### **CLINICAL PRACTICE**

# Prim-ly adding care: Case report of a student nurse/service dog team

Krysia W. Hudson, Marit Medefind, Maren Reinholdt, Ty Guyton

School of Nursing, Johns Hopkins UNiversity, Baltimore, Maryland, United States

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#### ABSTRACT

Traditionally, a therapy dog has been a complimentary tool used by healthcare providers to provide stress relief to patients. However, animals can perform functions at an even greater capacity. Service animals are becoming a part of the healthcare team, by providing unique assistance to the healthcare providers rather than the patients. Thus, the workforce has expanded to include service dogs as a part of the healthcare team. This article discusses the unique challenges and opportunities provided by the use of service animal as a part of the healthcare team, as provided by the piloted use of a service animal with a student nurse in an acute care facility.

Key Words: Service animal, Therapy dog, Nursing practice, Student nurse, Innovation

#### **1. INTRODUCTION**

The use of animals in an acute care setting has been limited to the use of therapy animals. Although the use of therapy animals is being embraced, the use of animals as a part of the daily healthcare team has not been documented. As of 2015, the CDC estimates there are 53 million Americans with disabilities.<sup>[1]</sup> Moreover, there is an increasing estimated number of service animals (100,000-200,000) in use in the United States.<sup>[2]</sup> In the United States, disabled individuals are protected from discrimination via Title 1 of the ADA and Section 501 and 504 of the Rehabilitation Act in regards to employment<sup>[3]</sup> (https://www.ada.gov/cguide.htm). Pairing the increasing number of disabled Americans with the increasing number of service animals, the use of animals as a part of the healthcare team must be explored and evaluated. This article will describe the case of the use of a service animal by a student nurse in an acute care facility, while discussing the traditional role of animals in healthcare and the

challenges and benefits of the unique dog/nurse partnership in caring for patients.

#### Background

Prior to discussing the case report of a dog being a partner in the healthcare team, it is pertinent to discuss the roles of dogs with in the healthcare system as they exist today. Principally, in the United States, there are three main roles registered in the United States: emotional support dog, therapy dog, and service dog. An emotional support dog is a dog that provides "... emotional support and comfort provided by their pet allows them to deal with challenges that might otherwise compromise their quality of life."<sup>[4]</sup> These dogs must be prescribed by a mental health therapist and are not service dogs. Although they provide emotional support, they must also be differentiated from psychiatric service dogs that protect their human handler from hazards brought on by mental illness (like post-traumatic distress). Psychiatric service dogs are trained and covered by the ADA (American

\*Correspondence: Krysia W Hudson; Email: khudson2@jhu.edu; Address: School of Nursing, Johns Hopkins University, Baltimore, Maryland, United States.

be other species, like cats, ferrets and other animals. They must be house trained and cannot impose a hazard to oth- cabin (see Table 1).

Disabilities Act).<sup>[4]</sup> Emotional support animals (ESA) may ers.<sup>[4]</sup> Under law, the handler of the ESA has the right to obtain fair housing and can carry their animal in an airline

Table 1. Legal rights of emotional	al, therapy and service dogs
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Name of Site	Fair Housing Act	Air Carrier Access Act	ADA Support
Emotional Support Animal	Х	Х	
Therapy Dog			
Service Dog	Х	Х	Х

A therapy dog is an animal employed by schools, nursing homes, hospitals, and other areas to provide happiness and comfort for the individuals. This animal is not covered by ADA or the Fair Housing Act or the Air Carrier Access Act.<sup>[5]</sup> Unlike an ESA, a therapy animal is present to provide comfort only. Optimally, the best use of a therapy dog must incorporate a "trained handler". This handler should take a class via a veterinarian recommended group, the dog will be certified by your veterinarian, the handler and dog will undergo a mock therapy visit and evaluation, and then the pair may be registered.<sup>[6]</sup> The use of a therapy dog has gained speed in the last 15 years. Many uses have been found for a therapy dog. Literature suggests that having a therapy dog has increased the quality of life in persons with Alzheimer's disease<sup>[7]</sup> and dementia.<sup>[8,9]</sup> Having a therapy dog has improved patient pain level and satisfaction with hospital stay post joint replacement.<sup>[10]</sup> Therapy dogs have been shown to reduce depression and anxiety in patients.<sup>[11, 12]</sup> Hospitals are not the only realm for use in therapy dogs. Schools are employing the use of pets to distress students at times of stress, like during exams, as well.<sup>[13]</sup>

Service dogs are not required to be certified by the American Disabilities Act.<sup>[14, 15]</sup> Many online organizations will offer certifications but these documents are not recognized "as proof" that the animals are service animals by the Department of Justice.<sup>[14]</sup> Service dogs are specially trained to perform tasks for an individual with a disability (e.g. diabetes). The task(s) performed by the dog must be directly related to the person's disability. Health conditions that may necessitate a service dog include: deafness, blindness, diabetes, autism, epilepsy, and depression.<sup>[14,16]</sup> Service dogs may go where animals may not normally go (e.g. the mall or grocery store) but they must be with their handler at all times. Like ESAs, service dogs are covered by the Fair Housing Act and the Air Carrier Access Act. These dogs are very expensive and can cost \$25,000.<sup>[16]</sup> Organizations that can connect consumers to service dog organizations are provided in Table 2. Labrador Retrievers are typical breeds that are used as service dogs.<sup>[16]</sup> No literature was discovered on the use of a service dog by a nurse, although multiple studies have evaluated the use of service dogs in a healthcare setting. Hence, this case report is unique.

Name of Site	Website	
International Association of Assistance Dog Partners	http://www.iaadp.org/	
American Disability Act-Service Animals	https://www.ada.gov/service_animals_2010.htm	
Service Dog Central	http://www.servicedogcentral.org/content/	
American Kennel Club-Emotional Support Dogs	http://www.akc.org/content/entertainment/articles/everything-about- emotional-support-animals/	
Pet Partners (formerly Delta Society)	https://petpartners.org/	

Table 2. Selected service dog websites

#### 2. CASE REPORT

In Fall 2016, a student was admitted to a large university school of nursing. This student required the use of a service dog in support of her diabetes care. The dog, Prim, is a black Labrador Retriever that is partnered with the student to detect and notifies the student by tapping the student with her paw when she becomes hypoglycemic or hyperglycemic. The student then responds and checks her glucose based on the

dog's cue. After notifying her handler, the dog receives a treat and then lies down at her handler's feet once the student nurse treats the glucose issue. Ironically, the dog has also notified other individuals (e.g. nurse instructor) of their hypo/hyperglycemia as well. As a part of their regular routine, the dog accompanies the student to class and throughout the day. As clinical practicum is an essential part of any nursing curriculum, it is necessary for the dog to accompany the

student nurse to clinical as well. This poses many challenges and opportunities for the clinical unit, and the student nurse.

## **3.** CASE ANALYSIS: DAILY INCORPORATION OF THE CLINICAL WORKFLOW

Prior to each of clinical day, instructors asked patients on the unit if they were comfortable having a student with a service dog working with them for the day. This provided an opportunity for patients to choose if they wanted to work with a dog. As a result, the student was easily paired with hospitalized, dog-loving patients who missed their pets at home. While working with patients, the student quickly developed a system for introducing Prim (see Figure 1). First, the student would enter a patient's room, introduce the dog (Prim) and herself. Next, she would explain what she does as a "service dog". Patients often ask if they can pet her, to which the student would gently explain that she is performing a job for the student and should not be distracted. She adds that Prim is happy to be in clinical and would say "hello" if she could. Patients have been very respectful of the student's request to refrain from petting her. (Ironically, other healthcare providers often have a harder time respecting the "do not pet" rule). After introduction, the student would either have Prim sit in a corner of the room or tie the leash around her waist while she began assessment and other nursing duties.

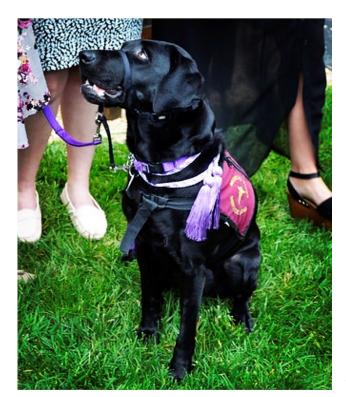


Figure 1. Prim, the service dog

As the nurse has physiological needs, so does the dog. Prim would eat breakfast, hydrate and relieve herself prior to the 8-hour clinical shift. At lunchtime, the dog would join her nurse partner and clinical group as they ate lunch. This was a key time for Prim to nap. Also at lunch, the dog would have a drink of water and urinate. Having a unit with quick access to the outdoors is a consideration for student placement. The clinical group also generally identified one student nurse that could take or handle the dog when the dog was not with her student nurse.

#### 4. **DISCUSSION**

#### 4.1 Challenges

The challenges of the nurse/dog partnership were numerous. First, organizational acceptance is key. Unit permission was obtained before the pair's arrival. This required accommodations to be present by Johns Hopkins School of Nursing and Johns Hopkins Hospital prior to student orientation. The unit needed to approve the dog as a part of the healthcare team and optimally, the unit should be used to the "presence" of the dog in clinical. Many units accepted the presence of the nurse dog pair. The first unit to accept the pair was a rehabilitation unit that used therapy dogs to improve patient experience. Clinical units often made suggestions for patient assignments. Second, it was necessary to have clinical instructors (and fellow student nurses) who were not afraid of or allergic to dogs. The clinical instructor is key to success. Pairing a strong, seasoned clinical instructor that has previous work history in a target unit is very beneficial. An established instructor ensures good communication between the staff and the student/dog pair. Third, there are some conditions where a nurse/dog pair are unsuitable. For instance, the pair are not permitted to enter isolation rooms or operating rooms. Although, the student nurse misses out on the unique learning experiences offered by these situations, the experience can be simulated. To simulate this clinical experience, clinical instructors suggested treating a patient as an isolation patient and learning to "cluster care". Clustering of care is done with an isolation patient to prevent going in and out of the room unnecessarily.

Certain conditions, like allergy to dog dander, are also a consideration for the team. Knowing non-drug allergies of the patient census was considered. Some literature has recommended the use of a t-shirt to minimize shedding and to prevent the dog from touching any infected surfaces.<sup>[17]</sup> Principally, the dog bore the responsibility of maintaining safety of her nurse partner. There were some clinical days where the dog arrived tired to work because she had been up all night tending to her human partner. Yet, as always, the dog would still remain vigilant and notify her nurse partner

if her blood sugar was too low by tapping her with her paw on the arm or chest. Although a challenge, this was very comforting to the clinical instructor – who is also in charge of the safety of the student nurse.

#### 4.2 Benefits of a nurse dog pair

Introducing a nurse/dog healthcare team was fraught with much worry, however, it was overwhelmingly successful. In fact, patients starting requesting to have the nurse/dog team. After introduction, the dog became an immediate "ice breaker". While many nursing students struggle to develop a therapeutic relationship, the service dog's company provided an immediate talking point; patients were interested in her presence and were more open to converse with the nursing student. Additionally, the nurse-dog pair motivated patients. Patients voiced that having Prim in their presence motivated them to get out of the bed, attend their therapy sessions, eat their meals, and work towards discharge.

The patients have been incredibly receptive to Prim's presence. (Ironically, only two people have been unreceptive to the dog's presence; both were employees of the acute care facility.) The pair's first patient had resided in the hospital for over a month, and had not seen her own dog during that time. She was thrilled to have a dog in the room, and said, "Even though I can't pet Prim, it is so nice to have her here! I feel so much calmer and happier." The primary nurse later indicated that the previous day had been incredibly hard for the patient. She attributed the patient's improvement largely to Prim's presence. This patient's terrific response gave the student a huge boost of confidence about bringing Prim to the hospital.

Since that initial patient interaction, continued positive feedback has come from patients, staff, and fellow students. This is supported by literature.<sup>[18]</sup> During the psychiatric unit rotation, dog-student nurse pair were able to accompany several patients to the electroconvulsive therapy (ECT) suite. The nurses and doctors were all very interested in the dog's role, and were excited to relay that she was the first dog to attend ECT. Because the patients in the psychiatric unit are typically on the unit for longer periods of time, the pair were able to establish rapport with many there. Additionally, just strolling through the hospital, many exclaim. "Look at the dog!" Numerous patients and their families would inquire about the dog, and frequently ask if the dog may visit a patient to brighten their day. Although direct physical interaction is prohibited to allow the dog to focus on doing her job, the pair have visited many patients throughout the hospital.

#### 5. **Recommendations**

In summary, the nurse-dog pair was very successful and can provide positive outcomes for patients. After careful review, it is apparent that clients with a long term stay (e.g. psychiatric units or rehabilitation units) would most benefit from this healthcare team. In observing this experience, our team has a few basic recommendations.

#### 5.1 Staffing considerations

Principally, there must be staffing contingencies for nurses paired with a service dog. Just as some staff members may have some physical limitations, a nurse/dog pair cannot be given patients with isolation precautions. Additionally, other staff members need to be identified as a "handler" other than the nurse in case the nurse must leave the dog's side. This additional member does not need to be a nurse. This person must be placed in the schedule and marked as having this responsibility. Charge Nurses must recognize that being an additional dog handler is part of their workload (as part of their patient assignment). All dogs must be tethered to the handler and the dog must obey the commands to the handler.<sup>[19]</sup> Second, the manager needs to be cognizant that fear or mild allergies cannot deny the use of a service animal<sup>[19]</sup> Having the service animal wear a new shirt each clinical day may decrease dander.<sup>[17]</sup>

#### 5.2 Infection considerations

The nurse dog pair may not care for isolation patients. But questions still remain, how do we protect the health of the service animal? Consideration of clean areas where the dog my reside must be considered. This area must be cleaned daily after use. Additionally, guidelines for dog bathing must also be considered. Is it appropriate for the animal to bathe nightly after clinical? As for providers, the CDC recommends minimal contact with saliva, dander or dog waste. Individuals who come in contact with service dogs should wash their hands with soap and water.<sup>[20]</sup> Transmission of disease from dog to human is considered low,<sup>[21]</sup> but service dogs should not be permitted in areas where sterile fields can be compromised (operating rooms or burn units).<sup>[19]</sup>

In summary, further exploration of the use of emotional support animals, therapy dogs, and service dogs should be encouraged in improving patient care. Time must be taken to carefully incorporate such strategies and craft policies that encourage the use of animals in patient care.

#### **CONFLICTS OF INTEREST DISCLOSURE**

The authors declare that there are no conflicts of interest.

#### REFERENCES

- Center for Disease Control. DC: 53 million adults in the US live with a disability; 2015. Available from: https://www.cdc.gov/medi a/releases/2015/p0730-us-disability.html
- [2] Service Dog Central; 2017. Available from: http://www.servic edogcentral.org/content
- [3] US Department of Justice (American Disabilities Act). A guide to disability rights laws; July 2009. Available from: https://www.ad a.gov/cguide.htm
- [4] Gilbeault S. Everything you need to know about emotional support animals. [Internet]. American Kennel Club; June 20, 2017. Available from: http://www.akc.org/content/entertainment/arti cles/everything-about-emotional-support-animals/
- [5] American Kennel Club (AKC). A therapy dog is not a service dog. [Internet] American Kennel Club; April 13, 2017. Available from: http://www.akc.org/content/dog-training/articl es/a-therapy-dog-is-not-a-service-dog/
- [6] Pet Partners. Become a handler. Pet Partners; July 2, 2017. Available from: https://petpartners.org/volunteer/become-a-han dler/
- [7] Swall A, Ebbeskog B, Hagelin CL, et al. Can therapy dogs evoke awareness of one's past and present life in persons with Alzhemier's disease? International Journal of Older People Nursing. 2015; 10(2): 84-93. https://doi.org/10.1111/opn.12053
- [8] Williams E, Jenkins R. Dog visitation therapy in dementia care: A literature review. Nursing Older People. 2008; 20(8): 31-35.
- [9] Laun L. Benefits of pet therapy in dementia. Home Healthc Nurs. 2003; 21: 49-52. https://doi.org/10.1097/00004045-20030 1000-00011
- [10] Harper CM, Dong Y, Thornhill TS, et al. Can therapy dogs improve pain and satisfaction after total joint arthroplasty? A randomized control trial. Clin Orthop Relat Res. 2015; 473: 372-379. https://doi.org/10.1007/s11999-014-3931-0
- [11] Friedmann E, Thomas SA. Pet ownership, social support, and oneyear survival after acute myocardial infarction in the Cardiac Arrhythmia Suppression Trial (CAST). Am J Cardiol. 1995; 76: 1213-1217. https://doi.org/10.1016/S0002-9149(99)80343-9

- [12] Hoffmann AO, Lee AH, Wertenauer F, et al. Dog-assisted intervention significantly reduces anxiety in hospitalized patients with major depression. Eur J Integr Med. 2009; 1: 145-148. https: //doi.org/10.1016/j.eujim.2009.08.002
- [13] Young JS. Pet therapy: Dogs de-stress students. Journal of Christian Nursing [Internet]. 2012; 29(4): 217-21. https://doi.org/10.1 097/CNJ.0b013e31826701a7
- [14] ADA. Frequently asked questions about service animals and the ADA. Department of Justice. July 20, 2015. Available from: https: //www.ada.gov/regs2010/service\_animal\_qa.pdf
- [15] Service Dog Central. Certification and vests. Service Dog Central; July 2, 2017. Available from: http://www.servicedogcentral. org/content/node/566
- [16] AKC. Service dog training 101—Everything you need to know. [Internet] American Kennel Club; November 14, 2016. Available from: http://www.akc.org/content/entertainment/arti cles/service-dog-training-101/
- [17] Centers for Disease Control. Guidelines for Environmental Infection Control in Health-Care Facilities; 2003. Available from: https://www.cdc.gov/infectioncontrol/guideline s/environmental/background/animals.html
- Barba BE. The positive influence of animals: Animal-assisted therapy in acute care. Clinical Nurse Specialist. 1995; 9(4): 199-202. PMid:7634227 https://doi.org/10.1097/00002800-1 99507000-00005
- [19] US Department of Health & Human Services. Understanding how to accommodate service animals in healthcare facilities; 2017. Available from: http://www.phe.gov/Preparedness/plannin g/abc/Documents/service-animals.pdf
- [20] Sehulster L, Chinn RY. CDC Guidelines for environmental infection control in health-care facilities [Internet]; 2003; 52 (RR10): 1-42. Available from: http://www.cdc.gov/mmwr/preview/mmwrhtm 1/rr5210a1.htm
- [21] Denholm B. Service dogs in health care facilities. AORN. 2009; 89(4): 757-760. https://doi.org/10.1016/j.aorn.2009.03 .011