Dialysis Dogs Program Implementation at Saint Joseph Hospital's Outpatient Dialysis Clinic: Animal-Assisted Activity in the Dialysis Environment

Megan R. Prescott, MSW, LCSW, University of Colorado Hospital, Aurora, CO;
Melissa Milne Ogata, MSW, LCSW, Saint Joseph Hospital, Orange, CA

In recent years, interventions with animals in medical environments have become more prevalent and accepted as a unique approach to improving patient outcomes. Hospitals, rehabilitation centers and nursing homes often use animals as part of the therapeutic milieu. A wealth of benefits to patient well-being has been explored in the literature, as have the relative safety of animal activities in medical settings. In spite of these benefits and documented safety of such interventions, therapeutic activities with animals in dialysis settings have not become common, nor have such programs been explored in the literature as a therapeutic adjunct for dialysis patient care. In 2006 and 2007, following parameters developed by and in partnership with volunteer teams trained through the Delta Society, the social workers at the outpatient dialysis clinic at St. Joseph Hospital in Orange, CA, successfully implemented a dog visitation program with 22 patients in the outpatient adult hemodialysis clinic. This article explores the design and implementation of this pilot program, as well as the impact of this unique approach for both patients and staff at the St. Joseph Hospital Renal Center.

REVIEW OF THE LITERATURE

For centuries, animals have been used for therapeutic benefit in a variety of health care and therapy settings. In a manuscript on nursing, Florence Nightingale noted, "A small pet animal is often an excellent companion for the sick, for long chronic cases especially" (1860). The early 20th century saw a departure from using animals in health care settings, until the practice increased in the 1960s. It was not until the 1980s that researchers began to study the unique health benefits of such practices (Fine, 2000; Johnson, Odendaal, & Meadows, 2002).

Leading this new investigation was a groundbreaking study conducted by Friedmann and colleagues, who discovered that patients who owned pets were more likely to live longer following a cardiac hospitalization than non-pet owners (1980). Pets provide companionship and a unique source of comfort and support that, unlike human companionship, is almost limitless in supply. Additionally, the supportive exchange between pets and people lack the complications, ambivalence and varying emotions that sometimes accompany human relationships (Friedmann, Katcher, Lynch, & Thomas, 1980). Contacts people have with their pets are speechless; they have a relaxing quality, unfettered and unchallenging (Friedmann, Katcher, Lynch, & Thomas, 1980; Jorgenson, 1997).

When carefully administered, pet visitation programs can be appropriate in a wide range of health care settings with nearly any patient. Age and illness do not usually present a barrier (Barba, 1995; Saylor, 1998). Dog visitation programs have had positive results with patients in a variety of settings, including cardiac, oncology, general surgery, HIV/AIDS, coma and rehabilitation and hospice units (Barba, 1995).

Programs that are carefully planned, implemented and supervised present very low risk of incident or infection (Barba, 1995; Brodie, Biley, & Shewring, 2002; Guiliano, Bloniasz, & Bell, 1999; Miller & Connor, 2000). It is important that policies and procedures for pet visitations address several key concerns to manage risks. Patients should be carefully screened to identify fear of animals, allergy to animals, interest in participating in the program and whether the patient has a history of violent or unpredictable behavior (Barba, 1995; Brodie, Biley, & Shewring, 2002). Both the pet handler and the animal should be evaluated by a certifying organization, such as the Delta Society or Therapy Dogs International, and a consistent review of program participants, including handlers, animals and even unit nurses is essential (Stanley-Hermanns & Miller, 2002). Visiting animals should be kept from areas that must remain sterile, such as isolation rooms and medication rooms, and areas where food is prepared, such as staff break rooms. Animals can wear shirts to control shedding, and the surface on which they sit, including patients' laps, can be padded and changed (Saylor, 1998). As part of certification, visiting dogs must have a health clearance from a veterinarian, be current with vaccinations and demonstrate consistent behavior (Cullen, Titler, & Drahozal, 1999).

The benefits of pet visitation are many and have been noted across the health care continuum. From inpatient and acute care settings to rehabilitation and extended care facilities, increased relaxation evidenced by reductions in blood pressure has been documented in patients receiving pet visitation (Barba, 1995; Cole & Gawlinski, 2000; Cullen, Titler, & Drahozal, 1999; Guiliano, Bloniasz, & Bell, 1999; Proulx, 1998; Saylor, 1998). Where a bond exists between the human and the animal, this relaxation response has been shown to be enhanced (Proulx, 1998). Other psychological benefits are widely acknowledged, such as improved adjustment to body image changes in patients with AIDS, stroke or cancer (Barba, 1995). Increased motivation to participate in recovery efforts were noted in traumatically injured patients (Miller & Connor, 2000), and decreased anger and hostility in patients on a transitional care unit (Stanley-Hermanns & Miller, 2002). Pet visits can improve patient communication with hospital staff during and after contact with the animal (Stanley-Hermanns & Miller, 2002) and can make institutional settings seem more home-like (Barba, 1995). Pet visits have reduced patient need for pain medica-

tion by providing a diversion from pain (Miller & Connor, 2000). Interaction between visiting pets and staff have led to unexpected benefits, such as reduction in staff stress and improvement in morale, which in turn produced better patient care by raising caregiver spirits and inspiring a more optimistic attitude (Barba, 1995; Miller & Ingram, 2000).

DEFINITION OF TERMS

The Delta Society is one of several international organizations that endeavor to "improve human health and services through service and therapy animals" (Delta Society, 1996, p. 81). As such, they have expanded the therapeutic and service role of animals in health settings. The *Standards of Practice in Animal-Assisted Activities and Animal-Assisted Therapy* provides guidance in the development, implementation and management of animal visitation programs in a wide variety of health settings (Delta Society, 1996).

As defined by the Delta Society, there are two types of animal visitation: animal-assisted therapy (AAT) and animal-assisted activities (AAA). The Dialysis Dogs Program at St. Joseph Hospital (SJH) Renal Center conforms to the Delta Society's definition of AAA.

AAT "is a goal directed intervention in which an animal that meets specific criteria is an integral part of the treatment process" (Delta Society, 1996, p. 79). This intervention is delivered by a specially-trained professional within the practice and scope of his or her profession. Under this definition, the therapeutic process must be documented and evaluated, as well as designed to meet specific treatment goals as dictated by the individual needs of the client/patient. Progress should be measured through the course of the intervention (Delta Society, 1996). AAT is often referred to as animal-facilitated therapy, pet-facilitated therapy and simply pet therapy.

By contrast, AAA is "basically the casual 'meet and greet' activities that involve pets meeting people" (Delta Society, 1996, p. 79). This is a straightforward activity that is easily duplicated with a wide variety of patient populations, without the need to tailor the intervention to meet a specific set of needs or goals. It can be conducted by specially-trained professionals, paraprofessionals or volunteers in a variety of settings. A wide range of animals can be partnered with human handlers in AAA, including dogs, cats, rabbits, guinea pigs and others. Although conforming to the Delta Society's definition of AAA, the program implemented at SJH's outpatient dialysis clinic involved only dogs and the AAA is often referred to as "dog visitation" for clarity.

While the adoption of the dog visitation program endeavored to affect therapeutic benefit in patients of the dialysis clinic at SJH, it is important to distinguish the Dialysis Dogs AAA program from AAT. Although AAT was not used in this program, the distinction between the two forms of animal visitation is important. First, the guidelines for the use of AAT are far more stringent than the design and implementation of this program. Second, it has relevance for future study as its use allows for the possibility of greater impact and therapeutic response. The use of AAA in a dialysis setting is a necessary first step toward the implementation of a true AAT program.

The combination of a specifically trained therapy dog and its trained human handler, (almost always the dog's owner) is referred to in this article as the therapy dog team. The terms *therapy dog* or *therapy animal* refer to animals who have fulfilled the training requirements with their human partner to qualify to work in a health environment in an AAA capacity.

POTENTIAL BENEFITS

Elderly or socially isolated patients who experience a limited amount of positive touch in their personal lives or in the clinical environment can benefit from the soft, loving touch of a trained therapy animal. In addition to the benefits of touch, the presence of a pet animal can provide a soothing connection to nature in a medical environment that can feel severely clinical, sterile and even technologically alienating. In-center dialysis treatments average three to four hours in length. Patients struggle to find satisfying ways to stay occupied during treatment; they are limited by the need to stay seated, and mobility of both arms is restricted by a blood pressure cuff and the need to protect the placement of the dialysis needles. Visits from an animal could provide a welcome distraction for dialysis patients, given the circumstances of the treatment even in patients who are simply observing the process and not actually participating in a visit. In addition, interaction and conversation with the handler could be as equally satisfying as the interaction with the therapy dog.

Adjustment to chronic illness often involves multiple losses and changes in roles and physical functioning. Patients can experience changes in body image, alienation from friends and family and withdrawal from activities, all of which can have a profound effect on an individual's self-esteem. Dogs (and other pet animals) offer enthusiastic and universal acceptance of the patient despite medical problems, disabilities or unusual appearance. As pet visitation and other AAA in medical settings have shown, the potential benefits to patients include decreased stress and anxiety around medical treatments. For the dialysis patient whose regimen includes treatments three times a week, these benefits could influence how patients feel about attending treatment and may even lead to fewer absences or fewer shortened treatments.

Additionally, there are concrete potential benefits for dialysis patients exposed to AAA in the clinic setting. Social workers at SJH Renal Center noted that dialysis patients frequently report feelings of anxiety and dread around the cannulation that accompanies every treatment. In the dialysis clinic, needle sticks are associated with the routine touch exchange between patients and dialysis staff. While patients exposed to therapy dogs would still have to endure needle sticks, the presence of a calming pet animal and the opportunity to engage in positive touch could have a counterbalancing effect to these uncomfortable feelings.

The presence of the animal can provide a conversational centerpiece with no connection to sources of emotional fear or insecurity. For withdrawn patients, the pet can provide a welcome subject matter that is simply outside patients, their bodies and their medical situations. Pet animals can also provide a conversational centerpiece through which patients and staff can find a pleasant commonality that may even be connected to cherished memories of childhood or a happier time. Such social interactions could help build relationships between patients and staff and with little effort from the participants.

Given the unique, positive nature of this social interaction, it is possible that the use of AAA programming could result in greater patient satisfaction with the treatment provider. One study showed that almost half of medical consumers would choose a hospital based on the availability of animal-assisted programming (Voelker, 1995). While this is only one study, the inference that the availability of animal programming in a routine medical clinic setting could lead to greater satisfaction with the provider is a compelling one, and warrants further research.

In addition to the many benefits to patients, it was also expected that the Dialysis Dogs program would present potential benefits to staff. Dialysis teams can become adversely affected by the chronicity of the clinic atmosphere and long hours of task redundancy, leading to apathy or even boredom in the work setting. It was hoped that the presence of therapy dog teams in the clinic environment would provide a welcomed break in routine for the staff, and through witnessing positive interactions between animal and patient, the mood of staff members could benefit along with the patients' and potentially lead to an increase in job satisfaction.

PROGRAM DESIGN

The major contribution of this social worker's work time took place before the program began, ensuring that a proper policy and procedure was in place and approved by the necessary governing bodies, surveying patients and staff, obtaining informed consents for participation, training staff to understand program design and safety measures, and implementing documentation. During the pilot phase, the social worker assumed the role of coordinator, and the primary task was observing the program directly and through contact with staff to ensure integrity and monitor for unanticipated problems.

To implement a dog visitation program in the adult hemodialysis clinic of SJH, it was necessary to first develop a policy and procedure for the program and then meet the approval of the Infection Control Board. As SJH already had an established policy and procedure for pet visitation in other units of the hospital, the existing policy and procedure was modified and adapted to meet the unique needs of the dialysis clinic to ensure safety and consistent program implementation. Additionally, approval from the dialysis facility's medical director had to be granted for the program's implementation, and additional clearance for each patient was required by one of the clinic's six nephrologists managing their individual care, which was given in writing and kept in the patient charts.

AAA programming at SJH is supervised by the volunteer coordinator. As the hospital's volunteer coordinator already had experience in the use of AAA, she was an important collaborator in the design of a safe, successful program tailored for the dialysis population. The volunteer coordinator collaborated with a social worker from the dialysis clinic during the design and approval processes, using the Delta Society's *Standards of Practice for Animal-Assisted Activities and Animal-Assisted Therapy* as a guide (Delta Society, 1996).

Therapy dog teams who contributed to the Dialysis Dogs program in the SJH outpatient dialysis clinic were oriented to SJH as volunteers and were required to attend a two-day orientation program covering hospital policies and procedures and interact with hospital patients in appropriate and sensitive ways. All therapy dog teams volunteering in the hospital were required to submit the necessary documentation of their certification to qualify them as a therapy dog team from a certified therapy dog organization, such as Therapy Dogs International or the Delta Society. Each volunteer animal handler and dog was required to wear a hospital photo identification badge while volunteering on hospital grounds. Prior to participation in the dialysis dog program, each dog therapy team was oriented to the dialysis unit by a dog handler with extensive experience providing dog visitation at SJH.

Once cleared by the volunteer department, the volunteer coordinator identified volunteer dog teams that might work well in the Dialysis Dogs program. The program benefited from having therapy dog teams who could be available weekly to provide a consistent presence in the clinic, as well as teams who could be available at the specific times of day when animals could safely enter the treatment area. Dialysis treatments typically last at least three hours, and the clinic operates all day, six days a week, which provides many opportunities for dog teams to visit at a time that is convenient to them. In designing this program, however, special attention was paid to the "turnover" time. Dialysis patients attend treatments in "shifts" consisting of approximately four hours each. Turnover is the commonly used term to describe the initiation of treatment and the termination of treatment, and the entrance of the next "shift" of patients to go onto the machines. During turnover, dialysis needles are being inserted and removed and catheters are exposed to air. The dangers of potential infection and accidents are increased and dog visitation is not allowed until all the patients are on the machine for that shift. Turnover can take up to 30 minutes and therefore limits the time available for therapy dog teams to essentially less than two hours at a time. This limitation required that the therapy dog teams have the flexibility to be available at these very specific times of the day.

Consideration was given to special measures that needed to be taken because of the dog's physical attributes, such as size and breed. Small dog breeds like Pomeranians are hard for patients to interact with from a dialysis chair unless the dog was placed in their laps. Large dogs, like Labradors, are too large to sit in patients' laps safely, and may need something to sit on to be easily reachable by patients. In the case of both large and small dogs, it was important to ensure that the patient could easily interact with the dog while keeping the access site secure. With small dogs, it was important to move blood lines out of the way and tape them in place so they were not accidentally stepped or tugged on by the dog. For infection risk reasons, the dog was not to come into contact with any part of the medical equipment, including the blood lines. Disposable pads were placed on patients' laps to ensure that the animal would only come into contact with patients' hands.

Infection prevention was addressed in several ways. Before and after each visit, patients used antibacterial hand gel to minimize the spread of germs from patient to animal and vice versa. This practice also served to minimize allergic reactions. To further minimize infection risk, animal activities were not allowed on the treatment floor during turnover time, when treatments were being initiated or terminated. This precaution ensured that the clinic atmosphere remained free of any unwanted contaminants during the time when it is most important for the environment to remain sterile. Animal handlers were given a detailed schedule, and clinic staff was responsible for approving animal teams' entrance into the treatment area, as turnover activities may exceed the limits of a set schedule. If an animal team arrived in the clinic during a turnover time, they would have to limit their visits to the waiting area until it was safe to enter the treatment area. Animal activities would not be permitted in isolation rooms.

As outlined by requirements for all animal activities in the hospital, each animal entering the dialysis clinic had to follow strict guidelines of hygiene and infection control. Handlers were required to maintain annual veterinary records ensuring that the animal was free of any infectious disease. Animals would have to be bathed and combed within 24 hours prior to all visits to the dialysis clinic, and nails had to be kept trimmed and filed to avoid risk of scratches.

Prior to the introduction of the dog visitation program, each patient and staff member was asked to complete a questionnaire containing items to identify any allergy, fear or aversion to animals. Only those patients who responded to questions about fear, allergy and aversion negatively and agreed to participate would be eligible for the program. Once a patient expressed a desire to participate in the program, informed consent was obtained by the social worker. The program was explained and patients were informed of their right to decline visits at any time. Staff members were asked if they wanted to be involved in program implementation, which meant assisting handlers in identifying patients who were approved for visits and completing required logs upon entering and exiting the facility and being aware of the dog handlers' activities to ensure that safety precautions were followed. If safety violations were noted, the staff was asked to report it to the social worker program coordinator.

As it would be impossible to screen every visitor to the outpatient dialysis clinic for fear, allergy or aversion to dogs, a large sign with a prominent picture of a dog was displayed during the course of the program announcing the possible presence of dogs in the clinic and the lobby. This sign asked visitors to speak to a member of the staff if they had any concerns about coming into contact with a dog in the dialysis center or lobby area. Of course, if at any time an individual became uncomfortable in the presence of a therapy dog team within the clinic, the therapy dog team would be required to calmly leave the area.

Two separate logs were used to track dog visitation in the dialysis clinic. As therapy dog teams entered the clinic, they were required to sign a log book kept at the nurses' station with the name of the handler and the dog, indicate the time they entered and left the clinic, and which patients received visits on that day. After the visits, handlers were asked to submit a more detailed log of the day's visits. The logs provided a brief record of the patient/animal contact and included general observations such as patient's mood and reaction to the animal, discussion topics during the visit and how the animal interacted with the patient physically. Other observations might also be recorded, such as whether the visit lasted longer or shorter than usual with a particular patient or if the patient fatigued easily.

RESULTS

The duration of this program until the time of the evaluation was seven months, from June 2, 2007 through January 2, 2008. When the program was launched in June 2007, only one therapy dog team was set up through the volunteer coordinator's office to visit the dialysis clinic. By the time of the program evaluation, there were seven teams visiting the dialysis clinic at varying degrees of regularity. There were 35 total therapy dog team visits to the dialysis facility in the seven-month pilot, and the average number of monthly therapy dog team visits to the dialysis clinic was five. July was the slowest month, with only two therapy dog teams visiting the clinic, and November was the busiest with eight.

Twenty-two dialysis patients who received regular visits with dogs completed questionnaires at the pilot program's completion. Although a majority of participating patients were female, the sample was otherwise consistent with the general demographics of in-center hemodialysis patients at SJH Renal Center (see Table 1). Follow-up questionnaires were used to evaluate the program's impact. The questionnaire consisted of 10 questions (including Likert-style, yes/no questions and open-ended questions) that attempted to determine the patients' overall satisfaction with the program, as well as solicit a more personal impression of how the program impacted their experience in the dialysis center.

Table 1

Participant Demographics: n = 22

Variable	Number	Percentage
Gender		
Male	6	27%
Female	16	73%
Ethnicity		
Hispanic	9	41%
Caucasian	12	54%
Asian	1	5%
Age		
30–39	2	9%
40–49	1	4%
50–59	5	23%
60–69	7	32%
70–79	5	23%
80+	2	9%
Years on Dialysis		
1–2	9	41%
2–5	4	18%
5–10	4	18%
10–20	2	9%
20–30	2	9%
30+	1	5%

Table 2

Dialysis Patient Response to Dog Visitation: n = 22

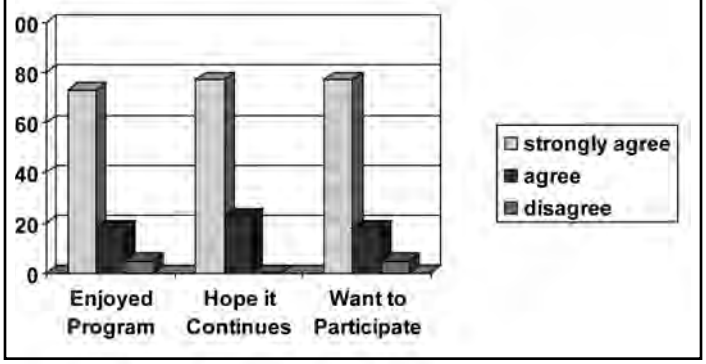
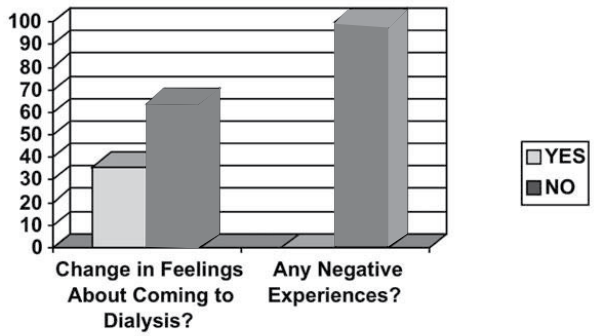


Table 3

Dialysis Patient Response to Dog Visitation: n = 22



Responses to the Likert-style questions were positive. Of the patients who completed questionnaires, 95% indicated that they enjoyed the program, 100% percent indicated that they would like to see the program continue and 95% would like to continue participating in the dog visits (see Table 2). When participants were asked if they had any negative experiences, none were reported. The questionnaire also asked patients whether the dog visitation program changed the way they felt about coming to dialysis and 36% of the participants indicated that it did. Those who did not indicate any change in their feelings about coming to dialysis nonetheless had only positive comments about the program (see Table 3).

Responses to open-ended questions (Appendix A) provided compelling information about the program's benefits to patients who participated. Some patients reported that the program was "soothing" and "relaxing," echoing the findings of similar programs in various medical settings. Comments like "When the dogs come, I just forget I'm here" and "Dialysis is more enjoyable now" supported the hypothesis that the presence of the dogs could provide a positive distraction. Other patient responses "It brightens my day and I go home happy" and "The program gives me something to look forward to" further illustrate the positive impact of the presence of pet animals.

A similar questionnaire solicited the dialysis clinic staff response to the program. Twelve staff members were surveyed, and all 12 indicated that they enjoyed the program and hoped to see it continue. Staff indicated that they enjoyed seeing the dogs in the clinic for the entertainment value, and also identified that therapy dog visits had a calming effect on staff and patients alike. Staff also appreciated the dogs' capacity to bring smiles to the patients, and their unique ability to facilitate positive discussion among patients and between patients and staff.

Ten dogs visited patients in the dialysis facility during the Dialysis Dogs pilot program, representing several different breeds. Patients were visited by a Great Dane, Shi Tzu, Whippet, three Golden Retrievers and two Labrador Retrievers. Individual patients developed preferences for different dogs and different dog breeds. Patients who completed the questionnaire were asked to indicate whether they had a favorite among the visiting dogs. The answers were varied. Some liked Olga (the Great Dane) and Bogie (a black Labrador) because of their temperament and the nature of the interaction with large dogs: the dogs approached the patient's chair side and presented themselves for petting. Others liked Daisy (the Shi Tzu) because she was small and could sit on a patient's lap for a more interactive experience. Some patients enjoyed these different interactions equally and could not identify a favorite. Of all, Daisy was identified most often as the favorite visiting dog in the follow-up questionnaire, and this dog's individual temperament and entertaining nature (patients enjoy her tricks) seemed to be the most compelling reason for this distinction.

Observations throughout the program and comments from patients, visitors to the clinic and clinic staff also contributed to the impression of the program's success in the clinic. At the time of the program evaluation and this article's completion, the Dialysis Dogs program at SJH Renal Center continues, and there is no immediate plan to end the program.

STUDY LIMITATION

The SJH dog visitation program was coordinated by the dialysis social worker in collaboration with the SJH volunteer coordinator. As such, the program relied on the use of volunteers whose training and experience varied considerably. A few of the handlers had experience in the medical field, but most did not have any direct training in patient care. When the program was evaluated at the end of the pilot phase, some disparity in the quality of the handlers' logs was identified. While those with some medical experience provided a thorough description of the dog visit experience for each patient, others simply repeated general information similar to what was required on the clinic log such as patient names and amount of time spent with each. Hospital policy does not require that volunteers conducting pet visits complete detailed logs, but for the dialysis clinic pilot program it was clear that this data could be an important means of evaluating the administration, safety and program impact. Despite these inconsistencies, however, the majority of the handlers submitted detailed logs contributing to sufficient data to develop a basic understanding of the nature and benefit of the visits.

During the pilot program, limitations around turnover time in the clinic presented a challenge to coordinating dog team visits. Dog teams were instructed to wait until turnover time was complete before entering the treatment area for both safety and practical reasons. This often resulted in patients falling asleep before the dog team was able to enter the treatment area. Staff remained sensitive to the dog handlers and such situations, which could lead to frustration and even deteriorate the volunteers' experiences. Because the program relied on volunteers staying motivated to continue to visit SJH Renal Center on a regular basis, the team sought to find ways to show appreciation to the volunteers.

The reports from some handlers provided anecdotal data suggesting that patients who developed an attachment to a visiting dog (or reported that a particular dog was their favorite) impacted the quality of the visits. While all patients responded to visits positively, those who became attached to a particular dog seemed to indicate the highest degree of appreciation and enjoyment. Had all handlers' reports been consistent in providing the type of feedback that supports this observation, it may have led to a more compelling conclusion. Given that the handlers were volunteers with no specific training in assessing patients' emotional responses, it may be necessary to provide training to handlers to collect comparable data in future programs.

DISCUSSION

The Dialysis Dogs program, while not a social work intervention in the strictest sense, was developed out of the social work notion of addressing patient needs in unique ways that address the whole person in the situation. Starting a dog visitation program at SJH was the idea of one social worker at the Renal Center who had a particular interest in this type of intervention, and sought to determine whether dog visitation could impact areas of patient well-being that are otherwise difficult to address through other means and could serve as a creative adjunct to social work counseling and interventions. As a hospital-based organization, the resources of an existing pet therapy program already being utilized at SJH were available to the dialysis unit. The Renal Center administration responded positively to the social worker's advocacy for the development of a pilot program. As this program was conceived, designed, implemented and managed by social workers, this innovative approach provides unique opportunities for social workers to contribute positively to the unique environment of medical social work.

Given the growing popularity of animal activities in medical settings, literature on the use of animal activities as part of the therapeutic milieu in dialysis facilities is notably absent, despite the wealth of potential benefits. AAA has

been shown to decrease blood pressure and elevate mood in patients in a variety of medical settings (Barba, 1995; Cole & Gawlinksi, 2000; Cullen, Titler, & Drahozal, 1999; Guiliano, Blonaisz, & Bell, 1999; Miller & Connor, 2000; Proulx, 1998; Saylor, 1998; Stanley-Hermanns & Miller, 2002). Studies that specifically seek to determine whether these effects can be documented in dialysis patients would contribute to the current understanding of the therapeutic potential of this intervention. Other areas of interest for future study would include impact of dog visitation programming on treatment attendance or patterns of shortening treatments. AAA has been noted in the literature to have greater outcomes when there is a bond with the animal, whether or not the animal is a personal pet. Study of the effects of dog visitation in dialysis facilities over time, particularly when patients are exposed to the same dog on a regular basis could impact future implementation. This program did not seek to systematically gather or analyze the impression of visitors to the clinic or patients who were not receiving dog visits, but observing. It would be interesting to develop an understanding of how AAA programming in dialysis settings impacts these populations as well.

AAA programs initiated in institutional settings should be always be informed by accepted standards of practice and developed along with set guidelines for safe program administration. Because AAA and AAT programs are still relatively new, some concerns remain that animal teams, both certified and uncertified, may be introduced to clinical environments without proper implementation of a program policy and procedure to ensure safety to patients, staff and the visiting animal. Worse still, some clinic staff may be tempted to bring their own pets to the workplace to visit with patients without proper training, certification or expert consultation.

The Dialysis Dogs program at SJH's outpatient dialysis clinic demonstrates that with appropriate precaution and careful implementation, dog visitation in the in-center dialysis setting can be a safe and effective way to positively impact the dialysis patients' treatment experience. The impact of AAA programs is difficult to imitate through other interventions. A dog visitation program requires little commitment of time from clinic staff, relies on volunteers and is therefore inexpensive, and has a positive impact on both patients and staff. The use of AAA provides a unique opportunity for social workers in partnership with volunteer groups to make a positive contribution to the interactions between patients and the dialysis center environment.

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APPENDIX A

Dialysis patient responses to open-ended questionnaire items to solicit responses to the dog visitation program:

- "All of my life I had dogs and I miss them, so it's nice to see them here."
- "It helps the patients; it cheers us up."
- "I would like to make a personal connection with one of the dogs."
- "The program gives me something to look forward to. I wish the dogs could come frequently."
- "It brightens my day, and I go home happy. The dogs remind me of my youth."
- "They make me feel good; it's good for patients."
- "It is a pleasant experience. It's the warm and hospitable greeting that cheers you up."
- "Dialysis is more enjoyable now."
- "It's good for the patients; it's soothing."
- "Some people don't get to have animals."
- "I think it's nice. It's relaxing."
- "It's fun to have them come around. They all have different personalities."
- "When the dogs come, I just forget I'm here."
- "It puts me in a good mood. I call it a ministry because it is like accomplishing something from God."
- "I like animals, it doesn't seem so clinical."