Connecticut, Florida, France, Hungary, Ireland, Italy, New York, North Carolina, Ohio, United Kingdom, and Washington. We serve campers with one or more of over 50 different serious medical conditions, as well as several extremely rare medical conditions. In addition to the traditional summer camp programs, our camps also offer weekend programs throughout the fall, winter and spring. Family Weekend programs offer the opportunity for campers to attend camp and share the experience with their parents/guardians and siblings.

Global Partnership Initiative
The Global Partnership Initiative programs create partnerships with medical partners and organizations in the operating countries, intending to be self-sustaining over the long term. A secondary benefit of these programs is the resulting skill and capacity transfer to local communities. Our Global Partnership Initiative programs are adapted to fit the cultural context and address the social and emotional needs of the children within each country including life skills, disease education, medication adherence and decision making.

Lindsay Standish is the Program Manager of the Camp Support Services department at The Association of Hole in the Wall Camps. She has worked within the Association of Hole in the Wall Camps for 5 years, including directing leadership programs for teens with life-threatening illnesses and serving as a behavior specialist. She previously worked in the Child Life departments at The Children’s Hospital of Scott & White Memorial Hospital, Dell Children’s Medical Center, and The Children’s Hospital of Philadelphia.
Hospital Outreach Programs
As part of the Association of Hole in the Wall Camps’ commitment to reach as many children with serious illness as possible, a number of our camps offer Hospital Outreach Programs. These innovative programs bring the camp experience to children in the hospital either through one-on-one bedside activities by transforming playrooms into a virtual camp.

Our Programs
Through intentional programming and a therapeutic recreation model, our Camp-based programs create environments that are safe, medically sound, and seriously fun. To ensure inclusivity, camps are designed to be accessible for campers with widely diverse abilities. Our camps have warming huts for campers with sickle cell disease who are particularly vulnerable to cold temperatures, Shamu-shaped zero entry pool for children who have difficulty using stairs, a universally accessible tree house and a wheelchair accessible high ropes course for campers that use wheelchairs.

The barrier-free philosophy extends far beyond the facilities and activities because most importantly it is embedded into the heart of camp. The goal at camp is to enable children to leave behind their medical conditions while engaging in activities.

As a camper parent states:

“It’s the only place she’s been where people just accept her for who she is. It’s the only place she’s been where all the activities are designed for her to be able to do them. She doesn’t have to sit anything out. She’s part of it all.”

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From the training that all staff and volunteers receive to every element of the programs, we incorporate our belief that children are children first; their abilities and medical conditions do not define them.

With a barrier free and child first philosophy, campers are able to face challenges and surmount perceived limitations. Campers choose the extent they participate in activities - an approach called challenge by choice. By teaching recreational skills and attitudes that promote health and positive growth, our programs help children increase confidence and self-efficacy.

*Something very special happened at camp.* Dexter has always wanted to swim but his legs would cramp. Your staff helped him and he passed the swimming test!!! He came home with a yellow bracelet on his arm - proof that he passed. He wouldn’t take it off for weeks because he was so proud of what it meant. He told me, “Mom, I am a normal kid. I’m just a normal kid with sickle cell.” Thank you for letting him know this feeling.

- Mother of a camper with sickle cell.

He knows at camp, he will be accepted. At camp, he will experience fairness, kindness and the change to play without worry of criticism. At camp, he can be 100% himself.

The defensive walls he builds around himself to deal with the everyday world disappear as soon as we enter the camp gates.

- Parent of a camper

Each camp has a child-friendly medical center complete with private exam areas, observation rooms, a pharmacy and a nurse’s station. These centers are designed to provide all of the medical care a child may need at camp in a child-centered, caring way including factor infusions, chemotherapy treatments and a range of other acute medical needs. All the camps have emergency equipment on site and many have helicopter landing pads should air transportation is necessary.

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Our medical teams can often be found out and about activity areas, engaging with campers and available to help if a child needs support. At any time, a medical team member may be wearing a penguin costume or princess dress while providing care for campers. Campers may even have the chance to see the medical team sing and dance during stage night.

Lauren Hancock, RN, MSN, CPNP-AC, the Nurse Practitioner at Victory Junction the Hole in the Wall Camp in North Carolina, shared the following story about one of her experiences with a camper.

During a Physical Disabilities session, I was the nurse on duty at our adventure tower. Although we have many adaptations for campers to be able to ascend the tower with assistance (for example, a chair that can hoist them to the top of the tower in), this particular girl wanted to climb on her own. On the ground, she uses a walker and has orthotic braces on her legs. On the tower, she struggled with every step, and had a counselor climbing directly behind her the entire way. The time came for lunch, and the rest of the campers and counselors at the tower headed to the dining hall. I stayed at the tower with the rest of the adventure tower team and a counselor from this camper’s cabin. After a long struggle, she finally made it to the top. Although I was on the ground, her grin was evident and the elated scream she let out while standing at the top of the tower could be heard all across camp. She enjoyed the view for

continued next page
a few minutes, and as we walked down to lunch she could not stop talking about the experience. I am not sure if I have ever seen a smile that pure or that full since. After returning home, I got a phone call from her father to thank us for the experience his daughter had at camp. She loved every minute, and was telling everyone about her accomplishment at the adventure tower. Mostly, he thanked us for the girl we had sent home to him—she was a more independent, stronger, happier, confident woman—a vast difference from the quiet, shy, reserved girl he had sent to camp.

In response to her story Lauren also shared, “It is moments like these that are why I do. There are pictures taken at each of these times on my walls to remind me every day that what I do is important and has an impact in the lives of children. I have the best job in the world and am lucky to be able to help create these memories and experiences for these campers. Also, most of my stories are not about the medical care provided for campers but the experiences that they had. Providing a medically sound environment is a priority, but having the campers experience camp without realizing they are any different or any of that infrastructure is present, is priceless.”

In 2010 Hole in the Wall Camps operated with the help of 1,143 medical volunteers. Volunteer opportunities are available for summer programs as well as fall, winter, spring family weekends and camper reunion programs. If you are interested in joining in on the fun please visit: http://www.holeinthewallcamps.org/Page.aspx?pid

Martha’s Vineyard MA
On March 19, 2011, one of the greatest moments in sports history was made when Anthony Robles, Arizona State College senior, won the NCAA Wrestling Title as 125 pound Division I Champion. The amazing thing about his victory, which commanded a standing ovation at the match’s end, was that Anthony Robles was not only a star athlete. Anthony was born without a right leg. Requiring crutches to make his way through life, he built up incredible upper body strength to compensate for his deficit. His strength proved to be no match for his opponents, scoring 36-0 for his wrestling meets this year. But Anthony Robles has something more than the sheer physical bulk of his biceps. He has an unconquerable spirit and the determination to accomplish whatever he sets out to do!

Anthony Robles exemplifies the spirit of Disability Sports and Recreation Resources: just because he’s missing a leg doesn’t mean he’s disabled. In the Dedication, Jean-Michel Cousteau says it best:

“Having a physical disability is not the same as being disabled. Failing to make that distinction, we leave out the most important ingredient in human achievement, the desire in each of us to strive for the best we can be.

Everyone lives in an age of opportunities and technological advances and yet, our most marvelous and moving experiences are still those victories of will and spirit against almost seemingly insurmountable odds.”

Jean-Michel Cousteau
Freedom in Depth
Handicapped Scuba Association, 1985

When it comes to planning, Nurse Life Care Planners are good at making nursing diagnoses and identifying interventions needed to optimize functional level and outcome. Disability Sports and Recreation Resources will help them and their clients take the next step: to identify recreational aspects of the life care plan, addressing needs that can be just as critically important. This book, considered the “Bible of Disability Sport,” is all about possibilities and

Disability Sports and Recreation Resources
Third Edition
Michael J. Paciorek
Jeffrey A. Jones
Cooper Publishing Group, LLC,
Traverse, Michigan
2001
ISBN: 1-884125-75-1

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can-do attitude in sports and recreational activities. Dedicated to athletes and to all those actively participating in sports, it provides specific information on which sports are best suited for a particular disability and how each can be performed.

Contact information and descriptions are provided on seven key cross-disability multi-sport organizations:

- Disabled Sports USA
- The Dwarf Athletic Association of America
- Special Olympics, Inc.
- The United States Association for Blind Athletes
- The United States Cerebral Palsy Athletic Association
- The United States Deaf Sports Federation
- Wheelchair Sports USA

There are forty-two chapters from A (All-Terrain Vehicles and Archery) to (almost) Z (Wilderness experiences and Wrestling). *(Anthony Robles isn’t in this book yet but there’s a good chance he will be in the next edition!)* Information for each sport or activity includes the sport governing board, if any, the specific disabled sports organization, primary disabilities determined appropriate for this activity, photographs, equipment examples, equipment providers nationally and additional resources and websites.

For the high-level spinal cord injured individual, Chapter 5 highlights the recreational activity Blowdarts, providing an overview, history, and equipment list, including assistive devices and equipment suppliers.

For those interested in Fishing, Chapter 12 discusses proper outfitting including adaptations depending on the disability (e.g., casting devices for those with upper extremity disabilities), suppliers, accessibility to fishing areas, and competitive fishing tournament providers.

**Disability Sports and Recreation Resources** is useful for those who want to learn how to engage in new sports or recreational activities following injury or would like to resume prior activities using adaptive equipment or strategies.

In keeping with the theme of this journal issue, vocation and recreational activities in life care planning, this book is all about the possibilities, an inspiration for those desiring an avocation or vocation.
Proper installation of grab bars for someone with a disability is critical. Improperly installed grab bars can become a serious safety hazard. This overview will describe how to locate grab bars. It will not teach you how to install them, but will describe how they should be properly installed. Because safety is a major issue, only qualified contractors familiar with the installation of grab bars should perform the actual installation.

Grab bars come in many lengths and shapes, some go around corners, some are U-shaped, some can angle from the floor to the wall to provide support at a toilet and some fold up out of the way. Being familiar with these choices will help you make the best choice for your patient. Because grab bars are used so frequently now and are so widely available, they are not very expensive. The installation is often much more costly than the materials.

The Americans with Disabilities Act (ADA) does not apply to private residences. The ADA gives very specific criteria for grab bars; however, they are intended for use in public places and for the greatest number of people. There are a number of websites which provide information about ADA specifications. A very good overview of the key issues for your specific client who requires grab bars can be found at http://www.adabathroom.com/grab_bar.html. This website clearly specifies grab bar heights, lengths and overall locations in the bathroom.

However, remember that these are general guidelines. You can, and must, modify the locations of...
grab bars to meet the capabilities, strength and height of your particular client.

Properly Locating a Grab Bar

Here’s a practical way to optimize grab bar location for patient leverage: put your arm in a likely position, and ask the individual to grab for it. It’s easy to adjust exactly where the bar should be by moving the arm. If a set (more than one) of bars is needed, e.g., if someone is transferring from a wheelchair onto a shower chair, I put my arm at the first place they reach as they began their transfer, mark the wall, then move to the next position. Always have one or two individuals standing by to support the person during parts of the transfer.

This method can be used for locating grab bars anywhere: toilet transfers, bed-to-chair mobility, and anywhere an individual’s abilities would be enhanced with grab bar support. Once someone has the idea of how a well-placed grab bar can help, more locations suggest themselves, for example, next to the washer and dryer. A grab bar at a doorway can allow someone to feel safe while they reach for their keys, operate the lock, and open the door.

Although it is common to see a 24-inch grab bar installed at a 45° angle attached to 16-inch studs (see Installation, below), this could be dangerous. Someone with wet soapy hands who begins slipping may follow that 45° angle right to the floor.

Grab bars should be permanent. Although there are grab bars with large suction cups or U-shaped bars that clamp to the side of a tub, a nonpermanent attachment tends to loosen over time. This is a hazard.

Remove any other items that might be used for weight support, like towel bars or soap dishes. Why? When someone begins to slip, it’s natural to grab anything within reach. A towel bar or a soap dish will detach from the wall very quickly, resulting in a fall.

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Check grab bars frequently for security and to be sure that moisture is not getting behind them, causing a slow deterioration and weakness.

You may need two sets of grab bars, one lower than the other, depending on the strength, range of motion, and overall size of the individual. This can allow the individual to lower into position with one set and use the second set to rise.

Proper Installation of Grab Bars
In the United States, most interior walls in homes are built with 2" x 4" wooden studs, running from floor to ceiling and generally spaced 16" apart. There are some variations, such as 2" x 6" studs 24" apart to allow space for drainage and water supply lines in bathrooms.

Outside walls may be stud construction or solid brick and plaster. On a solid wall, a grab bar can safely go anywhere with proper fasteners. With stud walls, a three-quarter inch plywood blocking behind the drywall extending between studs gives a solid base. This requires expensive and time-consuming removal and replacement of the existing wall, shower surround, and other items. Silicone must be applied to seal all openings to prevent water from rotting the wood inside the wall.

A stud finder can detect the location of each stud, and grab bars can be installed directly into the studs. If this doesn’t result in optimal placement, some bars are designed to bolt directly to the studs, followed by an adjustable connection to the bar itself, achieving a very strong, safe installation without tearing out walls. Availability may vary.

Finally, WingIt, http://www.wingits.com, a new fastener, addresses many installation problems. A 1.25" hole goes into the hollow wall exactly where you want the bar. The fastener goes through this hole and expands around the inside to make a very solid distributed load rated up to 1000 pounds, more than adequate to hold a grab bar. WingIt grab bars must be used with these. WingIt also addresses the very important issue of waterproofing; it has a flange that fits on the outside of the wall and a waterproof moldable sealer. There are installation videos and vendor information at the website.

Here are some additional resources or just search for “grab bars” on the Internet.

http://www.grabbarspecialists.com/
http://en.wikipedia.org/wiki/Grab_bar
http://www.800safebath.com/Premium-Grab-Bars_c_32.html
http://www.wikihow.com/Install-a-Grab-Bar
http://www.thisoldhouse.com/toh/video/0,,1631608,00.html
http://www.youtube.com/watch?v=JHi10Tdy8ns
The term “deaf-blind” often conjures up images of a young Helen Keller with her hand under the pump signing “water” for the first time. While this is memorable, it does not necessarily represent the actual population of people considered to be deaf-blind. The definition of deaf-blindness is much broader; it incorporates individuals with a wide range and combination of hearing and vision loss. The causes and severity of this combined loss also range significantly, influencing various levels of cognition and overall access to the hearing-sighted world. Many students who are deaf-blind experience significant cognitive delays, motor impairments, and severe health complications needing lifelong support, hence the potential need for a Life Care Planner.

Defining Deaf-Blindness

To get a better understanding of the population it may be most helpful to think of people with four very diverse life experiences:

- congenitally deaf with acquired blindness
- congenitally blind with acquired deafness
- acquired deaf-blindness
- congenital deaf-blindness

Major influencing factors on overall development for each are

- age of onset of the dual sensory loss
- etiology
- level of severity

As you can imagine, people with such a broad range of causes for this unique disability will also represent a wide range of communication modes, cognition, school experiences, ability to travel independently, vocational experience and aspirations, cultural identity, and medical intervention needs.

Congenitally Deaf with Acquired Blindness

Individuals who are born with a severe to profound hearing loss and acquire vision loss later in life are considered congenitally deaf with acquired blindness. The onset of vision loss can be gradual or immediate. These individuals will, most likely, be vis-

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ual learners and very often use some form of sign language as their main mode of communication. This combination of loss is often seen within the larger deaf community, with the most common etiology being Usher Syndrome, retinitis pigmentosa associated with congenital deafness (see http://www.nei.nih.gov/health/ushers). Vision may also be lost from trauma or other cause. One of the main issues for people within this category relates to the ongoing struggle of living with progressive loss. Individuals experience renewed grief every time a change in vision occurs. People who experience a sudden loss due to a traumatic event, such as an accident or illness, may also have traumatic brain injury or other complications that may require extensive intervention, particularly regarding medical and residential care.

**Congenitally Blind with Acquired Deafness**

Individuals born with significant visual impairment or blindness and acquire hearing loss later in life can be classified as *congenitally blind with acquired deafness*. The causes are varied but can be due to trauma, ototoxicity, or various syndromes. Individuals affected this way will most likely rely mainly on spoken or oral communication and assistive technology to access their world. They are often Braille readers or have pre-Braille skills, use a cane, guide dog or mobility device, and rely on technology to access printed materials, such as screen readers, ZoomText or a CCTV (closed circuit television) to enlarge font and pictures.

This group of individuals may have multiple other complications present at birth. Some neurological conditions that cause progressive sensory loss also affect other body systems. In these instances, the services of a Life Care Planner may be essential to both individual and family.

**Acquired Deaf-Blindness**

People who have acquired *deaf-blindness* are people who are born with typical hearing and normal vision, and acquire some degree of hearing and vision loss later in life. This is the category exemplified by Helen Keller. She was born with typical hearing and vision and then, due to illness, lost both senses. It is easy to imagine how a knowledgeable Life Care Planner could have been extremely helpful for the Keller family. Individuals in this category will have extremely varied life experiences due to the age of onset, combined impact, and cause of loss. Someone who acquires sudden hearing and vision loss due to trauma will

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require extensive services and comprehensive planning to assist with daily life functions. Age of onset is critical; the earlier a child is affected, the more overall development will be affected, including communication and language development, motor functioning, and mobility.

**Congenital Deaf-Blindness**

This designation includes individuals who are born with a combination of both hearing and vision loss and, perhaps, is the most likely individual with dual sensory loss that Life Care Planners will encounter. These infants often have low APGAR scores and require perinatal medical intervention. In October 2010 the National Consortium on Deaf-Blindness reported that there are currently 10,280 children between the ages of 0 – 21 throughout the United States who are categorized as deaf-blind (National Consortium on Deaf-Blindness, 2010). It is estimated that 90% of these children’s varying degrees of dual sensory loss occurred either during fetal development due to unique and often undiagnosed syndromes or through some sort of perinatal trauma. Of this number, approximately 80% are also challenged with a variety of other complications. These infants are often medically fragile and present with a wide range of communication and cognitive delays. These are the children who are most often seen in the NICUs: children with multiple complications but no single specific diagnosis. For example, an infant with prematurity can also be diagnosed with vision and hearing loss. However, due to complications of prematurity, that may remain as the primary diagnosis. Therefore, because of the immediacy of the medical needs to support and maintain life, the hearing and vision loss may go undetected until a later time. This delayed diagnosis can lead to severe gaps in overall development.

**Deaf-Blind Associated Diagnoses**

As reported in *The 2009 National Child Count of Children and Youth who are Deaf-Blind* by the National Consortium on Deaf-Blindness (2010) the most common causes of deaf-blindness are:

- prematurity
- CHARGE syndrome
- cytomegalovirus (CMV)
- Usher Syndrome (I, II, III)
- Down Syndrome (Trisomy 21 syndrome)
- various hereditary/syndrome disorders
- microcephaly
- hydrocephaly
- congenital rubella syndrome
- asphyxia
- meningitis
- severe head injury
- encephalitis
- other congenital conditions
- pre- and post-natal non-congenital complications

Let’s look at the potential for hearing and vision loss carried by the two most common etiologies.

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**CHARGE Syndrome**  Of particular interest to life care planners is CHARGE Syndrome as a number of children have been identified in recent years (see www.chargesyndrome.org). Although these features are no longer the sole determining factors to make the diagnosis, the acronym remains: it comes from Coloboma of the eye, Heart defects, Atresia of the nasal choanae, Retardation of growth and/or development, Genital and/or urinary abnormalities, and Ear abnormalities and deafness. CHARGE syndrome is complicated, potentially involving the entire cranial nervous system, and cardiovascular, endocrine, nasopharyngeal and gastrointestinal malformations. The increase in diagnosis is due to many reasons, most notably to advances in medical research and professional collaboration.

Children diagnosed with CHARGE syndrome have a very diverse functional range. Most are very medically fragile in the early stages of life and require significant intervention. Hearing, vision and cognition deficits can be mild to profound.

It is important to reassess hearing after other medical issues have become more manageable. For example, a child with CHARGE syndrome may appear to have a significant hearing loss but, after completing subcutaneous cleft palate repair the eustachian tubes may clear, thus improving hearing.

**Prematurity**  ROP (retinopathy of prematurity) severe enough to require medical treatment occurs in approximately 1,000-1,500 infants per year. Of these, the National Institute of Health reports that 400-600 of these infants become legally blind (National Institute of Health, 2011) ROP is the leading cause of blindness in children in the United States (Lad E et al., 2008).

Children’s Hospital Boston reports that serious hearing loss occurs in two to four of every 100 babies in newborn intensive care units (Children’s Hospital Boston, 2011). The range of impairment is extremely varied and can be misdiagnosed in infants, because complications and impairments, themselves, cause anomalous results in routine neonatal hearing tests, so the test results may then be inaccurate, misinterpreted or be ambiguous enough that false positives and false negatives result.

Both sight and hearing are generally affected in infants who are born at less than 32 weeks of gestation. Therefore, it is critical for nurses and nurse practitioners who work with preemies in NICUs to become aware of the potential of these combined issues and the possibility of deaf-blindness.

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Educational Services and Intervention
Defining deaf-blindness is complicated and often misunderstood. However, the federal definition provides a guideline for service delivery:

“...concomitant hearing and visual impairments, the combination of which causes such severe communication and other developmental and educational needs that they cannot be accommodated in special education programs solely for children with deafness or children with blindness. 34 CFR 300.8 (c) (2)”

Students who meet this definition become eligible for a variety of services, including those offered in the Early Intervention (EI) system. Very young children are not classified; “developmental delay of age-related milestones” is the only criterion needed to receive EI services through preschool. However, in most states, once students start elementary school they must be officially classified to continue to receive legally-mandated Individualized Education Program (IEP) services.

All deaf-blind children are unique, but they are often misclassified with the generic “multiply-disabled” label due to the complexity of their combined issues. Traditional evaluation measures usually result in inadequate assessments; the result is misdiagnosis and inadequate and/or delayed service delivery. Delaying appropriate services simply exacerbates the situation, as the child misses out critical input during the developmental years. Therefore, even very young EI students can still be eligible for services from the state deaf-blind project under the category of “at risk.”

There is no standard model of intervention for individuals with dual sensory loss and multiple disabilities. An individual with CHARGE syndrome will be followed by an average of 17 medical specialists and will experience more than 20 medical procedures by the age of 10 (Hefner & Davenport, 2002). (Table 1)

Therapy will differ depending on specific needs; however, research has shown that therapies based on principles of sensory integration are most successful. These therapeutic interventions will involve “activities that provide vestibular, proprioceptive and tactile stimulation…emphasis is placed upon automatic sensory processes in the course of a goal-directed activity, rather than instruction or drilling

Table 1. Typical Professional Services for Dual Sensory Loss

- Medical doctor
- Pediatric Ophthalmologist
- Ears Nose & Throat
- Geneticist
- Occupational Therapy
- Physical Therapy
- Speech Therapy
- Orientation & Mobility
- Special Education Teacher
- Teacher for the Visually Impaired
- Teacher for the Deaf
- Audiologist/Hearing Specialist
- Vision Rehabilitation Therapist
- Interpreter/Intervener/Paraprofessional
- State agency representative/counselor for services for individuals with developmental disabilities
- Social Worker
- Medicaid Service Coordinator
the child on how to respond (CHARGE Syndrome Foundation 2011).”

A volume of stories about dual-loss children written by parents can be found on the National Consortium on Deaf-Blindness (NCDB) website under the category of Selected Topics, Personal Narratives. One particular piece, entitled “Caitlin’s Story,” written by Caitlin’s mother, Jillana Holt-Reuter, will be of great interest to life planners, as it highlights the challenges the family experienced as well as the medical interventions that were needed throughout Caitlin’s life, especially during the formative years (Holt-Reuter, 2002)

Who Else Can Help
Federal, state and regional agencies and organizations are available to help families and professionals. The state office for students with developmental disabilities should be the first resource to give information on services and support. There are also state agencies to specifically address vocational and educational needs of individuals with hearing loss and vision loss. Each has specific criteria for services, so it is essential to have appropriate medical documentation to provide proof of eligibility.

Each state also has a time-limited deaf-blind grant award from the federal government through the Department of Education, Office of Special Education Programs (OSEP). These grants provide resources on deaf-blind related content and professional development to interested professionals and families, and assist in various planning activities. Importantly, although deaf-blind projects follow the federal definition of deaf-blindness, they are more attuned to functional aspects than what is defined in medical documentation alone. This is because, for example, a child with hearing loss cannot compensate by relying on vision to supplement what is being missed through audition. Therefore she or he may function at a more impaired level.

If you encounter a child or young adult with suspected hearing and vision loss or with multiple disabilities, access the services of the deaf-blind project staff. These professionals have expert knowledge on the needs of children with dual sensory impairment. They can help determine eligibility and make appropriate referrals for needed services.

A complete listing of all state deaf-blind projects is available on the National Consortium on Deaf-Blindness (NCDB) website. The site also hosts a national map indicating the number of children in your state who are currently identified as having dual sensory loss (http://www.nationaldb.org/censusMaps.php) and an extensive library of information on deaf-blindness.

Critical Transitions
Very often families are in need during times of transition. One of the most critical transitions is between early intervention to a formalized education pro-

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gram. Once an appropriate school program is determined it is critical to have a **transdisciplinary team** of professionals from different disciplines who will work together. Best practices identified for such teams include role release and role exchange, which involves the teaching of discipline-specific skills to colleagues on the team. This holistic approach ensures consistency of instruction across environments.

Research has proven that students who are deaf-blind do not transfer skills from environment to environment without direct instruction (Miles & McLetchie, 2011). *They are not incidental learners;* that is, they do not learn information in their environment as hearing-sighted children do. For example, they are unable to learn most social cues from observing people in social situations. Therefore, concept development and skill acquisition must be intentionally taught. Finding success in generalized concept development will be found when teams, including families, work together to practice skills across environments and within natural settings.

A second critical transition occurs when a young adult leaves school for adult life, moving from a system of *entitlement* (education entitlement under the Individuals with Disabilities Education Act) to one of *eligibility* (access to services with criterion-specific proof of disability). This transition can be extremely challenging for families. They are often unfamiliar with available services and inexperienced at navigating supports outside the educational system. As mandated by federal law, transition planning should begin at age 16, but, ideally, a transition statement should be made within the IEP at the age of 14, indicating plans that are in progress and identifying linkages within the adult service industry.

An article that speaks to this point, entitled “Personal Perspectives: Angelyne Thorning” highlights a young woman’s transition from school to adult life and the need for a comprehensive planning approach. This article is also available on the NCDB website (Malloy, 2008)

**Identifying Needs and Preferences**

It can be difficult to identify needs and preferences for individuals with dual sensory loss. An individual may not have the ability to formally express likes and dislikes yet these are critical to the planning

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process. Teams must have a process that allows these preferences to come to light. Not only is this mandated by law (IDEA), but it is necessary to design an individualized, comprehensive life plan. One approach to this type of planning process is called Person Centered Planning (Capacity Works, 2000). Engaging in such a process will assist in identifying strengths and areas of challenges across all environments, such as employment, recreation and leisure, and residence.

Summary
Students who are deaf-blind are very often mislabeled as having “multiple disabilities” without specific classification. Misdiagnosed sensory loss leads to significant developmental delays. Becoming familiar with the common syndromes and illnesses associated with deaf-blindness will assist you in the identification of hearing and vision loss for your clients, which will lead to obtaining the appropriate services for the child and ultimately assist the family with long-term life planning needs.

For more information on the New York Deaf-Blind Collaborative (NYDBC) please see www.qc.cuny.edu/nydbc.

Deaf-Blind Resources
American Association of the Deaf-Blind (AADB)
http://www.aadb.org
The only national organization run for, by and of deaf-blind individuals. It is a social networking and advocacy organization that provides information, resources and linkages to deaf-blind people and interested parties across the country.

CHARGE Syndrome Foundation
http://www.chargesyndrome.org/
The CHARGE Syndrome Foundation provides support to individuals with CHARGE syndrome and their families; gathers, develops, maintains and distributes information about CHARGE syndrome; and promotes awareness and research regarding its identification, causes and management.

Helen Keller National Center (HKNC)
http://www.hknc.org/ (HKNC)
Helen Keller National Center is the national rehabilitation center for deaf-blind adults. HKNC provides residential rehabilitation services at their center and outreach services through a national network of regional representatives.

National Association for Parents of Children with Visual Impairments (NAPVI)
http://www.NAPVI.org
The National Association for Parents of Children with Visual Impairments (NAPVI) is a national organization with information and resources for parents of children who are blind or visually impaired children, including those with additional disabilities.

National Consortium on Deaf-Blindness (NCDB)
http://www.nationaldb.org

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The national federal Technical Assistance project established specifically for supporting the state projects who serve children and young adults who are deaf-blind between the ages of 0 - 21.

**National Family Association of Deaf-Blind (NFADB)**

http://www.nfadb.org/

NFADB supports persons who are deaf-blind and their families. NFADB is a non-profit, volunteer-based family association and the largest network of families focusing on issues surrounding deaf-blindness.

**New York Deaf-Blind Collaborative (NYDBC)**

www.qc.cuny.edu/nydbc.

**References:**

Capacity Works. Amenia, NY 2000

http://www.capacityworks.com/personcentered.html

Children’s Hospital Boston.

http://www.childrenshospital.org/az/Site992/mainpageS992P0.html


Holt-Reuter, J. Caitlin’s Story. VIBRATIONS, Colorado Services for Children with Combined Vision and Hearing Loss, 2002

http://www.cde.state.co.us/cdesped/download/pdf/dbCaitlins_Story.pdf


http://www.tr.wou.edu/tr/dbp/pdf/apr08.pdf#page=9

Miles B and McLetchie B. Developing Concepts for Learners Who are Deaf-Blind. National Consortium on Deaf-Blindness


National Consortium on Deaf-Blindness.

http://www.nationaldb.org/TAChildCount.php

National Institute of Health.


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**Nursing Diagnoses to Consider** NANDA International Nursing Diagnosis, 2009-2011

- **Disturbed Sensory Perception (Visual)** Domain 5: Perception/Cognition; Class 3: Sensation/Perception (Change in visual sensory acuity)
- **Readiness for Enhanced Communication** (Domain 5, Perception/Cognition; Class 5, Communication)
- **Situational Low Self-Esteem**: (Domain 6, Self-Perception; Class 2: Self-Esteem)
- **Grieving** (Domain 9: Coping/Stress tolerance Class 2: Coping responses)
- **Readiness for Enhanced Coping** (Domain 9, Coping and Stress Tolerance; Class 2, Coping Responses)
- **Risk for Injury**: (Domain 11: Safety/Protection, Class 2: Physical Injury)
- **Social Isolation** (Domain 12, Comfort; Class 3, Social Comfort)
There are more than 25 million blind/visually-impaired individuals in America. As with most aging-related conditions, this number is predicted to grow exponentially in the coming years. New technology to allow expanded engagement for the visually-impaired in the world at large is being created at a rapid rate. These devices go a long way towards enabling work, careers, enhanced educational opportunities, and broader social access.

A recent article in the New York Times Health section discussed Mr. Jim Vlock, an individual suffering from low vision secondary to the retinal disorder known as macular degeneration (Brody, 2010). He sought help at three of the country’s best medical centers; they tried to treat his vision problem but none told him about ways he could improve his life without the hoped-for cure. Mr. Vlock was especially distressed by his inability to read, watch television, drive, and play tennis.

A proactive person, Mr. Vlock came upon a technician who educates others on how to use computers at the Veterans Health Administration Medical Center in West Haven, CT (Brody, 2010). The Veterans Administration has ten regional Blind Rehabilitation Centers that specialize in evaluating and training blind and low-vision veterans on assistive technologies. After six hours of evaluation and testing with numerous specialized devices, Mr. Vlock learned to use a computer with an enlarged keyboard, like those made by Greystone Digital or Intelli-Tools, Inc., and a magnified screen. He is now able to read and enjoy television, theater, ballgames, and e-mail.

From text-to-voice readers to complete computer/media systems that enable typing, emailing, web surfing, and on-line access to newspapers, magazines and international news media, new tools now provide unprecedented access and information. A device called BioOptic Telescopes that allow many low-vision patients to drive again (see next page). Departments of Motor Vehicles in 39 states allow the use of these devices, with collaboration.

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between patient, a physician specializing in low vision, and the DMV.

**Overview of Current Technology and Pricing**

Just as the technology, evaluation, and training for specialized devices and services vary widely, so do prices. Speech synthesizers that work with existing devices, such as computers and iPods, can be found at prices ranging from $299-$695. These devices, of course, require specialized software, around $299. There are a number of options for choosing the voice and the language spoken with this equipment and costs are anywhere from $16 to “Call for pricing.”

Products such as the *VictorReader Stream* provide access for downloading books and other printed material that convert text to voice in a hand-held unit the size of a cell phone and can store it for later use. Prices for the VictorReader Stream range from $359-$469 at *Humanware* (see below).

Electronic Braille notetakers are small, portable devices with Braille keyboards. They use a speech synthesizer or Braille display for output. The user enters the information on the Braille keyboard and has the option of transferring it to a larger computer with more memory, reviewing it using the built in speech synthesizer or Braille display, or sending it to a standard or Braille printer. The cost of a basic electronic Braille notetaker is between $1,000 and $3,000, with more sophisticated options that can cost up to $15,000. Braille printers that provide hardcopy information from computer devices can increase costs dramatically, from about $5,000 to as much as $25,000.

For those with low vision, table-top video magnifiers that use a camera mounted on an X-Y table (a gliding platform) are in the $1,800 to $4,000 price range. (see an example at [http://www.enhancedvision.com/low-vision-product-line/x-y-table.html](http://www.enhancedvision.com/low-vision-product-line/x-y-table.html)) Lower cost video magnifiers that plug into a TV are in the $400 to $1,000 price range.

To find a comprehensive range and pricing for many products and services, the following sites provide detailed information:


For a site that provides pricing and information on both high- and low-tech, check:

- AssistTech, [www.assistech.com](http://www.assistech.com)
- EnableMart ([www.enablemart.com](http://www.enablemart.com))
- Independent Living ([www.independentliving.com](http://www.independentliving.com))

**Resources for Evaluation and Training**

Mr. Vlock located just the technician he needed to help him regain some of his lost activities. Professionals who are certified to evaluate and train blind patients in use of technology and other areas that *continued next page*
impact activities of daily living are designated as Certified Vision Rehabilitation Therapists (CVRTs). Their counterpart for low vision patients is designated as Certified Low Vision Therapists (CLVTs).

The Veterans Administration has ten regional Blind Rehabilitation Centers that specialize in evaluating and training blind and low-vision veterans for assistive technologies. The BRCs treat vision problems related to health issues such as diabetes, glaucoma, and macular degeneration; vision problems do not have to be service-connected to qualify.

Central Blind Rehabilitation Center
Hines, IL 60141

Western Blind Rehabilitation Center
Palo Alto, CA 93404

Eastern Blind Rehabilitation Center
West Haven, CT 06516

American Lake Blind Rehabilitation Center
Tacoma, WA 98493

Waco Blind Rehabilitation Center
Waco, TX 76711

Southeastern Blind Rehabilitation Center
Birmingham, AL 35233

Puerto Rico Blind Rehabilitation Center
San Juan, PR 00921-3201

Southwestern Blind Rehabilitation Center
Tucson, AZ 85723

Augusta Blind Rehabilitation Center
Augusta, GA 30904

West Palm Beach Blind Rehabilitation Center
West Palm Beach, FL 33410

For more information on these Centers, go to www1.va.gov/BLINDREHAB/locations.asp

For non-military persons, VisionAware www.visionaware.org/find_vision_rehabilitation_vision_services_in_your_state provides a directory for locating vision rehabilitation centers and certified professionals in each state; lowvision.org provides a similar service for those with low vision for the United States, Australia, Canada, The Middle East, Europe/Asia, and Puerto Rico.

A link to search for providers certified by the Academy for Certification of Vision Rehabilitation and Education Professionals is available at http://www.acvrep.org/directory.aspx

In the future:
Because it can be difficult for a blind person to detect others’ emotions, one of the newest developments is a device that can help with perception of the emotions of others. According to the Technology of the Future blog, “Recently developed, a Braille code of emotions gives a brand new opportunity for social or emotional interaction for the visually impaired. With this device visual information can be transferred from a camera into vibrating patterns, which are then displayed on the skin. The vibrators which are used for this technology are sequentially activated. This provides pertinent information to the visually impaired individual about the type of emotion a person is expressing. It also relays the intensity of that particular emotion.” (Technology of the Future)

Other resources of interest on these topics
Hundreds of newspapers in audio form can be found at: www.newspapersfortheblind.org. This is a free service. Radio for and by the blind and low vision

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individuals is at American Council of the Blind Radio Interactive (ACBRI) Radio, found at http://interactive.acbradio.org/index.php For geeky types there is the Blind Geek Zone, http://www.blind-geek-zone.net/index.htm. For all kinds of recreational activities for the blind or low vision individual, check out The Eye, found at http://www.99main.com/~charlief/vi/recreation.html For something more physical there is Low Vision, http://www.lowvision.org/sports_and_recreation.htm or blind athletes and sports programs.

Other products
Enlarged keyboards can be found at Infogrip, www.Infogrip.com and EnableMart, www.enablemart.com. Infogrip currently offers ten models of large keyboards including zoom text keyboards and BigKeys. The ZoomText keyboard comes in black keys with white letters or yellow keys with black letters. Enlarged keyboard range in price from $24 - $126. Large stick-on letters are available to convert a standard keyboard for $12.75. A Braille alternative consisting of stick-on Braille labels is available for $17. There are keyboards designed for children as well as adults. Some options come in black and yellow and some include a built-in track-ball.

Enablemart also carries several screen magnification products, ranging in price from $29.95 for an Internet Explorer browser plug-in to $1,290 for SuperNova Access Suite that includes 1x-60x magnification, speech, and Braille output in one software product.

References


Nursing Diagnoses to Consider NANDA International Nursing Diagnosis, 2009-2011

› Disturbed Sensory Perception (Visual) Domain 5: Perception/Cognition; Class 3: Sensation/Perception (Change in visual sensory acuity)
› (Need for) Readiness for Enhanced Communication Domain 5: Perception/Cognition; Class 5: Communication
› Ineffective Community Coping (Domain 9, Coping/Stress Tolerance; Class 2, Coping Responses)
› Risk for Spiritual Distress (Domain 10, Life Principles; Class 3, Value/Belief/Action Congruence)
› Risk for Injury: (Domain 11: Safety/Protection, Class 2: Physical Injury)
› Social Isolation (Domain 12, Comfort; Class 3, Social Comfort)
calling all readers:

Annual
JNLCP
Reader Survey

Click on this live link
or enter in your browser
to give us feedback
on your JNLCP

http://www.surveymonkey.com/s/7R3L2GS
Rehabilitation plans and life care plans, while different, have complementary purposes. A life care plan is designed to outline future medical and supportive needs of an individual with a severe disability. When vocational rehabilitation services are indicated, basic knowledge of vocational rehabilitation is essential to the Nurse Life Care Planner.

Research has consistently shown that employment is tied to psychological well-being. Hess, Meade, Forchheimer & Tate (2004), for example, found that individuals with spinal cord injury (SCI) who were employed were significantly more satisfied with their lives, had significantly higher levels of social integration, and significantly fewer symptoms of depression than those who were not employed. According to Ottomanelli & Lind (2009), “Among employed individuals, there is not a significant difference in quality-of-life ratings between persons with SCI and persons without SCI. Employment is more related to satisfaction with life than level of impairment or disability itself” (p.522). The relationship of employability to life care planning is summarized by Blackwell, Millington, & Guglielmo (1999):

“Employment is a pervasive and important concern for the LCP. Access to employment is an implicit value attached to all rehabilitation efforts with a profound impact on psychological, social, and economic health” (p.13).

What Does a Vocational Rehabilitation Counselor Do?

Weed and Field (2001) define vocational rehabilitation as the “provision of any rehabilitation services (including medical, educational, social, etc.) to a vocationally handicapped person for the purpose of occupational (re)adjust-

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ment in work that may or may not be financially re-
munerative” (p. B-19). The role of a vocational re-
habilitation counselor is to first determine if an im-
pairment has impacted an individual’s ability to work, and if appropriate to plan services to prepare the individual for (re)entry of the labor market. The process will include a vocational evaluation to de-
termine an appropriate occupation when both the individual and the counselor are unsure what kind of work the client can or aspires to do. In these cases, both the counselor and client need more information to arrive at a vocational goal that takes into account the client's limitations and medical restrictions.

In a vocational evaluation an individual’s work his-
tory and any transferrable skills are considered to-
gether with the results of vocational testing to de-
termine jobs that are “consistent with the worker’s capabilities and functional restrictions” (Weed & Field, 2001, p. 111).  (See also Marino and Rodriguez in this issue for details on evaluation, page 420. Ed.)

The vocational rehabilitation counselor also deter-
mines if the individual will need any workplace ac-
commodation, special services, or supported or ex-
tended employment. The latter two services are dis-
cussed in depth later in the article.

Another way of assessing the individual’s abilities is through a situational assessment, in which an indi-
vidual is exposed to real-life work situations as he or
she “tries out” a job for a certain period of time (Johnson, Brown, & Knaster, 2010).

What is the Purpose of a Vocational Rehabilitation Plan?
The purpose of a vocational rehabilitation plan is to prepare an individual for employment. When creat-
ing a vocational rehabilitation plan, a counselor works with a person to determine if he or she can prepare a résumé, perform job searches, and present him- or herself effectively in a job interview. If the individual lacks the abilities or skills to obtain work independently, then the vocational rehabilitation counselor will assist with the process or hire a placement specialist to provide such assistance. Depen-
ding on vocational goal and intellectual and physical capabilities, the individual may be placed directly in a position or receive training before a job placement can be made.

If training is needed, the counselor must determine if the individual has the intellectual ability and mo-
tivation to complete a program of postsecondary education. A person who does can obtain training in a community college, technical school, university, or vocationally-specific school that provides intensive short-term training with placement after training is completed. A vocational rehabilitation plan also provides for necessary workplace accommodations such as job restructuring and adaptive equipment, e.g., an elevated desk or an orthopedic chair. The ultimate goal of a rehabilitation plan for the individ-

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ual with a disability is to secure and retain suitable employment.

What is Supported Employment?
Because life care plans are created for individuals with catastrophic injuries, supported and extended employment services are often necessary in order to find and maintain employment. Supported employment “targets individuals who fail to successfully participate in competitive employment and who, because of the nature and severity of their disabilities, need ongoing support in order to perform their jobs” (Holzberg, 2001, p. 250). In order for such persons to remain employed, a supported employment plan also “provides [for] assistance such as job coaches, transportation, assistive technology, specialized job training, and individually tailored supervision (Holzberg, 2001, p. 250).” Individuals receiving supported employment services generally work in an integrated setting and are paid at least minimum wage. People who need supported employment usually need help with

- determining abilities and support needs in the workplace
- locating and negotiating suitable work
- identifying and receiving an array of workplace supports or accommodations to enhance job performance
- problem solving issues either at or outside of work that, if left unattended, could lead to separation from employment.

(Wehman, Targett, Yasuda, McManus, & Briel, 2007, p. 98-99)

Job coaching is typically a part of a supported employment plan. A job coach is a person who “assists people with disabilities to obtain jobs and careers and assists employers to hire and accommodate people with disabilities (Luecking, Fabian, & Tilson, 2004, p. XIX).” A job coach’s tasks may include contacting employers, assessing employment settings, training clients, and monitoring success at regular intervals.

What is Extended Employment?
Once a job coach determines that a person is stable in a job, transition to extended employment may occur. Extended employment services are provided to individuals who need long-term support to remain employed. In an extended employment situation, a person's job performance is monitored until retirement, move to another state, quitting a job (either by choice or because a decline in function makes work unfeasible), or death.

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Extended employment has three different models. The sheltered workshop model is generally used when a person’s disability is severe enough to require constant direct or indirect supervision. Sheltered workshops typically employ individuals with intellectual disabilities and obtain contracts to perform work that requires no specialized skills. Job tasks usually consist of one or two steps, e.g., applying labels to products or stuffing envelopes. Employees of sheltered workshops are typically paid piecemeal, and the workshops are usually exempt from minimum wage laws.

The crew-based model consists of clients working in "enclaves" where five to seven people perform work at a business in the community and are supervised by one or two supervisors. An example of this model is a crew that cleans office buildings after general work hours. Individuals are generally semi-autonomous and work with distant supervision.

In the community-based model, individuals work in the competitive labor market, generally at entry-level jobs, such as dishwasher or janitor. A job coach is available on an as-needed basis to troubleshoot any problems that arise at the worksite. The agency that provides job coaching services is usually obligated to check on the individual a minimum of twice per month to ensure continued employment. If the individual is assigned additional work tasks or has difficulty performing assigned job duties, the job coach may spend several hours training him or her in proper performance.

**Funding Sources**

The major funding sources for vocational rehabilitation services are federal and state vocational rehabilitation programs, the US Department of Veterans Affairs, and state workers' compensation programs (although not all states provide vocational rehabilitation as part of workers' compensation). Additional funding may be available for such services from other state or local agencies or from personal insurance. If an individual requires extended employment services, it is important to contact the state vocational rehabilitation office to determine if these services are available. Since public extended employment services are entirely state-funded, the cost of private extended employment services will be part of the individual's compensation if the state does not offer them.

If an individual was injured on the job, funding from a workers’ compensation insurance carrier (state, employer self-insured, or private) will typically meet medical expenses. In the case of a person who has sustained vision impairment or loss, it is also important to inquire about blind and low vision services that may be provided by the state's vocational rehabilitation office. Such programs can provide orientation and mobility instruction and other specialized services, as well as vocational rehabilitation, for per-

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sons with impaired vision. (See Morrow in this issue, page 399, for more information and resources. Ed.)

Collateral Source Considerations
In some states, a plaintiff is entitled to full compensation for all expenses resulting from an injury, regardless of whether or not such expenses have been or will be met by another source, such as insurance. “The collateral source rule holds that a plaintiff is entitled to any and all benefits resulting from successful litigation, and prohibits the introduction of evidence that the plaintiff has received benefits from other sources” (Maryland State Bar Association, Inc., 2002). If an individual’s case is heard in a state that does not have a collateral source rule, then the total dollar amount paid by collateral sources must be determined, as these payments will offset damages. It is important to discuss the collateral source rule with an individual’s attorney since the difference of including or excluding long-term costs can be significant.

Collaboration With a Vocational Rehabilitation Counselor
A vocational rehabilitation counselor typically obtains information about an injured individual’s limitations and restrictions from physicians. Hegmann (2008) describes limitations as “the difference between the patient’s current physical stamina, agility, strength, and cognitive ability and potential job requirements” (p. 57). Restrictions, on the other hand, are described by Hegmann as “specific medical concerns or protective circumstances that are required in order to protect and keep the patient safe while working” (p. 57). Restrictions and limitations directly affect performance of work and household tasks. The physician must also determine if the client has attained maximum medical improvement, i.e., “the point when a medical impairment becomes stable so that additional diagnostic and/or therapeutic interventions are not reasonably expected to produce further improvement” (Rondinelli, 2005, p. 173). After obtaining information about the individual’s limitations and medical restrictions from the physician, the rehabilitation counselor must determine whether or not a disabled individual is employable and in what type of work. In cases in which supervision is indicated, it is important to ensure that the sheltered workshop or community-based placement does not overlap with projected attendant care. Also important to consider is the individual’s work life expectancy, as the need for attendant care may increase after retirement.

Consider the individual’s work life expectancy, as the need for attendant care may increase after retirement.

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tancy, as the need for attendant care may increase after retirement.

The fundamental value of a life care plan is the ultimate benefit to the individual with a disability. Services must be recommended with the goal of maximizing the individual's independence and/or employability. It is reasonable to assume that a comprehensive program of vocational and rehabilitation services may result in a reduction in the custodial services provided to the individual.

**Resources**

The Rehabilitation Services Administration (RSA) funds, evaluates, and monitors the effectiveness of federal/state vocational rehabilitation programs (http://rsa.ed.gov/index.cfm).

Information about accommodations relevant to specific disabilities may be found on the website of the Job Accommodation Network (JAN), http://askjan.org/. JAN provides examples of accommodations for physical, cognitive, and mental health impairments. The website also contains information about accommodations to enable employees with disabilities to meet performance and conduct standards.

The Council on Rehabilitation Education (CORE) provides accreditation standards for master’s level education in the United States. A list of accredited rehabilitation programs can be found on its website, http://www.core-rehab.org/progrec.html.

The Commission on Rehabilitation Counselor Certification (CRCC) certifies individuals interested in becoming rehabilitation counselors. Their website, http://www.crccertification.com/, includes information about rehabilitation counseling, how to become certified, and a code of ethics for certified rehabilitation counselors, among other resources.

Foundational books on vocational rehabilitation include the following: Rehabilitation Consultant’s Handbook-Revised (Weed & Field, 2001); Rehabilitation Counseling: Basics and Beyond, 4th Edition (Parker, Szymanski & Patterson, 2005); and Work and Disability: Issues and Strategies in Career Development and Job Placement, 2nd Edition (Szymanski & Parker, 2003).

**References**


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**Nursing Diagnoses to Consider**

- **Sedentary lifestyle** *(Domain 4, Activity/Rest, Class 2 Activity/Exercise)*
- **Impaired Walking** *(Domain 4 Activity/Rest Class 2: Activity/Exercise)*
- **Fatigue** *(Domain 4, Activity/Rest; Class 3: Energy Balance)*
- **Risk for Compromised Human Dignity:** *(Domain 6, Self-Perception; Class 1: Self-Concept)*
- **Readiness for Enhanced Self-concept** *(Domain 6, Self-Perception; Class 1, Self-Concept)*
- **Risk for Situational Low Self-Esteem:** *(Domain 6, Self-Perception; Class 2: Self-Esteem)*
- **Impaired Social Interaction** *(Domain 7, Role Relationships; Class 3, Role Performance)*
- **Ineffective Role Performance** *(Domain 7, Role Relationships; Class 3, Role Performance)*
- **Readiness for Enhanced Coping** *(Domain 9, Coping and Stress Tolerance; Class 2, Coping Responses)*

*These nursing diagnoses are suggested by our peer reviewers.*
Vocational Damages in Life Care Planning

Valerie J. Rodriguez MS CRC LPC, Irmo Marini PhD CRC CLCP FVE

Life care planning commonly involves a case management approach to disability: an organized, standardized, consistent, time-efficient and comprehensive method for providing the framework of goods and services that result from the onset of disability, typically from a traumatic event (Weed and Field, 1994). The nurse life care planner uses the nursing process to obtain and analyze comprehensive client information to develop a dynamic, individualized LCP (AANLCP 2011) in collaboration with other disciplines involved in client care. Life care plans typically consist of a narrative report and a tables section (Deutsch and Sawyer, 1999); vocational history is generally included in the narrative. Estimation of vocational damages is typically added to a LCP written by qualified vocational expert; alternatively, the LCP and vocational damages report are developed independently by two different experts. This paper is designed to provide readers with information regarding the role and function of vocational experts (VEs) in the process of life care plan development and how VEs generally derive their opinions.

Who Are Forensic Vocational Experts? There is no state or national requirement to be qualified as a certified or licensed vocational expert in a court of law. Many experts are deemed experts based on their education, skills, and work experience. The American Board of Vocational Experts (ABVE) includes certified VE members from many backgrounds: rehabilitation counseling, psychology, economics, and other allied disciplines. Qualifications for ABVE certification include a master’s or doctoral degree in the human service field (vocational rehabilitation, psychology, and/or vocational counseling) from an accredited institution; specific training and experience in assessment, functional capacity measures, psychological testing, job analysis and placement, and labor market analysis; and experience providing testimony in these areas. The member must also submit a sample forensic work.

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product, pass a certification examination, and adhere to a governing body of ethics (www.abve.net).

The American Rehabilitation Economics Association (www.a-r-e-a.org) offers the designation of Registered Forensic Vocational Expert (FVE). Its membership is vocational rehabilitation professionals, economists, and life care planners, all dealing with forensic issues. To become an FVE, members generally must hold a master’s degree, have worked at least three years in the field and testified as a vocational expert, submit work products, and submit at least two letters of recommendation from lawyers and/or judges who can attest to the applicant’s skills. Although many forensic vocational experts are not certified, they are held to the same expectations regarding knowledge, experience, expertise, skill level, and ethical standards. While helpful, membership in these associations is not required to be regarded as a well-qualified vocational expert.

In legal proceedings, the court cannot award compensation for wage loss or future earning capacity loss without the testimony or documented opinion of a VE regarding the nature of present and future functional abilities and limitations as related to employment (Deutsch, 2002). Vocational recommendations are a necessary and relevant component of many life care plans if employability is possible. It is common for many clients who need life care plans to be deemed not employable because they are considered totally and completely disabled. There are also cases where the client is still employable but needs a VE opinion on vocational damages and future wage loss. To formulate a sound vocational opinion, the expert must have access to pertinent information: medical records, physical and/or mental Functional Capacity Evaluations (FCE), tax returns (when relevant), a detailed work history, and school records (when relevant).

**Key Concepts in Understanding and Developing an Expert Vocational Opinion**

Arriving at an expert vocational opinion does not involve one set formula for all circumstances. There are, however, key concepts to consider. In estimating vocational damages, a number of vocational factors come into play. These include reasonable accommodations, essential job functions, job modifications, and assistive technology where appropriate to assist the individual in becoming gainfully employed.

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in the competitive labor market (Blackwell et al. 2005).

**Labor Market Access Loss**

*Reduced labor market access or labor market access loss* (LMAL) is the percentage of occupations or job titles which an injured individual is no longer able to perform as a result of their acquired disability. LMAL is generally expressed as a percentage. For example, consider a construction worker with less than a high school education engaged in heavy physical labor much of his life who sustains several cervical and lumbar disc herniations and is medically determined to only be able to perform sedentary work. He has likely sustained a LMAL of approximately 90%, i.e., nine out of ten of jobs he could have done before injury are no longer available to him.

This very rough illustration is based on the fact that only about 10% of all jobs in the US are sedentary (Field 1992). Actually, individuals with less than a high school education would have access to only about 200 unskilled sedentary jobs recognized by the Social Security Administration ([www.ssa.gov](http://www.ssa.gov)). In times of economic recession such as the present, LMAL would not be affected, since the VE does not estimate the calculation based on actual job openings (although in non-litigated workers’ compensation cases one would), but rather on the percentage of available job titles in the U.S. (based on pre- and post-injury functional impairment).

**Transferable Skills Analysis**

Transferable Skills Analysis (TSA) helps the VE determine whether the evaluee has skills that can be used in lighter alternate work that is compatible with their documented medical limitations. For instance, a nurse aide in a nursing home required to perform medium to heavy lifting (50 to 100 pounds maximum) would have other skills that could transfer to a position such as a semiskilled home companion if disability restricted her to light work (lifting/carrying no more than 20 pounds maximum).

**Future Wage Loss**

The difference between *future earning capacity loss* and *future wage loss* is whether the injured individual has an established work history and is either unable to return to any type of work (total future wage loss), or a different type of work which pays less than their former job (partial future wage loss). For example, our construction worker with less than a high school education earned $16 per hour after doing such work for 10 years. Post-injury; however, with no transferable skills and low education, he would likely be limited to jobs that paid minimum wage or slightly higher. A rudimentary labor market analysis of suitable jobs and their median wages would likely show unskilled sedentary jobs (e.g., circuit board inspector) paid perhaps half as much as
construction. Therefore, in all vocational probability, he would see a 50% reduction in future wages over his remaining working life. At an approximate $8.00 per hour future wage loss x 8 hours per day x 260 work days per year, this is about $16,640 per year future wage loss.

**Future Earning Capacity Loss Estimation**

In cases where a child or teenager does not have an established work history, it is more appropriate to estimate future earning capacity loss. In such cases, the VE generally looks at parental and significant family members’ education and work history for an indication of a statistically probable vocational career path for the child. A child of college graduates has a 70% chance of completing college; however, only 18% of children complete college when their parents have not (Toppino, Reed, and Agrusa, 1998).

Although the VE does not have a specific method from which to estimate future wage loss (unless in circumstances where the family has a history of being nurses or lawyers, etc.), the Bureau of Labor Statistics (www.bls.gov) gives tables of median annual earnings by race/ethnic group and educational level. The Bureau of Labor Statistics gives tables of median annual earnings by race / ethnic group and educational level.

Earning capacity loss estimations are also appropriate for adults who present with an uncharacteristic, interrupted, or atypical work history. The VE must consider each individual’s work history holistically. Individuals who are incarcerated one or more times may not have earnings histories that represent their capacity to earn (Deutsch and Sawyer 1999). Similarly, someone with a Ph.D. in English who is unable to find work in academia may spend years working as a waiter to make ends meet. A woman who has been in and out of the workforce due to childbirth every two to three years and extended work absences would not have been able to enjoy the benefits of a tenured position with annual raises, and may have had to start over in different jobs.

**Mental Functional Capacity Evaluations**

Mental functional capacity evaluations (MFCE) are psychometric tests. Typically administered by clinical or school psychologists, they determine an individual’s level of cognitive and emotional capacity at the time of the evaluation.
There are four major components which look at the evaluatee’s
- ability to comprehend, recall, and execute directions
- ability to sustain concentration and persistence
- ability to interact with others in a social setting
- response to changes in a work environment

The psychologist rates the evaluatee using a 5 point scale:
- 1, no limitations
- 2, slight/mild limitations but generally good function
- 3, moderate limitations but satisfactory function
- 4, marked and serious functional limits but the ability to work is not precluded
- 5, extreme and major limitations with no functional work ability

MFCEs are generally designated for evaluatees with psychiatric disabilities such as depression, personality disorders, or other psychotic disorders; or other intellectual/cognitive disabilities, such as traumatic brain injury and severe cerebral palsy. Findings are used to help the vocational expert in determining their vocational conclusions regarding potential for employment/return to work. This assessment also provides a basis for functions of independent living and needs for independent living (IL) services, which can also be included in the life care plan (Marini 2009).

**Physical Functional Capacity Evaluations**

The Physical Functional Capacity Evaluation (PFCE) targets physical demands and strength factors that may affect one’s ability to return to work in certain jobs based on the primarily physical demands of specific job titles. PFCEs are typically administered by physical or occupational therapists under physiatrist supervision. These evaluations provide a snapshot of evaluatee physical function with three to four hours of simulated work activity, such as lifting/carrying certain weights, walking, bending, stooping, reaching, grasping and handling, and so forth. Vocational experts then apply the resulting physician-determined limitations, age, education, past relevant work experience, and transferrable skills to the world of work to identify potential jobs (Marini 2009).

**The Worker Trait Profile**

Perhaps the most significant vocational expert resource is the worker trait profile, a detailed breakdown of the seven “worker traits” required to perform the 12,741 job titles in the *Dictionary of Occupational Titles* (DOT). This system is covered in the DOT crosswalk companion, the *Transitional Classification of Jobs* (COJ). The seven worker traits include:

- strength (e.g., sedentary, light, medium)
- physical demands (e.g., stooping, kneeling, climbing, reaching, handling)
- specific vocational preparation (unskilled, semiskilled, skilled)

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• aptitudes (e.g., intellect, manual dexterity, finger dexterity)
• environmental conditions (e.g., hot, cold, wet/humid, hazardous machinery)
• temperaments (e.g., making judgments, working with public vs. alone)
• general educational development (reasoning, math, language levels)

For a more detailed explanation, refer to the COJ (Field and Field 2004).

**Job Analysis**
Job analysis identifies specific requirements and their significance for a specific job itself, not the evaluatee. The results should provide information on duties and tasks, work environment, tools/equipment required, relationships/interactions with others on the job, and necessary knowledge, skills, and abilities. This portion of the process is like piecing the puzzle together. A combination of supporting medical documentation and physical/mental capacity evaluations will help the expert identify reasonable vocational goals for an individual with medically functional impairments, if employment is indeed a viable option.

**Work Life Expectancy**
Everyone has a work life expectancy. The VE considers this in conjunction with life expectancy. Many life care planners/vocational experts rely on documentation from treating physicians regarding life expectancy. The *US Life Tables*, published by the US Public Health Service, provide an estimate for both men and women based on race and gender, not including disability status, notably in catastrophic cases where the individual is totally and completely disabled from a vocational standpoint. Vocational experts typically rely on US Department of Labor information published on estimated number of years of remaining work life expectancy based on gender, age, and educational attainment. The *Life and Work Life Expectancies* tables (Richards & Donaldson 2010) provide all such related information and the methodology in obtaining them.

**Developing Damages in Different Circumstances**
Arriving at an opinion regarding vocational damages for a given individual requires a holistic approach and a recognized conceptual framework, using the factors described above. The VE’s report includes identifying and background information, educational background, medical history (objective and subjective), thorough vocational history, current living and functional status, behavioral observations, and current functioning. It may or may...
not include psychometric and/or vocational testing, research regarding labor market access, functional capacity evaluations, previous earnings, and options for employment, if deemed employable.

**Totally Disabled** In such cases, e.g., wheelchair-dependent child with severe cerebral palsy and, profound mental retardation, individuals are most often deemed permanently and totally vocationally disabled. The VE will determine a vocationally probable career and/or educational path based on parents and/or significant others in the child’s life (Toppino, Reed, and Agrusa, 1998). By reviewing significant others educational and/or employment history, VEs can run projections and obtain a future earning capacity loss derived in present-day dollars, then forwarded to the economist to calculate present value (Weed 2007).

For an adult who sustains a work-ending injury, a VE is not needed if there are no employability alternatives, and an economist can work directly with the individual’s past wage to estimate future wage loss (Weed 2007).

**Able to Work at Reduced LMA and/or Wage** The VE explores return to work (RTW) alternatives and their typical pay levels, looking at both future wage or earning capacity loss and loss of labor market access due to permanent functional limits.

A high school history teacher with T-12 SCI will sustain a LMAL (e.g., unable to perform medium or heavy lifting work requiring mostly standing and walking during an eight hour workday); however, can still return to the same work for the same pay, and therefore does not sustain any future wage loss.

A child or teenager who sustains a severe disability with resulting mental and/or physical disability may still able to enter the competitive labor market. For example, a teenager in a nursing family sustains an above the knee amputation with other injuries and is limited to primarily sedentary work, or at least sitting for much of the workday. This would result in LMAL of about 90% of all job titles in the national economy, and would therefore also sustain a future earning capacity loss. If academic performance confirms this, a VE could easily justify a nurse salary as the pre-injury earning capacity. Within the same field the VE would be able to defend positions such as medical secretary, medical transcriptionist, hospital admitting clerk, etc., which pay much less on average. Future earning capacity loss would be the difference between the two median salaries.

The previously-mentioned construction worker with a grade 9 education making $16 per hour who sustains a physically disabling injury limiting him to sedentary or light lifting jobs would be looking primarily at entry-level positions due in part to his functional limitations, but primarily to his level of education and lack of transferable skills.

**Life Care Planner & Vocational Expert Resources**

seling, career guidance, and labor market information

2) The Occupational Information Network (O*NET): online, detailed descriptions, outlook, career clusters, industry information, and job searches based on abilities, interests, knowledge, skills, work activities, work context, and work values; http://www.onetcenter.org/


4) The Transitional Classification of Jobs (COJ) (2004): Worker trait variables in the DOT and Americans with Disabilities Act (ADA)


6) The Enhanced Guide for Occupational Exploration (GOE) (1991): Job descriptions for more than 95% of the workplace, based on the U.S. Department of Labor and other sources

http://eric.ed.gov/ERICWebPortal/search/detailmini.jsp?_nfpb=true&_&ERICExtSearch_SearchValue_0=ED182460&ERICExtSearch_SearchTyp

7) The Job Accommodations Network (JAN): Expert guidance on workplace accommodations and various disability issues; www.askjan.org

8) AbleData: Objective information on assistive technology products and rehabilitation equipment; free online database of over 36,000 products in 20 categories; www.abledata.com

9) Vertek, Inc.: Software for occupational, labor market, employment, and training information; www.skilltran.com

10) McCroskey Vocational Quotient System (MVQS): Matches job demands and worker capabilities with potential job options, used frequently in identifying return to work options

11) SkillTRAN: PC-based software and internet-based services for transferrable skills analysis, pre & post injury analysis, labor market information, business listings used for labor market survey development, and job openings; www.skilltran.com

12) RESNA: Objective product, vendor, and equipment information; www.resna.org

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13) Life Care Planner System Software: Part of a suite of software for LCP development and formatting (DeFazio, 2008)


15) www.acinet.org: Occupation information, industry information, state information, and career tools

16) www.indeed.com: Job search engine combining other job search engines, job sites, newspapers, associations, and company career pages

17) www.Vocrehab.com: Comprehensive online system for vocational counseling, job assessment, and human resource professionals, typically used for transferrable skills analysis

18) www.assistivetech.net: Free online database of over 20,000 products, can search for by function (related functional area or disability), activity (related activity or task), or vendor (manufacturer or distributor name).

Although all of these are useful in some way, it is up to the life care planner/vocational expert to determine which are necessary and appropriate for an individual (Countiss, & Deutsch, 2002; Reavis, 2002; Stephanie, 2000). When an evaulcee has potential to work, collaboration between life care planners, rehabilitation professionals, and vocational experts will be crucial to identify appropriate job modifications and assistive technology required for success. Include these related activities in the LCP if desired by the client, with associated costs.

**Summary**

Estimating vocational damages is a complex process requiring a holistic, individualized approach. Understanding key terms, concepts, and resources is central to becoming participatory and well-informed in the process and development of vocational damage assessments in life care planning (McCollum & Weed, 2002).

**References**

American Association of Nurse Life Care Planners, www.aanlcp.org


Deer in island grass

Linda Husted
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