

EXAMINATION OF A LICENSED DEMENTIA HOUSING (LDH) MODEL FOR OLDER ADULTS WITH DEMENTIA

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For



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EXECUTIVE SUMMARY

This report is submitted by Beacon Community Services (BCS) to the Vancouver Island Health Authority (VIHA) as the final document intended to report outcomes of the newly commissioned Licensed Dementia Housing (LDH) project at Brentwood House in Brentwood Bay, British Columbia.

Brentwood House was formally licensed by the Vancouver Island Health Authority in December of 2007 and is currently providing care to 14 older adults with mild to moderate dementia using a newly devised specialized dementia care model, LDH, in a private public partnership between VIHA and BCS. This report focuses on the development phase prior to licensing as well as the first 18 months of operation. In addition, within the constraints of a small sample, the report attempts to compare outcomes over time for clients who have moved into Brentwood House with other clients with similar functional and care needs who have followed other care pathways. Resident quality of life and family satisfaction are also explored.

The overarching goal for VIHA and BCS in developing this form of housing is to provide a cost effective alternative to Complex Care facility care for individuals who do not meet legislated criteria for Assisted Living and are assessed as not needing the full suite of services provided in Complex care facilities. In addition, the LDH project seeks to evaluate whether a secure best practice community orientated dementia care program can support clients to remain in a community living setting for longer than they might otherwise if they remain in their homes.

Having been in operation for 18 months at the time of writing, it is possible to identify some long range conclusions as to the long term success or otherwise of the LDH model. Indeed, this report points to some emerging themes that do indicate a very positive outcome for LDH clients, staff and the continuum of care for individuals with dementia. These themes are:

1. Families report a high degree of satisfaction in both the effectiveness and quality of care provided.
2. The model of care provided at Brentwood House appears to reflect the best practices in dementia care as identified in the literature.
3. Staff report a high degree of satisfaction with working in this model. The level of staff retention is high.
4. A comparison of MDS-RAI data for similar community and hospital resident clients in 2005 indicates that those who have moved to Brentwood House have retained a higher level of function over similar clients who have either moved to complex care or are deceased. Although only suggestive, it is possible that residing in Brentwood House has protected the Brentwood House residents from decline and the requirement to move to residential (complex) care.

5. A comparison of Brentwood House residents with a similar group of individuals with dementia living at home indicates that Brentwood House residents experience a higher quality of life.
6. The project team for Brentwood House (Licensed Dementia Housing Planning Committee) has developed a set of measurable standards (described in [Appendix 1](#)) to support the maintenance of the LDH model over time as well as supporting the development of future settings. Brentwood House's adherence to the standards has been assessed by an external team, with very positive results.
7. The model, as described, has been achieved within the original program budget agreed between the partners. It remains therefore, a cost effective alternative to Complex Care facility placement currently provided by the VIHA. All of the clients who have moved to Brentwood House were either waitlisted for Complex care at the time of moving or would have been waitlisted had Brentwood House not been an option.

In terms of improvements to the model, the evaluation points to the following identified areas that require discussion.

1. Food: Families report that their loved ones are eating more regularly and as a consequence appear to be gaining body weight which raises a possible concern as to overall health effects.
2. Staff and families report that the limited space for activities, storage and professional work space at Brentwood House limits the overall range, scope and effectiveness of therapeutic activities.
3. Families have raised concerns that their loved ones will need to leave Brentwood House when they cease being able to transfer and ambulate independently. They have indicated that they would like this policy to be reviewed. *(In fact, the policy is a direct result of zoning restrictions imposed by the local municipality and is beyond the decision making ability of either VIHA or BCS).*

The results of this study suggest that Brentwood House LDH project is achieving great success in reaching its goals. The level of care provided is appropriate to the clients needs and easily meets best practice in dementia care. In addition, the project continues to be a cost effective alternative to Complex care placement for those clients who do not have a need for unscheduled professional nursing care but require secure 24 hour supervision.

INTRODUCTION

Brentwood House is currently providing care to 14 older adults with mild to moderate dementia using a newly devised specialized dementia care model, LDH, in a private public partnership between VIHA and BCS. This report documents the development of Brentwood House as a LDH facility, describes the model of care, compares it to best practices in dementia care, and explores the implications of the model for family satisfaction and for resident care and quality of life. Challenges are noted and recommendations to address these are made.

EVALUATION PROJECT PURPOSE AND OBJECTIVES

The purpose of this evaluation project is to address the question: *Can Brentwood House residents be maintained effectively with optimal functioning, quality of life and family satisfaction compared to a similar group of community clients?*

The specific objectives of the project are to:

1. Describe the model of care at Brentwood House and compare it to best practices in dementia care identified in the literature and to the standards created by the Licensed Dementia Housing Planning Committee.
2. Empirically describe:
 - Brentwood House residents;
 - clients eligible for LDH in 2005; and
 - clients eligible for LDH in 2007 but currently at home.
3. Compare Brentwood House residents, at 6 month and 18 month post implementation of the LDH model with:
 - clients eligible for LDH in 2005; and
 - clients eligible for LDH in 2007 but currently living at home.
4. Compare Brentwood House residents in 2007 with Brentwood House residents in 2009.
5. Using 2009 data, compare the original sample of Brentwood House residents with the original sample of clients who were eligible for LDH in 2007 and living at home.
6. Describe family members' satisfaction with Brentwood House.
7. Assess Brentwood residents' quality of life.
8. Compare Brentwood House residents' quality of life with a similar population of individuals with dementia who are residing at home, in the community, with the aid of a family care giver.

The LDH model was officially implemented at Brentwood House December 28, 2007. This report addresses all of the objectives above at 6 and 18 months post implementation of the LDH model at Brentwood House (June 2008 and July 2009).

ORGANIZATION OF THE REPORT

The report is organized as follows. First background information is provided as a context for how the Brentwood House LDH model has come into being. Secondly, the research methods are described. Thirdly, results are presented and discussed. Finally, challenges are identified and recommendations are made.

BACKGROUND AND RATIONALE FOR THE LDH MODEL

Since its inception in 2001, VIHA's Assisted Living program has recognised that adults with mild-moderate levels of dementia cannot always function safely in an Assisted Living setting. These adults generally require higher levels of supervision and assistance than is consistently possible in most Assisted Living settings. In addition, the Community Care & Assisted Living Act of 2002 has placed strict limits on the ability of adults with moderate cognitive impairment to enter or – if already resident – remain in Assisted Living. Consequently, when their formal and informal supports can no longer maintain them in their own home, adults with mild-moderate dementia regularly move into Residential Care facilities, the only housing alternative. In many instances the level of care provided in Residential Care facilities is perceived by service providers as higher than the actual needs of these adults dictate. This situation is perceived to undermine the remaining capacities of the affected adults, in part due to the way that care is (by necessity) traditionally delivered in Residential Care facilities, (e.g., a greater focus on medical and physical care than on social or emotional care). As well, it was felt that inappropriate placements contribute to the declining availability of complex-care residential beds.

The need for a new form of care that bridged the gap between staying at home or accessing Assisted Living and Residential Facility care seemed evident, and the concept of Licensed Dementia Housing (LDH) was conceived. It was envisioned that by enhancing supervision and security in Assisted Living environments they could be viable alternatives for adults with dementia who require more care than Assisted Living but less than complex-residential care. To explore the appropriateness and feasibility of LDH for this population, three steps were taken by VIHA. First, the characteristics of clients that could potentially be served by LDH were identified. Second, it was determined whether or not VIHA had a population that would fit the LDH client profile. Third, a literature review was conducted to identify how best to care for the target population.¹

- ❖ The characteristics of the population that could potentially be served by LDH were identified in 2005 by the LDH Planning Committee, a multi-disciplinary group of health care providers from different settings (e.g., hospital, complex care facilities, VIHA Home and Community Care, Rehabilitation services, Assisted Living, Beacon Community Services), and resulted in the following client profile for LDH:

¹ The three steps, summarized below, were carried out by Mark Blandford in 2005.

- Qualifies for Case Management through the H&CC program.
- Most clients will function at an IC2 level. Some clients functioning at an IC3 level may be appropriate for the setting.
- Client does not qualify for VIHA subsidized Assisted Living due to a reduced ability to make decisions on his/her own behalf.
- Has a cognitive impairment that is assessed as at least Stage 5 (Global Deterioration Scale – GDS) but has not yet reached Stage 6 (GDS).
- May have a Folstein MMSE below 23/30.
- Client is not safe living at home either due to inadequate family or H&CC supports.
- Client does not have a complex medical condition that requires unscheduled professional care.
- 24 hr supervision is required only for safety or to prevent wandering.
- Client is physically able to manage most aspects of hygiene or ADL but requires set-up or verbal cueing for successful completion.
- Clients living on the second floor of the building must be able to physically manage stairs without physical assistance.
- Client is ambulant without assistance (may use a walking aid).
- Client is physically able to transfer and ambulate without assistance.
- Client likely lives alone, has minimal informal supports or the informal supports are over-burdened.

Note:

- a) Clients were also required to have been assessed and approved as requiring placement in Residential care.
- b) Some assessment tools and descriptors referred to above, are no longer in use by the VIHA.

- ❖ In order to determine if there was indeed a population that conformed to these characteristics in VIHA, using the client profile above, (1) admissions in the past 12 months to a single residential care unit were reviewed to determine retroactively if any of the clients could have been candidates for LDH; (2) charts for clients on the Assessed Awaiting Placement (AAP) list for south VIHA were reviewed to identify clients who conformed to the client profile and could benefit from LDH.

The results validated the assumption that a large number of clients with moderate dementia are waitlisted for Residential care (RC) primarily to facilitate a secure living situation rather than a genuine requirement for the full range of complex care support services.

- At least 28% of the total waitlist (Intermediate Care (IC) and Extended Care (EC) combined) and 40% of the IC AAP waitlist could be redirected to LDH as opposed to RC. This is due to the primary needs of these clients being firstly a secure and monitored environment and secondly their not requiring 24/7 access to a professional nurse.
- Almost a third of clients AAP in hospital could be redirected to LDH instead of RC.
- A third (34.7%) of all IC AAP community clients could potentially be redirected to LDH.
- Living alone with dementia places clients at significantly higher risk of requiring RC placement. Clients with dementia who have adequate informal supports or a

live-in caregiver are less likely to be AAP. Clients with moderate dementia, who live alone or have limited informal supports, are much more likely to be AAP despite being medically stable.

- ❖ The literature reviewed strongly suggested that the prevailing care orientated medical model of support for persons with dementia is not effective in managing many aspects of the complex and dynamic nature of dementia in its early and middle stages. Various jurisdictions are moving to alternative models of care which, although being variously labelled (person-centred, social-model etc) seem to have central characteristics that are the same.

The characteristics of these emerging practices are social, environmental and function orientated and lean away from the 'disease management' and nursing 'care' philosophy of the traditional medical model. Clients are supported to use the skills they have to substitute for lost abilities and the operation of the environment is structured accordingly. This philosophy requires a different staffing pattern and new skills for staff (although there is little direction as to what best practices for staffing are.) It deemphasizes risk reduction in favour of managed risk.

Taken as a whole the best practice literature for dementia care indicates that successful enhanced assisted living relies on prerequisite operational and design facets that must be present and must be fully integrated with each other. These factors include:

- An environment with a small and familiar home like design that is expertly designed to facilitate maximum independence in persons with dementia;
- A staffing model emphasizing a social milieu rather than a medical/care model that has activities as a priority;
- Specialized staffing that are trained in dementia care, and show respect for and maintain the dignity of people with dementia;
- A support model that emphasizes a person centred approach;
- An environment designed and adapted to suit the level of dementia that clients exhibit;
- Adequate professional support and continuing education for care staff;
- Strong leadership that supports & models effective dementia practice;
- Strong assessment and reassessment of client medical & functional change; and
- Careful consideration of client selection: Clients with behavioural challenges and/or complex medical conditions do not achieve the same outcomes as clients who are medically stable and have minimal behavioural challenges.

To conclude, in that there seemed to be sufficient indication of a need for LDH, and a small best practice literature to guide the development of an appropriate care model, a partnership was formed between VIHA and Beacon Community Services to provide LDH at Brentwood House. As no fully articulated models of LDH were found in the literature that could provide a template for implementing the model of care envisioned by the LDH Planning Committee, they met on a regular basis to develop an appropriate model of care. Their planning was based on the best practice components (identified above), taking into account the rules and regulations/parameters/constraints of the provincial Licensing, VIHA

and Municipal Bylaws. The License to operate Brentwood House as a LDH facility was granted December 28, 2007.

Since Brentwood House has become an official LDH facility, members of the LDH Planning Committee and other experts in dementia care have translated the best practices in dementia care (above) into a set of LDH standards to guide care at Brentwood House, as follows.

Desired Outcomes of Dementia Housing² :

- Reassuring And Familiar Environment;
- Inclusion Of Personal Preference And Choice;
- Maintenance And Development Of Relationships;
- Knowledge Of A Person's Past To Inform The Present;
- Promotion Of Abilities And Maintenance Of Mobility;
- Continual Evaluation And Innovation;
- Staff And family members seek opportunities to facilitate joy.

DESIGN AND METHODS

Research Design

A descriptive, mixed-method design was used.

Participant Selection and Recruitment

All Brentwood House staff and residents' family members were eligible to participate in the study. The manager of Brentwood House informed staff and family members about the research project including when and where focus groups were to be held. The manager did not participate in either focus group.

Key informants (i.e.: the Brentwood House manager, Brentwood House housekeeper, Beacon Community Services management staff, VIHA staff providing services to Brentwood and LDH Planning Committee members) were selected for interviews due to their unique perspectives and histories.

Family Satisfaction Questionnaires were sent to family members by the Brentwood House manager, each of whom was provided with a stamped envelope, addressed to the researcher. Eighteen Family Satisfaction forms were returned.

All residents' were eligible to complete Pleasant Event Schedules. There were 258 Pleasant Events Schedules completed.

Eleven community-dwelling Vancouver Island residents with mild to moderate cognitive impairment living at home with the help of an informal caregiver, and their caregivers, were interviewed about their quality of life.

Data Collection and Procedures

² See Appendix 1 for full description of each standard

1. To describe the model of care at Brentwood House and to compare it to best practices in dementia care literature and to LDH standards of care.

The following procedures used to collect data to address each of the research objectives are summarized below.

Focus groups and/or individual interviews were held (at 6 and 18 months post implementation of the LDH model) with Brentwood House care staff (10 participants), VIHA Home and Community Care staff (10 participants), with Beacon Community Services management staff (6 participants) and with LDH Planning Committee members (4). Semi-structured individual interviews were conducted with the Brentwood House housekeeper and with the VIHA Assisted Living Case Manager. Eleven family members were interviewed individually and/or in a focus group.

An assessment of the implementation of the LDH standards at Brentwood House was undertaken by an external team made up of members of the LDH Planning Committee in June 2009,

Documentation at Brentwood House (e.g., policies, staff orientation manual, job descriptions, standards, etc.) and VIHA documents (e.g., pamphlets about Brentwood House for potential residents), were examined.

2. To describe and compare Brentwood House residents at 6 and 18 months post implementation of the LDH model, with (i) clients eligible for LDH in 2005 but living at home, and with (ii) clients eligible for LDH in 2005 but in hospital at time of assessment.

Resident Assessment Instrument (RAI) - Home Care data from 2005 were used to compare Brentwood residents (n=7) with clients eligible for LDH in 2005. The clients in the latter group (n=42) were those on the AAP list who were identified as candidates for LDH in the VIHA research described above. Their 2005 RAI assessment data were provided by VIHA to the researcher for this project, in anonymized form. This group was divided into clients who were living in the community (n=21), and clients who were in hospital (n=21) when the VIHA research was conducted.

3. To describe and compare Brentwood House residents in 2007 with clients eligible for LDH in 2007 but currently living at home.

RAI data were used to compare Brentwood House residents (n=14) to clients eligible for LDH in 2007 but currently at home (n=14). RAI assessment dates for the Brentwood group range from January 15, 2007 – April 9, 2008 while the Comparison group range from February 1, 2007 – November 22, 2007.

4. To compare Brentwood House residents in 2007 with Brentwood House residents in 2009.

RAI data were used to compare Brentwood house residents (n=14) in 2007 to those residing in Brentwood House (n=14) in 2009. The dates for 2007 range from January 15, 2007 – April 9, 2008 while those for the 2009 range from March 20 – April 3.

5. *To compare 2009 Brentwood House residents (from original cohort in 2007) with 2009 clients eligible for LDH but living at home in 2007.*

RAI data (2009 assessments) were used to compare Brentwood House residents (n=12) to those clients who were eligible for LDH in 2007 but living at home (n=14). All remaining Brentwood House clients from the original sample (n=12) received an assessment in 2009. Only 9 of the 14 LDH eligible clients received an assessment in 2009. The 2007 assessment was used for the five LDH eligible clients not receiving an assessment in 2009.

6. *To describe family members' satisfaction with Brentwood House and their perception of their relatives' quality of life.*

A Family Satisfaction Questionnaire for older adults in residential care has been developed by the University of Washington (Logsdon & Teri, 1995). This survey consists of 23 close-ended questions. Response categories include 'not at all satisfied', 'somewhat satisfied' and 'very satisfied'. There are also 4 close-ended questions asking family members to rate their overall satisfaction in the last month with residential care, physical environment, activities and programs, and care by the staff. Response categories for these questions include fair, poor, good, or excellent. Finally, there is an open-ended question that asks family members to describe any concerns or comments about their family member's care.

7. *To assess Brentwood House residents' quality of life*

The Pleasant Events Schedule-AD (PES-AD) is a caregiver-report questionnaire designed by Logsdon & Teri (1995) to identify pleasant events for Alzheimer's disease patients. It consists of a list of potential pleasant events in which AD patients may engage, and asks caregivers to rate whether the patient enjoyed each activity, and how frequently they engaged in each activity during the prior month. The instrument can be administered to caregivers as a questionnaire, and takes approximately 15 minutes to complete. Scoring involves an overall activity frequency rating and an overall enjoyment rating. Response categories for frequency of activity include 'Not at all' (coded as 0), '1 to 6 times' (coded as 1), and '7 or more times' (coded as 2), while categories for enjoyment include 'Not at all' (coded as 0), 'Somewhat' (coded as 1), and 'A lot' (coded as 2). The scale has been found to have good internal consistency ($\alpha=.90$) and to correlate with severity of depression in AD patients as assessed by the Hamilton Depression Rating Scale ($r=.41$), and with depression diagnosis ($r=.59$). A long (53 items) and short (20 items) version are available. Correlation between the two versions is 0.95. The PES-AD has been used in a published depression treatment study with these individuals (Teri, Logsdon, Uomoto, & McCurry, 1997).

8. *To compare Brentwood House residents' quality of life with a similar population of individuals with dementia who are residing at home, in the community, with the aid of a family care giver.*

Quality of life was measured using the Pleasant Events Schedule (described above) and the Cornell Scale for Depression in Dementia . *The Cornell Scale for Depression in*

*Dementia (CSDD; Alexopoulos, Abrams, Young, & Shamoian, 1998)*³. The CSDD was specifically developed to assess signs and symptoms of major depression in patients with dementia (Alexopoulos et al., 1998). Since some of these patients may give unreliable reports, the CSDD uses an inclusive interviewing approach that derives information from the patient and the informant (Alexopoulos et al., 1998). Information is obtained with the CSDD through the use of two semi-structured interviews: an interview with an informant and an interview with the individual with dementia (Alexopoulos et al., 1998).

- **Data Analysis**

1. To describe the model of care at Brentwood House and to compare it to best practices in dementia care literature and to LDH standards of care.

Key components of best practices in dementia care (presented above) were used as a framework to extract data from Brentwood House documentation, and from interview/focus group data. These data were used to describe the Brentwood House model of care.

Results of the Dementia Housing Report Card were used to describe Brentwood House's compliance with the LDH standards. The Dementia Housing Report Card has 44 items measured on a Likert scale of 1-4 with 1=*Never*, 2= *Sometimes*, 3 = *Usually* and 4 = *Always*. Each item was scored by individual team members. Where differences between team members occurred these were discussed until a unanimous team score was reached.

2. To describe and compare (1) the Brentwood House residents, (2) clients eligible for LDH in 2005 but living at home, and (3) clients eligible for LDH in 2005 but in hospital at time of assessment.

RAI-Home Care data were used to describe (1) the Brentwood residents, (2) clients eligible for LDH in 2005 but living at home, and (3) clients eligible for LDH in 2005 but in hospital at time of assessment. In addition to the individual items asked within the RAI, a number of scales can also be constructed. Scales used in this report include: (a) the Depression Rating Scale (DRS); (b) the Cognitive Performance Scale (CPS); (c) the activities of Daily Living (ADL) Long Form; (d) the Resource Utilization Group; and (e) the Pain Scale. The following provides a brief description of each.

- a) The DRS is a 7-item measure used to screen individuals for depressive disorders. The 7 items include: negative statements, persistent anger, unrealistic fears, health complaints, anxious complaints, facial expressions, and tearfulness. The scale ranges from 0-14 with scores of 3 or greater indicating minor or major depressive disorders. It should be noted that an increase in score is not related to severity. The criterion validity of this scale has been established using the Hamilton Depression Rating Scale and the Cornell Scale for Depression (Burrows et al., 2000).

³ This segment of the evaluation was carried out by Laura Booi, Vancouver Island University

- b) The CPS is used to assess the cognitive status of clients using 4 items (short-term memory, cognitive skills for daily decision-making, making self understood, and eating impairment). Scores range from 0-6 with scores of 3 (moderate impairment) or greater indicating difficulty in daily decision-making. This scale has been validated against the Mini Mental State Examination and the Test for Severe Impairment (Morris et al., 1994; Hartmaier et al., 1995).
- c) The ADL Long Form is a tool used to summarize functional ability. The 7 items involved in the scale include: personal hygiene, toilet use, locomotion, eating, bed mobility, transfer, and dressing upper/lower body. Scale scores range from 0-28 with higher values reflecting greater dependence on others for assistance with these activities. The ADL Long Form has very good internal consistency ($\alpha=0.94$) (Morris et al., 1999). For the purposes of this study, the scale scores were collapsed into: independent (0-1); mild dependence (2-9); moderate dependence (10-20); very dependent (21-25); and total dependence (26-28).
- d) The RUG score categorizes people based on a combination of ADLs, IADLs, diagnoses, symptoms, treatments, and health services utilization. There are 7 categories in total: (1) special rehabilitation; (2) extensive services; (3) special care; (4) clinically complex; (5) impaired cognition; (6) behaviour problems; and (7) reduced physical functions. Each of these subgroups has a minimum of 2 subgroups.
- e) The Pain Scale is a composite score (2 items) intended to identify the presence and intensity of pain. It ranges from 0-3 with higher scores reflecting more prevalent pain. According a sample of nursing home residents, this scale has been shown to be very predictive of pain (Fries et al., 2001).

Simple frequencies of client characteristics by client group were conducted. Sample sizes did not allow for tests of significance.

3. To describe and compare Brentwood House residents with clients eligible for LDH in 2007 but currently at home.

Simple frequencies of client characteristics by client group were conducted. Sample sizes did not allow for tests of significance.

4. To compare Brentwood House residents in 2007 (most recent assessment) with residents in 2009.

Simple frequencies of client characteristics across the two years were conducted. Sample sizes did not allow for tests of significance.

5. To compare 2009 Brentwood House residents (from original cohort in 2007) with 2009 clients eligible for LDH (from original cohort of those living at home in 2007).

Simple frequencies of client characteristics across the two years were conducted. Sample sizes did not allow for tests of significance.

6. *To describe family members' satisfaction with Brentwood House and their perception of their relatives' quality of life.*

Responses are summed for each question.

7. *To assess Brentwood House residents' quality of life.*

For the purposes of this study, caregivers were asked to complete the short version of the PES-AD for a total of 8 months (October 2007 – June 2008 with the exception of April 2008). Sample sizes range from 12-14 for each month. The 20 items for both Frequency and Enjoyment were summed producing scales ranging from 0 to 40. Due to missing data, scale scores were divided by the total number of valid responses resulting in mean scale scores ranging from 0-2.

8. *To compare Brentwood House residents' quality of life with a similar population of individuals with dementia who are residing at home, in the community, with the aid of a family care giver.*

Comparisons between the two groups was made through the use of t-tests and the Mann-Whitney-U test for nonparametric statistics.

EVALUATION RESULTS

1. *To compare the model of care at Brentwood House to best practices in dementia care identified in the literature.*

The following section presents information, derived from:

(i) A review of documentation and interviews with staff and management at Brentwood House, Beacon Community Services and VIHA, members of the LDH Committee and with residents' family members, that illustrate how the best practices in dementia care (discussed above) are implemented at Brentwood House.

(ii) An external assessment of Brentwood House's implementation of the LDH standards.

1. The Brentwood House Service Delivery Model Comparison:

- **Brentwood House Vision and Philosophy.**

The best practices and LDH standards are reflected in the vision and philosophy of Brentwood House.

- Vision: People living with dementia will have the highest quality of life possible.
- Philosophy: A person with dementia living in dementia housing will be treated as an esteemed elder and respected for who they are and whom they have been

([Appendix 1](#) presents the LDH booklet for residents and families with examples of how the LDH standards are implemented).

- **“Social Milieu**

The definitions of “social milieu”, “home-like environment” and “person centred care” are all somewhat what elusive. Following are some of the ways participants have tried to describe the model of care at Brentwood House

We wanted to create a milieu that brought out the best in peopleto create an environment that was more familiar to the people living there. And by doing that, in fact, optimizing their functioning.

We’re trying to provide the care that people need in terms of assistance with ADLs, hygiene, medications and certainly their domestic, or at least the amount of responsibility for domestic things; while at the same time maintaining whatever level of abilities and independence they do have. So what I’m hoping that we’re able to achieve is residents doing all that they can do ...supported without having to ask and without having to get frustrated by inability, getting supported to do everything that they’re not able to do.

At Brentwood House you are allowed to be yourself because it is not a big institution with the inherent need for conformity and routine and rules and regulations.

I think what we’re trying to do at Brentwood House is to create opportunities for staff to do stuff that they’ve always wanted to do.

.a place where the people living there have a chance to have a life even though they are suffering from dementia and reduced capacity, which includes their family.

It’s sort of more flexible and resident-based rather than us-based. It’s about life. It’s about letting them (residents) live their lives.

It feels like a home—very warm and accommodating. Mom always says “Did we remember to tell them I’m leaving—she feels like she belongs here

a safe and secure environment but where they’re given as many opportunities to maintain their identity and personalize as possible

You’re really focusing on what’s right with you and the strengths and getting people involved in their ADLs and their activities with daily living and getting dressed and maybe participating a little bit of the meal prep, setting the table, doing those kinds of activities and maintaining function as opposed to doing for. In this environment, we’re going to create some external cues in the system as well as people to encourage people to do those things.

- **Physical and Social Environment**

Physical Environment - Safety

The physical environment has a number of measures in place to meet the safety and care needs of residents with dementia

- Windows and doors can be secured.
- Outdoor lighting provides safe entry and exit.
- A keypad secures the entrances and exits.
- The garden area is secure.
- Hot water is thermostatically controlled.
- Non-slip surfaces are used in bathing areas.
- Ergonomic bars are situated to maximize staff and resident safety.
- A wireless monitoring system to keep track of residents at night.

Physical Environment - Space

The physical environment at Brentwood House supports Brentwood's vision and philosophy and reinforces the social environment.

The physical space and how it is designed provide opportunities, and cues, for the development of a social milieu that supports individuals' capacities and is home-like.

It's been designed to look more like a house, more like a home... so by keeping something similar to a family environment and trying to tap into the old memories and not kind of throwing people into a new environment that they aren't capable to understand at this point in their dementia

I think the small size is a real bonus. Staff get to know the residents really well. And I think also because of that they get to know the family and they are encouraged to participate in many of the activities

The building is attractive, somewhat reminiscent of a country manor and blends in with its neighbours. The surrounding grounds are attractively landscaped with a variety of comfortable sitting areas for groups or individuals. The secure perimeter fencing is decorative (wrought iron) and enhances the overall look of a house rather than a facility.

The community accepts it. They like the fence; they like the building; they see it as congruent with the bed and breakfast next to it. You know it enhances the community. That's really important for acceptance. I think from what I've seen at gatherings where you've got ceremonies and whatever, there's huge support for it.

Physically we've tried to make it look home-like so it does feel as though it's theirs and actually people do feel that way. It's home to them.

it makes people look at the building and think that it's home and they feel attracted to it even before they move into it. And that helps. It does make a difference to people's ability to accept this move as a good move for them.

Residents are able to access the grounds independently and the size and configuration of the grounds allows for lengthy walks. Having easy access to the outdoors is perceived as physically and spiritually positive by family members.

You know they can just get out into the garden, whatever. There's way more exposure to all of the health aspects of being outdoors like Vitamin D and exercise.

Inside the building (which has a secure key pad entrance) there are two floors. The main floor consists of an office and bathroom for staff, laundry facilities, some resident rooms and an open concept kitchen/dining/living room. The gardens and patio can be accessed through doors on the main floor. The second floor is comprised of resident rooms, an activity/sitting room and private living quarters for the housekeeper. Access between floors is either by elevator or by stairs. Residents are encouraged to use the stairs.

The halls are not as wide as found in institutions and are decorated with pleasant pictures. There is no evidence of facility paraphernalia (e.g., carts, wheelchairs, lifts) to undermine the residential “look”. The location of the common spaces is at the ends of the halls naturally leads residents to them.

What I've found is that they do tend to congregate in the kitchen- living room. You know they're aware for the most part that something's going to happen. They're not sure maybe what it is that's going on...some of them do. They go around the corner and say, "I'll just see what we're doing today." And they'll come in – we've got an activity

Social Environment

The social environment is a combination of activities of daily life and how they are organized; the quality of relations between residents, staff and family; and the over-all mood. At Brentwood House every effort is made to create a daily life that is characteristic of living in a family home. This familiarity provides cues to the residents and links to their experience, maximizing their capabilities.

Daily Life

Much of daily life centres on the sitting-kitchen area. All food is prepared at Brentwood House adding to the sense of a home.

And there's a combined living room, kitchen and dining room. So they can watch the meal being prepared; they can smell it; anticipate it; talk about it; talk to the person preparing it.

I think having home-cooked meals on the site, prepared right in a sort of very home-like kitchen, is familiar and a great step up nutritionally.

Meals are served family style to help maintain social graces and to encourage socialization.

So the kitchen looks like a house kitchen; it's open to the dining room and the residents are seated around round tables which facilitates conversation

Each resident has a small bed-sitting room with a private bathroom. Residents are expected to bring their own furnishings to make the room their own.

They're living together not communal in the same room like a ward in a residential facility but like residents in a house.

We really strongly promote the familiar environment to them – the furniture that they know and have used so that when they bring their own dresser in, they know their undergarment are going to be in where the slacks are because they've always put them there.

Residents are expected to treat the whole house as their home with their room a bedroom rather than as a self-contained suite. This deters social isolation.

There's a feeling that you live in whole house rather than just your room---so you get more stimulation. There's a deliberate attempt not to create situation to squirrel away in your own room.

Residents are expected to do their own laundry to whatever degree they are able to do so, with staff direction and encouragements as needed (i.e., only folding the clothes, or doing the entire job with some prompting). Residents may also assist with table setting or clearing, food preparation, or other household activities.

Like when we do the laundry and you know they can help with the laundry and help with the setting of the tables and preparation, the peeling of carrots and things like that. Just to make them feel like they are part of the day-to-day. Whereas if you were in a facility or extended care or something, they're like, "There's your meal."

Here if they want to dust or vacuum well go right ahead – anything she wants to do the staff encourage.

So if they can you know, pop some toast in the toaster they're encouraged to do that. If they can go and get the cereal and pour their own cereal, then they're encouraged to do that, if they could pour their own juice. So they're able to participate to the level of their ability in that activity.

Residents are taken into the village to shop.

It doesn't have to be a daily thing but it just makes them feel as though they are accomplishing that necessary task that they've done all of their life.

Our keenest shoppers, they think of the current shopping trips as practices so that they can...one day they want to do that on their own and they sort of flag step-by-step goals for themselves

Social Relations

Brentwood House is a community. Residents are encouraged to socialize with each other and efforts are made to draw family into daily life. Staff are warm and welcoming.

They (residents) look out for one another. During meals they are sort of very much family style and so they would have to say, "Pass the butter please." "Would you like some peas?", passing things to one another so they're definitely communicating with each other. If someone doesn't seem to be eating, someone else will say, "Are you all right?" or "Are you having any trouble? Can I get you anything?" They're aware, very much aware of one another.

One of the strategies in meeting the needs of people here is being perceptive of them and picking up on what people say, as opposed to imposing a...I mean you do plan some activities - but as opposed to having an activity schedule people are trying to find things that come out of the residents through current

<i>conversation, which takes initiative on the staff's parts, right?</i>
<i>I have never once felt that I was unwelcome at Brentwood---in fact I would say that everyone is very welcoming---I feel at home when I go to Mom's</i>
<i>I go into a lot of facilities ---this one feels alive---everyone seems connected.</i>
<i>The staff at Brentwood all come across as warm and caring - they look like they like each other and the residents---they really make this a welcoming place for us to visit.</i>

- **Staffing**

Developing a social milieu that creates a sense of belonging (of home), and that facilitates a person centred approach that is respectful and supportive of residents' dignity requires more than an appropriate environment. An appropriate staffing model, positive staff attitudes and staff knowledge of dementia are required to translate theory into action. Equally important, staff need to be supported to carry out their work effectively.

Staffing Model

All day to day care at Brentwood House is provided by the operator, Beacon Community Services. Care is provided 24/7. There is an LPN on all Day, Evening and Night shifts. There are daily care activity workers, one from 7:00 am - 3:00 pm, and another from 5:00 pm – 9:00 pm. All care activity staff are trained as residential care aides and as activity aides. There is a live in housekeeper. During the night the LPN can call upon the housekeeper if required. An RN is employed eight hours per week to oversee care plan development, to liaison with physicians and pharmacists, and to consult with staff. The Brentwood House manager is an Occupational Therapist (OT) by training and works weekdays. There is not a facility physician. Instead, residents are encouraged to keep their own physicians and to visit the physician's office.

<i>For those people that it's part of their routine, it's something that they do. They may have a relationship with their physician, the physician knows them and they have the ability and they continue to go.</i>
--

Selecting and Orienting Staff

The selection of staff with the attitudes and skills to effectively implement the model of care envisioned at Brentwood House, is crucial. To this end the staff have been carefully chosen.

<i>Well they (LPNs, care activity aides, RN) were hand-picked. They responded to an ad that specifically stated that you know, we've got a very social model of care and specialized in dementia and promoting independence. So the advertisement that they responded to would have appeal to only some.</i>
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<i>And then they were put through a fairly rigorous interview in which questions about dementia as a diagnosis was discussed, but also that made sure that their understanding of caregiving for people with dementia was there. So they understood potential behaviours, the meaning behind some behaviours, the triggers of some behaviours, the need for distracting and returning to issues that cause [] under the...or other sort of stress behaviours at first. And so you know, even before they start their jobs, I have a pretty good idea that these were people that understood those issues and would be able to respond to residents' needs appropriately.</i>

the questions on the interview..... they were almost identical for the activity workers as they were for the LPNs and they included activities because it's part of the model and everyone needs to understand that activities are a necessary part of life and that activities work best when they're familiar and done in a familiar setting and that they're meaningful. And so the LPNs had to understand that every bit as much as the workers who were expected to plan activities because they all do them.

The staff has had some specific training over and above what RCAs and community health workers have for dementia.

Once hired, staff are oriented for a day and provided with an orientation binder that is comprised of information about dementia, ways to create a culture of care that supports residents' abilities, and strategies to address challenging issues. The orientation package is based on training manual for adult day programs and throughout stresses the importance of knowing the person, building on strengths, and maintaining skills and promoting meaning through daily activities. This approach ensures from their first day of work that the staff understands the importance and priority of the activity portion of their work.

If we are short-staffed activities do not automatically shift to the bottom of the list.

Staff Support

The best practices indicate that the staff require continuing education, professional support and strong leadership to provide optimal dementia care. This is especially true when the default position for dementia care tends to be what is familiar, in most cases the institutional medical model form of care. Brentwood House provides their staff with ongoing education formally (e.g., Best Friends) and informally (e.g., making written resources available). Staff meetings are used to provide information and to develop problem-solving skills. Consultations with Elderly Mental Health Services have an educational component and support staff (e.g., understanding and responding to a residents' sexual activity). Professional support is provided through annual appraisals that identify staff strengths and set learning goals. As well, the RN and the Brentwood House manager provide consultation and support to staff as needed.

She (RN) was only a phone call away and if there was something else that had to happen that I didn't know about...

She (the manager) is just one of the team and we know that if we don't have the answer for something, we go and ask her and if she doesn't know it, she'll find out and get back to us

What I really like is that it's OK to make a mistake—here the main thing is to learn something from it.

We are treated like intelligent adults and partners in looking after the residents. Our opinions matter and we can make a difference to residents' lives. It's not like this everywhere.

The manager is provided support by her managers as well as by the LDH Planning Committee, which helps to guide the model. This committee includes VIHA clinical experts

in dementia care as well as representatives from the community and caregivers of people with dementia.

Staff Attitude

When I go in they are always friendly and helpful but they are always focussed on the residents at the same time.

They are a role model for all elder care -- their knowledge is good and they put a lot of energy into figuring out ways to help the resident be successful.

This is the way I always thought things could be in a care facility.

I feel like the way we do things here brings out the best in us as well as in the residents.

- **Leadership**

Support for staff to carry out their roles comes from the operator of Brentwood House.

Well I think if you create the vessel, then the staff and if you give the staff permission to think outside the box and do stuff that's different, they'll grow into it.

Staff happiness and excellence in care come from the top down—we have a leader operates who empowers staff to supports their capacity to be the best they can be.

The Brentwood House manager is an OT by training with extensive experience in working with people in all stages of dementia in a wide variety of settings. The choice of an OT as the manager was deliberate and made with the idea that her training was most aligned to the development of a social model of care.

The manager is an OT with a specific skill set around dementia, management behaviours and compensatory sort of strategies and we really like that

Her focus is residents' daily life---maintaining function, using existing functions to compensate for limitations and facilitating adaptation.

Occupational Therapy is ideal for leading care at Brentwood House—the person and what makes life meaningful to them never gets lost behind the disease.

The manager describes her management style as participatory and her philosophy as one that values acceptance of peoples' difference.

Staff need to be supported, trusted, and feel they can ask for what they need.

Care should be value driven and staff need to really feel ownership for Brentwood House's vision and philosophy

The Brentwood House manager strives to create an environment in which staff plan their work, and organizational (e.g., staff schedule changes) and program issues (e.g., planning formal activities) are resolved as much as possible by staff.

And there's not that I don't know, that status thing. Like it's just not like that. Whatever the job is being done, then whoever it is at the moment, off you go and you do it. You kind of work as a team. Yeah it is a really good team here.

they get to use decision-making, they get to assess before they do things. They don't just get told the task and then go and do it.

We need to collaborate with each other. Like if we have this, if we're making a decision we'll discuss it. "This is something happening with this particular resident. What do you think?" And we'll get everyone's opinion and how it affects all three shifts. We say, "Okay, this may be a good solution. Let's try this." And we try to get consensus.

There are plenty of instances where staff make differing assessments and we resolve these as opportunities for learning.

- **Value Driven Care**

The Brentwood House model of care is value driven. Health is seen as an individual positive resource for everyday living, not the objective of living or the absence of disease (WHO, 1986). A high priority is given to all aspects of health, emotional well-being and social connectedness are at least as important as physical health.

Emotional Well- being and Social Connectedness

We take the time to just give them a hug and tell them they're okay. They're safe, they're here or they have a problem with their memory and you know, be as real as you can and understanding. And encourage them in their friendships

We see the staff making bridges between residents all the time and helping them to feel good about themselves. My Mom's anxiety has really reduced since she has been here—she feels connected.

Person Centred Care

The foundation of care at Brentwood House is knowledge/understanding of individual residents and their families and an approach to residents that is flexible and creative.. This enables person-centred care and reinforces Brentwood House's commitment to a social model of care.

They really get to understand the residents and they're giving intimate care in many cases and they're giving it to people that they really know so they get to understand what that person can and can't do, likes and different likes, how [proud?] they are, how...you know. They know how to handle these people. I think that that's very rewarding for them.

Respect has to be [there?] because these people that have dementia didn't always have dementia. They've lived a full life and we have to remember that they need to be loved and honoured every day. I try to do that.

Nothing is written in stone... it's just that each resident is treated like your mom and dad would be treated, you know.

Adoption of the Best Friends approach and creation of resident audio visual biographies supports person centred care

Best Friends is a way of providing care to individuals who are cognitively impaired by staff continually using a friendly approach that compliments people and diffuses any kind of conflict or negative commentary or restrictiveness. So it would be a way of continuously approaching situations to end up with a person feeling loved and supported in the environment. And it starts with like just basically everybody talking to a client in a friendly way and there would be some key known. So the person's past life becomes really, really known to the staff.

Brentwood House is piloting Memory Lane, a project that supports person centred care. With funding from VIHA, an audio-visual record of each resident's life and memories is being created through memorabilia, letters, photos and interviews. VIHA has provided Brentwood House with a movie camera and soft ware, as well as training for a staff person, so that video biographies can be made about each resident. These provide a multi-dimensional picture of the resident that gives staff a deeper understanding of the resident, enabling them to individualize his/her care. The process of being interviewed, and the end product, are validating for residents and their families.

Physical and Medical Care

Physical care and medical needs are addressed as required but care is not organized around them.

the care plan is focused on that individual at the time – it'll be specialized for dementia as opposed to focusing mostly on the physical stuff

It is recognized that strong assessment and reassessment of client medical and functional change are important components of care.

The staff notice when they (residents) aren't well or require changes in their care delivery because they're not persons who can make those decisions for themselves necessarily. They might have times when they're okay to make those decisions but other times not. So staff need to have training and ability to make decisions for them.

People will be identified with the beginning symptoms of a problem and have that dealt with prior to having it become such a huge crisis.

There are LPNs on site. So that's when you get someone that's problem-solving, quick-thinking and go from there. And then there is access to the RN who completes that nursing aspect of the care plan.

Continuity and consistency of staff are important principles of care at Brentwood House. Staff work regular shifts and as much as possible missed shifts are replaced by other regular staff and a very small number of casual staff.

- **Resident Selection**

Best practices indicate that clients with behavioural challenges and/or complex medical conditions do not achieve the same outcomes as clients who are medically stable and have minimal behavioural challenges. Residents are referred to Brentwood House through the approved VIHA/Home & Community care process. After selecting clients from the *Pathways* computerised placement system, the Brentwood House manager makes home visits to potential residents and visits with family, to determine their suitability for Brentwood House. Potential residents must be medically stable, have no significant behavioural challenges, and be likely to benefit from the social milieu. In addition, potential residents must be mobile and able to transfer. A final decision on client admission is made in conjunction with the Home and Community Care Assisted living Case Manager.

- **Perceived Benefits of the Brentwood House Model of Care**

The Brentwood House model of care is perceived by participants to have a positive impact on residents, staff and families.

The staff appreciate the way the model allows them to care for the residents, and report personal benefits as well.

It's really nice to see rather than just being able to live, to honour their life, just allow them to be really. It's not a matter of just medicating

If they're feeling some anxiety for whatever reason, real or unreal, then I can just stop, put whatever I'm doing on hold, this is priority.

They(residents) are allowed to participate as opposed to you know, being herded from one section to the other.

We've seen they're calmer, there's less medication, fewer medications being used.

I have become very flexible and adaptable and find out what's needed. And I think I've grown into the job. I learned to try different things in the beginning and all of us really believe in it.

Everybody that is here is here because they really enjoy working at Brentwood House. It's just like we came here and we clicked. It was great. I can do this. It makes me happy.

They (the residents) get to know us as people, not just, "Oh yes, there's that nurse and I don't know anything about her or whatever." But, "Oh, there she is. You're the married one. How's married life treating you and how's..." you know, whatever. That's a benefit for you as a staff person, having those interactions as a human being, having those interactions with real people.

The way that staff are organized, they get to use their gifts and to be creative, is good for them and the residents

Benefits of the model of care are also reported for family members.

I think the families like to know that their loved one has opportunity to be the individual they always have been to them. We recognize that person.

The staff are friendly, cheerful and always approachable. I get a real lift when I walk into Brentwood.

I never worry about my mother when I go home

- **Issues and Areas for Improvement**

Overall participants are very positive about how Brentwood House provides care and unanimous in their praise of staff and of the manager. Participants described a number of other areas where they felt improvements could be made at Brentwood House.

There was considerable praise for the high quality of food and the way it is served, but at the same time concern was expressed about residents' gaining weight. This was seen as putting residents at risk for falls. Likewise, some participants felt there was not enough opportunities for exercise, leading to muscle loss and potential for falls.

But I think....they're not active enough for all the snacks and things they're getting. I kind of think to myself, "Why do they keep feeding them if they're not active enough?" I've got a lady here that's gained back part of the thirty pounds that she's lost and she's got really, really bad knees, so this is going to affect her mobility.

Adequate space (i.e., size and suitability) for both resident and professional activities was described as a hindrance to providing the best care possible to Brentwood House residents

We need better storage and useful spaces for those sorts of activities that the residents could do. If they felt like sitting down in front of an old Singer treadle sewing machine and fiddling around on it, well we just don't have that for them. That kind of thing. If the guys want to spread out the tools on the table and you know redesign a hanging system for [a room?], well we don't have those gathered all together. There aren't all those things

I would like to see a lot of rummaging areas; little nooks and crannies; having like a store room with props so we could bring interesting objects out and just sort of leave it there and see what happens. It would give them meaningful work and meaningful activities -- something that means something to them and it's a reflection of how their life was, either working or as a homemaker or whatever they did.

We don't have enough space for things like dancing or carpet bowling. It's hard too when we can never leave anything out to come back to, like jig saw puzzles.

Space to manage resident charts and related paper work, for meetings and for client medications, was described as crowded and difficult to function in

The space where the staff meet is really too small and crammed with resident charts and other paper work---then you add a couple of people and everyone is on top of everyone else. . It is really tough to manage

There needs to be a better space and more space to look after the medications.

Other suggestions were made relating to the physical environment.

<i>There is a real need for a bathroom or even a sink to wash in, in the activity space.</i>
<i>A bathtub and one room with something where you can, you know, if you want to do care by care or feet or sort of a salon type of thing, right?</i>
<i>A front gate --when you take the residents for a walk, sometimes it's hard and it would be nice for them to be able to come through there again, rather than having to go all the way around.</i>
<i>They need to accommodate wheel chairs.</i>

Some services that participants would like to see are not offered.

<i>I would love to see a bus, a small bus that we could take them out on an outing.</i>
<i>It would be great if there was a hair salon.</i>
<i>I would like to see residents taking advantage of activities in the community like the Peninsula Recreation Centre.</i>

Suggestions Related to Medical Care

<i>it would also be nice to have a physician attached to Beacon at Brentwood for those instances where something has come up and we need a physician assessment.</i>
<i>It would be good to have a Medical Director overseeing all the residents' care---there would be someone to go to if there were concerns about medical care</i>

Participants expressed a concern that without vigilance that the model could revert to an institutional/medical model of care.

<i>I think that it is the default position and it is for all of our systems</i>
<i>It's easy to lose sight of client centeredness if decisions are made that meet the needs of the professionals instead of the resident. It's easier to have a Doctor come in but it's normal to go to your own Doctor.</i>

Concerns were expressed about the relationship issues that could develop in a small site with negative impacts.

<i>It is very difficult to manage all the relationships and the interpersonal stuff that happens in that family-like environment. And it takes someone to understand boundary-setting and how to resolve conflicts and how to keep people from splitting staff</i>
--

Family Concerns

Family members spoke of fear that their parent would have to leave Brentwood at some point due to physical issues that Brentwood House lacks the equipment (e.g., Hoyer lift) or the staffing, to deal with.

She's moved three times in the last few years and I dread moving her again---it was hard on her every time—we need a place where people can stay.

I really worry that if her mobility goes down she will be sent somewhere else.

Some family members felt that Brentwood House staff are overzealous in informing them of concerns about their family member, while other family members felt that they did not receive enough information.

Sometimes they call just to say that Mom seems under the weather but not really sick—so what's the point of that? I just worry but there's nothing to do. I wish they would wait until something is really wrong.

I can't get in as often as I'd like to—I wish they would just phone and give me an update now and again instead of me always having to call in.

I've been called twice in the same day by two people with same information—it's as though they don't always talk to each other about what they are doing.

Issues

Resident Selection

In the past year the resident selection process was short circuited in the interest of time, resulting in an inappropriate person being admitted to Brentwood House. The resident had significant personality issues and was detrimental to the social milieu. In spite of staff' effort to adapt to the resident as much as possible and to implement behavioural interventions, the situation could not be resolved. As a result the resident was discharged. During her 3 month stay however, staff found it challenging to focus as much as usual on the other residents.

Changes in Residents

Over the past 18 months staff report that most of the residents have declined cognitively and physically. This has changed in what activities residents can be engaged. As well, staff are providing more direct care to some residents making it hard to meet the social needs of others. Staff find this frustrating.

ii. [Appendix 2](#) (Dementia Housing Report Card) presents the results of an assessment of Brentwood House's implementation of the LDH standards.

Of the 44 items, 6 were scored as 2 (Sometimes), 6 were scored as 3 (Usually) and the remaining 32 were scored as 4 (Always).

Four of the six items scored as 2 (sometimes) related to inadequate spaces, as did two of the six items scored as 3 (Usually).

2. Comparison of Brentwood House Residents, Community & Hospital Clients

2. To describe and compare .1) the Brentwood House residents, (2) clients eligible for LDH in 2005 and living in the community, and (3) clients eligible for LDH in 2007 but in the hospital at the time of the assessment.

The different client groups include: (1) Brentwood; (2) Community; and (3) Hospital.

1. The Brentwood group consists of 14 clients currently residing in Brentwood House. Seven of these clients received RAI assessments in 2005. The data presented in the Tables for Brentwood correspond to these 7 individuals.
2. The Community group refers to clients who received an assessment in 2005 and were eligible for Brentwood House but were never admitted. At the time of the assessments these individuals were living in the community. The Community group represents 24 individuals but only 21 received an assessment. The data presented in the tables for the Community group correspond to these 21 individuals.
3. The Hospital group refers to clients who received an assessment in 2005 and were eligible for Brentwood House but were never admitted. At the time of the assessments, these individuals were situated in a hospital setting. The Hospital group represents 22 individuals but only 21 received an assessment. The data presented in the tables for the Hospital group correspond to these 21 individuals.

The following provides a brief description of each group.

Brentwood House residents at time of 2005 assessment

- the average age was 87.4 and all but one were female
- the majority (57.1%) were widowed
- all lived in community at the time of the 2005 assessment and 57.1% lived alone
- cognition measures suggest that these individuals had mild to moderate cognitive impairments
- according to the DRS, none of the Brentwood clients had depressive disorders
- formal service utilization was minimal and average number of medications was 4.0
- 6 of the 7 clients did not live with the primary caregiver at the time of the assessment
- the majority (n=4) of residents received 1-10 hours of informal care prior to moving to Brentwood
- less than half (42.9%) of clients experienced a decline in ADLs and almost three-quarters (71.4%) were independent according to the ADL long form
- mobility in this group was good
- only 1 client experienced a decline in communication and 1 a decline in behaviour

Community residents at time of 2005 assessment

- the average age of community clients was 88.14 and the majority (71.4%) were female
- the majority (66.7%) are widowed
- all but 3 lived in the community at the time of the 2005 assessment and 47.6% lived alone

- cognition measures suggest that all but 2 had at least some degree of minimal impairment
- over half (57.1%) have experienced ADL and/or cognitive declines in the past 90 days
- according to the CPS, almost three-quarters (71.4%) of the community group had moderate impairment
- 6 individuals scored 3 or greater on the DRS indicating the presence of minor or major depressive episodes
- formal service utilization was minimal and average number of medications was 6.2
- almost half (42.9%) lived with the primary caregiver at the time of the assessment
- only half (52.4%) were independent according to the 7 items involved in the ADL long form
- community clients averaged almost 1 fall in the past 90 days
- declines were evident in communication (33.3%), visual (19.0%), mood (28.6%), and behaviour (38.1%)
- as of January, 2008, 2 community clients had died, 4 were unknown, and the remainder were living in community care

Hospital clients at the time of 2005 assessment

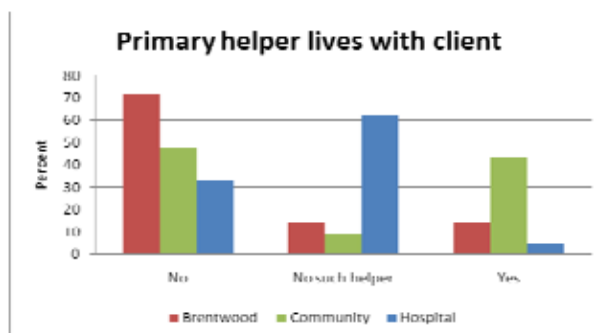
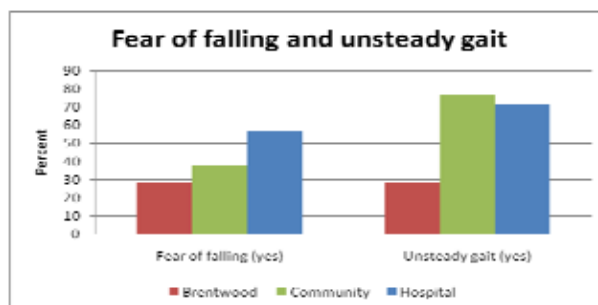
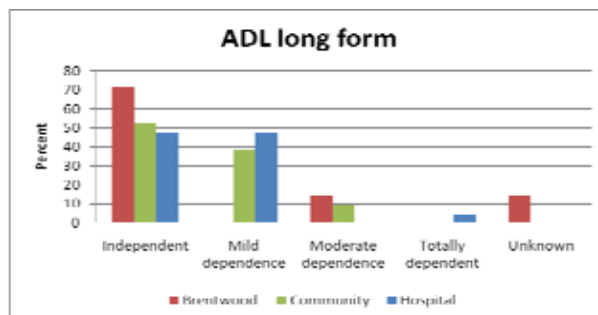
- the average age of hospital clients was 87.10 and the majority (57.1%) were female
- 52.4% are widowed
- all but 3 lived in the community at the time of the 2005 assessment and 47.6% lived alone
- cognition measures suggest that all but 3 had at least some degree of dependence and two-thirds exhibited declines in cognition and/or ADLs in the past 90 days
- according to the CPS, 61.9% had moderate impairment
- 4 individuals scored 3 or greater on the DRS indicating the presence of minor or major depressive episodes
- formal service utilization was minimal and average number of medications was 7.7
- of this group, 61.9% do not have a primary caregiver
- community clients averaged almost 1 fall in the last 90 days
- approximately one-quarter of clients experienced declines in communication and behaviour
- as of January, 2008, 12 hospital clients had died, 7 were in residential care, 1 was in assisted living, and 1 was unknown

Tables 1-7 found in [Appendix 3](#) present comparisons of Brentwood House, Community, and Hospital groups.

- the three groups are similar in mean age, percent widowed, percent female, minimal use of formal health services, percent living alone and in the community at the time of the 2005 assessment

- **Differences between the three groups include:**

- ADL declines are lowest in the Brentwood group and highest in the hospital group (Figure 1)
- number of medications is lowest in Brentwood ($\bar{x}=4.0$) and highest in the hospital ($\bar{x}=7.7$)
- highest levels of decline are found in the community group for communication, visual, mood, and behaviour
- none of the Brentwood clients exhibited minor or major depressive episodes according to the DRS (Figure 2)
- mobility as defined by number of falls, unsteady gait, and fear of falling are lowest in the Brentwood group (Figure 3)
- half of those in the community lived with the primary caregiver, while over 60% of those in the hospital do not have a primary caregiver (Figure 5)
- all of the hospital and community group clients had transitioned to residential care or were deceased, unlike those the Brentwood clients.
- the number of deaths is highest in the hospital group while of the 7 Brentwood clients who had an RAI assessment in 2005, all are still alive (Figure 6)



Comparison of Brentwood House Residents with Residents Eligible for LDH but Living at Home

3. To describe and compare Brentwood House residents, with (i) clients eligible for LDH in 2005, and with (ii) clients eligible for LDH in 2007 but currently at home.

This section describes and compares the RAI results of the Brentwood residents to a Comparison group of 14 individuals living in the community who were identified by Home and Community Care case managers as eligible for Brentwood House. Tables 8-14 found in [Appendix 3](#) present the results of the comparison.

Brentwood clients at time of most recent assessment

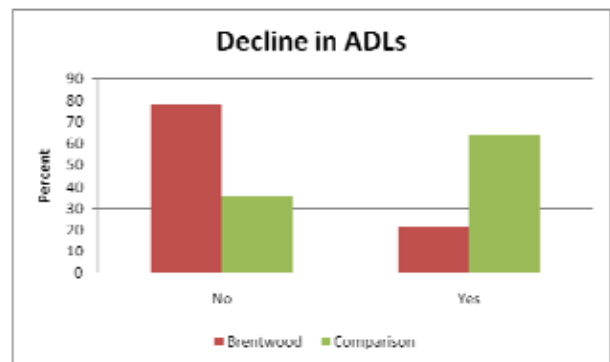
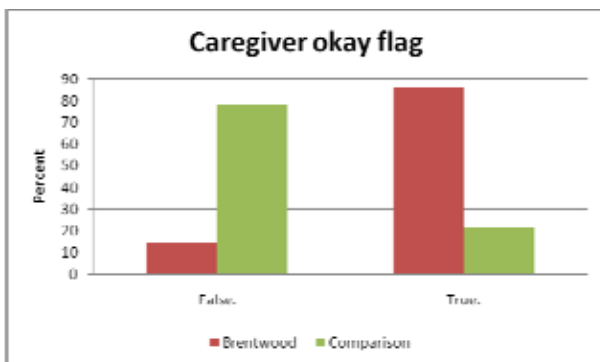
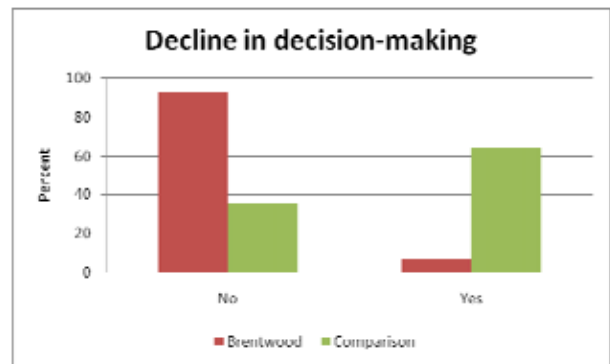
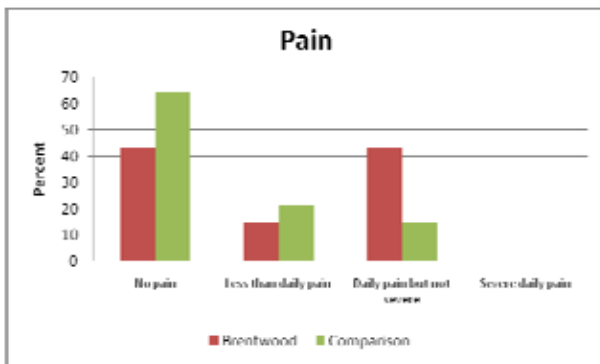
- the average age was 88.3 and the majority (78.6%) were female
- the majority (78.6%) were widowed
- cognition measures suggest that all but 1 resident had mild to severe cognitive impairments
- according to the DRS, 2 of the Brentwood clients had depressive disorders
- formal service utilization was minimal
- average number of medications was 6.2
- the majority (57.1%) of residents received 0 hours of informal care
- only 21.4% of clients experienced a decline in ADLs and half were independent according to the ADL long form
- mobility in this group was good
- in the last 90 days only 2 clients experienced a decline in communication, 1 a decline in behaviour, and 2 a decline in mood

Comparison group clients at time of most recent assessment

- the average age was 85.29 and all were female
- the majority (78.8%) were widowed
- almost all (92.9%) lived in the community at the time of their most recent assessment and half lived alone
- cognition measure suggest that all had a least some degree of minimal impairment
- over half (64.3%) experienced ADL and/or decision-making declines in the past 90 days
- according to the CPS, almost three-quarters (71.4%) of the control group had moderate impairment
- 3 individuals scored 3 or greater on the DRS indicating the presence of minor or major depressive episodes
- formal service utilization was minimal
- average number of medications was 4.7
- almost two-thirds (64.3%) were independent according to the 7 items involved in the ADL long form
- declines were evident in communication (28.6%), mood (21.4%), and behaviour (14.3%)

Differences of note between the Brentwood and Comparison groups from these 2007 assessments:

- at the time of the assessment, 64.3% of the Comparison group were receiving home care while only 14.3% of the Brentwood group were receiving home care
- a greater number of Brentwood residents (42.9%) experienced daily pain than the Comparison group clients (14.3%)
- in comparison with 1 Brentwood resident, 9 Comparison group clients experienced a decline in decision-making in the last 90 days
- the flag identifying whether the caregiver is okay or not suggests that 78.6% of the Comparison group caregivers are not okay while the number of Brentwood caregivers not okay is 2
- a greater percent of Comparison group clients (64.3%) have experienced a decline in ADLs when compared with the Brentwood residents (21.4%)



Comarison of 2007 Brentwood Clients with 2009 Brentwood Clients

4. To compare Brentwood House residents in 2007 (most recent assessment) with residents in 2009.

A comparison of Brentwood House residents in 2007 (n=14) to those in 2009 (n=14) is presented in Tables 15–21, [Appendix 3](#). However, it should be noted that 2 of the original 14 Brentwood House residents were deceased at the time of this report. Given this, the 2009 data include the 12 remaining clients from this original cohort plus 2 new clients.

While many factors are consistent across the years, there are some noticeable declines in decision making, delirium, service utilization, number of medications, and hours of informal care received. Decision making decline in the last 90 days decreased from 92.9% in 2007 to 78.6% in 2009, while delirium decline in the last 90 days decreased from 92.9% to 64.3%. In terms of service utilization, hospital visits, emergency room visits, and emergent care visits in the last 90 days all increased from 2007 to 2009. As well, the number of medications taken by residents increased from 6.21 in 2007 to 7.57 in 2009. Finally, 57% of residents reported receiving no informal care in 2007 however in 2009, 92.9% of residents reported receiving 1-10 hours of informal care.

Comparison of 2009 Brentwood House residents with 2009 Eligible for LDH residents

5. To compare 2009 Brentwood House residents (from original cohort in 2007) with 2009 clients eligible for LDH (from original cohort of those living at home in 2007).

Tables 22 – 28 in [Appendix 3](#) compare the 2009 data for the 14 Brentwood House residents and 14 Eligible LDH residents. In terms of marital status, 78.7% of Eligible LDH residents were married compared with only 8.3% of Brentwood House residents. Fifty percent of Eligible LDH residents exhibited declines in ADL and decision-making. However, according to the ADL Long Form results, 50% of Eligible for LDH residents are independent compared with only 8.3% of Brentwood House residents. Not surprisingly, 100% of caregivers of Brentwood House residents are flagged as being 'okay', while the figure for Eligible LDH residents caregivers is only 64.3%.

3. Family Member Satisfaction with Brentwood House

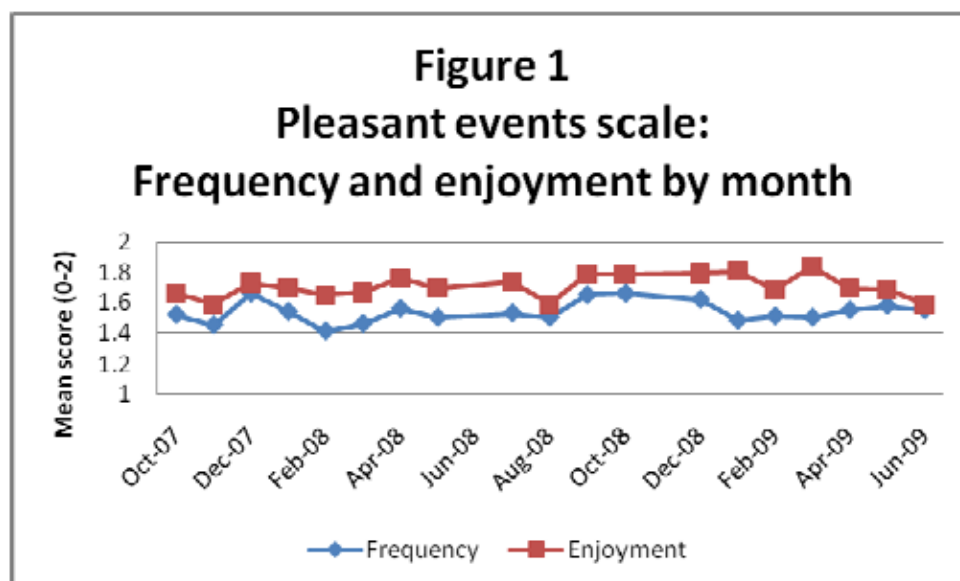
6. To describe family members' satisfaction with Brentwood House and their perception of their relatives' quality of life.

In general, the results from the family satisfaction surveys suggest that family members are somewhat or very satisfied with the 22 items (Table 29 in [Appendix 3](#)). Qualitative data presented earlier support these findings.

4. Quality of Life

7. To assess Brentwood House residents' quality of life

In total, 258 scale forms were completed. As shown in Table 30 and Figure 1, the mean scores for both Frequency and Enjoyment have remained very stable across the months. Interestingly, however, the mean scores decrease slightly at the time when Brentwood House formally transitioned from Assisted Living to Licensed Dementia Housing (January, 2008), but then increase to pre-2008 levels by May, 2008 and remain fairly consistent through to June, 2009.



Tables 31 and 32 in [Appendix 3](#) present the most and least frequent activities, and most and least enjoyed activities respectively during this time. Two of the top 5 activities most enjoyed are also in the top 5 activities done most frequently. Similarly, 4 of the activities receiving low enjoyment scores also receive low frequency scores.

8. To compare Brentwood House residents' quality of life with a similar population of individuals with dementia who are residing at home, in the community, with the aid of a family care giver.

A greater number of pleasant events were experienced by participants residing in Brentwood House compared to community dwelling participants ($p < .05$). As well, greater enjoyment in pleasant events was reported by participants residing in the Brentwood House compared to community dwelling residents as measured by the Pleasant Events Schedule ($p < .05$). Participants in the community dwelling group were found to have more depression, as measured by the CSDD, than residents of the Brentwood House.

5. Evaluation Limitations

A number of limitations should be acknowledged. First, from a statistical perspective, the small number of cases means that any significance tests to assess differences between groups cannot be conducted. Given this, these results presented in this report are descriptive in nature. Second, only half of all Brentwood residents received an RAI assessment in 2005. As such, comparisons of the Brentwood residents with both Community and Hospital groups must be made with caution as only half of the Brentwood clients are represented in the figures. Third, the majority of residents at Brentwood House have been residing there prior to Brentwood House officially becoming a LDH facility. Finally, there are a limited number of Family Satisfaction surveys from which to draw any meaningful conclusions. It is hoped that additional surveys will become available in the future to help determine levels of family member satisfaction and ultimately help inform quality of care at Brentwood.

6. Summary Discussion and Implications

The model of care provided at Brentwood House appears to reflect the best practices in dementia care identified in the literature and to meet the LDH standards. Overall, family members are very satisfied with care and experience less stress than the family members of comparable individuals in the community. The model of care appears to have positive impact for staff and, from the perspectives of staff and family, to contribute to the quality of life of the residents. Brentwood House residents experience a greater quality of life than a comparable group of older adults with dementia living in their own homes with family.

Participants made a number of suggestions to enhance care at Brentwood House, and it is recommended that these be explored. In particular, improved activity and dining space should be considered. Likewise, it is desirable to develop a strategy to address resident weight gain, exercise and the related risk for falls.

In 2008, nearly all of the clients who were assessed in 2005 as eligible for LDH (had it existed) in the community and hospital groups were either in residential care or deceased, in contrast to those in Brentwood House assessed in 2005, and in spite of the similarity of the three groups. Furthermore, in 2009, only one client from the original comparison group was still residing in the community. The remainder of these clients were in Brentwood House, a residential care facility, or deceased. Although only suggestive, it is possible that residing in Brentwood House has protected the Brentwood House residents from decline. Without the existence of Brentwood House it is highly likely that those currently living at Brentwood House would be either in residential care at a much greater cost to VIHA, or deceased.

Table 33: Change in residence from 2008 to 2009

	Brentwood House	Community	Assisted Living	Residential Care	Deceased	Unknown
Hospital (n=21)						
Jan 2008	0	0	1	7	12	1
June 2009	0	0	0	6	14	1
Community (n=21)						
Jan 2008	0	0	0	14	3	4
June 2009	0	0	0	7	10	4
Brentwood House (n=14)						
Jan 2008	14	0	0	0	0	0
June 2009	12	0	0	0	2	0
Comparison (n=14)						
Jan 2008	0	14	0	0	0	0
June 2009	3	1	0	6	2	2

Overall, participating family members are very satisfied with the care their relatives receive and feel welcome at Brentwood House. Their greatest concern is that physical needs might force their relative out of Brentwood House, but were unsure of the exact criteria or process. Although Brentwood House has developed and shares discharge guidelines with families, this does not appear to have alleviated concern

Residents enjoy many pleasant events which promote positive quality of life. The results indicate that residents are participating most frequently in a number of activities that they find enjoyable and vice versa. The slight decrease in pleasant events in January 2008 could be due to the admission of new residents that may have disturbed the milieu and/or reduced interactions with staff during the transition period. Brentwood is addressing this by bringing in extra staff when new residents are admitted to deal with any issues that may arise with the new residents while minimizing the impact on the social milieu and on other residents.

Staff morale and commitment to Brentwood House are very high and a credit to the leadership. The Brentwood House manager has a participatory management style that empowers the staff to use their knowledge and skills creatively. This approach should be considered a key requirement for future hiring.

As noted, the key leadership role is assumed by the site manager who is an Occupational Therapist. An Occupational Therapy perspective with its' focus on daily life, maintaining function, using existing functions to compensate for limitations and facilitating adaptation is highly congruent with the best practices in dementia care and may be an essential element in the success of Brentwood House. This should be considered in selecting managers for other LDH facilities.

Transitions are challenging and there is often a tendency, especially when resources are strained, to slide back to old styles of providing care. The manager is aware of this tendency and will take steps as needed. In that the manager's discipline (OT) is non-traditional for her position and does not share the more prevalent medical/care paradigm of dementia care, the risk of back sliding is relatively low.

The concern that the staff are able to set appropriate boundaries amongst themselves and with residents and staff should be carefully considered. Staff have had some training around this issue but perhaps this should be provided on a regular basis.

The changing needs of residents as they inevitably decline over time will lead to higher needs for assistance with ADL and IADL. To ensure that physical needs do not overwhelm the staff's capacity, jeopardizing social and emotional care, changes in staffing, and/or discharge of residents with high care needs may be required. A careful balance will need to be struck between the needs of individual residents and of the social milieu.

7. Future Research

A larger study with more participants in LDH would be useful. Comparison between people with dementia in LDH and with those living in the community could be made with more robust results.

Standardization of client data collection instruments and processes to collect the data across VIHA would facilitate research processes.

A full economic analysis of the comparative cost of living in Brentwood House, to living in the community for individuals with dementia, their families and VIHA, should be undertaken. Similarly an analysis of client quality of life and caregiver burden should be undertaken.

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APPENDIX 1



H:\Brentwood House
2008\Final Evaluation

APPENDIX 2

Dementia Housing Report Card

Completed June 2009

Score from 1 to 4, 1= Never, 2= Sometimes, 3= Usually, 4= Always		Score	Comments
Kitchen and Dining Room	Small scale kitchen appliances	4	
	Food prepared in open setting	4	
	Familiar foods in menu	4	
	Residents have option of participating in meal preparation	2	
	Residents have option of participating in meal planning	2	-indirectly participate by indicating preferences
	Residents have option of participating in clean-up	2	
	Dining setting is family style in small groups	4	
	Special diets accommodated	4	
	Snacks available in between meals	4	
	Family members give input to food preferences and routines	4	
	Staff show understanding of age and dementia related considerations for eating such as visibility, apraxia etc.	3	

Score from 1 to 4, 1= Never, 2= Sometimes, 3= Usually, 4= Always		Score	Comments
Living Room	Comfortable, familiar furnishings	4	
	Visual clues identify intended use of areas.	4	
	Books, puzzles etc readily available.	3	
	Space for private conversations available.	2	-lack of space
	Space for social gatherings available.	3	-not spacious
	Decorations reflect the season and special occasions.	4	
	Natural light is generous.	4	
	All the senses are stimulated (fountains, music etc.)	3	
	Way finding cues help residents find different rooms	2	
	Inappropriate equipment (medical) is not found in living areas.	4	

Score from 1 to 4, 1= Never, 2= Sometimes, 3= Usually, 4= Always		Score	Comments
Bedrooms and Bathrooms	Resident's rooms contain personal, familiar belongings.	4	
	Flexibility in care routines is evident.	4	
	Resident's preferences are listened to and accommodated.	4	
	Stable staffing schedules are maintained.	3	
	Personal care allows resident participation and independence.	4	
	Family members give input to previous habits and routines.	4	
	Staff use care plan details of residents past to inform daily interaction.	4	
	Residents have the option of participating in tasks in their room.	4	
	Familiar items and cues help the resident identify areas and their use.	4	
	Family input is used to ensure that residents have their preferred clothing.	4	
	Humour, reassurance and innovation are tools that staff use before medication.	4	
	A kind word or friendly chat takes precedence over accomplishing the task.	3	There are times that something like hygiene may be more important.

Score from 1 to 4, 1= Never, 2= Sometimes, 3= Usually, 4= Always		Score	Comments
Recreational Areas and Outdoors	Activities that recognize former life roles are available.	2	
	Yard and garden are homelike and familiar.	4	
	Residents are free to go outside to a safe area that does not appear restrictive.	4	
	Seating in the yard allows for both social gathering and private moments.	4	
	Activities reflect the cultural diversity of residents.	4	
	Residents are encouraged to participate in activity planning.	4	
	Residents have the choice of participating in activities.	4	
	Activities incorporate a record of activities that each resident has enjoyed in the past.	4	
	Staff see resident participation as indicators of effective strategies and early indicators of potential problems.	4	
	Recreational opportunities in the community are taken advantage of whenever possible.	4	

APPENDIX 3

Brentwood vs. Community and Hospital: Frequencies

Table 1: Client characteristics (%)

	Brentwood (n=7)	Community (n=21)	Hospital (n=21)
Gender			
Female	85.7	71.4	57.1
Male	14.3	28.6	42.9
Age	\bar{x} =87.4	\bar{x} =88.14	\bar{x} =87.10
Marital status			
Married	28.6	23.8	28.6
Widowed	57.1	66.7	52.4
Divorced	0.0	4.8	14.3
Never married	14.3	4.8	4.8
Where lived at assessment			
Board/AL/GH	0.0	14.3	9.5
Private home – no HC	71.4	42.9	66.7
Private home – with HC	28.6	42.9	19.0
Residential care	0.0	0.0	4.8
Who lived with at assessment			
Lived alone	57.1	47.6	47.6
Lived with child	28.6	19.0	14.3
Lived with group	0.0	19.0	9.5
Lived with spouse only	0.0	14.3	23.8
Lived with spouse only	14.3	0.0	4.8
Other arrangement			
Reason for referral			
Home placement screen	14.3	38.1	81.0
Day care	0.0	14.3	0.0
Eligibility for home care	42.9	23.8	9.5
Community chronic care	14.3	14.3	0.0
Post hospital care	28.6	4.8	4.8
Other	0.0	4.8	4.8
Pain			
No pain	57.1	53.4	53.4
Less than daily pain	14.3	4.8	19.0
Daily pain but not severe	28.6	42.8	23.8
Severe daily pain	0.0	0.0	4.8
Status as of January 2008			
Death	0.0	14.3	57.1

Residential care	0.0	66.6	33.3
Assisted living	100.0	0.0	4.8
Community	0.0	0.0	0.0
Unknown	0.0	19.0	4.8

Table 2: Mental health characteristics (%)

	Brentwood (n=7)	Community (n=21)	Hospital (n=21)
Cog. decision making skills			
Independent	14.3	9.5	14.3
Minimally impaired	14.3	33.3	33.3
Moderately impaired	42.9	38.1	38.1
Modified independent	28.6	14.3	4.8
Severely impaired	0.0	4.8	9.5
Decision-making decline in last 90 days			
No	42.9	42.9	33.3
Yes	57.1	57.1	66.7
Delirium in last 90 days			
No	85.7	71.4	62.4
Yes	14.3	28.6	37.6
Cognitive Performance Scale			
Intact	14.3	0.0	4.8
Borderline intact	0.0	0.0	9.5
Mild impairment	28.6	19.0	9.5
Moderate impairment	57.1	71.4	61.9
Mod./severe impairment	0.0	4.8	4.8
Severe impairment	0.0	4.8	4.8
Very severe impairment	0.0	0.0	4.8
Depression Rating Scale			
0	71.4	28.6	66.7
1	28.6	28.6	4.8
2	0.0	14.3	9.6
3	0.0	4.8	0.0
4	0.0	9.6	9.6
5	0.0	0.0	0.0
6	0.0	9.6	0.0
7	0.0	4.8	4.8
8	0.0	0.0	0.0
9	0.0	0.0	4.8

Table 3: Formal service utilization (%)

	Brentwood (n=7)	Community (n=21)	Hospital (n=21)
Hospital visits last 90 days	\bar{x} =.14	\bar{x} =.33	\bar{x} =1.10
Emergency room visits last 90 days	\bar{x} =0.0	\bar{x} =.24	\bar{x} =.24
Emergent care visits last 90 days	\bar{x} =0.0	\bar{x} =.24	\bar{x} =.24
Number of medications	\bar{x} =4.00	\bar{x} =6.2	\bar{x} =7.7
Resource Utilization Group (RUG)			
Special care level 2 – mod	0.0	0.0	4.8
Clinically complex – mild	14.3	0.0	0.0
Clinically complex - mod	0.0	4.8	19.0
Impaired cognition – mild	14.3	9.5	0.0
Impaired cognition – mod	28.6	53.4	53.4
Impaired cognition – severe	14.3	14.3	4.8
Reduced phys function – mild	28.6	4.8	0.0
Reduced phys function – mod	0.0	14.3	19.0
Reduced phys function - severe	0.0	0.0	0.0

Table 4: Informal service utilization (%)

	Brentwood (n=7)	Community (n=21)	Hospital (n=21)
Primary helper lives with client	71.4	47.6	33.3
No	14.3	9.5	61.9
No such helper	14.3	42.9	4.8
Yes			
Caregiver okay flag			
False	14.3	61.9	47.6
True	85.7	38.1	52.4
Informal hours in last 7 days			
0 hours	14.3	14.3	28.6
1-10 hours	57.1	23.8	47.6
11-20 hours	14.3	4.8	4.8
21–30 hours	0.0	23.8	0.0
31-40 hours	0.0	19.0	4.8
51-60 hours	0.0	0.0	0.0
61-70 hours	0.0	0.0	0.0
71-80 hours	0.0	0.0	4.8
81-90 hours	14.3	4.8	4.8
121-130 hours	0.0	0.0	4.8
151-160 hours	0.0	4.8	0.0
160+ hours	0.0	4.8	0.0

Table 5: ADL characteristics (%)

	Brentwood (n=7)	Community (n=21)	Hospital (n=21)
ADL decline flag			
No	57.1	42.9	33.3
Yes	42.9	57.1	66.7
ADL long form			
Independent	71.4	52.4	47.6
Mild dependence	0.0	38.1	47.6
Moderate dependence	14.3	9.5	0.0
Very dependent	0.0	0.0	4.8
Totally dependent	0.0	0.0	0.0
Unknown	14.3	0.0	0.0

Table 6: Falls (%)

	Brentwood (n=7)	Community (n=21)	Hospital (n=21)
Number of falls in last 90 days	$\bar{x}=.14$	$\bar{x}=.95$	$\bar{x}=.95$
Unsteady gait			
No	71.4	23.8	28.6
Yes	28.6	76.2	71.4
Fear of falling			
No	71.4	61.9	42.9
Yes	28.6	38.1	57.1

Table 7: Declines (%)

	Brentwood (n=7)	Community (n=21)	Hospital (n=21)
Commun. decline in last 90 days			
No	85.7	66.7	71.4
Yes	14.3	33.3	28.6
Visual decline in last 90 days			
No	100.0	81.0	90.5
Yes	0.0	19.0	9.5
Mood decline in last 90 days			
No	100.0	71.4	90.5
Yes	0.0	28.6	9.5
Behaviour decline in last 90 days			
No	85.7	61.9	76.2
Yes	14.3	38.1	23.8

Brentwood vs. Living at Home Comparison: Frequencies

Table 8: Client characteristics (%)

	Brentwood (n=14)	Comparison (n=14)
Gender		
Female	78.6	100.0
Male	21.4	0.0
Age	\bar{x} =88.43	\bar{x} =85.29
Marital status		
Married	7.1	7.1
Widowed	78.6	78.8
Divorced	0.0	7.1
Never married	14.3	7.1
Where lived at assessment		
Board/AL/GH	14.3	7.1
Private home – no HC	57.1	28.6
Private home – with HC	14.3	64.3
Residential care	7.1	0.0
Other	7.1	0.0
Who lived with at assessment		
Lived alone	35.7	50.0
Lived with child	21.4	21.4
Lived with group	28.6	14.3
Lived with spouse only	7.1	7.1
Other arrangement	7.1	7.1
Reason for referral		
Home placement screen	28.6	7.1
Day care	0.0	0.0
Eligibility for home care	28.6	50.0
Community chronic care	21.4	21.4
Post hospital care	14.3	7.1
Other	7.1	14.3
Pain		
No pain	42.9	64.3
Less than daily pain	14.3	21.4
Daily pain but not severe	42.9	14.3
Severe daily pain	0.0	0.0

Table 9: Mental health characteristics (%)

	Brentwood (n=14)	Comparison (n=14)
Decision-making decline in last 90 days		
No	92.9	35.7
Yes	7.1	64.3
Delirium in last 90 days		
No	92.9	85.7
Yes	7.1	14.3
Cognitive Performance Scale		
Intact	7.1	0.0
Borderline intact	0.0	0.0
Mild impairment	7.1	14.3
Moderate impairment	64.3	71.4
Mod./severe impairment	14.3	14.3
Severe impairment	7.1	0.0
Very severe impairment	0.0	0.0
Depression Rating Scale		
0	57.1	50.0
1	7.1	14.3
2	7.1	14.3
3	14.3	0.0
4	14.3	7.1
5	0.0	7.1
6	0.0	0.0
7	0.0	7.1
8	0.0	0.0
9	0.0	0.0

Table 10: Formal service utilization (%)

	Brentwood (n=14)	Comparison (n=14)
Hospital visits last 90 days	$\bar{x}=0.0$	$\bar{x}=.14$
Emergency room visits last 90 days	$\bar{x}=.14$	$\bar{x}=.36$
Emergent care visits last 90 days	$\bar{x}=0.0$	$\bar{x}=.29$
Number of medications	$\bar{x}=6.21$	$\bar{x}=4.7$
Resource utilization group (RUG)		
Reduced phys function – mild	7.1	0.0
Reduced phys Function – mod	7.1	7.1
Reduced phys function - severe	0.0	7.1
Impaired cognition – mild	0.0	21.4
Impaired cognition – mod	57.1	50.0
Impaired cognition – severe	28.6	7.1
Clinically complex - mild	0.0	0.0
Clinically complex – mod	0.0	7.1
Special care level 2 - mod	0.0	0.0

Table 11: Informal service utilization (%)

	Brentwood (n=14)	Comparison (n=14)
Caregiver okay flag		
False	14.3	78.6
True	85.7	21.4
Informal hours in last 7 days		
0 hours	57.1	7.1
1-10 hours	28.6	50.0
11-20 hours	0.0	21.4
21-30 hours	0.0	7.1
31-40 hours	0.0	7.1
51-60 hours	7.1	7.1
61-70 hours	7.1	0.0

Table 12: ADL characteristics (%)

	Brentwood (n=14)	Comparison (n=14)
ADL decline flag		
No	78.6	35.7
Yes	21.4	64.3
ADL long form		
Independence	50.0	64.3
Mild dependence	7.1	21.4
Moderate dependence	7.1	7.1
Very dependent	0.0	0.0
Totally dependent	14.3	7.1
Unknown	21.4	0.0

Table 13: Falls (%)

	Brentwood (n=14)	Comparison (n=14)
Number of falls in last 90 days	$\bar{x}=.64$	$\bar{x}=.14$

Table 14: Declines (%)

	Brentwood (n=14)	Comparison (n=14)
Commun. decline in last 90 days		
No	85.7	71.4
Yes	14.3	28.6
Visual decline in last 90 days		
No	100.0	100.0
Yes	0.0	0.0
Mood decline in last 90 days		
No	85.7	78.6
Yes	14.3	21.4
Behaviour decline in last 90 days		
No	92.9	85.7
Yes	7.1	14.3

Brentwood: 2007 versus 2009 Frequencies

Table 15: Client characteristics (%)

	2007 (n=14)	2009 (n=14)
Gender		
Female	78.6	85.7
Male	21.4	14.3
Age	$\bar{x}=88.43$	$\bar{x}=87.78$
Marital status		
Married	7.1	7.1
Widowed	78.6	78.6
Divorced	0.0	0.0
Never married	14.3	14.3
Pain		
No pain	42.9	42.9
Less than daily pain	14.3	35.8
Daily pain but not severe	42.9	7.1
Severe daily pain	0.0	14.2

Table 16: Mental health characteristics (%)

	2007 (n=14)	2009 (n=14)
Decision-making decline in last 90 days		
No	92.9	78.6
Yes	7.1	21.4
Delirium in last 90 days		
No	92.9	64.3
Yes	7.1	35.7
Cognitive Performance Scale		
Intact	7.1	7.1
Borderline intact	0.0	0.0
Mild impairment	7.1	14.3
Moderate impairment	64.3	57.2
Mod./severe impairment	14.3	14.3
Severe impairment	7.1	7.1
Very severe impairment	0.0	0.0
Depression Rating Scale		
0	57.1	57.3
1	7.1	7.1
2	7.1	7.1
3	14.3	14.3
4	14.3	7.1
5	0.0	7.1
6	0.0	0.0
7	0.0	0.0
8	0.0	0.0
9	0.0	0.0

Table 17: Formal service utilization (%)

	2007 (n=14)	2009 (n=14)
Hospital visits last 90 days	$\bar{x}=0.0$	$\bar{x}=0.21$
Emergency room visits last 90 days	$\bar{x}=0.14$	$\bar{x}=0.29$
Emergent care visits last 90 days	$\bar{x}=0.0$	$\bar{x}=1.14$
Number of medications	$\bar{x}=6.21$	$\bar{x}=7.57$
Resource utilization group (RUG)		
Reduced phys function – mild	7.1	0.0
Reduced phys Function – mod	7.1	21.4
Impaired cognition – mod	57.1	35.7
Impaired cognition – severe	28.6	42.9

Table 18: Informal service utilization (%)

	2007 (n=14)	2009 (n=14)
Caregiver okay flag		
False	14.3	0.0
True	85.7	100.0
Informal hours in last 7 days		
0 hours	57.1	0.0
1-10 hours	28.6	92.9
11-20 hours	0.0	7.1
21–30 hours	0.0	0.0
31-40 hours	0.0	0.0
51-60 hours	7.1	0.0
61-70 hours	7.1	0.0

Table 19: ADL characteristics (%)

	2007 (n=14)	2009 (n=14)
ADL decline flag		
No	78.6	71.4
Yes	21.4	28.6
ADL		
Independent	50.0	14.3
Mild dependence	7.1	78.6
Moderate dependence	7.1	7.1
Very dependent	0.0	0.0
Total dependence	14.3	0.0
Unknown	21.4	0.0

Table 20: Falls (%)

	2007 (n=14)	2009 (n=14)
Number of falls in last 90 days	$\bar{x}=0.64$	$\bar{x}=0.50$

Table 21: Declines (%)

	2007 (n=14)	2009 (n=14)
Commun. decline in last 90 days		
No	85.7	92.9
Yes	14.3	7.1
Visual decline in last 90 days		
No	100.0	100.0
Yes	0.0	0.0
Mood decline in last 90 days		
No	85.7	85.7
Yes	14.3	14.3
Behaviour decline in last 90 days		
No	92.9	100.0
Yes	7.1	0.0

Brentwood 2009 versus Comparison 2009

Table 22: Client characteristics (%)

	Brentwood (n=12)	Comparison (n=14)
Gender		
Female	83.3	85.8
Male	16.7	7.1
Missing	0.0	7.1
Age	$\bar{x}=88.00$	$\bar{x}=86.29$
Marital status		
Married	8.3	78.7
Widowed	75.0	7.1
Divorced	0.0	0.0
Never married	16.7	7.1
Missing	0.0	7.1
Pain		
No pain	41.6	64.3
Less than daily pain	33.3	21.5
Daily pain but not severe	8.3	14.2
Severe daily pain	16.7	0.0

Table 23: Mental health characteristics (%)

	Brentwood (n=12)	Comparison (n=14)
Decision-making decline in last 90 days		
No	83.3	42.9
Yes	16.7	50.0
Missing	0.0	7.1
Delirium in last 90 days		
No	66.7	64.3
Yes	33.3	28.6
Missing	0.0	7.1
Cognitive Performance Scale		
Intact	8.3	0.0
Borderline intact	0.0	0.0
Mild impairment	8.3	14.3
Moderate impairment	58.4	71.4
Mod./severe impairment	16.7	14.3
Severe impairment	8.3	0.0
Very severe impairment	0.0	0.0
Depression Rating Scale		
0	50.0	50.0
1	8.3	14.3
2	8.3	14.3
3	16.8	0.0
4	8.3	7.1
5	8.3	7.1
6	0.0	0.0
7	0.0	7.1
8	0.0	0.0
9	0.0	0.0

Table 24: Formal service utilization (%)

	Brentwood (n=12)	Comparison (n=14)
Hospital visits last 90 days	\bar{x} =.25	\bar{x} =.15
Emergency room visits last 90 days	\bar{x} =.25	\bar{x} =.15
Emergent care visits last 90 days	\bar{x} =1.25	\bar{x} =.23
Number of medications	\bar{x} =4.92	\bar{x} =5.86
Resource utilization group (RUG)		
Reduced phys Function – mod	16.8	7.1
Reduced phys function - severe	0.0	7.1
Impaired cognition – mild	0.0	21.4
Impaired cognition – mod	41.7	50.0
Impaired cognition – severe	41.7	7.1
Clinically complex – mod	0.0	7.1

Table 25: Informal service utilization (%)

	Brentwood (n=12)	Comparison (n=14)
Caregiver okay flag		
False	0.0	28.6
True	100.0	64.3
Missing	0.0	7.1
Informal hours in last 7 days		
0 hours	0.0	7.1
1-10 hours	91.7	57.2
11-20 hours	8.3	14.4
21–30 hours	0.0	7.1
31-40 hours	0.0	0.0
51-60 hours	0.0	7.1
61-70 hours	0.0	0.0
Missing	0.0	7.1

Table 26: ADL characteristics (%)

	Brentwood (n=12)	Comparison (n=14)
ADL decline flag		
No	66.7	42.9
Yes	33.3	50.0
Missing	0.0	7.1
ADL long form		
Independent	8.3	50.0
Mild dependence	84.4	42.9
Moderate dependence	8.3	0.0
Very dependent	0.0	0.0
Totally dependent	0.0	0.0
Missing	0.0	7.1

Table 27: Falls (%)

	Brentwood (n=12)	Comparison (n=14)
Number of falls in last 90 days	$\bar{x}=.50$	$\bar{x}=.43$

Table 28: Declines (%)

	Brentwood (n=12)	Comparison (n=14)
Commun. decline in last 90 days		
No	91.7	57.2
Yes	8.3	35.7
Missing	0.0	7.1
Visual decline in last 90 days		
No	100.0	85.8
Yes	0.0	7.1
Missing	0.0	7.1
Mood decline in last 90 days		
No	83.3	57.2
Yes	16.7	35.7
Missing	0.0	7.1
Behaviour decline in last 90 days		
No	100.0	57.2
Yes	0.0	35.7
Missing	0.0	7.1

Family Satisfaction

Table 29: Family Satisfaction

	Not at all satisfied	Somewhat satisfied	Very satisfied	NA/No answer
Size of the facility where your family member lives	0	1	10	0
Your family member's room and private space	0	4	14	0
Toileting and bathing facilities	0	3	15	0
Homelike atmosphere of shared space	0	1	17	0
Ability of residents to safely walk around facility	0	3	15	0
Wandering prevention strategies used by facility	0	0	15	2
Outdoor space available to your family member	0	1	17	0
Availability of individualized activities for your family member	1	6	10	0
Availability of group/social activities for your family member	1	3	14	0
Staff knowledge of your family member's past history and personal experiences	1	4	11	1
Staff knowledge of your family member's current preferences about activities, food, etc.	0	6	12	0
Staff sensitivity to multicultural considerations and ethnic differences among residents	0	0	5	12
Number and availability of staff on week days	0	3	14	0
Number and availability of staff on weekends	0	3	14	0
Number and availability of staff at night	0	3	12	1
Ability of staff to meet residents' health care needs	0	4	13	1
Ability of staff to deal with problems related to dementia	0	3	13	2
Ability of staff to recognize and manage depression or anxiety	0	6	10	2
Ability of staff to manage difficult behaviours	0	2	12	3
Facility's use of consultative services when needed	1	4	9	3
Staff communication with you and other family members	1	3	13	1
Your involvement in your family member's assessment and care planning	1	1	13	1
Your involvement in your family member's ongoing care	1	1	13	2

Pleasant Events Schedule: Frequency and Enjoyment

Table 30: Pleasant Events Schedule for Brentwood residents: Frequency and enjoyment

	Mean	SD	Range
October, 2007 (n=12)			
Frequency	1.52	.20	1.25 – 1.80
Enjoyment	1.66	.24	1.10 – 1.92
November, 2007 (n=12)			
Frequency	1.45	.26	1.15 – 1.85
Enjoyment	1.59	.25	1.10 – 1.87
December, 2007 (n=12)			
Frequency	1.66	.21	1.20 – 1.90
Enjoyment	1.73	.12	1.45 – 1.90
January, 2008 (n=14)			
Frequency	1.54	.28	.95 – 1.95
Enjoyment	1.70	.19	1.33 – 1.95
February, 2008 (n=14)			
Frequency	1.41	.35	.90 – 1.95
Enjoyment	1.65	.27	1.20 – 1.95
March, 2008 (n=14)			
Frequency	1.46	.34	.60 – 1.95
Enjoyment	1.67	.37	.60 – 1.95
May, 2008 (n=14)			
Frequency	1.50	.11	1.30 – 1.70
Enjoyment	1.70	.13	1.50 – 1.85
June, 2008 (n=14)			
Frequency	1.45	.17	1.10 – 1.70
Enjoyment	1.71	.15	1.45 – 1.90
July, 2008 (n=14)			
Frequency	1.53	.20	1.10 – 1.80
Enjoyment	1.74	.14	1.50 – 2.00
August, 2008 (n=14)			
Frequency	1.50	.20	1.05 – 1.83
Enjoyment	1.59	.28	0.80 – 1.95
September, 2008 (n=14)			
Frequency	1.65	.19	1.85 – 1.95
Enjoyment	1.79	.13	1.47 – 2.00
October/November, 2008 (n=14)			
Frequency	1.66	.16	1.30 – 1.95
Enjoyment	1.79	.17	1.45 – 2.00
December, 2008 (n=13)			
Frequency	1.62	.12	1.45 – 1.85
Enjoyment	1.80	.13	1.50 – 1.95
January, 2009 (n=14)			
Frequency	1.48	.15	1.20 – 1.70

Enjoyment	1.81	.10	1.60 – 1.95
February, 2009 (n=14)			
Frequency	1.51	.21	1.10 – 1.95
Enjoyment	1.69	.16	1.45 – 2.00
March, 2009 (n=14)			
Frequency	1.50	.16	1.25 – 1.80
Enjoyment	1.84	.10	1.55 – 1.95
April, 2009 (n=14)			
Frequency	1.55	.18	1.20 – 1.90
Enjoyment	1.70	.20	1.30 – 2.00
May, 2009 (n=14)			
Frequency	1.58	.20	1.35 – 1.95
Enjoyment	1.69	.18	1.30 – 1.95
June, 2009 (n=13)			
Frequency	1.55	.14	1.30 – 1.75
Enjoyment	1.59	.22	1.00 – 1.80

Table 31: Pleasant Events Schedule: Frequency

Most Frequent Activities¹	Least Frequent Activities²
1. Laughing (n=248)	1. Shopping buying things (n=95)
2. Being complimented (n=248)	2. Going on outings (n=93)
3. Watching tv (n=231)	3. Helping around the house (n=57)
4. Exercising (n=220)	4. Getting/sending letters, cards (n=57)
5. Making or eating snacks (n=220)	5. Listening to sounds of nature (n=35)

¹ Frequency of respondents selecting '7 or more times' when asked about frequency.

² Frequency of respondents selecting 'not at all' when asked about enjoyment.

Table 32: Pleasant Events Schedule: Enjoyment

Most Enjoyed Activities¹	Least Enjoyed Activities²
1. Laughing (n=244)	1. Shopping, buying things (n=70)
2. Being with family (n=242)	2. Helping around the house (n=50)
3. Being complimented (n=237)	3. Getting/sending letters, cards (n=29)
4. Having meals with family or friends (n=228)	4. Listening to sounds of nature (n=15)
5. Going for a ride in the car (n=75)	5. Recalling and discussing past events (n=9)

¹ Frequency of respondents selecting '7 or more times' when asked about frequency.

² Frequency of respondents selecting 'not at all' when asked about enjoyment.