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# ELDER CARE

## A Resource for Interprofessional Providers

### Animal-Assisted Interventions for Older Adults - Part 1

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Many households in the U.S. own pets, and it is estimated that up to half of older adults have pets. Since the 17<sup>th</sup> century, animals have been used as a way to teach children and adults how to care for things. As early as the 18<sup>th</sup> century animals were used as an aid in the treatment of patients with mental illness. This use was expanded to many hospitals until it was stopped in the early 20<sup>th</sup> century due to concerns about transmission of zoonotic infection.

In the last several decades there has been renewed interest in the potential health benefits of owning pets and animal assisted interventions (AAIs). Many studies of AAIs have focused on older adults, including those living at home, those in assisted living, and long-term care facilities. Dogs are the most common AAI animals in the U.S., but other animals are also used, including cats, birds, monkeys, and others.

#### What Are Animal Assisted Interventions?

AAIs include animal assisted activities (AAAs), animal assisted therapies (AATs), animal assisted education (AAE), and service animal programs (SAPs). These AAIs are defined and examples are provided in Table 1. Table 2 shows the classification of animals used in the various AAIs.

While all types of AAIs can potentially help older adults, AAT has been the most studied for its effects on elders living with dementia, depression, and cardiovascular disease.

#### AAI for Dementia

AAI has been shown to have several positive behavioral effects for patients with dementia. Studies have used animals in roles ranging from formal AAT to facility animals (Table 2), and all demonstrate a beneficial effect on disruptive behaviors associated with dementia - specifically, delirium-related agitation.

In addition, several social activities among nursing home residents improve with the use of AAI, including more interaction with other patients and longer conversations when animals were present.

Although there is improvement in behavior, animal therapies have not been shown to improve cognition or slow the progression of dementia. Older adults with dementia who are exposed to pet dogs have a similar decline in cognition as those without such exposure.

#### AAI for Depression and Anxiety

Exposure to AAI has been studied in older adults with depression and shown to decrease anxiety levels. Older adults with depression who are exposed to AAI also have lower loneliness scores. Potential reasons for these benefits include increased activity, companionship and purpose.

**Table 1. Types of Animal Assisted Interventions**

Type of Therapy	Definition	Examples
<b>Animal Assisted Activity (AAA)</b>	Animals are used to provide motivation, education, and/or recreation to patients. Activities are intended to improve quality of life.	<ul style="list-style-type: none"> <li>• Dog is brought by owner to a nursing home to visit patients once a month.</li> <li>• A rehab facility has a cat that lives in the building and interacts with the patients.</li> </ul>
<b>Animal Assisted Therapy (AAT)</b>	Animals are used by health care professionals within their practice to help patients meet specific goals and measurable objectives.	<ul style="list-style-type: none"> <li>• Dog or cat is used during an occupational therapy session to help a stroke patient re-learn fine motor skills by using the buckles on leashes and collars.</li> </ul>
<b>Animal Assisted Education (AAE)</b>	Animals are used by educators to help students reach goals with measurable outcomes.	<ul style="list-style-type: none"> <li>• Chickens are raised on school grounds with the children caring for them and learning life skills.</li> </ul>
<b>Service Animal Program (SAP)</b>	A dog or miniature horse that is trained to do something specific to help an individual handler.	<ul style="list-style-type: none"> <li>• Dog trained to alert a diabetic patient to hyperglycemia.</li> <li>• Miniature horse trained to help guide a blind handler.</li> </ul>

#### TIPS ABOUT ANIMAL-ASSISTED INTERVENTIONS FOR OLDER ADULTS

- Consider recommending interaction with pets, especially dogs, for older adults - particularly for those with dementia, depression, and/or cardiovascular risk, for whom research indicates potential benefit.
- Before recommending pet ownership, be sure the patient is capable of managing the financial and care aspects.

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## AAI and Cardiovascular Health

Blood pressure is lower in pet owners overall and particularly in the setting of high stress, during which systolic blood pressure is as much as 12.8 mmHg lower than in control groups without pets.

The largest cardiovascular benefit from pet ownership, however, appears to be in patients who have already been diagnosed with cardiovascular disease. One-year survival rates are higher among pet owners after an acute coronary syndrome (ACS) or an MI, and for two-years survival is higher after receiving an implantable defibrillator. Another study showed that in patients who had been hospitalized for heart failure, those who had a dog were able to walk twice as far as those who did not.

While there have been some conflicting studies on the benefits of pet ownership for cardiovascular health, the American Heart Association recommended in 2013 that pet ownership, particularly pet dogs, may be a reasonable approach to reducing cardiovascular risk, though it advised against obtaining a pet solely for this reason.

## General Benefits of Having a Pet

Even without a formal AAI, older adults experience several benefits simply from owning a pet. In addition to some of the aforementioned dementia-related and cardiovascular benefits, dog owners not only walk further; they also walk more frequently than older adults who do not own a dog. Studies have also found that people with pets are slower to have deteriorations in activities of daily living.

## Disadvantages of Having a Pet

Although not well studied, there are potential downsides to pet ownership, and these should be considered when suggesting pet ownership to older adults. Pets can be a financial burden due to the cost of food and veterinary care. They may limit choice of housing. In addition, there may be a slight increased risk of falls that can occur when walking, being knocked over by, or tripping on an animal. There is also need to bend down to feed pets or otherwise care for them - something not all older adults are easily able to do. Finally, there could be problems with allergies for some people, and adverse psychological reactions when an individual experiences the death of a pet.

**Table 2. Classification of Assistance Animals**

Type of Animal	Definition	Certification Needed?	Public Access?
<b>Assistance/Service Animals</b>	An animal that has been trained to do a specific task to help an individual with a disability. Can be dog but many other animals are used (e.g., miniature horse, monkey, ferrets, etc.).	No national standards but American Kennel Club provides guidelines.	Access to all public spaces unless animal is unruly. Protected by Americans with Disabilities Act.
<b>Therapy Animals</b>	Animals deemed appropriate to interact with the public, such as in a hospital. The pet owner accompanies the animal to and within these settings.	No, but local groups may evaluate pets and provide facilities with assurance that pet is appropriate for therapy.	No, only to the spaces where therapy occurs.
<b>Facility Animals</b>	Animals regularly present in a clinical or residential setting; may be any variety of species, such as cats, dogs, fish, or birds. May live in the facility or travel there daily with a handler.	No, only approval from the facility.	No, unless also an assistance/service animal.
<b>Emotional Support Animals</b>	Pets that provide emotional support to an individual with mental illness.	Only a letter from licensed mental health professional stating animal is necessary for mental health reasons.	May be in housing that is otherwise designated as "no pets" and usually can travel on airplanes and public transportation.

## References and Resources

Cherniack EP, Cherniack AR. The benefit of pets and animal-assisted therapy to the health of older individuals. *Curr Gerontol Geriatr Res*. 2014, 4:2014: 623203

Fine AH. *Handbook on Animal Assisted Therapy, Fourth Edition*. Elsevier. 2015

Levine GN, et al. Pet ownership and cardiovascular risk: a scientific statement from the American Heart Association. *Circulation*. 2013;127: 1-11.

Useful Websites:

Pet Partners: [www.PetPartner.org](http://www.PetPartner.org)

Therapy Dogs International: [www.tdi-dog.org](http://www.tdi-dog.org)

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