

JOURNAL OF

# NURSE LIFE CARE PLANNING

AANCP

WINTER 2021

vol XXI, no.1

## Therapeutic Modalities





FEBRUARY 2021

# JOURNAL OF NURSE LIFE CARE PLANNING

## TABLE OF CONTENTS

- 10 Cracking the Code for Therapy Goods and Services**  
*Dawn L Cook RN, CLCP, CLNC*
- 19 Recreational Therapy – Fun or Functional?**  
*Gerrie M. Springston, B.S.N., R.N., L.N.C.C., C.C.M., C.N.L.C.P.*
- 26 An Introduction to Hydrotherapy in Rehabilitation**  
*Andrea K. Goicoechea, RN, MSN*
- 34 Music Therapy: Evidence-Based Practice to Benefit People with Neurologic Issues**  
*Concetta M. Tomaino, DA, LCAT, MT-BC*
- 39 Art Therapy ~ A Stroke of the Brush**  
*Kathryn J. Wright, MA, LPC, ATR, L*
- 44 Service Dogs and Disabilities: Nurse Life Care Planning Considerations**  
*Kirsten Turkington, DNP, APRN, FNP-C, CNLCP, AFN-BC*  
*Tricia West, BSN, MBA/HCM, RN, CHN, PHN.*

## DEPARTMENTS

- 4 From the Editor**
- 5 Information for Authors**
- 6 A Message from the President**
- 7 Contributors to this Issue**

**AMERICAN ASSOCIATION OF NURSE LIFE CARE PLANNERS**  
299 S. Main Street #1300-91732  
Salt Lake City, UT 94111  
PH & FAX: 801.274.1184  
[aanlcp.org](http://aanlcp.org)

### BOARD OF DIRECTORS

#### President

Andrea Nebel, RN, BSN, CNLCP

#### Past President

Erin OConnell MSN-RN, MBA, CNL, CNLCP, MSCC, CCM

#### Secretary

Richard Bays, JD, MBA, RN, LNCCP

#### Treasurer

Penny Cates, RN, BSN, MSCC, CLCP, LNCC, CNLCP, CCM

### JOURNAL OF NURSE LIFE CARE PLANNING EDITOR

Wendie Howland MN, RN-BC, CRRN, CCM, CNLCP, LNCC

Holly Allman, DNP, RN, CNLCP

Barbara T. Bate RN-BC, CCM, CNLCP, LNCC, MSCC

Pat Brock PhD, RN

Kelly K. Campbell, BSN, RN, CP, CLCN

Dawn L Cook RN, CLCP, CNLCP

Michele Cook, MA, RN, CCM, CRC, CLCP, ABVE

Andrea Goicoechea MSN, RN, NP-BC

Cheryl L. Halkowicz, MS, RN, CPHQ, CLCP

Linda Husted, MPH, RN, CNLCP, LNCC, CCM, CDMS, CRC

Jim Quinn, RN, BSN, CCRN, CLCP

Evelyn Robert, BSN, RN, CCM, CRP, CLCP, MSCC

Gerrie Springston, BSN, RN, CNLCP, LNCC, CCM

Kirsten Turkington, DNP, APRN, FNP-C, CNLCP, AFN-BC

Carole Stolte Upman, MA, RN, CNLCP, CDMS/R, CCM/R

Jessica H. Urie, RN, BSN, CLCP

Tricia West, BSN, RN, MBA/HCM, CHN, PHN



## The Nation's Leading Provider of **Orthotic and Prosthetic Care**

We create a world of possibilities for people with limb loss or limb difference through the highest quality and most accessible care and customized orthotic and prosthetic solutions. One by one, we listen to challenges, collaborate with partners, lead through innovation, and apply our expertise to help move lives forward. Learn more at [HangerClinic.com](https://www.hangerclinic.com).



CONNECT WITH US



(877) 442-6437 | [HANGERCLINIC.COM](https://www.hangerclinic.com)

# From the Editor



Good day, and welcome to the February issue on therapeutic modalities. One of the things I love about working on this issue is the opportunity to learn about new ways to improve our plans of care by suggesting newer therapies or programs to a treating physician, along with the evidence bases as contained in the references for each article.

Many of us have heard people refer to life care planning as “case management on steroids.” It is very true that people with a solid background in true case management (defined as making medical care delivery more effective and timely) have an advantage when they begin NLCP practice, as they already speak the language and know the players in the insurance-based healthcare industry. I recently had an extensive conversation with a life care planner on the differences between case management, care management, and life care planning. In my opinion, there’s considerable overlap between them.

The chief difference in my opinion is that nurse life care planners are often more aware of the power their nursing licenses/nurse practice acts bestows, and don’t hesitate to use it and defend it. Many complementary therapies do not require physician prescription to implement based on nursing assessment, for example. Some of us list nursing diagnoses on the same page as medical diagnoses to demonstrate that they carry equal weight—and in some ways, more weight, especially in the long-term conditions many of us see. Here’s a partial list on the cover page I had on a recent case:

| Medical Diagnoses   |  | Nursing Diagnoses  |   |
|---|--|--|---|
| <ul style="list-style-type: none"> <li>• C6-C7 vertebral fx-dislocation with quadriplegia (motor and sensory level C4)</li> <li>• T4-11 vertebral, transverse, and spinous process fxs</li> <li>• Comminuted L1 fx</li> <li>• Sternal fractures</li> <li>• Fractured ribs right 1-12, pulmonary contusion, pneumothorax</li> <li>• Proximal right humerus comminuted and dislocated fracture</li> </ul> | <ul style="list-style-type: none"> <li>• ORIF T11 burst fracture</li> <li>• Fusion T9-L1</li> <li>• Posterior fusion C4-T1, anterior fusion C6-7</li> <li>• DVT, PE</li> <li>• Autonomic dysreflexia</li> <li>• Pressure injuries,</li> <li>• Chronic neuropathic pain</li> <li>• Neurogenic bladder and bowel</li> <li>• Recurrent UTI</li> </ul> | <ul style="list-style-type: none"> <li>• Chronic pain</li> <li>• Post trauma-syndrome</li> <li>• Incontinence</li> <li>• Impaired physical mobility; postural instability, decrease in gross and fine motor skills</li> <li>• Impaired standing</li> <li>• Impaired transfer ability</li> <li>• Risk for pressure injury</li> <li>• Risk for infection</li> <li>• Impaired dentition</li> <li>• Autonomic dysreflexia/risk for AD</li> </ul> | <ul style="list-style-type: none"> <li>• Caregiver role strain</li> <li>• Interrupted family processes</li> <li>• Decreased diversional activity engagement</li> <li>• Risk for infection</li> <li>• Sexual dysfunction</li> <li>• Grieving</li> <li>• Readiness for enhanced coping</li> </ul> |

Think about the things you would add in a NLCP to address each of those, on the strength of your nursing scope and standard of practice. Think about how often medical care is delivered in silos, with little overlap between physicians, and little reason for physicians to integrate competent nursing diagnosis into the medical plan of care. Think of the opportunities for collaboration this case presents.

This patient needed a service dog (decrease in motor skills, coping, role strain), had difficulty with eating (impaired dentition), a suprapubic catheter and decreased vital capacity (risk for infection) and other needs; both partners experienced caregiver role strain, interrupted family processes, sexual dysfunction, post-trauma syndrome, and grieving. But they were ready for measures to help improve quality of life (readiness for enhanced coping). See what articles in this issue would offer you resources to help them with these diagnoses. We’d be interested in your take on this.

*Wendie A. Howland*

**Wendie A. Howland**  
 MN, RN-BC, CRRN, CCM, CNLCP, LNCC, JNLCP  
 Editor, [whowland@howlandhealthconsulting.com](mailto:whowland@howlandhealthconsulting.com)

# Information for Authors

## Information for Authors

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. Submitted material must be original. Manuscripts and queries may be addressed to the Editor. 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 (.doc, .docx) or Pages (.pages)
- 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)
- Place author name, contact information, and article title on a separate title page
- Use APA style (Publication Manual of the American Psychological Assoc. current edition)

## Art, Figures, Links

- All photos, figures, and artwork must be in JPG or PDF format (JPG preferred for photos).

- Line art must 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 must be submitted as a separate file, 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, 2019). Graphic elements embedded in a word processing document cannot be used.
- Live links are encouraged. Please include the full URL for each.

## Editing and Permissions

- The author must accompany the submission with written release from:
  - Any recognizable identified facility for the use of name or image
  - Any recognizable person in a photograph, for unrestricted use of the image
  - Any copyright holder, for copyrighted materials including illustrations, photographs, tables, etc. Note that images harvested online may be copyrighted.
- All authors must disclose any relationship with facilities, institutions, organizations, or companies mentioned in their work.
- All accepted manuscripts are subject to editing, which may involve only minor

changes of grammar, punctuation, paragraphing, etc. However, some editing may involve condensing or restructuring the narrative. Authors will be notified of extensive editing. Authors will approve the final revision for submission. 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`

All manuscripts published become the property of the Journal. Submission indicates that the author accepts these terms. Queries may be addressed to the care of the Editor at: [journal@aanlcp.org](mailto:journal@aanlcp.org)

## Manuscript Review Process

Submitted articles are peer reviewed by Nurse Life Care Planners with diverse backgrounds in life care planning, case management, rehabilitation, and nursing. 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.

Journal of Nurse Life Care Planning is the official peer-reviewed publication of the American Association of Nurse Life Care Planners. Articles, statements, and opinions contained herein are those of the author(s) and are not necessarily the official policy of the AANLCP® or the editors, unless expressly stated as such. The Association reserves the right to accept, reject, or alter manuscripts or advertising material submitted for publication. The Journal of Nurse Life Care Planning is published quarterly in spring, summer, fall and winter. Members of AANLCP® receive the Journal subscription electronically as a membership benefit. Back issues are available in electronic (PDF) format on the association website. Journal contents are also indexed at the Cumulative Index of Nursing and Allied Health Literature (CINAHL) at [ebSCOhost.com](http://ebSCOhost.com). Please forward all email address changes to AANLCP® marked "Journal-Notice of Address Update." Contents and format copyright by the American Association of Nurse Life Care Planners. All rights reserved. For permission to reprint articles, graphics, or charts from this journal, please request to AANLCP® headed "Journal-Reprint Permissions" citing the volume number, article title, author and intended reprinting purpose. 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. In order to make safe and effective judgments using NANDA-I nursing diagnoses it is essential that nurses refer to the definitions and defining characteristics of the diagnoses listed in this work.

# A Message from the President

Dear Members, Colleagues and Fellow Nurse Life Care Planners,



Last year brought incredible challenges to the world, put enormous strain on communities and I'm sure has changed and touched each of our lives in some way.

As an employed mom of two young girls, I didn't have the power to change the course of the pandemic and its consequences of school closures.

Or the struggles with meeting the needs of my girls and my employer while keeping the family safe, supporting my husband with his business and staying grounded. But I did realize that I had the power to change the circumstances, and so I did. I launched my own business in the fall, and it has been rewarding, challenging and the best decision ever. I wish each and every one of you to find the strength within, to overcome challenges in 2021, and I hope you will find support and guidance from the Association and its members.

The highlight of the year for the Association has always been the conference where attendees from all over the United States get to meet, connect, collaborate and further their knowledge of the professional standards and research as it relates to the practice of Nurse Life Care Planning. Consequences of the global COVID-19 pandemic have forced the Association to postpone the planned annual conference in Memphis in March to a virtual conference now being held May 20 – 23, 2021. Although not as originally envisioned, the conference committee, chaired by Victoria Powell and Joan Schofield has been working enthusiastically to offer an engaging and inspiring Conference! Attendees will be able to listen to a host of speakers on a variety of topics, meet exhibitors on the virtual platform and connect and communicate with colleagues. I hope you take advantage of deepening your knowledge while in the comfort of your home or office. And I hope to see many of you there and look forward to making new connections!

As a member, I have had the opportunity to attend the wonderful Conferences over the last several years, develop friendships and connections, grow my knowledge in the field of Nurse Life Care Planning and witness the Association's growth, thanks to all of its previous leaders, volunteers and enthusiastic members. And now, I am deeply honored to have been elected to be the president of the American Association of Nurse Life Care Planners. Thank you all for the excellent work and hours given to the Association. Your dedication, membership and vision make AANLCP such an exceptional organization.

I look forward to the teamwork with the Executive Board and the Committees, and I hope to get to know many of you, our members!

During the annual strategic meeting in December 2020, I witnessed the incredible amount of work the Executive Board put into the Association to provide its members invaluable resources, education and a platform to connect with others. I would like to thank Erin O'Connell, Evelyn Robert, Penny Cates, and Kelly Dawson for their dedication, time and commitment.

The goals discussed and updated during the strategic planning meeting are focused on providing you with resources, knowledge, and support to achieve excellence in your profession as a Nurse Life Care Planner. There is much to do. We value and need your help. Our committees offer a variety of opportunities to get involved and welcome your participation and ideas!

I look forward to serving you as the AANLCP president.

**Andrea Nebel, RN, BSN, CNLCP**

*President, AANLCP*

president@aanlcp.org

**"You have power over your mind — not outside events. Realize this, and you will find strength."**

- Marcus Aurelius

# Contributors to this Issue



## **Dawn Cook, RN, CNLCP, CLCP**

is a licensed Registered Nurse with two certifications in life care planning. Dawn has been practicing as an expert in life care planning and past medical bill review since 2012, creating reports for plaintiff and defense counsel in 28 states. She has testified in Federal and state court and has been deposed more than 100 times. She can be contacted at [dawn@cooklifecareplan.com](mailto:dawn@cooklifecareplan.com)



## **Gerrie Springston, B.S.N., R.N., L.N.C.C., C.C.M., C.N.L.C.P.**

entered the world of legal nurse consulting, nurse case management, and life care planning following a clinical nursing career in intensive care, cardiovascular intensive care, and heart transplant care. She serves on the peer review committee for JNLCP and on the board of directors of the Phoenix Chapter of AALNC. She is also a member of the International Association of Rehabilitation Professionals (IARP) and the International Academy of Life Care Planners (IALCP). She can be contacted at [gerries@vocationaldiagnostics.com](mailto:gerries@vocationaldiagnostics.com)



## **Andrea K. Goicoechea, MSN, RN, WHNP-BC, PHN**

was introduced to nurse life care planning via legal nurse consulting work and the San Diego chapter of AALNC. Her background is in research, public health, and women's health. Andrea currently works as an independent contractor with Liz Holakiewicz & Associates, and is appreciative of her mentors and the support from AANLCP members. She can be contacted at [akgoico@gmail.com](mailto:akgoico@gmail.com)



## **Concetta M. Tomaino, DA, LCAT, MT-BC**

is the Executive Director/co-founder of the Institute for Music and Neurologic Function. She can be reached at [ctomaino@wartburg.org](mailto:ctomaino@wartburg.org)

# Contributors to this Issue



**Kathryn J. Wright, LPC, ATR, LAC**

is the owner of New Vision Counseling, providing specialized art therapy to the elderly and individuals with special needs at home. Ms. Wright has over 30 years experience working with the elderly in a variety of capacities. She earned the Masters of Art Therapy Counseling Degree, is a Licenced Art Therapist, and is certified in Addiction Studies.

Ms. Wright also works in crisis management at a psychiatric emergency department. She was a featured speaker at the Oregon Adolescent Sex Offending Treatment Network Conference, presenting "Art Therapy with a Juvenile Sex Offender: Establishing Empathy through Attachment (2014)." Ms. Wright was the Facilitator of "Self-Care for the Caregiver: the Art-making Process" at the Annual Wellness Conference for Caregivers of the Sisters of Holy Names and Jesus and Mary (2018).

She can be contacted at [newvisioncounseling13@gmail.com](mailto:newvisioncounseling13@gmail.com)



**Dr. Kirsten Turkington, NP**

is the owner of Athena Life Care Planning, PLLC in Scottsdale, Arizona. She is a board certified Nurse Practitioner, Nurse Life Care Planner, Emergency Nurse and Advanced Forensic Nurse. She can be reached at [athenalcp@outlook.com](mailto:athenalcp@outlook.com).



**Tricia West, RN, BSN, MBA/HCM, PHN, CHN, LNC**

has been doing Legal Nurse Expert work since 1977. In her 40 years as a Registered Nurse, she has worked in Intensive and Cardiac Care, Acute and Chronic Hemodialysis and Quality Assurance. She is the founder and CEO of P.J. West and Associates, Inc. a Medical Legal Consulting company. Tricia works with attorneys throughout the United States consulting as an expert in medical legal cases including Life Care Plans, Billing Analysis, Medicare Set Asides, and standards of care in legal cases wherein there is a medical component. Tricia can be reached at 818.707.0051 or [twest@pjwa.com](mailto:twest@pjwa.com).

# HELPING PLAINTIFF & DEFENSE ATTORNEYS DETERMINE FUTURE HEALTH & MEDICAL CARE NEEDS



**Jenn Craigmyle**  
MSN | RN | CNLCP | CLCP | LNCP-C  
Principal Nurse Life Care Planner  
TBI Med Legal Conference Speaker



**LIFE CARE PLANNING | ESTIMATES OF FUTURE CARE  
MEDICAL BILL REVIEW | CARE COORDINATION**

**CALL TO DISCUSS YOUR CATASTROPHIC INJURY CASES  
(951) 332-2322**

**[www.legalnurseccraigmyle.com](http://www.legalnurseccraigmyle.com)**

# Cracking the Code for Therapy Goods and Services



Dawn L Cook RN, CLCP, CLNC

**Keywords:** medical billing, codes, coding, HCPCS, CPT

## Abstract

Whether developing or rebutting a life care plan or performing a bill review, life care planners need to understand billing goods and services codes. Codes may change, so life care planners stay current in their understanding of the codes and utilization.

## Introduction

When properly used, the medical codes in the life care plan will indicate who will be providing care (physician, therapist for example), the service planned as well as the level of complexity, why a procedure is needed, what equipment and or supplies will be used or provided and the type of facility where the service will be performed (inpatient or outpatient) (Maniha, 2008). This brief review will discuss Current

Procedural Terminology (CPT) and Healthcare Common Procedure Coding System (HCPCS) codes for various therapies and provide resources for several national therapy-based associations.

These codes and coding tips should aid the life care planner who is including therapy services in the life care plan or when reviewing past medical bills. Using CPT and or HCPCS codes accurately will provide both transparency and reproducibility.

The AMA reviews, revises, deletes, and/or releases new CPT codes on January 1 each year. In 2020, for instance, there were 394 code changes in the 2020 CPT code set including 248 new codes, 71 deletions, and 75 revisions. These changes are usually announced in the Fall and can be found at <https://www.ama-assn.org/practice-management/cpt>.

Professional association websites, both national and individual state are useful ways to determine if there are changes to the specific codes or their current application to the specific therapy. See the list at the end of this article for specifics.

## Origins and Usage

Current Procedural Terminology (CPT) codes were developed in 1966 by the American Medical Association (AMA) to standardize reporting for reimbursement of both services and procedures performed by healthcare providers. These five-digit alphanumeric codes are also used for both inpatient and outpatient facilities as well as providers (AAPC, 2020; CPT, 2020).

Beginning in 1978, the federal government created what is now the Healthcare Common Procedure Coding System (HCPCS) system to standardize healthcare claims to the federal government. There are two divisions of HCPCS codes:

- Level I codes are the CPT codes
- Level II codes are for items such as durable medical equipment, disposable supplies, medications, and transportation services. Like CPT, HCPCS codes are also five-digit alphanumeric with the beginning letter (A–V) representing the grouping of like services and goods (AAPC, 2020; HCPCS, 2020).

**Therapy services are billed with both CPT and HCPCS codes.** For example, the therapist would use a CPT code to indicate the services provided (e.g., gait training) and use a HCPCS codes for the provision (e.g., new crutches).

CPT codes for therapy services are either **timed or untimed**. **Timed** codes indicate a therapy service provided directly to the patient; one-on-one, typically in 15-minute increments. These services include therapy modalities, procedures, and tests and measurements.

Codes for **untimed** services are used to indicate the number of times a procedure was performed regardless of the time spent, often once per day (Centers for Medicare & Medicaid Services, 2020).

## Associations & Therapy Codes

### 1. Acupuncture

#### a. Associations:

- i. American Academy of Medical Acupuncture (AAMA): <https://www.medicalacupuncture.org/>
- ii. American Society of Acupuncturists: <https://www.asacu.org>

#### b. Coding:

- i. Acupuncturists code for evaluation and management (E/M) services (99211–99214 and 99201–99204) and the provision of treatments (97810–97814). Acupuncturists also code for a variety of treatments and therapeutic modalities, as noted in the tables below.

#### c. Coding instructions:

- i. Office visits/E/M services may be billed on the initial patient evaluation and follow-up evaluations thereafter. Office visits are typically billed every 30 days or every sixth visit.

- ii. Acupuncture services are coded in 15-minute increments; one code for the initial 15 minutes then a separate code for additional units of time (Holistic Billing, 2020).

### 2. Art Therapy

#### a. Association:

- i. American Art Therapy Association: <https://arttherapy.org>

#### b. Coding:

- i. Art therapy uses HCPCS Level II code; G0176 (American Academy of Professional Coders; HCPCS & HCPCS codes; G-Codes, 2020).

### 3. Massage Therapy

#### a. Associations:

- i. American Massage Therapy Association: <https://www.amtamassage.org>
- ii. National Association of Nurse Massage Therapist: <http://www.nanmt.org>

#### b. Coding:

- i. Massage therapy is billed using CPT codes: 97122, 97124, 97140, and frequently, 97010.

#### c. Coding instruction:

- i. Do not combine 97124 and 97140; use one or the other (Massage Practice Builder, 2020).

### 4. Music Therapy

#### a. Association:

- i. America Music Therapy Association: <https://www.musictherapy.org>

#### b. Coding:

- i. The American Medical Association (AMA) CPT Editorial Panel recommends the use of Health Behavior Assessment and Intervention codes for music therapy: CPT 96156–97533 (American Music Therapy Association; CPT Codes, 2020).
- ii. Music therapy may be covered using HCPCS code G0176 (American Music Therapy Association; Reimbursement Overview, 2012).

### 5. Occupational Therapy

#### a. Association:

- i. American Occupational Therapy Association: <https://www.aota.org>

#### b. Coding:

- i. Occupational Therapy (OT) uses both CPT and HCPCS codes. CPT codes are used for evaluations (97165–97167); re-evaluations (97168); testing and measurement (95851 & 95852; 97750–97755); treatment procedures and modalities (97010–97763 & 29065–29445) and orthotic and prosthetic management and or training (CPT 97760–97763) (American Occupational Therapy Association; Billing and Coding, 2020).
- ii. Durable Medical Equipment (DME) HCPCS ‘E’ codes and definitions can be found at <https://hcpcs.codes/e-codes/?page=3>.

- iii. Casting supplies HCPCS 'Q' codes (Q4003–Q4040) and definitions can be found at <https://hcpcs.codes/q-codes/?page=1>

## 6. Orthotics and Prosthetics

### a. Associations:

- i. The American Academy of Orthotists & Prosthetics: <https://www.oandp.org>
- ii. National Association for the Advancement of Orthotics and Prosthetics: <https://naaop.us>

### b. Coding:

- i. Orthotics and Prosthetic (O&P) services are coded with CPT and HCPCS codes. CPT codes are used for the management and training of orthoses and prostheses (97760–97763). HCPCS 'L' codes are specific to the procedures and devices provided; codes and definitions can be found at <https://hcpcs.codes/l-codes/?page=1>

## 7. Physical Therapy

### a. Association:

- i. American Physical Therapy Association: <https://www.apta.org>

### b. Coding:

- i. As with OT, Physical Therapists (PT) code services using CPT codes: evaluations (97161–97163); re-evaluations (97164); testing and measurement (95851 & 95852; 97750–97755); treatment procedures and modalities (97010–97763) as well as orthotic and prosthetic management and or training (CPT 97760–97763) (WebPT, 2019).
- ii. HCPCS 'E' codes are specific to Durable Medical Equipment (DME); codes and definitions can be found at <https://hcpcs.codes/e-codes/?page=3>.
- iii. HCPCS 'K' codes are also specific to DME, particularly wheelchairs and component parts.

## 8. Psychology

### a. Association:

- i. American Psychological Association: <https://www.apa.org>

### b. Coding:

- i. Psychological services use CPT codes: evaluation (90791); psychotherapy (90832–90853) (American Psychological Association; 2016).

### c. Coding tips:

- i. CPT 90785 is an add-on code to be used for interactive complexity. This code may be used with the psychiatric diagnostic evaluation (90791); psychotherapy (90832, 90834, 90837); and group psychotherapy (90853) (American Psychological Association; 2016).

## 9. Recreational Therapy

### a. Association:

- i. American Therapeutic Recreation Association: <https://www.atra-online.com>

### b. Coding:

- i. Recreational Therapy uses the HCPCS code, G0176.

## 10. Speech Therapy

### a. Association:

- i. American Speech-Language-Hearing Association: <https://www.asha.org>

### b. Coding:

- i. Speech Language Pathologists (SLP) use CPT and HCPCS codes. CPT codes include: swallowing function (92526–92617); speech, language, voice, and cognition (92507–97533; various codes listed below) as well as augmentative and alternative communication (92605–92609, 92618 and 92597).
- ii. HCPCS groups A, E, G, L, S, T, and V codes and definitions used for SLP services can be found at [https://www.asha.org/practice/reimbursement/coding/hcpcs\\_slp/](https://www.asha.org/practice/reimbursement/coding/hcpcs_slp/)

## RESOURCES

American Academy of Medical Acupuncture. (2020). Retrieved October 20, 2020, from <https://www.medicalacupuncture.org>

American Academy of Professional Coders (AAPC). (2020). What is CPT? Retrieved October 20, 2020, from <https://www.aapc.com/resources/medical-coding/cpt.aspx>

American Academy of Professional Coders (AAPC). What is HCPCS? Retrieved October 20, 2020, from <https://www.aapc.com/resources/medical-coding/hcpcs.aspx>

American Music Therapy Association. (2020). Retrieved October 20, 2020, from <https://www.musictherapy.org>

The American Academy of Orthotists & Prosthetics. (2020). Retrieved October 20, 2020, from <https://www.oandp.org>

American Art Therapy Association. (2020). Retrieved October 20, 2020, from <https://www.atcb.org/Misc/AATA>

American Massage Therapy Association. (2020). Retrieved October 20, 2020, from <https://www.amtamassage.org>

American Music Therapy Association CPT Codes. (2020). Retrieved October 20, 2020, from <https://www.musictherapy.org/assets/1/7/CPTcodeInfo2020.pdf>

## RESOURCES

- American Music Therapy Association Reimbursement Overview. (2012). Retrieved October 20, 2020, from [https://www.musictherapy.org/assets/1/7/AMTA\\_Reimbursement\\_Overview\\_2012.pdf](https://www.musictherapy.org/assets/1/7/AMTA_Reimbursement_Overview_2012.pdf)
- American Occupational Therapy Association. (2020). Pediatric Billing and Coding Tips and Tools. Retrieved October 20, 2020, from <https://www.aota.org/-/media/Corporate/Files/Advocacy/Federal/coding/Pediatric-Billing-Coding-Tips-Tools.pdf>
- American Occupational Therapy Association. (2020). Retrieved October 20, 2020, from <https://www.aota.org>
- American Physical Therapy Association. (2020). Retrieved October 20, 2020, from <https://www.apta.org>
- American Psychological Association (APA). (2016). Billing for Psychological Services. Retrieved October 20, 2020, from <https://www.apaservices.org/practice/medicare/medicare-payment/billing>
- American Psychological Association (APA). (2020). Retrieved October 20, 2020, from <https://www.apa.org>
- American Society of Acupuncturists. (2016). Retrieved October 20, 2020, from <https://www.asacu.org>
- American Speech-Language-Hearing Association. (2020). Retrieved October 20, 2020, from <https://www.asha.org>
- American Therapeutic Recreation Association. (n.d.). Retrieved October 20, 2020, from <https://www.atra-online.com>
- Centers for Medicare & Medicaid Services. (n.d.). Internet Only Manual, Publication 100-04, Claims Processing Manual, Chapter 5, Section 20.2. Retrieved October 20, 2020, from <https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/Downloads/clm104c05.pdf>
- HCPCS.codes. (2020). HCPCS E-Codes Durable Medical Equipment (DME). Retrieved October 20, 2020, from <https://hcpcs.codes/e-codes/?page=3>
- HCPCS.codes. (2020). HCPCS G-Codes Procedures/Professional Services (Temporary Codes). Retrieved October 20, 2020, from <https://hcpcs.codes/g-codes/?page=2>
- HCPCS.codes. (2020). HCPCS Q-Codes Miscellaneous Services (Temporary Codes). Retrieved October 20, 2020, from <https://hcpcs.codes/q-codes/?page=1>
- HCPCS Code G0176. (2020). Retrieved October 20, 2020, from <https://www.aapc.com/codes/hcpcs-codes/G0176>
- HCPCS.codes. (2020). HCPCS L-Codes Orthotic and Prosthetic Procedures, Devices. Retrieved October 20, 2020, from <https://hcpcs.codes/l-codes/?page=1>
- Health Care Common Procedure Coding System (HCPCS) Level II Codes: AAC and Other Speech-Language Pathology Related Devices. (2020). Retrieved October 20, 2020, from [https://www.asha.org/practice/reimbursement/coding/hcpcs\\_slp/](https://www.asha.org/practice/reimbursement/coding/hcpcs_slp/)
- Holistic Billing. (2020). Acupuncture Insurance Billing Codes. Retrieved October 20, 2020, from <https://holisticbillingservices.com/acupuncture-insurance-billing-codes/>
- Maniha, A. (2008). Research to Another Level: Medical Coding and the Life Care Planning Process: Part I. *Journal of Life Care Planning*, 7(2), 61-72.
- Massage Practice Builder. (2020). CPT codes for massage therapists (2019). Retrieved October 20, 2020, from <https://www.massagethepracticebuilder.com/massage-insurance-billing/cpt-codes-for-massage-therapists/>
- National Association for the Advancement of Orthotics and Prosthetics. (2020). Retrieved October 20, 2020, from <https://naaop.us>
- National Association of Nurse Massage Therapist. (2011). Retrieved October 20, 2020, from <http://www.nanmt.org>
- PMIC Digital Book Series: Medical Fees 2020. (2019). Los Angeles, CA: Practice Management Information Corporation.
- WebPT. (2019). Physical Therapists' Guide to Billing. Retrieved October 20, 2020.

## CPT & HCPCS CODES AND DEFINITIONS

These definitions were obtained from the 2020 AMA CPT code book

| CPT Code         | DEFINITION; BRIEF  | THERAPY     | CATEGORY              |
|------------------|--|-------------|-----------------------|
| UNTIMED SERVICES |  |             |                       |
| 20550            | Injection(s); single tendon sheath or ligament, aponeurosis (plantar "fascia")   | Acupuncture | Therapeutic procedure |
| 20552            | Injection(s); single or multiple trigger point(s), 1 or 2 muscle(s)  | Acupuncture | Therapeutic procedure |
| 29065            | Application; shoulder to hand (long arm)   | OT          | Casting               |
| 29075            | Application; elbow to finger (short arm)   | OT          | Casting               |
| 29085            | Application; hand and lower forearm  | OT          | Casting               |
| 29086            | Application; finger (contracture)  | OT          | Casting               |
| 29345            | Application; long leg (thighs to toes)   | OT          | Casting               |
| 29355            | Application; long leg cast (thigh to toes); walker or ambulatory   | OT          | Casting               |
| 29365            | Application; cylinder cast (thigh to ankle)  | OT          | Casting               |
| 29405            | Application; short leg cast (below knee to toes)   | OT          | Casting               |
| 29425            | Application; short leg cast (below knee to toes); walking or ambulatory  | OT          | Casting               |
| 29445            | Application; rigid total contact leg   | OT          | Casting               |
| 90791            | Psychiatric diagnostic evaluation  | Psychology  | Evaluation            |
| 90845            | Psychoanalysis   | Psychology  | Psychotherapy         |
| 90901            | Biofeedback training   | PT/OT       | Modality              |
| 92507            | Treatment of speech, language, voice, communication and/or auditory processing disorder  | SLP         | Therapeutic Procedure |
| 92521            | Evaluation of speech fluency   | SLP         | Evaluation            |
| 92522            | Evaluation of speech sound production (articulation, phonological process, apraxia, dysarthria)                                    | SLP         | Evaluation            |
| 92523            | Evaluation of speech sound production with evaluation of language comprehension and expression (receptive and expressive language) | SLP         | Evaluation            |
| 92524            | Behavioral and qualitative analysis of voice and resonance   | SLP         | Evaluation            |
| 92526            | Treatment of swallowing dysfunction and/or oral function for feeding   | SLP         | Therapeutic Procedure |
| 92606            | Therapeutic service(s) for the use of non-speech-generating device, including programming and modification                         | SLP         | Therapeutic Procedure |
| 92609            | Therapeutic services for the use of speech-generating device, including programming and modification                               | SLP         | Therapeutic Procedure |

## CPT & HCPCS CODES AND DEFINITIONS

These definitions were obtained from the 2020 AMA CPT code book

| CPT Code              | DEFINITION; BRIEF  | THERAPY                             | CATEGORY             |
|-----------------------|--|-------------------------------------|----------------------|
| 92610                 | Evaluation of oral and pharyngeal swallowing function  | SLP                                 | Evaluation           |
| 92611                 | Motion fluoroscopic evaluation of swallowing function  | SLP                                 | Modality             |
| 95851                 | Range of motion measurements and report; each extremity (excluding hand) or each trunk section (spine)   | PT/OT                               | Tests & Measurements |
| 95852                 | Range of motion measurements and report; hand, with or without comparison to normal side   | PT/OT                               | Tests & Measurements |
| 96110                 | Developmental screening (developmental milestone survey, speech and language delay screen) with scoring and documentation, per standardized instrument | SLP                                 | Evaluation           |
| 96156                 | Health behavior assessment, or re-assessment   | Music Therapy                       | Health Behavior      |
| 97010                 | Hot/Cold Packs   | Acupuncture, Massage Therapy, PT/OT | Modality             |
| 97012                 | Traction, mechanical   | PT/OT                               | Modality             |
| 97014                 | Electrical Stimulation (Unattended)  | PT/OT                               | Modality             |
| 97018                 | Paraffin bath  | PT/OT                               | Modality             |
| 97022                 | Whirlpool  | PT/OT                               | Modality             |
| 97026                 | Application; infrared  | Acupuncture, PT/OT                  | Modality             |
| 97028                 | Application; ultraviolet   | PT/OT                               | Modality             |
| 97161                 | Physical Therapy evaluation - low complexity   | PT                                  | Evaluation           |
| 97162                 | Physical Therapy evaluation - moderate complexity  | PT                                  | Evaluation           |
| 97163                 | Physical Therapy evaluation - high complexity  | PT                                  | Evaluation           |
| 97164                 | Physical therapy re-evaluation   | PT                                  | Evaluation           |
| 97165                 | Occupational Therapy evaluation - low complexity;  | OT                                  | Evaluation           |
| 97166                 | Occupational Therapy evaluation - moderate complexity  | OT                                  | Evaluation           |
| 97167                 | Occupational Therapy evaluation - high complexity  | OT                                  | Evaluation           |
| 97168                 | Occupational Therapy re-evaluation   | OT                                  | Evaluation           |
| <b>TIMED SERVICES</b> |  |                                     |                      |
| 90832                 | 30 minutes with patient and/or family member   | Psychology                          | Psychotherapy        |
| 90834                 | 45 minutes with patient and/or family member   | Psychology                          | Psychotherapy        |
| 90837                 | 60 minutes with patient and/or family member   | Psychology                          | Psychotherapy        |

## CPT & HCPCS CODES AND DEFINITIONS

These definitions were obtained from the 2020 AMA CPT code book

| CPT Code | DEFINITION; BRIEF   | THERAPY                           | CATEGORY              |
|----------|---|-----------------------------------|-----------------------|
| 90846    | Family without the patient; 50 minutes  | Psychology                        | Psychotherapy         |
| 90847    | Family with the patient; 50 minutes   | Psychology                        | Psychotherapy         |
| 92605    | Evaluation for prescription of non-speech-generating augmentative and alternative communication device; first hour  | SLP                               | Evaluation            |
| 92607    | Evaluation for prescription for speech generating augmentative and alternative communication device; first hour   | SLP                               | Evaluation            |
| 92608    | Add-on code to 92607; each additional 30 minutes  | SLP                               | Evaluation            |
| 92618    | Evaluation for prescription of non-speech-generating augmentative and alternative communication device, face-to-face with the patient; each additional 30 minutes   | SLP                               | Evaluation            |
| 96105    | Assessment of aphasia and cognitive performance testing; per hour   | SLP                               | Evaluation            |
| 96112    | Developmental test administration (including assessment of fine and/or gross motor, language, cognitive level, social, memory, and/or executive functions by standardized developmental instruments) with interpretation and report; first hour | OT                                | Evaluation            |
| 96113    | Add-on to 96112: Each additional 30 minutes   | OT                                | Evaluation            |
| 96125    | Standardized cognitive performance testing per hour both face-to-face time and interpreting test results and preparing the report   | OT, SLP                           | Evaluation            |
| 96158    | Health Behavior Intervention, Individual; initial 30 minutes  | Music Therapy                     | Health Behavior       |
| 96159    | Add-on code to 96158; each additional 15 minutes  | Music Therapy                     | Health Behavior       |
| 96167    | Health Behavior Intervention, Family with patient; initial 30 minutes   | Music Therapy                     | Health Behavior       |
| 96168    | Add-on code to 96167; each additional 15 minutes  | Music Therapy                     | Health Behavior       |
| 96170    | Health Behavior Intervention, Family without patient; initial 30 minutes  | Music Therapy                     | Health Behavior       |
| 96171    | Add-on code to 96170; each additional 15 minutes  | Music Therapy                     | Health Behavior       |
| 97032    | Application; electrical stimulation (manual), each 15 minutes   | PT/OT                             | Modality              |
| 97033    | Iontophoresis, each 15 minutes  | PT/OT                             | Modality              |
| 97035    | Ultrasound, each 15 minutes   | PT/OT                             | Modality              |
| 97110    | Therapeutic exercises to develop strength and endurance, range of motion and flexibility; 15 minutes  | Acupuncture, Music Therapy, PT/OT | Therapeutic Procedure |
| 97112    | Neuromuscular re-education of movement, balance, coordination kinesthetic sense, posture, and/or proprioception for sitting and/or standing activities; 15 minutes  | Acupuncture, Music Therapy, PT/OT | Therapeutic Procedure |

## CPT & HCPCS CODES AND DEFINITIONS

These definitions were obtained from the 2020 AMA CPT code book

| <b>CPT Code</b> | <b>DEFINITION; BRIEF</b>  | <b>THERAPY</b>                            | <b>CATEGORY</b>                         |
|-----------------|---|---|---|
| 97113           | Aquatic therapy with therapeutic exercises; each 15 minutes   | PT/OT                                     | Therapeutic procedures                  |
| 97116           | Gait Training (includes stair climbing); 15 minutes   | Music Therapy,<br>PT/OT                   | Therapeutic Procedure                   |
| 97124           | Therapeutic Procedure including effleurage, petrissage and/or tapotement, compression, percussion; 15 minutes   | Acupuncture,<br>Massage Therapy,<br>PT/OT | Therapeutic Procedure                   |
| 97129           | Focus on cognitive function (attention, memory, reasoning, executive function, problem solving, and/or pragmatic functioning) and compensatory strategies to manage the performance of an activity (managing time or schedules, initiating, organizing, and sequencing tasks); initial 15 minutes | Music Therapy,<br>OT, SLP                 | Therapeutic Procedure                   |
| 97130           | Add-on code to 97129; each additional 15 minutes  | Music Therapy,<br>OT, SLP                 | Therapeutic Procedures                  |
| 97140           | Mobilization, manipulation, manual lymphatic drainage, manual traction; 15 minutes  | Massage Therapy,<br>PT/OT                 | Therapeutic Procedure                   |
| 97530           | Therapeutic activities, direct patient contact (use of dynamic activities to improve functional performance); each 15 minutes   | Music Therapy,<br>PT/OT                   | Therapeutic Procedure                   |
| 97533           | Enhance sensory processing and promote adaptive responses to environmental demands, direct patient contact; each 15 minutes   | Music Therapy,<br>PT/OT                   | Therapeutic Procedure                   |
| 97535           | Self-care/home management training, each 15 minutes   | PT/OT                                     | Therapeutic Procedure                   |
| 97542           | Wheelchair management (assessment, fitting, training), each 15 minutes  | PT/OT                                     | Evaluation and<br>Therapeutic Procedure |
| 97750           | Physical performance test or measurement (musculoskeletal, functional capacity) with written report; each 15 minutes  | PT/OT                                     | Evaluation                              |
| 97755           | Assistive technology assessment (to restore, augment or compensate for existing function, optimize functional tasks and/or maximize environmental accessibility) with written report; each 15 minutes   | SLP                                       | Evaluation                              |
| 97760           | Orthotic(s) management and training (assessment and fitting), upper extremity(ies), lower extremity(ies) and/or trunk, initial orthotic(s) encounter; each 15 minutes   | PT/OT/Orthotics                           | Evaluation and<br>Therapeutic Procedure |
| 97761           | Prosthetic(s) training, upper and/or lower extremity(ies); initial encounter; each 15 minutes   | Prosthetics                               | Evaluation and<br>Therapeutic Procedure |
| 97763           | Orthotic(s)/prosthetic(s) management and/or training, upper extremity(ies), lower extremity(ies), and/or trunk, subsequent orthotic(s)/prosthetic(s) encounter; each 15 minutes   | PT/OT/Orthotics<br>& Prosthetics          | Therapeutic Procedure                   |
| 97810           | Acupuncture without electrical stimulation, initial 15 minutes  | Acupuncture                               | Therapeutic Procedure                   |
| 97811           | Add-on code to 97810; each additional 15 minutes  | Acupuncture                               | Therapeutic Procedure                   |

## CPT & HCPCS CODES AND DEFINITIONS

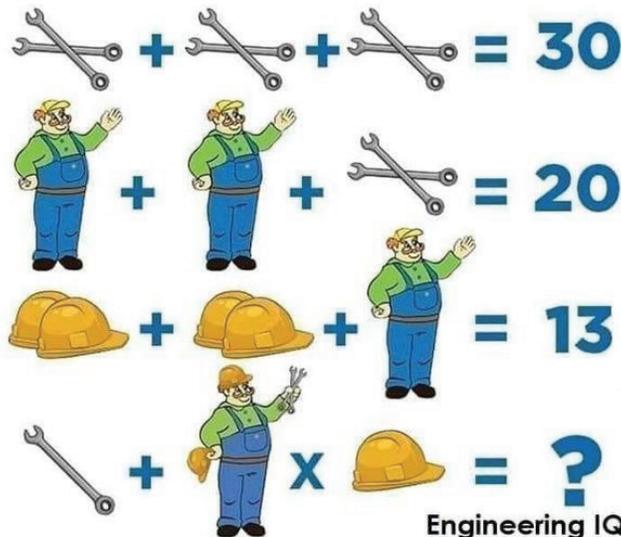
These definitions were obtained from the 2020 AMA CPT code book

| CPT Code | DEFINITION; BRIEF  | THERAPY     | CATEGORY                |
|----------|--|-------------|-------------------------|
| 97813    | Acupuncture with electrical stimulation, initial 15 minutes  | Acupuncture | Therapeutic Procedure   |
| 97814    | Add-on code to 97813; each additional 15 minutes   | Acupuncture | Therapeutic Procedure   |
| 99201    | Office or outpatient evaluation and management (E/M) of a new patient: problem focused history and examination with straightforward medical decision making; 10 minutes                      | Acupuncture | Evaluation & Management |
| 99204    | Office or other outpatient visit for the E/M of a new patient with a comprehensive history and examination with moderate complexity medical decision making; 45 minutes                      | Acupuncture | Evaluation & Management |
| 99212    | Office or other outpatient visit for the E/M of an established patient with problem focused history and examination with straightforward medical decision making; 10 minutes                 | Acupuncture | Evaluation & Management |
| 99213    | Office or other outpatient visit for E/M of an established patient, which with an expanded problem focused history and examination and medical decision making of low complexity; 15 minutes | Acupuncture | Evaluation & Management |
| 99214    | Office or other outpatient visit for E/M of an established patient with a detailed history and examination. Medical decision making of moderate complexity; 25 minutes                       | Acupuncture | Evaluation & Management |

### Editor’s Puzzle

And now for some fun: We all use different skills to do our assessments and different ways to calculate and present our data in tables. Here’s a little puzzle to test your assessment and planning skills. First three people to send me the correct answer with their mailing addresses get a prize! Answer in the next issue! Send to [whowland1@mac.com](mailto:whowland1@mac.com)

Stay safe, get your vaccine as soon as you can, volunteer at a vaccination site, spread the word, not the virus. People trust us to do the right thing.





# RECREATIONAL THERAPY

## FUN OR FUNCTIONAL?

Gerrie M. Springston, B.S.N., R.N., L.N.C.C.,  
C.C.M., C.N.L.C.P.

**Keywords:** Therapeutic recreation, Recreation Therapy, Adaptive sports, Snoezelen (controlled multisensory environment), Licensed therapeutic recreation specialist, Therapeutic Recreational Specialist (TRS), recreation for disabled, assessment for recreation

### NURSING DIAGNOSES TO CONSIDER NANDA-I 2018-2020

- Decreased diversion activity engagement (Domain 1, Health Promotion; Class 1, Health Awareness)
- Impaired social interaction (Domain 7, Role Relationship; Class 3, Role Performance)
- Social isolation (Domain 12, Comfort; Class 3, Social Comfort)
- Risk for injury (Domain 11, Safety/Protection; Class 2, Physical Injury)
- Ineffective community coping (Domain 9, Coping/Stress Tolerance; Class 2, Coping Responses)
- Readiness for enhanced community coping (Domain 9, Coping/Stress Tolerance; Class 2, Coping Responses)
- Impaired physical mobility (Domain 4, Activity/Rest; Class 2, Activity/Exercise)
- Chronic pain (Domain 12, Comfort; Class 1, Physical Comfort)
- Risk for chronic low self-esteem (Domain 6, Self-perception; Class 2, Self-esteem)

### Abstract

Is recreational therapy fun and games? Yes ... and no. It looks like fun. People seem to be having a good time. However, there is a functional purpose behind the activities, goals to

achieve like with any other therapy. Making therapy fun could help compliance with participation. When people hear “adapted” recreation, they generally think of wheelchair sports and activities. Many disabled people have other needs for adaptations related to low vision/blindness, deafness, developmental delays, and cognitive disorders, to name a few. Even if two people have the same disability, their individual needs can be quite different and should be considered for the Life Care Plan. However, it is important to realize the difference between adaptive and therapeutic recreation.

### Introduction

“Recreational therapy, also known as therapeutic recreation, is a systematic process that utilizes recreation and other activity-based interventions to address the assessed needs of individuals with illnesses and/or disabling conditions, as a means to psychological and physical health, recovery and well-being. ‘Recreational therapy’ means a treatment service designed to restore, remediate and rehabilitate a person’s level of functioning and independence in life activities, to promote health and wellness, as well as reduce or eliminate the activity limitations and restrictions to participation in life situations caused by an illness or disabling condition. People of all ages can benefit from recreational therapy.” (American Therapeutic Recreation Association, n.d.)

### Settings and Collaboration

Do not confuse recreational therapists with activities directors; therapeutic recreation is not just an activity. Recreational therapy, physical therapy and occupational therapy collaborate with the care team, all use purposeful interventions to improve quality of life and productivity, and are individualized to each person’s past, present, and future interests and lifestyle. Therapists assess social, cognitive, physical, and leisure needs considering the client’s interests, and/or community. The goals include independence, productivity, well-being, and quality of life. The recreational activity is the modality used

to accomplish the goals. Examples of recreational modalities include but are not limited to:

- Fishing
- Videogaming
- Arts and crafts
- Music
- Sports
- Fitness

Recreational therapy modalities (interventions) in a behavioral health setting include, but are not limited to:

- Aquatic therapy (e.g., therapeutic exercise in a pool)
- Adventure-based counseling (e.g., rock climbing, backpacking, community service)
- Expressive therapies (e.g., arts and crafts, dance, drama, listening or learning to play music)
- Therapeutic play (e.g., role-playing, puppets)
- Horticulture therapy (gardening)
- Animal-facilitated therapy (e.g., therapy dogs, equine therapy, spending time with animals)
- Community reintegration (community recreational settings, e.g., parks, bowling alleys, museums, theatres, sports stadiums, community pools, community events)
- Reminiscence (e.g., recreational group discussion to share memories)
- Stress management and relaxation therapy (e.g., tai chi, yoga, music, art, cooking)
- Adaptive sports (e.g., archery, basketball, cycling, rowing, swimming, tennis, golf, track & field, volleyball, skiing, sled hockey)
- Anger management (e.g., activities and games that teach self-regulation and coping skills)
- Cognitive stimulation (e.g., nature walks, jigsaw puzzles, concentration card games);
- Communication (e.g., role play, games that lead to increased social interaction)
- Pain management (e.g., tai chi, yoga)
- Physical functioning (e.g., exercise groups, workout programs, explore new ways to be active)
- Sensory stimulation activities (e.g., sensory play, music, aroma therapy; games or activities using sensory items)



- Snoezelen (e.g., interactive activities in a controlled multisensory environment). (Whaley and Carr, n.d.)

Recreational therapy is provided in a variety of settings with a large group, small group, or one to one:

- Acute care facility
- Inpatient rehabilitation facility
- Inpatient psychiatric facility
- Outpatient rehabilitation facility
- Skilled nursing facility
- Community center
- Assisted living
- Group home
- Adult day program
- Park and recreation department
- Adapted sports program
- School system
- Private practice

## Credentialing

Most states do not require recreational therapists to be licensed. This poses a problem for funding. Health insurance companies and other third party payors typically do not reimburse for recreational therapy unless it is bundled with other therapies as part of a rehabilitation program. Thus, most recreational therapists work in clinics or large facilities versus private practice. States with licensure requirement (license verification per state licensure boards):

- Utah;
- New Hampshire;
- North Carolina;
- Oklahoma;
- District of Columbia - Washington DC. (Therapeutic Recreation Directory, (n.d.), *Recreation Therapy Licensure and Title Protection*.)

States currently seeking licensure:

- California;
- New York;
- Pennsylvania;
- Georgia. (Therapeutic Recreation Directory, (n.d.), *Recreation Therapy Licensure and Title Protection.*)

Some states that do not currently require licensure have a title protection act, which restricts the use of the title of recreation therapist to only those who have met certain educational requirements. Recreational therapists are required to have at least a bachelor's degree before they can practice.

States with Title Protection Acts:

- California;
- Washington state. (Therapeutic Recreation Directory, (n.d.), *Recreation Therapy Licensure and Title Protection.*)

Keep in mind that licensure designation is determined by the state of licensure, e.g., Licensed Recreational Therapist (LRT) in North Carolina and Recreational Therapist (RT) in New Hampshire. A licensed therapeutic recreation specialist may use the letters TRS/L or CTRS/L in the State of Oklahoma. In Utah, there are Therapeutic Recreational Specialist (TRS) and Master Therapeutic Recreational Specialist (MTRS) designations.

Licensure often requires certification as well. The body that certifies recreation therapists is the National Council for Therapeutic Recreation Certification (NCTRC). "NCTRC certification signifies that a recreational therapist has the knowledge, skill, and ability that is well recognized as being essential for the practice of recreational therapy." The Certified Therapeutic Recreation Specialist (CTRS) credential is granted after the individual meets established standards that include education, experience, testing and continuing professional development. A bachelor's degree or higher is required. (National Council for Therapeutic Recreation Certification, 2020)

The American Therapeutic Recreation Association (ATRA) is a national organization which represents recreational therapists at the local, state, and national levels. The life care planner can find information regarding the ATRA standards of practice and code of ethics for recreational therapy on the website [www.atra-online.com](http://www.atra-online.com). Links to regional, state, and international associations can be found at the Therapeutic Recreation Association Directory website, <https://www.recreationtherapy.com/trorg.htm>.

The Life Care Planner can locate a recreational therapist in a specific area with online licensee verification for states

with licensure, NCTRC, ATRA, a state recreation therapy organization, or a regional organization.

## Evidence-based practice

Studies conducted by Spinal Cord Injury (SCI) Model Systems research centers have shown that therapeutic recreation during inpatient rehabilitation is strongly associated with patients living healthier, more integrated and more active lives after returning home from rehabilitation. (Cahow et al., 2012) Patients enrolled in the "SCIRehab" study received a mean total of 17.5 hours of therapeutic recreation, with significant differences seen in the amount of time spent in each activity among and within injury group categories. "The majority (76%) of patients participated in at least one structured therapeutic outing." The large variation in time spent in therapeutic recreational activities was not well explained by patient and injury characteristics. (Gassaway, Dijkers, et al., 2011)

Later studies by Gassaway, Sweatman, et al. in 2019 showed that more time spent in therapeutic recreation during inpatient rehabilitation after SCI "is associated strongly with improved community participation, health and function, and recreational participation at one and five years post injury."

## More information

Recreational therapy information can also be found in journals such as:

- Therapeutic Recreation Journal (TRJ), editor Dr. Marcia Jean Carter;
- Journal Of Outdoor Recreation, Education, And Leadership (JOREL), editor Bruce Martin;
- The American Journal of Recreation Therapy editors Mr. Richard A. DeVito, Jr., Weston Medical Publishing, LLC, and Dr. Allison Wilder, University of New Hampshire.

## Billing Codes

Recreational therapists used the same billing codes as physical therapists and occupational therapists. Reimbursement, when available, typically requires a prescription and anticipated improvement. Requirement for prescription or recommendation by a medical provider (physician, nurse practitioner, chiropractor, etc.) for recreational therapy is a financial control by payor sources, not a nod to expertise on the part of the prescriber. Note that the actual plan of care is determined by the therapist after assessment, and the therapist assesses its outcomes. Codes are included here for reference in financial planning, e.g., for a life care plan.

| Code   | Intervention and Definition   |
|--------|---|
| 997165 | Occupational therapy evaluation, low complexity; typically 30 minutes.  |
| 97166  | Occupational therapy evaluation, moderate complexity; typically 45 minutes.   |
| 97167  | Occupational therapy evaluation, high complexity; typically 60 minutes.   |
| 97168  | Reevaluation of occupational therapy established plan of care; a revised plan of care; typically 30 minutes.  |
| 97110  | Therapeutic procedure one or more areas, each 15 minutes; therapeutic exercises to develop strength and endurance, range of motion and flexibility.   |
| 97112  | Neuromuscular re-education of movement, balance, coordination, kinesthetic sense, posture, and proprioception for sitting and/or standing activities.   |
| 97113  | Aquatic therapy with therapeutic exercise.  |
| 97150  | Therapeutic procedure/s group (2 or more individuals).  |
| 97530  | Therapeutic activities direct (one-on-one) patient contact (use of dynamic activities to improve functional performance), each 15 minutes.  |
| 97533  | Sensory integrated techniques to enhance sensory processing and promote responses to environmental demands, direct (one-on-one) patient contact, each 15 minutes.   |
| 97537  | Community/work reintegration (e.g., shopping, transportation, money management, avocational activities and/or work environment/modification analysis, work task analysis, use of assistive technology device/ adaptive equipment), direct one-on-one contact, each 15 minutes.  |
| 97542  | Wheelchair management (e.g., assessment, fitting, training), each 15 minutes.   |
| 97129  | Therapeutic interventions that focus on cognitive function (e.g., attention, memory, reasoning, executive function, problem solving, and/or pragmatic functioning) and compensatory strategies to manage the performance of an activity (e.g., managing time or schedules, initiating, organizing and sequencing tasks), direct (one-on-one) patient contact; initial 15 minutes. |
| 97130  | Therapeutic interventions that focus on cognitive function, each additional 15 minutes.   |
| 97535  | Self-care/home management training (e.g., activities of daily living (ADL) and compensatory training, meal preparation, safety procedures, and instructions in use of assistive technology devices/adaptive equipment) direct one-on-one contact, each 15 minutes. (Davis, 2020)  |

I interviewed several recreational therapists and reviewed websites from their facilities for this article. *Charges associated with recreational therapy and community programs are noted below for information purposes only; no endorsement of a given program should be inferred Call the facility or access the website to obtain current charges.*

**Craig Hospital, 3425 S Clarkson St, Englewood, CO 80113, 303-789-8000**

<https://craighospital.org>

Tom Carr, Director of Therapeutic Recreation, 09/29/20

The Therapeutic Recreation Program at Craig Hospital provides services to mostly people with spinal cord injury, brain injury or nervous system injury. Craig Hospital is a Spinal Cord Injury Model System Center. They do not use medical codes for individual therapy, especially inpatient, because their therapies are typically bundled in an interdisciplinary

program. In general, private pay charges for outpatient therapy in the Denver, Colorado area are approximately \$60.00-\$100.00/hour.

The number of hours needed for recreational therapy varies with each individual. Therapy is typically more intense initially. At Craig, the number of hours of inpatient recreational therapy is bundled with other therapies for an overall rehabilitation program. After discharge from an inpatient rehabilitation program, the following recreational therapy schedule would be reasonable for most people:

- 8-10 visits during the first 3-6 months;
- One visit every 6 months for a year;
- One visit a year for 3-5 years;
- One visit every 10 years and as needed to life expectancy.

The recreational therapist working with a person on an outpatient basis could include community level activities near the person's residence. The person applies the skills learned as an inpatient to the real world, with the recreational therapist present to assist with the transition and determine any additional adaptation or equipment needs.

If the person lives near Craig, indoor and outdoor recreational therapy opportunities are available. The Therapeutic Recreation Adventure Program at Craig offers unique opportunities for travel, sports and outdoor recreation, such as flying, gliding, camping, scuba diving and sailing. Recreational therapists are involved in the Craig programs. The programs are not reimbursed by insurance. They rely on support from charitable support donors for general operating expenses and equipment.

A variety of therapeutic recreation resources and therapeutic recreational opportunities across the country and even around the world are listed on the Craig Hospital website, <https://craighospital.org/programs/therapeutic-recreation/t-rec-resource-links>.

The Craig Hospital website also has information regarding therapeutic recreation and adaptive equipment resources. Under each category of equipment noted below, there is a list of manufacturers and information regarding specific models, often including pricing.

- Handcycles & recumbent bikes
- Racing wheelchairs
- Sport wheelchairs
- All-terrain wheelchairs
- Water sports
- Snow sports
- Gaming resources (Craig Hospital, 2020)



**Ability360 Sports & Fitness Center**, 5031 E. Washington St., Phoenix, AZ 85034, 602-386-4566  
<https://ability360.org>

Gus LaZear, Vice President and General Manager, 09/25/20

The Ability360 Center and the Ability360 Sports & Fitness Center include an accessible sports, fitness and aquatics center for people with all different types of disabilities and all ages. It also hosts local, national and international adaptive sporting events. It is one of only a handful of similar centers in the U.S. and the only center of its kind in the Western

United States. There are several Certified Therapeutic Recreation Specialists (CTRS) on staff. The pricing noted in their brochure is the same for all payor sources, e.g., private pay, Workers Compensation, Veterans Administration.

### Membership Fees:

**Daily Drop In:** Military Daily Drop In: \$3; Daily Drop In: \$5  
**Punch Pass (12 visits), \$50**

**Monthly (Set up as autopay)**

- Youth (Up to 18): \$25
- Adult (19+): \$35
- Senior (62+): \$30
- Adult +1: \$50 (2 people in the same household)
- Senior +1: \$45 (2 people in the same household)
- Family (starts at): \$60 (Up to 6 people in the same household)

### Annual

- Military Annual: \$25
- Youth (Up to 18): \$255
- Adult (age 19+): \$357
- Adult +1: \$510 (2 people in the same household)
- Senior (62+): \$306
- Senior +1: \$459 (2 people in the same household)
- Family: \$612 (Up to 6 people in the same household)

### Recreation Therapy:

#### Member Pricing:

- Assessment & plan: Free
- A Leisure-Recreation Assessment will be completed by a CTRS. The CTRS will create or assist in creating an individualized plan for each Recreation Therapy session to reach goals based on the individual's interest and abilities.
- \$20.00 for 30-minute session
- \$80.00 for 5 sessions of 30 minutes each
- \$150.00 per ten 30-minute sessions

#### Non-Member Pricing:

- \$25.00 for 30-minute sessions
- \$100.00 for 5 sessions of 30 minutes each
- \$175.00 per ten 30-minute sessions

This program is for individuals looking for guidance on completing goals related to leisure interests. (Ability360, 2020)

### Rock Climbing Sessions:

- Members: \$10/30-minute session
- Non-members: \$15/30-minute session

Sessions are held in the indoor climbing gym and will be led by a trained Ability360 staff member.

### Adapted Rock Climbing Sessions:

- Members: Free
- Non-members: \$5 daily drop in fee

Climbing the indoor rock wall with the Mechanical Advantage Climbing gear. "This equipment is predominantly for people with paralysis, cerebral palsy, spina bifida, or others with limited use of their lower extremities." (Beaubien, 2019)

**Shepherd Center, 2020 Peachtree Road NW, Atlanta, GA 30309, 404-352-2020**

<https://www.shepherd.org>

Kelly Edens, Recreation Therapy Manager, 09/25/20

Shepherd Center specializes in brain and spinal cord injury. Shepherd Center is the largest of the country's 14 Model Systems of Care for SCI. Recreational therapy is part of an interdisciplinary team, which helps to maximize benefits. Providing adaptations could be included in a therapeutic recreational plan, but it is only part of the plan. The person needs to adapt to a new lifestyle even if no adaptive equipment is necessary. Recreational therapists help the patients transition from inpatient to outpatient therapy and then to the community.

Performing an activity in the rehabilitation center is different than performing the same activity out in the community. The recreational therapist teaches the individual how to take what was learned in physical therapy, occupational therapy, speech therapy, psychotherapy and/or nursing, and put it together for use in the community. During an outing, for example, the recreational therapist can help the person build physical tolerance, address barriers, problem solve to build confidence, and adjust to public reaction to their disability. The final goal is for the person to be an independent, functional member of their community and no longer need the assistance of the recreational therapist.

The Fred, Shaler, and Andrew Alias Sports Teams program at Shepherd Center sponsors 11 sports teams that enable individuals with physical disabilities in the Atlanta area to participate in sports on a recreational or competitive level. Athletes compete in local and regional competitions, as well as at the national and international levels. (Shepherd Center, 2020)

**Shirley Ryan AbilityLab, (formerly the Rehabilitation Institute of Chicago)**

355 E. Erie St., Chicago, IL 60611, 312-238-1000

<https://www.sralab.org>

Therapeutic Recreation at the Shirley Ryan AbilityLab includes:

- Animal assisted therapy program weekly;
  - Certified therapy dogs and volunteers work in groups with patients to reach rehabilitation goals supervised by recreational therapists;
  - Canine Therapy Corps offers comprehensive dog training classes. Canine Therapy Corps certifies and runs programs for therapy dogs exclusively – not service animals or emotional support animals (ESAs);
  - Each dog is required to have taken a 6-week group obedience class or four private training sessions with a professional before taking the certification test;
- Using accessible Chicago Transit Authority trains and buses;
  - The Regional Transportation Authority (RTA) Travel Training Program offers specialized training to any person with a disability or older adult on how to navigate using public transportation in the Chicagoland area. Specifically, the program shows individuals how to use the CTA, Metra, and Pace buses and trains;
  - Training is FREE except for the cost of transit fares during training sessions;
- Exploring accessible activities such as movies, cultural events and outdoor recreation;
- Adaptive Sports & Fitness Program;
  - Adaptive Sports and Fitness Center, 541 N. Fairbanks Mezzanine, Chicago, IL 60611;
  - There is a nominal one-time initiation fee of \$35 to join the Adaptive Sports and Fitness Center and a yearly maintenance fee of \$95. (Note: At the time a life care plan is developed, the nurse life care planner should access the website noted above for the most current fees.);
  - Adaptive Sports Program: Many of the sports programs are offered free of charge to participants, although, in some cases there may be a nominal fee associated with participating in an event or sport. Athletes of all skill levels, from those interested in learning a new recreational sport to athletes wishing to hone their craft for elite-level competition;
  - Adaptive Fitness Center: Well-equipped fitness facility designed for people of all abilities and offers a broad selection of fitness services and classes to help people remain active and achieve their fitness goals. (Shirley Ryan AbilityLab, 2020, Therapeutic Recreation)

Shirley Ryan AbilityLab's Youth Adaptive Sports (formerly Caring for Kids) program, led by a Certified Therapeutic Recreation Specialist (CTRS), provides adaptive sport and recreation programs for children with physical impairments or conditions. Their summer, year-round and weekend programs include dance, judo, yoga, and karate.

- The weekend programs (Dance, Judo, Yoga, and Karate) meet at the Menomonee Club located at 1535 N Dayton St, Chicago, IL 60642;
  - Each class costs \$30, which is paid once for the year. This fee enables a participant to enroll in any session offered in a single calendar year;
  - Each program follows a 5-week session format; 5 week sessions with a 2-3 week break in between each session;
- The summer program/summer camp offers outdoor and indoor adaptive sports and hands-on recreational activities;

- Cost: \$75 per two-week session;
- Activities occur at locations throughout Chicago and the surrounding suburbs;
- One two-week session for ages 7-12 and another session for ages 13-17.
- Monday-Friday 10 AM-2 PM. (Shirley Ryan AbilityLab, 2020).

## Summary

Recreational therapy is fun with a functional purpose. The goals are to achieve and maintain optimal levels of independence, productivity, well-being, and quality of life. Whatever the level of disability, recreational therapists can help the individual to work hard to achieve therapy goals, and have fun along the way!

## RESOURCES

Ability360. (2020). *Membership Information*. <https://ability360.org/membership-information/>

Ability360. (2020). *Recreation Therapy*. <https://ability360.org/sports/recreation-therapy/>

American Therapeutic Recreation Association. (n.d.). *About Recreational Therapy*. <https://www.atra-online.com/page/AboutRecTherapy>

Beaubien, J. (2018). *Adaptive Climbing at AZ on the Rocks*. <https://ability360.org/adaptive-climbing/>

Beaubien, J. (2019). *Individual Rock Climbing Sessions*. <https://ability360.org/individual-rock-climbing-sessions/>

Beckmann, K. (2020). *Romeoville home to Sensory Room for special needs community*. The Times Weekly.com. <http://thetimesweekly.com/news/2020/mar/10/romeoville-home-sensory-room-special-needs-communi/>

Cahow, C., Gassaway, J., Rider, C., Joyce, J.P., Bogenshutz, A., Edens, K., Kreider, S.E., & Whiteneck, G. (2012). Relationship of therapeutic recreation inpatient rehabilitation interventions and patient characteristics to outcomes following spinal cord injury: the SCIR rehab project. *The journal of spinal cord medicine*, 35(6), 547–564. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3522896/#!po=2.63158>

Craig Hospital. (2020). *Adaptive Recreation Equipment Resources*. <https://craighospital.org/programs/therapeutic-recreation/adaptive-sports-equipment-resources>

Davis, J. (Ed.) (2020). *Medical Fees 2020*. Los Angeles, CA: Practice Management Information Corporation (PMIC).

Gassaway, J., Dijkers, M., Riders, C., Edens, K., Cahow, C., & Joyce, J. (2011). The SCIR rehab project: treatment time spent in SCI rehabilitation. Therapeutic recreation treatment time during inpatient rehabilitation. *The journal of spinal cord medicine*, 34(2), 176–185. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3066511/>

Gassaway, J., Sweatman, M., Rider, C., Edens, K., Weber, M. (2019). Therapeutic Recreation Outcomes during Inpatient SCI Rehabilitation. *Therapeutic Recreation Journal*. LIII (2), 99–116.

National Council for Therapeutic Recreation Certification. (2020) CTRS: *The Qualified Provider of Recreational Therapy*. <http://nctrc.org>

Shepherd Center. (2020). *Shepherd Sports*. <https://www.shepherd.org/patient-programs/sports-recreation/sports>

Shirley Ryan AbilityLab. (2020). *Summer camp*. <https://www.sralab.org/summer-camp>

Shirley Ryan AbilityLab. (2020). *Therapeutic Recreation*. <https://www.sralab.org/services/therapeutic-recreation>

Therapeutic Recreation Directory. (n.d.). *Recreation Therapy Licensure and Title Protection*. <https://www.recreationtherapy.com/licensure.htm>

Therapeutic Recreation Directory. (n.d.). *Therapeutic Recreation Association Directory*. <https://www.recreationtherapy.com/trorg.htm>

Whaley, D. and Carr, G. (n.d.). *Insight Into Recreational Therapy Philosophy, Models, and Modalities in Behavioral Health Settings*. <https://northstarbehavioral.com/wp-content/uploads/2015/06/04-23-Whaley-Carr-1-4-TrailGym.pdf>

# AN INTRODUCTION TO HYDROTHERAPY IN REHABILITATION



Andrea Goicoechea MSN, RN

## Background

Hydrotherapy is a safe and versatile modality used to treat a wide range of conditions for people of many ages. It can be helpful to understand its background and applications.

Aquatic immersion therapy has been used for centuries to promote wellness and healing. Numerous ancient and more modern civilizations utilized still or running, cold or warm water in curative modalities to treat both physical and mental illnesses. During the 18th and 19th centuries, hydropathy clinics and baths were highly popular throughout Europe, coming to America in the mid-19th century when hot and cold baths came into vogue and spawned a robust tourist trade. In the 1920s, Franklin Delano Roosevelt sought treatment for his polio at a hot spring facility in Warm Springs, Georgia and became a powerful advocate for immersion therapy. The 1940s saw the use of whirlpools

introduced, and hydrotherapy techniques leapt forward (Bahadorfar, 2014).

A considerable body of research has been collected about water immersion to meet therapeutic and fitness goals. Water immersion therapy, also known as aquatic therapy (AT), water therapy, pool therapy, hydrotherapy, aquatic physical therapy or physiotherapy, refers to water-based treatments and exercises intended to support general wellness, fitness, and/or rehabilitation. Treatments and exercises are performed while floating, partially submerged, or fully submerged in water, usually in specialized temperature-controlled pools.

## The Physics of Water Immersion

As Becker (2009) writes, aquatic immersion has profound biological effects, both immediate and delayed. The key

# Grow your career with FIG!

**Life Care Planning  
Medical Cost Projections  
Medicare Set-Asides**

## Plant A Seed...

### Certification Classes

- Online & onsite
- Pre-approved for certification (CNLCP, CLCP, MSCC)
- Payment plan

## Nourish Your Foundation...

### Customized Coaching

## Strengthen Your Roots...

### Continuing Education

- Pre-approved for CNLCP, CLCP, MSCC & RN

## Retreat Of Resources...

### Treehouse

- Interactive website with resources, happenings, & networking



**FIG<sup>®</sup>**  
**FIGeducation.com**



difference between AT and land therapy is that movement is facilitated by the physical properties of water and bodies in it, particularly density and specific gravity, buoyancy, hydrostatic pressure, viscosity, and thermodynamics.

The body is slightly less dense than water, with an average specific gravity of 0.97, creating buoyancy. This offloads immersed joints, assisting movement and decreasing joint compression. When gravity is partially reduced by immersion, weight bearing restrictions are difficult to exceed, facilitating strength building, range of motion, and gait training.

Hydrostatic pressure from outside the immersed body forces internal fluids through the lymphatic and vascular systems from the limbs toward the pelvis and thorax. This reduces peripheral edema, and increased venous return causes stroke volume and cardiac output to rise. This means the cardiovascular effects of training can be achieved at slower speeds than on land. The fluid movement is generally well tolerated but warrants clinical evaluation especially in the setting of congestive heart failure. Viscosity and drag allow balance practice and strengthening in a “fall-safe” environment. Turbulence in a therapy pool can be varied to create gentle to strenuous exercise routines.

Therapists use water in a wide range of temperatures, from cold plunge tanks to hot tubs. Typically, therapy pools are heated to a neutral 33.5°-35.5° C (92.3°-95.9° F) to avoid chilling or overheating. Thermodynamically, water has a much greater heat capacity than air, so it transfers temperature more efficiently to tissues. Warm water increases circulation and joint lubrication, decreasing muscle spasm, increasing range of motion, and modifying pain perception. Cold water immersion (CWI) is commonly used in post-exercise recovery. The effects of CWI have not been fully explained. It is speculated that post-exercise CWI helps reduce the pain-spasm cycle and inflammatory processes and limits edema formation (Machado, et al, 2016).

## Applications

- A recent review found support for AT in **neurorehabilitation** (Becker, 2020); uses for parkinsonism, stroke rehabilitation, multiple sclerosis, cerebral palsy, and dementia are well documented. There is evidence to suggest that, at neutral temperatures, AT improves spasticity (Kesiktas et al., 2004), cardiorespiratory function, balance, and functional independence in individuals with traumatic brain injury, even in the presence of comorbidities (Mossberg et al., 2010). Literature supports the same effects for individuals with spinal cord injury and amputation (Ellapen et al., 2018) (Blauwet & Donovan, 2016) (Young, 2008).
- Aquatic physical therapy, used alone or in combination with land-based therapy, is widely used as part of **orthopedic rehabilitation**. Vilalta and Peiris (Vilalta & Peiris, 2013, p. 146) conclude that it can be used as an adjunct to, or instead of, land-based physical therapy to enhance motion



and function in early stages after orthopedic surgery, and that AT does not increase the risk of wound-related adverse events. Patients diagnosed with **osteoarthritis** can achieve conditioning with less joint pain and greater improvements in mobility using underwater treadmills (Denning et al., n.d.).

- **Children** with physical conditions affecting neurological and spinal function, e.g., cerebral palsy and spina bifida, face significant barriers to participation in community sports and other forms of exercise. As a result, they frequently suffer from lower cardiovascular endurance, decreased muscle strength, poor balance and coordination, and overall diminished motor skills. Regular exercise in a disability pool can be useful; further, anecdotal evidence suggests that most children find aquatics more fun than land-based exercise. One author concludes that “aquatic exercise may provide a safe and beneficial alternative low-impact exercise for children with disabilities” (Fragala-Pinkham et al., 2008, p. 822).
- Aquatic therapy is used extensively in **athletic training and sports rehabilitation**.
- For **weight management**, non-weight bearing exercise may reduce pain and risk of injury in overweight and obese people.
- Patients with **fibromyalgia** syndrome with improvements in pain scores, health-related quality of life, fitness, fatigue, and physical function (Munguía-Izquierdo & Legaz-Arrese, 2008).

Importantly, patients report improvements in quality-of-life measures, mood disorder, and sleep. Substantial literature exists supporting the role of exercise, and hydrotherapy specifically, in relieving mood and sleep disorders. Opportunity for group contact at the therapy pool may increase community involvement and diminish feelings of isolation.

## Certifications



Thousands of participants worldwide enjoy aquatics fitness programs. Certified fitness professionals are qualified to teach individuals in water programs. Certifications vary;

general categories include intervention-specific certifications, disease-specific certifications, Aquatic Therapy & Rehab Industry certification (ATRI-C), specialized aquatic fitness certification via the Aquatic Exercise Association, adapted aquatic instructor training, and basic aquatic certifications such as water safety instructor (WSI) and Red Cross lifesaving.

Therapists may become certified in unique specialized approaches. Examples include the Halliwick Concept®, the Bad Ragaz Ring Method, Ai Chi, and Watsu, among others. The nurse life care planner (NLCP) may see reference to these specific approaches in treatment records.

The NLCP needs to be aware of the difference between therapy performed by a licensed provider and the use of hydrotherapy for general fitness and wellbeing. Any therapeutic program should be planned, provided, and documented by a physical or occupational therapist, physician, or other licensed provider, and be carried out in the presence of the therapist or supervised therapy assistant. Any candidate for AT will undergo an initial evaluation before moving to the therapy pool.

## Costs

Therapies provided in a life care plan are covered by any approved settlement terms; except under special conditions, life care plans do not consider collateral sources for payment. However, in some circumstances it may be useful for the NLCP to know how insurance carriers view AT. According to the Centers for Medicare and Medicaid Services, aquatic therapy is an accepted form of physical/occupational therapy and is reimbursable under Parts B and C. If the provider recommends aquatic therapy, the therapist and the facility must be Medicare-approved and accept assignment. Major insurers, as well, consider aquatic therapy a billable component of a physical or occupational therapy plan when documentation demands are met.

For example, an Aetna Clinical Policy Bulletin (2020) is representative, and notes the following:

- Aetna covers only the professional charges of a physical therapist or other recognized, licensed providers (e.g., doctor of medicine, doctor of osteopathy, podiatrist, and physical therapy assistant), for physical therapy modalities administered in a pool, which require direct, one-on-one, patient contact. Charges for aquatic exercise programs, or separate charges for use of a pool, are not covered.
- The provider must have direct (one-to-one) patient contact when reporting aquatic therapy. Supervising multiple patients in a pool at one time and billing for each of these patients per 15 minutes of therapy time is inappropriate.

If pool therapy is provided in a public facility (rather than clinic-based), the treatment area must be separated in some manner (floats or boundaries) from general public access.

**Table 1. Selected CPT and ICD-10 codes applicable to hydrotherapy, in addition to initial evaluation and re-evaluations**

| CPT Code  | Description   |
|---|---|
| 97113 (primary hydrotherapy code)                 | Therapeutic procedure, one or more areas, each 15 minutes; aquatic therapy with therapeutic exercises.      |
| 97036   | Application of a modality to one or more areas; Hubbard tank, each 15 minutes. Requires constant attention. |
| 97022   | Application of whirlpool therapy to one or more areas.  |
| 97034   | Therapeutic hot and cold baths to one or more areas; each 15 minutes.                                       |
| <b>ICD-10 Codes if selection criteria are met</b> |   |
| M30.3-M99.9                                       | Diseases of the musculoskeletal system and connective tissue  |
| S00-S99.929                                       | Injury  |
| Z87.81-Z87.828                                    | Personal history of injury  |
| Z51.89  | Encounter for other specified aftercare   |

## Contraindications and Precautions

The client does not need to know how to swim to benefit from hydrotherapy. However, experts note that pool therapy is contraindicated in the following conditions (Dwyer, 2017) (Frye et al., 2017):

- Recent myocardial infarction, severe heart failure, valvular insufficiency
- PEG, ostomy or suprapubic catheter
- Severe cognitive deficit
- Unpredictable bowel incontinence
- Tracheostomy
- Recent cerebral hemorrhage
- Open wounds that cannot be covered by an occlusive dressing
- Skin infections, including parasites
- Contagious disease
- Fever or vomiting
- Renal disease that cannot adjust to fluid loss
- Hydrophobia

The AT clinician will use precaution with:

- Multiple sclerosis, due to heat intolerance
- Controlled seizure disorder
- Neuropathy
- Prosthetic limbs: only prostheses designed for swimming are to be used
- Braces, assistive devices must be water-tolerant
- Hearing aids, contact lenses
- Menses
- Small wounds
- Behavior problems
- Pregnancy- consider water temperatures below 90° F

To ensure a rehabilitation-friendly pool facility consider:

- Parking and building accessibility
- Changing areas- private if opposite gender caregiver, wheelchair accessible
- Bring a care assistant if needed
- Presence of a pool lift and weight capacity
- Presence of a professional lifeguard
- Availability of equipment

- Pool temperature: thermoneutral or warm pool temperatures are indicated in rehabilitation of most post-operative or neuromuscular conditions

Hydrotherapy recommendations per therapist evaluation would likely include visits and items of equipment related to pool activity:

- Aquatic therapy sessions 1-2 times weekly for eight weeks, or as prescribed by the provider (Dwyer, 2017)
- Waterproof prostheses and water-resistant braces/orthotics needed for balance and gait training
- Occlusive dressings for small open wounds
- Water socks or shoes
- Swim wear/towel/cap/goggles
- Required equipment, if not provided by the facility, flotation or other devices
- Gym or pool membership
- Mobility aids to reach poolside
- Portable pool lift, if not available at the facility
- Attendant care for changing and transfers
- Transportation to and from the facility

## NURSING DIAGNOSES TO CONSIDER NANDA-I 2018-2020

- Impaired physical mobility
- Risk for falls
- Impaired comfort
- Readiness for enhanced comfort
- Chronic pain
- Activity intolerance
- Impaired walking
- Risk for disuse syndrome
- Sedentary lifestyle
- Impaired standing
- Readiness for enhanced sleep
- Risk for powerlessness r/t loss of function
- Disturbed body image
- Impaired mood regulation
- Decreased diversional activity engagement
- Social isolation



High quality hydrotherapy research is hampered: study blinding is nearly impossible, outcomes measurements are challenging to assess, and funding considerations limit progress. The NLCP can educate providers about the benefits of AT and identify availability of local recreational and therapeutic community resources. The NLCP

may consider recommending safe and substantiated aquatic therapies into the life care plan for a diverse group of clients and conditions.

### Summary of AT benefits:

- safely increase endurance and strength
- facilitation of relaxation
- improve balance and postural control
- improve balance and postural control
- Improved quality of life
- improved mood
- reduce pain, stiffness and muscle spasm
- improved sleep
- aid in gait retraining
- opportunities for socialization
- improve functional mobility

## REFERENCES

Aetna Clinical Policy Bulletin (04/23/2020). Pool therapy, aquatic therapy or hydrotherapy, number 0174.

[http://www.aetna.com/cpb/medical/data/100\\_199/0174.html#dummyLink4](http://www.aetna.com/cpb/medical/data/100_199/0174.html#dummyLink4)

Bahadorfar, M. (2014). A study of hydrotherapy and its health benefits. *International Journal of Research*, 1(8), 294–305.

Becker, B. E. (2009). Aquatic therapy: scientific foundations and clinical rehabilitation applications. *Physical Medicine and Rehabilitation*, 1, 859–872. <https://doi.org/10.1016/j.pmj.2009.05.017>

Becker, B. E. (2020). Aquatic therapy in contemporary neurorehabilitation: An update. *PM&R*.

<https://doi.org/10.1002/pmj.12435>

Blauwet, C., & Donovan, J. (2016). *Exercise after spinal cord injury [MSKTC fact sheet]*. Model Systems Knowledge Translation Center. <https://msktc.org/sci/factsheets/exercise>

Denning, W. M., Bressel, E., & Doiny, D. (n.d.). *Underwater treadmill exercise as a potential treatment for adults with osteoarthritis* (n.d.) [HydroWorx]. <https://www.hydroworx.com/content/uploads/2015/07/Osteoarthritis-Study.pdf>

Dwyer, K. (2017, October 4). *Beyond the basics-putting aquatic therapy into practice*. physicaltherapy.com.

[physicaltherapy.com/articles/beyond-basics-putting-aquatic-therapy-3738](http://physicaltherapy.com/articles/beyond-basics-putting-aquatic-therapy-3738)

Ellapen, T. J., Hammill, H. V., Swanepoel, M., & Strydom, G. L. (2018). The benefits of hydrotherapy to patients with spinal cord injuries. *African Journal of Disability*, 7. <https://doi.org/10.4102/ajod.v7i0.450>

Fragala-Pinkham, M., Haley, S. M., & O'Neil, M. E. (2008). Group aquatic aerobic exercise for children with disabilities. *Developmental Medicine & Child Neurology*, 50(11), 822–827. <https://doi.org/10.1111/j.1469-8749.2008.03086.x>

<https://doi.org/10.1111/j.1469-8749.2008.03086.x>

Frye, S. K., Ogonowske-Slodownik, A., & Geigle, P. R. (2017). Aquatic exercise for people with spinal cord injury. *Archives of Physical Medicine and Rehabilitation*, 98(7), 195–197. [https://doi.org/10.1016/s0003-9993\(17\)30349-0](https://doi.org/10.1016/s0003-9993(17)30349-0)

Kesiktas, N., Paker, N., Erdogan, N., Gülsen, G., Biçki, D., & Yilmaz, H. (2004). The use of hydrotherapy for the management of spasticity. *Neurorehabilitation and Neural Repair*, 18(4), 268–273. <https://doi.org/10.1177/1545968304270002>

## REFERENCES

- Machado, A.F., Ferreira, P.H., Micheletti, J.K. et al. Can Water Temperature and Immersion Time Influence the Effect of Cold Water Immersion on Muscle Soreness? A Systematic Review and Meta-Analysis. *Sports Med* 46, 503–514 (2016). <https://doi.org/10.1007/s40279-015-0431-7>
- Mossberg, K. A., Amonette, W. E., & Masel, B. E. (2010). Endurance training and cardiorespiratory conditioning after traumatic brain injury. *Journal of Head Trauma Rehabilitation*, 25(3), 173–183. <https://doi.org/10.1097/htr.0b013e3181dc98ff>
- Munguía-Izquierdo, D., & Legaz-Arrese, A. (2008). Assessment of the effects of aquatic therapy on global symptomatology in patients with fibromyalgia syndrome: A randomized controlled trial. *Archives of Physical Medicine and Rehabilitation*, 89(12), 2250–2257. <https://doi.org/10.1016/j.apmr.2008.03.026>
- Villalta, E. M., & Peiris, C. L. (2013). Early aquatic physical therapy improves function and does not increase risk of wound-related adverse events for adults after orthopedic surgery: A systematic review and meta-analysis. *Archives of Physical Medicine and Rehabilitation*, 94(1), 138–148. <https://doi.org/10.1016/j.apmr.2012.07.020>
- Young, E. (2008). *Aquatic therapy is serious fun* (Volume 18 · Issue 6) [InMotion]. Amputee Coalition. <https://www.amputee-coalition.org/resources/aquatic-therapy-is-serious/>



Let your passion  
**power your future.**

If nursing is your passion, then be sure to learn how the University of St. Augustine for Health Sciences can help you take your passion to the next level and do more with an advanced degree.

**Advance in your field with an MSN or DNP**

- Family Nurse Practitioner
- Nurse Educator
- Nurse Executive

 UNIVERSITY OF  
ST. AUGUSTINE  
FOR HEALTH SCIENCES

[usa.edu](http://usa.edu)

 CCNE  
ACCREDITED

The Master of Science in Nursing (MSN) program at the University of St. Augustine for Health Sciences is accredited by the Commission on Collegiate Nursing Education, 655 K Street NW, Suite 750, Washington, DC 20001, 202-887-6791.



# AANLCP Crash Cart

now  
hosted  
&  
maintained  
by



**FIG<sup>®</sup>**  
**FIGeducation.com**





## Introduction

Neurologic conditions affecting cognition, communication, motor function, and psychological well-being present complex issues that require an integrated team approach to help an individual improve and/or maintain function and quality of life. Increasingly, with robust clinical studies in parallel with basic neuroscience research, the importance of music therapy to help in the rehabilitation and quality of life for those neurologic conditions is being recognized in acute, sub-acute and home-based health care programs.

## Music Therapy



Music therapy has been an established profession in the United States since 1950, using evidence-based music intervention within a developing relationship between a professional music therapist, i.e., MT-BC, Music Therapist-Board Certified, and client to restore, maintain, and/or improve physical, emotional,

psychosocial and neurological function. Depending on goals, the therapist's treatment plan will use elements of music, i.e., rhythm, melody, tone frequencies, and active music engagement to achieve targeted goals. The importance of music therapy and music based interventions have gained interest from both NIH (Cheever, et al., 2018) and the World Health Organization, WHO (Fancourt, et al., 2019). Collaborative research between neuroscientists and clinical music therapists is enriching the evidence base for its efficacy as an integrated health care modality (O'Kelly et al., 2016). Most advances are in neurorehabilitation, including stroke, TBI and motor disorders, and neurocognitive impairments such as Alzheimer's disease.

## Cognition, Executive Function, and Neurocognitive Impairment

One challenge in neurocognitive rehabilitation following traumatic brain injury is that changes in comprehension and attention may impede recovery time. Impaired attention and challenges with multi-tasking lead to memory decline and reduced recovery potential. Engaged attention is necessary for learning and relearning to take place. Those with progressive diseases such as Parkinson's and multiple sclerosis may also struggle with cognitive impairment.

Music processing engages multiple levels of neural engagement, from basic arousal networks to higher cortical processes (Chandra and Levitin 2013), so it stimulates and engages residual function in those unable to initiate that function independently. Research in music perception shows

that rhythm's structure (patterned generated sound) gives the brain a template for time-ordered activities and can aid in memory retention and recall (Simmons-Stern, et al., 2010).

Some brain injuries affect **executive function**: working memory, ability to retain and manipulate distinct pieces of information over short periods; mental flexibility, ability to sustain or shift attention in response to different demands or to apply different rules in different settings; and self-control, ability to set priorities and resist impulses.

Music therapy techniques to enhance executive function include individual and or group improvisations with task structure relative to the clinical goals. Participants using percussion instruments synchronize their playing to track rhythmic patterns introduced by the music therapist, facilitating attention and focus. The physical motor activity of the participants, rather than regulating motor timing, regulates cognitive timing and mental flexibility mechanisms (Thaut et al., 2009). To enhance memory recall, music can be used as a mnemonic device to aid in the retention of non-musical information, such as phrases or groups of numbers (Moore et al., 2008; Simmons-Stern et al., 2010).

Music therapy has had a long history in benefiting those with **Alzheimer's disease** and other **neurocognitive deficits**. (Tomaino, 1998; Fang, R et al., 2017). Even with severe memory impairments, people with dementia demonstrate strong recognition memory for familiar or important music. It provides several cues and emotional arousal that enable recall. Recent studies have indicated that daily exposure to long-known music can alter functional brain connectivity and improve cognitive outcomes (Leggieri, 2018).

Active music therapy where participants are fully engaged in music making by clapping, dancing, and playing instruments has been shown to improve social awareness and interpersonal connections. (Raglio and Oasi, 2015). Active music-making has shown significant decrease in delusions, agitation, and apathy (Clark, et al., 1998; Raglio et al., 2010). Agitation is present in many individuals with dementia and includes such behaviors as restlessness, aggressive behaviors, repetitive acts, and vocal outburst without the adverse side effects of medication. Personalized music play lists reduce medication taken by nursing home residents ( Bakerjian. D et al., 2020).

Although familiar music can arouse pleasant memories in those with dementia it can also arouse negative associations of personal loss or trauma. Additionally, people with frontal temporal dementia can have changes in auditory perception which can alter their music preferences or make music sound like noise. Music therapists can help select proper playlists by observing either positive or negative responses and training care partners to use appropriate music, including singing, to aid in activities of daily living (Clark et al., 1998; Gotell et al., 2003; Raglio et al., 2008).

## Movement Disorders

One of the most effective interventions, especially for those with Parkinson's disease (PD), has been using rhythm to stimulate and improve gait (Thaut, 1996; Tomaino, 2006, 2011; Cochen de Cock, 2018). In PD, the changes in basal ganglia-cortical networks is associated with alterations in timing perception and the production of rhythmic-based events, including movement. Using an external rhythmic cue provides the necessary stimulus to initiate motor activity, enhancing gait while reducing shuffling and freezing. Some individuals with PD may have changes in their beat perception (Grahn, 2009) and benefit from direct real-time rhythmic cuing to improve balance, stride length, posture, side-side movement, and complex coordinated movement sequences combining upper and lower limbs (Nombela et al., 2013).

For similar reasons rhythmic cuing and active music making can enhance range of motion in stroke survivors (Magee et al., 2017). Gait, upper extremity coordination, and fine motor skills show better improvement when combined with music-supported training than traditional functional motor training (Altenmuller et al., 2009; Schneider, S. 2010; Kogutec, et al., 2016).

## Communication

Fluency and word retrieval share neural mechanisms with motor timing and singing. This is why using music-based cues and singing after acquired brain injury can help improve speech. Stroke survivors with non-fluent aphasia often have the ability to sing phrases and familiar song lyrics despite not being able to initiate a meaningful sentence. Research in neuroscience has shown that increased neural connectivity in the brain with intensive music-based interventions lead to speech recovery (Schlaug, et al., 2009)

Music therapy for patients with nonfluent aphasia strengthens breath support, improves articulation, word-retrieval, naming tasks, and improves prosody (patterns of rhythm and sound) (Tomaino, 2013; Magee et al, 2017). Individuals with nonfluent aphasia are encouraged and motivated when they are able to sing even though they cannot speak. This motivation keeps them engaged, leading to improved carryover of communication skills (Kim and Tomaino, 2008). Similar improvements and additional benefits of improved volume, intelligibility, and quality of life have been attained with PD (Elefant, et al., 2012; Stegemoller et al., 2017; Tamplin, et al., 2019) and in improved respiratory function, voice and mood with quadriplegia ( Tamplin et al., 2013).

## Pain Management, Anxiety, and Delirium

Music processing also influences physiological responses such as heart and respiration rates and pain perception. Evidenced-based applications of music therapy decrease pain perception in cancer care and reduce stress and anxiety in coronary heart disease patients (Bradt et al., 2013; 2015). Even though both listening alone and interactive music engagement with a therapist have benefits, participants rate the experience with the music therapist as more beneficial (Bradt et al., 2015).

Recent studies have investigated the effect of music on preventing delirium with older patients admitted to a trauma intensive care unit. Interventions include specially selected music, via headphones, with slow tempo, low pitch, and simple repetitive rhythms provided twice a day over three days to alter physiologic responses (Johnson et al, 2018). Benefits of specialized listening programs have also been shown to reduced stress in mechanically ventilated patients. Findings indicated that listening to music consistently reduced respiratory rate and systolic blood pressure, suggesting a relaxation response (Bradt et al., 2014, Kahn et al, 2020).

Active engagement in music therapy can provide positive outcomes for depression and anxiety related to a traumatic brain injury or chronic condition, especially when cognitive impairments impedes ability to for verbal expression. (Maratos et al., 2008; Gardiner and Horwitz, 2015). Interventions may include music improvisation allowing for nonverbal expression of emotions which the music therapist helps confirm what is being expressed. This expressive outlet can be crucial in recovery.

Creative song writing is another evidenced based practice which has shown to promote integration of self-concept in those with acquired neurologic injuries is (Tamplin et al., 2016)

## Summary

Music therapists have increased awareness of the benefits of evidence-based music interventions to address cognition, communication, motor function, and psychological well-being. The challenge is to educate to public, medical community, and regulatory agencies so that people with life care issues can benefit from music therapy. More information about the profession of music therapy and resources about professional music therapists by region can be found at [www.musictherapy.org](http://www.musictherapy.org) and [www.cbmt.org](http://www.cbmt.org)

## REFERENCES

- Altenmuller, E, Marco-Pallares, J, Munte, TF, Schneider S. (2009) Neural reorganization underlies improvement in stroke –induced motor dysfunction by music-supported therapy. *Ann NY Acad Sci.*2009 Jul;1169:395-405.doi:10.1111/j.1749-6632.2009.04580.x
- Bakerjian, D. Bettega, K. Cachu, A, Azzis, L, Taylor, S ( 2020) The impact of music and memory on resident level outcomes in California nursing homes. *JAMDA* <https://doi.org/10.1016/j.jamda.2020.01.103>
- Besson,M., Chobert,J., Marie, C.(2011).Transfer of training between music and speech: common processing, attention, and memory. *Front. Psychol.* 2:94. doi:10.3389/fpsyg.2011.00094
- Bradt J, Dileo C, Potvin N. Music for stress and anxiety reduction in coronary heart disease patients. *Cochrane Database of Systematic Reviews.* 2013(12). doi: 10.1002/14651858.CD006577.pub3. PubMed PMID: CD006577.
- Bradt J, Dileo C. (2014) Music interventions for mechanically ventilated patients. *Cochrane Database of Systematic Reviews.* 2014(12). doi: 10.1002/14651858.CD006902.pub3. PubMed PMID: CD006902
- Bradt J, Potvin N, Kesslick A, Shim M, Radl D, Schriver E, Gracely EJ, Komarnicky-Kocher LT. (2015) The impact of music therapy versus music medicine on psychological outcomes and pain in cancer patients: a mixed methods study. *Supportive Care in Cancer.* 2015;23(5):1261-71. doi: 10.1007/s00520-014-2478-7.
- Bradt J, Dileo C, Magill L, Teague A. (2016) Music interventions for improving psychological and physical outcomes in cancer patients. *Cochrane Database of Systematic Reviews.* 2016(8). doi: 10.1002/14651858.CD006911.pub3. PubMed PMID: CD006911.
- Chanda,M.L.,andLevitin,D.J.(2013).The neurochemistry of music. *Trends Cogn.Sci.(Regul.Ed).* 17,179–193.doi:10.1016/j.tics.2013.02.007
- Cheever, T., Taylor, A. Finkelstein R, Edwards E, et al. (2018) NIH/Kennedy Center workshop on music and the brain: finding harmony. *Neuron* 2018;97(6):1214-1218
- Clark ME, Lipe AW, Bilbrey M. Use of music to decrease aggressive behaviors in people with dementia. *J Gerontol Nurs.* 1998; 24(7): 10–17.
- Cochon De Cock, V. ,Dotov, D.G., et al. (2018). Rhythmic abilities and musical training in Parkinson’s Disease: do they help? *NPJ Parkinson’s disease*, 4,8. <https://doi.org/10.1038/s41531-018-0043-7>
- Elefant, C., Baker, F. A., Lotan, M., et al. (2012). The effect of group music therapy on mood, speech, and singing in individuals with Parkinson’s disease - a feasibility study. *Journal of Music Therapy*, 49(3), 278-302. doi:10.1093/jmt/49.3.278
- Fancourt D, Finn, S; (2019) What is the evidence on the role of the arts in improving health and well-being? A scoping review ( 2019) *Health Evidence Network Synthesis report 67.* ISBN 978 92 890 5455 3
- Fang, R.; Ye, S; Haungfu, J.,Calimag, D.P. ( 2017) Music Therapy is a potential intervention for cognition of Alzheimer’s disease: a mini review.. *Translational Neurogeneration*, 6, 2. <https://doi.org/10.1186/s404035-017-0073-9>
- Gardiner, J. C. & Horwitz, J. L. (2015). Neurologic music therapy and group psychotherapy for treatment of traumatic brain injury: evaluation of a cognitive rehabilitation group. *Music Therapy Perspectives*, 33 (2): 193-201. doi:10.1093/mtp/miu045
- Götell E, Brown S, Ekman SL. (2003) Influence of caregiver singing and background music on posture, movement, and sensory awareness in dementia care. *Int Psychogeriatr.* 2003; 15(4): 411–430.
- Grahn JA, Brett M. (2009) Impairment of beat-based rhythm discrimination in Parkinson’s disease. *Cortex.* 2009; 45:54-61. doi:10.1016/j.cortex.2008.01.005.
- Johnson K, Fleury J, McClain D. (2018) Music intervention to prevent delirium among older patients admitted to a trauma intensive care unit and a trauma orthopaedic unit. *Intensive and Critical Care Nursing.* 2018;47:7-14. doi: <https://doi.org/10.1016/j.iccn.2018.03.007>
- Khan SH, Xu C, Purpura R, et al. (2020) Decreasing delirium through music: a randomized pilot trial. *American Journal of Critical Care.* 2020;29(2):e31-e8. doi: 10.4037/ajcc2020175.
- Kim, M, Tomaino, C ( 2008) Protocol evaluation for effective music therapy for persons with nonfluent aphasia. *Top in Stroke Rehabil* 2008;15(6):555-569 doi:10.1310/tsr1506-555
- Kogutec, D.L ; Holmes, J.D; Grahn,J.A. et al. (2016) Active music therapy and physical improvements from rehabilitation for neurological conditions. *Advances Mind Body Medicine*, Fall 2016, VOL. 30, NO. 4
- Leggieri, M., Fischer, C., Churchill, N. et al. (2018) Repeated exposure to familiar music alters functional connectivity in Alzheimer’s disease. *Alzheimer’s & Dementia* 14(7) P463 doi:10.1016/j.jalz.2018.06.422
- Leggieri, M, Thaut, M., Fornazzi, L., et al. (2019) Music intervention approaches for Alzheimer’s disease: a review of the literature. *Frontiers in Neuroscience* 13:132. doi:10.3389/fnis.2019.00132

## REFERENCES

- Maratos, A.S., Gold,C.,Wang,X.,et al. (2008).Music therapy for depression. *Cochrane Database Syst Rev.* 1:CD004517.doi:10.1002/14651858.CD004517.pub2
- Magee, W, Clark, I, Tamplin, et al.(2017).Music interventions for acquired brain injury. *Cochrane Database Syst Rev.* 2017 jan 20;1(1):CD006787. doi:10.1002/14651858.CD006787.pub3.
- Moore KS, Peterson DA, O'Shea G, et al..(2008) The effectiveness of music as a mnemonic device on recognition memory for people with multiple sclerosis. *J Music Ther.* 2008 Fall;45(3):307-29
- Nombela, C, Hughes, L, Owen, A, Grah, J, (2013) Into the Groove: Can rhythm influence Parkinson's disease. *Neuroscience and Biobehavioral Reviews* 37. 10, Part 2; 2564-2570. <https://doi.org/10.1016/j.neubiorev.2013.08.003>
- O'Kelly J., Fachner J.C. and Tervaniemi M. (2016) Editorial: dialogues in music therapy and music neuroscience: collaborative understanding driving clinical advances. *Front Hum Neurosci* 10:585. doi: 10.3389/fnhum.2016.00585
- Raglio A, Bellelli G, Traficante D, et al. (2008) Efficacy of music therapy in the treatment of behavioral and psychiatric symptoms of dementia. *Alzheimer Dis Assoc Disord.* 2008; 22(2): 158–162.
- Raglio, A, Bellelli, G., Traficante, D. et al. (2010) Efficacy of music therapy treatment based on cycles of session: a randomized controlled trial. *Aging Ment. Health.* Nov;14(8) 900 -4 doi:10.1080/13607861003713158.PMID:21069596
- Raglio, A. Oasi, O. (2015) Music and Health: what interventions for what results? *Frontiers Psychol.*6:230.doi:10.3389/fpsyg.2015.00230
- Schlaug, G.,Marchina, S., Norton, A.(2009) Evidence for plasticity in white-matter tracts of patients with chronic Broca's aphasia undergoing intense intonation-based speech therapy. *Ann.N.Y.Acad.Sci.* 1169,385–394.doi:10. 1111/j.1749-6632.2009.04587.x
- Schneider, S., Munte, T., Rodriguez-Fornells, et al. ( 2010) Music-supported training is more effecient than functional motor training for recovery of fine motor skills in stroke patients. *Music Perception: An Introductory Journal*, vol27, 4 (April 2010) pp, 271-280  
<http://www.jstor.org/stable/10.1525/mp.2010.27.4.271>
- Simmons-Stern, N.R., Budson A.E, Ally B.A. (2010). Music as a memory enhancer in patients with Alzheimer's disease. *Neuropsychologia.* 2010 August; 48(10): 3164–3167
- Stegemoller, E, Radig, Hibbing, P, et al. (2017) Effects of singing on voice, respiratory control and quality of life in persons with Parkinson's disease. *Disabil Rehab.* 2017 Mar;39(6) 594-600, doi:10.3109/09638288.216.1152610.
- Tamplin, J, Baker, FA, Grocke, D, et al. (2013) Effect of singing on respiratory function, voice and mood after quadriplegia : a randomized control trial. *Arch Phys Med Rehabil* 2013 Mar;94(3):426-34. doi:10.1016/j.apmr.2012.10.006. Epub 2012 Oct 24
- Tamplin, J., Baker, F. A., Macdonald, R., et al. (2016). A theoretical framework and therapeutic songwriting protocol to promote integration of self-concept in people with acquired neurological injuries. *Nordic Journal of Music Therapy*, 25(2), 111-133. doi:10.1080/08098131.2015.1011208
- Tamplin, J, Morris, ME, Marigliani, C et al. (2019) ParkinSong: a controlled trial of singing-based therapy for Parkinson's disease. *Neurorehabil Neural Repair.*2019 Jun;33(6):453-463.doi:10.1177/1545968319847948.
- Thaut, M. McIntosh, G, Rice, R, et al. (1996) Rhythmic auditory stimulation in gait training for Parkinson's disease patients. *Movement Disorders: Official Journal of the Movement Disorders Society*,11(1996) pp.193-200
- Thaut, M., Gardiner, J., Holmberg, D; et al. (2009) Neurologic music therapy improves executive function and emotional adjustment in traumatic brain injury rehabilitation. *The Neurosciences and Music – Disorders and Plasticity: Ann. NY Academy of Sci* 1169: 406-416 doi:10.1111/j.1749-6632.2009.04585.x
- Tomaino, C.M. 1998. Music and memory: accessing residual function. In C.M. Tomaino (Ed.), *Clinical Applications of Music in Neurologic Rehabilitation* (pp. 19-27). St. Louis, MMB Music, Inc.
- Tomaino, C.M. (2006) Music therapy to benefit individuals with Parkinson's disease,. *Movement Disorders*, Vol. 21/Supplement 13, 2006, p. S29
- Tomaino, C.M. (2011) Using rhythmic auditory stimulation for rehabilitation. In Berger and Turov (eds) *Music, Science, and the Rhythmic Brain* Rutledge, NY pp111-121
- Tomaino CM. (2012) Effective music therapy techniques in the treatment of nonfluent aphasia. *Ann N Y Acad Sci.* 2012 Apr;1252:312-7.



# ART THERAPY A STROKE OF THE BRUSH

Kathryn J. Wright, MA, LPC, ATR, LAT

## What is Art Therapy?

Art therapy is an integrative approach used to enrich the lives of individuals through the art-making process. This unique form of therapy was founded and curated in the 1940s by Margaret Naumburg (1890-1983), an American psychologist, as a therapeutic technique that explores and encourages creative expression with the intent to foster healing and well-being. Art therapy helps individuals of all ages gain self-awareness to explore and manage their emotions, anxiety, depression, trauma, and addictions as they gain coping skills to manage undesirable learned or unconscious behaviors (Slayton, D'Archer & Kaplan, 2010). There is evidence to support that art therapy reduces stress by the use of soothing art materials along with the feelings of attachment and comfort created by the relationship triad that exists between the art, the art-making process, and the art therapist (Czamanski-Cohen & Weihs, 2016). Art therapy has been shown to help patients with neurological problems using the Mini Mental Status Exam pre and post engaging in art therapy (Mirabella, 2015). Individuals who suffer from an injury such as a stroke often experience anger, sadness, and remorse (Steiner, 2011). There is evidence that art therapy can help reduce distress in those with neurologically-based trauma (Hass-Cohen, Clyde Findlay, Carr & Vanderlain, 2014).

## Credentials and Costs

Art therapy is a specialized modality that requires a master's degree in art therapy and mental health counseling. Art therapists are registered with the American Art Therapy Certification Board (ATCB) and require a license in many states. An art therapist has extensive study in therapy models and practice; knowledge of psychodynamic theory; clinical assessment skills; treatment planning, artistic competence and knowledge of materials used, as well as skill to collaborate with other healthcare providers. Art therapy just as with physical therapy or other specialized therapy should only be practiced by someone who is trained and licensed.

Art therapy is considered a therapeutic modality, like cognitive behavior therapy and dialectical behavior therapy.

## NURSING DIAGNOSES TO CONSIDER NANDA-I 2018-2020

Decreased diversional activity engagement  
Impaired social interaction  
Risk for chronic low self-esteem  
Alteration in self-care  
Acute confusion,  
Impaired memory  
Impaired verbal communication  
Decreased diversional activity engagement  
Frail elderly syndrome  
Unilateral neglect  
Readiness for enhanced spiritual well-being

**Keywords:** Art therapy, art-making process, expressive arts therapy, third hand, brain injury, neurorehabilitation, disability, stroke, CVA

As a stand-alone, it will not be authorized under mental health insurance. Most art therapists also hold a state licensure such as Licensed Professional Counselor or Licensed Clinical Social Worker, therefore art therapy would fall under “therapy” and would be covered under an insurance coding as specified by the therapist. Often, clients will pay privately, with funds from a settlement from litigation, or have guardians, conservators, or payees that will authorize payment for art therapy. The cost of an art therapy session is comparable to a traditional talk-therapy session, billing anywhere from \$90 to \$130 an hour plus cost of art supplies used.

## AT in Diagnosis

There are many uses for the modality of art therapy working with a variety of individuals. First, the art-making process can be used as both a diagnostic tool and a treatment modality. In most cases, an art assessment is conducted in the first session to determine one’s level of functioning. There are specific art directives that provide the art therapist with information that indicates, for instance, an individual’s degree of baseline coping skills, resilience, and potential trauma. This information provides the art therapist with valuable insight on how an individual sees and interacts with their world, thus determining their strengths and deficits that can be the focus in treatment planning.

In younger children, having the client draw a picture of their family will indicate if the child feels safe at home and with family members, mainly the parents. It is reasonable for a small child under the age of 6 to draw human figures without legs, arms or fingers, as these details are not conceptualized at this age and are considered to be “preschematic” according to Viktor Lowenfeld’s Stages of Artistic Development (Lowenfeld, 1947). However, if an older child or adult draws him or herself in relationship to their parents, family members or partner and omits details such as extremities, fingers, feet or perhaps a mouth, this may indicate the feeling of helplessness or submission for the person completing the drawing. This is especially helpful in assessing if the individual is experiencing or has experienced trauma or abuse.

## AT in Treatment

With trauma or anxiety, an effective art therapy directive would be to create a “safe place.” This project involves the individual creating a model that encompasses a physical space incorporating the five senses. For example, a tree house with a drop-down ladder that ensures safety; birds in the tree that provide a sweet peaceful singing; a Fimo® polymer clay pizza that represents the client’s favorite food; a plush fleece carpet inside with a soft tactile feel; faux pipe cleaner flowers dipped in lavender oil with a calming aroma; and a small framed photograph hanging inside of a beloved sibling provide the individual with fond memories. These components also

provide the client with a sensation to recall when in distress, thus reducing anxiety and symptoms of PTSD.

When working with a group of individuals with addiction issues, an art therapy directive may be for the group to collectively create a bridge out of popsicle sticks. This activity promotes communication, collaboration and teamwork that are important skills for recovery. After the bridge is completed, each individual creates a clay representation of him or herself and places the figurine on the bridge indicating where they feel they are at on their journey to sobriety. Group work such as this promotes camaraderie, community, and vulnerability that will prove useful as members explore and identify their triggers as they progress towards a healthier lifestyle.

## Art as Therapy

Another form of this therapeutic model is “art as therapy”, used by Edith Kramer (1916-2014), a Hungarian artist and teacher who taught in New York in the 1940s. First and foremost considered the “mother” of art therapy, Kramer was a talented painter who used art therapy in schools when it was discovered that children were better able to express feelings and reduce aversive behaviors when provided art as a creative outlet.

When using art as therapy, it is less important how the finished product looks than what individuals learn about themselves in the process. The therapeutic value often lies in the individual working through the challenging moments when struggling with the art supplies or directives, and yet do persist during those times of duress. Gaining resilience through such perseverance is a valuable attribute for those who struggle with psychological and physical limitations. This skill can be used in other areas of life, such as engaging in physical therapy or learning a new skill. When someone can persist with a task, however challenging, this effort enhances self-esteem, empowers, and decreases feelings of depression and anxiety. This is not to say that the finished artwork does not have significant meaning for the individual who created it. There is great satisfaction and, psychodynamically speaking, expansion of the ego that results from the involvement in the art-making process itself (Kramer, 1971). Completing a drawing, painting, or collage and having it displayed can have a positive effect on an individual who has suffered loss of their previous functioning. It invokes a sense of pride and accomplishment, regardless of age or functioning level; this recognition in and of itself is therapeutic.

## The Effects of Art on the Brain

In addition to the positive effect art therapy has on the client’s emotional well-being and the management of mental health symptoms, there is evidence to support how the art-making process impacts the brain itself.

When the brain functions properly, the left and right hemispheres communicate and work together to integrate information. When someone suffers from a brain injury or stroke, the brain experiences trauma that affects functions depending on which part of the brain was injured.

- The *left hemisphere* is responsible for taking in, analyzing and processing information, organizing tasks and eliciting verbal communication.
- The *right hemisphere* is responsible for taking in visual and spatial information, identifying and recalling images and recognizing shapes and colors.

Art therapy targets both hemispheres to stimulate the motor cortex, the region of the cerebral cortex involved in planning, control and execution of voluntary movements  
<https://www.saebo.com/blog/art-therapy-after-stroke/>.

Studies show that processing speed, planning, attention and sequencing improve after an individual engages in art therapy (Reynolds, 2012). The art-making stimulates brain integration using creative processes, and it is believed that this stimulation activates neuroplasticity that is key in the brain's evolution; its structure; and its ability to rewire and repair itself, re-channel pathways, and restore functions damaged by a stroke  
[www.art4healing.org](http://www.art4healing.org).

## Art Therapy with "Jo"- Stroke Survivor - Case Study

Witnessing the affirming effects of art therapy on patients who have experienced debilitating neurological disorders is rewarding. Patients living with such disorders may only be able to return a certain level of activity at the endpoint of physical therapy. Art therapy is able to open doors to a creative modality the patient can continue to build upon.

An example of the progress someone can achieve is the work done by a woman with a neurological disorder. "Jo," is a 93-year-old woman who suffered a series of three strokes, the last one in April 2019. Jo suffered a cerebrovascular accident (stroke) that affected the right side of her body. Jo suffers from global aphasia, meaning that she has difficulty understanding and expressing words. She also suffers from apraxia, a neurological disorder that affects her ability to perform familiar tasks and movements on command even though she may understand commands and want to respond. Jo is not independently ambulatory. Aside from feeding herself, Jo needs assistance with activities of daily living. Jo was a physical education teacher until she retired in 1993. She was very social and an avid skier and athlete. Jo was self-sufficient and driving until 2018. Following her stroke, Jo received several months of physical therapy and had progressed as much physically as expected given the severity of her stroke.

Initially, a simplified art assessment was conducted with Jo to assess her level of functioning. The "house-tree-person" directive was conducted, having Jo draw one object at a time. This is a common directive used to assess how an individual perceives home (a sense of shelter/safety), in proportion to a tree (their environment) and person (themselves) in their world. In a more simplistic way, this directive served as a way to assess Jo's object relatedness. She made marks and appeared to really be concentrating to execute the task. Her house drawing resembled a structure (Figure 1), her tree drawing was not recognizable (Figure 2), and her person drawing had some components of a human (Figure 3). Simple



Figure 1

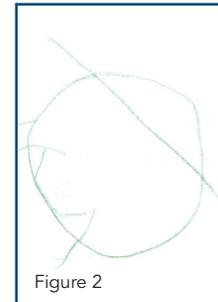


Figure 2

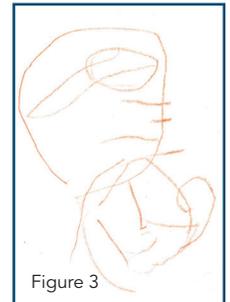


Figure 3

shapes were then drawn and Jo was asked to identify a colored object, for instance, to point to the red circle. She was able to identify about 50% correctly, though it is unclear if these were by guessing. This information informed the art therapist that Jo was not consistently able to recognize colors and shapes or produce an object from her memory. Jo's art therapist then drew a circle and had her draw one, she could do this about 60% of the time. Since Jo's stroke impacted her left hemisphere, she was relying on her right hemisphere to process information, therefore she was able to follow directions visually and spatially when a task was demonstrated. This was important information for the therapist to have.

Over the course of eighteen months, Jo progressed from shaky sketches of birds (see Figure 4) to drawing pastel landscapes from photographs with the help of her art therapist. A technique of the "third hand" was used to execute the composition and some of the shading. The third hand refers to the assistance provided by the art therapist to help clients with tasks they can't do independently. This assistance helps the creative process without being intrusive, distorting meaning or imposing the therapist's ideas or preferences onto the client (Kramer, 2000).

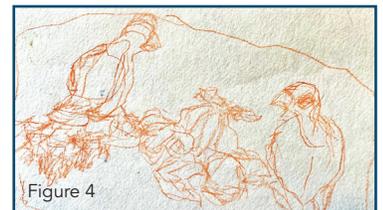


Figure 4

The use of visual images stimulates deeper levels of consciousness and releases creative active energy that help alleviate stress (Wilson, 2001). Jo's art therapist provided her with squishable hand-held toys for her to squeeze to help

strengthen her grip while she listened to her radio talk shows or watched TV. This proved to improve her dexterity and her ability to manage the drawing utensils when drawing. Although Jo was not able to speak, her art therapist paid close attention to her affect, smile, or grimaces and her eye contact to get a sense of how she was responding to art therapy. Initially, Jo made scoffing sounds when she was frustrated or displeased with her drawing. But at the end of the session, she smiled, indicating she was proud of her drawing.

## Client-Therapist Collaboration

A major component of effective art therapy is the strong and trusting relationship between the therapist and client. This conscious and active collaboration between client and therapist is distinguished by three main concepts: 1) the client-therapist bond or relationship, 2) agreements on goals, and 3) collaboration on tasks (Bordin, 1979). This bond is defined by mutual positive feelings based on reciprocated trust and acceptance (Ardito & Rabellino, 2011). Part of cultivating the unique and trusting relationship needed for this type of growth is providing supportive, encouraging and praising the on-going efforts to persist through challenges.

Jo's art therapist began working with her by attempting seascapes and landscapes with meadows and mountains. Landscapes are easier, unlike details of birds that can look amiss if the beak or wing is in the wrong place. Compositions from nature are open to the artist's interpretation and it is not as crucial to place a tree somewhere or omit some aspect of the composition. Jo's art therapist provided a few images to use as a stimulus and only a few reference lines for Jo to get started. Then the art therapist demonstrated how to hold the pastel stick on the side and show Jo how to move it back and forth to cover the sky, working the way down to the horizon line. The art therapist did the same throughout the drawing, pointing to an area in the photo telling her this was what we

were going to draw next. Then she helped Jo in picking colors that matched the landscape.

Jo's art therapy sessions continued to improve over the course of the months she engaged in art therapy, in her engagement and ability to use pastels and follow demonstrations. Due to COVID, safety restrictions curtailed Jo's art therapy for three months. When her art therapy resumed, the art therapist saw a decline in her comprehension and affect. Her daughter she lived with noticed this too. Her interaction decreased, her affect was not as bright and her skill level also declined.

When working with Jo and individuals with neurological disorders it is important to remember to speak slowly and give simple directions with demonstrations. Every session starts from the beginning as if it were the first. The ability of individuals with cognitive impairments fluctuates and their memory varies from week to week.

Now Jo has completed several pastel drawings of landscapes and scenes from nature and requires minimal help from the art therapist (Figures 5 & 6). She has good days and tired days depending on how she sleeps the night before, and the sessions are adapted accordingly. Jo's dining room walls are filled with her drawings that her daughter has displayed proudly. Jo and her art therapist have developed a strong rapport as indicated by her demeanor and her approval of her artwork. For Jo, this indicates growth. The hope for Jo is that art therapy continues to improve her cognitive and social functioning, enhance her life and provides her with an outlet to create, while the art therapist holds the creative and supportive space for her to make art. And when Jo sits at her dining room table and she looks around at her artwork on the wall she undoubtedly feels a sense of accomplishment, pride and purpose.

To locate an Art Therapist, go to: <https://arttherapy.org/art-therapist-locator/> or <https://www.psychologytoday.com/>



Figure 5



Figure 6

## REFERENCES

- Ardito, R.B., & Rabellino, D. (2011). Therapeutic alliance and outcome of psychotherapy; historical excursus measurements, and prospects for research, *Frontiers in Psychology*, 2, 1-11.
- Bordin, E. (1979). The generalizability of the psychoanalytic concept of the working alliance. *Psychotherapy; Theory, Research, & Practice*, 16, 252-260.
- Czamanski-Cohen, J., & Weihs, K. L. (2016). Research article: The body mind model: A platform for studying the mechanisms of change induced by art therapy. *The Arts in Psychotherapy*, 51, 63-71.
- Hass-Cohen, N., Clyde-Findlay, J., Carr, R., & Vanderlan, J. (2014). Check, change what you need to change and/or keep what you want: An art therapy neurobiological-based trauma protocol. *Art Therapy: Journal of American Art Therapy Association*, 31(2), 69-78.
- Kramer, E. (1971). *Art as therapy with Children*. New York: Schocken Books.
- Kramer, E. (2000). *Childhood and Art Therapy*. New York: Schocken Books.
- Lowenfeld, V. (1947). *Creative and Mental Growth*. New York: Macmillan.
- Mirabella, G. (2015). Is art therapy a reliable tool for rehabilitating people suffering from brain/ mental diseases? *The Journal of Alternative and Complementary*, 21(4).
- Reynolds, F., (2012). Art therapy after stroke: Evidence and need for further research. *The Arts in Psychotherapy*, 39(4), 239-244.
- Slayton, S. C., D'Archer, J., & Kaplan, F. (2010) Outcome studies on the efficacy of art therapy: A review of findings, *Art Therapy*, 27:3, 108-118.
- Steiner, J. (2001). *Seeing and being seen: Emerging from Psychic Retreat*. New York: Rutledge
- Wilson, L. (2001). Symbolism and art therapy. In J. A. Rubin (Ed.), *Approaches to Art Therapy; theory and technique* (2nd ed., pp. 40-53). Phildepoa: Bruner-Rutledge.
- Www.art4healing.org Special report on art and the brain. *Art & Creativity for Healing*. (Sept 9, 2017).
- <https://www.saebo.com/blog/art-therapy-after-stroke/> Hoffman, H. (2019) Art therapy after a stroke.



# SERVICE DOGS AND DISABILITIES: NURSE LIFE CARE PLANNING CONSIDERATIONS

Kirsten Turkington, DNP, APRN, FNP-C, CNLCP, AFN-BC

Tricia West, BSN, MBA/HCM, RN, CHN, PHN.

## Abstract

Service and emotional support animals are increasingly common in the United States. There is a distinction between service animals and emotional support animals that must be acknowledged and understood. Service animal roles, for dogs in particular, started with blind World War I veterans and continue to evolve with modern legislative changes. Health professionals and the general public lack knowledge and understanding of how service dogs provide essential services to disabled handlers. Service dogs are underrepresented in life care plans. This article defines the purpose, function and services provided by service dogs. This article also provides Nurse Life Care Planners with factual details to price a service animal in a plan.

## Service Dogs and Disabilities: Nurse Life Care Planning Considerations

Service dogs provide vital services to disabled individuals. The prevalence of increasingly expanded service roles requires additional understanding for professionals (Karetnick, 2019). Service dogs have important roles with life care plans. They can, and should, be included in circumstances where a service dog can make the disabled individual whole. Regardless of physical, emotional, or psychologic disability, a service dog is an "around the clock" working animal. They provide the companionship, support, and independence not otherwise available because of one's disability.

## History of Service Dogs

In the 1920s Morris Frank helped to establish the first seeing eye training center in New Jersey after reading

## NURSING DIAGNOSES TO CONSIDER NANDA-I 2018-2020

- Risk for falls
- Caregiver role strain
- Risk for injury
- Risk for physical trauma
- Impaired mobility
- Ineffective protection
- Risk for injury
- Readiness for Enhanced Self-Health Maintenance
- Impaired mood regulation
- Risk for unstable blood glucose level

**Keywords:** therapy, disability, ADA, blind, safety, medical service animal, disability service animal, independence, emotional support animal, companion animal, deliberate disobedience

about Dorothy Harrison Eustis, who trained police dogs in Switzerland during WWI to support veterans who lost their vision in the war (The Seeing Eye, Inc., 2015a), notably in gas attacks. Frank asked as a civilian, intending to make the world more accessible to blind individuals. Eustis agreed and the American service dog industry began. Frank became the first American benefitting from a service dog.

Frank returned to the United States with his newly trained dog, Buddy, a German shepherd trained to be Frank's eyes (Karetnick, 2019). Together, Buddy and Frank successfully navigated public life. According to Frank, "Buddy delivered the divine gift of freedom." Although Frank died in 1980, his legacy continues as the Seeing Eye Dog, a fully accredited member of the International Guide Dog Federation (2015b).

## Disability Legislation

Service dogs provide many essential services for disabilities recognized under federal law. However, there is a significant legal distinction specific to the United States between service dogs and emotional support animals. The legislation discussed here has undergone several important revisions over the past 40 years.

### Rehabilitation Act of 1973

American disability legislation took a long time to develop. United States disability civil rights originated with the Rehabilitation Act of 1973 (Disability Rights Education & Defense Fund, 2020). Passage of the Rehabilitation Act prohibited discrimination of disabled individuals at work or school. It insured disabled individuals were included and treated equally and provided a framework for the ADA to develop. Passage of the act was major milestone in American disability rights. This legislation also formalized Department of Justice (DOJ) responsibility for service animal oversight. Like most legislation, the initial act was subsequently modified into the Americans with Disabilities Act of 1990.

### Americans with Disabilities Act of 1990

The ADA enacted in 1990 prohibits discrimination in all areas of public life, allowing equal opportunity to access public spaces, work, schools and government services. The Act is made up of five titles, or sections, addressing areas impacting public life. Dogs were recognized as service animals on March 15, 2011 under the ADA (U.S. Department of Justice, 2019).

The ADA was amended in 2008 to include significant changes. Among others, it expanded the disability definition to "a physical or mental impairment that substantially limits

a major life activity" (Cornell Law School Legal Information Institute, n.d.; U.S. Equal Employment Opportunity Commission, 1992).

Titles II and III of the ADA directly relate to service animals because these titles cover public access and accommodations for disabled individuals to fully participate without limitation. They apply primarily to state and local government administration and define expected standards (U.S. Department of Justice, 2020).

Additionally, the ADA protects individuals with a history of such a disability, or if an employer believes that you have such a disability, even if you do not. Meaning, if your employer believes you have a disability, but you do not disclose or acknowledge it, disabled individuals are still covered under the ADA. These are important distinctions when considering whether an individual requiring a life care plan is a service dog candidate.

Title III defines the minimum standards required for public accommodations (National Network Information Guidance and Training on the Americans with Disabilities Act, 2020). It addresses public accommodations and relates to hotels, entertainment venues, schools, and sporting events. It provides the necessary framework for businesses to reasonably modify to serve people with disabilities. Businesses are obligated to provide disabled individuals access to the facilities with limited acknowledgements (United States Department of Justice, 2020).

Service animals, because of their roles and legislation, now have full access to public areas. This access begins early in the training and continues throughout the service dog's working life.

### Working, Service, or Support Animal?

There is a distinction between service animals for disabilities and other working dogs in the community. This section focuses primarily on medical and psychological disability service animals, rather than other working canine roles such as law enforcement or contraband detection. Additional canine working roles is outside the scope of this article.

Although other animals are used for service such as miniature horses, dogs are by far the most common support animals found in the United States. They are classified as either emotional support animals or service dogs.

Service dogs are useful in many conditions and circumstances to support structural and functional disability. The primary consideration is that a service dog must be specifically trained for this task and this task must be directly related to the handler's disability. These include a variety

of physical, mental and functional impairments resulting in disability.

A specific disability must impact either a major life activity or bodily function (Table 1). A list of federally recognized major life activities (Table 2) and limitations of major bodily functions (Table 3) is not all inclusive.

They are provided as guidelines under federal law (Cornell Law, n.d.) and each individual is reviewed on a case by case basis regarding specific impairment.

Service dogs assist as seeing eye dogs for blind individuals and hearing-impaired dogs for those that are deaf. They assist individuals that have physical impairments with mobility. They also provide balance stabilization with stroke patients. Some service dogs aid individuals with varying

**Table 3**

*Major Bodily Functions*

- Functions of the immune system
- Normal cell growth
- Digestive
- Bowel
- Bladder
- Neurological
- Brain
- Respiratory
- Circulatory
- Endocrine
- Reproductive

**Table 1.**

*Definition of Disability* (1) Disability: The term "disability" means, with respect to an individual:

- (A) A physical or mental impairment that substantially limits one or more major life activities of such individual
- (B) A record of such an impairment
- (C) Being regarded as having an impairment

medical conditions in a variety of clinical roles. Their professional service roles are limited only by the extent of a specific disability and the level of required training.

**Medical Roles**

Medical service animals are defined by the specific task or role they are trained for (Reisen, 2019). This role or task must directly relate to the person's disability and the dog's role is legally protected. For example, a seeing eye dog will physically guide a visually impaired individual in daily activities as well as bring supplies. A service dog trained to work for a paraplegic may retrieve necessary items, turn on lights upon entering a room, and bring items on request.

Service dogs are frequently trained to detect changes in biochemistry using their keen sense of smell. This is common

**Table 2**

*Major Life Activities*

- Caring for oneself
- Sleeping
- Performing manual tasks
- Walking
- Seeing
- Standing
- Hearing
- Lifting
- Eating
- Bending
- Communicating
- Working

with diabetic and seizure alert dogs (Diabetic Alert Dogs of America, n.d.; Kiriakopoulos, 2017). These dogs are trained to notify either the handler or bystander of minute changes in biochemistry. These changes may indicate an impending seizure, thereby alerting the person to be in a safe place or activate 911 (Epilepsy Foundation, n.d.).

Service dogs are also used with diabetic patients (Diabetic Alert Dogs of America, n.d.; Taylor, 2018). These dogs are trained to identify changes in blood sugar based on acute olfactory changes associated with varying blood sugar levels or ketosis by using their partner's scent (Canine Partners for Life, 2020).

**Seeing Eye Dogs**

These are among the most common service animals. This is what people think of when they hear of a working guide dog and is the most highly trained. This guide dog in particular must also learn what is known as deliberate disobedience. For example, if the human partner in this team gives a command for the dog to cross a street and the dog can see there is an electric car which the blind person could not hear, the dog will disobey and block their person from danger. The same is true of a low hanging tree branch or pothole in the street. They will be guided around it, not necessarily the direct route the person had requested.

**Service Dogs for Psychological Conditions**

Service dogs also provide service with psychological conditions such as post-traumatic stress disorder (PTSD), post-traumatic syndrome, anxiety, and autism that often coexist with medical issues. PTSD service dogs are trained in specific tasks such as creating a physical barrier in triggering situations or using pressure points to alleviate stress (Palmetto Animal Assisted Life Services, 2020). The same actions are used with anxiety and autism clients.

**What about Emotional Support Animals?**

Emotional support animals and service dogs are very different. Remember, a service dog is specifically trained

to provide an essential service to a human handler. A service dog takes specific action related to the disability. An emotional support animal, however, is classified as a companion animal according to the ADA and not afforded the same protections.

The Fair Housing Act (FHA) is specific to housing requirements and not public access (unlike the ADA). This act requires landlords to make reasonable accommodations to tenants with emotional support animals. The FHA is overseen by the Department of Housing and Urban Development (HUD).

The Air Carrier Access Act (ACAA) permits emotional support animals to travel with their eligible handlers inside airplane cabins. Otherwise, companion animals fly as cargo. Airlines may not charge for ESAs, unlike pets, which frequently have significant fees. The ACAA is overseen by the U.S. Department of Transportation. Note that regulations may change, so travelers should check before they travel to be sure an animal is allowed in a cabin.

Readers are encouraged to research evidence-based resources for appropriate guidance regarding emotional support animal qualifications if a specific client is not a candidate for a service dog. There are many reliable online resources available.

## Service Dog Selection

Service dogs vary in breeds, size and individual capacity for supporting disabled individuals. The most desired dog qualities include intelligence, desire to please, loyalty, dependability, stability, and trainability. Purebred dogs are most often used because of predictable health, genetics, and bloodlines, but some purebreds have inherent weaknesses that hybrids may not.

Most service dogs are larger pure breeds such as Labrador retrievers, golden retrievers, German shepherds and standard poodles (Zenithson & Aubrey, 2019). However, smaller breeds may better fit an individual's needs and styles. Smaller dog candidates include Welsh corgis, chihuahuas and pomeranians. Some support organizations use cross-breeds such as labradoodles (a cross between a Labrador retriever and a poodle) but the animal temperament and health history is less predictable.

Service purpose and trainability are primary considerations. Larger dog breeds better serve an individual requiring mobility support. Likewise, a veteran with PTSD residing in a small apartment may do fine with an appropriate smaller dog.

## Professional Service Dog Organizations

Most nonprofit professional organizations have their own breeding programs. Once the puppies are ready to be

weaned, they go to puppy raisers. These are volunteer homes that foster and socialize the dogs until they are about 18 months old. The foster families and professional trainers also address temperament (Sayers Animal Hospital, 2020). Many organizations allow facility tours. Some also offer to connect a potential service animal candidate with former service dog clients. This offers perspective on the evaluation, training process, and overall experience to convert "disability" into "ability."

## Training



In the foster homes, puppies are housebroken, socialized, and learn basic obedience training by the host family under the supervision and training of the organization's professional trainers, who also evaluate the puppies for specific traits.

The puppy raiser is committed to put the dogs in as many situations as they can over the 18 months for the dog to become accustomed to a wide variety of circumstances. Loud noises, kids, skateboards, traffic, bikes, crowds, music, and other house pets, etc. are all distractions the dogs need to be trained ignore or not to fear.

The puppy raisers are the initial phase in professional training. They take the puppy with them everywhere in the community. This includes to work, grocery stores, restaurants, airplanes, ships, and hotels. Anywhere their puppy raiser can go, the dog, wearing a vest, can go with them. In this way the dogs begin to be taught proper service/guide dog behavior from just a few months old. And they learn from that same age when they are wearing their vest (it is a little cape for the young puppies), they are "working" and behavior expectations are different then when they are "off duty."

Organizational service dogs also go through extensive medical evaluations. These evaluations screen for physical health for an average of eight years of service (Zenithson & Aubrey, 2019).

## How To Acquire A Service Dog

Service dogs can be acquired privately or through a service dog organization. Most service dog organizations are nonprofits, funded by donations from individuals, businesses, and civic groups. The organizations use volunteers to puppy raise and support dogs early in their careers.

Privately obtained service dogs are possible, but not recommended. This route selects dogs from breeders, rescues and other modalities for individual training. The process is less formalized and highly unpredictable due to both the animal and trainer experience with specific conditions. The genetics, temperament and overall training is

variable and less likely to result in the desired end goal of a service animal. A dog from a nonprofessional training route is not recommended for life care planning purposes.

## Service Dog Initial Costs



Most dogs obtained through a professional service organization are free to the disabled individual but they are not always available. Nurse life care planners will need to research appropriate organizations such as Canine Companions for Independence (2020), Guide Dogs of the Desert (2019), or Guiding Eyes for the Blind (2020).

Ascertain how long the wait is for a service dog. More often than not, expect more than a two-year waiting list, which may not be appropriate for the disabled client.

When there is a significant delay for service dog placement, it is important to include a cost for the purchase and professional training of a service dog. This can also be made as a contingent cost after research for appropriate organizations for a client and understanding the wait time. Also account for service dog replacement.

Practically speaking, professional organizations are the gold standard for cost estimates. Professional groups estimate the initial service dog breeding, raising, and training is approximately \$40,000-\$50,000. These initial costs are almost always funded by donations when obtained through professional organizations. Disabled individuals are not charged for assistance dogs, but these general costs must be planned. Additionally, remember that service dogs require ongoing veterinary expenses and supplies.

## Ongoing Veterinary Expenses

Veterinary expenses are for regular ongoing and episodic care, similar to that of humans. The American Animal Hospital Association (AAHA) and American Veterinary Medical Association (AVMA) are leading sources for canine care recommendations.

According to both the AAHA and AVMA, dogs require yearly veterinary health visits, which includes subjective and objective health evaluations, routine annual veterinary visits and episodic consultations for urgent or emergent conditions, wellness checks, and vaccines (2017). Costs are regional and can be obtained by local research.

A routine canine diagnostic plan includes health screenings, lab testing for heartworm and parasites and customization for specific regional conditions. For example, Valley Fever (Coccidiomycosis) is a fungal infection endemic to the Southwestern states (Taboada, 2018). Lyme's disease (Lyme

borreliosis), however, is more prevalent in the Northeast, upper Midwest and Pacific coast (Straubinger, 2018).

Ultimately, vaccines, medications and labwork are at the discretion of the consulting veterinarian. Veterinarians can direct a specific vaccination schedule, vitamins, and joint supplements that a service dog requires.

## Vaccines

Rabies is the only legally required companion animal vaccine in the United States (American Veterinary Medical Association, 2016; American Animal Hospital Association, 2020). However, check the individual's state requirements (information at Boehringer Ingelheim, n.d.).

Rabies vaccine may be administered on either annually or every three years. Other vaccinations are highly recommended for general health and well-being of service animals. The American Animal Hospital Association (2011) publishes evidence based authoritative guidelines for core and noncore canine vaccinations. The specific canine vaccination recommended guidelines PDF can be found here: [https://www.aaha.org/globalassets/02-guidelines/canine-vaccination/vaccination\\_recommendation\\_for\\_general\\_practice\\_table.pdf](https://www.aaha.org/globalassets/02-guidelines/canine-vaccination/vaccination_recommendation_for_general_practice_table.pdf)

While authoritative in nature, the veterinary guidelines are not considered a universal protocol (Ford, Larson, Schultz and Welborn, 2017). Care planners are encouraged to consult with a specific veterinarian for specific guidance, other recommendations, and costs

## Ongoing Costs

These include licensure, food, equipment (leashes, harness, collars, booties and cold-weather gear, life vest, bowls, toys, crates), episodic veterinary expenses, regular service dog replacement costs and grooming fees.

Grooming is typically done about every two weeks depending upon where the dog is taken for services. Grooming costs (in California) typically run about \$2,400 a year and are tax deductible. In Arizona, grooming costs are highly variable and depend on the size of the dog and the zip code for services.

## Coding

Service dogs themselves and service dogs related supplies are not formally identified in current coding schedules. Diagnosis-specific coding starts with the specific medical or psychiatric disability. For example, blindness is H54 (Blindness and low vision). See the non-inclusive list of HCPCS codes, service dog-related supplies and replacement timelines in Table 4.

**Table 4: Service Dog and Related Supplies Replacement Schedule**

| Item  | HCPCS <sup>1</sup> Code | Definition   | Replacement Frequency <sup>2</sup>          |
|---|-------------------------|--|---|
| Service Animal: A service dog is a medical necessity. The specific purpose or skill the animal will provide to the handler. Qualifications can properly direct whether the service animal is a mobility support device, safety device or tool for medical or behavioral management. | E1399                   | Durable Medical Equipment, miscellaneous   | Once every 8 years.                         |
|   | A9999                   | Miscellaneous DME supply or accessory, not otherwise specified                       |   |
| Licensure   | A9900                   | Miscellaneous DME supply, accessory, and/or service component of another HCPCS code. | Once every year.                            |
| Collar  | A9900                   | Miscellaneous DME supply, accessory, and/or service component of another HCPCS code. | Once every two years.                       |
| Leash   | A9900                   | Miscellaneous DME supply, accessory, and/or service component of another HCPCS code. | Once every two years.                       |
| Tags  | A9900                   | Miscellaneous DME supply, accessory, and/or service component of another HCPCS code. | Once every year.                            |
| Preventive Veterinary Visits  | A9900                   | Miscellaneous DME supply, accessory, and/or service component of another HCPCS code. | Once every year.                            |
| Canine Labwork  | A9900                   | Miscellaneous DME supply, accessory, and/or service component of another HCPCS code. | Once every year.                            |
| Rabies Vaccination  | A9900                   | Miscellaneous DME supply, accessory, and/or service component of another HCPCS code. | Once every one to three years. <sup>3</sup> |
| Crate   | A9900                   | Miscellaneous DME supply, accessory, and/or service component of another HCPCS code. | One every 5 years.                          |
| Bowls   | A9900                   | Miscellaneous DME supply, accessory, and/or service component of another HCPCS code. | Two every 5 years.                          |
| Monthly Parasite Preventative   | A9900                   | Miscellaneous DME supply, accessory, and/or service component of another HCPCS code. | 12 every year.                              |
| Heartworm Preventative <sup>4</sup>   | A9900                   | Miscellaneous DME supply, accessory, and/or service component of another HCPCS code. | 12 every year.                              |
| Dog Food <sup>5</sup>   | A9900                   | Miscellaneous DME supply, accessory, and/or service component of another HCPCS code. | Variable.                                   |
| Nutritional Supplements <sup>6</sup>  | A9900                   | Miscellaneous DME supply, accessory, and/or service component of another HCPCS code. | Variable.                                   |
| Grooming  | A9900                   | Miscellaneous DME supply, accessory, and/or service component of another HCPCS code. | 24 every year.                              |

1. Health Care Common Procedure System. 2. Beginning at age 18. 3. Frequency is dependent on Veterinarian and manufacturer. 4. Most medications are monthly, however, recent advancements are administered once time every three months. For life care planning purposes, monthly administration is included. 5. Customized to canine size and source as recommended by local veterinarian that will care for the service animal. 6. Customized to canine as recommended by local veterinarian that will care for the service animal.

## Conclusion

Service dogs may be an uncommon consideration for most life care plans. Sometimes this is due to the life care planner. Other times it is because of client resistance. It is common for disabled persons to initially resist a service dog. This is especially if they have not previously owned dogs.

It is important to understand the service dog role. This basic understanding helps the medical team, family, and disabled person see the value of service dogs. Service dogs are trained to provide a service related to a disability. This improves quality of life by supporting disability related deficits.

Service dogs offer positive change for life-altering conditions. Service dogs are working partners to address

independence and function. Service dogs are non-vocal patient advocates for their handler's unique conditions and circumstances. The service dog allows the person greater autonomy for activities of daily living due to the many tasks the dog can perform.

There is a clear service dog role for many disabled individuals. Assess for client-specific needs, major life activities, and major bodily functions in order to determine a service animal's role in a specific plan. Once candidacy is identified, investigate including a service dog in appropriate client's life care plans. Service dogs offer vital services to a wide variety of conditions and afford an unrecognized lifeline to many disabled individuals.

## REFERENCES

- American Animal Hospital Association – American Medical Veterinary Association. (2011). AAHA—AVMA Canine preventive healthcare guidelines. [https://www.aaha.org/globalassets/02-guidelines/preventive-healthcare/caninepreventiveguidelines\\_ppph.pdf](https://www.aaha.org/globalassets/02-guidelines/preventive-healthcare/caninepreventiveguidelines_ppph.pdf)
- American Animal Hospital Association. (2020). *Rabies vaccination*. <https://www.aaha.org/aaha-guidelines/vaccination-canine-configuration/rabies-vaccination/>
- American Kennel Club. (2020). *For the love of all things dog*. <https://www.akc.org/>
- American Veterinary Medical Association. (2016, March 1). Compendium of animal rabies prevention and control, 2016. *Journal of the American Veterinary Medical Association*, 248(5), 505-517. <https://doi.org/10.2460/javma.248.5.505>
- Boehringer Ingelheim. (n.d.). *Rabies information by state*. <http://www.rabiesaware.org/>
- Canine Companions for Independence. (2020). *Learn more*. <https://www.cci.org/>
- Canine Partners for Life. (2020). *Diabetes alert dogs: Service dogs for those with diabetes*. <https://k94life.org/diabetes-alert/#:~:text=CPL%20diabetes%20alert%20dogs%20are,accompany%20different%20blood%20sugar%20levels>.
- Centers for Medicare & Medicaid Services. (n.d.). *2020 Alphanumeric HCPCS file*. <https://www.cms.gov/Medicare/Coding/HCPCSReleaseCodeSets/Alpha-Numeric-HCPCS-Items/2020-Alpha-Numeric-HCPCS-File>
- Cornell Law School Legal Information Institute. (n.d.). 42 U.S. Code § 12102. *Definition of disability*. <https://www.law.cornell.edu/uscode/text/42/12102>
- Diabetic Alert Dogs of America (n.d.). <https://www.diabeticalertdogsofamerica.com/>
- Disability Rights & Education Defense Fund. (2020). *Section 504 of the Rehabilitation Act of 1973*. <https://dredf.org/legal-advocacy/laws/section-504-of-the-rehabilitation-act-of-1973/#:~:text=Section%20504%20of%20the%201973,the%20Americans%20with%20Disabilities%20Act>
- Ford, R.B., Larson, L.J., Schults, R.D., & Welborn, L.V. (2017, October). *2017 AAHA Canine Vaccination Guidelines*. <https://www.aaha.org/globalassets/02-guidelines/canine-vaccination/vaccination-recommendation-for-general-practice-table.pdf>
- Gibeault, S. (2019, October 3). *Everything you need to know about emotional support animals*. <https://www.akc.org/expert-advice/news/everything-about-emotional-support-animals/>
- Guiding Eyes for the Blind. (2020). *FAQs*.

## REFERENCES

- Hayner, L.M. (2019, February 12). *Let's meet some of the best service breeds*. <https://www.dogster.com/lifestyle/best-service-dog-breeds>
- Karetnick, J. (2019, September 24). *Service dogs 101 – Everything you need to know*. American Kennel Club. <https://www.akc.org/expert-advice/training/service-dog-training-101/#:~:text=A%20service%20dog%20is%20a,%2C%20Labs%2C%20and%20Golden%20Retrievers>
- Kiriakopoulos E. (2019). *Seizure dogs*. <https://www.epilepsy.com/living-epilepsy/seizure-first-aid-and-safety/seizure-dogs>
- Maricopa County. (n.d.). *Licensing your dog*. <https://www.maricopa.gov/226/Dog-License>
- National Network Information, Guidance, and Training on the Americans with Disabilities Act. (2020, October). *What is the Americans with disabilities act (ADA)?* <https://adata.org/learn-about-ada>
- Palmetto Animal Assisted Life Services (PAALS). (2020). *Our services*. <https://paals.org/services/>
- Sayers Animal Hospital. (2020, March 19). *Becoming a service dog: Training and temperament are key factors*. <https://www.sayersanimalhospital.net/customer-resources/becoming-a-service-dog-training-and-temperament-are-key-factors/>
- Straubinger, R.K. (2018, June). *Lyme disease (Lyme borreliosis) in dogs*. Merck Veterinary Manual. <https://www.merckvetmanual.com/dog-owners/disorders-affecting-multiple-body-systems-of-dogs/lyme-disease-lyme-borreliosis-in-dogs>
- Taboada, J. (2018, March). *Coccidiomycosis*. Merck Veterinary Manual. <https://www.merckvetmanual.com/generalized-conditions/fungal-infections/coccidioidomycosis>
- Taylor, M.T. (2018, August 12). *Trained dogs can detect C. difficile in stool*. <https://www.healio.com/news/infectious-disease/20180809/trained-dogs-can-detect-c-difficile-in-stool#:~:text=Piper%2C%20a%203%2Dyear%2D,dog%20trained%20for%20CDI%20detection.&text=The%20diagnostic%20accuracy%20of%20the,which%20were%20positive%20for%20C>.
- The Seeing Eye, Inc. (2015a). *History*. <https://www.seeingeye.org/about-us/history.html>
- \_\_\_\_\_. (2015b). *Accreditation*. <https://www.seeingeye.org/about-us/accreditation.html>
- U.S. Department of Justice, Civil Rights Division. (2020, February 24). *Service animals*. [https://www.ada.gov/service\\_animals\\_2010.htm](https://www.ada.gov/service_animals_2010.htm)
- U.S. Equal Employment Opportunity Commission. (1992, January 1). *Your employment rights as an individual with a disability*. <https://www.eeoc.gov/laws/guidance/your-employment-rights-individual-disability#:~:text=Under%20the%20ADA%20%2C%20you%20have,even%20if%20you%20don't>.
- Ng, Z., & Fine, A. (2019). *Paving the path toward retirement for assistance animals: Transitioning lives*. *Frontiers in Veterinary Science*, 6, 39. <https://doi.org/10.3389/fvets.2019.00039>





# 2021 VIRTUAL CONFERENCE

## May 21-23, 2021

For our **2021 VIRTUAL Conference**, AANLCP is asking its members to help recruit conference sponsors and vendors. If you have a sponsor or vendor you would like to see at our 2021 conference, and they have no prior affiliation with AANLCP, we are offering a discount toward your conference registration. Go to the AANLCP website

<https://www.aanlcp.org/corporate-partnership/>

and fill out the Partnership Referral Form. Next, have your potential sponsor or vendor go to

<https://www.aanlcp.org/corporate-partnership/>

and register. Whenever they are filling out the sponsor/vendor form, they must include your name on the referral form.

For each new sponsor/vendor you recruit, you will receive 10% of their sponsorship level (Platinum sponsorship \$3500, you will receive \$350 once they have registered and paid in full) toward your general conference session registration.

You will accumulate up to the cost of the general conference registration. Your credit will be used toward your 2021 conference registration. There will be no refunds, and you will not be able to carry over the referral credit.

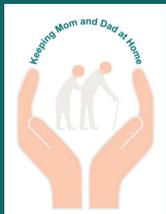


### Making Life Easier for Care Managers and Life Care Planners

- ✚ HIPAA compliant client centric data base with document storage
- ✚ Electronic health record with mobile application for work on the go
- ✚ Standardized forms for intake, assessment and resources tracking
- ✚ Remote patient monitoring
- ✚ Track time, mileage and expenses
- ✚ Integrated accounting software
- ✚ Billing and Bookkeeping services

**Empowering** our allies with the **Solutions** and **Technology** to do what you do best...**CARE**

Contact Us to Find Out More  
812-590-2855



## Keeping Mom and Dad at Home

Get online quotes for a large variety of your equipment needs at [www.KeepingMomAndDadAtHome.com](http://www.KeepingMomAndDadAtHome.com). For specific questions about installation and home re-modification requirements, please ask us at [info.kmdah.com](mailto:info.kmdah.com).





# LONG-TERM ADULT AND PEDIATRIC CARE



## Family-Centered, Continuous Care

A collaborative and coordinated approach for your loved one's care.

### Contact Team Select

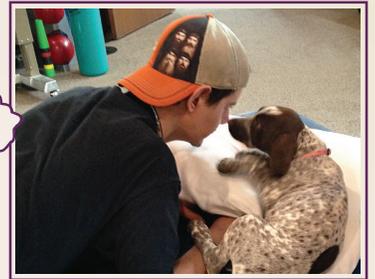
Phone: (949) 707-5023

Fax: (949) 707-5301

[www.tshc.com](http://www.tshc.com)

*Serving the Laguna Hills, San Diego, Diamond Bar and Los Angeles areas.*

*Located in the historical town of Milford, PA.*



# Progressive Health

## *Brain Injury Specialists*

PROVIDING OUTPATIENT, DAY PROGRAMS, AND COMFORTABLE SUPPORTED RESIDENTIAL PROGRAMS SINCE 1994.



(570) 296-5156 | [progressivehealthofpa.com](http://progressivehealthofpa.com)



# FIND-A-CODE®

## subscription features

### Create A Life Care Planner Package to Fit your Needs

| Facility Base plus                     | LCP Expert       | LCP Elite        |
|--|------------------|------------------|
| <b>OUTPATIENT REIMBURSEMENT TOOLS</b>  |                  |                  |
| Pro Fee Calculator                     | ✓                | ✓                |
| APC Packages                           | ✓                | ✓                |
| Medicare LCDs/NCDs, MIPS & more        | ✓                | ✓                |
| CPT® Common Language Descriptions      | ✓                | ✓                |
| ICD-10-CM Common Language Descriptions | ✓                | ✓                |
| CPT® & HCPCS                           | ✓                | ✓                |
| NCCI Edits Validators™ Tool            | ✓                | ✓                |
| UCR and Workers Comp Fees              | ✓                | ✓                |
| ASA Crosswalks                         | ✓                | ✓                |
| Lab Test                               | ✓                | ✓                |
| Commercial Payer Policy                |                  | ✓                |
| WK Drug Database                       |                  | ✓                |
| Medical Lab Test with CLD Ranks        |                  | ✓                |
| Inpatient Reimbursement Tools          | Available add-on | Available add-on |
| ASC (Surgical) Reimbursement Tools     | Available add-on | Available add-on |
|  | \$109/mo         | \$139/mo         |



"Switching to FindAcode.com not only saved us money, it turned out to be something our entire staff loved!" -OhioHealth

Need help customizing? Email us at [alan.crop@findacode.com](mailto:alan.crop@findacode.com) or call us at 801.679.4728

## RESIDENTIAL ASSISTED LIVING ACADEMY

is here to teach medical professionals to use their skills to create positive change in, and build a future for themselves through focused senior care, thereby creating a legacy both for their community and family.

**There is a coming Silver Tsunami of Baby Boomers who will need your help. Use our proven system to get on board today!**

**RALACADEMY.COM**  
**(480) 704-3065**

*Residential Assisted Living improves senior living by improving the caregiver to senior ratio, and giving them quality, focused care in the environment they desire.*

**Gene Guarino**  
RAL ACADEMY  
FOUNDER/CEO





# LOOKING AHEAD

## 2021

- May                    The Business of NLCP
- August              Ages and Stages in Life Care Planning
- November          Expert Witnessing and Testimony

## 2022

- February            NLCP and Criminal Justice
- May                    Pediatric considerations
- Aug                    New Issues in Pain Management
- Nov                    Wound Management

*Coming!*  
*Fall 2021*

*Core Curriculum  
for Nurse Life Care  
Planning  
2<sup>nd</sup> edition*

 Comprehensive

 Trusted

 Affordable



# LookUp

All the information you need, when you need it.

Efficiently and confidently access accurate and reliable fee schedule, Medicare, and reasonable rates.

**Instantly**  
Search Medical  
Reimbursement Values.

*Want to Learn More?*

Visit  
[Medatalookup.com](http://Medatalookup.com)

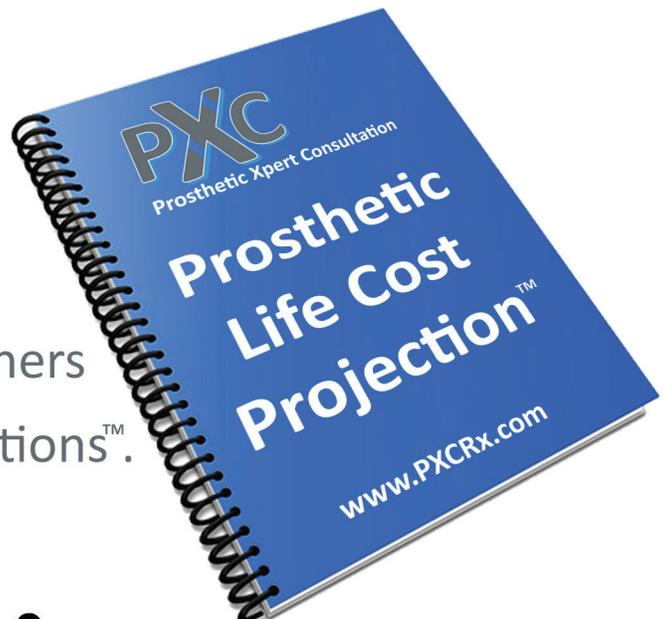
# medata

The premier provider of end-to-end solutions for cost management in the workers' compensation and auto liability industries



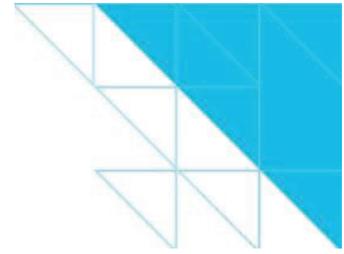
Prosthetic Xpert Consultation

Supporting Certified Life Care Planners  
with Prosthetic Life Cost Projections™.



Dale Berry, CP, FAAOP, LP  
[www.PXCRx.com](http://www.PXCRx.com)  
612-810-1100





pioneering  
new  
possibilities

# ansolutions

**ANS currently offers four unique solutions, including a pharmacy intervention program—which has played a significant role in reducing opioid usage in injured workers—as well as Medicare Set-Aside, medical cost projection, and nurse expert services.**

**For 15 years, ANS has worked tirelessly to build powerful partnerships within the workers' compensation, medical provider, and legal communities. The Clinical Nurse Consultants on our team offer a personalized approach, giving each and every case the time, attention, and respect it deserves—and ends with giving patients, adjusters, and physicians results they feel good about.**

**ANS is proud to partner with AANLCP and has been a supporting member for more than 16 years.**

pioneering  
new  
possibilities

© Copyright 2020 ANS Solutions, LLC, All Rights Reserved

Phone: 908-315-7500 | Fax: 908-822-0422 | Email: [info@ans-solutions.com](mailto:info@ans-solutions.com)

ANS Solutions | 92 East Main St. Suite 307 Somerville, NJ 08876

# AANLCP® Index of Past Issues

## 2012

- XII.1 Coding and Costing
- XII.2 Electrical Stimulation Technology
- XII.3 Preconference / Brain Injury
- XII.4 Veterans Administration

## 2013

- XIII.1 LCP for Motor and Developmental Disorders
- XIII.2 Ethical Topics in LCP
- XIII.3 Preconference / Exemplars in NLCP
- XIII.4 Home Modifications

## 2014

- XIV.1 Technology Updates
- XIV.2 LCP Across All Ages
- XIV.3 Psych topics in LCP
- XIV.4 LCP and the ACA

## 2015

- XV.1 Topics in Translation
- XV.2 Updates in Spinal Cord Injury
- XV.3 Burns
- XV.4 Perinatal / Childhood

## 2016

- XVI.1 Pain
- XVI.2 GI Issues
- XVI.3 International LCP
- XVI.4 Home Care

## 2017

- XVII.1 Brain Injury
- XVII.2 The Business of Life Care Planning
- XVII.3 Back and Spine
- XVII.4 Mobility and Extemity Function

## 2018

- XVIII.1 Costing and Coding

## 2019

- XIX.1 Presidents Issue
- XIX.2 Licensure | Qualifications | Certifications
- XIX.3 New Directions in Pain Management
- XIX.4 Technology Updates

## 2020

- XX.1 Spinal Cord Injury Updates
- XX.2 Advances in Amputation
- XX.3 Evidence Based Practice
- XX.4 Durable Medical Equipment and NLCP

