Lakeview Ranch: A New Model of Dementia Care

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Abstract: While dementia producing illnesses affect approximately 5-8% of the older population (Karasik, 2003), care quality and costs are an increasing concern. An estimated $315.4 billion was spent worldwide on dementia care in 2005 (Wimo, Winblad & Jonsson, 2007). Individuals seeking dementia care cost 3.2 times as much as other older adults and are hospitalized 3.4 times more often (Alzheimer's Association, 2007). The current research examines an innovative approach to dementia care that seeks to pair increased care quality with reduced overall costs. Key elements of the Lakeview Ranch model are a high staff to resident ratio (1:3), extensive medication reviews, and a nature-based setting which includes animal therapy and a strong focus on residents' emotional and spiritual needs. Additional attention is placed on support and training of staff, with the goal of decreasing the financial and emotional costs of staff turnover. The average cost to stay in a Hospital Geriatric Care Unit ranges from $2500-$5000 per day, while the average cost of a Nursing Home bed in MN is $191 per day. Likewise, the average cost of Specialized Dementia Care using the Lakeview Ranch Model only costs about $215 per day. Assessment of a sample of past and current residents (N=122) showed significant decreases in behavior-related hospitalizations and behavior-related medication use following admission to Lakeview Ranch. The current findings suggest that increasing care quality can be cost effective.

Introduction:

Numerous social, emotional and financial costs are associated with providing care for persons with dementia (Karasik, 2003). These costs can be exacerbated by the presence of particularly challenging behavioral symptoms of dementia (e.g., wandering, agitation, aggression) (Palo-Bengtsson & Ekman, 2002). In fact, behavioral symptoms related to dementia are a major factor in the institutionalization of persons with dementia (Boustani et al., 2005), as well as in the increased reliance on behavior-related medication and behavior-related hospitalizations. To reduce the need for medication and repeated psychiatric hospitalizations, as well as to improve the overall quality of care, many care providers are turning to alternative approaches to manage behavioral symptoms, with varying levels of success (Boustani et al., 2005; Buettner & Fitzsimmons, 2006). Some of these approaches focus on the impact of physical activity (Palo-Bengtsson & Ekman, 2002; Eggermont & Scherder, 2006) and social programs (Basting, 2006; Gigliotti & Jarrott, 2005) on reducing challenging behaviors. Others employ models of behavioral programming (Lichtenberg, Kemp-Havican, MacNeill & Schafer Johnson, 2005), or seek to create therapeutic physical and social environments (Werezak & Morgan, 2003). Still others focus on the importance of staff training to reduce aggressive behaviors (Chrzescijanski, Moyle & Creedy, 2007; Egan et al., 2007, Perry & Bottorff, 2005). The current model of care incorporates many of the above strategies, along with additional elements to provide specialized care for persons with dementia-related behavioral issues, while significantly reducing the need for behavior-related medication and hospitalization.

The Lakeview Ranch Model of Care:

The Lakeview Ranch (LR) model focuses on the provision of specialized dementia care for persons with significant behavioral issues. Developed by the daughter of a woman with dementia, the LR model stems from a grass-roots approach of adopting "the best of" various existing models of dementia care for persons with behavioral issues, while incorporating ideas from family and professional caregivers. The goal of the LR model is to address the specific individual needs of persons with dementia who exhibit behaviors that other care facilities are often unable to address or which are addressed via behavior-related medication use, psychiatric hospitalization, or discharge ("de-admittance") to another facility. Characterized as "a work in progress" the LR model has evolved through a process of putting various ideas into practice -- keeping the things that worked, and discarding that which did not. Prior to opening Lakeview Ranch, the developers spent three years visiting many different models around the country that were focusing on person-centered care approaches. The developers also met with front-line care staff to get feedback on what was working in their models, and what was not. Key elements of the LR care model are a high staff to resident ratio (1:3), extensive medication reviews, individualized registered nurse coverage, and a nature-based setting which includes

animal therapy and a strong focus on residents' emotional and spiritual needs. Additional attention is placed on support and training of staff, with the goal of decreasing the financial and emotional costs of staff turnover.

Staff to Resident Ratio: Highly skilled staff to resident ratios, while costly, have been shown to be critical in working with persons with significant behavioral needs (Kayser-Jones & Schell, 1997; Reid & Chappell, 2003). Having evaluated staff to resident ratios, the LR model determined that a 1:3 staff to resident ratio, supported by extensive ongoing training, is most effective.

Medication Reviews: Behavior-related medications, often used to "assist" staff in coping with challenging behaviors, can also be the cause of certain behaviors and cognitive losses themselves, as well as other unwanted side effects (Aupperle, 2006; Harrison & Therrien, 2007). The LR model employs the least amount of medicinal intervention necessary, and depends upon frequent medication reviews and close individual supervision by staff RN's.

Nature-Based Setting: While several program models have adopted nature-based settings (Hinman & Heyl, 2002; Sampsell, 2003), the LR model expands and combines the concept of a pastoral setting with extensive animal therapy and horticulture programs. In addition, large secured outdoor areas with gardens give persons with dementia the opportunity to walk outdoors freely when they choose.

Focus on Resident Needs: Central to the LR model is a focus on each individual resident's needs. Several studies (Gaughler, Anderson, Leach, Smith, Schmitt & Mendiondo, 2004; Gaughler, Kane, Kane, & Newcomer, 2005) focus on the concern for meeting unmet physical needs. Anecdotal experiences suggest that the cause of many challenging and aggressive behaviors associated with dementia stem from unidentified needs that are social and emotional, as well as physical. The LR model of focusing on meeting resident's emotional needs developed from observing residents and recognizing that many were depressed, lonely, grieving, frustrated and/or frightened. Care providers may mistake a person's inability to communicate their needs with a lack of needs (Egan, et al., 2007; Kovach, Noonan, Matovina Schlidt, Reynolds, & Wells, 2006; Perry & Bottorff, 2005). The LR staff is trained to discover and interpret each resident's individual thoughts, feelings, and needs. This approach requires significant time, as well as staff flexibility. For persons with dementia things change daily, sometimes hour to hour, based on the progression of their disease, the time of day and how well their individual needs are being recognized and met.

Staff Support and Training: It is well established that caring for persons with dementia is stressful and results in a high burnout rate for caregivers in the field (Coogle, Parham & Young, 2007; Lyman, 1993). Specialized training has been shown to be effective in reducing staff turnover (Grant, Kane, Potthoff & Ryden, 1996). To address issues of stress and turnover, the LR model provides extensive, on-going training and individual support for staff. In addition, most staff are limited to a 32 hour work week (full time) and are encouraged to monitor their individual stress levels and take breaks when necessary.

The Current Study:

The current study sought to explore the effectiveness of the LR model in reducing the need (and hence the cost) of behavior-related medication and hospitalization by providing specialized care for persons with dementia who had previously demonstrated significant behavioral issues.

Procedure:

The current research was a collaboration of the administration of the LR care agency with graduate students and faculty at St. Cloud State University. Agency data for the past eight years were compiled for this study. Data on behavior-related hospitalizations were gathered from a variety of agency records, including: family interviews; pre-admission screenings/assessments (medical records from the resident's physician, resident's psychiatric history, resident's medication history); post admission screenings/assessments (RN's weekly assessments of resident's cognitive decline and behavior changes, physicians' monthly assessments of residents' development, physician's monthly medication review, quarterly public health assessments, and annual mini -mental exams). Medication usage was gathered from past and current medical records. A pre and post admission comparison was made of the overall individual use of behavior- related drugs (e.g., Seroquil, Haldol, Resperidol, Depakote).

Sample:

Data was analyzed for 122 Lakeview Ranch current (n=30, 24.5%) and past (n=92, 75.4%) residents diagnosed with a form of dementia. All of the residents (N=122) were Caucasian, and ranged in age from 56-101 years old, with a mean age of 82.4 years. Of the residents, 76 (62.3%) were female and 46 (37.7%) were male. Many of these residents had lived in one or more care facilities before Lakeview Ranch. Prior to moving to Lakeview Ranch, 68 residents (56%) were de-admitted and/or denied re-admission to the prior facilities for behavioral reasons. Only 23 (18%) of the LR residents came from home and had no prior placement. Of the 30 current residents, half (n=15, 50%) are private pay, while the other half (n=15) receive Medical Assistance.

Findings:

Number of Behavior-Related Hospitalizations (Year Prior to Moving to LR/After moving to LR):

Of the 122 current and former LR residents, 62 (50.8%) required no psychiatric hospitalizations in the year prior to or after arriving at LR. Sixty residents (49.2%) had at least one prior psychiatric hospitalization in the year before coming to LR. Of those 60, 56 (93.3%) had no additional psychiatric hospitalizations after arriving at LR. Those 60 residents showed a mean of 2.13 psychiatric hospitalizations in the year prior to arriving at LR but only 0.07 hospitalizations after arriving at LR. This decrease in psychiatric hospitalizations was significant ($t=15.91$, $df=59$, $p=.00$). None of the residents had more than one psychiatric hospitalization after arriving at LR, although prior year psychiatric hospitalizations ranged from one to five.

Behavior-Related Medication Reductions

Of the 122 current and former LR residents, 44 (36.1%) experienced a decrease in the use of behavior-related medications after moving to LR.

Discussion:

While the Lakeview Ranch model developed from a grass-roots trial and error approach to providing specialized dementia care, the resulting techniques reflect an innovative combination of many of the best practices in the current literature. These practices include: person-centered care focusing on meeting the emotional needs of residents, validating feelings, animal therapy, a high staff ratio, and a focus on flexibility with both staff and residents – an essential component of person-centered care (Cohen-Mansfield & Bester, 2006). The Lakeview Ranch model also highlights the differences between a biomedical and a communications approach to care. The biomedical approach, a disease-based model, focuses on treating abnormal behaviors as mere artifacts of a diseased brain. In contrast, a communications approach, which adheres to the idea that all behaviors are a form of communication, directs attention to the meaning behind the behavior. The goal of a communications-based model of care, such as the one used at Lakeview Ranch, is to properly interpret and meet the underlying need(s) expressed by the residents through their behaviors (McLean, 2007). As the current findings indicate, the outcome of the Lakeview Ranch model of "best care practices" is a reduction in the use of potentially harmful behavior-related medications and costly behavior-related hospitalizations. Future research will further examine the impact of the Lakeview Ranch model with regard to its effect on families (e.g., caregiver stress, social and financial burden,) and staff (e.g., burnout, turnover, stress related disease etc).

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