

# Untie the Elderly®

*a program to eliminate physical and chemical restraints in health care settings*

*Sponsored by The Kendal Corporation  
Kennett Square, Pennsylvania  
Volume 13, No. 2 • December 2001*



Focus for this issue:  
**ACUTE CARE**

ALSO:  
PARRI Update  
New Resource Materials  
Student Experiences  
Bed Safety Update  
Letter from the Editor

## Moving Toward a Restraint-Free Environment in the Acute Care Setting

by Diane Baggett, RN, BSN, MSN and Fran Powell, RN, BSN

Restraint usage has gained national attention with publicity being focused on adverse patient outcomes and tighter external controls. The media has published alarming statistics and horror stories involving inappropriate use of restraints and inadequate staff training, while hospitals and other health care agencies have come under increased scrutiny by external regulating bodies.

For the past several years JCAHO has had specific standards related to restraints in the acute care setting with the emphasis on reducing usage except in clinically appropriate situations. In 1999, HCFA (now Centers for Medicare and Medicaid Services) issued a new "Patient Rights Condition of Participation" that hospitals had to meet to be approved for, or continue participation in, the Medicare and Medicaid programs. These new standards also included a section on the right to freedom from restraints used in the provision of acute medical and surgical care, unless clinically necessary. While there continues to be much discussion about what is clinically necessary, the clear expectations of these agencies are that restraint usage will be significantly reduced and that staff will be adequately trained.

This article focuses on a six-year continuous quality improvement initiative in an acute care hospital. After initiating the CQI process, including a fishbone diagram, (see *Figure 1 & Figure 2*), the process identified gaps in knowledge and practice and shifted the paradigm to restraint reduction. The focus was on creating innovative and exciting alternatives for managing patient care issues and educating staff to achieve these objectives.

WakeMed is a private, not-for-profit, 738 bed multi-facility health system in Raleigh, North Carolina. WakeMed currently operates two full-service acute care hospitals, one of which is a regional tertiary care center. In 1996, this particular hospital initiated an intensive focus on restraint reduction in the acute care and rehabilitation settings.

Our focus historically was on compliance of documentation and not on the reduction of restraints. The team's first project was to collect concurrent data on all restrained

Let us hear about your challenges and successes. We invite you to submit an article for publication to **Untie the Elderly**, P. O. Box 100, Kennett Square, PA 19348; deadline for next issue is January 30, 2002.

Visit our Web site at:  
[www.ute.kendal.org](http://www.ute.kendal.org)

patients. We quickly identified from this data that we had a high use of restraints hospital-wide (see Figure 1) and that the restraints were being used for two reasons. The reasons were 1) altered mental status and 2) putting patients at risk for falls and pulling at tubes and lines. This information gave us a clear understanding for where we needed to direct our efforts.

Since our focus had never been on reduction of restraints, we next needed to determine our staff's attitude toward the use of restraints and their knowledge base. The staff completed a survey that revealed antiquated beliefs and misconceptions. Before any changes could be made in patient outcomes, we needed to help the staff shift their paradigm of thinking. Staff had been taught in their traditional nursing education that in order to keep patients safe from injury, restraints were the first line of defense. Intensive re-education focused on shifting that thinking to using alternatives to restraints. No longer would a patient be considered safe when restrained, but rather at jeopardy both for injury and loss of human dignity.

Next we needed to combine the survey results with the restraint audit results. The biggest opportunity was to provide the staff with tools to implement new approaches to patient care and teach them how to effectively use the alternatives. We selected a patient care unit to develop the alternatives and trial their implementation. The unit that historically had the largest number of restrained patients was chosen for

the trial. This was a 45-bed unit with a large geriatric population. The trial ran for four months with outstanding results. The restraint usage dropped by 80% (see Figure 3). The staff was excited about these changes and believed in the new approach. With their enthusiasm and creativity evident to the nursing staff, it was time to introduce the program to the rest of the hospital.

The team developed standardized approaches for patients at risk of falling as well as those at risk of pulling out tubes and wrote them in decision trees. (see insert—Figures 6 and 7). For the falls risk patient, these approaches involved an initial falls assessment, keeping the room uniformly arranged, as well as the previously mentioned interventions.

For patients tampering with tubes or lines, staff determined the reason (through dialogue with the patient) followed by assessment to see if the tube was still necessary and discontinued the tube when possible. If it was still necessary, the interventions were initiated. The interventions were divided into groups depending on the type of tube. For example, the nurses assessed whether an IV site could be rotated or an NG tube be changed to a smaller tube. Depending on the assessment, the tube was discontinued or changed to a G-tube.

The alternatives were a real challenge but proved to be one of the most rewarding parts of the entire program. The staff came up with innovative and truly

Figure 1

Initial Restraint Usage Audit Results

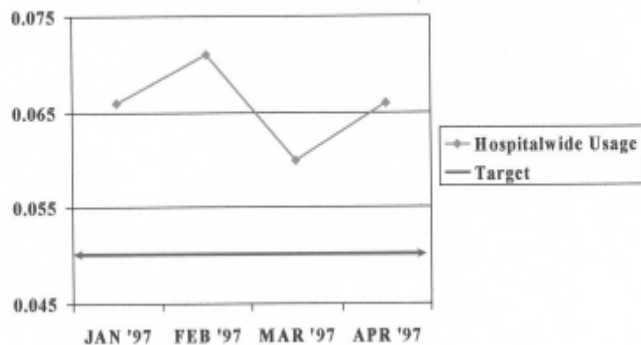
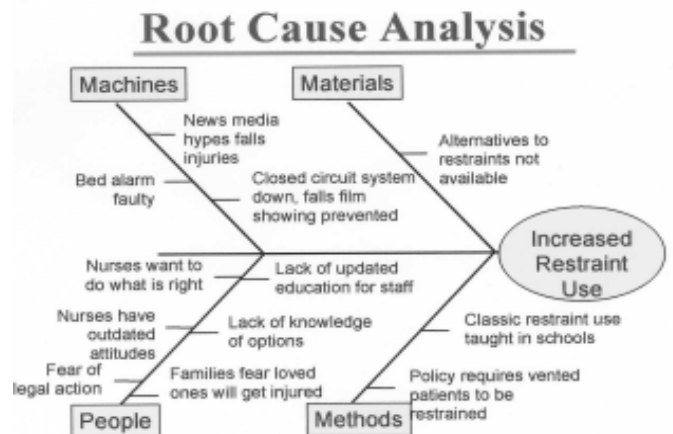


Figure 2



creative strategies. The alternatives were divided into groups to address the top two reasons for restraining patients. For patients who pulled at tubes, the alternatives were further divided, based on the types of tubes/lines.

One of the creative strategies for patients that pulled at IVs and NGs was buying gardening gloves to put on the patients. These gloves were large and bulky and made it difficult for the patient to grasp the tube. If they still could manage to pull at the tube, putting a small nerf ball inside the palm of the glove made it even more difficult. The patients loved it because now they could squeeze the ball and exercise their hand, providing a diversional activity. We learned that by simply covering an IV site, the patient would forget the line was there and stop pulling it out; stockinette or Kling was used to cover the site. A small slit was made for a thumb hole to keep the stockinette anchored. This alternative provided easy access to visualize the IV site. For male patients with Foley catheters in place, boxer shorts were used in addition to the standard leg band. The boxer shorts hid the catheter from their view, eliminating the temptation to pull at it; (out of site, out of mind). The same principle was applied for G-tubes. By applying an abdominal binder, the patient was no longer able to dislodge the tube. Most of these patients, before the introduction of alternatives, would have had their hands tied with wrist restraints first and would have been asked questions later.

We soon discovered that any type of diversionary tool worked miracles with patients. The volunteer department started making soft cloth dolls to give to the elderly or confused patients to keep their hands occupied. The team assisted in the development of an activity apron to provide tactile stimulation. It has an array of diversionary activities such as: large fur-covered pockets, a zipper, a large Velcro strip to open and close and shoe laces to tie. We also found that the relaxation music initially provided for pain management was very effective in calming the agitated or confused patient.

For the patients at risk for falls, several alternatives were evaluated. A foam cushion in the chairs made it difficult for them to get up on their own. Non-slip grip soled slippers, provided at no cost to the patient, assured safe footwear. One of the more creative tools for this population was the use of gripper pads used to line home cabinets. Putting this pad in a patient's chair or bed kept the patient from sliding out and falling. But, the most effective intervention was toileting the patient every two hours while awake. In theory this sounded like an excellent idea, but we soon found that many of our patients found it difficult to ambulate to the bathroom but didn't want to use a bedpan. Bedside commodes were often difficult to maintain and limited in number. The hospital instituted a contract with an outside vendor to provide and maintain bedside commodes for any patient needing one. This provided easy access for the pa-

Figure 3

### Unit Specific Trial

- 45 bed Medical Unit with large geriatric population, heavy use of restraints.
- Educated staff on alternatives
- Tried multiple products: garden gloves, boxer shorts, dressings, wedges, stockinette, binders, terry cloth dolls.

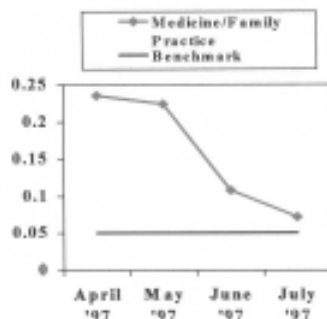
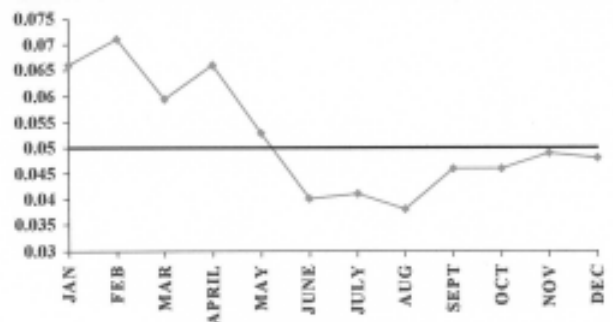


Figure 4

### Hospital-wide Restraint Usage



tients who were mobile enough to use a commode but unable to safely ambulate across the room for whatever reason. These measures drastically reduced the use of vest restraints for patients at risk of falling.

After obtaining the results from the trial and making the alternatives available, the program was instituted hospital-wide. Dramatic results were immediately obtained and, by the end of the year, restraint usage decreased from 0.065 to 0.043. This 27% reduction, was even better than the initial goal of 20% (see Figure 4).

JCAHO surveyed WakeMed that fall and loved the restraint program. We were very pleased with the success and slowly our focus shifted away from the intense scrutiny that had been placed on this initiative. Within four months the numbers started to rise again. The team immediately reconvened to address the increase. We found the intense program had worked, but the consistency in follow through had been lost. Many of the items needed to implement alternatives brought in for the trial were no longer in stock. The patient acuity and census had increased and the training program had been offered only once; the emphasis was no longer on restraints (see Figure 5).

The team moved forward with Phase II of its educational plan. Proper restraint application and use of alternatives has become a permanent part of the hospital's monthly orientation and is now required as an annual competency skill for all patient care staff. Products used as alternatives are now permanent

stock items and the hospital has added restraint reduction to its master list of priority quality improvement initiatives. To date, restraint reduction has continued (see Figure 4). The committee continues to monitor restraint use and evaluate new alternatives. The team has even changed its name from the Restraint Committee to the RELEASE Committee to reflect the paradigm shift. **RELEASE** now stands for:

**Restraints are  
Extinct  
Letting  
Each  
Achieve  
Safety for  
Everyone**

*Diane Baggett is Director of Medical Surgical Services; Fran Powell is the Supervisor/Educator, Urology/Renal Unit at Wake Med in Raleigh, North Carolina. They co-chair the Restraint Reduction Committee.*



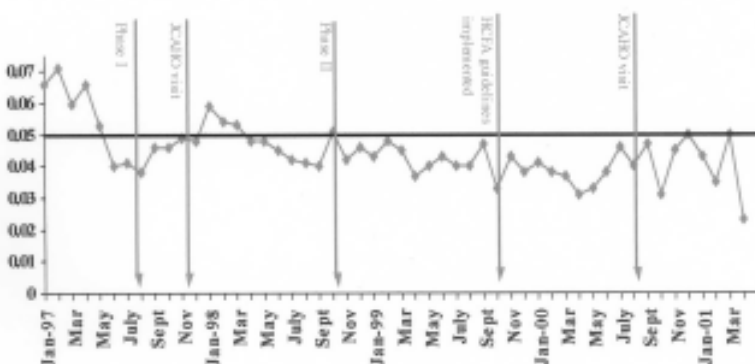
Diane Baggett



Fran Powell

Figure 5

### Hospital-wide Restraint Usage



*Untie the Elderly welcomes your studies of creative ideas—or successful programs implemented in your facility.*

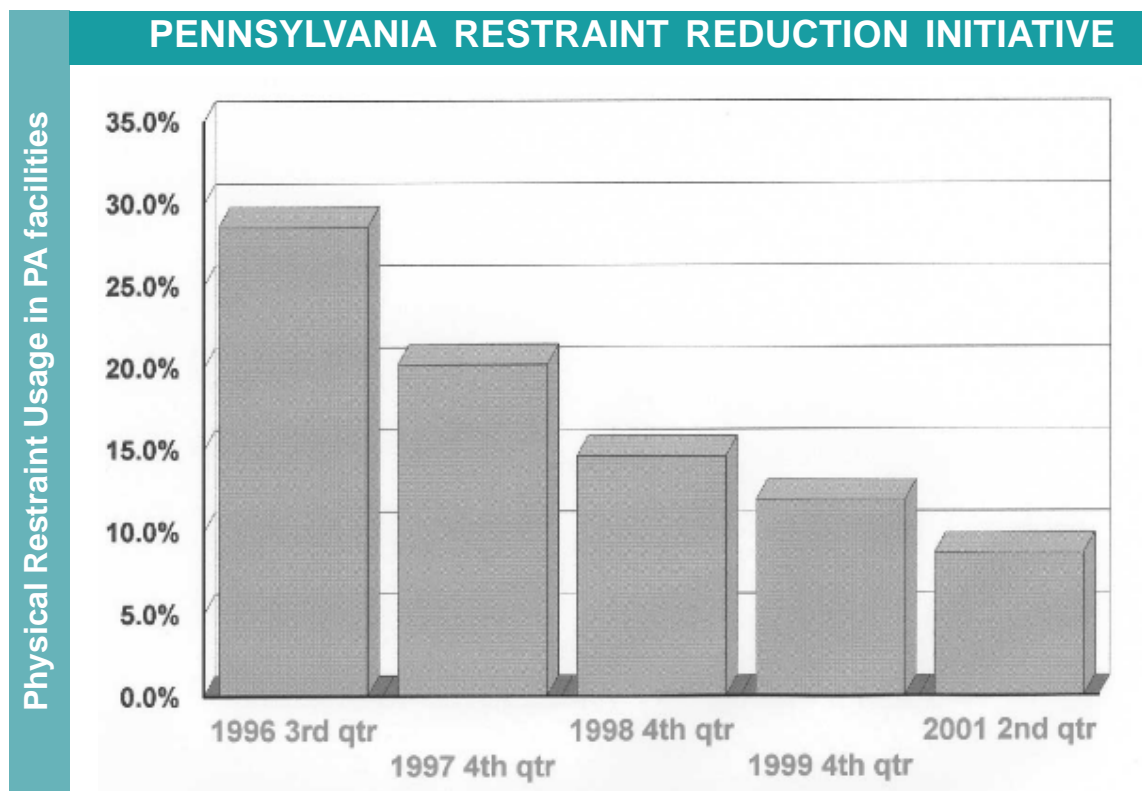
*Please submit to:*

*Untie the Elderly  
The Kendal Corporation  
P. O. Box 100  
Kennett Square, PA 19348*

*by e-mail: mscharf@ute.kendal.org  
fax: 610-388-5589*

# UPDATE Pennsylvania Restraint Reduction Initiative (PARRI)

Four months into year six of the Initiative, nineteen long term care facilities serve as training sites for physical restraint elimination, and five as training sites for chemical reduction. PARRI staff have offered a variety of educational sessions which have been well received. Topics have included: strategies for chemical reduction, communication skills and working with difficult behaviors, fall prevention, comprehensive resident assessments, and physical restraint reduction. The team continues to meet facility-specific requests and mentor facilities working toward training site status. The success of the Initiative is measured in the following graph.



## *New Resource Materials*

### **Untie the Elderly Resource Manual, 5<sup>th</sup> Edition**

This training manual is a step-by-step comprehensive restraint reduction process featuring sections on Adverse Effects, Legal Issues, Change Process, Alternatives, Research, Acute Care and, new this issue, Fall Prevention and Safety. Available in early 2002.

### **Training Packet—Residents Have the Answers: Improving Quality of Life in Long-term Care**

This in-service training packet includes a 33-minute video and accompanying viewing and resource guide outlining methods to objectively identify quality of life issues and a process to determine if these concerns are being met. The Guide is divided into two parts. The Video Guide enables you to facilitate a discussion of the video with staff members. The Resource Guide provides a detailed description of how to replicate this process in your facility, including a questionnaire template and sample items for six quality of life domains. Six domain-specific templates also are provided on a computer diskette to facilitate their customization and duplication. The goal is to help facilities work with residents to define quality of life and develop performance indicators to measure it. For managers, this can lead to higher customer understanding of resident needs and, therefore, greater job satisfaction. The following is one social worker's feedback on the packet: "I thought the information on quality of life in long-term care was excellent. I thoroughly enjoyed the video which was very instructive and easy to follow. Quality of life is difficult to measure but this set of tools gives you step by step information on how to proceed. The six domains they have chosen definitely cover the areas that contribute to a resident's quality of life and need further measurement. I also think a project like this can lead to a better understanding of residents needs by staff. Using the focus group is a great way to gather information. Hearing directly from the residents is always the best way to measure the success of any program."

For information on purchasing the training packet or the *Untie the Elderly Resource Manual*, contact Mary Scharf at 610-388-5580.

# Fostering Restraint Alternatives: The Experiences of Four Student Nurses

## Letter to the Editor

Dear Sir or Madam:

Enclosed is an article entitled *Fostering Restraint Alternatives: The Experiences of Four Student Nurses*. Having experienced for the first time the challenges of clinical research and the rewards of musical intervention, as they relate to physical restraints, we decided to pen and submit an article, with the hopes of publication in a future issue of *Untie the Elderly*. We, as students at the University at Buffalo, felt quite lucky to be a part of Dr. Genevieve W. Kanski's research team and wanted to let your readers know of our exciting experiences regarding the behavioral reactions to music in physically restrained patients. We present to you our finished product. If you would like any additional information, please feel free to contact me by telephone at (716) 662-5830.

Thank you very much for your time.

Keith C. Mages  
University at Buffalo  
State University of New York School of Nursing

There is something truly horrific about seeing a patient tethered in restraints. Unfortunately, it is a sight we, as student nurses, have witnessed all too often. The lack of appropriate alternatives to the use of restraints in hospitals is a major concern.

Throughout the course of the Spring 2001 Semester, we have had the opportunity to assist Dr. Genevieve W. Kanski (University at Buffalo) with her ongoing research regarding behavioral reactions to music in physically restrained patients. This particular study dealt with a total of 30 patients on general medical-surgical units of a major Buffalo hospital who were restrained by any of the following means: Posey/vest/chest restraint, wristlets/anklet soft ties, mitts, and waist belts. Bedrails were not considered restraints in this study. Furthermore, each subject was to be 50 years or older, required to hear sounds in the normal speaking range, and have a basic understanding of the English language which could be utilized in conversational speech.

The 30 total subjects were broken down into three separate cohorts. Ten patients were placed in Inter-

vention Group I, in which they received 30 minutes of musical intervention free from their restraints. The music, delivered through headphones, was pre-selected by the patient or family from the following: big band, gospel, country-western, new age, classical, jazz, popular, and marching music. A member from the research team was present throughout the time period to observe the clients as they received the intervention, marking their reactions on a Restraint-Music Response Instrument (RMRI). The RMRI measures a total of 40 verbal and non-verbal responses, subdivided into positive (+) and negative (-) responses.

Another third of the patients, placed into Control Group II, were released from their restraints and observed with the RMRI for a total of 30 minutes without musical intervention.

The last ten restrained individuals were placed into Group III and were provided with 30 minutes of musical intervention while being kept in their restraints. The RMRI was also utilized during this intervention.

In our capacity as student research assistants, we have been pleased to observe the power musical intervention holds to soothe and calm many confused and/or agitated patients. It is genuinely amazing to witness the emotional and physical changes that the participants receiving musical intervention undergo. We would like to share with you the following story of a patient assigned to Intervention Group I:

An elderly woman is forced into restraints for her own safety that she could no longer provide for herself. She is unaware of what day it is or even where she is, yet is led through music to have strong, vivid memories leading to a deep emotional response. This response was triggered through a music therapy intervention in which the patient's choice of music is played for them using headphones. All that is heard is the music, blocking out the reality of their situation, allowing the patient to be where they want to be.

As soon as the headphones were applied, the woman began singing along, swaying her body while snapping her fingers. A look of pure joy was on her face. Her eyes were closed, and her

facial expressions confirmed that she was reminiscing about happy times. This elderly woman, having severe dementia, would shout out the title as a new song began and recite its lyrics in full. She began mimicking a drummer and tapping her feet with such enthusiasm that her slippers flew off.

As the intervention came to an end, the emotional response changed drastically from extreme joy to sadness. The woman began to cry, which led to sobbing. The headphones were removed while the sobbing continued. When asked what had upset her, the response was, "I have had so many good times." Although the intervention had caused sadness, the woman was able to become in touch with reality. She remembered her happy past, yet knew she was

currently in a different stage of her life. When questioned if she regretted listening to the music, a convincing "no" was answered. She will always have these memories, and the music helped her to recall those happy times, which may have been otherwise forgotten.

We felt compelled to share with the readers of *Untie the Elderly* the nature of our research and the pronounced effect that musical intervention can have on a restrained individual. Ultimately, music may have the power to reduce the need for restraints. We feel confident that through sustained clinical research, coupled with the continued work of compassionate, committed individuals, restraints will eventually fall into obsolescence.

*Keith Mages, Gretchen Kampff, Carmelita Maalouf, Chung (Karina) Lam*

## Update from the Hospital Bed Safety Workgroup

In April, 1999, the Food and Drug Administration, in partnership with representatives from consumer advocacy groups, hospital beds and bed accessory industry, national health care organizations, researchers, ECRI, *Untie the Elderly*, and other governmental agencies (Centers for Medicare and Medicaid Services, Veterans Administration, Consumer Product Safety Commission, and Medical Devices Bureau of Health Canada) formed the Hospital Bed Safety Workgroup (HBSW). The purpose of the HBSW has been to work cooperatively to address the safety issues of hospital beds and vulnerable patients in all patient care settings—nursing homes, hospitals, and homes. The key objective of the HBSW is to develop strategies to decrease injuries and deaths to patients and residents related to entrapment within the bed and/or its associated components (rails, frames, mattresses, etc.).

For over a year, *Untie the Elderly* has filled nearly 200,000 requests for HBSW's brochure, *A Guide to Bed Safety*, and we will continue to make them available. If you are interested in copies, please call us at 610-388-5580 or e-mail [bgoldman@kcorp.kendal.org](mailto:bgoldman@kcorp.kendal.org).

A new product of HBSW will soon be available to help you assess your own beds and bed accessories. The Bed System Entrapment Assessment Kit is a vital tool designed by the HBSW to help healthcare facilities improve the safety of bed systems and ac-



cessories. It also offers guidance on clinical practices to help reduce the occurrence of entrapment. To help you assess and improve bed safety, the kit includes:

- ✓ A binder with informational and safety materials, including:
  - Clinical guidance for the assessment and implementation of bedrails in hospitals, long term care facilities, and home care settings;
  - HBSW bed system dimensional and assessment guidelines (presently being reviewed by FDA for adoption as guidance);
  - Bed system corrective action plan for reducing the risk of patient entrapment;
  - Quick references to assist clinicians in summarizing assessment and corrective action;
  - A Guide to Bed Safety (brochure);
  - Checklists.
- ✓ An instructional video on how to use the assessment tool and how to apply the dimensional criteria.
- ✓ Tools for assessing the measuring bed and rail safety (the tools are made for specific human body shapes and sizes)

**For further information about The Bed System Entrapment Assessment Kit, please contact ECRI:**

**Fax:** 1-(610) 834-1275

**Telephone:** 1 (610) 825-6000, ext. 5382

**E-mail:** [bedsafety@ecri.org](mailto:bedsafety@ecri.org)

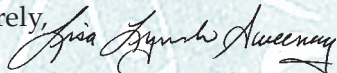
**Mail:** Bed Safety Kit, c/o ECRI, 5200 Butler Pike, Plymouth Meeting, PA 19462

**The Bed System Entrapment Assessment Kit is assembled and sold exclusively by ECRI, a nonprofit health services research organization.**

# Being Present ~ a message from the Editor

While all of our thoughts this holiday season are colored and tempered by the events of September 11, 2001, it remains a season of hope and joy. It is with respect and appreciation that we at *Untie the Elderly* take this opportunity to applaud all who provide restraint free care and all who are working on restraint reduction projects around the country.

May this be the season that you enjoy all of the little things in life. May this be the season of rededicating your efforts to making the environments you live and work within, restraint free and peaceful. May you be truly present in all areas of your life with the knowledge that what you do is meaningful and important and may the coming year be full of blessings.

Sincerely,   
Lisa Lynch Sweeney, Editor

Please accept my gift of \$ \_\_\_\_\_ to support the *Untie the Elderly*® program.

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Make check payable to Kendal Charitable Funds. All gifts are tax deductible and should be mailed to: *The Kendal Corporation, Untie the Elderly*®, P. O. Box 100, Kennett Square, PA 19348

Nonprofit  
U.S. Postage  
PAID  
Kennett Square  
PA 19348  
Permit No. 16

*Untie the Elderly*®  
published by The Kendal Corporation,  
a not-for-profit organization whose  
mission is to establish and operate  
communities and services for older  
people in accordance with the  
principles of the Religious Society of  
Friends (Quakers).  
The Kendal Corporation  
P.O. Box 100  
Kennett Square, PA 19348  
(610) 388-5580  
Beryl D. Goldman  
Director of *Untie the Elderly*  
Lisa Lynch Sweeney  
Editor