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**NIC**

The National Investment Center for the Seniors Housing & Care Industry (NIC) has made its mission to advance the seniors housing and care industry by facilitating informed investment decision-making and providing excellence in networking, professional education, and research. Since 1991, NIC has been the leading source of information to lenders, investors, developers, operators, and others interested in meeting the housing and health care needs of America’s seniors.

One of NIC’s major initiatives to further this mission is the NIC Market Area Profiles™ (NIC MAP™) data and analysis service. NIC MAP provides a powerful tool to access local market intelligence about seniors housing in America’s top 30 metropolitan statistical areas (MSAs). With the NIC MAP data and analysis service, subscribers can tap into occupancy rates, pricing, supply, demographics, market share, and time series data—all updated quarterly. Every major property type is covered, including independent living, assisted living, dementia, skilled nursing, and CCRCs.

NIC has also inaugurated its executive development program at the newly formed Erickson School of Aging Studies at the University of Maryland, Baltimore County (UMBC). UMBC, one of only five universities in the nation to offer a Ph.D. in gerontology, has formed a new school designed to develop leaders in the seniors housing and care profession. NIC has extensive experience in conducting executive development courses for leaders in seniors housing and care covering operations, management, sales, marketing, development, finance, and service quality.

For more information, visit www.NIC.org or call (410) 267-0504.

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**Mather LifeWays**

Mather LifeWays is a 50+-year-old not-for-profit organization committed to creating Ways to Age Well℠. The organization demonstrates its commitment through senior living residences, community programs, and the Mather LifeWays Institute on Aging.

From independent living to assisted living and skilled care, Mather LifeWays’ senior residences comprise a continuum of living and choices. Community programs, including the successful Mather’s—More Than a Café concept, provide access to community resources and lifelong engagement. The Mather LifeWays Institute on Aging is dedicated to advancing state-of-the-art applied research and sharing information on successful service innovations. As part of this effort, the Institute is collaborating with NIC in producing the Seniors Housing & Care Journal.

Through its combination of research, education, and services, Mather LifeWays is a national and international resource on the well-being of older adults. More information is available at www.math-erlifeways.com or (847) 492-7500.

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**GE Healthcare Financial Services**

The Journal would like to thank GE Healthcare Financial Services for sponsoring the “GE Award for Best Research Paper,” which encourages empirically based research that benefits the industry.
INTRODUCTION

This edition of the Seniors Housing & Care Journal continues the tradition of disseminating empirically based research and quality best practice commentaries that are focused on the critical issues faced by professionals in the field. This year’s articles cover the entire range of seniors housing and care, from the benefits of environmental enhancements to a conceptual model for evaluating senior living programs. Collectively, the articles demonstrate the richness of how program evaluation and research can be used to improve planning, operations, and policies in senior living.

As in the past few years, the editors have selected one paper for special recognition, and the author receives a special award sponsored by GE Healthcare Financial Services. This year’s outstanding research article was written by Susan Rodiek and is titled A Missing Link: Can Enhanced Outdoor Space Improve Seniors Housing? The author examines resident outdoor usage and preferences among 14 assisted living communities randomly selected from a 12-county region. She suggests key elements seniors housing and care providers can incorporate into the physical design of their communities to improve resident satisfaction and well-being.

Our other offerings will give readers equally important concepts to apply in their own settings. Perry Edelman and Jan Montague discuss the emerging trend of whole-person wellness programming throughout senior living communities, and provide pilot data supporting the use of an evaluation tool to measure the outcomes of these programs. Mary Harahan, Alisha Sanders, and Robyn Stone introduce an alternate model of affordable housing with linked services and discuss how the model has been successfully implemented in various settings. Cristina Flores and Robert Newcomer propose an adaptation to the structure-process model as a means to more effectively utilize administrative data to measure quality of care. Janet Severance discusses the progress of culture change within nursing homes in the state of Illinois, and offers insights as to trends within this phenomenon.

Also included in this edition are two brief reports: Susan Brecht and Anthony Mullen compare continuing care retirement and active adult communities with attention to goals for improving marketing strategies for residents. Finally, Bradley Fulton, Perry Edelman, Daniel Kuhn, and Andrew Cislo provide information on an observational tool to analyze quality of life among those suffering from dementia.

We are particularly appreciative for the efforts of our Editorial Board members who have spent considerable time reviewing submissions in order to provide papers that are high quality and include findings relevant to their work. We further want to acknowledge our colleagues in the field who have identified articles for consideration that are of benefit to our readers, as well as referring numerous authors to our attention. Finally, we are indebted to the associate managing editors, Naomi Levinthal and Bradley Fulton, technical editor Felice Arenas Gill, and Paula Sellergren, Marketing Communications Manager at Mather LifeWays, who have shepherded this issue to conclusion.
The *Journal* continues to publish research that has direct relevance in day-to-day operations and that also makes a contribution to the senior living field. As the field continues to grow and mature, we expect that the range of research topics of interest to our readers will also expand. We look forward to your thoughts and views as to the range of topics and issues that should be considered for future issues of the *Seniors Housing & Care Journal.*

Sincerely,

Joan Hyde, Ph.D.
Hearthstone Alzheimer Care
*Editor*

David A. Lindeman, Ph.D.
Mather LifeWays Institute on Aging
*Managing Editor*

Margaret A. Wylde, Ph.D.
ProMatura Group, LLC
*Editor*
A Missing Link: Can Enhanced Outdoor Space Improve Seniors Housing?

Susan D. Rodiek, Ph.D., N.C.A.R.B.

ABSTRACT

Recent studies indicate seniors who spend even modest amounts of time outdoors may benefit from improvements in mood, hormone balance, sleep patterns, and increased physical activity. Although usable outdoor space is provided at nearly all types of seniors housing, it is typically reported as being underutilized. This paper presents findings from 14 assisted living facilities randomly selected from a 12-county region. Focus groups, written surveys, and photographic comparisons were used to explore residents’ (N=211) outdoor usage and preferences. Findings showed they appreciated outdoor features such as walkways, shade, seating, greenery, and views; however, existing outdoor spaces failed to meet their expectations in several ways, including accessibility, comfort, and aesthetic issues. Findings suggest better design of outdoor areas in seniors housing could increase outdoor usage, and the resulting improvements in resident satisfaction and well-being could produce financial benefits for senior living providers.
INTRODUCTION

Outdoor access is widely considered an essential quality of life aspect of seniors housing. Although retirement communities typically include usable outdoor space, it is often reported as being underutilized by residents (Heath & Gifford, 2001; Hiatt, 1980). This has become an issue of increasing concern, especially as research indicates substantial health-related benefits for those who spend even modest amounts of time outdoors (Ulrich, 1999). While outdoor space may be a desirable amenity for residents and their families, if seldom used, it may fail to achieve its potential as a therapeutic resource for improving health and well-being. Successful access to nature and the outdoors may be a “missing link” that could greatly improve the quality of the residential environment. Because older adults have been found to under-use outdoor areas in spite of indications that they value outdoor access (Rodiek, 2006), it is worth considering whether architectural and landscape design may be part of the problem. Although other factors such as health, weather, and staff policy certainly influence usage, this paper is focused on how the design of the physical environment may either encourage or discourage residents who would like to go outdoors.

This study was conducted in assisted living settings, but many of the principles can be adapted for seniors housing at different levels; however, dementia-care outdoor space has specific design parameters not addressed here. The main research questions were: 1) How do seniors feel about being outdoors?; 2) What outdoor features and activities do they most prefer?; and 3) What environmental features tend to encourage or discourage their outdoor usage? The answers they provided can be used to improve the quality of seniors housing by addressing the actual needs and preferences of residents. If enhanced outdoor access is achieved, it is likely to benefit residents’ health and well-being, while at the same time potentially leading to higher resident satisfaction levels and improving the marketability of housing units.

BACKGROUND

Value of Outdoor Space to Seniors Housing Providers

Surprisingly few studies have examined the importance of outdoor space from the providers’ perspective. In a recent dementia-market assisted living survey of overall design features reported as important by responding providers, the design feature ranked second-highest in importance was “secure outside activity space” (57%), just behind the top category of “physical supports such as handrails and walking surfaces” (62%) (Mather LifeWays Institute on Aging and the Assisted Living Federation of America [ALFA], reported in Keane et al., 2003, p. 15). A pilot evaluation program with more than 100 assisted living providers and design practitioners found that approximately 82% agreed with the statement, “The design of outdoor space should be one of the most important considerations in the design of new residential care facilities” (Rodiek, 2005). In independent living, a National Association of Home Builders (NAHB) study on housing preferences in the 55+ market reported prospective homebuyers describing the amenities “that would influence seniors to move to a specific community.” Outdoor features such as walking trails and outdoor open spaces were listed as five of the top six most desirable overall attractions (Mahmood, 2002, p. 5, reporting on Wylde, 2002).

Are Seniors Interested In the Outdoors?

Several studies have found that seniors place great importance on having outdoor access (Heath & Gifford, 2001; MacRae, 1997; Perkins, 1998). Passive usage (primarily sitting) and active usage (primarily walking) are reported as the two main activities (Carstens, 1982; Cranz, 1987; Browne, 1992; Stoneham & Jones, 1996; Perkins, 1998). Among elderly apartment dwellers, it was found (Talbot & Kaplan, 1991) that having access to nature
improved how seniors rated their residential satisfaction and life satisfaction levels. Studies of older apartment dwellers (Cranz & Shumacher, 1975; Cranz, 1987) found 82% who had patios or balconies valued them highly, and more than 99% valued them to some extent. Browne (1992) surveyed 300 retirement community residents and found “living within green or landscaped grounds” was considered either “important” or “essential” by 99% of respondents. When asked to describe what influenced their selection of facilities, the largest category of responses (38%) named the facility grounds, typically referring to their naturalistic character or to specific nature elements (p. 76). Design professionals appear to recognize the importance of older adults going outdoors and generally recommend outdoor space as an essential component of residential environments for aging (e.g., Bourret et al., 2002; Brawley, 1997, 2006; Brummett, 1997; Calkins, 1988; Carstens, 1993, 1998; Cohen & Weisman, 1991; Physical Activity, 2002; Regnier, 1994, 2002; Tyson, 1998; Zeisel et al., 1977). Exhibit 1 shows a resident looking outdoors in a setting where outdoor access is restricted.

Potential Health Benefits from Going Outdoors

In younger people, contact with nature may improve blood pressure, heart rate, muscle tension, immune response, surgical outcomes, pain tolerance, mood, and ability to concentrate (Beauchemin et al., 1996; Hartig et al., 1991; Ulrich, 1999; Ulrich et al., 1991; Ulrich & Parsons, 1992). Although fewer studies have been done with older populations, the available research suggests similar benefits. The current emphasis on prevention in medicine and public health has stimulated interest in whether the seniors housing environment itself may be an important way to promote and maintain the health of residents (Cohen-Mansfield & Werner, 1998; Cutler, 2000; Day et al., 2000; Golant, 2003; Schwarz, 1999; Sloane et al., 2002; Zeisel et al., 2003).

Three of the main pathways by which these benefits occur are 1) increased physical activity; 2) effects of sunlight and bright outdoor light; and 3) contact with nature elements. A rapidly growing body of evidence suggests spending time outdoors can improve health and quality of life for many frail, elderly seniors. For example, a large study in Tokyo found significantly higher longevity in seniors with better access to walkable green spaces, when all other factors were controlled (Takano et al., 2002). Other studies suggest that contact with nature may help promote better sleeping patterns; relieve depression; improve cortisol levels; reduce respiratory and urinary tract infections; and even reduce the risk of falling (e.g., Babyak et al., 2001; Beauchemin & Hayes, 1997; Connell, 2002; Rodiek, 2002; Tang & Brown, in press; Thomas, 1996; Wong et al., 2003). Collectively, these findings suggest seniors may have significant health benefits from contact with nature and the outdoor environment.
Underutilization of Outdoors Due to Environmental Factors

In spite of the acknowledged importance of outdoor space to health and well-being, the valuable therapeutic resource of outdoor space seems to be typically underutilized at existing facilities. This may give the impression that older adults no longer want to spend time outdoors, but studies have not found this to be the case. Although many assisted living and nursing residents do need assistance to get around and some can access the outdoors only by window views, a majority of seniors are still able to access outdoor areas directly, if designed to meet their specific needs and preferences (Conn et al., 2002; Heath & Gifford, 2001; Perkins, 1998; Rodiek, 2003); however, inadequate design has been considered a potentially strong deterrent to outdoor usage (Calkins & Connell, 2003; Cutler & Kane, in press; Hiatt, 1980; Kearney & Winterbottom, in press; McBride, 1999). In a recent national survey by Hawes and Phillips (2000), field data suggested assisted living residents were less satisfied with outdoor space than with other parts of the facility’s environment. Troxel (2005) points out that while many assisted living facilities advertise outdoor activity space as an important component of the care environment, “there is only one thing missing – people!” (p. 333).

Using observational methods, Regnier (1985) found outdoor space was underutilized by elderly residents and identified ways the physical environment tended to discourage usage. Many other gerontologists and design professionals have noted design inadequacies in existing facilities and have recommended improvements based on professional experience and behavioral research (Brawley, 1997; Brummett, 1997; Calkins, 1988; Carstens, 1993, 1998; Cohen & Weisman, 1991; Cooper Marcus & Barnes, 1999; Regnier, 1994, 2002; Stoneham & Thoday, 1996; Tyson, 1998; Zeisel et al., 1977). Issues proposed as important in this literature include the type and frequency of seating, type of plant materials, visual connection with indoors, and safety and accessibility aspects of doors and walkways.

METHODS

To better understand the features seniors need and prefer in outdoor space, and to develop a stronger evidence base for encouraging outdoor usage through appropriate design, the following steps were taken: 1) focus groups and written surveys were conducted and analyzed; and 2) the results from this step were examined further with photocomparisons.

Selecting Facilities and Residents to Participate

Assisted living communities. In 2003, a 12-county region of central Texas was selected that included Houston, the fourth-largest city in the United States. Within that region, 14 facilities were randomly selected to take part in this study from the list of 34 licensed assisted living facilities, with 50+ resident capacity providing standard care (i.e., not solely dementia care). Only two of the 14 participating facilities were not-for-profit. The study targeted larger-sized facilities because it was expected that the larger building size and layout might make it more challenging to design adequate outdoor access. The buildings ranged from one to three stories in height, and only three of the 14 were more than five years old. Resident capacity ranged from 57 to 188, and three of them had Type A emergency egress status in which residents are capable of evacuating independently during emergencies.

Residents. From the sampled population of 1,541 seniors, approximately 15 residents were randomly selected from each facility, resulting in 211 total participants. All residents were eligible to participate if they were 1) cognitively and functionally able to take part in the study, in the opinion of administrators; and 2) able to reach the outdoors without needing staff assistance. They were considered eligible even if they used canes, walkers, wheelchairs, power scoot-
ers, etc., to get outdoors. Participants were approximately 70% female and ranged in age from 61 to 99, with the mean age just under 84 years.

**Focus Groups and Written Surveys**

To learn how residents felt about the outdoors and what elements attracted or discouraged them from using outdoor areas, focus groups and written surveys were conducted at each facility. Staff members were not permitted at focus group discussions so participants could discuss their feelings more freely. Sessions were recorded and transcribed so comments could be analyzed. Seniors completed brief written surveys ahead of time so group discussions would not influence their individual opinions. Responses were then summarized and categorized using content analysis.

**Photosurveys**

Collectively, the verbal comments created a large database of information obtained directly from the users themselves, which made it clear that certain outdoor features were very important to seniors. To confirm the meaning of their comments, a photographic assessment study was conducted that translated their verbal responses into visual images. Although some features could not be represented in photographs (e.g., fresh air), many were quite suitable. The features tested included:

1. Paths – walkways that allow seniors to reach outdoor areas
2. Comfort – shade and seating provided outdoors
3. Greenery – trees, shrubs, lawns, and flowering plants
4. Views – opportunities to see beyond the facility walls
5. Windows – visual connections between indoors and outdoors
6. Transitions – physical access between indoors and outdoors

Each of these six elements was tested with four different pairs of photos, making a total of 24 photocomparisons. For each comparison, a photograph was selected to illustrate the concept in a feasible way. Then, Adobe Photoshop® was used to create a second version of each photograph with a single element modified – the rest of the photograph remained identical (see examples in Exhibits 2a, 2b and 3a, 3b). This innovative approach made it possible to assess seniors’ opinions on several of the specific elements they had described as being important. For example, they might compare two identical photos in which the only difference was walkway layout or the amount of greenery. Large \( 81/2 \times 11 \) matte-finish color photos were printed on facing pages in individual photobooks, making it easy for
residents to choose which view they liked better. They were asked, “Which place would you rather live?”

RESULTS

The survey/focus group study found residents perceived some of the most important outdoor benefits as a chance to get “fresh air,” to move around physically, and to “see the world beyond these walls.” Seniors indicated that outdoor elements were a strong incentive for “walking” or “getting around,” even if the “walking” was done with a wheelchair or power scooter. Residents who went out regularly said they did so even in inclement weather, and those from urban backgrounds reported going out as frequently as those who grew up in rural areas. A strong majority said they felt outdoor contact was beneficial to their health, with 74% reporting they felt better after being outdoors and several saying they felt “invigorated” or “refreshed” by the experience. It was also observed that the location of outdoor areas played a major role in their usability. Areas that were highly visible and easy to access, par-

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Exhibit 4. Importance of outdoors to residents

<table>
<thead>
<tr>
<th>“Do you value being able to spend time outdoors at this facility?”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all 8%</td>
</tr>
<tr>
<td>A little bit 20%</td>
</tr>
<tr>
<td>Quite a bit 46%</td>
</tr>
<tr>
<td>Very much 26%</td>
</tr>
</tbody>
</table>

Exhibit 5. Comments on how seniors felt about the outdoors

“I feel the outdoors is where I belong.”
“It’s fresh—the word is fresh.”
“I’d rather be outdoors in a tent than where I am right now.”
“You have more to look at, more to see.”
“...I do walk in here, but I prefer to walk outside.”
“I miss trees…”
“...we need a place like a small park, where we can walk…”

Exhibits 3a, 3b. These images assessed preference for “views” by comparing solid wood with open metal fencing.
particularly those near the front entry, were reported as being the most heavily used, even where they were less attractive and less developed than other areas.

Did Seniors Consider the Outdoors to Be Important?

Most seniors reported they enjoyed the outdoors and considered it a very important aspect of the housing environment. About 72% said they valued the outdoors “very much” or “quite a bit,” while only 8% valued it “not at all” (Exhibits 4, 5).

Seniors also described how often they went outdoors in nice weather and how long they usually stayed. The results were condensed into average “hours per week,” summarized in Exhibit 6. Considering that elderly people cannot be expected to stay outdoors very long at a time, it was interesting that nearly 20% of participants reported being outdoors four or more hours each week, even in settings they reported as having drawbacks.

Feelings After Being Outdoors

When seniors were asked how they typically felt after spending time outdoors, about 75% reported it made them feel “good” or “better.” A high percentage added comments that being outdoors made them feel “rejuvenated” or “refreshed.” A few mentioned it made them feel more “relaxed” or “peaceful.” About 3% said they felt worse outdoors, typically due to asthma or other chronic health conditions (Exhibits 7, 8). Specific issues were organized according to content analysis (Exhibit 9).

What Elements Discouraged Seniors from Going Outdoors?

Unfortunately, about 25% of the overall comments reported that certain aspects of the building or out-
door areas made it somewhat difficult to go outdoors (Exhibits 10, 11, 12). A major concern was that outdoor areas were located where they were difficult for residents to see and/or access easily. Several residents reported that there was not enough well-placed and comfortable outdoor seating or enough protection from sun and rain. They also said there was a lack of amenities such as swings, fountains, and interesting landscapes to look at. It was surprising that many of the unfavorable comments referred to accessibility issues, even though facilities should have been in compliance with current codes, as most were less than five years old. A number of problems appeared to develop from uncoordinated planning, the deterioration of materials, and lack of maintenance. For example, one sidewalk was found to have a sufficiently wide paved surface by itself; however, adjacent parked cars intruded over a large part of the walkway, making it too narrow for wheelchairs to get past. At another facility, sections of a sidewalk had settled and cracked after construction, making it difficult to navigate with a walker or wheelchair. Doors were especially difficult for many

<table>
<thead>
<tr>
<th>Exhibit 8. How seniors felt after being outdoors</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Free—no walls to keep you from the sky and plants.”</td>
</tr>
<tr>
<td>“As if I have accomplished something.”</td>
</tr>
<tr>
<td>“Invigorated and more alive.”</td>
</tr>
<tr>
<td>“Less institutionalized, more like a person.”</td>
</tr>
<tr>
<td>“I can breathe easier.”</td>
</tr>
<tr>
<td>“Improved outlook.”</td>
</tr>
<tr>
<td>“…clears my head.”</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Exhibit 10. Problems with outdoor usage (not related to accessibility)</th>
</tr>
</thead>
<tbody>
<tr>
<td>“What problems are there with the outdoor space?”</td>
</tr>
<tr>
<td>Lack of interesting features 16%</td>
</tr>
<tr>
<td>Insects and climate 23%</td>
</tr>
<tr>
<td>Safety/security concerns 29%</td>
</tr>
<tr>
<td>Physical configuration of elements 32%</td>
</tr>
</tbody>
</table>

<table>
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<tr>
<th>Exhibit 9. Categories of feelings after being outdoors</th>
</tr>
</thead>
<tbody>
<tr>
<td>“After spending time outdoors, how do you usually feel?”</td>
</tr>
<tr>
<td>Appreciative</td>
</tr>
<tr>
<td>Drawbacks</td>
</tr>
<tr>
<td>Relaxed</td>
</tr>
<tr>
<td>Freedom/Autonomy</td>
</tr>
<tr>
<td>Physical/Psychological</td>
</tr>
<tr>
<td>Mildly Good</td>
</tr>
<tr>
<td>Improved</td>
</tr>
<tr>
<td>Invigorated</td>
</tr>
<tr>
<td>Good</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>0</th>
<th>5</th>
<th>10</th>
<th>15</th>
<th>20</th>
<th>25</th>
<th>30</th>
<th>35</th>
</tr>
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residents to negotiate, and several reported they seldom went out because of problems with the doors. This was unfortunate because in many cases, the existing overhead door-closing devices could easily have been adjusted so they could be operated by elderly residents, as specified by accessibility guidelines.

What Elements Attracted Seniors to the Outdoors?

Residents typically indicated they went outdoors to be closer to nature and they enthusiastically discussed their favorite outdoor nature elements as fresh air, flowers, greenery, birds, and water features (Exhibits 13, 14). One resident described what they most wanted was a “small park with green trees,” where they could walk easily without going far from the facility.

Many of the “hardscape” or built elements discussed by residents provided the settings for the two main activities they said they engaged in: 1) walking (on paved surfaces); and 2) sitting (with something to watch). In this study and previous studies, these two activities were approximately equally preferred, and together accounted for more than 90% of their outdoor activities.

Photosurveys Compared with Focus Group/Survey Results

The photosurvey results strongly confirmed what seniors had described in the focus groups and surveys. On all 24 paired comparisons, the majority of participants chose the images that matched their verbal preferences rather than those that did not. As seen in Exhibits 15 and 16, the six hypothetically preferred environmental features were chosen by approximately 75% to 85% of participants. Because images chosen in photographic simulations have been found to be similar to what people actually choose in real-life settings (Nasar, 1981), these findings should be a valid indication of what seniors actually want in their outdoor residential environments. The photosurvey findings are reported in more detail by Rodiek and Fried (2005), along with additional photocomparison images. The results show that seniors preferred:

- chances to see beyond the facility (Views);
- accessible connecting walkways (Paths);
- shade and seating along paths (Comfort);
- greater visibility to the outdoors (Windows);
- well-developed indoor/outdoor zones (Transitions); and
- abundant trees and other plant materials (Greenery)
DISCUSSION

The information gained from this two-stage, multi-method study helped strengthen, clarify, and extend previous knowledge on this topic. First, this study helped confirm that seniors have strong interest in spending time outdoors. Second, it clarified their preference for specific outdoor features. Third, this study found that problems with the design and maintenance of existing facilities appear to substantially contribute to lack of outdoor usage. Fourth, by correlating their verbally described preferences with realistically depicted photographic examples, this
study helped confirm the validity of specific outdoor features preferred by seniors. Collectively, these findings reinforce the idea that outdoor space must be carefully designed to successfully attract seniors to use it.

Need for Further Research

Because this study covered a sizeable geographic area in the United States (approximately 260,000 square miles with a population of 22 million) and used a random selection process, the findings can be generalized to apply to other facilities in this region; however, it is possible that different issues and preferences would be found in different climate and cultural regions. Further research could examine differences and similarities in a series of structured post-occupancy evaluations (POEs), as described by Fraley et al., (2001). Future studies could also employ behavior-mapping techniques, where

<table>
<thead>
<tr>
<th>Feature</th>
<th>Estimated mean measure of preference</th>
<th>Standard error</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Views</td>
<td>86.83</td>
<td>6.899</td>
<td>5.338***</td>
</tr>
<tr>
<td>Paths</td>
<td>84.21</td>
<td>6.899</td>
<td>4.958***</td>
</tr>
<tr>
<td>Windows</td>
<td>83.81</td>
<td>6.894</td>
<td>4.904***</td>
</tr>
<tr>
<td>Transition</td>
<td>82.45</td>
<td>6.866</td>
<td>4.726***</td>
</tr>
<tr>
<td>Comfort</td>
<td>79.61</td>
<td>6.942</td>
<td>4.265***</td>
</tr>
<tr>
<td>Greenery</td>
<td>77.78</td>
<td>6.922</td>
<td>4.013**</td>
</tr>
</tbody>
</table>

Mean, standard error, and one-sample t tests for H0: µpreference > 50%.

*** p-value (1 sided) < 0.001
** p-value (1 sided) < 0.01
Limiting Factors in Outdoor Usage

Not everyone should be encouraged to go outdoors. Some seniors have health conditions, such as asthma, that make direct outdoor access unfeasible. Also, people taking certain medications must carefully limit exposure to sunlight. In cases where direct outdoor access would not benefit health, alternatives such as spending time in an atrium or viewing the outdoors through a window may be feasible substitutes. Different levels of seniors housing require different design parameters, but many of the basic needs are similar; for example, the need for walking surfaces, adequate shade, comfortable seating, etc. Frailer, older residents tend to prefer smaller spaces with better wind and sun protection, while more robust senior populations may enjoy strenuous physical-activity elements (e.g., pools, longer walking loops, etc.). Seniors with Alzheimer’s disease or advanced stage dementia require specific design solutions, such as lack of dead-end circulation routes, additional visual screening and security measures, and other elements that may not provide optimal conditions for seniors with different needs.

Successful Application of Research and Design Principles

Unfortunately, there is often a critical gap between knowing about health-related benefits and knowing how to design residential care facilities to maximize their potential. Although previously published design recommendations have discussed some of the issues presented here (e.g., Carstens, 1993, 1998; Cooper Marcus & Barnes, 1999; Pachana, 2002; Regnier, 1994, 2002; Zeisel et al., 2003), we found that many established “best-practice” design guidelines were not being applied, even in facilities built after relevant information became available. Examples of problems included: 1) walkways placed in sterile and unshaded areas while nearby beautifully landscaped areas had no walkways and could not be reached by elderly residents; 2) inadequate seating along paths even though seniors should be provided with seating at frequent intervals; 3) budgets spent on “decorative landscaping” rather than “functional landscaping” to benefit seniors; and 4) outdoor space located in remote or closed-in areas.
cut off from visual contact with the indoors, where residents do not even know it exists. While these may seem like minor issues to younger people, in frail, elderly people, a small deterrent can literally make the difference between using health-promoting outdoor spaces or not. A recent conference presentation described a man who went outdoors during the first month he lived in a hospital-related assisted living setting. He had difficulty getting back indoors (due to a steep ramp), and as a result he never attempted to go outdoors again, although he lived at the facility for the next 35 years because of his physical disabilities (Lee, 2006). This illustrates what may be occurring every day in seniors housing: people are not going outdoors as much as they would like to partly because the outdoor space is not designed to meet their needs.

Further efforts on developing usable outdoor space might focus on remedying the gap between research and what actually gets built; a current project is underway to develop a multi-media set of architectural examples and design guidelines that can be utilized easily by providers as well as design practitioners.1 Recommended solutions will include elements identified in this study, supported by previous studies, such as the need for 1) adequately designed and abundant seating; 2) shade placed where it will actually reach the walkways and patios; 3) abundant greenery and flowering plants rather than too many hard surfaces; 4) windows that allow residents to preview outdoor areas; 5) doors that are easy to navigate; 6) well-furnished transition zones that invite seniors outdoors; and 7) location of usable outdoor areas where they are easy for residents to see. Overall, perhaps the most important issue is location. Usable outdoor areas should be placed where they are easy for residents to see, remember, and access, while having good views of daily life and activity. In some settings, this can be achieved near the front entry, where residents surveyed in this study were found to sit most frequently.

Potential Benefits for the Provider Industry

It is likely that improved physical environments, including enhanced outdoor space, will contribute to increased satisfaction with seniors housing and could give providers a competitive edge, especially in an increasingly consumer-driven market. Recent studies in the health care industry are finding that health-promoting environmental design may produce substantial cost benefits for providers (e.g., Berry et al., 2004; Iacono, 2002). Following are a few ways in which enhanced outdoor access might lead to economic benefits in seniors housing:

- Seniors and families who are more satisfied with the environment may provide better word-of-mouth recommendations, making it easier and more economical to market units and increase occupancy levels;
- Seniors who retain functional abilities longer may need less assistance, thus reducing demands on staff time and effort, leading to direct operational cost savings;
- Healthier and/or happier residents may be more pleasant and less demanding, which may potentially increase staff satisfaction and reduce staff turnover and absenteeism; and
- Healthier and better-adjusted seniors may be able to maintain current living status longer and delay moving to higher levels of care, thus reducing resident turnover levels.

Benefits Compared With Risks

By encouraging residents to spend more time outdoors, providers may think they are increasing the potential for accidents and liability. While the overall number of opportunities for falls may increase if residents spend more time walking around, this should be more than offset by the fact that seniors are less likely to fall when they are healthier and more physically active (Singh, 2002). Considering that one of the main ways seniors get exercise is by walking (see Exhibit 17) and that access to walkable...
outdoor areas has been found to increase walking behavior (Humpel et al., 2002), increased outdoor usage should overall tend to reduce falls, while at the same time adding other significant health benefits.

Unfortunately, many residential settings for older adults attempt to control outdoor risk with a locked-door policy. This is often done by administrators and staff concerned that they would be blamed for falls or other accidents that might occur. Two main reasons are that 1) they cannot provide visual surveillance of outdoor areas; and 2) they realize that outdoor walking surfaces and other elements may not meet accessibility standards. These are both valid reasons, yet both problems can be improved substantially by appropriate architectural and landscape design. Although in some settings it may be necessary to provide maximum security, in most cases it simply is not feasible or ethical to keep seniors permanently locked inside the facility. Most people have a desire for contact with the world outdoors (as shown in this study, for example). The question is whether they will encounter a well-designed and accessible outdoor area with adequate visual surveillance from the indoors, or whether they will encounter a poorly designed and inaccessible area that feels cut off from the indoors. Successful design can make the difference between a) frequently used outdoor areas that promote the health and well-being of residents, while minimizing risk; or b) seldom-used outdoor areas that provide fewer health benefits due to inadequately meeting seniors’ needs, while at the same time presenting a higher level of risk for those who venture outdoors. From a quality of care perspective, it is clearly important to provide seniors with the user-friendly outdoor access for which they have expressed a desire.

**ENDNOTES**

1 An educational program is currently being developed for a broad range of industry professionals to address the need for application-based information on designing outdoor space for seniors. Funded by National Institute on Aging Grant R43 AG024786-01, this CD-based multimedia program is focused on common design issues that may affect usability and health benefits. To view a preliminary prototype of the program or to participate in ongoing development or evaluation, please contact Susan Rodiek at rodiek@tamu.edu.

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Whole-Person Wellness Outcomes in Senior Living Communities: The Resident Whole-Person Wellness Survey

Perry Edelman, Ph.D.; Jan Montague, M.G.S.

ABSTRACT

Whole-person wellness, which addresses multiple dimensions of well-being, represents the cutting edge of programming in senior living communities. Given that communities have only recently adopted the whole-person wellness model and there is great diversity in senior living communities in terms of residents, programs, staffing, and physical environments, assessment of the impact of wellness programs is critical to ensure their success in meeting the needs of residents. A survey that embraces the whole-person wellness model has been pilot-tested with 383 residents in nine communities. The pilot test supports the validity, usefulness, and practicality of the Resident Whole-Person Wellness Survey as a tool for assessing outcomes of whole-person wellness programs in senior living communities.
INRODUCTION

A recent issue of *FutureAge*, a publication of the American Association of Homes and Services for the Aging (AAHSA), highlights two issues that are prominent in the senior living industry: wellness and evidence-based practice (Matthiesen, 2006; Mitchell, 2006). Whole-person wellness, which addresses not only physical well-being but also multiple dimensions of well-being, has been gaining popularity in senior living communities (Hogdson et al., 2003). Because whole-person wellness in senior living is relatively new and represents challenges in terms of outcome assessment, a tool designed specifically for measuring the impact of these programs has, until now, been unavailable. This paper describes the development of the Resident Whole-Person Wellness Survey (RWPWS), a measure specifically designed to assess whole-person wellness program outcomes.

The origin of the RWPWS is rooted in the needs of two organizations. Mather LifeWays anticipated the need for such an instrument to assess its newly initiated whole-person wellness approach; and Montague, Eippert and Associates, a national leader in the development of whole-person wellness programs and centers for seniors, had been searching for a tool to recommend to its client communities, which were at different stages of adopting whole-person wellness programming. The RWPWS builds upon the strengths of both organizations—the whole-person wellness expertise of Montague, Eippert, and Associates; and the skills of Mather LifeWays Institute on Aging in developing outcome measures.

Why Whole-Person Wellness?

As the older population increases in numbers and age in the coming years, some fear that medical costs will continue an upward spiral at alarming rates. To address this concern, many believe the whole-person wellness model can lead to not only decreased health care consumption, but also improved health and quality of life for many Americans (Poon et al., 2003). The desire for optimal health as we age and to be functionally able for as long as possible has people embracing the concepts of wellness as a leading model of health management. The wellness model promotes self-responsibility for health and well-being within all areas of a person’s life. This model incorporates a “wholistic” perspective; it integrates, balances, and blends the six dimensions of wellness (emotional, social, intellectual, physical, spiritual, and vocational) into individualized programming. Research shows for many aging individuals, participation in whole-person health programs slows the aging process and promotes independence (Vaillant, 2002). The wellness concept is emerging as a model that can lead not only to decreased health care consumption, but also to improved health and quality of life.

Whole-Person Wellness

The whole-person wellness model reflects a “wholistic” view toward health and quality of life. This approach embraces the concept of the whole being greater than the sum of the parts and requires that the whole person be valued and considered. To determine if a whole-person wellness initiative, program, or environment is successful, senior living communities would be best served by approaching planning and outcome assessment in a logical step-by-step process. The sequential steps include:

- a) knowledge and understanding of a comprehensive whole-person wellness model;
- b) a clearly written framework with measurable outcomes;
- c) the utilization of evidence-based strategies and techniques to positively change health behaviors; and
- d) appropriate assessments and evaluations that serve the function of identifying progress by individual residents, as well as entire communities, toward goals and action steps.

An examination of the various steps in the process toward achieving a whole-person wellness program in senior living communities follows.
for older Americans. But why are we experiencing this conscious change in perspective? Why now? Several factors are contributing to this shift to a wellness focus:

• the high cost of health care
• relevant research on successful and vital aging
• increased awareness of health behavior change strategies and techniques
• documented importance of perceived health status on quality of life
• changing demographics and baby boomer influence

These factors drive the change in perspective in an attempt to keep seniors healthier and proactive toward aging. At the same time, older adults increasingly recognize the benefits of a healthy lifestyle (Strawbridge & Wallhagen, 2003). Together, these forces are creating the momentum toward wellness that we see today.

Research Supports a Whole-Person Wellness Model

The MacArthur Foundation’s Study of Aging in America (Rowe & Kahn, 1998) provided a new structure for the study of aging and quality of life. The study was designed to examine the factors responsible for the positive aspects of aging. Its goals were “to move beyond the limited view of chronological age and to clarify the genetic, biomedical, behavioral, and social factors responsible for retaining—and even enhancing—people’s ability to function in later life.”

The MacArthur Foundation provided more than $10 million in support and thousands of older adult participants. During a period of 10 years, the results from dozens of interdisciplinary research projects were examined. The combined data from those studies provided the best evidence that successful aging is not determined by genetic inheritance. Instead, we age successfully by incorporating wellness concepts and beliefs into all aspects of our lives.

In their 1998 book Successful Aging, John W. Rowe, M.D., and Robert L. Kahn, Ph. D., described the following conclusions from the MacArthur Foundation’s Study of Aging in America:

Mental Function. The ability to maintain a high level of mental function was attributed to a strong social support system; regular physical activity; education and lifelong intellectual/vocational activities; self-efficacy (a belief in one’s ability to handle what life has to offer); social connectedness; and reducing feelings of isolation, whether actual or perceived. The interdisciplinary studies found that isolation was a powerful risk factor for poor health. The more frequently older people participated in social relationships, the better their overall health.

Physical Function. Not surprisingly, seniors participating in regular physical exercise and activities experienced better overall health than their contemporaries who did not. Improvements in physical function included increased strength, endurance, and flexibility; improvements in mood, balance, coronary heart disease, high blood pressure, colon and rectal cancer, diabetes and related problems, arthritis and osteoporosis; and a reduction in the number of falls.

Self-efficacy. Study participants who approached life with a “Yes, I can!” attitude generally had the best coping skills and greatest self-esteem. Self-efficacy can be increased by undertaking a specific action or activity that challenges one’s sense of self-sufficiency without overwhelming it. Self-confidence is also bolstered by the presence of supportive and reassuring others or the experience of succeeding at something with confirming feedback from others.

Steps to Whole-Person Wellness

Step One: Learn about whole-person wellness. The wellness model promotes self-responsibility for health and well-being within all areas of a person’s life. Simply defined, wellness is the integration of an individual’s multiple dimensions into positive and meaningful activities. This new approach to health—a comprehensive wellness model—requires a new lifestyle perspective that includes self-responsibility for emotional, intellectual, physical, social, spiritual, and vocational health; an optimistic out-
look; and a “can-do” attitude. Wellness is about adopting a whole-person health philosophy throughout one's entire life.

*Wellness* was first conceptualized by Dr. Halbert Dunn in the mid-1950s. In his book *High Level Wellness* (1977), Dunn defined wellness as an integrated method of functioning that is oriented toward maximizing the potential of which the individual is capable within the functioning environment. The National Wellness Institute (n.d.), the principal organization for wellness education, training, and research in the United States, defined the wellness concept as six dimensional. Dimensions that embody personal wellness include, but are not limited to, emotional, intellectual, physical, social, spiritual, and vocational. Wellness is a life-growth process that embodies the philosophy of holistic health. It is the integration of mind, body, and spirit throughout life's journey. Simply stated, what one does, thinks, feels, and believes has an impact on his/her health and well-being. A description of each of the wellness dimensions follows.

The *emotional* dimension emphasizes an awareness and acceptance of one's feelings. It reflects the degree to which an individual feels positive and enthusiastic about one's self and life. This dimension involves the capacity to manage feelings and behaviors, accept oneself unconditionally, assess limitations, develop autonomy, and cope with stress.

The *intellectual* dimension promotes the use of one's mind to create a greater understanding and appreciation of oneself and others. It involves one's ability to think creatively and rationally. This dimension encourages individuals to expand their knowledge and skill base through a variety of resources and cultural activities.

The *physical* dimension promotes participation in activities for cardiovascular endurance, muscular strengthening, and flexibility. This multi-faceted dimension is relative to each person's abilities and disabilities. It promotes increased knowledge for achieving healthy lifestyle habits, and discouraging negative, excessive behavior. The physical dimension encourages participation in activities contributing to high-level wellness, including personal safety, medical self-care, and the appropriate use of the medical system.

The *social* dimension is humanistic, emphasizing the creation and maintenance of healthy relationships. It enhances interdependence with others and nature, and encourages the pursuit of harmony within the family. This dimension furthers positive contributions to human and physical environments for the common welfare of the community.

The *spiritual* dimension involves seeking meaning and purpose in human existence. It involves developing a strong sense of personal values and ethics. This dimension includes the development of an appreciation for the depth and expanse of life and natural forces that exist in the universe.

The *vocational* dimension emphasizes the importance of giving and receiving. It is the process of determining and achieving personal and occupational interests through meaningful activities. This dimension encourages goal setting for one's personal enrichment. Vocational wellness is linked to the creation of a positive attitude about personal and professional development.

Whole-person wellness initiatives that incorporate the wellness dimensions with concepts of self-responsibility, optimism, self-directed approach, self-efficacy, and personal choice help to change the focus from what people can't do to what they *can* do. The result is fully integrated wellness (Clark, 1996).

**Step Two: Create the framework and identify outcomes.** The framework consists of a wellness-based vision, mission, health behavior strategies, goals, action steps, and measurable outcomes. Outcomes answer the question, “*Why are we doing this?*” and “*How can we do it better?*” Outcomes validate the organization’s mission and reveal if the initiatives, programs, and environments are making a difference in people's lives and reaffirm that the organization is on the right path. Outcome data are the foundation of return on investment and cost effectiveness analyses by measuring benefits or changes in an individual’s health status, behavior, skills, knowl-
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edge, attitude, condition, or personal values. Answers gleaned from the simple question, “Why are we doing this?” will guide the wellness program planning process. Whole-person wellness initiatives, programs, and environments will be created to achieve intentionally the desired results. The program assessment can show if the programs and environments are actually enhancing personal wellness, and can provide direction for improving programs/environments by answering the question “How can we do it better?”

Step Three: Identify and implement health behavior strategies. Wellness program planners should incorporate health behavior change strategies and techniques to motivate residents toward maintaining or improving their personal wellness. The Transtheoretical Model of Behavior Change is useful in this regard (Prochaska et al., 1992). This model focuses on the Stages of Health Behavior Change including Precontemplation (not ready to change), Contemplation (thinking about changing), Preparation (ready to change), Action (making changes now), Maintenance (on track), and Relapse. Effective whole-person wellness programs should include health behavior change strategies, techniques, and language to engage people at various health behavior stages. Individuals should be tracked and recognized as they move from one stage of behavior to a higher level or stage. Too often people are only measured when they reach the highest level of health behavior. Whole-person wellness programs reward and recognize individuals for any positive movement toward maintaining a desired health behavior.

Step Four: Create a wellness plan. Whole-person wellness will not happen on its own; it must be purposeful and intentional. These initiatives require a clear thought process for planning programs and environments to enhance personal wellness. To provide whole-person wellness opportunities, the planning process and program framework should be both outcome- and evidence-based. The focus of all wellness initiatives should be results-oriented and health behavior-specific. Based on the extensive experience of the second author, the most effective wellness programs incorporate behavior change strategies and techniques, thereby getting and keeping people motivated toward maintaining and improving personal wellness. Programs should be planned on an annual basis to achieve outcomes and goals that relate to a wellness mission, as opposed to offering activities to fill time slots on an activity calendar. Additionally, program names and descriptions should reflect an individualized strength-based approach that emphasizes proactive and positive behaviors. Therefore, whole-person wellness programming calendars that incorporate these concepts are replacing the previous activity-centered model.

Step Five: Assess wellness plan and outcomes. Through effective outcome measurements, communities are recognizing that wellness is relevant to each individual, regardless of the person’s functional or mental status. A variety of return on investment evaluation and assessment instruments are being utilized to determine whole-person wellness program effectiveness. Qualitative measures include focus group data, testimonials, and individuals’ statements of perceived health and well-being. Quantitative measures include the SF-12 (Ware et al., 1996) quality of life scales; resident satisfaction surveys; participation and usage data; the Senior Functional Fitness Test (Rikli & Jones, 2001); and the FallProof (Rose, 2003) balance and fall prevention scale. Currently, most senior living communities have to piece together a variety of measures to obtain a more comprehensive picture of residents’ wellness. Given that different measures use different scales and response categories, it’s difficult to compare well-being across different dimensions of wellness.

What is needed is an instrument that embraces the whole-person wellness concept and assesses outcomes from the perspective of residents of senior living communities across the six wellness dimensions. The next section describes the development and testing of this much-needed tool.
**METHODOLOGY**

**Measures**

The Resident Whole-Person Wellness Survey (RWPWS) was developed as a tool that would be useful, valid, and practical for senior living communities. To be useful, the instrument must provide information that senior living communities can use to improve the well-being of residents by influencing programming. Valid implies that the RWPWS measures what it intends to measure and does so in a consistent manner. Finally, to ensure that it will be used, the tool must be practical such that it is not too burdensome for either residents or staff.

The RWPWS can serve a variety of purposes. For individual residents, survey results can provide an assessment of their overall well-being and indicate wellness dimensions that need attention. Findings across a substantial proportion of residents in a community could provide a picture of the overall well-being of the community and indicate areas of programming in need of improvement or expansion. Individual survey results over time can demonstrate residents’ progress toward their individual goals. Similarly, cumulative data across residents collected on an annual basis can demonstrate the community’s progress toward whole-person wellness. Alternatively, evaluation of a new intervention (e.g., program, service, design change) can be accomplished by collecting RWPWS data prior to and following the intervention, thus establishing the efficacy of the intervention. Finally, in order to assess the consistency of its whole-person wellness program across sites, a multi-site organization may want to compare findings for different communities or benchmark each site against the aggregate findings for all sites.

The foundation of the original version of the RWPWS is its focus on 12 areas or issues. Reflecting the whole-person philosophy, the six wellness dimensions are addressed by these 12 areas, which include:

- Participate in physical activity regularly at least three times per week (Physical)
- Accomplish everyday activities (Physical)
- Socialize with others (family or friends) at the level you would like to (Social)
- Express your emotions (both positive and negative) (Emotional)
- Appropriately cope with stress in your life (Emotional)
- Find meaning and purpose in life (Spiritual)
- Find peace in your life (Spiritual)
- Continue to learn (Intellectual)
- Think creatively (Intellectual)
- Participate in hobbies or volunteer activities (Vocational)
- Identify personal goals (Multiple dimensions)
- Achieve personal goals (Multiple dimensions)

The following types of questions are applied to each of the 12 areas above:

- **Satisfaction** with well-being in each of the 12 areas (or dissatisfaction) potentially contributes to residents’ desire to change their health behavior and improve their well-being. Respondents indicated their satisfaction with each of the 12 areas/issues using the following responses: totally satisfied, moderately satisfied, a little satisfied, and not at all satisfied.

- **Stage of change** indicates residents’ readiness to change and suggests opportunities for interventions to facilitate change in healthy behaviors. Response options included five stages of change: pre-contemplation, contemplation, preparation, action, and maintenance.

- **Self-efficacy** to change behavior, which has been demonstrated to be highly predictive of actual behavior change (Allison & Keller, 2004; Bandura, 1997; Seeman et al., 1999), indicates residents’ belief that they are capable of accomplishing certain wellness-related behavior or cognitive changes in each of the 12 areas. Using a 1 to 10 scale on which 10 represents total confidence, respondents indicated their confidence in
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their ability to accomplish wellness-related activities.

- **Goals**, as described by residents, provide both an indication of residents’ perspective on their need or desire to change, as well as potential opportunities to help residents improve their well-being. Examples of each of the above types of questions appear in the Appendix.

Other information collected on the survey includes gender, age, length of time living in community, marital status, education, race/ethnicity, self-reported general health, and physical functioning (SF-36 physical function scale; Ware et al., 1993).

**Pilot-Testing of RWPWS**

**Purpose:** The purpose of the pilot test was to: 1) determine the appropriateness and relevance of the whole-person wellness survey items to older adults in continuing care retirement communities (CCRCs); 2) identify questions/items that were unclear or needed revisions; 3) determine the response rate to each item; and 4) determine if most respondents could complete the RWPWS within 30 minutes.

**Sites:** Nine CCRCs were recruited for the pilot test of the RWPWS. Based largely on the experience of the second author, sites were chosen based on 1) their experience/progress in developing whole-person wellness programs in their communities; and 2) the desire to achieve some diversity regarding the types of communities included. Participant communities included four from Florida, one from Cincinnati, Ohio, two from a rural town in Ohio, one in a suburb of Chicago, and one new community in a suburb of Virginia. Two staff and 10 depositors who were involved in planning the development of the Virginia community were participants in the pilot study.

**Respondents:** Resident survey respondents (N=383) lived in independent living and were largely white (93%) females (62%) who were married (49%) or widowed (41%). Most respondents were between the ages of 76 and 85 (54%) or were 86 or older (26%). Also, respondents were highly educated; 27% had some college, 26% were college graduates, and 27% had attended graduate school. Most rated their general health as excellent or very good (42%) or good (36%); and their physical functioning based on the SF-36 scale was high (53% scored 70 or higher, and 26% scored 90 or higher based on a 0-100 scale).

**Procedure:** After internal review by Mather LifeWays Institute on Aging staff, including the resident managers of Mather LifeWays’ two independent living communities, the pilot study was reviewed and approved by the Mather LifeWays Institute on Aging Institutional Review Board. After obtaining agreement to participate from presidents/CEOs, administrators, and/or directors of wellness, the RWPWS was mailed to sites for distribution to all residents in independent living. Completed surveys were collected at the sites. Blank surveys were also distributed to staff in preparation for their participation in focus groups.

Focus groups were conducted by the first author and were 1.5 hours in length and tape-recorded. A staff person at each site (typically the director of wellness) identified 8-12 residents who were willing to participate in a focus group and represented a variety of perspectives regarding whole-person wellness. Completed surveys by residents who had volunteered to participate in the focus group were returned to participants for reference during the focus group. The president/CEO, administrator, or director of wellness at each site identified staff to participate in the staff focus group. Blank surveys were distributed to staff participants for their reference during the focus group.

Following completion of focus groups, resident surveys were mailed to Mather LifeWays Institute on Aging where they were entered into a computer database and analyzed.

**RESULTS**

**Response Rate**

In terms of developing a new survey measure,
response rate is a critical factor in determining the appropriateness of survey items/questions. As demonstrated in Exhibit 1, the response rate is high, ranging from 92%-98% for satisfaction, 85%-95% for stage of change, and 87%-93% for self-efficacy questions.

**Satisfaction**

Although more respondents indicated they were totally satisfied with their ability to socialize (61%) than with any of the other areas/issues, the majority of respondents were moderately or totally satisfied regarding all 12 areas/issues (79%-97%).

**Stage of Change**

In terms of their stage of change, most respondents (54%-68%) indicated they had attempted to improve their behavior for more than six months (“maintenance” stage) in each of the 12 areas/issues.

**Self-efficacy**

Self-efficacy was very high. The majority of respondents (60%-84%) indicated an 8 or higher in confidence for each of the 12 areas/issues; the highest rating of total confidence (44%) was reported for ability to exercise regularly.

**Goals**

Respondents were asked if they had goals related to any of the 12 areas/issues. It is important to understand that they were not being asked to create a goal for the purpose of the survey, rather, to describe a current goal. The objective was to determine the extent to which residents had goals, so that staff could potentially work with them to meet their goals. A large proportion of respondents wrote a goal for regular physical exercise (72%) and opportunities to continue learning (51%). In addition, about a third (31%-37%) wrote a goal for finding meaning in life; ability to do things they want to do; ability to cope with stress; and opportunities to think creatively, find peace, and socialize. An additional 25% and 22% wrote a goal related to ability to express emotions and achieve personal goals.

**Focus Groups**

Resident and staff focus group feedback indicated that the RWPWS was a valuable tool for assessing the impact of whole-person wellness programs in CCRCs. Generally, residents understood the ques-
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...and residents and staff agreed that the questions were appropriate and useful; thus, the perspective of the two most important groups of stakeholders provided evidence for the content validity of the RWPWS. Feedback from both groups was used to change the wording of certain questions/items to make them more user-friendly for older persons. Based on pilot study findings, changes were made to the areas/issues related to the six wellness dimensions. The following 11 areas/issues comprise the focus of the current RWPWS:

- Participate in physical activity regularly at least three times per week (Physical)
- Accomplish everyday activities (Physical)
- Socialize with others (family or friends) at the level you would like to (Social)
- Express your emotions (both positive and negative) (Emotional)
- Appropriately cope with stress in your life (Emotional)
- Find meaning and purpose in life (Spiritual)
- Find peace in your life (Spiritual)
- Continue to learn (Intellectual)
- Participate in volunteer activities that help others (Vocational)
- Participate in hobbies or occupational interests (Vocational)
- Achieve a personal mission in life (Multiple dimensions)

Finally, most residents were able to complete the survey within 30 minutes, meeting an objective of the survey.

Feedback to Sites

Staff in focus groups identified types of feedback from the RWPWS that they preferred. **Exhibit 2** provides a sample table that compares a single site (Site A) to all the pilot sites in terms of findings related to satisfaction and stage of change. This table indicates that respondents from Site A were more satisfied regarding regular exercise, but less satisfied in terms of socialization, dealing with emotions, finding peace in life, and achieving a personal mission. Site A was similar to respondents from all sites in terms of the other areas/issues. In terms of stage of change, a greater proportion of Site A respondents were in the pre-contemplation stage and fewer were in action or maintenance than the respondents from all of the sites. Interestingly, although more Site A respondents were in the pre-contemplation stage regarding regular exercise, they were more satisfied; however, for four of the other areas/issues in which Site A respondents were in the pre-contemplation stage, they were less satisfied.

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<tr>
<td>Vocational</td>
<td>—</td>
<td>Fewer</td>
<td>—</td>
<td>More</td>
</tr>
<tr>
<td>Achieve Personal Mission</td>
<td>Less</td>
<td>Fewer</td>
<td>—</td>
<td>More</td>
</tr>
</tbody>
</table>

Exhibit 2. Sample data: satisfaction and stages of change - single community vs. all communities
Exhibit 3 compares a single site to a group of sites in terms of satisfaction and stage of change. Exhibit 4 demonstrates three additional ways of presenting data in one figure. First, organizations with a number of communities may want to display data for each community (as well as for all communities averaged together) on a single slide. Second, Exhibit 4 describes baseline and post-test data following an intervention. Third, the co-occurrence of satisfaction and stage of change data are indicated by focusing on specific categories of interest. In this case, the focus is on residents in pre-contemplation who are not at all or a little satisfied at baseline, and residents in contemplation who are a little or moderately satisfied at baseline. In this example (data are fictitious), residents in pre-contemplation demonstrated little change in terms of their satisfaction, but residents in contemplation improved with a smaller percent, reporting “a little satisfaction” at post-test. A higher percent reported they are moderately satisfied at post-test.

**DISCUSSION**

Society is beginning to embrace a new perspective – healthy aging. Today, people are more likely to be defined by what they can do rather than what they cannot do. Seniors are becoming role models for younger cohorts because they are achieving desirable health outcomes by combining whole-person wellness principles with self-responsibility for health.

For whole-person wellness programs to succeed, improve, and be widely disseminated in senior living...
Whole-Person Wellness Outcomes in Senior Living Communities: The Resident Whole-Person Wellness Survey

Assessment data can be used to demonstrate the benefits of whole-person wellness programs, an increasingly important function at a time when evidence-based practice is stressed. In addition, these data can be used to modify and adapt programs to specific environments and individuals.

The RWPWS is a tool that reflects the whole-person wellness philosophy through its focus on 11 areas/issues related to the 6 wellness dimensions. Pilot work has resulted in a practical (i.e., user-friendly) and valid (appropriate for the purpose of assessing whole-person wellness in senior living) instrument that respondents easily understood and appropriately completed.

While far from exhaustive of the possibilities, the examples of feedback from the RWPWS (in the form of exhibits) begin to provide a sense of the type of information that staff and administrators could use to improve the well-being of their residents through more effective programming. When implemented on a regular basis, the RWPWS can serve as a useful yardstick of the well-being of residents as well as the community. In addition, the process of developing, assessing, and adapting whole-person wellness programs will give senior living communities a competitive advantage in terms of attracting and retaining residents.

The use of the RWPWS may serve additional purposes. For instance, it could provide data that could complement traditional health risk appraisals, providing a more comprehensive picture of the health and wellness of individuals and communities. For example, stage of change information relevant to residents’ physical activity levels.

Exhibit 4. Fictitious data: specific satisfaction by stages of change combinations for regular physical exercise - pre/post data for multiple communities

<table>
<thead>
<tr>
<th></th>
<th>Total: Baseline</th>
<th>Post</th>
<th>Site 1: Baseline</th>
<th>Post</th>
<th>Site 2: Baseline</th>
<th>Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-Contemplation, Not at All Satisfied</td>
<td>16</td>
<td>8</td>
<td>10</td>
<td>14</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>Contemplation, a Little Satisfied</td>
<td>8</td>
<td>6</td>
<td>8</td>
<td>14</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Contemplation, Moderately Satisfied</td>
<td>6</td>
<td>6</td>
<td>7</td>
<td>9</td>
<td>7</td>
<td>7</td>
</tr>
</tbody>
</table>
idents’ emotional or spiritual well-being would provide information not typically obtained via health risk appraisals. If implemented on a wide-scale basis, the RWPWS could provide useful benchmarking data against which organizations could compare their communities. Finally, the RWPWS can be used as a research tool as well as a tool to improve practice. For instance, a research study is being implemented by the first author to use the RWPWS as an outcome measure to assess the relationship between whole-person wellness program inputs and outcomes to better understand factors associated with successful whole-person wellness programs. The results of this research may assist practitioners attempting to improve their whole-person wellness programs.

A number of limitations of this pilot study should be noted. Further testing with a larger, more diverse sample of senior living communities is necessary to estimate the generalizability of the surveys findings. The representativeness of the sample of respondents is unknown because the characteristics of all residents at each pilot site are unknown. Although the pilot study established the content validity of the RWPWS through focus groups with staff and residents, survey findings should be validated against instruments that provide similar information regarding resident wellness. Also, while the authors believe that with some modification the RWPWS is likely to be useful with seniors in settings other than independent living (e.g., assisted living), the survey needs to be pilot-tested with these individuals.

In coming years, more and more senior living communities and senior service organizations will likely adopt wellness as their core philosophy. These organizations should continue to focus on prevention, the whole-person philosophy, and the implementation and evaluation of programs and services that keep people healthy in mind, body, and spirit throughout their lifespan.

**APPENDIX**

Sample questions from Resident Whole-Person Wellness Survey are below.

Regular physical activity is any planned physical activity (e.g., walking, aerobics, using the fitness center, swimming, etc.) performed to increase physical fitness. Such activity should be performed at least three times per week for at least 20 minutes each time.

**SATISFACTION**

How satisfied are you with your level of regular physical activity?
1 - Not At All Satisfied
2 - A Little Satisfied
3 - Moderately Satisfied
4 - Totally Satisfied

**STAGE OF CHANGE**

Do you participate in regular physical activity according to the definition given above?
1 = YES, I have for MORE than 6 months
2 = YES, I have for LESS than 6 months
3 = NO, but I intend to in the next 30 days
4 = NO, but intend to in the next 6 months
5 = NO, and I do NOT intend to in the next 6 months

**SELF-EFFICACY**

We would like to know how you feel about your ability to accomplish certain things in your life. Using the following scale, please choose the number that corresponds to your confidence that you can do the tasks regularly at the present time, and place the number on the blank.

1- Not At All Confident 2, 3, 4, 5, 6, 7- Totally Confident

How confident are you that you can…

____ Participate in physical activity regularly at least three times per week?
GOALS

For each aspect of your life listed below, try to identify a goal for yourself. If you can think of a goal that you might be able to work toward, please write the goal. If you cannot think of a goal, do not write one.

Please write a goal you have related to: __________

Your level of regular physical activity: __________

REFERENCES


© 2006, National Investment Center for the Seniors Housing & Care Industries
Linking Affordable Housing with Services: A Long-Term Care Option for Low- and Modest-Income Seniors

Mary Harahan; Alisha Sanders, M.PAff.; Robyn Stone, Dr.P.H.

ABSTRACT

With the relationship between increasing age, chronic illness and disability, and growing long-term care needs well documented, new models of delivering health-related and supportive services are being sought that are attractive and affordable to low- and modest-income older adults. One promising, but under-explored, strategy—affordable housing plus services (AHPS)—links older residents of subsidized, multi-unit housing to health and supportive services so that they can “age in place.” As part of a multi-purpose initiative to explore the promise of AHPS strategies, the Institute for the Future of Aging Services recently convened four invitational workshops across the country. This article reports on the lessons learned from these workshops. The workshops showed a wide variety of AHPS programs operating in all parts of the country, typically due to the initiative of individual housing providers. Hard evidence on the impact of these programs is lacking. Programs deemed successful 1) bridged the different worlds of housing and aging services; 2) involved housing providers committed to a broader role; 3) possessed the skills to develop collaborative relationships with community partners; and 4) proactively sought out funders and overcame regulatory barriers. Widespread replication and dissemination of AHPS programs will require additional numbers of committed housing providers, greater provider capacity, and concrete demonstration and evaluation of the impact of AHPS programs.
INTRODUCTION

By 2030, the number of older Americans aged 65 and older will increase to 70 million, accounting for one-fifth of the United States population. Within this group, those aged 85 and older will double to 9.6 million by 2030, and then double again by 2050 (He et al., 2005). With the relationship between increasing age, chronic illness and disability, and growing long-term care needs well documented, consumer advocates, policymakers, and service providers are seeking new models of organizing and delivering long-term care that are attractive and affordable to older adults, particularly those who are poor or of modest means.

Assisted living facilities (ALFs) are one long-term care option that has received considerable attention. ALFs are a facility-based model of care that, like nursing homes, combines shelter and health-related and supportive services in a single package. The goal of assisted living is to provide a lower cost, less restrictive, and more home-like environment for frail and disabled seniors than can be found in a nursing home. While the number of ALFs across the country has rapidly expanded over the last decade, they have largely remained cost prohibitive for older people with limited incomes. A 2004 review by Health Policy Tracking Services found that the average cost of assisted living ranged from approximately $2,100 to $2,900 per month (Wright, 2004). Many states have secured waivers allowing Medicaid to cover ALF costs, nevertheless assisted living remains primarily private pay. In 2002, Medicaid helped pay for approximately 11% of assisted living residents in 41 states. In comparison, in 2000, 75% of residents paid with their own funds or with support from family members (Wright, 2004).

A less publicized strategy for providing lower-income seniors with access to needed long-term care support is emerging within the affordable housing market, particularly among publicly subsidized housing communities. This service-delivery model, referred to as “affordable housing plus services” (AHPS), is intended to integrate independent housing environments with health and supportive services so that low- and modest-income older adults are able to remain in the community. AHPS programs target senior residents of affordable, largely publicly subsidized housing properties who are growing frail and/or disabled as they age. The housing provider may offer a range of services directly or link the resident to services available in the surrounding community, such as transportation, housekeeping, personal care, a meals program, etc. The goal is to enable residents to “age in place” by connecting them to increasing amounts and types of services as needed, without requiring the resident to move to a higher level of care.

With support from several government agencies and a private foundation, the Institute for the Future of Aging Services (IFAS), the applied research arm of the American Association of Homes and Services for the Aging (AAHSA), has developed a multi-purpose initiative involving applied research, evaluation, and technical assistance to explore the promise of affordable housing plus services strategies. This article reports findings from one component of the initiative—the convening of four invitational workshops across the country attended by more than 230 policymakers and practitioners from 14 states brought together to share perspectives on:

• the goals and characteristics of AHPS programs and how they differ from one another;
• the perceived impact of AHPS programs on older adults and the housing communities in which they live;
• the regulatory and practice barriers believed to impede implementation; and
• the empirical information needed by providers and policymakers before they are likely to invest in wide-scale replication of AHPS strategies.

THE RATIONALE FOR AHPS PROGRAMS FOR OLDER ADULTS

More individuals aged 65 and older live in federally
subsidized housing than live in nursing homes (Wilden & Redfoot, 2002). The majority live in public housing, Section 202 Supportive Housing for the Elderly, Low-Income Housing Tax Credit, and Section 515 Rural Rental Housing properties. Unknown numbers of low-income seniors, whose incomes would qualify them for federally subsidized housing, also live in rental properties subsidized through state and municipal programs and in privately financed housing where they pay the full market rent without the benefit of a subsidy.

Significant numbers of these older residents are frail and/or disabled. Analysis of the 2002 American Community Survey found that subsidized older renters were twice as likely to be disabled, as were older homeowners (Redfoot & Kochera, 2004). More than half of subsidized older renters reported limitations in activities like walking and climbing stairs, in comparison to one-quarter of older homeowners. One-third of subsidized older renters reported difficulty with shopping or going to the doctor, twice the proportion of older homeowners reporting such difficulties. Disability levels among subsidized seniors housing residents also appear to be increasing. In a 1999 survey of Section 202 seniors housing managers, 22% of residents were reported to be frail, a considerable increase from the 13% reported frail in a similar 1988 survey (Heumann et al., 2001). Managers in the 1999 survey also reported that 30% of vacancies were due to residents transferring to a nursing home (Heumann et al., 2001).

Senior renters living in subsidized housing also are less likely than unsubsidized renters to live in properties that offer supportive services. According to analysis of AHEAD (The Study of Assets and Health Dynamics among the Oldest Old) Wave 2 survey data, 36% of subsidized senior housing properties offer transportation services, 26% offer group meals, about 12% offer housekeeping, and 6% offer personal care. In contrast, more than 75% of unsubsidized elderly renters live in multi-unit housing that offers group meals and transportation, 67% live in properties that offer housekeeping, and 43% offer personal care (Gibler, 2003).

Despite the high proportion of older residents with disabilities living in affordable housing, there are several reasons why connecting them to needed assistance is not straightforward. Discontinuities between the agencies responsible for housing and for long-term care are well documented (Pynoos et al., 2004; Golant, 2003; Wilden & Redfoot, 2002; Redfoot & Kochera, 2004; Lawler, 2001). For example, housing policy is largely about “bricks and mortar,” and, with few exceptions, housing funds cannot pay for services. Conversely, health and supportive services financing cannot be used to pay rents unless an individual is in a nursing home or, in some states, an assisted living facility. Regardless of whether the presence of supportive services in subsidized housing can delay transfer to a nursing home, diverting this transfer is rarely the goal of housing policy. The availability of affordable housing plus services is also typically disregarded in developing long-term care policy.

The residents of publicly subsidized housing also face practical barriers to obtaining needed support (Pynoos et al., 2004; Wilden & Redfoot, 2002; Lawler, 2001). They are less likely than older homeowners to have family members on which they can rely. Community providers may incorrectly believe the housing provider, not them, is responsible for service provision. Other tenants may pressure management to evict residents who look too old and frail. Families may face difficulty locating willing service providers. Housing managers worry about their liability if confused residents leave the stove on or disturb other residents. Most often, housing providers and community services agencies simply view their missions through different lenses and lack experience working together.

**THE IFAS WORKSHOPS**

Over the summer and fall of 2005, four workshops were convened to explore the benefits and limitations of AHPS programs and how their more
systematic evaluation and replication could be achieved. The first workshop, convened in Cleveland, Ohio, and hosted by the AM McGregor Home, was targeted primarily at the Cleveland metropolitan area. The other three workshops, hosted by AAHSA state affiliates in California, Rhode Island, and Georgia, were organized to facilitate statewide and regional participation. Participants came from the states of California, Washington, Oregon, Arizona, Massachusetts, Connecticut, Rhode Island, New Hampshire, Maine, Vermont, New York, Florida, and Georgia; and included: housing, health care, and aging services providers; federal and state policymakers; insurers; attorneys; investment bankers; researchers; and consumer advocates.

The following discussion highlights lessons learned from the workshops and the implications of AHPS for meeting some long-term care needs of lower-income seniors. The lessons reported in this article have been gleaned from an analysis of notes taken by IFAS and AAHSA staff attending each workshop. No attempt was made to achieve consensus among participants about any particular issue or topic. The conclusions drawn about the implications of these workshops for future policy and practice are those of the authors.

**WORKSHOP LESSONS**

The workshops confirmed that a rich array of AHPS arrangements for seniors was operating in every part of the country. Readers should note that the examples of programs highlighted at the workshops primarily involved the residents of publicly subsidized housing communities located in urban areas. Workshop conveners were not able to identify many AHPS models aimed at lower-income seniors who live in multi-unit, market-rate housing, or in subsidized housing in rural areas. Whether the lessons of the four workshops would apply to these settings remains to be explored.

The AHPS programs presented in the workshops were highly varied. For example, some low-cost strategies relied only on the efforts of individual housing managers reaching out to the community to recruit volunteers and solicit service providers, such as Title III meals programs or senior centers, to collocate on or near the property. In other programs, the housing manager or housing sponsor employed a part-time or full-time services coordinator, typically paid through a grant from the United States Department of Housing and Urban Development, to link residents to community services and advocate on their behalf. More complex strategies included dedicated staff within the housing property to organize and coordinate services, formally assess resident health and functioning, and prepare and monitor a formal care plan, as well as the capacity to actually deliver or contract for certain services, such as personal care, homemaking and transportation services, medication management, and 24-hour coverage to meet unscheduled needs. Through partnering with an adult day health program or a public health clinic, or by owning their own home health agency, some AHPS programs reported they were able to offer a level of service comparable to or exceeding what is available in licensed assisted living.

**Is it Effective?**

Workshop participants were quick to note that little hard evidence exists to demonstrate that AHPS programs are a practical and cost-effective alternative to assisted living or nursing homes. There are no data clearly demonstrating that AHPS programs can increase the duration of independent living, reduce transfers to assisted living facilities or nursing homes, or reduce the use of hospital emergency rooms and other expensive emergency health services. In fact, participants engaged in considerable debate over key questions about who should be served by AHPS programs, and under what circumstances. Some housing providers strongly believed in enabling residents to stay in their apartments for as long as they wished, regardless of their level of disability. Others believed that it was not feasible, or even appropriate, to maintain residents in independent living if they
had significant disabilities and needed services available 24 hours a day, seven days a week. Most problematic to these workshop attendees was residents with dementia or severe mental illness.

Notwithstanding such disagreements, the workshops highlighted important benefits that could be derived from wider replication and dissemination of AHPS strategies. For example:

• Most participants believed that AHPS is an attractive product, both from a consumer and policy perspective, because of its potential to help low- and modest-income seniors prolong the period of independent living and avoid higher and more expensive levels of care.

• Some AHPS programs were perceived to be very effective in supporting seniors even with significant disabilities, particularly if the housing community was able to co-locate with community health services, such as an adult day health care program, health clinic, or could participate in a “house call” program in which physicians and nurses treat and monitor residents in their own apartments.

• Delivering services to affordable housing settings was perceived to increase efficiency and lower service costs because consumers live close to one another, making coordinated scheduling and bulk purchasing of services more feasible.

• The marginal costs to housing providers and public agencies of implementing and operating AHPS programs was thought to be low when the program was embedded in a community with an extensive array of services already available.

• The burden of caring for aging residents could be shared or transferred from the housing provider to community services agencies that typically have greater expertise and capacity.

What Should an AHPS Program Look Like?

No one AHPS approach or model was endorsed as “right” for all situations. Some workshop participants believed the housing provider should also be the services provider, directly employing caregiving staff, as is typically seen in an assisted living facility model. Others stated the housing entity should stay out of direct service delivery and instead serve as a linking agent, helping residents identify and arrange for needed community services. Those favoring a linkage strategy over direct services provision seemed to believe most housing providers lacked the capacity to deliver direct services and/or they thought it was unnecessary since most services were already available in the surrounding community. For the most part, workshop discussions confirmed the view that a wide range of AHPS models could be effective, and that the implementation of particular AHPS approaches and practices should be guided by what the state’s regulatory environment would permit, the capacity of the individual housing provider, and the services richness of the community.

Participants also largely agreed that the prerequisite for any successful linkage model was the availability of a service coordinator to act as a liaison between the resident and the services system, helping identify needs and coordinate services.

Participants also emphasized that new models need to reflect, or be adaptable to, the changing characteristics of seniors seeking affordable housing. For example, some housing providers are seeing a growing frequency of residents experiencing significant mental health problems. They also note many new residents are more likely than in the past to move into the property with pre-existing disabilities. In fact, some housing providers believed that new residents were often seeking out senior housing because of the availability of services. If affordable housing providers are to successfully serve growing numbers of residents with specialized needs, they may need to establish relationships with a new community partner such as the local Alzheimer’s Association chapter or the community mental health clinic.

Not surprisingly, funding of AHPS programs received a lot of attention. Of surprise was the perception of many workshop participants that advocates for AHPS must look beyond traditional
public funding sources, particularly Medicaid and Section 202 Housing for the Elderly, in developing successful models. In every workshop, there was considerable agreement that the future would require mixed funding strategies on both the housing and services side if AHPS programs were to be sustainable. Concerns were raised about the lack of predictability of Medicaid funding levels from year to year, making it difficult for housing providers and residents to know who would be eligible for services and what could be covered. Some housing providers pointed out that the very purposes of the Medicaid Home and Community-Based waiver program—to target nursing-home-eligible individuals—conflicted with their philosophy and mission to serve healthy as well as moderately and significantly impaired residents. In addition, several housing providers observed that many of their residents might not be poor enough to qualify for Medicaid, yet lack the resources to purchase services out of their own pockets. They did not wish to let these people fall through the cracks. Going a step further, participants agreed that AHPS program models should be designed around resident needs, rather than allowing funding sources to drive what services are offered, who receives them, and how they are delivered.

In general, workshop participants thought AHPS models should provide residents access to a range of health and supportive services. Transportation services ranked high, although a number of attendees questioned the capacity of some housing providers to provide or arrange access to needed transportation. There was less agreement about incorporating primary health care and chronic care management into AHPS programs. Several workshop attendees believed these services were not feasible unless provided in conjunction with PACE, a federal/state-certified program that provides a full range of primary, acute, and long-term care services to a nursing-home-eligible population under a capitation arrangement with Medicare and Medicaid. Most PACE services are provided in an adult day health center. Some workshop attendees believed that participation in PACE is too complicated and risky for most independent housing providers because of its financial risk-sharing requirements. Furthermore, the majority of their residents were not even likely to be eligible for PACE. While a few subsidized housing providers have become certified PACE providers, a more typical arrangement is the co-location of a PACE adult day health center in or near a subsidized housing community so that eligible residents can participate if they so choose. Others noted a growing experience with “house-call” programs as a vehicle for bringing medical services and chronic-care management to residents. Under this model, physicians and nurse practitioners treat and manage the care of elderly persons with chronic illnesses in their own apartments. Such a model might be ideally suited to affordable housing settings where large numbers of older adults are clustered together.

**Prerequisites of a Successful Strategy**

Numerous AHPS programs for seniors have been implemented across the country, most frequently at the initiation of individual low-income housing sponsors and providers. More systemic efforts to develop and implement AHPS programs on a wide scale are largely lacking. One lesson grew out of all the workshops: the broader replication and dissemination of AHPS program strategies requires the bridging of the two very different worlds of affordable housing and health and aging services, each with its own culture, mission, rules, and regulations. For some attendees, the workshops were the first time that both sides of the “bridge” had even been in the same room. Usually, although not always, the impetus for building these bridges has come from organizations and individuals at the local level.

What did workshop attendees see as necessary ingredients for bridging these two worlds? One frequently mentioned requirement was the commitment of housing providers to a broader role. Many participants strongly believed that housing sponsors and property managers who are dedicated to helping
residents age in place must see themselves as more than property managers collecting rent and maintaining the physical plant. For example, they must ensure a mechanism is available to residents to help identify needed services and arrange and coordinate them when necessary. They must be willing to make financial and human resource investments to help fill service gaps in the community. They must be flexible enough to allow residents to refuse services and even to make bad choices. Learning how to support residents to take some measure of risk was perceived as an important part of maintaining an independent living environment.

Every model highlighted in the workshops was also built around an extensive network of community partners. Building AHPS programs that capitalize on existing community resources was perceived to be a highly cost-effective strategy. A number of workshop members questioned the capacity of their fellow housing providers to leverage community resources or to even understand their availability. There was, however, general agreement that the ability of a housing provider to negotiate effective linkages with aging and health services agencies, volunteer and charitable organizations, businesses, community leaders, elected officials, and relevant public agencies was the most important attribute of a successful program.

Workshop discussions also emphasized the importance of persistence and creativity. The architects of successful AHPS programs were viewed as “proactive” organizations who knew how to “work the system” and who sought out new community partners, networked with policy and practice stakeholders at the state and community level, stayed on top of new funding opportunities, and worked around policy and regulatory barriers. Rather than getting blocked by a regulatory restriction, successful providers find ways to restructure their programs to comply with regulatory requirements, obtain waivers of troublesome regulations, or persuade regulators to remove or alter the offending regulation.

Finally, one of the workshop sponsors strongly emphasized the need for a catalyst or champion to bring the AHPS concept to fruition. This observer pointed out that an organization or individual must take ownership of the goal, identify and convene stakeholders, facilitate information gathering, mobilize resources, and coordinate ongoing activities. Without a catalyst, even widely supported and well-intended efforts to launch AHPS programs may fall through the cracks. Who the “owner” or “catalyst” will be is likely to vary depending on the particular state and/or community in which the program is located, the leadership capacity of individuals and organizations in that community, and the origin of program goals.

Obstacles to Implementation and Expansion

The workshops demonstrated that linking affordable housing for seniors and services is doable and is perceived to be beneficial to senior residents. Nonetheless, participants also identified a variety of obstacles to achieving wider implementation.

Licensing/Regulation: The regulatory and policy frameworks governing publicly subsidized housing and long-term care programs have developed independently of one another, at both the federal and state level, to serve very different goals. Various workshop participants observed that regulators frequently fail to understand how government regulation negatively impacts their ability to serve an increasingly aging resident base. For example, fair-housing laws were identified as a source of widespread confusion. Some attendees believed that an unintended consequence of fair-housing laws was to prohibit them from asking prospective and current residents about their health status and disabling conditions, even though such information is considered important in planning to meet health and supportive service needs. Without this type of information, providers are not able to respond to changing needs over time or to monitor their own performance in meeting changing needs. The standards for evicting residents were also perceived as ambiguous, particu-
larly in cases where a resident’s cognitive impairment restricted his or her decision-making ability. Other regulatory concerns included restrictions against paying for health services with rent proceeds in properties financed through low-income housing tax credits, prohibitions against giving priority to disabled seniors in establishing admissions policies, state laws governing the number of residents who can receive services before the housing provider must be licensed, and rules that appeared to bar the housing provider from engaging in any direct service delivery.

Several housing providers attending the workshops expressed strong opposition to becoming licensed caregiving facilities. Assisted living regulations were identified as an example of the type of regulatory framework they wished to avoid. In their view, state regulations governing assisted living typically required providers to offer a highly structured service package to a narrowly defined population. This approach seemed to be at odds with the mission of independent housing providers to serve a diverse population, some of whom are healthy with little or no service needs, and others who have significant disabilities and many service needs.

**Liability:** In each workshop, some housing providers raised concerns about their potential liability should a resident receiving services through an AHPS program experience an adverse event. This was true even though attendees failed to identify specific situations where a resident receiving services successfully sued the housing owner. Obtaining insurance against potential lawsuits was viewed as difficult and costly. A risk manager pointed out that the insurance industry has virtually no experience underwriting policies for AHPS programs. He urged providers to work with the industry to create actuarially sound data from which fair premiums could be calculated, warning that, otherwise, a nursing home model would be used that could prove unaffordable. Some workshop attendees also suggested that resident access to supportive services could help allay a provider’s liability concerns by increasing resident safety and preventing property damage and unsanitary conditions.

A related issue was balancing liability concerns with consumer choice. In AHPS programs, the resident has the right to reject a service. Housing providers worried about their liability if the health or safety of residents was compromised as a result of poor resident choices. Several housing providers also told of being caught between a resident’s desire to refuse services and the expectations of his or her family that the resident’s safety be assured.

**Silo Mentality:** Workshop attendees repeatedly expressed their frustration with a policy and budget process at all levels of government that insulates housing and aging services providers and policymakers from understanding how they impact one another. Workshop attendees placed a high priority on convincing stakeholders from both worlds to get involved in each other’s business. As one participant observed, “if you don’t show up at important forums where these issues are debated, the outcomes are not likely to meet your needs.”

**Funding:** Funding for low-income housing and long-term care supports was widely viewed as inadequate to meet current needs. Traditional sources of funding for subsidized housing, such as the Section 202 program, has been level funded for the past few years. With rising development costs, this translates into fewer actual new units each year. A theme emerging from all the workshops was the importance of securing a broad funding base involving multiple sources if future AHPS programs were to be financially sustainable.

**Limited Housing Provider Commitment and Capacity:** A variety of stakeholders at the workshops believed many of their fellow affordable housing providers see themselves as responsible only for traditional housing functions—leasing, collecting rents, maintaining the physical plant, etc. They do not see creating a supportive housing environment for aging residents as a part of their role. While senior housing communities increasingly employ services coordinators to help residents, several participants...
knew of housing managers who refused to take responsibility for supporting the coordinator’s role or helping their residents to age in place. Two key impediments to the growth of AHPS programs were identified across all the workshops: (1) the limited knowledge of many affordable housing sponsors and managers about the health and supportive services resources available in their community; and (2) the limited skills and training of many housing providers in building partnerships with community organizations.

**Resident Opposition:** Residents themselves were also identified as obstacles to AHPS programs. Some residents oppose keeping frail and/or disabled residents in their community because they do not want to be reminded of their own vulnerability as they age. There may even be a tipping point when the property begins to look too much like a nursing home, an environment they wish to avoid. Providers also face challenges in convincing some residents to accept services. Residents may be in denial that their health is declining or they may fear eviction if they admit to needing support to live safely on their own. Overcoming this challenge requires sustained involvement of residents in planning the AHPS program, as well as considerable resident education.

**Affordability:** Keeping supportive services affordable to residents and to the housing provider was regarded as an important challenge to the more widespread replication of AHPS. At one of the workshops, a housing provider explained her strategy for helping to keep service costs low. The housing manager worked with a home health care agency to break down the increments of service provided to residents to 15-minute intervals instead of the typical two- or four-hour blocks of time. Purchasing only the amount of services needed reduced resident out-of-pocket costs. Because multiple residents in the building were receiving home health services, this strategy also was economically feasible for the home health agency.

**Nursing Home Influence:** Participants had differing thoughts on the impact of nursing homes on the expansion of AHPS. Some viewed nursing homes as competitors who would not allow AHPS programs to expand for fear of losing business. Others thought nursing homes could be valuable partners, willing to collaborate with housing providers to better manage their beds, thus keeping less frail seniors out of their facility and their acuity levels high.

**Suggested Next Steps**

A number of next steps were suggested for moving an AHPS agenda forward:

**Resident and Family Education Programs:** Residents and their families are often not aware of the service opportunities in their community. As one participant put it, many residents see services as a light switch—either on or off. This participant thought the concept of a “dimmer switch” was more appropriate with residents and families learning how to seek services, as they are needed, rather than waiting for a crisis to overtake them. Services coordinators, AAHSA state affiliates, Area Agencies on Aging, American Association of Retired Persons (AARP) chapters, the Red Cross, and local Alzheimer’s Association chapters could all be venues for developing and disseminating awareness and educational materials describing community service resources for residents and their families and how to use them.

**Provider Education and Technical Assistance:** Participants across the workshops stressed the importance of educating affordable housing providers about: 1) the service needs of aging residents; 2) available community resources and how to access them; 3) the characteristics of promising AHPS strategies and programs and how they can be implemented; and 4) ways of addressing perceived regulatory barriers. Many participants recommended that AAHSA, its state affiliates, other national and state housing associations, and aging agencies be more proactive in promoting AHPS in national and state meetings and workshops. Some participants suggested that AAHSA develop and operate a clearinghouse for its members to provide technical
National Awareness Campaign: There was significant support for raising the visibility of AHPS as a potential vehicle for meeting the long-term care needs of at least some low- and modest-income seniors. Participants spoke of subsidized elderly housing residents as being “off the radar screen” of advocates and policy officials seeking long-term care solutions. Some observed that while funding has significantly grown for home- and community-based services over the past several decades, little is known about the extent to which seniors in subsidized housing have benefited. A suggestion was to move AHPS onto the agenda of the Conference of Mayors, since municipalities are now dealing with the problem of poor seniors who are not able to maintain independent living. It also was noted that advocates for the homeless have been very effective in educating government at all levels about the importance of linking housing options with services to sustain independent living. Affordable housing providers might consider developing a platform based on a similar model for aging seniors in affordable housing.

Replication of Workshops in Rural Areas: All workshops were held in urban areas, primarily for an urban or suburban audience. The characteristics of AHPS that work in rural communities may be different from those that were discussed. Holding one or more workshops in rural areas was suggested, possibly in partnership with the United States Department of Agriculture.

Applied Research and Evaluation: There was significant agreement that the evidence base needs to be enhanced before policymakers and providers are likely to support widespread replication and funding. Accurate estimates are lacking of the number of elderly individuals living in publicly subsidized and privately financed affordable housing arrangements. Even less information is available on their characteristics, including their health and functional status, the types and amounts of services they use, and how these services are obtained and financed. There is also a dearth of information on how long individuals remain in independent housing and where they relocate, either voluntarily or involuntarily. Such baseline data are necessary for housing and services providers and policymakers to understand unmet needs and the size of the potential market. Workshop participants also agreed that aging services and housing providers and policymakers need information that documents the characteristics of various AHPS strategies and how they actually work, their impact on residents and on the housing communities in which they live, and on public and private costs. Equally important, the efficacy of AHPS programs needs to be compared with strategies such as assisted living, PACE, and nursing home models.

Conclusion

For many stakeholders, the AHPS workshops marked the first time that representatives from both affordable housing and aging services came together to explore common interests. Participants clearly demonstrated that committed individuals, working at the community level, can overcome fragmented funding and bureaucratic and policy resistance to implement AHPS programs in all parts of the country, often on a shoestring budget. The workshops also helped to generate renewed interest in the potential of AHPS programs to contribute lower-cost long-term care solutions for some poor and near-poor seniors. More systematic and widespread replication and dissemination of AHPS programs will require several next steps. It will require greater numbers of affordable housing providers to commit to meeting the service needs of an aging resident base as part of their mission. The leadership of national and state housing organizations, as expressed through policy statements, annual conferences, workshops and seminars, and publications, is essential in this regard. It will also require concrete demonstrations that AHPS programs can, in fact, deliver on their potential to meet some of the
nation’s present and future long-term care needs. To this end, partnerships should be facilitated between funders, researchers, and the many housing providers around the country who can act as “natural laboratories” so that AHPS strategies can be evaluated and their impact determined. Governmental and private funders should also be encouraged to support the development, implementation, and evaluation of new models to help meet future long-term care needs. Greater widespread replication and dissemination will also require nurturing the capacity of affordable housing providers and aging services agencies to develop and implement AHPS programs. Less experienced affordable housing providers committed to aging in place should be matched to ones with greater experience so that they can learn from each other. AHPS practices need to be documented, including how they work and under what conditions, and made widely accessible. Providers involved in AHPS should be networked with one another to identify and resolve problems and share promising practices. It is time to take the next steps.

ENDNOTES

1 The Section 202 program is the only federal financing source specifically for seniors housing. Today’s Section 202 program provides not-for-profit entities with interest-free capital advances to help finance construction and rental assistance to subsidize resident rents. Qualified tenants generally must be at least 62 years old and have incomes less than 50% of the area median income. Low-income housing tax credits provide equity capital to help finance the development of affordable housing. The credits are awarded competitively to housing project sponsors who then sell the credits to investors to offset their federal tax liability. Projects are required to target a minimum number of units to residents with incomes less than 50% or 60% of the area median income. The Section 515 program provides direct loans to finance affordable rental housing in rural areas for low-income families, elderly people, and persons with disabilities. Properties financed by all these programs may also have Section 8 or similar rental assistance attached to them. Section 8 assistance pays landlords the difference between 30% of the household income and an established fair market rent for the area. Public housing is a federally funded program administered by local housing authorities to provide rental housing for low-income families, the elderly, and persons with disabilities. In general, residents pay 30% of their monthly income in rent. Public housing is the largest federal housing assistance program for the elderly. Seniors live in both elderly designated buildings and family properties.

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Toward a Framework for Monitoring the Quality of Care in Residential Care for the Elderly

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ABSTRACT

This article proposes an adaptation of the Avedis Donabedian structure-process-outcome theory as a framework for designing and more effectively using the administrative data collected in the licensing and regulation of residential care/assisted living facilities. Such information can meet the needs of various stakeholders, including providers, state regulatory agencies, consumers, and researchers in the evaluation of quality of care. Structural components are represented by facility, staff, and resident characteristics. Process components include the types of services available and safety and injury prevention. Possible outcome measures include deficiencies and complaints, changes of resident health status and quality indicators, and discharge and medical event data. Emphasis is on measures available in administrative records, but other measures can be incorporated. A quality of care framework may be an incentive for the development and maintenance of complete and accurate state administrative records.
TOWARD A FRAMEWORK FOR MONITORING THE QUALITY OF CARE IN RESIDENTIAL CARE FOR THE ELDERLY

The quality of care (QoC) provided in licensed housing such as assisted living (AL) and residential care (RC) facilities for the elderly, is important to consumers, professionals, advocates, and policymakers. State regulatory agencies typically orient licensing and monitoring efforts toward structural elements, such as physical plant and staffing requirements, and process elements such as service and safety requirements. These approaches tend to lack an evaluation of resident outcomes. Governmental reports, congressional hearings, published literature, as well as media reports, have highlighted quality of care problems within this industry (Assisted Living Quality Initiative, 1998; Assisted Living Working Group, 2003; Institute of Medicine, 2001; U.S. General Accounting Office [GAO], 1999).

This article proposes an adaptation of Avedis Donabedian’s Quality of Care model of structure, process, and outcome (Donabedian, 1966, 1988, 2003) as a framework for designing and more effectively using the administrative data collected in the licensing and regulation of RC/AL facilities. While domains and measures in this framework have some commonality with those applied to hospice and nursing home care, there are also unique elements associated with the social model of care. Both common and unique dimensions are discussed.

BACKGROUND

Residential Care/Assisted Living (RC/AL)

RC/AL Facilities

Services available in RC/AL facilities generally include room and board with provisions for assistance with activities of daily living such as bathing, dressing, eating, grooming, and continence. In addition, assistance with transportation, housekeeping, laundry, obtaining medical and social services, and the supervision of medications and other medical needs are often offered.

There is no nationally accepted definition of RC/AL facilities, as states, which are responsible for regulating the supportive housing industry, have each developed their own definitions and guidelines. In general, AL refers to housing for the elderly with supportive services in a homelike environment and in which operational values include maximizing functional capability, autonomy, and utilizing the environment as an aid for independence and socialization (Lewin-VHI, Inc., 1996). Since the early 1990s, state regulations and facilities have increasingly used AL and residential care terms interchangeably (Mollica et al., 2005).

Another definitional issue affecting RC/AL facilities is that of distinguishing them from nursing homes. The RC/AL defines itself as a social model of care and with a focus on maintaining resident autonomy, independence, and dignity. This is reflected in physical design, approaches to care provision, and a wide range in the level of care needs of residents. RC/AL facilities often serve residents who may otherwise be eligible for nursing home care. In spite of the overlaps with nursing homes, RC/AL facilities are licensed differently than nursing homes in all states, with far less regulation and no federal oversight (Mollica, 2002).

For purposes of this paper and the model presented, we have assumed that RC/AL facilities and nursing homes will continue to be separately licensed and regulated. We also recognize that RC/AL facilities are providing long-term care to frail and dependent elderly with characteristics similar to residents of nursing homes, and that the number of such residents is expected to grow. Consistent with these assumptions, we expect that the quality of care problems faced by nursing homes may also be seen in RC/AL facilities. The proposed quality of care framework is specific to RC/AL facilities. Some ele-
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Resident's Quality Concerns

The prevalence of physical and cognitive frailty among RC/AL residents, combined with often lower staff-to-resident ratios and lower training standards than found in nursing homes, are among the concerns about the safety of residents. Congressional hearings, government reports, research publications, and media reports around the country have drawn attention to actual and possible QoC related problems. Twenty-seven percent of the facilities reviewed had been cited for five or more QoC or consumer protection deficiencies during the 1996-1997 time period (US GAO, 1999). The Institute of Medicine's Committee to Improving Quality in Long-Term Care (2001) raised questions about the effectiveness of state regulation and licensure in promoting quality in residential care and recommended research to examine the effectiveness of survey and enforcement activities related to QoC, quality of life, staffing, and other measures.

States are responsible for the licensing and oversight of RC/AL facilities. While there is often commonality in the areas given regulatory oversight (Carlson, 2005; Mollica et al., 2005), there are no federal or industry-based standardized reporting guidelines for RC/AL. One consequence of this is that state quality assurance and oversight data systems are thought to vary in both the data collected and frequency of collection. The extent of this variability has not been documented in published studies of state regulatory and quality assurance data systems. Surveys of state licensing officials have focused on regulations and deficiencies, rather than data systems or quality assurance processes. One example is a survey by the National Academy for State Health Policy Research (Mollica, 2002) asking state officials to rank deficiencies and complaints by frequency.

The US GAO (1999) study of the RC/AL QoC and safety provides an example of using available inspection records and reports from state oversight agencies. This study included 753 facilities across four states (California, Florida, Ohio, and Oregon). The GAO reported that RC/AL facilities do not always give prospective consumers adequate information as to whether, for how long, and under what circumstances a facility could meet their needs. They also found that information provided to consumers was often vague, incomplete, or misleading, and that 27% of the facilities reviewed had been cited for five or more QoC or consumer protection deficiencies during 1996 and 1997. Four problems commonly associated with RC/AL facilities were listed: 1) providing poor care to residents such as inadequate medical attention following an accident; 2) having...
insufficient, unqualified, and untrained staff, exacerbated by high staff turnover and low pay for direct care staff; 3) not providing residents with appropriate medications and not storing medications properly; and 4) not following admission and discharge policies required by state regulations.

Beyond studies such as those noted above, the extent of variation among states in administrative data systems has not been expressly studied. Nevertheless, there is a concern among all stakeholders that further research and development in this area remains important. For example, after a hearing held by the United States Senate Special Committee on Aging, the Assisted Living Working Group was formed in 2001 to develop recommendations designed to ensure consistent quality in facilities across the country. This working group (2003), in their subsequent report to the senate, identified two primary issues related to accountability and oversight: 1) the need to develop regulatory guidelines for states; and 2) the need to establish a mechanism to develop outcome measures and quality improvement methods that can be integrated with traditional systems to provide state-of-the-art measurement systems to ensure consumer safety and satisfaction. We are proposing an adaptation of the Donabedian QoC framework as a conceptual basis for such development.

**DONABEDIAN: A QUALITY OF CARE THEORY**

Avedis Donabedian’s (1966) structure-process-outcome framework has been used for four decades to conceptually identify the elements appropriate for the evaluation of health care quality. Donabedian (1988) described these three components as linked because “good structure increases the likelihood of good process, and good process increases the likelihood of a good outcome.” This model has proven to be adaptable to the evaluation of quality across a variety of health care settings. Among these are hospice programs (Richie, 1987); public health systems (Handler et al., 2001); nursing homes (Harrington et al., 2003) and health outcomes (Mitchell et al., 1998).

The conceptual simplicity of Donabedian’s framework is one of its strengths, but there has not been much standardization of the empirical measures used to implement the framework (Donabedian, 2003). Structure is typically easiest to assess, as this relies on measurements such as counting and checking if desired features are present. Structure includes the professional and organizational resources associated with the provision of care (e.g., physical plant, staffing, and clientele characteristics). Process refers to activities occurring among providers, patients, caregivers, and family members in the course of delivering care such as types of services provided, provisions for safety, and staffing levels. Process has proven to be difficult to measure directly, but measurement can be aided by incorporating criteria that identify the expected standards of care. Outcomes are the desired states expected to result from care processes. Examples include reductions in morbidity or mortality, maintenance of function, and improvement of quality of life. Service use and adverse events can be readily measured in administrative data. Changes in health or functional status or resident satisfaction are reflected in physician reports and/or health care utilization reports. Such documentation likely is (or could be) required by states. Most challenging for outcomes evaluation is whether it is necessary or practical to have information that expressly links the chain of structure and process that produced the outcomes defining “optimal” care. Measures for the various dimensions are described shortly.

**CONCEPTUAL MODEL FOR EVALUATING QUALITY OF CARE IN RC/AL FACILITIES**

Exhibit 1 shows a conceptual model for evaluating QoC in RC/AL facilities. It incorporates the Donabedian structure-process-outcome framework,
Exhibit 1: Conceptual model for evaluating quality of care in RC/AL facilities

Facility Characteristics
- Location
- Licensure
- Size
- Occupancy Rates
- % of Private Pay Residents
- Owner & Ownership Type
- Physical Plant

Staff Characteristics
- Staff Training & Credentials
- Availability of Nurses
- Staffing Levels

Resident Characteristics
- Sociodemographic Factors
- Resident Dependency Levels

Process
- Types of Services
- Staff Turnover
- Safety & Injury Prevention
- Care of Residents
- Utilization of Community Resources

Outcome
- Complaints
- Deficiencies/Enforcement Actions
- Changes in Resident Health Status/Quality Indicators
- Discharge/Medical Event Data
- Changes in Resident Cognition/Behavior
- Quality of Life Indicators/Resident/Family Satisfaction

but it has been adapted by the authors to operationalize these concepts with components specific to RC/AL care. We have given priority to information available in administrative records maintained by state regulatory agencies. The measures or indicators shown are illustrative and could be expanded or modified appropriate to available information. The rationale for each component of the model is
described below. Where certain components end and others begin may sometimes seem arbitrary. Later empirical work will be needed to explore the predictive and time-ordered relationships between measures and domains. As such work progresses, the model could be simplified and some measures could be moved from one domain or another.

**Structure**

Structural characteristics provide the organizational context for facility operations. Structural components are divided into three interdependent areas: facility characteristics (including location, licensure, size, occupancy rates, percentage of private pay versus Medicaid or SSI/SSP residents, owner and ownership type, and the physical plant), staff characteristics (including staff training and credentials, the availability of a nurse, and staffing levels), and resident characteristics (including sociodemographic factors, including income and Medicaid eligibility, and resident dependency levels).

**Facility Characteristics**

Meeting individual needs and preferences is an important part of quality long-term care. Many states even include reference to these needs in their RC/AL philosophy statements (Mollica et al., 2005). The extent to which a setting may or may not meet these types of needs can greatly depend on the structural characteristics of the facility.

**Location.** Consumer selection of a RC/AL facility is often based upon whether the facility is located near one’s home or the homes of relatives and friends; or proximity to services (e.g., physicians, hospitals). Location may also affect resources available to the facility such as the ability to attract private pay residents, ability to recruit and retain quality staff, and the level of competition from other RC/ALs or community care services. Facility location can be measured by recording addresses of facilities.

**Licensure.** Some states have single-level systems where only one type of RC/AL facility is licensed and others have licenses or waivers specific to different levels of care services (Carlson, 2005; Mollica et al., 2005). Hawes and colleagues (1995), in a survey of assisted living facilities, found that licensure status was associated with a facility’s ability to accept and/or retain clients who need increasing levels of care and other QoC issues. Information regarding licensure applications and levels of licensure may be obtained from state agencies.

**Size.** RC/AL facilities range in size from small homes with three to four residents, to those with more than 100 beds. Larger facilities may be more difficult to manage because of the many residents and personnel that need to be overseen, and smaller facilities may have fewer resources. Size can also be a preference of a resident, with larger facilities offering more amenities and smaller facilities being more attentive to personal preferences. The relationship of size and QoC in RC/AL is not known and may be related to other variables (e.g., the monthly rent and resident mix). The state license typically includes the number of beds licensed by the facility.

**Occupancy Rates.** Many factors may affect occupancy, but a community reputation for providing good care may improve occupancy rates. Whether a facility has multiple vacancies or several potential residents on a waiting list could provide some insight on QoC issues. Extended low occupancy can threaten the operational viability of the facility or provide an incentive to admit or retain residents that may be inappropriate given the facility’s capabilities. High occupancy rates, on the other hand, may decrease the amount of choices available to consumers or contribute to price increases. Occupancy rates can be calculated from state licensing records, facility records, and ombudsman programs. Presently, in most states these data sources provide “snapshots” compiled once annually or less often, rather than being continuous or in real time.

**Owner and Ownership Type.** Ownership, particularly the distinction between single facility and chain ownership, and between for-profit and not-for-profit tax status, have been commonly used in studies of
nursing home quality of care. The rationale is that one type of ownership may influence operational practices that are not readily measured. For example, owners of small or privately held facilities may have direct control over operational decisions. Ownership decisions in large and/or chain operations also affect QoC, but in a context where these decisions may be disconnected from facility level management. On the other hand, larger operations may have access to better internal quality assurance systems, training, and financial resources. A facility's tax status may also be associated with decisions regarding QoC issues such as staffing levels, especially if overhead expenses (e.g., stockholder dividends and property taxes) compete with operational resources. Further, not-for-profit facilities may have access to endowments or fundraising that help offset revenue shortfalls. Direct measures of financial practices, such as financial records and fundraising practices, may be available in some states. The owner of the facility and ownership type can be found on the facility license or application for licensure.

Physical Plant. The goals of a safe and secure environment include protection from fire, prevention of injury, and provisions for special assistance such as accessibility for those with disability and dementia (Sloane et al., 2001). RC/AL environmental design experts have made recommendations and even defined standards for such things as how to reduce the risk of injury due to fire by provisions such as multiple exits, the use of flame retardant materials, and the installation of automatic sprinkler systems (Regnier et al., 1991). Whether or not a facility has complied with both codes and recommendations from experts is an important aspect for evaluating if the facility is a safe environment for residents. State regulatory, fire inspection, and building records provide information regarding the compliance of the facility in this area.

Staffing Characteristics

Staff Training and Credentials. The training of RC/AL staff (e.g., the education and experience of those in charge of a facility) is one important staffing characteristic. Direct care staff in RC/AL facilities can, more often than not, be hired without any training or experience, and there is wide variation in the staff training requirements and stringency of the requirements among the states (Assisted Living Federation of America, 2005; Carlson, 2005; Mollica et al., 2005). Differences in the levels of direct care staff training may be an opportune way to distinguish between facilities. The credentials of owners, administrators, and other personnel are also noteworthy. Staff training and experience information should be available from facility personnel and training records. Some states require that training be reported to regulatory agencies. Staff training documentation can be complicated in situations where a facility contracts with an outside vendor such as home health care or hospice services. Such arrangements would be noted in training or in other measures related to staffing (e.g., the availability of a nurse).

Availability of a Nurse. Nurses and nursing oversight is not mandatory in all RC/AL facilities. This is in keeping with the philosophy that licensed housing is a social model of care; however, Hawes and Phillips (2000), in their study of assisted living, found that residents in facilities with a full-time nurse involved in direct resident care were half as likely to move to a nursing home as residents in facilities with lower levels of nursing. This finding remained even after adjusting for other staffing and services variables. Carlson (2005) reported that 26 states require RC/AL facilities to employ or contract with nurses. In some instances, nurses are required to conduct assessments and review care plans and in others, to conduct medication reviews. Facility staff records and personnel records should indicate the presence of nursing staff. Comparison of advertised services to actual services may also be useful.

Staffing Levels. Ultimately, QoC depends on the ability and availability of staff to provide appropriate care to residents. The adequacy of staffing levels (often measured as a ratio of number of staff to num-
ber of residents) is dependent to some degree on the levels of need of residents. These can change daily and even throughout the day. Requirements for the number of staff who must be available for direct care is variable among states, usually broadly defined without specific ratios. Often facilities are given discretion in determining the number of staff necessary (Assisted Living Working Group, 2003; Carlson, 2005; Mollica et al., 2005). The US GAO (1999) identified insufficient and undertrained staff, low pay rates, and high staff turnover as major contributions to QoC problems in RC/AL. Other studies have linked staffing issues to providing necessary care to residents in RC/AL (Cartwright & Kayser-Jones, 2003; Konetzka et al., 2005; Zimmerman et al., 2003). Facility staffing records, payroll records, and personnel reports may provide this information. In some facilities it may be necessary to verify or audit these records as an incentive to assure accuracy.

Resident Characteristics

Sociodemographic Factors. Sociodemographic factors such as age, sex, and ethnicity may affect preferences in facility selection among consumers. In long-term care, persons over the age of 85 may have more dependencies and higher level of care needs (Ullmann, 1990). Correspondingly, facilities with higher proportions of the very old might be expected to increase staffing and to offer higher levels of care. Resident records should be available on site that can provide age and other information.

Resident Dependency Levels. The numbers of residents needing certain levels of care (resident case-mix) may affect the ability of the facility to provide appropriate levels of care. Should the proportion of residents become increasingly physically and cognitively impaired, one might expect to see an increase in staffing and the levels of assistance available. Resident records, specifically medical records and physician reports, may provide some of this information, although there may be little standardization of measures. There is also the issue that dependency data may not be updated with changes in conditions.

Process

There are a number of processes conducted in the RC/AL setting. Some of these are specific to hands-on care, such as assistance with bathing and supervising transfers or ambulation help to ensure safety and prevent injuries. These activities may be charted, but resources are not available to directly and systematically observe this assistance. Processes such as staff turnover can be compiled from payroll and other records. The utilization of some community resources (e.g., use of home health care) may be well documented, whereas use of community senior centers and other social/recreational services may not be as well documented, especially if there are no payments involved for these resources. Observational data are expensive to collect. It is time-limited and subject to a “Hawthorn Effect,” with observation influencing behavior. Because of these challenges, process measurement has often relied on charted or claims data. The quality of practice is assessed by comparisons of services, staffing, and other practices against norms and standards (these may be codified in licensure requirements). Reliability and completeness of the charted information is a key factor in these comparisons.

Types of Services

Services typically available in RC/AL facilities include room and board with provisions for assistance with activities of daily living such as bathing, dressing, eating, grooming, and continence. Additionally, assistance with transportation, planned social activities, housekeeping, laundry, obtaining medical and social services, and the supervision of medications and other medical needs are often available. RC/AL facilities vary in the type of services they provide and in whether they are able/willing to offer additional services should residents become more disabled and require more care. The extent to which a facility can provide higher levels of services impacts the residents’ ability to age in place. Lack of consumer information regarding available services in RC/AL has been noted as a quality problem (US
GAO, 1999). Information regarding the types of services offered may be obtained from the facility’s informational brochures or marketing materials, as well as in the application for licensure. Whether or not a facility actually provides the services necessary, and whether there are special circumstances that may limit access to these services, are more complicated matters that may require further investigation.

**Staff Turnover**

The quality and continuity of care provided to persons in RC/AL facilities may be compromised if turnover is frequent among staff (Stearns & Morgan, 2001). The ability of a facility to retain good staff is an important aspect of facility process. High turnover of direct care staff may be indicative of poor staff morale, low wages, poor working conditions, or a competitive job market. Regardless of the cause, turnover affects operating efficiency, staff expertise, and very likely QoC. Having insufficient, unqualified, and untrained staff, exacerbated by high staff turnover and low pay for direct care staff, is considered an important aspect of QoC problems in RC/AL facilities (US GAO, 1999). Monitoring staffing records and personnel records may provide this information. These records are often mandated to be maintained and reviewed at the time of a licensing survey. Staff interviews may prove useful, too, in determining staff morale and work satisfaction. While these may seem to be cost-prohibitive, it should be noted that often surveyors would be speaking to staff and could conduct short interviews. The collection of mail questionnaires can lower the cost of obtaining this information.

**Safety and Injury Prevention**

Falls prevention is an example of a safety orientation in facility operations. Falls present a serious health risk to older persons, as one out of every three persons over the age of 65 falls. In 2003, more than 1.8 million seniors over the age of 65 were treated in emergency departments for fall-related injuries, and more than 421,000 were hospitalized (Centers for Disease Control and Prevention, 2005). Defining an incidence rate or other standard to define an acceptable injury rate (or comparison among facilities) is beyond the scope of this paper, but such standardization can be facilitated once information is regularly and uniformly reported.

Another safety example is that of injuries related to emergencies such as fire and disaster. Emergency and disaster planning is usually required by regulation, but the ability of the staff to implement policies and procedures in the event of an emergency may take more practice and training than is usually given. Media reports of fires claiming multiple lives and injuring many residents living in supportive housing bring attention to fire safety in all long-term care settings. Facility reports of unusual incidents, injury, and death are potential data sources to examine resident safety in RC/AL settings. Another data source is the state and national fire department information reporting systems. Variations among state regulations and licensing requirements may influence adverse safety incident rates. This may create a natural experiment for comparisons within or between states across time. Standardization of the information reported and the reliability of this reporting will be necessary for any such comparisons.

**Care of Residents**

Providing good quality care to elderly persons requires technical knowledge and experience, as well as respect for and protection of the personal rights of the residents. Certain services provided to residents, such as correct medication administration and appropriate implementation of the plan of care, are highly visible in evaluation. These are sometimes measured through observation, but most common is a review of procedure manuals, treatment or drug distribution logs, and staff training requirements. Documenting whether care is provided in a manner that assures personal rights (e.g., promoting dignity and choice) is more difficult. Perceptions can be measured through surveys, but generally documentation is done through attention to resident
agreements and the criteria within them specific to the levels of care and assistance that will be supported by the facility (including those that require a resident to move or move into higher levels of care). Resident complaints about the interpretation of these agreements is another data source. Observational data or resident satisfaction surveys are costly ways to document facility practice in this area.

Utilization of Community Resources

RC/AL facilities have varying access to a variety of community resources to improve QoC for residents. Among these are senior centers, adult day care, health centers, home health care, and hospice programs. Each of these services provides opportunities for residents to get exercise and social stimulation, as well as access to support for needs not served by the RC/AL facility itself. For residents eligible for Medicaid (or those willing to pay out of pocket), case management is usually available. Facilities may state that they provide or facilitate access to community resources, but documentation of participation may be more difficult to obtain. Facility and resident records may contain at least some of this information.

Outcome

Outcome components include a variety of dimensions. Among these are: deficiencies; complaints; enforcement actions; changes of resident health status and quality indicators; discharge and medical event data; changes in resident cognition and behavior; quality of life indicators; and resident and family satisfaction. In assessing the outcome of RC/AL facilities, it is important to distinguish those that may be attributable to encounters with the facility and staff versus those that may be more affected by the quality of their chronic disease and health management responsibilities (that may be external to the RC/AL). Among residents with chronic and progressive diseases, a “cure” is not expected as an outcome, but avoiding preventable events like emergency room use, hospitalizations, and relocations to nursing homes is a reasonable expectation. Residents’ and their family members’ satisfaction with the quality of the RC/AL care received is another expectation.

Complaints

Residents, family members, health care providers, staff, or other persons may file complaints regarding a facility. Often, complaints are made to the state regulatory agency or the local ombudsman program. Complaints may give some indication of QoC. If complaints are substantiated, they may be reclassified into deficiencies. The pattern and number of complaints may provide some insight into consumer satisfaction concerns. Complaints may be tracked by state licensing records. Local ombudsman offices may also provide facility complaints information.

Deficiencies/Enforcement Actions

State regulatory agencies are responsible for facility inspections. When a standard or regulation is not followed, a deficiency may be given to the facility. State surveyors generally follow established guidelines for the evaluation of a facility. Deficiencies may be grouped by type. The seriousness of a deficiency is an important indicator of QoC and may be more important than the actual number of deficiencies. State records provide information about deficiencies and some states require facilities to post or make available state survey reports.

State regulatory agencies may impose fines or restrictions on a RC/AL facility if serious deficiencies or complaints have been confirmed. In addition to tracking this information, it is important to also track whether deficiencies are corrected or repeated. State regulatory records would contain this information.

Changes in Resident Health Status/Quality Indicators

There is no specific set of quality indicators developed for RC/AL facilities; however, quality indicators used in other long-term care settings and research efforts seem to offer appropriate considerations. One example of quality indicators was developed for the Centers for Medicare and
Medicaid Services and consists of decline in ability to perform daily activities, infection, pressure ulcers, physical restraints, and pain (Morris et al., 2002). Falls and injuries are also suggested as a quality indicator. Tracking resident function over time is most appropriately done using standardized scales. Some of the assisted living waiver programs are doing this using an adaptation of the Minimum Data Set Activities of Daily Living Self-Performance Index. More broadly, and for all payers, medical assessments done on residents upon admission and subsequently could be developed into a useful resource for measuring change. States typically include criteria in their regulations that determine admission and retention policies covering some or all of the following: general condition; health-related conditions; functional condition; Alzheimer’s disease and dementia; and behavioral condition (Mollica, 2002). Home health records and hospice service records would include some health status information. In addition, medical events, such as 911 calls and emergency room visits could provide further information regarding potential changes in health. We cannot find evidence showing that states require these latter data or how complete this information is if required; however, we believe that such information should be maintained and available.

### Discharge/Medical Event Data

Discharge and medical event data may often be more reliably measured/recorded than changes in health status. One event given prominence is the number of nursing home transfers. In compiling this statistic, it is important to distinguish between permanent transfers and episodic or short-term stays. The latter of these may be therapeutic, such as for rehabilitation, or post-treatment recovery from even minor procedures like nail debridements. Moves from the facility to higher or lower levels of RC/AL care would also be informative. Another aspect of outcomes monitoring is that of medical events such as mortality, hospitalization, emergency room visits, and emergency medical technician (EMT) use. This information may be recorded in discharge records or as medical event incidence reports. States often require reporting of this information to the licensing agency. The linkage of residents to Medicare and Medicaid claims systems, although with a year lag in information, could also be a source for relatively complete information on health care use.

### Changes in Resident Cognition/Behavior

Quality of care may affect the cognition and behavior of residents. In turn, such changes may affect the ability of the facility to provide adequate care. Decline in cognitive status is likely to increase discharges to a nursing home (Hawes & Phillips, 2000). Physician reports, resident observation, and staff and family interviews are among the means to document changes in resident behavior. The use of standardized instruments for disability or other measurement is not widely available in administrative data. Cost and burden considerations likely limit the incorporation of these measures into a national uniform reporting system.

### Resident/Family Satisfaction/Quality of Life Indicators

Satisfaction is a multi-dimensional concept that is difficult to define. In RC/AL facilities, it has been described by characteristics of the facility assumed to be important to residents, including autonomy, adequate access to health care, availability of services, homelike physical environment, supportive relationships with staff, and meaningful social life and activities (Sikorska-Simmons, 2001). This information is usually obtained from surveys and interviews of residents and/or family members. Instruments in use include the Resident Satisfaction Index developed by Sikorska-Simmons (2001) and the instruments used by Hawes and her colleagues (1995), but even these have not been developed for persons with cognitive impairments. For the more immediate future, it is likely that the dimensions of quality of life will be measured indirectly, as in the resources and processes in place that support or facil-
itate things like privacy, security, and dignity.

**Summary & Conclusions**

The foregoing has been suggested as a theory-based approach for the evaluation of the quality of care in RC/AL facilities. This approach considered the structure and processes of care in residential care/assisted living and how these might influence or be associated with various outcomes of care. Each of the framework dimensions was described and illustrated with measures likely to be available in state and/or facility administrative records. Measures of RC/AL ideals such as dignity, autonomy, and decision-making are likely to be difficult to capture within administrative data. Because of this, attention was focused on measures reflective of the quality of care and the opportunity for quality of life (e.g., privacy). Explicit evaluations of quality of life outcomes among residents are likely better done within the context of focused studies, rather than as part of ongoing regulatory oversight data systems.

Comprehensive, computerized administrative recording systems can facilitate access to information and make it useful to state agencies, consumers, providers, and researchers. As data become visibly used by the public and in program oversight, it is likely that accuracy, completeness, and timeliness will improve.

Our proposed quality of care framework proposes a number of measures and suggests interrelationships between facility structures, processes and residents, and other performance outcomes. These relationships are theoretical; they have not been systematically tested for the timing and direction of effects. Such work remains to be conducted, and the measures used to illustrate the components of the framework will benefit from refinement and standardization. An especially important information gap in the residential care industry is that of resident-level data, particularly changes in health status and discharge/medical event data. Assuming that the frailty level of RC/AL continues to increase, it will be important for both providers and state programs to understand the factors contributing to and challenging attainment of desired resident outcomes.

The reliance on administrative data offers a practical way to begin building a self-sustaining data system for the monitoring of quality of care in RC/AL settings. This system can be implemented incrementally. Costs can be minimized to the extent that the system is based on data collected by current oversight staff and the ongoing reporting by providers. There may be added costs associated with modifying instruments and computerizing information collection, but the training of inspectors and providers in how to use these instruments can be implemented over several years within the context of continuing education and training. The resulting information, if reported on a regular basis, will be useful in program operations, policy development, and by those seeking RC/AL accommodations. Such work can contribute to the development of standards (such as those defining acceptable injury rates or rates for other adverse outcomes) while offering a basis for trend line and/or post policy or practice change comparisons with a facility, or among facilities in a single state, or even across states. The development of a minimum set of measures common across states will require negotiation among stakeholders. While elements of this have already begun within the industry, it remains possible to allow this process to emerge with the phase-in of measures as they become reliably available.

Concomitant to the proposed framework are several limitations to its applicability in RC/AL settings. First, some questions or issues may be more appropriately studied on a sample basis rather than through ongoing administrative data systems. For example, measures of resident satisfaction, perceptions of autonomy, and promotion of independence require resident-level data that may be burdensome for ongoing systems. Second, analyses that attempt to identify the causal effects of various attributes (such as levels of staff training or service mix) or the interrelationships among the quality of care frame-
work components require sample designs and measurement that may be similarly expensive and may not be required on a regular basis. Although there are many challenges to gaining agreement on conceptual domains, operational measures, the frequency and quality of data collection, the framework proposed herein provides a starting point with which to build incrementally with experience.

REFERENCES


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To assess the impact of resident choice and staff empowerment on organizational culture change, a qualitative survey was employed to ascertain nursing home administrators' views of culture change in their facilities. In the fall of 2005, a written, anonymous questionnaire was sent to the administrators of all skilled nursing facilities in Illinois, with a return rate of 20% (N=150). Over three-quarters of the sample indicated that a vision for culture change had been developed, with most initiatives focusing on meals. Regulations were not listed as a significant barrier to culture change. The nursing home administrators in the sample evidenced awareness of culture change and committed to initiating at least some changes in their facilities. Respondents listed increased staff training as the most needed type of assistance to further culture change. This study highlights resident-directed care behaviors and staff empowerment as key elements of culture change in nursing homes.
Nursing home changes and improvements are often driven by regulators or market forces, leaving leaders to alter practices to meet these demands. Other types of changes are adopted after facility leaders develop new ideas and share them with others as they seek new methods to improve resident satisfaction, increase compliance with regulations, decrease staff turnover, or attract a different mix of residents. These new ideas may also serve to attain and maintain a resident’s “highest practicable physical, mental, and psycho-social well-being” (Omnibus Budget Reconciliation Act, 1987). An emerging method to achieve nursing home care improvement goals is culture change. Nursing home culture change puts community and choice at the heart of long-term care practices. In the United States, nursing home culture change has developed from a grassroots movement led by charismatic nursing home leaders to a widespread trend embraced by large corporations and the Centers for Medicare and Medicaid Services (CMS) (2005). This article explains this trend and provides data on culture change practices from a survey of nursing home administrators.

Components of Culture Change

Many corporations refer to management transformation as culture change. Corporate culture change has been defined as “a metamorphosis or mutation of culture. It is accomplished through purposeful alteration of individual habitual attitudes and behavior” (Shuster, 1994, p. 9). Shuster writes one goal of culture change is to totally satisfy customers by exceeding expectations and by viewing corporate operations from the customers’ perspective. Satisfaction of customers also demands satisfaction of all internal personnel where they feel safe enough to express their ideas and act on them. This enabling environment can be developed through corporate culture change. Shuster writes that for a visionary leader to support organizational change, they “envision the future and then create the conditions for others to build a common vision together” (Kouzes & Posner, 2002, p. 131).

Recently, leaders of the Pioneer Network, a not-for-profit organization devoted to significant change in nursing home care, developed a consensus statement on attributes expected to be found in a nursing home that is “100% culture changed” (J. Angelelli, personal communication, July 15, 2006). “A culture-changed nursing home is an organization that has home and work environments that include the following:

• care and all resident-related activities directed by the resident;
• a living environment that is designed to be a home rather than an institution;
• close, high quality relationships existing between residents, family members, staff, and community;
• work organized to support and empower all staff to respond to residents’ needs and desires;
• management enabling collaborative and decentralized decision-making; and
• systematic processes that are comprehensive and measurement-based, and that are utilized for continuous quality improvement.”

CMS has supported such nursing home culture change, as described by Pioneer Network, through its Quality Improvement Organizations (QIO). In Illinois, the Medicare-contracted QIO is the Illinois Foundation for Quality Health Care (IFQHC). Through IFQHC, Illinois was one of many states that participated in the nursing home culture change demonstration project in 2004 and 2005. The Person-Centered Care Demonstration Project provided intense training in person-centered care and related culture change. Results from six participating nursing homes indicated widespread improvement in many quality indicators over a 10-month period. For example, 100% of facilities showed a decline in prevalence of high risk behavior symptoms, and 83% of facilities showed a decline in weight loss (IFQHC, 2005). IFQHC continues these efforts through their current participation in a six-state col-
laborative effort “to create a more resident-centered movement known as culture change; improve staff retention, decrease rates of pressure ulcers and physical restraints, as well as improve the management of depression and chronic pain in the nursing home environment” (IFQHC, 2006).

In order for nursing home culture to change significantly from the traditional medical model (promoting efficiency and clinical outcomes) to a model characteristic of that described above, generally requires an organizational effort on several levels, including leadership commitment to a vision of change, planning change, implementation of change, and evaluation of the change. Since nursing home care is complex and involves many processes and people, many frameworks for improvement may be used, but purposeful, widespread culture change is posited as requiring commitment from leaders. This study focuses on nursing home administrators’ views of culture change in their facilities.

**Nursing Home Culture Change**

Over the last 40 years of significant public funding of nursing home care, quality has improved due to regulations regarding safety and health for residents; however, as nursing home leaders and staff focus on complying with regulations, it has been suggested that the social connections of day-to-day living have been ignored in many homes. For example, while a nursing home may be free of infection, it may also be free of laughter and spontaneity. Similarly, while a home may serve a varied diet at the proper temperatures, residents may not enjoy meal time. The current wave of nursing home improvements focus on the social and personal aspects of living with chronic health care needs.

By emphasizing resident choice and offering opportunities for active, involved living, many homes have created environments where residents feel nurtured and validated. In one model, plants, animals and children may be included in a “culture-changed” home to fight loneliness and boredom (Thomas, 1994). More generally, daily operations are modified to include increased resident choice in areas such as meals, activities, and even in bathing (Rader et al., 2006). In addition, these models foster increased staff involvement and empowerment to achieve a facility-wide culture of community and concern.

In general, culture change fosters the transition from a medical model of service delivery to a social model, focusing on the wants and needs of the resident (i.e., person-centered care). One resource that provides a strong base for the approach of person-centered care is Tom Kitwood’s *Dementia Reconsidered: The Person Comes First* (1997). This book is a guide for much of the resident-centered behaviors now encouraged in geriatric long-term care. Kitwood explores the concept of “personhood” and describes how individuals with dementia should not lose the “recognition, respect, and trust” (p. 8) they experienced prior to cognitive impairment. According to Kitwood, individuals with disabilities and illness traditionally have been dehumanized, especially in an institutional setting. Many caregivers no longer see these individuals as people with the same rights, responsibilities, and interests as others. Older individuals with chronic illness have the added stigma of advanced age that can also lead to negative, non-supportive interactions.

Two main areas of culture change include: 1) alterations to dining experiences; and 2) staff involvement. An example of culture change can be seen at mealtime in many nursing homes. The rituals of family meals are a lasting influence in people’s lives, and facilities have tapped into this trend by including more options at mealtime by: smaller dining areas in neighborhoods, buffet dining, and restaurant-style dining. Family-style mealtime in a nursing home has been shown to maintain a high quality of life, physical performance, and body weight of persons without dementia (Nijs et al., 2006). It is likely that a similar effect would be seen in persons with dementia, but the study was limited to those without dementia. The traditional nursing home offers three meals a day with little choice of food or time of meal, as is promoted by traditional
regulatory structure; however, a stronger focus on resident choice leads to a wider variety of food offerings at each meal and flexibility of mealtime. Buffet dining or restaurant-style dining supports resident choice. A randomized, controlled trial showed no significant difference in weight loss or other nutritional indicators after three months of buffet dining, compared with traditional tray dining. Although there were some additional start-up costs in buffet dining, there was overwhelming resident support for buffet dining, and the test facility adopted buffet dining after the study was completed (Remsburg et al., 2001).

Not only are staff asked to focus more on residents in culture changed homes, generally they are expected to work in teams and be more involved in staff decision-making. Staff empowerment fosters a positive work environment where all employees are committed to a positive, nurturing environment for residents. To begin this process, leaders must envision a need for change and then educate, motivate, and support staff to plan and implement changes (Gibson & Barsade, 2003).

**Culture Change in Illinois**

The state of Illinois endorsed nursing home culture change early in 1999, and national culture change experts trained staff from a large portion of the nursing home sector as well as the Long-Term Care Ombudsman Program staff. In the following years, regional pioneer groups were formed, and Illinois hosted the national Pioneer Network conference in 2002. A statewide culture change coalition was established in 2003 as the Illinois Pioneer Coalition, providing statewide educational programs and supporting regional coalitions. Continuing its national support of culture change, Illinois again hosted a major regional meeting in 2005 for the Pioneer Network. In addition, the major state nursing home trade associations have offered numerous educational opportunities about culture change to their members.

Illinois Department of Public Health (IDPH) officials have also supported the culture change movement in Illinois. For the past several years, IDPH has approved the use of Civil Money Penalty (CMP) funds collected through nursing home fines to help provide training throughout the state and support the Illinois Pioneer Coalition. The research presented herein was supported by CMP funds to address nursing home administrators’ interest in and progress of culture change within their facilities.

**METHODOLOGY**

In the fall of 2005, a questionnaire was mailed to administrators in all 741 skilled nursing facilities in Illinois. The questionnaire was returned anonymously and was part of a statewide research project to determine progress toward culture change in Illinois nursing homes. Significant portions of the survey were originally developed by Leslie Grant, Ph.D., from the University of Minnesota, and were used with his permission. The six-page questionnaire addressed: permanent staff assignments; staff resident-directed behaviors; management team leadership behaviors; resident choice; neighborhood configuration; neighborhood team participation; commitment to culture change; and the need for resources.

Respondents were not provided with a definition of culture change in the cover letter or questionnaire; however, specific components of culture change were defined throughout the questionnaire. For example, to determine whether or not permanent nursing staff assignments were used, the respondents were asked “Do nursing staff rotate to other units, neighborhoods, or households within the facility on a regular basis (e.g., daily, weekly, or monthly)?” Other definitions are included in the exhibits.

**RESULTS**

Twenty percent of the mailed administrator surveys were returned (N=150), and no reminders or second surveys were mailed. Based on the demographic questions, 41% of the homes where the respondents worked were not-for-profit, 54% for-
profit, and 8% government-owned. This distribution of ownership is not proportional to Illinois nursing homes, where 27% of facilities are not-for-profit, 69% are for-profit, and 4% are government owned; these distributions are characteristic of national distributions (Jones, 2002). The average bed size in the sample was 113, with a range from 11 to 360. Comparatively, average bed size in the state of Illinois is 124, ranging from 7 to 787 (CMS, Nursing Home Comparison Tool). In addition, 8% of the skilled nursing facilities responding to the survey were hospital-based; the population of hospital-based Illinois nursing homes is also 8% (CMS, Nursing Home Comparison Tool).

Nursing home administrators were asked to what degree they were engaged in culture change in their facilities. As shown in Exhibit 1, respondents indicated a high level of interest in culture change ranging from almost 9 out of 10 respondents reporting “managers have been educated about culture change” (89%), to 6 out of 10 reporting evaluation efforts of existing culture change (61%). Eighty-three percent of administrators completing the survey indicated that managers are committed to culture change, with 64% reporting staff is committed to culture change.

Respondents were asked to describe the most significant changes implemented in their facilities in the past two years. Responses ranged from buffet-style dining to an increased emphasis in resident-directed care, as listed in Exhibit 2 in order of frequency. Even though respondents were asked to describe just one recent change, many listed more than one. All responses were included in the list in an effort to capture the type of recent culture change activity in the state. Mealtime changes were the most frequently mentioned recent nursing home culture change. The most common recent change was buffet dining (N=26), followed by restaurant or menu-based dining (N=23). Other responses indicated facilities are offering more choice to residents. This includes more activity choices, a more liberal
meal schedule, and choices in when a resident wants to sleep. Many also indicated a move toward more resident-centered care plans. Based on a separate question, 71% of respondents to this questionnaire indicated staff is permanently assigned in their facility.

As described above, 83% of respondents indicated the managers in their facility are committed to culture change. Exhibit 3 describes to what extent respondents indicated different managers in the facility “demonstrate team leadership behaviors that go beyond doing tasks within his or her primary function in a departmental role.” Respondents could reply “a great deal,” “some,” or “little or none.” This question was self-reported and did not provide definitions. Respondents reported administrators as the type of manager exhibiting the highest level of team leadership behaviors, with medical directors exhibiting the least.

Indicators of staff empowerment in the culture change process were assessed by querying “neighborhood” staff configuration (i.e., teams within the staff organizational structure). One-third of the respondents (N=50) completed the questions about neighborhood decision-making. As shown in Exhibit 4, respondents indicated that neighborhood team members were usually or always involved in resident care planning (84%). Neighborhood team members were also usually or always involved in quality improvement initiatives (67%) and planning social events (64%). Only about one-third of neighborhood team members were usually or always involved in staff assignments (36%) and planning meals outside the regular menu (35%). Neighborhood team members were least involved in staff scheduling (18%).

To better understand the extent to which staff was committed to culture change, respondents reported

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**Exhibit 3. Team leadership behaviors**

“Does this person demonstrate team leadership behaviors that go beyond doing tasks within his or her primary function in a departmental role?”

<table>
<thead>
<tr>
<th>Manager</th>
<th>A Great Deal</th>
<th>Some</th>
<th>Little or None</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrator</td>
<td>85%</td>
<td>14%</td>
<td>1%</td>
</tr>
<tr>
<td>Director of Nursing</td>
<td>72%</td>
<td>25%</td>
<td>3%</td>
</tr>
<tr>
<td>Social Service Director</td>
<td>67%</td>
<td>27%</td>
<td>6%</td>
</tr>
<tr>
<td>Activity Director</td>
<td>64%</td>
<td>26%</td>
<td>10%</td>
</tr>
<tr>
<td>Housekeeping Director</td>
<td>54%</td>
<td>34%</td>
<td>13%</td>
</tr>
<tr>
<td>Dietary Director</td>
<td>52%</td>
<td>36%</td>
<td>12%</td>
</tr>
<tr>
<td>Medical Director</td>
<td>31%</td>
<td>41%</td>
<td>28%</td>
</tr>
</tbody>
</table>

* Defined as taking on tasks or responsibilities that go outside his/her primary discipline or function

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**Exhibit 4. Neighborhood decision-making**

“To what extent do members of the neighborhood team participate in the following types of decisions?” (Only those leaders who perceived their facility as configured in neighborhoods answered this question.)

<table>
<thead>
<tr>
<th>Decision Category</th>
<th>Usually or Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resident care planning</td>
<td>84%</td>
</tr>
<tr>
<td>Quality improvement initiatives</td>
<td>67%</td>
</tr>
<tr>
<td>Planning social events</td>
<td>64%</td>
</tr>
<tr>
<td>Staff assignments</td>
<td>36%</td>
</tr>
<tr>
<td>Planning meals outside the regular menu</td>
<td>35%</td>
</tr>
<tr>
<td>Staff Scheduling</td>
<td>18%</td>
</tr>
</tbody>
</table>
the proportion of staff demonstrating resident-directed behaviors. The following definition was included in the survey: “Resident-directed behaviors are responses that indicate that the respondent takes positive action toward fulfilling the resident’s request such as: ‘I try to give them what they want by...’ or ‘I go to my supervisor to see if we can...’ and so forth. Negative responses to this include responses such as ‘It can’t be done,’ ‘I politely let them know that that’s not possible,’ or ‘I ignore the request because...’ and so forth.” Nearly half of respondents (47%) indicated 80-100% of staff demonstrate resident-directed behaviors, and an additional 40% indicated 51-79% of staff demonstrate resident-directed behaviors. Thirteen percent of the respondents indicated half or less of the staff demonstrates resident-directed behaviors (Exhibit 5).

Respondents were asked what types of assistance were needed to further culture change at their facilities, as shown in Exhibit 6. The resource listed as most needed was more staff training in culture change (64%), while “change in regulations” was the least common response (17%). If respondents to the leadership survey indicated a change in regulations would help further culture change in their facilities, they were asked to describe the needed change. These comments included a need for a change in surveyor attitudes regarding time span between

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**Exhibit 5. Resident-directed staff behaviors**

<table>
<thead>
<tr>
<th>Proportion of staff demonstrating level of “resident-directed” behaviors</th>
<th>0-20%</th>
<th>21-50%</th>
<th>51-79%</th>
<th>80-100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>From Leadership Mailed Survey</td>
<td>3%</td>
<td>10%</td>
<td>40%</td>
<td>47%</td>
</tr>
</tbody>
</table>

* Resident-directed staff responses were defined as “responses that indicate that the respondent takes positive action toward fulfilling the resident’s request such as: “I try to give them what they want by…” or “I go to my supervisor to see if we can...” Examples of negative responses were “It can’t be done” and “I politely let them know that that’s not possible.”

**Exhibit 6. Types of assistance needed to further culture change**

<table>
<thead>
<tr>
<th>Assistance Needed</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff training</td>
<td>64%</td>
</tr>
<tr>
<td>Additional financial resources</td>
<td>54%</td>
</tr>
<tr>
<td>Training modules</td>
<td>47%</td>
</tr>
<tr>
<td>Leadership training</td>
<td>43%</td>
</tr>
<tr>
<td>Videos</td>
<td>39%</td>
</tr>
<tr>
<td>Consultant to work with facility</td>
<td>27%</td>
</tr>
<tr>
<td>Change in regulations</td>
<td>17%</td>
</tr>
</tbody>
</table>
meals and liberalizing diets, more flexibility in regulation interpretation, and validation by state regulators of their culture change efforts.

**DISCUSSION**

Study results show at least some level of culture change implemented in nursing homes represented in this survey. The administrator respondents indicated a high level of interest in culture change. Most respondents had received education about culture change and were committed to implementing changes. Three important areas highlighted by the findings of the study include choice within resident-directed care, staff empowerment, and regulations, which are discussed below.

**Resident-Directed Care**

As evidenced from the sample, changes to resident-directed care can be characterized as granting more choice to residents. A few examples of this type of change are evident in the reorientation of mealtime and increased options for activities of daily living such as waking and sleeping times. In general, changes center on choice. Models of how to implement these types of changes are available through the Pioneer Network and other organizations.

In order to move toward more resident-directed activities, extensive education is needed on the overall philosophy of resident-directed care and on the specific needs and wants of residents. Comprehensive assessment and planning should include details about the resident’s personal history and pleasurable activities. Staff should be trained and supported to focus on resident needs.

**Staff Empowerment**

One key element of culture change as a philosophy is that staff must be involved to make it work (Shuster, 1994). Staff should be involved in decision-making and empowerment efforts to create a sense of teamwork and community. The results of this study indicate that in most cases, staff is not involved in key management decisions, pointing to a significant opportunity for improvement. Results show staff are involved with care planning, consistent with regulatory requirements, as well as involved in planning social events; however, it is a unique nursing home that involves staff in scheduling of staff time or in work assignments.

Anecdotal evidence finds staff involvement in culture change has been implemented in some homes with great success. An administrator who had recently changed to permanent staff assignments, including staff ranking and then selecting the residents with whom they would work, remarked, “I have been in this industry 40 years, and I can’t believe we haven’t done this before.” The administrator said the empowerment, involvement, and increased concern of the staff working with the residents has been remarkable in the facility. To implement this type of staff assignment and involvement may constitute a significant change to traditionally bureaucratic organizations with hierarchical decision-making. Results from this study indicate that 71% of homes use permanent staff assignment. While there may be some methodological problems with the simple question used for this indicator, it is posited that widespread use of permanent staff assignment has significantly increased since culture change education began in Illinois in 1999.

In order to empower staff to respond to residents’ needs and desires, leaders need to release control of some decisions and support cross-functional teams that work together. This would dictate that staff be hands-on in problem-solving, refraining from saying for instance, “That’s not my job.” Permanent staff assignments will allow staff to develop good relations with residents and better understand them. In addition, performance improvement teams should be supported as part of the ongoing operations of a facility. Creativity in addressing the challenges of staff empowerment should be supported and encouraged at all levels.
Regulations

One area that has traditionally been listed as a barrier to culture change is regulations. Many have expressed concerns about how to provide more choice in mealtime, more homelike settings, and more flexible schedules given regulation restrictions; however, this was not listed as a major barrier according to the administrators completing this survey (17%). This finding points to the possibility of the message to facilities that change does not dictate regulatory compromise. Additionally, surveyors may have received sufficient education to overcome what had been seen as regulatory barriers. Communication with state agencies and creative approaches to operations could promote successful outcomes. Based on the results of this study, we can conclude that this sample did not interpret regulations as a barrier to culture change implementation.

Study Limitations

Limitations of the study include a non-representative sample and subjective perceptions of attitudes and behaviors. Administrators from not-for-profit organizations completed this survey at a higher rate than those from for-profit facilities. Not-for-profit organizations may be more committed to culture change and this may reflect a self-selection bias in the sample. It is reasonable to assume that administrators already considering or implementing culture change were more likely to complete the survey. In addition, the rate of return limits the ability to generalize findings across the state of Illinois, as only 20% of the population completed the questionnaire. Future research should strive for more representative respondents.

The second limitation is the subjectivity of the responses. This short survey requested generalized impressions and judgments from one person whose responses may not reflect actual practices of people in the nursing home. Future research should investigate more specifically the extent to which typical culture change practices have been implemented in a nursing home and obtain input from multiple respondents in a facility. Associated with this concern is that the intangible concept of culture is difficult to measure. For example, how do we know how each staff member defines or interprets individual needs, desires, and choices of residents? How can we measure the impact of resident choice and staff empowerment on resident quality of life? These are challenging issues to be addressed in future research studies regarding culture change.

Sources of Support for Implementing Culture Change

Resources are necessary to implement and sustain culture change. Respondents indicated education is the primary need—especially staff education. In Illinois, many affordable training sessions have been held throughout the state, for example by the Illinois Pioneer Coalition (www.illinoispioneercoalition.org). Staff education requires commitment of leadership and perhaps other funding sources to help people understand the components and methods needed to implement culture change. Management can foster educational efforts by affording time for staff to attend trainings or fostering in-house sessions.

Leaders who want to use culture change as a method to improve care practices can access many resources through the Pioneer Network (www.pion cnetwork.net), Eden Alternative (www.edenalt.com), Wellspring (www.wellspringis.org), and numerous consultants. Many state units on aging and ombudsman programs have embraced culture change and are excellent sources of information. CMS also supports culture change through its resources and initiatives (www.cms.hhs.gov/center/quality.asp). Nursing home leaders face the eternal constraints of time, money, and creativity as they attempt culture change, but many resources are available from state, federal, and not-for-profit groups to help combat these limitations.
CONCLUSION

Nursing home care is changing throughout the United States to include increased resident choice and staff empowerment. This culture change began as a grassroots movement developing from theory to practice, as facilities began to understand its transformative power to enhance quality of life among residents and staff. While culture change is becoming a common approach, it is still in its infancy. This study of nursing homes indicates that culture change has been making inroads in some Illinois facilities. The research indicates increased educational efforts, staff training and involvement, and industry information will benefit facilities incorporating organizational culture change.

REFERENCES


ACKNOWLEDGEMENTS

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Comparing Active Adult and Continuing Care Retirement Communities: Competitors or Complements?
Susan B. Brecht; Anthony J. Mullen, C.P.A., M.S.

ABSTRACT
Operators and developers of seniors housing have been speculating for some time about the extent, if any, of competition for prospects and new residents between Active Adult Communities (AACs), Continuing Care Retirement Communities (CCRCs), and other types of independent living communities. AACs tend to be for-sale communities offering one-floor living, outdoor property maintenance, social and recreational activities, and do not offer meals, personal services (such as housekeeping and transportation), or health care (such as assisted living and nursing care). CCRCs tend to be rental or entrance fee models (with no equity ownership) offering meals, personal care, and health care services, in addition to one-floor living, outdoor property maintenance, and social and recreational activities. This paper presents a direct comparison of senior living residents’ motivations to choose to live in an AAC or CCRC, and reports on the differences they perceive in each type of community. Additionally, we examine the extent to which residents of one type of community looked into moving to the other type, and thus the level of competition between AACs and CCRCs. This article addresses these and other related concerns of the seniors housing industry through a combination of data derived from a survey of residents of AACs and CCRCs, as well as anecdotal data obtained from the authors’ work in this field over more than two decades.
INTRODUCTION

As the baby boomers have started to “come of age,” the generation being served by continuing care retirement communities (CCRCs) has shifted, and housing for the mature market has entered an era of expansion. This expansion has been fueled further by a housing market that produced resale values that, in some cases, have increased the net worth of many 55+ households as they sell their homes and cash out. In the 1990s, during the boom in assisted living development, the industry began to experience the blurring of lines between independent living and assisted living communities, both of which laid claim to older residents (Mullen, 2003). Now that this challenge to CCRCs has begun to work itself out, with assisted living communities tending to care for frailer residents than originally anticipated, CCRCs are wondering if the newest housing product, the active adult community (AAC), will erode the younger, more active and independent segment of the market that they hope to attract to their apartments and cottages.

How much overlap is there in the seniors housing market for CCRCs and AACs? Mullen (2003) hypothesized competition between AACs and CCRCs (and other independent living) for residents, and that part of the drop in occupancy for CCRCs in the period 1999 to 2003 was due to competition from the many AACs introduced to the market during that time. Other authors have noted the difference between “younger seniors” and “older seniors” in the types of retirement communities they move to, and that younger seniors tend to be pulled into more amenity-rich communities, while older seniors tend to be pushed into more care-oriented communities; but these authors did not note the level of competition between the different types of senior housing communities (Gibler et al., 1998).

While Mullen (2003) did not speculate on the percentage of residents of AACs who originally considered a CCRC but then chose an AAC, he did note that an AAC usually offers overlapping components of a CCRC: outdoor property maintenance, one-floor living, social and recreational activities, and programming. Further, an AAC affords a resident the financial benefits of homeownership, which the vast majority of CCRCs do not include.

This paper addresses the question of crossover competition between the two types of communities in an exploratory fashion, recognizing that further research is necessary. For the purposes of this paper, the authors define AACs as communities whose residents are aged 55 and over, common grounds maintenance is provided, and in most cases, amenities include a clubhouse or common gathering area. Most residents of AACs purchase their residential unit either on a fee-simple or condominium basis. CCRCs feature a combination of independent living, assisted living, and skilled nursing units. This type of community typically draws residents in their mid- to late-70s. There are several types of contracts defining how the resident pays for residency and the provision of services (i.e., extensive care, modified, fee-for-service, and rental contracts) (AAHSA et al., 2005). Although a comprehensive presentation of the history of CCRCs is beyond the scope of this brief report, the interested reader is referred to Gordon (1998) or Brecht (2002).

THE PRODUCTS: SIMILARITIES AND DIFFERENCES

Once limited, for the most part, to the Sunbelt, AACs are now being developed throughout the United States. Pioneered by Del Webb, the original model of a large (1,000 units or more) golf course-centered AAC is also changing, with the largest number of new active adult communities eliminating the golf course completely and being designed on a significantly smaller scale. The diminished land requirements resulting from the changing model has allowed many new communities to be developed. Many may have 200 to 400 residential units designed around a clubhouse, and others are even smaller, without any centralized amenities.
Comparing Active Adult and Continuing Care Retirement Communities: Competitors or Complements?

AACs range from single-family-clustered homes and townhouses, to apartments in multi-family structures. While most are offered on a for-sale basis, the rental model is beginning to surface in some markets. The greatest commonality across the ever-increasing AAC community models is what these communities do not provide: hospitality and health care support services such as a structured meal program, housekeeping, home care, and assisted living and nursing care. Considered anathema to the marketing of an AAC, only a small number have added components of a “care” model to their communities as they look to the future needs of aging residents.

By contrast, the CCRC is defined around the hospitality and health care support services eschewed by AACs. CCRCs have emphasized care rather than real estate in selling to older consumers. Typically, CCRCs offer three types of housing and service models including independent living, assisted living, and nursing care. Although the Fair Housing Act now prohibits CCRCs from requiring that residents move through the continuum as their needs change, most communities do have policies that require such movement when services can no longer be delivered into the independent apartments and cottages or when residents become a danger to themselves or others.

The vast majority of CCRCs are more than 10-years-old. According to Continuing Care Retirement Communities 2005 Profile, a study that presented data on 162 CCRCs offering three levels of care, the median age of these communities was 21 years, with the middle half of these communities between 14 and 40 years old (AAHSA et al., 2005). These communities are now starting to serve a new generation of seniors who are much more discerning and demanding than their predecessors (Howe & Strauss, 1991). This change has resulted in a wave of renovation, expansion, and repositioning as CCRCs scramble to keep from becoming oversized assisted living communities unable to attract the well elderly. One of the most significant changes in CCRCs over the last 10 years has been the increasing size of independent living units. The 2005 study referenced above, which reported on existing communities, indicated that the median size of two-bedroom units was 1,100 square feet and the median size of one-bedroom and studios was 700 and 450 square feet, respectively. The 2004 study, From Start-Up to Success (AAHSA, Herbert J. Sims & Co., 2004), revealed the mean size of an independent living unit (including all types of units) in CCRCs developed between 1999 and 2004 was 1,176 square feet, an increase of 13% from its similar study of those communities developed between 1994 and 1999. In addition to the reduction or complete elimination of small studio and one-bedroom units, CCRCs are, when possible, adding cottages, villas, townhomes, and cluster and single-family housing. Emulating their AAC counterparts, CCRCs frequently offer units that start at 1,500 to 1,600 square feet and go well beyond the 2,000-square-foot mark. At a recent conference for CCRC marketing and public relations staff, a random selection of photos of AACs and CCRCs were shown to the audience and almost no one correctly identified which product they were looking at.1 The similarities and differences between AACs and CCRCs are illustrated in Exhibits 1 and 2.

THE SURVEY

The survey results described in this paper stem from research completed in 20042 of 400 telephone surveys conducted with participants in Phoenix, Arizona; Montgomery County, Maryland; and Middlesex and Ocean Counties in New Jersey. These areas were selected specifically because they

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1 Marketing and Public Relations Society of Seniors Housing and Service Professionals, Annual Membership Meeting and Program, “Choices, Choices…Active Adults Redefining Housing and Services,” November 18, 2005
2 Sponsored by Brecht Associates and Presbyterian Homes of New Jersey

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contained both AACs and CCRCs. An additional 97 mail-based surveys were completed by residents of two CCRCs located in Middlesex and Ocean Counties, New Jersey. Sixty-five percent (N=324) of total respondents were AAC residents and 20% (N=99) were CCRC residents. It should be noted that the survey sample was purposive rather than scientific, and was targeted to specific providers and regions, thus findings may not be generalizable.

RESULTS

How Residents/Buyers View Themselves and the Products

Data from the survey indicate residents of AACs view themselves and their community of choice as being quite different from CCRCs and the people they attract. Only 11% of the telephone survey respondents had considered both an AAC and a CCRC when they made the decision ultimately to move to the AAC. By contrast, 30% of respondents who lived in CCRCs had also considered AACs when making the decision to move (see Exhibit 3).

When asked why they had decided to move to an AAC rather than a CCRC, the survey participants responded in equal proportion saying they were too young, wanted to remain independent, or didn’t want to pay for services they didn’t use. Exhibit 4 summarizes these responses. It should be noted that the

<table>
<thead>
<tr>
<th>Exhibit 1. Similarities between AACs and CCRCs</th>
</tr>
</thead>
<tbody>
<tr>
<td>May be on either a campus or in-fill site</td>
</tr>
<tr>
<td>May include apartments, townhomes, and</td>
</tr>
<tr>
<td>single-family homes</td>
</tr>
<tr>
<td>May include custom upgrades and features</td>
</tr>
<tr>
<td>May include wellness centers (fitness, pool, etc.)</td>
</tr>
<tr>
<td>Usually offer outdoor amenities such as walking trails</td>
</tr>
<tr>
<td>May include clubhouse for social functions</td>
</tr>
<tr>
<td>Usually offer organized social and</td>
</tr>
<tr>
<td>recreational activities</td>
</tr>
<tr>
<td>Usually services include lawn care, snow removal, trash removal, and exterior maintenance</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Exhibit 2. Differences between AACs and CCRCs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AACs</strong></td>
</tr>
<tr>
<td>Positioning for Active Lifestyle</td>
</tr>
<tr>
<td>Open to 55+</td>
</tr>
<tr>
<td>Targets Age 55+</td>
</tr>
<tr>
<td>Typical Age 60-75</td>
</tr>
<tr>
<td>Does Not Include Health Care</td>
</tr>
<tr>
<td>Almost Always For-Sale Product</td>
</tr>
<tr>
<td>More Outdoor Activity Amenities</td>
</tr>
<tr>
<td>Attracts Mostly Couples</td>
</tr>
<tr>
<td>For-Profit Developers</td>
</tr>
<tr>
<td>Many Public Companies</td>
</tr>
<tr>
<td>Resident Pays Property Tax</td>
</tr>
<tr>
<td>Tax Deduction for Property Tax</td>
</tr>
<tr>
<td>Hospitality Services are Not Provided</td>
</tr>
<tr>
<td>Resident Pays Utilities</td>
</tr>
<tr>
<td><strong>CCRCs</strong></td>
</tr>
<tr>
<td>Positioning for Lifetime Care</td>
</tr>
<tr>
<td>Open to 62+</td>
</tr>
<tr>
<td>Targets Age 70/75+</td>
</tr>
<tr>
<td>Typical Age 75+</td>
</tr>
<tr>
<td>Always Includes Health Care</td>
</tr>
<tr>
<td>Rarely For-Sale Product Equity Plans Becoming More Popular</td>
</tr>
<tr>
<td>Outdoor Amenities Typically Less Active</td>
</tr>
<tr>
<td>Attracts Fewer Couples</td>
</tr>
<tr>
<td>Mix of For-Profit/Non-Profit (mostly)</td>
</tr>
<tr>
<td>Almost No Public Companies</td>
</tr>
<tr>
<td>Usually No Property Tax</td>
</tr>
<tr>
<td>Tax Deduction for Health Care Component (lifecare)</td>
</tr>
<tr>
<td>Availability of Hospitality Services (meals, housekeeping, etc.)</td>
</tr>
<tr>
<td>Utilities Usually Included in Fee</td>
</tr>
</tbody>
</table>
Comparing Active Adult and Continuing Care Retirement Communities: Competitors or Complements?

respondents were permitted to select all descriptions that they felt applied to them, so the percentages will not add to 100.

Participants’ impressions of the differences between residents of the two types of communities are confirmed when one-third indicated that AACs were for more active people and offered a totally independent lifestyle (see Exhibit 5). Real estate features ranked highest when survey respondents living in AACs commented on what they liked about their current community. The three top factors included community location, homeownership opportunities, and the type and size of the home. Of less importance were social factors such as having friends live there or the social activities offered at the community. The single most important factor influencing the decision to move to an AAC was the desire to downsize, although when the top three factors were considered, the most frequently mentioned was the desire for a maintenance-free lifestyle. Exhibit 6 illustrates the top reasons residents chose to live at an AAC, and Exhibit 7 shows top reasons residents chose to live at a CCRC.

Exhibit 8 shows a sizeable proportion of AAC residents would consider a future move to a senior housing community offering support services to its residents.

DISCUSSION

An Overlapping Market

After examining all these considerations, there appears to be some overlap between the market for both the AAC and the CCRC. Notably, factors such as location, the desire to downsize, and a maintenance-free lifestyle are common to both types of products and decision-drivers. Arguably, with the upgrades and enhancements available in new and remodeled CCRCs, the importance of the type and size of the home also may be a component in making a decision for both types of communities.

Until recently, one of the most significant differences between AAC buyers and those who choose CCRCs has been the desire to continue to own, a

---

1 Respondents were permitted to select all comments that apply and therefore, the percentages will not add to 100.

2 Respondents to questions presented in Exhibits 6 and 7 were asked to rank each feature in order of importance from 1 (most important) to 4 (least important). Exhibits 6 and 7 reflect rankings including the Top (percent who ranked item 1), Top 2 (percent who ranked item 1 or 2) and Top 3 (percent who ranked item 1, 2, or 3).
Recognizing the continued value in homeownership, some CCRCs, even those owned and operated by not-for-profit organizations, are now beginning to offer equity or equity-like arrangements to residents. Condominium and cooperative structures are emerging across the country, as are financial structures offering shared appreciation when a resident leaves the community, even if the other benefits of actual ownership are not made available.

The difference in the age of those attracted to AACs versus CCRCs is of interest as well. Although the minimum age differs legally (55+ for AACs versus 62+ for most CCRCs), the experience of AACs varies. Many new AACs report attracting younger residents, particularly those targeting a luxury market. In addition, we believe new AACs in the Sunbelt draw buyers an average age of four to five years younger than new AACs outside the Sunbelt. Yet, we have observed through visits and discussions with developers that a fairly significant number of communities are attracting those in their mid- to late-60s and early 70s—where the crossover begins to occur with CCRCs. Some of the larger CCRCs, such as those being developed by Erickson Retirement Communities (Boston, Detroit, and Chicago metro areas, for example) and Shannondell of Valley Forge in the Philadelphia area, are success-

---

**Exhibit 6. Factors influencing decision to move to AAC**

<table>
<thead>
<tr>
<th>Top Mentions</th>
<th>Top</th>
<th>Top 2</th>
<th>Top 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wanted to downsize</td>
<td>33%</td>
<td>49%</td>
<td>62%</td>
</tr>
<tr>
<td>Wanted maintenance-free lifestyle</td>
<td>30%</td>
<td>55%</td>
<td>67%</td>
</tr>
<tr>
<td>Wanted to be closer to kids</td>
<td>13%</td>
<td>26%</td>
<td>36%</td>
</tr>
<tr>
<td>Friends live there</td>
<td>9%</td>
<td>26%</td>
<td>41%</td>
</tr>
</tbody>
</table>

---

**Exhibit 7. Factors influencing decision to move to CCRC**

<table>
<thead>
<tr>
<th>Top Mentions</th>
<th>Top</th>
<th>Top 2</th>
<th>Top 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance-free</td>
<td>32%</td>
<td>47%</td>
<td>68%</td>
</tr>
<tr>
<td>Security/on-site health care</td>
<td>29%</td>
<td>50%</td>
<td>71%</td>
</tr>
<tr>
<td>Meals/housekeeping, etc.</td>
<td>16%</td>
<td>37%</td>
<td>55%</td>
</tr>
<tr>
<td>Loss of spouse</td>
<td>13%</td>
<td>13%</td>
<td>16%</td>
</tr>
<tr>
<td>Downsizing</td>
<td>5%</td>
<td>26%</td>
<td>42%</td>
</tr>
<tr>
<td>Financial value</td>
<td>3%</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>Social environment*</td>
<td>0%</td>
<td>5%</td>
<td>10%</td>
</tr>
</tbody>
</table>

*Interestingly, although survey participants ranked the social environment low in comparison to most other factors, the results of American Seniors Housing Association’s (ASHA, 2003) The Benefits of Independent Living Communities: A Comparative Analysis of Residents and Non-Residents concluded that “social programs and opportunities to facilitate getting ‘out’ from the communities as well as paving the way for making and getting together with new friends are likely to increase satisfaction among independent living Residents” and that the “most striking difference between (Non-Residents) and Residents is that Residents are significantly more likely to want to be with other people than Non-Residents.”*
fully attracting people in their early to mid-70s with their substantial amenity and activity programs, and promise of a 100% refund on the entrance fee. In the survey discussed in this manuscript, 58% of the AAC respondents were aged 75 or below, in marked contrast to the 97% of CCRC survey participants who were 75+. In that same sample, 52% of AAC respondents were married in comparison to only 32% in CCRCs. Yet, in the future, it may be that age itself is less of a determinant than the health and wellness of the prospective resident. As noted above, the AAC residents perceived a significant difference in the capabilities of the AAC versus the CCRC resident.

Exhibit 8. Making a future move from an AAC

<table>
<thead>
<tr>
<th>Where would you move next?</th>
<th>CCRCs</th>
<th>Independent Living w/ Support Services</th>
<th>Assisted Living</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>31.5%</td>
<td>51.9%</td>
<td>37.7%</td>
</tr>
<tr>
<td>No</td>
<td>39.5%</td>
<td>29.6%</td>
<td>33.0%</td>
</tr>
<tr>
<td>Depends on circumstances</td>
<td>21.0%</td>
<td>13.0%</td>
<td>25.6%</td>
</tr>
<tr>
<td>Don’t know</td>
<td>7.1%</td>
<td>5.6%</td>
<td>3.4%</td>
</tr>
</tbody>
</table>

Will CCRCs Be Part of the Future Continuum?

As greater numbers of the 55+ segment move to AAC communities, what will happen 10 to 15 years down the road? Are the challenges perceived by CCRCs today likely to accelerate or will they become communities of opportunity? As long as AACs continue to make no provisions for an aging population base, residents will eventually begin to need to look elsewhere, particularly for health-related services. A greater sense of “community” may occur within an AAC than in the community at large, fostering internal, informal support systems that will emerge naturally to help frailer residents stay in the community. But what will be the tipping point when the burden of communal and self-care becomes too great? Will those in AACs continue to think ahead and make the move to a CCRC before it is a totally need-driven decision?

The data indicate those who would consider a move would do so before needing health care services. Nearly one-third could envision a future move to a CCRC (more than 50% would consider a move to independent living with support services), while in contrast, 38% thought they might move when they needed assisted living services. Survey results indicated that those who would consider moving to a CCRC tended to favor apartments over cottages. A change in health care status was the top reason people felt they would move to a CCRC in the future. Respondents cited a desire for more care services as the probable reason they would need to make such a move, indicating how real estate-related factors would no longer take precedence in their decision-making.

Several markets support the notion that AACs and CCRCs form a natural complement or continuum rather than being highly competitive. The New Jersey counties surveyed in the study (Ocean and Middlesex) are home not only to a large number of active adult units in both mature and new communities, but they also offer successful CCRCs. Respondents from these CCRCs revealed nearly 50% had moved from an AAC and 62% had lived in an AAC at some time previous to their move to the CCRC.

So what differentiates the AAC consumer from the
CCRC consumer? While age clearly still appears to be a determining factor, with the younger segment of the market gravitating toward the AAC, other factors seem to be more important. The AAC resident is influenced primarily by factors tied to real estate. They want to own their home, to diminish the burdens of home maintenance, and to downsize or have a home more suitable to their needs in its design. The CCRC resident is looking for long-term security, future health care services, the convenience of available services (such as meals and housekeeping under one roof), and they don’t want to move again.

Limitations and Future Directions

For those in the seniors housing industry, the findings of the survey may help guide the marketing efforts of their sales teams in recruitment of new residents. While we are able to summarize the data, we are aware that the small sample size may not be truly representative of the current state of the seniors housing market. A further assessment of the AAC and CCRC housing climate with a larger, representative sample size of prospective residents is necessary to lend credence to the trends described here.

Will the age differential remain a key factor in the selection of an AAC versus a CCRC, or will functionality and lifestyle dictate the choice? Will AACS delay, or perhaps eliminate, the move to the CCRC? More research is needed in this important area, as residents of both types of communities now exceed one million people.

REFERENCES

Understanding the experience of people cared for in dementia care settings is crucial for improving dementia care practice. To this end, we have developed a new observational tool, OQOLD (Observing Quality of Life in Dementia), that can be used by direct care staff in adult day, assisted living, and skilled care settings to assess the quality of life of persons with dementia and to match activities to their needs, interests, and abilities. OQOLD is reliable and valid; cost and time sensitive; easy to use and incorporate into daily routines; and provides relevant information that is immediately applicable in care practice. This paper describes the development of OQOLD and discusses possible applications.
INTRODUCTION

The quality of life (QOL) of people with dementia is a growing concern among researchers and service providers. Whitehouse and Rabins (1992) argue that QOL is the primary goal of dementia care. Kane (2001) argues that QOL should be a priority, rather than secondary to the focus on quality of care.

Despite a theoretical framework that has been highly influential (Lawton, 1991), dementia-specific QOL (DSQOL) remains an “elusive concept” (Logsdon et al., 2002, p. 510). Rabins and Kasper (1997) recognize multiple definitions. Ready and Ott (2003) note multiple dimensions that have been interpreted and implemented differently.

Nonetheless, several measures of DSQOL have been developed. These measures have employed a variety of methods, including: standardized interviews (Brod et al., 1999; Logsdon et al., 2000, 2002), proxy measures involving ratings of family or staff members (Logsdon et al., 2000, 2002; Rabins et al., 1999), and observational measures (Bradford Dementia Group, 1997; Lawton et al., 1996; Orsulic-Jeras et al., 2000). Recent studies have shown that persons with dementia consistently rate their own QOL higher than proxy ratings (Edelman et al., 2005; Sloane et al., 2005), calling into question the validity of proxy measures. Cognitive impairment may prevent persons with advanced dementia from accurately assessing or conveying their QOL via interviews. Thus, observational measures may be the most appropriate method for capturing DSQOL among persons at all levels of dementia severity.

As its name suggests, social engagement is the focus of the Myers Research Institute Engagement Scale (Orsulic-Jeras et al., 2000) an observational measure of DSQOL. On the other hand, affect is the focus of the Apparent Affect Rating Scale, another observational measure of DSQOL that was developed mainly for use among nursing home residents (Lawton et al., 1996). These tools are limited by a focus on one component of DSQOL (i.e., engagement and affect, respectively); thus, they fail to capture the complexity of QOL as a multidimensional concept. We believe that affect and engagement combine to create something entirely distinct when taken together—that is, the relative “pleasantness” of the person’s experience. While recognizing that DSQOL is determined by additional factors, we believe that examining the pleasantness of a person’s experience across multiple dimensions of wellness (described below) captures crucial aspects of DSQOL.

Dementia Care Mapping (DCM) (Bradford Dementia Group, 1997) is an observational tool that assesses person-centered care among clients/residents in formal care settings (Kitwood & Bredin, 1992). The primary goal of DCM is to improve care practice by assessing the individualized needs of clients/residents through detailed observations of 26 behaviors and affects over a period of six continuous hours (Kitwood, 1997, 1998). Unlike the above two observational tools, DCM does assess both affect and engagement. Moreover, DCM makes a major contribution to dementia care by promoting the adoption of person-centered care. The method is complex, however, requiring much time and skill in collecting and analyzing detailed data and giving feedback to staff.

This paper describes the development of OQOLD (Observing Quality of Life in Dementia), a new observational tool for direct care staff in adult day, assisted living, and skilled care settings to maximize the QOL of clients/residents at all levels of dementia care. In addition to considering issues of reliability and validity, the development of OQOLD was guided by three primary considerations. First, the tool must be easy to understand to minimize the cost and time required to become proficient in its use. Second, the tool must be easy to use and incorporate into daily routines. Third, the tool must provide relevant information that is immediately applicable in care practice.
**METHODOLOGY**

**Measure**

OQOLD consists of two coding systems that indicate 1) the “pleasantness” of an experience (the pleasantness score); and 2) wellness dimensions to which the experience is relevant (wellness codes). The first coding system (see **Exhibit 1**) is comprised of a seven-point scale ranging from +3 (an extremely pleasant experience) to -3 (an extremely unpleasant experience). This coding system was influenced by DCM Well/Ill-Being (WIB) scores (Bradford Dementia Group, 1997). Unlike WIB scores, however, this coding system includes a neutral-point (indicating neither a pleasant nor unpleasant experience). Service providers have informed us that the inclusion of a neutral-point is a substantial improvement. The definitions of the seven points are based on conceptualizations of affect and engagement (Lawton et al., 1996; Orsulic-Jeras et al., 2000), as well as the authors’ experience with persons with dementia. For the purpose of training, an information sheet is provided in which each point in the seven-point scale is formally defined. To promote reliability across observers, the definitions are accompanied by facial expressions and examples; verbal anchors also are attached to the midpoint and endpoints of the seven-point scale.

The second coding system is based on the Whole-Person Wellness model, which is often used to promote well-being in non-dementia populations and is practical for general use among older adults (Montague et al., 2005). There are seven codes, one for each of six wellness dimensions (physical, emotional, social, spiritual, intellectual, and vocational) and one indicating no observable impact in any of these dimensions. Formal definitions of the six dimensions are provided by Montague and colleagues (2005); these definitions were modified slightly for use among persons with dementia.

**Procedures**

Rather than observing clients/residents over a period of several hours, as is the procedure in DCM, service providers have informed us that they would rather focus on specific activities or interventions. Thus, we formulated an approach to assess DSQOL in which the individual is observed participating in selected activities across time. The specific activities selected to be observed depends on the type of data desired; for example, one could test a new activity by observing all clients/residents in the care setting participating in that activity. One also could do a case

<table>
<thead>
<tr>
<th>Pleasantness Score</th>
<th>Verbal Anchor</th>
<th>Brief Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>+3</td>
<td>Excellent</td>
<td>High level of positive affect or verbal/non-verbal engagement</td>
</tr>
<tr>
<td>+2</td>
<td>Moderate</td>
<td>Moderate level of positive affect or verbal/non-verbal engagement</td>
</tr>
<tr>
<td>+1</td>
<td>Slight</td>
<td>Slight level of positive affect or verbal/non-verbal engagement</td>
</tr>
<tr>
<td>0</td>
<td>Neutral</td>
<td>No positive/negative affect and no verbal/non-verbal engagement</td>
</tr>
<tr>
<td>-1</td>
<td>Slight</td>
<td>Slight level of negative affect with or without engagement</td>
</tr>
<tr>
<td>-2</td>
<td>Moderate</td>
<td>Moderate level of negative affect with or without engagement</td>
</tr>
<tr>
<td>-3</td>
<td>Terrible</td>
<td>High level of negative affect with or without engagement</td>
</tr>
</tbody>
</table>

*Note: Information in this table is in summary format and is intended for instructional purposes only; thus, it should not be used for data collection purposes. Those interested in adopting OQOLD should contact the first author to discuss training, which is necessary for the reliable/valid use of OQOLD.*
study of a new resident by examining him/her in a variety of activities across a two-week period.

OQOLD was designed to be implemented by persons in a variety of roles in dementia care settings (e.g., certified nursing assistants, nurses, administrative staff, and even volunteers and family members). It has been tested with several of these groups. After conducting an activity with a group of residents, the staff member who conducted the activity assigns three OQOLD scores for each client/resident participating in the activity. The first score indicates the state of pleasantness or unpleasantness in which the individual was observed most often. The second score indicates the most extreme state of pleasantness in which the individual was observed. The final score indicates the most extreme state of unpleasantness in which the individual was observed. The latter two scores are recorded regardless of duration, enabling the observer to document moments which, although fleeting, may be important in understanding/improving QOL. In addition, one or two wellness codes are applied to each individual, depending on the activity and one's response to it; for example, a ball-toss activity may be primarily physical and secondarily social in nature, depending on the experience of the individual.

Finally, additional information is recorded, such as the duration and start/stop time of the activity, location, noise/traffic in surrounding area, number of persons involved (including residents, family, staff, volunteers, etc.), and other information of specific interest. Depending on the nature of the question, a number of observations of the activity/activities may be needed. Expanding on the aforementioned examples, testing a new activity could require three or four observations in order to capture everyone at the site participating in the activity. Conducting a case study of a new resident might require observing him/her in 10 different activities across a two-week period. The method of “activity sampling” should provide a reasonable representation of the activity/activities of interest—this remains a question to be examined in future research.

**DISCUSSION**

OQOLD is a practical tool that has been successfully tested by direct care staff in adult day, assisted living, and skilled care settings. Data from these studies support the reliability and validity of OQOLD, as well as the ease with which it is learned and incorporated into daily routines, and the relevance and immediate applicability of OQOLD data to dementia care practice. Although presentation of these data is beyond the scope of this resource document, they are available from the first author and will be reported in a future manuscript (Edelman et al., 2006).

To promote timely feedback and utilization of findings, a computer software program has been developed that will provide a user-friendly platform for data entry and generation of reports, tables, charts, and graphs that may be customized to suit one's needs. This software will enable examination of individual and group-level data, as well as the influence of certain variables (e.g., time of day, length of each intervention, number of persons present, etc.).

In conjunction with the supporting software, OQOLD has many applications. OQOLD data can be used to provide a holistic experience (as defined by the six wellness dimensions) for clients/residents with dementia that maximizes their QOL. Specifically, OQOLD data can be collected and examined for activities selected to best match the needs, strengths, and interests of each client/resident within each of the six wellness dimensions. Activities with the strongest impact on QOL can be identified for each client/resident. By using OQOLD in this way, it also functions as a staff training program. That is, it enhances staff members' ability to meet the needs of persons in their care. Long-term implementation of OQOLD in this way enables staff members to continually test and discover the impact of various activities.

OQOLD information also serves to identify gaps in programming; for example, OQOLD data exam-
ined across an entire group of residents might demonstrate that few residents in a nursing home respond well to existing physical interventions, prompting staff to test new interventions.

OQOLD may be used to provide family members with quantitative feedback, augmenting staff members’ personal (qualitative) reports. Observations could also be taken during family members’ visits; thus, families can benefit from information regarding the types of activities that are most pleasing to their loved ones during visits.

OQOLD functions as a quality improvement tool by facilitating staff members’ recognition of the ability of clients/residents to experience high QOL under the appropriate conditions. OQOLD also may fulfill a quality improvement requirement (e.g., Commission on Accreditation of Rehabilitation Facilities [CARF] accreditation) and enable a care setting to set itself apart from its competitors by providing important information about the experience of dementia care recipients within a variety of care settings.

The collection and application of valid and reliable information about DSQOL is critical to promote the best possible care of persons with dementia. The authors contend that OQOLD is an advancement over existing tools for its ability to tap several dimensions of DSQOL at once; for its relative ease to learn and implement; and for its ability to capture immediately applicable information. Further, OQOLD can be used for persons in all stages of dementia, unlike direct interviews that are not practical for persons with advanced dementia. Although there are many questions to be answered regarding the use of OQOLD and much research yet to be conducted, the current state of its development suggests that OQOLD is a practical tool that can be successfully used in dementia care practice.

REFERENCES


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