Due to rapid advances in the medical field, effective holistic forms of patient care are often precluded from best practice consideration. Without evidence-based data on these nontraditional interventions, resources are likely to focus more on costly equipment, complicated surgeries, and increasingly heavy use of medication. Successful programs such as animal-assisted therapy remain unknown to the medical community at large and, consequently, underutilized, despite their demonstrated efficacy in the rehabilitative milieu. This paper highlights canine programs currently used by the US Army that use trained animals and handlers to achieve specific physical, cognitive, and psychosocial goals.

Animals are a significant part of American culture and share a symbiotic relationship throughout the history of humans worldwide. In November 2005, the American Heart Association released the results of a study showing that 12-minute visits with therapy dogs improved heart and lung function, reduced blood pressure, diminished harmful hormones, and decreased anxiety in heart patients.¹ Despite limited therapeutic evidence in both the civilian and military sectors, it is reasonable to surmise that the benefits of animal involvement in rehabilitative settings can be extremely helpful for patient and provider alike.

The Walter Reed National Military Medical Center (WRNMMC) is one such facility that is an emerging leader in implementing various human-animal bond programs. As the military’s first combined service medical center facility, WRNMMC currently provides support to over 500 Wounded Warriors and their Family members living in on- or off-campus facilities. Enhancing healthcare needs throughout their rehabilitation was the impetus for implementation of the following human-animal bond programs.

**SERVICE DOG PROGRAM**

The Service Dog Program works with civilian organizations accredited under Assistance Dogs International (ADI) (Santa Rosa, California). Currently, recipients of these dogs are limited to Wounded Warriors with physical disabilities. However, research is underway into extending eligibility to include Wounded Warriors diagnosed with posttraumatic stress disorder through studies, guidance, and education. Participation in the Service Dog Program starts with a physician, therapist, or the Warrior Transition Brigade. Eligible service members are educated on the available ADI accredited nonprofit organizations (NPO) that have a 501(c) tax exemption. The WRNMMC has verbal agreements with participating NPOs that have excellent reputations and strong follow-up records of their clients. Wounded Warriors cannot accept service dogs from an NPO until they reach outpatient status or are living off-campus. This requirement stems from policies aimed at protecting patients’ health and welfare as well as their respective service dog. Once a patient selects an organization, he or she fills out a referral application and submits it to the selected agency. The chosen agency makes a qualification determination and contacts the patient to coordinate matching with a service dog that will meet their needs.

**CANINES FOR COMBAT VETERANS**

Canines for Combat Veterans (CCV) was founded to specifically address the unique assistance needs of combat Veterans and is one of several leading NPOs that provide service dogs to Wounded Warriors. Under the auspices of the National Education for Assistance Dog Services (NEADS, also known as Dogs for Deaf and Disabled Americans), CCV donates service dogs to Wounded Warriors from all foreign wars, past and present. Additionally, they provide a 2-week training course for the Veteran and a primary care assistant. This program includes lodging, meals, and round trip transportation to their Princeton, Massachusetts training facility. Customized training of the dog is completed based on the user’s needs prior to receipt of the dog. NEADS provides ongoing monthly follow-ups with the Veteran to ensure that the dog is meeting the Veteran’s needs.*

Prior to its recent consolidation with the Navy National Medical Center, the Walter Reed Army Medical Center (hereinafter called Walter Reed) was the only medical treatment facility to use a fully trained service dog for both demonstration purposes and patient interactions as a therapy dog. In accordance with donation limitations and CCV guidelines, the adopted dog belonged to a combat Veteran who was also a rehab therapist. The

---

*See related article on page 61.
handler need not possess a debilitating injury if the service dog is used to provide patient education in a clinical setting. In this case, the therapist was solely responsible for the health and welfare of the dog as well as gaining supervisory guidance in the application and frequency of canine use in the clinic.

In addition to standard service dog commands, the therapist and CCV dog demonstrate the following tasks that can be performed by most service dogs: press buttons to open ADA doors,* manually open and close other doors, retrieve prosthetics and assistive devices, turn lights on and off, open refrigerator to retrieve an object and close refrigerator door, assist with floor to stand transfers, find up to 8 separately identified objects selected by the patient, and retrieve items like keys and even coins.

This program not only benefits many patients and their respective primary care assistants, it is a valuable tool for the multidisciplinary education of all providers. Likewise, the staff member who adopts the dog gains valuable insight to the training and skill maintenance requirements their patients will encounter. Ultimately, it assists the patient and provider in making a more accurate assessment of whether such a resource is appropriate and beneficial.

**PETS2VETS**

The objective of Pets2Vets (Arlington, Virginia) is to alleviate the psychological suffering of our nation’s Warriors while reducing the number of sheltered animals in the United States. Those beneficiaries without physical disabilities who are not eligible for a service dog may qualify for participation in Pets2Vets. Typically, these dogs do not have the training or capacity to provide physical assistance. Instead, these “pets” are trained to promote a wide range of psychosocial benefits well-known to man that are considered therapeutic, albeit much more difficult to validate with tangible evidence. To qualify for participation in Pets2Vets at WRNMMC, active duty members or their family must participate in shelter visits, attend pet training and care classes, and must reside off-campus. Much like the Service Dog Program discussed earlier, a provider or the Warrior transition unit recommends the patient who then submits an application to Pets2Vets. In turn, Pets2Vets makes a qualification determination and follows up with the patient for participation in their program.

**SPECIALIZED THERAPY K-9 PROGRAM**

The Specialized Therapy K-9 Program uses trained service dogs for specific therapeutic applications in WRNMMC’s Military Advanced Training Center (MATC). The MATC’s multidisciplinary team provides Wounded Warriors with care from initial surgery to reintegration with their units, or transition to Veterans Administration care.

The program allows certified therapy dogs to work within an approved clinical setting while under the supervision of a medical provider who is also the personal owner of the dog. Participating dogs are certified by an approved service dog or therapy dog agency, and up-to-date medical records must be maintained within the section where they are working. Periodic assessments and continuing education of the dog are documented by the owner and or participating agency to ensure that proper safety and training precautions are current.

As of this writing, there are 2 dogs that work regularly in the MATC. Their schedule and scope of practice is determined by the department chief, the owner/handler, and the providers that use the dogs in their therapy. Wounded Warriors receiving care at the MATC may participate in rehabilitation that incorporates some if not all of the following tasks: general dog handling skills; fallen/seat position to standing; retrieval of objects; gait and balance training with a harness; strength and balance training with tug of war; cognitive training and coordination with physical movement through sequential movement patterns, tasks, and/or verbal commands; chest wall expansion through voice commands (H. Naranjo, oral communication, October 27, 2010). These adjunct forms of rehabilitation add graded environmental complexity to purposeful activities that can improve social and therapeutic engagement via interaction with the dogs. Further, these novel interventions can foster psychological well-being, calmness, and ultimately motivate a patient to improve their quality of life by applying for their own service dog.

**WARRIOR TRANSITION BRIGADE OCCUPATIONAL THERAPY WORK AND EDUCATION PROGRAM**

There are a variety of therapeutic dog interactions offered by the WRNMMC Warrior Transition Brigade’s Occupational Therapy Work and Education Program. The following differ slightly by the tasks being performed as well as the amount of involvement by the Wounded Warriors.

**Warrior Transition Brigade Service Dog Training Program**

This evolving initiative was initially a collaboration of the Bergin University of Canine Studies (Santa Rosa, California), the Department of Veterans Affairs, and the

---

*Meets criteria and specifications of the Americans with Disability Act (ADA), 42 USC §12101-12213 and 47 USC §§225, 611.*
Walter Reed Army Medical Center Warrior Transition Brigade (WTB).\(^3\) Now, a variety of NPOs are partnered with WRNMMC to create a therapeutic learning opportunity for Warriors in transition and other service members diagnosed with posttraumatic stress disorder or traumatic brain injury. Instructors address some of the symptoms associated with these injuries by coaching service members in the training of future service dogs for other Veterans. Eligible service members are referred to the program by the WRNMMC WTB Occupational Therapy Department. Program participants develop a connection with the dogs they are training and experience their unconditional love, affection, and support that can provide significant stress relief during the service members’ community reintegration.\(^*\)

Research indicates that dedicated interaction with canines promotes sociability and cushions the negative physiological effects of anxiety.\(^1\) Training sessions are 2 hours long up to 4 days per week and include dog-learning theory, grooming, and hands-on supervised training, both on- and off-campus. These sessions provide a sense of accomplishment for the Wounded Warriors and can improve cognitive, emotional, and social competence. Ultimately, the fully trained dogs are then partnered with Veterans with combat-related physical disabilities. Assisting in this partnership exemplifies the portion of the Soldier’s Creed that declares “I will never leave a fallen comrade,” while challenging Wounded Warriors to practice the emotional and cognitive skills that enhance the trainers’ overall recovery. The impact of the Warrior Service Dog Training Program on Veterans and service members reaches well beyond its participants. The presence of this program on military installations brings the trainers and their dogs into friendly contact with dozens of other service members every day. Such interactions can provide periods of reduced stress for all parties as well as an opportunity for the participants to share their positive experiences with fellow Veterans and service members.

While under training, the dogs are housed at night and on weekends by volunteer “puppy parents” comprised primarily of WRNMMC staff and cadre. Dogs trained in the program are loaned to the WTB by NPOs and are carefully screened for temperament, health, and genetic abnormalities. Training is based strictly on positive reinforcement and consists of 90 different service dog commands to mitigate various functional obstacles of the future recipient of the dog. It can take up to 2 years for service dogs to complete training. Once a dog graduates from the program, it is returned to the NPO for placement with a Veteran. As of this writing, 3 Warrior-trained service dogs have been placed with Veterans, and 2 more have graduated and are awaiting placement. Although the trained service dog is provided at no charge to the recipient, the health and welfare of the dog becomes the Veteran’s responsibility. The average service dog works for up to 8 years, after which the dog may remain in the home with the Veteran or a family member and a successor service dog will be provided at no cost by an affiliated NPO.

Washington Humane Society “Dog Tags” Behavior and Grooming Training Program

The only congressionally-chartered animal welfare agency in the United States, the Washington Humane Society (WHS) has been the leading voice for animals in the District of Columbia since 1870.\(^4\) The WHS operates the only shelter in the nation’s capital that does not decline animals and is open 24 hours a day.

Wounded Warriors who volunteer for Dog Tags attend animal training and behavior classes twice a week in a vocational environment comprised of both classroom lecture and hands-on training. Classes are conducted at the Washington Humane Society’s Behavior & Learning Center. The 3-tiered program is certificate based and targets individuals who either plan on a career in veterinary work or simply interested in the recreational, hobbyist level of learning while spending time with animals.\(^5\)

The first tier of training consists of a basic knowledge and understanding of how canines learn. The second tier focuses on socialization techniques and canine developmental stages. The last tier addresses relationships and canine behavior. All tiers build upon each other and all involve grooming exercises throughout the training cycle. This program exposes Wounded Warriors to the therapeutic effects of canine interaction, and allows participants to contribute to their temporary community, while potentially gaining experience for future jobs in animal-related fields.\(^7\)

Animal-assisted Therapy

Clinical staff members of the Warrior Transition Brigade at WRNMMC are authorized to bring their personal pets several times a week, provided the dog is certified as a therapy dog by Therapy Dogs International (Flanders, New Jersey). According to a recently issued policy memorandum from the Office of The Surgeon General/Army Medical Command,\(^6\) animal-assisted therapy is defined as the use of a certified animal to facilitate patient recovery from physical, mental, or social illness, using the

\(^*\)See related article on page 63.

\(^†\)See related article on page 70.
pet as a “co-therapist” to achieve a specific therapy goal. Therapy dogs are used by the occupational therapists during patient encounters or visits (when appropriate) to provide support to Warriors in transition (WTs). Their presence in the clinic provides opportunities for patients and staff alike to relieve stress and anxiety through animal contact. Therapy dogs attend the Warrior Transition Brigade weekly formations, providing opportunities for a larger number of WTs to benefit. Additionally, WTs separated from their own personal pets due to deployment and or injuries are afforded temporary companionship while actively convalescing at WRNMMC.

American Red Cross Pet Visitation

The Red Cross Pet Visitation program consists of supervised hospital visits twice a month by Red Cross volunteers and their personal pet dogs which have been certified by the American Kennel Club Canine Good Citizen program. Unlike many of the other programs, these dogs are permitted to visit different inpatient wards in addition to typical interaction with patients passing through the hallways. Pet visitation provides measurable effects on health, including noticeable improvements in both mental and physical well-being to those who are hospitalized.

CONCLUSION

What the former Walter Reed Army Medical Center and now WRNMMC has spearheaded in the way of animal-assisted therapy has paved the way for other medical treatment facilities within the military health care system to follow. The tremendous and far-reaching impact animal-assisted therapy has had on current and prior Wounded Warriors is difficult to measure and therefore hard to quantify. Indeed, it is especially difficult for those who have not experienced close interaction with animals, particularly dogs, to truly appreciate the therapeutic power of that interaction. The willingness of those first at Walter Reed and now WRNMMC to explore nontraditional approaches and try animal therapy has impacted injured Warriors in positive ways that are still largely unmeasured. Unfortunately, these successes may remain largely unrecognized unless and until more such programs are instituted throughout the military medical system.

REFERENCES


AUTHORS

MAJ Yeager is Chief, Occupational Therapy, Reynolds Army Community Hospital, Fort Sill, Oklahoma.

CPT Irwin is Healthcare Administrator, Healthcare Operations and Strategic Planning, Walter Reed National Military Medical Center, Bethesda, Maryland.