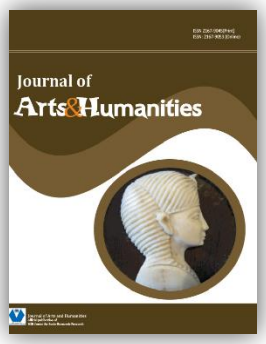

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Animal-Assisted Therapy and Application to Older Adults in Long Term Care

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ABSTRACT

In the past thirty years animal-assisted therapy (AAT) has moved beyond anecdotal status to a scientific evidence-based intervention. AAT comes in many shapes and sizes. There are a variety of animals which can be used such as dogs, cats, rabbits, horses, guinea pigs, goats, dolphins, and even fish aquariums. Loneliness is a common theme among older adults in long term care (LTC). Many older adults living in LTC facilities feel isolated. Some have little contact with family members or friends. Many describe feelings of loneliness and withdraw from social activities and interaction with others. Some feel as if they have nothing to look forward to and find no useful purpose in life. The absence of having another to care for or nurture can also be distressing. The purpose of this project was to explore the use of AAT as an intervention to decrease loneliness in residents living in a LTC setting by introducing visits from a Sphynx cat registered by the Delta Society as a therapy animal. The project sample consisted of seven participants all over the age of 60 years who resided in a LTC facility in Texas. Pre-intervention and post-intervention checklists and open-ended questions were employed to collect data from participants. Analysis of the project findings revealed a notable decrease in loneliness.

Key words: Animal-assisted therapy, older adults, loneliness, long term care.
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1.0 Introduction

AAT can be especially beneficial for the elderly population. In recent years, health related disciplines have begun to utilize AAT as a mode of healing the mind, body, and spirit (Ormerod, 2005).

It is believed the interaction between humans and animals may stimulate the release of endorphins which increase feelings of happiness, contentment, and pleasure. Feelings of loneliness and despair can be improved with animal contact (Holloway, 2008).

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Calvert (1989) examined AAT as a means to decrease loneliness. She focused on older adults living in nursing homes and concluded that those residents who interacted more with animals experienced less loneliness than did those who interacted less with animals. Routasalo and Pitkala (2003) regarded loneliness as the "geriatric giant." This is particularly evident for older adults living in LTC facilities. The basic need to touch is often denied to older adults living in an institutionalized environment. Animals can fulfill that need by having their bodies stroked, sitting in a lap, or being nuzzled or hugged by a resident (Abramowitz, 2000).

The idea of this study was to introduce a therapy animal (Sphynx cat) to older adults residing in a LTC facility in Texas. The aim of this project was to determine whether this intervention could decrease loneliness by increasing interaction among the participants.

Since the 1960s, the human-animal bond has become more research based. No longer are animals considered complementary therapy. Since the term "pet therapy" was first coined in 1960, additional research studies on this topic have been conducted. AAT is now recognized as a legitimate therapeutic intervention (Hooker, Freeman & Stewart, 2002). This recognition has assisted in the integration of AAT into many health care institutions today.

What is evident is that dogs tend to dominate as the type of animal used in most research studies. One could speculate the reason for this might be the relative ease of training dogs over other animals. Studies utilizing cats for AAT are sparse. Recently however, cats have been introduced with more frequency for AAT particularly in long term healthcare facilities. Cats can be held, carried, and passed from one person to another. They provide not only the tactile sensation of warmth and softness but also the feel of a vibrating body as they purr. Cats can assist in relieving loneliness especially for the institutionalized older adult (Marano, 2008).

There are also studies that use a variety of animals making it sometimes difficult to discern the utility of AAT in certain environments. Some investigators view the lack of homogeneity in outcome measures across studies as weaknesses of meta-analysis. Other investigators assert that a more robust depiction of AAT can be seen because of the variability encountered in measuring an assortment of dependent variables and constructs (Lipsy & Wilson, 2001).

Although there have been four decades of research examining the benefits of human and animal interactions on both the physical and psychological health of humans, studies remain preliminary (Cherniack & Cherniack, 2014). "Some investigations have used rigorous methodology, utilizing randomized designs comparing AAT with control groups or established treatments, while others have used simple pre- and post-test designs" (Nimer & Lundahl, 2007). Souter & Miller (2007) conducted a meta-analysis to examine the effectiveness of AAT in depressive symptoms in humans and noted gaps in AAT research. In addition, flawed methodologies in study design and evaluation of animal-assisted interventions were noted. Much of the current literature base consists of anecdotal reporting (Stern and Chur-Hansen, 2013). Herzog (2011) argues that the existence of a pet having an effect on one's mental health as well as physical health is not factual but rather hypothetical.

This evidence-based project was implemented to determine if there was a decrease in loneliness in individuals selected to participate in this study. The data collected from the participants demonstrated a decrease in loneliness.

In this study, the introduction of a therapy animal (Sphynx cat) to older adults living in a LTC facility in Texas demonstrated an increase in eye contact with others, engagement in conversation, and social interaction. The participants consistently reported feeling less lonely and happier after the AAT visits.

AAT can stimulate awareness and interaction as well as decrease loneliness. AAT can provide variety in the often predictable lives of those living in institutionalized facilities. The number of older adults

residing in LTC is accelerating as life expectancy continues to increase. Many are discovering it is not cancer or heart disease that is the most serious threat to the elderly. It is loneliness (Pawprints and Purrs, 2008). Love is the best medicine and animals are one of nature's finest suppliers. Despite the domination of dogs for AAT, felines can be very suitable animals for AAT as well.

The following sections will start with a literature review presenting research, hierarchy of evidence and levels of evidence related to various research studies. A synthesis of the literature will be discussed. The selected intervention will be reviewed. Furthermore, the methodology discussing how the evidence-based project was conducted, and the results of the project will be discussed and reviewed. Lastly, the conclusion and policy implications for the future will be presented.

2.0 Literature

2.01 Review of literature

This section will discuss the literature reviewed as well as other research studies reviewed. Individual research studies will be described with ratings of the level of evidence for the literature and the scale for the rating will be provided.

The use of therapy animals has been around for centuries. In ancient times, both Greece and Rome kept dogs in their healing temples and lap dogs were encouraged for women of middle age. Others kept dogs close believing they would preserve mental health. In the 1700's birds and other animals were successfully introduced to a psychiatric asylum in England known as the York Retreat (Jorgenson, 1997).

Simply the presence of an animal can create a sense of comfort for many people. Enhanced communication among individuals has been noted when introducing an animal to therapy sessions (Grado, 2011). An AAT program at a LTC facility in Illinois had a twenty year follow-up study conducted in 2011 which concluded that AAT was still considered by staff and residents alike to be beneficial both psychologically and physically (Behling, Haefner & Stowe, 2011). A case study in South Africa revealed the use of AAT increased socialization and improved self-esteem among the participants (Lubbe & Scholtz, 2013).

Even Florence Nightingale understood the worth of AAT. In 1859 she wrote "a small pet is often an excellent companion for the sick, for long chronic cases especially. A pet bird in a cage is sometimes the only pleasure for an invalid confined for years to the same room" (Nightingale, 1859).

Dr. Boris Levinson a psychotherapist first recorded his observations of the use of animals with patients in 1961. His presentation that year at the American Psychological Association was received with skepticism and ridicule by many of his psychology and psychiatry colleagues. Undaunted, he pursued the use of animals in his practice and continued to report his findings. Ironically one of the great forefathers before Levinson was known for keeping a dog in his office during patient visits. His name was Sigmund Freud (Bloom, Wijewickrama & Smith, 2005).

"Animal interactions promote positive emotions, which can boost confidence and reduce feelings of loneliness, sadness, anger, and insecurity. This may be particularly significant for elderly persons, particularly those residing in nursing homes, where such feelings are common experiences" (Ernst, 2014).

Quantitative research studies of AAT are relatively new. Nimer and Lundahl (2007) conducted a meta-analysis focusing on quantitative reviews of studies utilizing AAT. A comprehensive search of the literature revealed a variance in the types of animals used, AAT settings employed for intervention, and the presence or absence of mental health barriers of the subjects studied.

The meta-analysis by Nimer and Lundahl (2007) also demonstrated how the use of AAT as an adjunct to other interventions can vary greatly. The literature review illustrated a wide range of problems targeting AAT in conjunction with other therapeutic interventions. Because of such variance it was suggested there may be a lack of universal understanding about the usefulness of AAT. Moderator analysis was used in some studies to account for the variance, but it could not account for all variance in all studies. Approximately one half of the studies in this meta-analysis used a control group.

The utility of AAT can be most evident in the elderly population. Persons living in long-term health care facilities often feel isolated, and rejected by society. Many share feelings of loneliness. A quasi-experimental study was conducted by (Fick, 1992) which supported the use of AAT in nursing homes. The results of the study found that the presence of an animal stimulates social interaction and provides an environment that fosters cognitive awareness. Kawamura, Niiyama, and Niiyama (2007) conducted a research study in a residential nursing home in northern Japan. The purpose of this study was to assess the effects of AAT on older adults in a nursing home, both psychologically and physically. Although no control groups were utilized, they concluded that the participants had an improvement in mental functions after exposure to AAT. Most research studies to date have not used control groups for comparison of their research findings. Greater confidence could be assured in studies employing control groups.

There are a limited number of qualitative reviews on AAT. Brodie and Biley (1999) however, performed a qualitative review of AAT articles and concluded improved happiness, social interactions, and physiological health could be gleaned from the use of AAT.

A pilot study conducted in Melbourne Australia (Prosser, Townsend, & Staiger, 2008) reported improvement in the health and well-being of older adults living in a residential facility when allowed visitation with animals. The development of a reciprocal affection can produce many desirable health benefits both physically and mentally. Loneliness is a common feeling among older adults. Bloom et al., (2005) compared two different groups of older adults living in nursing homes. One group received a visit by a volunteer with a dog and the other group received a visit by a volunteer without a dog. They concluded there were significantly positive mood differences in nursing home patients who received visits with a dog present.

A randomized study by (Banks and Banks, 2005) compared the effects of group and individual AAT on loneliness in residents of long-term healthcare facilities. Their study noted three primary reasons associated with restriction in an older adult's quality of life. They were loss of personal belongings, loss of personal possessions (including a pet), and loss of social activity.

Table: Listing articles and level of hierarchy of evidence:

Author/Year	Level of Evidence
Nimer, J. & Lundahl, B., 2007	Level I
Bloom, P., Wijewickrama, R. & Smith, B., 2005	Level II
Bank, M. & Banks, W., 2005	Level II
Brodie, S. & Biley, F., 1999	Level V
Kawamura, N., Niiyama, M. & Niiyama, H., 2007	Level VI
Fick, K., 1992	Level VI
Prosser, L., Townsend, M. & Staiger, P., 2008	Level VI

2.02 Synthesis of literature

AAT can be used alone or as an adjunct to other therapeutic interventions. AAT can trigger memories and reminisce of past pets and reconnect people with the outside world. Animals can ease the dawning of old age by creating diversion. Observing the antics and playfulness of a dog or cat can facilitate the dismissal of everyday aches and pains. Animals do not care how a person looks, acts, sounds or smells.

They can lift spirits and rid boredom. Forgetfulness and disorientation can cause some older adults to shy away from social interaction with family and friends as they are often fearful of rebuffs. An animal is a nonjudgmental listener who doesn't mind hearing the same stories over and over again. An animal can provide a pleasant conversational topic which can rekindle memories and feelings of joy (Stang, 2002).

There are a limited number of qualitative studies pertaining to the use of AAT in LTC facilities; therefore the literature review on this subject is sparse. It is uncertain which types of animals work best in a given setting with a particular subset of subjects. There are also studies that use a variety of animals making it sometimes difficult to discern the utility of AAT in certain environments.

The human-animal relationship and its implications for healthcare has garnered so much interest in the past that many organizations, governmental task forces, and university studies have been developed to examine the potential benefits (Jorgenson, 1997). Prosser et al., (2008) found that when elderly people entered a residential care center they often felt as if their lives had been disrupted causing detrimental effects on their health and well-being. Many felt a sense of loneliness. It is believed pets evoke a reassuring, non-threatening, tactile comfort thus breaking the cycle of loneliness and social withdrawal often seen in older adults living in LTC facilities. The introduction of a pet as an intervention to change the environment is believed to reduce feelings of isolation (Brodie & Briley, 1999). They concluded that AAT was most effective in decreasing loneliness for LTC residents if provided individually verses a group setting. Brickel (1979) found that introducing a cat to nursing home residents increased resident motivation to participate in activities at the facility thus decreasing feelings of loneliness. Banks and Banks (2005) found in one of their studies that lonelier individuals benefited the most from AAT. They advocated AAT as an intervention useful to increase social interaction and combat feelings of loneliness especially in old adults living in LTC facilities.

After an extensive review of the literature, a targeted intervention emerged. The intervention was the application of AAT to older adults living in LTC facilities to decrease loneliness. Loneliness is a common issue among older adults. A person can suffer from loneliness even if surrounded by people. It was discovered that loneliness can be manipulated by interventions that develop social skills and elevate self-esteem (Routasalo and Pitkala, 2003). Banks (2006) found that loneliness in nursing home residents could be reduced using AAT. The intervention revealed that simply letting the animals spend time with the residents decreased feelings of loneliness. The AAT visits gave the residents something to talk about to one another. Sharing the ATT experience amongst themselves seemed to diminish feelings of loneliness.

The first step was to select a LTC facility. Banks and Banks (2005) note that older adults are predominant within the demographics of LTC facilities. The facility chosen provided a strength for this project as the intervention was directed toward an aged population. An analysis was done to determine strengths, weaknesses, opportunities and threats (SWOT). The strengths projected for the study included the ability of an animal to decrease loneliness in older institutionalized adults (Marano, 2008). There were no weaknesses identified. There were opportunities for residents to increase self-image and coping abilities. According to Donaldson and Watson (1996) ageing can interact with loneliness by leading to poor self-image and inability to cope with loss. The only threat identified was the possibility of an animal inflicted injury.

The second step was to identify a therapy animal for the intervention. The animal selected for this intervention was a male Sphynx cat named Spencer. This cat was chosen because he was hairless, decreasing the chances of allergic responses among residents. The investigator (Nurse Practitioner) and the cat successfully completed all training requirements set forth by the Delta Society and became registered Pet Partners. The Delta Society screens and evaluates all animals for temperament and suitability before granting Pet Partner recognition (Delta Society, 2008).

The third step was to meet with the LTC facility Administrator. This meeting was held and the purpose of the study reviewed. Approval was granted and a clinical contract with the facility signed. Next, predetermined criteria were established for subject inclusion for the study. Criteria included subjects over the age of 60 years who functioned independently. A total of seven participants were recruited to allow for possible attrition. A meeting was held with both shifts of nursing staffs at the LTC facility to introduce the therapy animal, and to educate them on the purpose of the study and the process. Concerns were identified and questions answered.

The cat was carried in a small blanket, wore a special harness and was on lead at all times during visits with the subjects. The investigator wore a Delta Society identification badge and the cat wore a Delta Society identification tag while at the facility. AAT visits commenced twice per week for 13 weeks. During AAT, the subjects were asked open ended questions before and after the encounter with the cat. Pre-intervention and post-intervention the question was asked "how do you feel now?" A notation was also made related to the subject's eye contact with others, engagement in conversation, and interest in the cat pre-intervention and post-intervention. The responses gleaned from the subjects determined the effectiveness of the AAT intervention in decreasing loneliness in older adults residing in LTC facilities. Ongoing feedback from multidisciplinary team members was solicited throughout the study.

2.03 Theory used for development of intervention

The theory selected for the development of this intervention was the Cognitive Theory of Loneliness. This theory considers loneliness as a state of being which can be manipulated via interventions which can develop social skills and increase self-esteem. This theory focuses on the individual's experiences of loneliness and responses to loneliness. According to this theory the way a person *feels* about their loneliness determines their experience of loneliness (Donaldson and Watson, 1996). It is from this supposition that loneliness is considered to be a feeling which can be manipulated.

The Cognitive Theory of Loneliness fit well with the proposed intervention and supported the open ended question asked pre and post-intervention ("How do you feel now?"). Pre-intervention responses provided baseline data at the beginning of each visit about how the subjects were feeling. Then after the intervention was introduced in the form of an AAT visit with the cat, the subjects were asked again, "How do you feel now?" Subject responses to the question and whether or not there was noticeable eye contact or conversation with others pre-intervention and post-intervention were also noted. Changes of the participant's feelings pre-intervention and post-intervention was key to examining the effects of AAT in decreasing loneliness in older adults.

3.0 Methodology

3.01 Guiding framework

The model chosen as a framework for this intervention is the ACE Star Model of Knowledge Transformation. This model helped to delineate the features, cycles and characteristics of knowledge as it relates to evidence-based practice (EBP). While it is inclusive of existing knowledge, it also accounts for new scientific knowledge. The information is then combined and integrated into practice. It is a systematic process (Stevens, 2004). The model is configured in a five point star. Each star point represents a different stage of knowledge transformation.

The first star point is knowledge discovery. This is the stage in which knowledge is spawned. New knowledge can be discovered in the process of conventional research methodologies. This is the stage where the body of research is created related to clinical actions (Stevens, 2004). It was in this stage that it was discovered that nursing literature began addressing animals as a type of nursing intervention in the 1980s. Numerous descriptive accounts utilizing animals to create positive outcomes

in patient care became apparent. Nursing also began to recognize that animals seem to fill a void for older adults living in LTC facilities. The animals made the residents feel needed. In the 1990s there was an upsurge in the research of AAT. Many descriptive designs were supported by experimental research findings (Hooker et al., 2002). It was from these scientific inquiries and various traditional research methodologies that the stage was set for a new clinical intervention to emerge. Ideas for the proposed intervention began to amass.

The second star point is evidence summary. This represents the next stage of knowledge transformation. It is also considered to be a stage in which knowledge is generated. Summarization of knowledge occurs simultaneously. Review of the literature, systematic reviews, and meta-analysis were some of the types of evidence summaries found in this stage (Stevens, 2004). This stage is the synthesis of the literature reviewed previously and discussed under the synthesis of literature section of this paper.

The third star point is translation. This entailed taking the data gleaned from the evidence summaries and translating it into clinical practice (Stevens, 2004). The intervention that emerged from the synthesis of literature was the use of AAT to decrease loneliness in older adults living in LTC facilities. Evidence based studies indicated there is a synergistic experience between humans and animals which serve to diminish feelings of loneliness (Jorgenson, 1997). In this stage the data collection tool (pre-intervention and post-intervention checklists) were developed and inclusion criteria for study participants formulated.

The fourth star point is integration. In this step, practices of the individual and the organization are changed. This is done via formal and informal avenues. Factors affecting the intervention's rate of adoption and integration into sustainable systems are noted. This information was previously discussed under the intervention section of this paper.

The fifth star point is evaluation. This is the last stage of the ACE Star Model of Knowledge Transformation. In this stage the value of evidence-based practice was examined in relation to the effect on resident health outcomes. The satisfaction of AAT among the provider, staff and residents was noted. The efficacy of the intervention was assessed and incorporated as part of evidence-based practice which improved the healthcare quality of the study participants.

Initially four females and three males agreed to participate. One female died in the first month of the intervention. Participant ages ranged between 65 years to 92 years. Some of the participants had owned pets before and others had not. Some of the participants liked cats. One did not but still elected to be a participant. Most did not receive regular visits from friends and family members. One chose to stay in her room and would not socialize with others, except for the AAT visits with the cat. Three of the participants had varying degrees of social withdrawal noted in their records either because of health problems, lack of emotional control or personal preference. All participants had multiple medical diagnoses.

The results yielded from the study included a very favorable response to AAT visits. There were no AAT visits in which any subject reported an unfavorable response. Some common themes were recognized over the course of the study. It was noted pre-intervention that when the subjects were asked "how do you feel now" the answers ran the gamut from "alone, lonely, discouraged, isolated, alienated, hopeless, down, blue, bored, forgotten, worthless, poorly, weak, useless, depressed, frustrated, nonproductive, bad, terrible, and sad." Participants did not always make eye contact or engage in conversation with others. However, the participants were always interested in the cat.
Post-intervention when the participants were asked "how do you feel now" the responses ranged from "less lonely, more content, cheered up, excited, calmer, less anxious, good, less isolated, like somebody cares, less sad, special, less worried, more relaxed, hopeful, better, joyful, peaceful, upbeat, more alive and honored." Some of the other comments made by the participants included "I feel like Spencer's grandmother, he smiles at me, he brightens my day, he reminds me of my pet, and he loves me."

4.0 Results and Discussion

This section will discuss the evaluation and results of the process and outcomes of the study. This was the last step (fifth star point) of the guiding framework used.

4.01 Process and outcome evaluation

The project goal was the application of AAT to older adults in a LTC facility to decrease loneliness. The introduction of a therapy animal (Sphynx cat) to a specific unit in a LTC in Texas was used. Seven residents were voluntarily recruited for the intervention and signed consent forms were obtained from each. Pre-intervention data was collected during each visit, the cat was introduced by the investigator to each participant for a visit, and each participant was then asked if they would like to stroke the cat. This process was repeated with every participant (with the exception of one participant who died in the first month of the intervention) for a total of 13 weeks (26 visits). The process was evaluated by noting how the intervention flowed and whether to add, delete, or revise the steps or process.

The outcomes to be evaluated consisted of one question and three observations by the investigator. This was done both pre-intervention and post-intervention, utilizing a checklist. The one open-ended question asked to the participants was, "How do you feel now?" The three observations made by the investigator included whether the participant was engaged in conversation, made eye contact with others, and showed an interest in stroking the cat.

4.02 Results of evaluation of process and outcomes

The results of the evaluation of the process yielded some modifications in how the intervention was conducted. It was first thought a group setting would be most beneficial but it became evident at the beginning that one on one visits with the subjects were a more practical means of implementing the intervention. This was because the subjects had differently scheduled activities and meal times that had to be accommodated. No additional steps of the process were added, deleted or revised.

The results of the evaluation of the outcomes yielded overwhelmingly positive responses to AAT visits. The one open ended question asked by the investigator pre-intervention and post-intervention was "how do you feel now?" The responses were positive each time. The three observations made pre-intervention and post-intervention by the investigator related to engagement in conversation, eye contact with others and interest in stroking cat were also noted to be overwhelmingly favorable.

5.0 Conclusion and Policy Implications

In conclusion, the effects of introducing AAT to older adults residing in a LTC facility generated much interest and curiosity from most everyone on the unit. The nursing staff and social workers frequently reported many of the residents asking for Spencer and wanting longer visits with him. In addition, the three subjects diagnosed with varying degrees of social withdrawal became more social and left their rooms more frequently to talk about the cat with others. From the data collected via the checklists pre-intervention and post-intervention, one can draw the conclusion that AAT in older adults residing in LTC facilities has many benefits; including the decrease of loneliness in older adults.

There were no "misfits" discovered. The data seemed to fit the model used for development of this intervention.

There were some unforeseen lessons learned. For example, this population of individuals were very much creatures of habit. They had a daily schedule and they did not want to deviate. Therefore, the investigator had to spend a little more time than expected working around their schedules to

implement the intervention. One resident wanted to participate in the study until she realized the time clashed with her favorite television program. Also, once the word was out that Spencer was making visits, many were trying to figure who was participating in the study and if there would be another study to participate in later. The nursing staff also became quite attached to Spencer. He frequently left the facility with multiple lipstick smudges on his body!

5.01 Future implications

A suggestion for change to this intervention would be to shorten the study by one month. The data gleaned after two months was fairly repetitive.

Some suggestions for nurses in general would be to embrace AAT as a way to improve the quality of life for older adults in long term care facilities. Before embarking upon an AAT program, I would highly recommend the owner and animal receive education, training and become registered Pet Partners with the Delta Society. This helps to ensure animal suitability for such visits.

Loneliness is not inevitable in old age but it is a significant problem. Suggestions for nurses who are translators, implementers and researchers would include the need for further research to legitimize AAT and link it to improved healthcare outcomes. Philosophically nursing embraces total well-being. There is a need for future research and translation of this research to the bedside in order for AAT to be seen as a valid contributor to better health.

Since the initiation of AAT with the cat, the LTC facility nursing staff state there has been some discussion among nursing staff, residents and administration about obtaining a resident feline. Spencer has not been forgotten and continues to make periodic visits to not only the participants of the AAT intervention but many other residents who request his presence. Those participating in the intervention continue to keep Spencer's picture displayed in their rooms. The nursing staff state they speak of him often.

The introduction of AAT should be carefully planned. There are many aspects to be considered and staff involvement from the beginning is essential. Involvement of other disciplines within the facility is also vital to garner support for AAT early on. The objectives of AAT should be reviewed with all staff and evidence-based practice guidelines should be developed.

Not all animals are suitable for AAT. The temperament of the animal should be considered as well as the handler's experience with the animal.

Examination of the animal by a veterinarian for good health and current vaccinations prior to resident visitation is important. Assessment for zoonotic disease risks with corresponding procedures in place to mitigate these risks is also recommended.

A written policy or guidelines may also be warranted as a safeguard for the welfare of the residents of the facility as well as the animal. Resident attitudes, allergies and phobias all need to be taken into account before beginning AAT. A facility meeting should be held to discuss the scientific evidence supporting AAT, examine existing practice, address any concerns, obtain feedback from staff and residents and make decisions on how to proceed with AAT. Other topics such as animal selection, animal screening and suitability, animal care, infection control procedure, staff training, measurement indicators and documentation should be discussed.

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