# Animals in healthcare settings

Finding the balance between the benefits and risks that our four-legged friends bring to patients is an increasing concern when managing quality care. Understanding the legal and health issues will help you get the most out of therapeutic animals at your facility.

By Kathryn Murphy, DNSc, NP

The use of animals in therapy is plentiful in modern history. Dogs began being trained to assist blind individuals in the wake of World War I. Animals were incorporated into therapy at St. Elizabeth Hospital in Washington, D.C., in 1919 and at the Pawling Army Air Force Convalescent Hospital in New York in 1942. Utilization of animals continued anecdotally with little scientific evidence of the benefit until 1961 when Dr. Boris Levinson documented the effects of animal contact on healing. His observations caused the healthcare field to consider the use of animals as a legitimate therapy. This began research into the benefits of animalassisted therapy (AAT) in the healthcare

AAT is now considered a research-based therapy, with nursing leading the charge to move animals into healthcare facilities. AAT is used in mental health, home health, hospice, and long-term care. In addition, there are trained service animals available to assist with activities of daily living for individuals with medical or psychological disorders.

Animals are increasingly visible in public settings, such as hospitals, long-term-care facilities, schools, and shopping malls. Service animals, therapy animals, and emotional support animals are allowed in all of these public places. However, as animals enter public spaces, health concerns may also increase. Knowing the legalities and health implications will assist you to better incorporate animals into the healthcare setting.

# Service, therapy, support

Many different kinds of animals can be utilized as support, such as miniature horses, dogs, cats, or birds. However, most of the animals entering healthcare settings are dogs or cats. In general, there are animals that perform a service, animals used in therapy activities, and animals that provide emotional support. It's important to know how these animals differ. Let's take a closer look.

## **Service animals**

According to the American Disability Act (ADA), a service dog or animal is specially



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trained to provide assistance to a person with a disability. There are a variety of ways that animals are utilized in service, including guiding or hearing animals, those that assist with mobility, and animals that provide companionship. A guide or seeing animal is trained to assist people who are blind. A hearing or signal animal alerts people with hearing impairment to sounds. A seizure response animal is trained to stand guard over a person during the seizure or get help for the person when the seizure occurs. Some of these animals can warn the person in advance to sit down or move to as safe place with the onset of a seizure.

A psychiatric service animal is trained to perform specific work or tasks to help mitigate a person's psychiatric disability. These animals can be trained to alert individuals with mental disorders to detect the onset of symptoms, such as mania. The animals may also be trained to remind their handlers to take daily medications, provide safety checks, interrupt self-harm, and keep disoriented individuals from danger. A sensory signal animal or social signal animal is trained to help people with autism, assisting them to exhibit more prosocial behaviors.

Some service animals are licensed or certified by a state or local agency, but some aren't. The ADA requires that all businesses allow individuals to bring their service animals into the premises or other areas in which customers are



# did you know?

Recently, more attention is being given to the use of service animals for veterans experiencing posttraumatic stress disorder (PTSD). These specially trained dogs can help alert the individual to danger in the environment, decreasing the hypervigilance and anxiety that accompany PTSD. A new study involving 230 veterans with PTSD is being conducted to support the benefits of psychiatric service dogs for veterans with this disorder.

Source: Kime P. New studies focus on service dogs and PTSD. www.militarytimes. com/story/military/benefits/health-care/2015/05/10/ptsd-service-dogs-va-perdue/70944650/.

allowed. These animals aren't considered pets under the law, so any policies prohibiting pets in a public place don't apply. Service animals must be on a leash or under direct control of the handler, current on recommended vaccinations, and housebroken.

In addition, for employment or housing, the handler should supply documentation that describes how the animal helps him or her perform job or daily living tasks and the training that the animal has received to behave in a workplace. The nature of an individual's disability may not be asked, only how the animal assists him or her.

# Therapy animals

AAT is part of a treatment process for specific individuals developed by healthcare or human resource providers. For example, equine therapy is utilized as a treatment strategy for children to improve socialization, movement, and self-esteem. In therapeutic riding, a child can improve language development, sensory integration, and trauma recovery by learning how to communicate with the horse's emotions and rhythmic movement. Equine-facilitated learning utilizes animal communication and mindfulness activities to improve cognitive functioning and self-esteem or decrease core attention deficit hyperactivity disorder symptoms. Insurance companies will often reimburse for ATT.

In comparison, animal-assisted activities are defined as activities with animals that aren't part of an individual's treatment goals or designed to assist with a specific disorder. Animal-assisted activities include visits to long-term-care facilities, pediatric units, or outpatient facilities (such as through the Wounded Warrior Project). These visits can be spontaneous, of any length of time and frequency, and aren't part of a therapeutic treatment plan.

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# **Emotional support animals**

Emotional support animals provide comfort to individuals with psychiatric disabilities but don't perform assistive tasks. They're sometimes referred to as a companion or social animal. Because the comfort offered by the presence of an animal isn't a trained skill, emotional support animals aren't covered under the ADA laws that apply specifically to service animals, which allow protection in places such as healthcare settings. This is different than a psychiatric service animal that has been trained to provide specific tasks to help mitigate the handler's psychiatric disability.

# How animals can help

There's increasing research that demonstrates the positive health benefits of animal contact. The American Heart Association purports a lower risk of heart disease in people who own any type of pet. One study of cat owners found that they had a 40% decreased risk of myocardial infarction than those who didn't own a cat. Other studies have shown that when people interact with a pet, the brain releases oxytocin—a hormone produced in the brain that helps modulate the stress response to assist with any disruption in homeostasis.

For example, a 2015 study published in the journal *Science* found that gazing behavior from dogs increased oxytocin levels in handlers. When a dog looked at its handler, oxytocin levels increased in the dog; then as the person gazed back at the dog, his or her oxytocin levels also increased. These findings suggest the existence of an interspecies oxytocin-mediated positive feedback loop, which increases bonding and attachment between the species. Put simply, interacting with animals helps reduce stress and boost mood.

One group of researchers studied the effects of canine-assisted therapy on patients with chronic heart failure. Before the study, there was an ambulation failure rate of 28%. Because ambulation is very important to

As nurses, it's often up to us to coordinate animal activities and ensure the safety of patients and others interacting with the animal.



long-term outcomes in patients with chronic heart failure, it's important to improve this area. After the canine-assisted therapy, the ambulation failure rate dropped to 7.2%. In this study, one group of patients was offered a dog to assist with ambulation and the other group had no dog. Those who used the dog to assist with ambulation significantly increased their participation in the therapy. In fact, not only did the ambulation failure rate drop, the distance of ambulation also increased.

In another study, hospitalized patients with congestive heart failure who interacted with a dog demonstrated a reduction in pulmonary capillary wedge pressure, systolic pulmonary artery pressure, anxiety levels, and catecholamine levels. In other words, the patient's heart worked stronger and more efficiently after interactions with a dog.

One study found that AAT reduced anxiety related to magnetic resonance imaging (MRI) testing. The need to enter a closed space with loud noise and vibrations often prevents patients from undergoing MRI. Often, the test must be stopped or the images are poor due to motion artifacts. The study had 26 people interact with therapy dogs for 15 minutes before MRI. The Spielberger State-Trait Anxiety Inventory (STAI) was administered before and after the MRI. According to the STAI, the average level of anxiety for adults is about 36. Before AAT, the average anxiety level for the study group was 43; after AAT, the average score was 29—a significant decrease. AAT allowed the patients to undergo MRI without the use of antianxiety medication.

Other studies have found that AAT improved mood and decreased pain in

children, both in the hospital and outpatient settings. In the inpatient psychiatric setting, AAT has been effective in improving mood and decreasing anxiety in patients. In addition, equine therapy has been uniquely effective in decreasing aggressive behavior in chronic psychiatric patients, especially those at risk for violence.

In the long-term-care setting, research has been done to evaluate the effect of AAT on mood and agitation in patients with dementia. One study looked at how encounters with therapy dogs in long-term-care facilities acted as a form of reminiscence therapy by eliciting memories from the past to decrease anxiety and agitation. Either during or after the visit with a dog, the patients talked with the handlers about the memories or feelings they had that were associated with dogs. Other studies found that dog visitation reduced the frequency of agitation in patients with dementia.

# **Know the risks**

Although it's beneficial to incorporate animals into healthcare settings, it's important to evaluate the risks. The same risks that can result from any human-animal interaction are applicable whether the animal is used in therapy or acts as a service animal. When in healthcare settings, it's often the nurse who's involved in mitigating the risks to patients and family members.

Zoonotic infections or diseases that can be transmitted from animal to human are one of the risks of having animals in public, and especially healthcare, settings. Many patients already have compromised immune systems, which increases their risk of infection. *Escherichia coli*, *Campylobacter*, *Salmonella*, and *Cryptosporidium* infections can be spread when a person pets or kisses an animal, thus allowing saliva contact. This risk may increase with farm animals, such as llamas or donkeys. Skin contact with animals can also add to the risk of infection.

Another healthcare concern with having animals in the healthcare setting is allergies. Exposure to the skin, dander, fur, feathers, urine, or saliva of animals can elicit an allergic response in susceptible individuals. Although the patient receiving the animal visit or handling the service animal may not have an allergy to animals, others in the setting, such as visitors and staff, may be allergic.

Injuries, including bites, falls, kicks, or scratches, are also a risk of having animals in healthcare settings. Small dogs can quickly get in the way of a patient ambulating after a major surgery. An animal that may be friendly and safe at home in its own environment may become fearful and bite an unfamiliar person who approaches it in other settings. Pasteurella, Staphylococcus, Streptococcus, Capnocytophaga canimorsus, Bartonella henselae (cat scratch fever), and Streptobacillus moniliformis (rat bite fever) are infections associated with animal bites.

# **Policies and education**

Healthcare facilities should develop clear, concise policies that define the categories of animals that are allowed in the setting and outline where and how they can interact with patients. Although service animals can't be prohibited, visitation animals may be more restricted. The policy should also state that all animals require identification and certification of health, and are excluded from certain areas of the facility, including ICUs and isolation rooms. It may also be prudent for the facility to keep a log of all animal-assisted activities or service animals, including the patient and rooms visited for contact tracing.



# kev points

- Learn about the different roles animals have in helping your patients.
- Identify possible problems and solutions related to having animals in the healthcare setting.
- Know the ADA law regarding service animals in public places and your facility's policies about animals.

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Developing staff education on the animals that may enter the healthcare setting can prevent misunderstandings about the role of these animals in the facility. Addressing any staff members who have a fear of animals while also supporting the ADA guidelines is crucial. It's also important to inform staff members that they can't ask for proof of an individual's disability or the service animal's training.

Providing hand-washing stations is the number one way to control infection from service animals or any animalassisted activities in the healthcare setting. Signs that encourage everyone to wash their hands after leaving animal areas, after exposure to the animal, and before eating or drinking should be in view. Except for *Cryptosporidium* and some viruses, alcohol-based hand sanitizers are effective against the majority of animal-borne infections. However, if hands are visible soiled, it's recommended to wash them under hot water with soap for 20 seconds.

If an animal deposits waste, housekeeping should be called immediately for proper cleaning. Tools for waste removal should be accessible to the housekeeping staff. Any soiled bedding should be removed. All waste should be confined in a leakproof container with a tight lid and disposed of according to federal, state, and local regulations. It's essential that all staff in contact with animals in the healthcare setting be educated on these procedures.

# **Healing power**

Research has demonstrated the positive benefits of animals on our psychological and physical health. As nurses, it's often up to us to coordinate animal activities and ensure the safety of patients and others interacting with the animal. Becoming educated on the different ways animals can be utilized in healthcare and how to prevent possible adverse events is the first step toward

# **Animal roles**

cheat

- Service animals: specially trained to provide assistance to a person with a physical or psychiatric disability
- Animal-assisted therapy: a treatment process for specific individuals developed by healthcare or human resource providers
- Animal-assisted activities: time spent with animals that isn't part
  of an individual's treatment goals or designed to assist with a
  specific disorder
- Emotional support animals: provide comfort to individuals with psychiatric disabilities, but don't perform assistive tasks

providing a safe and healing environment for all.

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