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## The Eden Alternative

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**The Eden Alternative**

Jennifer Ellen Gettman, BSBA



An Abstract Presented to the Faculty of the  
Graduate School of Lindenwood College in  
Partial Fulfillment of the Requirements for  
the Degree of Master of Arts  
1995

Thesis  
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1995

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DEDICATION:

This project is dedicated to Dr. John Morley and the dedicated staff at NHC Healthcare. Many lives have been changed due to their hard work and vision.

## Abstract

The purpose of this study and program implementation was to integrate animal, plants, and teamwork philosophy into the nursing home environment. The focus of measurement was to identify the therapeutic value of the Eden Alternative in nursing home residents.

Utilizing the Yesavage Geriatric depression scale, 196 residents of a St. Louis based nursing home were studied. Fifty-five percent of the residents were identified of having some depression. Utilizing the long form of the Yesavage tool, residents were questioned to establish a base level of minimal, moderate, and severe depression. In a six-month follow-up, 22% of the severely depressed were reassessed. Results concluded that residents involved in companion pet programs had substantial decrease in depression. Through patient satisfaction indexes, the study also indicated an overall increase in happiness and satisfaction of care after implementation of the Eden Alternative program.

Facility activity participation records assisted in measuring the activity levels before the program development and after implementation. A significant increase in overall activity level was identified after Edenizing. This tool also helped to determine that severely depressed individuals experienced an increase in

socialization and other meaningful activities.

Other indicators and contributing service enhancements were not measured. The program development information should guide others in developing similar programs in other nursing facilities.

A Mastering Project Presented to the Faculty of the  
Cleveland Institute of Management College in Partial  
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Master of Business Administration

1975

## The Eden Alternative

Jennifer Ellen Gettman, BSBA

A Culminating Project Presented to the Faculty of the  
Graduate School of Lindenwood College in Partial  
Fulfillment of the Requirements for the Degree of  
Master of Arts

1995

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## Chapter I

The leading cause of suffering in nursing homes may be more related to feelings of hopelessness, depression, and loneliness than a medical condition. Yet, providers of long term care have created sterile environments to accommodate the medical needs of the residents. While providing this care, nurses and administrators have focused on treating the medical conditions of the patients.

There are many important psychosocial and psychiatric needs that caregivers often omit. By studying the effects of pet therapy and other environmental changes, offered through the Eden Alternative, this study attempted to determine if depression can be treated and prevented through environmental changes and pet companionship.

Other psychosocial issues were evaluated to monitor and assess changes in resident activity levels and social interaction. Are patients happier after implementation and how does the Eden Alternative affect the staff?

This study attempted to demonstrate that the Eden alternative enhances the overall quality of living, in the nursing home environment. Depression and hopelessness decreased as animals and plants were introduced into resident rooms and the nursing home community.

Finally, the study concluded by weighing the costs of the program. Through evaluation of this Alternative, recommendations are offered for future implementations.

## Chapter II

Nursing homes have struggled to maintain a positive impression on society. Perhaps it is because people associate them with "poor houses" of yesteryear. Before more stringent regulations, the treatment of patients was deplorable. Today people read about abuse and ill treatment of the elderly, in poorly run facilities. By focusing on providing a sterile environment rather than on a therapeutic home like one, many long term care facilities fail to meet the meet the social and psychological needs of the residents they serve. Providers often blame the media, but ignore the responsibility to change negative societal images. Long-term care providers often market the center as the "resident's home" but continue to maintain a sterile or hospital-like environment.

In 1991, Dr. William Thomas and Chase Memorial Home began a process called the Eden Alternative. Dr. Thomas believed that nursing homes over emphasized treatment and lacked enough care. Most nursing facilities focused on the important problems of disease, disability, and decline (Thomas, 1994). Though the majority of homes did an excellent job in maintaining high standards of treatment of disease and rehabilitation, many forgot that providing long-term care is supposed to be about living rather than existing (Thomas, 1994).

In fact, most nursing homes do an excellent job in providing what they perceive as quality care. Many take great pride in their clinical abilities to treat and provide care to those they serve. The problem is that caregivers often are looking only at the primary medical diagnosis not the overall needs of the patient. Many staff members confuse caring with delivering treatment.

Most people suffer a great loss when they enter a long term care facility. Some homes allow a few personal belongings to be brought in, however, residents must leave many personal items with sentimental value. Detachment from their home, personal items, their pets, and loved ones often affect the mental health of those entering and living in a long-term care facility.

This loss often leads to depression or poor mental health. In order to state what is healthy, it is essential to identify what is going well. We should focus on such concepts as creativity and play (Tornstam, 1992). Identifying those things that "enable humans to thrive, not merely survive", assists health care providers to improve environmental conditions that effect positive mental health (Butler, Lewis and Sunderland, 1991). If a patient is unable to adapt, to a new living situation, it can lead to both physical and mental illness. Buchholz and Roth (1990) described the concept of adaptivity to adjustment and interaction with the environment.

Researchers agree that successful adaptation to the nursing home environment determines success to positive physical and mental health.

When entering a nursing home, a resident must make many adjustments. Their environment completely changes. Suddenly the new nursing home patient must adjust to a shared room, bring only a small portion of their life's possessions, adapt to scheduled meals and activities, and often cope with a physical or mental deficit. These many factors may trigger depression or mental confusion.

#### *Depressive symptoms*

Depressive disorders are one of the most common psychiatric problems that older adults experience. While the elderly in the community have an incidence of depression of 10-15% (Blazer, 1990), the institutionalized elderly experience higher prevalence of symptoms of up to 25% (Vaczek, 1994).

There are many symptoms of depression. A persistent sad or empty mood might indicate a depressive disorder. Many times they lose interest or pleasure in ordinary activities. Activities that once brought pleasure become drudgery. Fatigue and sleeplessness are indicative of a depressed state. Often lost self-esteem, anxiety, indecisiveness, guilt, and irritability are all indicators of someone needing careful clinical evaluation.

Suicidal thoughts are indicative of a depressed individual.

Males over 65 years of age are at a higher risk, than any other group. Psychologists correlate suicidal tendencies to feelings of inadequacies, loss of independence, and sudden loss of loved ones (Vaczek, 1994).

Though caregivers or family members may be able to identify certain symptoms, the diagnosis should be based on a thorough psychiatric history and physical examination. By presenting the symptoms with the lifestyle and medical and psychiatric history, the physician should be able to make an accurate diagnosis. Often obtaining the family history provides the clinician with valid background information. The family unit may be of assistance in providing likes, habits, and tendencies. A neurological evaluation helps to differentiate dementia from depression. Laboratory tests can help provide diagnostic support (Morley and Szwabo 1994).

There are many tests and gauges to diagnose depression. A popular tool utilized by physicians, to properly diagnose depression in the elderly, is the Yesavage Geriatric Depression scale. (Appendix I) This is even more effective used in conjunction with the Folstein mini-mental status test. These tools identify those older persons needing professional treatment by a psychiatrist or physician and assist the other health care caregivers to more

effectively meet the needs of the resident.

### *Depression types and causes*

Clinical depression may be defined as chemical imbalance of the central nervous system. Many times this chemical imbalance, is linked to diet and socialization at mealtimes. A low protein diet following stress may lead to this illness (Smith,1983). The absence of socialization may directly effect nutrition and cause weight loss.

Reactive depression of affective disorder can follow a traumatic event (Mondimore,1990). When death occurs, the bereavement of a loved one may trigger this state. It is normal to be depressed or down when someone a loved one dies. However, when feelings of grief, hopelessness, or despair becomes prolonged it is indicative of a problem. Within one month, signs of brief cheerfulness should be occurring. The loss of the home and belongings may trigger reactive depression.

### *Treatment alternatives*

Medications to treat depression are often the first and only choice of treatment by some physicians. Anti-depressants are commonly prescribed but offer numerous side effects. Some of the treatments actually cause loss of appetite which can prolong the depression and cause confusion. Supplementation of vitamin B12 is also utilized to combat the illness (Hoffman, 1993).

The role of the family is of vital importance, especially

during times of loss, grieving, physical disability, and adapting to a new environment. Most older persons rely on friendships or family relationships to be a source of strength during times of trauma (Morley, 1994).

Elderly who are active, eat healthy, exercise, and are involved in social activities are able to combat tendencies leading to mental illness. Although not all depression can be prevented, those living a therapeutic life style will view life as more joyful and fulfilling. Some studies suggest coping with loneliness and stress is all depressed elderly require (Keil, 1990). Other clinicians would challenge that simply coping is not living.

The Joint Commission on Mental Illness and Health describes mental health as the concept of "thriving rather than surviving." The commission came up with three basic approaches to be used for identifying positive mental health in old age. Self-attitude, growth and self-actualization, and integration into activities are all concepts that enhance positive self-perceptions. When the elderly focus on identification and commitment to someone or something other than themselves, feelings of self-worth are effected (Sherman, 1993).

### *Effects*

As the nursing home patient loses the responsibility of



provider, homemaker, parent, and other meaningful roles, the issue of identity in old age resurfaces (Erickson, 1986). Caregivers often view their role as treatment, prevention, and providing compassionate medical attention to the patients. The health care provider has good intentions to take care of what they perceive to be the needs of the patient.

#### *The Eden Alternative Approach*

The Eden Alternative concept focuses on caregivers and residents working together to create a stimulating home-like environment. The integration of plants and animals into the environment not only adds warmth to the center, but offers many other aspects.

Residents and staff cooperate towards completing meaningful tasks. The resident begins to feel a sense of purpose by watering or feeding animals or plants. Most elderly persons either had domestic or farm animals during their lifetime. Reminiscence is useful to lift spirits and create a positive mood. As residents begin to complete useful tasks, the memories of yesteryear significantly affects their health (White, 1983).

Companionship is one of the primary focuses of the program. Feeling needed or loved and finally regaining the role of nurturing creates positive mental health. There is a direct correlation with successful aging and feeling of value to society

(Baun, 1984).

The integration of shared pets is one aspect of the Eden Alternative. Some persons are not physically able to care for a pet nor do they want the responsibility. A group activity is integrated to feed the animals and or water the plants. A large aviary or community dog provides stimulation desired by many of the residents. Other community animals may be integrated into the program as desired by the residents.

Some residents may enjoy the responsibility and companionship of personal pets. A bird cage may offer the resident an opportunity to care for an animal and feel useful. Bed bound patients or those rarely willing to socialize may discover that a pet may satisfy their needs and trigger a reversal of negative self-image (White, 1983). A comparative study by Thomas (1994) reflects that elderly persons with companion animals live longer and healthier lives.

Caring and tending for a pet increases the exercise level and often improves mobility. Companion pets have a special bond to their owners. This enhances the ego of the elderly resident.

Pet therapy provides meaningful experiences for the aged and chronically ill. Some clinicians utilize pets in reminiscing therapy as well remotivation therapy. Studies indicate that people

may respond to stimuli introduced by pets, when they are not stimulated by any other method of treatment (Burnside, 1986).

Often caregivers in the long term care setting, forget that touching is an important part of caring. An animal generally is very affectionate and enjoys being petted and loved. As patients become older, the need for touching is as great as ever while opportunities are lessened. Some studies reflect that touching, stroking animals, and talking to animals can actually lower blood pressure (Baun, 1984).

In a study, gauging the physiological effects of human bonding, 24 nursing home resident's blood pressure was monitored. When petting the companion dog, both systolic and diastolic blood pressures decreased, paralleling the relaxation effects of reading quietly (Baun, 1984).

One very important aspect of the Eden Alternative Process is that through the animals, powerful conversations replace monotonous routines. Intergenerational visits occur out of curiosity and excitement of the animals. This encourages visits by family and grandchildren. Relating the stories of yesteryear when petting a farm animal help to bridge the gap between young and old.

Research indicates that social interactions increase among nursing home residents when pets are present. Because social

interaction improves the social climate, therapists and clinicians are able to incorporate group processes into treatment approaches. Therapeutic use of animals can become useful in reaching treatment goals utilizing the enhanced social climate (Fick, 1993).

Volunteerism and community involvement naturally evolve when the philosophy of the Eden Alternative is adapted into the nursing home environment. People gravitate to heart warming projects involving animals. As pets are integrated, members of the community may begin assisting the facility residents. Local schools students, needing community service hours, are helpful in maintaining the cages and grounds.

Some schools may develop a volunteer program and provide a different student each day. The student learns while helping others. Other classes may spend a field trip understanding the aging process and the value pet therapy adds for the elderly.

The residents may want to become more involved in the community. Some residents may volunteer in tasks to help the children. Others may speak to an elementary class about life as a child or show off their personal pet, discussing how to care for it properly. The strongest advantage, cited in research involving animal programs, is that social interaction and communication is increased among friends and family (Behling, 1990).

Community members may begin to get curious about the specifics of the process. As they visit they communication increases among others in the community. They often are easily convinced to assist as volunteers.

Plants and gardening have been identified as being therapeutic to reduce stress and achieve the feeling of accomplishment. The scent and beauty of gardens offer the facility a less sterile environment as well as offering the residents meaningful tasks. Sense of ownership is another benefit offered in caring for plants. Harvesting vegetable gardens can be rewarding to those who have diligently weeded and watered throughout the season.

Although maintaining plants is therapeutic, pets offer the elderly diversion, fun, and complete attitude changes. In a study by Mugford and M'Comisky, one group of 75-80 year olds were given plants to care for and the other group parakeets. It was discovered the bird owners showed improvement in their attitudes toward people and their own psychological health. While caring for plants proved to be therapeutic, the companionship the birds provided was more beneficial to the patient's mental health (White, 1983).

The concept of Edenizing, links staff and residents together. The attitude of the resident toward the staff and the staff outlook toward care delivery are key components of the process. Together

they work collaboratively towards a common goal. Administrators may begin to initiate changes and challenge the staff to look at care delivery differently.

As the environment of the resident becomes less stringent and more freedom to make decisions and become involved is allowed, the concept toward managing employees changes. One important aspect of the Eden Alternative is the quality team management style. In order to gain acceptance and ownership of the Eden Alternative Process, staff members must be involved in the decision making processes of care delivery. Through employee empowerment, the concept creates the atmosphere for resident empowerment.

Self-directed teams are seldom found in the nursing home industry. Nursing homes have typically managed with hierarchy systems. CNA and service staff often are eliminated from the decision making process. Typically, the work schedule is developed by the supervisor. Many times assignments are prepared in advance by the supervisor. This may be done out of habit or because the supervisor lacks confidence in the staff's ability to perform these tasks.

The first step of empowerment displays management's confidence in the direct care givers ability to make decisions. After

implementation, management will realize that the caregivers know more about meeting the resident's needs than they do. Team members begin to feel control over their own destiny (Fisher, 1993).

In developing a self-directed team, management may disband the notion of traditional work groups. The management team sets up standards, boundaries, guidelines and communicates these to the self-directed teams.

Each team is interdisciplinary and includes a team leader. The team communicates with one another to monitor quality and establish work routines. They begin to select new team members through interviewing. Voting is used to correct problems as they occur.

The role of the supervisor evolves to that of a cheerleader. Posting results of successes and educating teams of healthcare trends, regulatory changes, and patient indicators are all functions the supervisor performs. The team then sets the goals and work together for the benefit of the patient (Buchholz and Roth 1994).

The self-directed teams create and reinforce a positive work culture. A good leader taps into the creativity of the team members. As the team gains a sense of shared responsibility, they begin to feel ownership of the facility and its operation.

Employee satisfaction and decreased turnover are indicators that the team concept is working. Patients appear happier, because staff harmony is evident in the nursing home environment.

Many facilities now have begun to implement like programs. One study conducted at NHC HealthCare in Maryland Heights also developed and evaluated an effective Eden Alternative program.



### Chapter III

In developing an effective program for this project, many issues were considered. Careful planning, research, and especially communication were essential components for development of the program.

The initial factors considered were the needs of the residents, staff, size of the facility and grounds, financial position, community needs, and finally governmental ordinances/regulations. Merely wanting a program was not enough.

To assess the needs of the residents, an assessment of psychological, physical abilities, and current activity level were evaluated. A commonly accepted psychological evaluation tool was the Folstein mini-mental status assessment and the Yesavage Geriatric Depression scale. These tools helped to establish a base line for depression and other cognitive deficits. The facility categorized the range of depression by the Yesavage grading scale. Those scoring over 15 were target individuals for aggressive treatment.

Concise and accurate activity participation records proved to be helpful in identifying residents' background history. These records assisted in identifying individuals who would be interested and active participants in duties associated with the care of plants and animals. More importantly, the record helped to identify

persons needing more sensory stimulation and socialization.

While the facility did not have additional labor hours to complete the depression scales and mini-mental status tests, they solicited help from the community. St. Louis University Medical School Geriatric Medicine students welcomed the practicum experience. Allowing the students to participate in this study, also initiated the first step of community inclusion. The nursing facility believed that "non-facility" volunteers were able to identify and recognize patient tendencies more accurately without including their own personal beliefs and biases.

A physical assessment of each patient was also essential to gauge the effectiveness of the program. Already required of long-term care facilities by the Omnibus Budget Reconciliation Act (OBRA), the completed Minimum Data Set (MDS) and nursing and physical therapy assessments were readily available. Social histories reflected that many residents enjoyed the traditional domestic and farm animals. Many of these patients, even in urban areas, farmed and gardened.

It was important to consider the age of the resident. The physical abilities of the residents was also a factor to decide the type of animals and the quantity. There were a significant number of bed bound patients desiring personal companions. The mobile

residents were physically able to participate in gardening and caring for larger animals in courtyard areas.

By communicating to the residents all phases of implementation, many enjoyed setting goals and helping reach them. The center gradually integrated animals into the population. This not only stimulated the residents and their families but also help to create excitement and acceptance from the staff.

Management to staff communication was important at onset. The staff needed coaxing to see the value of the program. As trends and goals were achieved they were posted. While some employees were animal lovers or had "green thumbs" , there were others who wanted no part of the animal or plant care. Many were concerned about the additional work and duties this program may add. Cultural issues were also a hurdle to overcome. Some cultures harbored fears against certain animals and biases toward pets.

The Eden Alternative was a shift to total team collaborativeness. More staff was not required, however a positive attitude, in regards to the program, was key.

An Eden planning committee was instrumental to initiate the alternative. Members volunteered to help steer the activities. This multi-disciplinary team encompassed nursing, maintenance, housekeeping, residents, and administration. A volunteer community advisory board provided valuable insight from a "non-

facility" perspective. As the process gained momentum, excitement within the community was generated.

The Eden committee began recording meeting minutes, in order to maintain focus, document successes and list encountered problems. Minutes of the meetings also assisted the committee with a history and a handy reference.

Initially, the committee selected projects that provided immediate gratification. They expanded on existing activities to gain momentum. As an example, the facility had many plants that were being maintained by a plant company, simply redesigning the activity routine to include a garden club decreased overall expenditures of plant maintenance and increased patient involvement. This initiated another phase of development, and helped to increase self worth among some residents.

The committee established an account in which contributions could be made to fund the program. Other sources of income were found through creative thinking. One idea included purchasing vending machines for the facility and maintaining them in house. These additional revenues helped to fund Eden expenses.

The facility administrator and Eden committee representative contacted the local city planning unit upon this initial phase of the program. By understanding the needs of the residents,

the city planner assisted in the promotion within the community. The city had ordinances restricting certain types of domestic animals allowed within the city limits. These restrictions dictated the type of animals the committee selected. Ordinances were altered, because a thorough plan was in place that allowed for well-designed space and proper animal care.

The administrator contacted the local team leader of the State Division of Aging regulatory agency, to prevent survey issues relating to this program. The nursing home administrator solicited suggestions from the survey team to help gain acceptance of the Eden Alternative.

Certain licenses needed to be obtained depending on the state regulations and the type of animals that were selected. A special permit was required by the conservation agency to house wildlife and some non-domestic animals. The conservation agency also provided a list of safe plants to assist in planning for gardening and horticulture.

Local animal shelters were visited by the committee. They provided a free dog as well as training and instruction in care. The humane society was included at the onset. This inclusion later proved to be a valuable relationship.

The committee found garden clubs, scout groups, area schools (seeking community service hours), 4 H clubs, pet stores

and lawn/garden centers were anxious to assist and donate time, pets, and pet items. It became essential to formulate sub-committees to handle the increased community involvement.

As excitement built, members of the community called to donate more animals. The committee formulated health standards for the animals. Vaccinations and veterinary care were implemented before the animals were introduced into the facility. The veterinarian was an excellent advisor from the community and provided information (and medical attention) regarding animal health vaccinations and standards.

The Eden committee expanded to include more team members. The committee members were identified by a special Eden T-shirt. By logging service hours the Eden committee broadened, encompassing various shifts and departments. Those staff members who helped feed or clean, initialed worksheets to insure Eden tasks were completed. After completion of 15 hours, they received an Eden t-shirt and were considered Eden committee members.

### **Introduction of Animals**

The facility began with a low maintenance aviary. The staff and family members marveled at the level of interest by the residents surrounding the aviary. Although staff primarily cared for

the aviary, the visual and audible stimulation it provided for the residents was easily recognized.

An aquarium was the first pet therapy that included resident participation. A resident volunteered to be responsible for the daily feeding and monitoring. This resulted in excitement and inclusion.

Other animals were introduced after pens and shelters were built. The outside animals were two goats, two geese, rabbits and a fawn. (Because the wildlife license was not obtained the fawn went back to it's original owner.) The dog was donated several months into the program.

The residents assisted the committee with cleaning and feeding. A schedule was initiated that designated a staff member to coordinate the duties. Committee staff members assisted the residents in feeding, watering and cleaning the plants and animals. A rotating schedule of team members helped staff to feel ownership of the program. (Appendix 2). In the beginning only the activity department performed the daily tasks. The entire staff soon began to view the Eden Alternative as an activity program. By rotating other disciplines, various residents and staff members became involved.

The feeding, watering, and cleaning schedule was posted and initialled daily, by the assigned coordinator. This assured everyone that the animals were being cared for properly. It also

encouraged others to sign up and participate.

As pets and/or plants were integrated throughout patient rooms, more staff participated and began to take active roles. The posted schedule assisted staff to relay questions concerning animal care to one appointed person. This schedule also helped to insure that one resident was not given sole responsibility without assistance of a staff member.

*Case Study:* A 79 year male resident, was thrilled when the dog was introduced into the facility. He began to take an active role in walking the dog and feeding/watering it. (He was instrumental in helping the dog acclimate to her new environment.) On the third day, he was left with the dog for almost 6 hours. Of course the staff did not intend to "stick" him with the responsibility, but none the less he accepted it. The responsibility was too much for him to mentally accept. He became leery of assisting with any daily chores as he remembered being overwhelmed with an unwanted responsibility.

#### **Promotions:**

Press releases were sent out to the media within the first phase. As the public felt the program added "warmth" to the nursing home environment, the media promoted the story as being a "unique" approach to the typical sterile environment. Providing the



media with pictures and stories that "warm the heart" generated even more publicity. The committee kept a camera readily accessible and jotted antidotes as they occurred. This provided the necessary stories the media requested to cover the program.

The facility contacted an association that involves other homes that are involved in an Eden Program. In Missouri, an organization called Project Life helps to promote and provide information regarding the Eden Alternative. Associating with organizations that understand the basic concept, provided the facility ideas in the beginning stages. The organization also provided information to the state ombudsman. The Ombudsman office is contacted as a reference (to community inquirers) of facility standards and recommendations.

As references were given and publicity gained, the facility received more referrals. The facility tracked inquiries (that referenced the Eden Alternative) to assist the external marketing committee to gauge the cost and effectiveness of the program.

**Costs:**

The program costs were minimal. The plants were not expensive as most plants were started through clippings, pots were donated, and animals (and pens) were donated. Costs for staffing reflected a reduction, as turnover decreased and less supervisor costs were required. The teamwork concept reduced

costs of overtime and training. During the initial phase, cost reduction for staffing was not recognized. Tracking of drug costs showed a gradual decline or reduction. As fewer drugs were required, the labor to dispense those medications also decreased.

### **Birds**

Birds offered the nursing home residents a personal pet and companion, with whom they could live (Thomas, 1994). The sound of the birds brought a feeling of spring into the facility.

The residents, staff, and visitors enjoyed bird watching and the ritual of feeding birds. The facility integrated birds into the environment with the large aviary. Many people appreciated watching birds lay eggs and later hatch. A pre-fabricated aviary was purchased that included birds, nests, and even maintenance agreements. While this was wonderful it was also expensive. The price exceeded \$2,000.

A less expensive aviary was constructed by converting a curio/display cabinet. By removing the glass, and replacing it with fine grade screen, it allowed for proper air movement in this type of aviary. Residents were able to hear the bird sounds more easily. Nests, twigs, and leaves were added to provide a natural setting for the birds. A metal sheet (cookie) was placed in the bottom and lined for easy cleanup. A water and food cup was also placed to

provide proper nutrients and hydration. (Cost approximately \$200).

The aviary was not placed in direct sunlight or in a drafty areas. This helped to provide a constant temperature providing a safer environment for the birds. The aviary, cleaned on a regular basis, helped to insure that the birds had clean drinking water. Fresh water and food were provided to the birds. Finches, doves, canaries, and parakeets are just a few birds that are colorful and easy to maintain in an aviary.

Although the aviaries were enjoyable, they did not provide stimulation for bed-bound patients. Bird cages in patient rooms, offered the sensory stimulation that many residents lacked. Many residents lacked a feeling of purpose and needed the love and companionship only a personal pet could provide.

Integration of birds into the room environment was difficult. The committee established a criteria, of who got the birds first. The committee gradually was able to keep up with the patient demand. They solicited want ads, families, or pet stores for used cages. An elementary school heard about the project and donated ten cages to accommodate the needs of those who desired birds.

Some roommates did not wish to have birds share their space. Through education and respecting the rights of all involved the facility was able to foster harmony. While establishing a criteria

for who received birds first was important, flexibility was equally as important. The following example illustrates why the criteria for integrating bird cages changed.

*Case Study:* The facility started with five cages to begin integration of birds within the rooms. The committee established that bed-bound patients would receive the available birds first. Two cockatiels were placed in a cage of an alert but medically complex female resident. The birds chirped happily and this patient was ecstatic. In the room next to her, a 72 year old manic depressed female resided. This woman often stayed in her room, and kept her curtains closed. Although she walked to the dining room, the remainder of the day she secluded herself behind her cubicle curtain and slept. After hearing the birds chirping in the room next door, she investigated and found the bed-bound patient with the caged birds. The depressed woman pleaded for birds and the committee acknowledged her request. Immediately the resident nurtured her own two cockatiels and began to feel purpose and companionship. She now complains that she can't sleep during the day any more because she has to keep her birds company and take care of them. Within one week her sleep medications were discontinued and she no longer slept during the day but rather slept through the night.

As birds hatched within the aviary, more birds were able to

be distributed to individuals within their rooms. Personal cages were kept at bedside or on stands for those who desired more intense companionship. As the birds multiplied, they were given to volunteers and children within the community.

The facility found that parakeets were a colorful and an inexpensive bird to consider. They were large enough for those visionally impaired residents. By obtaining young birds, 6-8 weeks after they have left the nest, they are able to feed independently without assistance from their mother. As they formed attachment to their owner, they substituted the owner for their mother and father.

Cockatiels also provided excellent companions for room bound patients. While these birds are larger, they may also be more expensive. However, a Cockatiel farmer willingly donated to the Eden Alternative. Residents found that Cockatiels made beautiful sounds and were very easy to handle. When a mirror is placed within the cage, they sang sweetly as they looked at themselves. This species lives ten to twenty years and were easy to care for.

Bird cages should provide birds enough space for their wings to spread fully without touching the sides while stressing space for the width rather than height. In the aviary, the facility

found that smaller birds created less mess and had adequate space. The birds were provided stimulation such as a mirrors, ladders, bells or swing. Too much stimulation was not healthy for the birds. They enjoyed hearing and seeing objects. Perches were not placed over the food or water. Droppings would have caused illness if consumed by the birds.

Since birds were in an area where they couldn't rest, because of daily activities, a cover was placed over the cage to allow the birds to rest. Some residents were kept awake at night if their cages were not covered.

The cages were not placed over heaters or situated where they received drafts. Indirect sunlight provided a healthier spot for the cage. Bed bound patients required a stand or table at a height that their bird could be easily seen and heard.

The birds were misted once per week to allow the indoor bird to molt more naturally. A squirt bottle (free of chemicals), with tepid water, provided the resident or volunteer the tool to effectively help the bird shed it's feathers naturally (Thomas,1994). Tablets were purchased, and placed in the water cup, to achieve the same purpose before the routine of misting was implemented.

The veterinarian or pet supply store provided information on nutrition required to meet the need of certain species. Birds required a high energy, nutrient rich diet. Fresh fruit and vegetables

provided a variety to the diet of seed and pellets. Cuttlebones, were attached to the cages to provide calcium for the bird.

Foods that spoiled were emptied on a daily basis. A hard boiled egg was provided for the mother bird feeding her young. Young birds were unable to digest seed as grown birds could. Fresh tap water, free of chemicals, was replaced on a daily basis.

A cart, complete with fresh water and food, assisted the residents and volunteers to make rounds on a daily basis. An accountability log was complete with instructions (Appendix 3).

Wild birds were an extension of the Eden program. Supplying hummingbird feeders, restocking bird feeders, and refilling bird baths were activities that residents participated in. Some enjoyed collecting bread after meals and feeding the wildlife. Many varieties of fowl were swift to receive attention from residents.

### **Dogs**

Although it seemed that introducing a canine to the nursing home would be an easy and simple task, it required thought and patience. Selecting a breed of dog that was affectionate and dependable was of utmost importance.

The dog was donated and first came to the center after

completing obedience school. The dog was gentle and didn't jump onto residents.

It took work to acclimate and train the dog to adjust to a new environment. Selecting a dog that was easy to train, was essential. More importantly the committee evaluated the dog's temperament, and whether the dog would become territorial. By having a rotating feeding schedule, the Eden committee members assisted with feeding and caring for the dog. This rotation helped the animal become dependent on many different people. A routine of removing the dog from resident areas, during meal times, helped to alleviate many problems. Issues of infection control, canine obesity, and bonding to one individual were all common risks of integrating a dog into the nursing home environment.

The dog was trained to understand her boundaries and also have it's own space. A crate or private sleeping area allowed the dog to have it's own space. The dog was trained to sit, stay, and come. The dog was trained to not jump up on the patient's legs. This likely would have caused skin tears and unnecessary injury. The committee determined, although the particular breed is not a necessary component, certain breeds are more feisty and high strung. Greyhounds are affectionate and fairly docile. As many greyhounds are "disposed of" after racing, the Greyhound Association was a source for adoption. However, the nursing



facility experienced difficulty in obtaining adoption due to prejudices of the local association. The dog selected was a mixed-breed hound that was very affectionate.

Nearly everyone enjoyed the companionship of a dog. It was determined to be an excellent companion for the institutionalized elderly.

### **Farm Animals**

While the concept of having farm animals may have seemed far fetched, there were many wonderful animals that were integrated into the milieu. Most of the elderly enjoyed watching the antics and activity of pigs, goats, a miniature donkey, geese, chicken, and bunnies. As zoning laws and space were limitations, careful consideration and planning was required when integrating them into the program. Daily feeding and cleaning schedules were essential to maintain a healthy environment.

At NHC HealthCare of Maryland Heights, the residents and staff selected two Vietnamese pot belly pigs, two goats, a miniature donkey, two geese, one chicken, and a variety of rabbits to inhabit an enclosed courtyard. The facility built a wooden fence (with chicken wire along the bottom section) along the patio and sidewalk areas. A gazebo was placed strategically midway up the sidewalk. This allowed the animals to be seen from all sides and

those on the patio could also enjoy watching this scenic area. Two small pools were built to provide drinking and bathing water. The maintenance department simply utilized a pool filter system to restore clean water back into the pools. Goldfish and lily pads were also included and easily seen by the residents.

Privacy fencing barricaded unwanted creatures from this area. A wire fence was trenched six inches below the bottom of the privacy fence to keep the rabbits and turtles from burrowing under and escaping. A locked gate was used to prevent children and residents from walking in the barnyard area unattended. Invisible fencing was utilized to keep the goats from munching on non-food items. Collars were placed on the goats to train them to stay in desired areas.

The goats and donkey required little maintenance. Occasional curry combing, fresh water, and food (corn, hay, or grass) kept these delightful creatures happy. They were very friendly and both a little mischievous. The residents enjoyed observing and laughing at these animals as they played and nuzzled.

Though the staff did not enjoy cleaning up after the geese, the geese provided residents with a large focal image. The geese enjoyed being paired and often silhouetted one another. They were easy for the residents to see and enjoyed splashing in the water. The geese ate a mixture of corn and pellets on a daily basis.

The pigs were smart and easily litter trained. They were adorable and quickly became affectionate. Most children were infatuated with the pigs. The residents and their grandchildren often interacted as they tried to pet or tell "greased pig" stories. Obesity was a risk for a nursing home pig. Everyone thought when the bowl was empty they needed more food. A schedule of feeding and water was followed in order to keep the pigs healthy. Rooting was not a problem with the Vietnamese potbelly pig. Castration became necessary as the pigs grew older.

The chicken was donated when it was a young chick. As it was too young to be with the other animals, it was placed in a bird cage. It was adopted by a resident and staff member. The chicken was a bit messy but fun for individuals to watch. It enjoyed pecking and became quite friendly. A special place to roost was important for the chicken's safety and security.

*Case Study;* A small chick was delivered to the facility for a staff member. Mistakenly it was placed inside the pigs pen. Somehow it roosted on one of the pigs head. The pig strutted around until the other pig got jealous and attacked the chick. The chick was saved by a female resident and adopted. This chick was placed inside the facility and cared for in a cage. The resident enjoyed the chick so much that she, at times, let it perch on her

shoulder. She began to take it for walks in the wheelchair. This would not seem too amazing but this resident disliked to walk as she suffers from tremors. The therapeutic value of this chicken could not be measured. No one could have convinced this resident that she needed to be mobile and active. Her motivation had to come from her feeling of being needed.

### **Rabbits**

Integrating the rabbits proved to be simple. They were easy to care for and gave everyone a warm feeling. They became very friendly. Rabbits, that have been humanized at an early age, become friendlier and more docile. The lop-eared rabbits were quite large and easy to see. Keeping the rabbits contained, was the greatest challenge the facility experienced. Rabbits burrowed and required fencing below the earth to keep them contained. A rabbit hut allowed the rabbits shelter. A rabbit that was kept inside, however, created a problem with clean-up. Similar to a cat, it was litter box trained. Residents enjoyed petting and holding these furry creatures. Therapeutic visits were offered to bed bound patients.

### **Wildlife**

This facility was surrounded by an abundance of land. This area inhabits many species. The facility did not obtain a wildlife permit from the conservation agency, to raise wildlife, however was in the process of obtaining one. Rabid animals were a risk the

facility feared integrating the wild into civilization. However, the facility enhanced the natural habitat to provide the residents an opportunity to view the animals from afar.

### **Community Involvement**

This facility had fun choosing animals that stimulated the community. Physicians, school students, family members, staff, and residents enjoyed the antics and variety this program offers.

Nothing surprises the visitors anymore.

*Case Study:* A confused resident was laughing after leaving the courtyard where the animals resided. When asked what was funny, she replied "I just went to the zoo. I didn't think much of it until 'mmph' one of those goats nipped at my knee." Her story changed during the month. (She even forgot it at times) However, when her psychiatrist visited she retold the story. This time instead of a goat she said "an alligator nipped at my knee." The psychiatrist laughed and then asked the staff member "you don't really have an alligator do you?" Because the facility had used such creativity, she thought it may have been possible! (It should be noted that this physician remarked that all patients she had seen had notably improved that first month after implementation of the program.)

### **Plants**

A gardening club was formulated, compiled of residents and

staff. The activity department assisted in filling the water buckets and coordinated the watering. The club met daily and watered or cleaned (waxed) the interior plants. Some residents enjoyed maintaining garden. A community member was a valuable member in helping build a tiered garden and preparing the soil for planting.

A tiered garden was made by simply layering railroad ties to wheelchair height. This allowed for less bending and was easy to maintain. Approximate garden sizes vary, however an 8'x6' area was easily manageable. All types of vegetables were planted, watered, and harvested. Residents took special pleasure eating them as they grew varieties of tomatoes, turnips, lettuce, peppers, and squash.

As a large area was available, the residents had plans to plant a large pumpkin patch next year. This will allow for a colorful crop, and children could enjoy coming and selecting their own pumpkin. The resident planned to make jack-o-lanterns together. The residents have learned that involving the community, is a part of the Eden program.

Families were encouraged to send potted plants, rather than fresh cut flowers. The resident could then care for the plant throughout the year. Local garden clubs were difficult to solicit, however the facility hopes that one may assist in planning landscaping or rose gardens. At NHC the local high school,

provided numerous volunteers to help prepare flower beds and mulch. Working with the resident, these young people learned the satisfaction of helping others. The elderly enjoyed being around adolescents. This is may have been the most satisfying step in developing the garden.

Whether staff members assisted the residents in watering and caring for the inside plants or helping with the garden, their basic role was to remind a patient about a task. Sometimes it was necessary to fill the bucket for the resident or help with a shovel, most of the staff felt a sense of satisfaction in helping the resident have a more homelike room or environment. Some staff helped to start new plants and helped in re-potting.

A green house was another option that the facility used to solicit plants that needed to be nursed back to health. Donations were received of both healthy and unhealthy plants. Residents found that lilies, violets, and greenery could be maintained year round by residents who enjoy this therapeutic activity.

### **Self-directed Work Teams**

The Eden philosophy includes utilizing self-directed work teams. Typically, nursing facilities manage through a heirachy system. Many administrators manage the department heads, who in turn manage the direct care givers or service staff. By encouraging

work teams that are self-directed, staff become more patient focused.

This was the most difficult phase of implementation. The facility was in the beginning phases of this concept. They were beginning by appointing one team. The team was given boundaries, guidelines, education, and empowerment. They were given the authority to hire, discipline, and enforce quality standards. They became involved in the decision making processes that effected the residents in their care.

Allowing the team to make mistakes and correct those mistakes was probably the greatest challenges administration will face. Once the team knew they were responsible, they began to exhibit creativity and meet the challenge. Beginning the self-directed teams in a non-medically complex unit proved to be a successful strategy. The Eden committee communicated often with the team to inform of any changes and needs that particular residents require.

The first step in initiating the self-directed work team was to educate. Beginning with a study group was assisting the facility top to model future teams. The discussions and team meeting minutes were recorded as well as the observations from these meetings. These discussions included information on empowerment, goals, and the role of the team members. Thomas'(1994) study proved to



be a helpful guide for the facility during the team implementation.

The transition to self-directed teams was particularly difficult for many traditional supervisors. Some felt threatened, fearing they would no longer be needed. The (former traditional) supervisors met and helped with planning the implementation of this difficult phase of development. Their role shifted to team leader and later may be phased out.

The team made group decisions, prepared their own schedules, hired and disciplined according to facility policy. The team leader labored to help direct the focus to consistent enforcement of the facility policies. The team leader's role changed to co-worker, mediator, educator, cheerleader, and visionary. These are vital functions in successful leadership of quality work teams.

Continuing education in appropriate interviewing techniques and legal issues regarding hiring, and consistent enforcement of employment guidelines was a key function of the team leader. Although there were regulatory staffing requirements, the team's first function was to begin developing their own work schedules. This empowered the team and began the first level of trust between employees and administration.

The team leader enabled the team to make group decisions.

Weekly meetings, helped keep the team focused. Goals were developed by the team and posted for all to view. As the goals were reached, the team celebrated their accomplishments together. Gradually the facility plans to add new teams encompassing all staff.

### **Marketing Strategies**

The community heard about the program through many mediums. It was the external marketing committee's job to ensure that they heard positive remarks about the Eden Alternative. A campaign to promote the process was initiated at onset. Recording the inquiries helped guide the committee to market certain hospital social workers and physicians.

Planning an open house brought curious individuals to view the program. Local animal shelters, activist groups, governmental leaders, State agencies, family members, schools, church groups, and physicians were invited to promote the facility and create excitement. Press releases were sent to area media. Television, radio, and newspapers requested pictures and quotes.

The residents and staff participated in naming the animals. Contests to name the pets proved to be a lot of fun and promoted program ownership. The winners were premiered, by the Lt. Governor at the open house and follow-up press releases acknowledged the winners.

The committee utilized the facility newsletter and staff meetings to report the happenings of the Eden program. Family members and staff were updated on the progress and funny antidotes.

Facility brochures and fact sheets were revised to include the Eden Alternative. This provided an opportunity to include the vital and key information the committee decided the community needed to hear. A separate brochure was helpful to market the program individually.

A video was another tool the committee utilized to market the Eden Alternative. Because the program was unusual, the staff found impressions could be changed when viewing the happy faces of residents and children working with plants and animals. A copy was placed in the hospital discharge planning office and used when speaking about the facility and services.

The external marketing committee met routinely to analyze census data and inquiry data. Scrutinizing this information assisted the committee in recognizing where the referrals were being generated from. Any inquiries that did not come to the facility were recognized immediately and plans were made to rectify any problems that arose.

The external marketing committee worked very closely with

the Eden committee to insure any suggestions or problems from customers are communicated and resolved. As donations were made or community volunteers performed tasks, the teams determined who would acknowledge appreciation. Thank you notes were completed and a donation or memorial plaques acknowledged the gift.

A photo collection of pictures and published articles helped maintain the history and was useful in showing the center in a positive light. The committee kept an album in the waiting area or a picture collage in a public area.

#### **Re-assessment**

Re-assessment of the patient helped gauge the success of the program. Annually, the depression scales were initiated to note progress. Though the annual assessments were not due, the facility completed random studies to also gauge success and problematic areas. The facility planned to graph the increased activity levels, depression levels, and other indicators associated with the Eden Alternative implementation. By graphing the facility hopes to give the staff, physicians, and family members a sense of satisfaction. By posting this information, the staff began to realize the value and celebrate their successes.

Patient satisfaction surveys will be completed annually to also gauge the success of the alternative. Graphing or posting the

increase of overall patient satisfaction will keep the staff motivated to continue improvements.

Finally, by posting and calculating turnover decreases, the staff began taking responsibility in retaining staff. Reduced costs were recognized because of the program. The savings recognized by employee retention, were then reapplied to the staff's salaries.

## Chapter IV

### Psychosocial

Before implementation of the Eden Alternative a base line of depression diagnosis was initiated. Fifty-five percent of 196 residents were determined to be depressed. Utilizing the original version of the Yesavage Depression Scale through verbal questions and answers, the highest score calculated was 26. There were twenty residents scoring 15 or higher.

Six months, after initial Eden implementation, 6 of the 20 the severely depressed were reassessed. Patients scoring the highest upon onset, were reassessed. The initial scores averaged 22.2 of the severely depressed. After reassessment the average score decreased to 12.2.

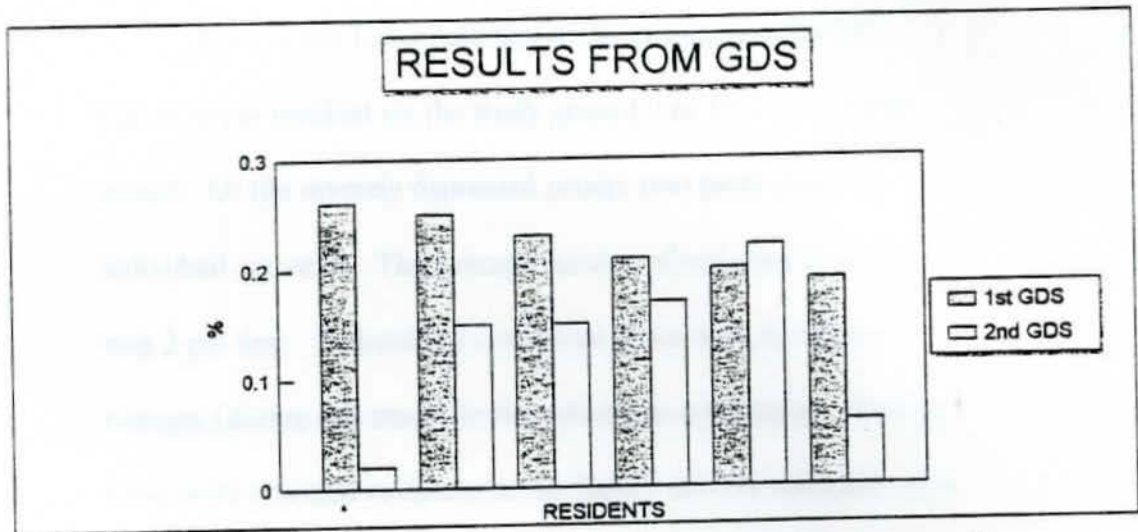
Significant decreases were identified in this group. All but two in this group were very active in the pet therapy the Eden Alternative provided. One individual was treated for pain management and since has experienced a substantial decrease in depression. Scoring 23 before pain management, she now scored 6 on the Yesavage scale.

The largest decrease in depression was identified in an individual who was the primary caregiver of the chicken. She also

assisted, through reminding, another resident in feeding the fish.

Her original score was 25, after re-assessment, she scored 2 on the scale. Table I illustrates the results from the Geriatric Depression Scale (GDS).

**Table I**



### **Activity Level**

Activity levels of each sub-group were compared before and after the Eden Alternative was initiated. Although many of the severely depressed did not participate in group activities, individual room activities were included in the participatory study.

Prior to the Eden Alternative the average number of activities per resident (in the study group) was 10 activities per month. Of the severely depressed group, two participated in individual activities. The average number of activities facility wide, was 2 per day. It should be noted that there were no radical changes (during this study) in the activity programming. Although there were constant revisions to the facility activity schedules on a monthly basis, the only radical change was the Eden Alternative. No additional activity staff was hired, although more volunteers were acquired through Edenizing.

The Garden club, Eden Committee, Animal Feeding times, and additional intergenerational activities positively impacted the facility activity program. The overall activity participation has increased by 19%. The severely depressed increased their activity level to average 45 in room and group activities per month.



In room activities were included in the calculation of activity participation. The residents, with birds, actively fed and cared for the birds throughout the day. This activity was counted as one activity per day.

Others participated in caring for the community pets or plants. Intergenerational activities and visits with volunteers resulted in a substantial increase in activity level.

Table 1  
PARTNER INTERVENTIONS



### Employee Turnover

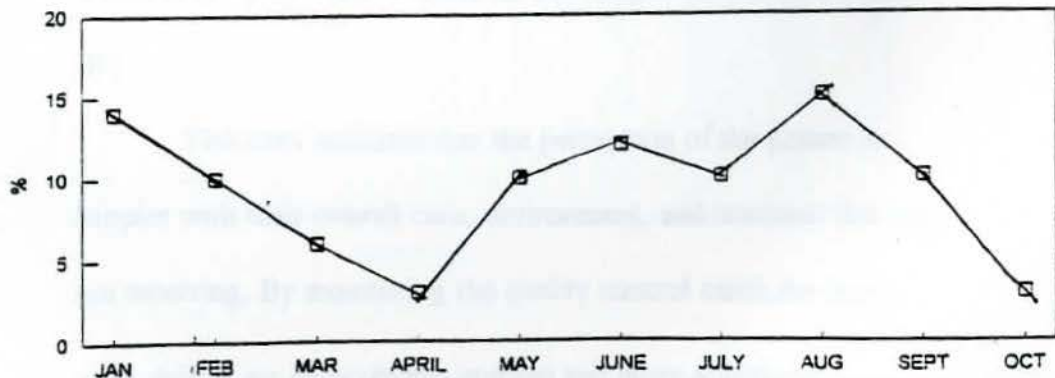
The facility attributed the Eden Alternative to improved results in employee retention. Although turnover was a focus before the Eden implementation, the turnover decreased by 64% during the months of Edenization. (see Table II)

This reduction is attributed to a more peaceful environment, enhanced resident relationships, and to empowerment through teams and committees. Communication was increased and the orientation process enhanced to include the Eden Alternative.

A significant increase in applicants was gained due to favorable media promotions. Members of the team were able to be more selective in the hiring process. Some applicants were attracted to the facility because of the environment and their own love of plants or animals.

**Table II**

**PARTNER TURNOVER %**



### **Patient Satisfaction**

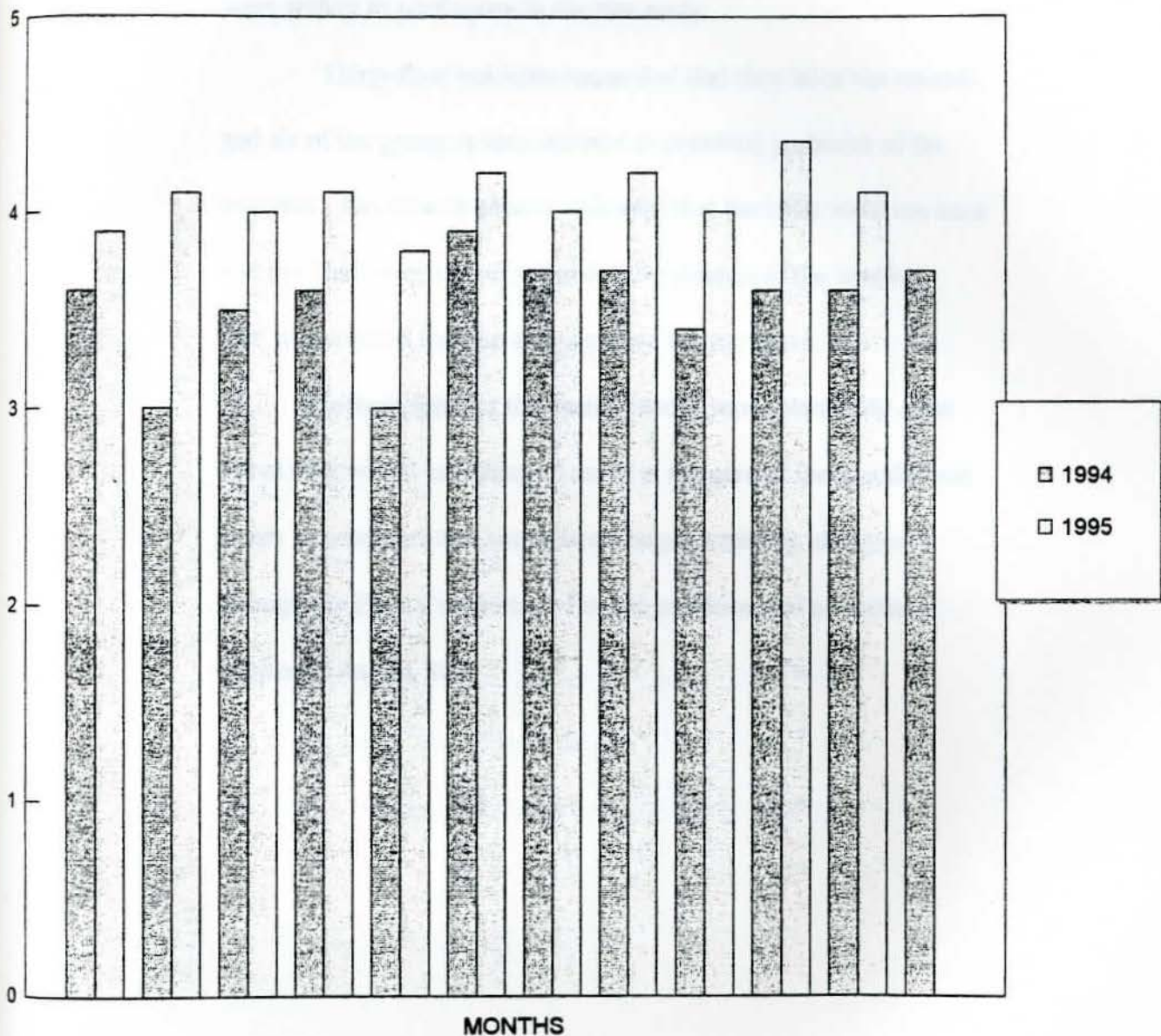
Patient Satisfaction Indexes were utilized to obtain the general happiness and contentment of the nursing home resident. Quality control card categorical rating trends were measured against patient satisfaction indexes and evaluated. The cards were completed by the resident or guardian two weeks after admission to the facility and in three months after the admission. Once annually and upon the discharge, patients or their families rate satisfaction. The scale ranges from 1-5 with five being excellent or extremely satisfied.

The criteria ranking lowest was food satisfaction with a yearly data ranking of 3.5. The overall satisfaction score was 3.6. After implementation of the Eden Alternative, in November 1994, currently the quality control card dietary perception increased by .25. Overall patient satisfaction index has increased to 4.43. This reflected a .83 increase in score or 23% improvement (see Table III).

This data indicates that the perception of the patient is happier with their overall care, environment, and attention that they are receiving. By monitoring the quality control cards the teams were able to act on problems quicker and more effectively.

# PATIENT SATISFACTION

1994-1995



In November 1995 a resident quality assurance study was issued to alert and oriented residents. Of the 198 residents, 40 were willing to participate in the this study.

Thirty-four residents responded that they liked the animals and six of the group voiced concern of potential problems of the program. The basic problems indicated that the birds were too loud and that they were concerned about the animals in the weather. One was worried that the animals were fed too much.

Nineteen felt that the center needed more plants and eight stated they would be willing to assist in the care of these additional plants. A team member immediately began initiating changes through the Eden Committee of noted problems and concerns (Appendix 4a, 4b, 4c ).

### **Census/Revenue Enhancement**

Due to the increased publicity and positive public perception, over 16 inquiries called specifically about of the Eden Alternative. Much emphasis has been placed in the overall marketing of this program to hospital social workers, discharge planners, case workers, nurses stations, and physicians. Approximately, 350 open house invitations were mailed out to healthcare professionals and over 300 brochures were distributed. Approximately 100 local students have visited the center (since May 1995) to view the program and help the residents.

An increase of 2 % of Medicare census and 3% in private pay census has been attributed to the Eden Alternative. Additional revenues in therapies and enhanced census mix equate to approximately \$ 11,175 per month.

center to admit more rehabilitation candidates.

### Costs

The costs of the program were minimal. The revenue offset the cost significantly. Overall costs of the program averaged \$40 per month. Revenues were calculated to reflect the increased private and Medicare private pay admissions. The initial start up costs were as follows:

	Expense	Revenue	
November 1994-	\$2,300		aviary
December 1994			
January 1995			
February 1995	60		aviary mtc
March 1995	500	6,447	aquarium
April 1995		6,500	
May 1995		6,448	
June 1995	2,716	6,792	Pond/curio
July 1995		6,561	
August 1995	152	5,380	
September 1995		7,300	(Donation)
October 1995		6,900	(Donation)
<b>TOTAL</b>	<b>\$ 3,451</b>	<b>\$52,328</b>	

Additional revenue from the vending machines was recognized. The average revenue was \$1,800 from the vending machines every month. This additional revenue helped to increase cash flow when making large purchases.

Therapy revenue escalated dramatically due to the increase in Medicare Part A census. The number of inquiries allowed the

## Chapter V

While the benefits far outweigh the problems, there were many issues to consider and avoid, if possible. One barrier to getting started with this program was getting the staff to obtain the vision. Some staff could see that it was going to be hard work, and had developed a negative attitude about cleaning up after animals. Staff were reluctant to commit to take care of animals also.

Skeptics argued that this program was unsanitary and would cause more infections. By monitoring infections on a monthly basis in the study results were shared with these critics. Upon analysis of the infection control data at the NHC study and the Thomas study there was no increase of infections after the implementation of the Eden Alternative. At NHC, a hand wipe dispenser was installed on the gazebo. For those desiring to pet or feed the animals they were able to sanitize their hands immediately after. Although there was no concentrated inservicing or monitoring to increase hand washing, most people washed more often because of handling outside animals.

Allergies are closely correlated with infections and there was a concern about integrating animals that residents and staff at NHC Healthcare were allergic to. Physicians and nursing felt that integrating a cat would have likely increased respiratory infections.



Therefore, cats were not a species selected at the time of implementation.

*Social Factors:* The facility had various cultures of staff and residents. Some staff were very afraid of certain animals, because they were raised with biases against that species. Some were fearful of dogs, others simply hated cats. The Eden committee invited these staff members to become involved in the decision-making process. Education was the key in helping them to overcome their fear and biases. There were animal lovers and there were activists. It became easy for people to begin focusing on the animals. The caregivers had to stay focused on their mission to maintain a high quality of life for residents. It was extremely frustrating when staff or visitors began thinking of the needs of the animals before the needs of the residents. While a healthy environment was important for the animals, the staff had to stay resident focused.

The committee had to be prepared for Humane society investigations. Food consumption logs, prepared by the Eden committee helped to assure the enforcement agency that the animals were being cared for. If the humane society had not been involved, during the initial start-up, the facility would likely have had complications.

*Environmental Issues:* Some animals could not live in

harmony. The selection of the group of animals involved some strategy. For an example; the dog would have chased the rabbits, if the committee had not planned to keep them in separate courtyards. Other animals may have destroyed the beauty that this process can bring to the facility. NHC had to get an invisible fence (and collars) for the goats. The facility displayed creativity in maintaining the flowers and furniture. Sometimes the animals were overly aggressive towards one another. Castration was necessary to avoid this problem.

Certain climates would not have been healthy for some varieties of pets. Using common sense in planning, and provision of adequate shelter helped to prevent sickness and/or death of animals.

In one case the dog killed a rabbit and the staff were distraught. Educating the staff about the nature of the dog and keeping areas separate helped to overcome anxiousness. The birds occasionally got loose. The staff kept a sense of humor and stayed flexible, helping to defuse these situations.

When an animal died it devastated residents, staff, and volunteers. When Edenizing, the staff was reminded that this emulates the cycle of life. Animals will be born and someday will die. What is important is what happened in between.

*Financial Impact:* The facility incurred costs upon initiation. Donations were solicited. Other revenue producing steps helped in start-up costs. At NHC, when the vending machines were purchased and the facility began maintenance, the net revenue increased from \$300 to over \$2000 a month. The profits were applied to purchasing the aviary and gazebo/fencing. Donations were solicited for the animals and invisible fencing. The facility also discontinued the plant maintenance contract. Because the Garden Club watered the plants, the facility reapplied the costs to other areas.

Data reflects that Medicare, Private Pay, and therapy revenues dramatically increased during the NHC study. One could argue that other routine factors contributed to this phenomenon. The center had been working hard to constantly improve the services and quality of care. One observation made by social workers at the center, was although the actual number of "Eden" inquiries were moderate, the volume of everyday inquiries that immediately stated "they would look no further" increased. During the touring process, the inquirers, routinely, no longer wanted to finish the tour (after viewing the Eden courtyard and center plant area). They simply stated it was the place for their parent and readily signed the admission paperwork. The tremendous influx of eager customers allowed the center to accept more of the type of

patient that they could best care for while maintaining the occupancy rate they desired.

*Psychological:* Confused patients did not always recognize the animals and some even showed fear towards them. Depression scales and all other indexes could not be processed or analyzed when dealing with Alzheimer's and other dementias. The facility discovered that observing behaviors when animals were present were the best indicators of effect. In the NHC study, the dementia unit residents showed little interest in the rabbit on a daily basis. They did respond to petting when placed in the lap or birds when placed on their shoulder. How this program effected their overall quality of life is unknown.

Clearly the psychosocial aspects are some of the greatest benefits of Edenizing. As the Quality Assurance study indicated not everyone even liked animals or plants. One factor not measured was that the center staff pays more attention to the patient's interest or what could interest them. The staff did not merely assist with the medical care but rather assisted with the social and psychosocial needs. By helping the patient to have an increased activity level, ultimately, helped the patient physically, psychologically, and socially.

*Team building:* Establishing Eden Alternative quality

teams proved to take a lot of hard work, organization, and vision. Most of all, the entire team had to want it. Inspiring the shared vision took a tremendous amount of energy by the administrative staff. Through focusing so diligently on this program shifted the attention from other areas. Though the initial phases were the most time consuming, the process was continuous. Gradually, it became a more natural leadership for the team leaders and Administrator.

The center continues in their quest to Edenize. As the patients are reassessed, on a frequent basis, the center will be able to integrate more companion pets and positively affect patient outcomes. It is recommended that the center reassess depression by utilizing follow-up GDS (depression scales). Resident care needs may be enhanced as constant reassessments are initiated to further enhance the overall nursing home environment.

### Yesavage Depression Scale

This scale was designed especially for rating depression in the elderly. The original geriatric scale is a 30-item instrument. A 15-item short version has also been validated. It is used as a self-rated scale.

Applicability: Depression symptomatology in the elderly. Can also be used across ages.

Utilization: As a screening device or weekly in treatment outcome.

Time Span Rated: Now or within past week.

Scoring:

	Original Version	Short Form
Low	1-10	1-5
Medium	11-20	6-10
High	21-30	11-15

References:

Yesavage, J.A., Brink, T.L.: Development and validation of a geriatric depression screening scale: A preliminary report. *J. Psychiat Res* 17:1:37-49, 1983.

Yesavage, J.A.: Geriatric depression scale. *Psychopharmacology Bulletin* 24:4:709-711, 1988.



**YESAVAGE DEPRESSION SCALE  
(LONG FORM)**

Please have the patient complete if possible.

Circle best answer for how you felt over the past week.

1. Are you basically satisfied with your life? . . . . . YES/NO
2. Have you dropped many of your activities and interests? . . . . . YES/NO
3. Do you feel that your life is empty? . . . . . YES/NO
4. Do you often get bored? . . . . . YES/NO
5. Are you hopeful about the future? . . . . . YES/NO
6. Are you bothered by thoughts you can't get out of your head? YES/NO
7. Are you in good spirits most of the time? . . . . . YES/NO
8. Are you afraid that something bad is going to happen to you? YES/NO
9. Do you feel happy most of the time? . . . . . YES/NO
10. Do you often feel helpless? . . . . . YES/NO
11. Do you often get restless and fidgety? . . . . . YES/NO
12. Do you prefer to stay at home, rather than going out and  
doing new things? . . . . . YES/NO
13. Do you frequently worry about the future? . . . . . YES/NO
14. Do you feel you have more problems with memory than most? . . YES/NO
15. Do you think it is wonderful to be alive now? . . . . . YES/NO
16. Do you often feel downhearted and blue? . . . . . YES/NO
17. Do you feel pretty worthless the way you are now? . . . . . YES/NO
18. Do you worry a lot about the past? . . . . . YES/NO
19. Do you find life very exciting? . . . . . YES/NO
20. Is it hard for you to get started on new projects? . . . . . YES/NO
21. Do you feel full of energy? . . . . . YES/NO
22. Do you feel that your situation is hopeless? . . . . . YES/NO
23. Do you think that most people are better off than you are? . YES/NO
24. Do you frequently get upset over little things? . . . . . YES/NO
25. Do you frequently feel like crying? . . . . . YES/NO
26. Do you have trouble concentrating? . . . . . YES/NO
27. Do you enjoy getting up in the morning? . . . . . YES/NO
28. Do you prefer to avoid social gatherings? . . . . . YES/NO
29. Is it easy for you to make decisions? . . . . . YES/NO
30. Is your mind as clear as it used to be? . . . . . YES/NO

Adapted From: Yesavage, J.A., Brink, T.L.: Development  
and validation of a geriatric depression screening scale:  
A preliminary report. J. Psychiat Res 17:1:37-49, 1983.

Completed by \_\_\_\_\_  
Date \_\_\_\_\_

## WHAT OUR LITTLE FREINDS EAT



PIGGLEY WIGGLE  
HAMLET

1-LARGE CUP A DAY AND FRESH  
PIG FOOD WATER

GEESE

1-SMALL CUP A DAY FRESH WATER  
IN WHITE TUB  
CORN

GOATS

1-LARGE CUP IN FEEDING TROUGH  
CORN

BORROW

1-SMALL CUP ON SIDE WALK OR  
TROUGH  
CORN

RABBIT CLAN

FILL BOWL AND FRESH WATER IN  
BOTTLES

LADY

1/2 BOWL OF DOG FOOD AND  
FRESH WATER

CHICKEN

1/2 CUP AND FRESH WATER

BIRDS SNU

1/2 CUP AND FRESH WATER



# November 1995

Appendix 3

S	M	T	W	T	F	S
			1	2	3	4
5 FEED-BILL CLEAN-GAIL	6	7	8	9	10	11
12 FEED-MARY.T. CLEAN-S.LYNN	13	14	15	16	17	18
19 FEED-SUSAN.M CLEAN-BENIE	20	21	22	23	24	25
26 FEED-MARY ANN DEMOR CLEAN-RHONDA	27	28	29	30		

EDEN QUESTIONNAIRE

1. Do You like animals? No=6 / Yes=34
2. Favorite animal? Dog=16, Birds=4, Pigs=2, Cats=2, Horse=2, Rabbits=1, Goats=1, Fish=1, Deer=1, Sheep=1 Panda=1.
3. Do you go outside to pet animals? No=15 / Yes=25
4. Do you think the animals are inside enough? No=15, Yes=25
5. Would you like the animals inside more? No=15, Yes=25
6. Would you like to help take care of the animals or plants? No=25/Yes=15. 7 of the 15 aren't able. 8 only plants  
Which ones would you like to take care of? Plants only
7. Do you think we should get more animals? No=22 / Yes=15  
3 don't care
8. If so, what kind? Peacock, Giraffe, Cats, Snakes, Small Dog, Bunnies, Turkey, Ostrich, Horse, Panda.
9. Do you think we need more plants? No=17 / Yes=19  
4 don't know
10. What problems, if any, do you think we have with the animals?
  - 1.) Not enough love given to the animals
  - 2.) They are fed too much
  - 3.) The dog and birds are too loud at night.
  - 4.) Shelter from the weather
  - 5.) Residents need more information about animals.
  - 6.) Dog needs to be inside more and treated better.

Ac7  
 Q-A. 14/22/95

QUALITY ASSESSMENT AND IMPROVEMENT SUMMARY REPORT PAGE 1 of 2

TOPIC Eden with the Residents DEPT(S) Activities

REPORT DATE Nov 27 1995 X INITIAL REPORT FOLLOW-UP RPT

(A follow-up study is a repeat study which measures the effectiveness of changes made in response to the findings of the initial study.)

I. PLANNING AND MEASURING:

- A. Reason for selecting this topic: New Program introduced to residents
- B. Start Date & Frequency of Monitoring Aug 1 to Present
- C. Sample: Who/What/How Many Residents Amount =40
- D. Source of Information:  Review Records/other document  
 Observation or visual inspection  
 Survey, Questionnaire
- E. Explain how you will gather information on this topic Talk with residents and set up a questionnaire.

F. INDICATORS, ACCEPTABLE VALUE OR RANGE (AV/R), FINDINGS

**Indicators:** The indicators are specific aspects of this topic that are measured in order to indicate how well we are doing. They are never general statements. Indicators must be measurable either with a yes/no answer or a number or a rating. They are measurement tools. (See Manual for further information & examples.)

**Acceptable Value or Range:** This is abbreviated as AV/R and is a %, or range of %'s, that state what is acceptable. AV/R is usually stated as a percent. It reflects the standard which we are striving to meet. It can be a single %, (ex: 100%) or a range of %'s. Ranges have high and low numbers ex: 95-100%.

**Data Summary:** After the data is gathered, it is to be summarized for each indicator and expressed both as the numbers (Actual findings such as 15 yes answers in 20 observations or 15/20) and in percents (actual findings expressed as a percent, such as 75%); N/A answers are not included in the calculations.

INDICATORS	ACCEPTABLE VALUE OR RANGE (%)	DATA SUMMARY EXPRESSED IN NUMBERS	DATA SUMMARY EXPRESSED IN PERCENTS
1.) Do they like Animals	30%	34/40	85%
2.) Do they go outside to pet the animals?	25%	25/40	63%
3.) Do they help with animals and plants	0-10%	8/40	20%
4.) Do they want more animals inside	50%	15/40	48%
5.) Do they want more animals	50%	15/40	38%
6.) Do they want more plants?	50%	19/40	48%

STATE YOUR FINDINGS/RESULTS OF COMPARISON OF MEASURED DATA TO THE AV/R:

Comparing the data measured to the AV/R allows us to judge whether or not we are complying with the standard as set by Federal or State regulations, NRC policy, professional standards, safety standards etc. If this is a Follow-up Report, see note at top of page 2.

QUALITY ASSESSMENT AND IMPROVEMENT SUMMARY REPORT PAGE 2 of 2

Note: If this is a follow-up report for a study which requires no further follow-up, it is not necessary to complete Sections II & III. Provide information about the conclusion of the study in the last paragraph of Section I.

TOPIC Eden With The Residents DEPT. Activities DATE 11-27 I X F/U

II. ANALYSIS AND IMPROVEMENT PHASE (May be completed after group discussion at the QA meeting including, at minimum, all involved disciplines.)

A. STATE THE PROBLEMS &/or AREAS IDENTIFIED FOR IMPROVEMENT: POSSIBLE CAUSE(S)

(These can be numbered and referred to by number in A.C. & B.)

- |  |  |
|--|--|
| <u>1.) Birds are too loud at Night.</u>  | <u>1.) Birds are unaware its night</u>             |
| <u>2.) Dog needs to be inside more due to weather and residents would like to see it more.</u> | <u>2.) Has been running out door.</u>              |
| <u>3.) Birds are too messy</u>   | <u>3.) Birds aren't being cleaned</u>              |
| <u>4.) shelter from weather</u>  | <u>5.) Residents are feeding them after staff.</u> |
| <u>5.) Animals fed too much.</u>   |  |

B. ACTIONS (TO BE) TAKEN:

- 1.) Put a cloth over cage at night
- 2.) Setting up Invisible fence system.
- 3.) Have Restorative Aides clean cages.
- 4.) Maintenance has built snelter
- 5.) Monitor what food residents are giving them.

C. BY WHOM?

- 1.) CNA
- 2.) Maintenance
- 3.) Restorative
- 4.) Maintenance
- 5.) Eden Team

D. WHEN?

- 1.) nightly
- 2.) 12/1/95
- 3.) weekly
- 4.) Nov. 1
- 5.) Daily

III. FOLLOW-UP PLANS FOR IDENTIFIED PROBLEMS/AREAS TO IMPROVE (Repeat monitoring of this topic is needed to test the effectiveness of any changes.)

A. WHO WILL RE-MONITOR? Rhonda Clark-Ross

B. WHEN? Weekly

C. NEXT REPORT DATE TO QA COMMITTEE: Feburary 1996

D. COMMENTS/MONITORING CHANGES/RECOMMENDATIONS: \_\_\_\_\_

\*\*\*\*\*  
This Quality Assessment and Improvement Study was done by:

Name	Title	Dept
<u>Rhonda Clark- Ross</u>	<u>Activity Director</u>	<u>Activities</u>
_____	_____	_____
_____	_____	_____

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