Practice Concepts and Policy Analysis

Kathleen Walsh Piercy, PhD, Editor

The Palisades: An Interdisciplinary Wellness Model in Senior Housing

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Purpose: The conceptual model and implementation strategies for a university–private housing collaboration in a multilevel housing campus for older adults are described. The faculty and private developers viewed senior housing as an opportunity for people to downsize their space in order to upsize their lives within a community rich with resources to support their developmental needs. Methods: A wellness program that includes assessments developed and performed by a multidisciplinary team provides the basis for the development of resources and interventions aimed at up sizing residents’ lives. Semiannual assessments and feedback sessions provide the residents with opportunities to set and revise goals and to work with members of the team to identify resource needs. Results: After the first year, the wellness assessment scheduling and protocol were streamlined and recruitment barriers were addressed. The addition of a system for providing feedback to residents about their assessment results enhanced the meaning and value of the process. Implications: The Palisades team hopes to assist in promoting similar projects designed to positively impact wellness in older adults.

Key Words: PCCS, Multidisciplinary teams, Wellness model

How can quality of life be maximized for residents of a senior housing campus if a senior housing developer collaborates with university faculty whose expertise is in aging? This question has guided the process of developing a 120-unit housing
The Palisades partnership emerged from an invitation from a local developer to a psychology faculty member (and Gerontology Center Director) to join a senior housing development project that was in early stages of planning. In subsequent years of visioning and planning, a series of three contracts evolved, structured around distinct services: a health clinic operated by Nursing faculty, physical wellness activities developed by Health Sciences faculty, and an integrated activities program to maintain and improve residents’ cognitive fitness and psychosocial engagement developed by the Gerontology Center faculty. The developer committed to pay for the services and pledged to donate 1% of the Palisades’ gross revenues to support on-site research. The developers allocated the intellectual property arising from the faculty’s projects to the university. Several years prior to opening, the core faculty leading each of the three contracts became involved in planning how the Palisades could take full advantage of current research findings, university resources, and student learning opportunities to enhance the Palisades experience. Faculty subsequently worked on conceptual frameworks for services in each area, consulted on architectural and interior design considerations, designed programs, and brainstormed with other university faculty and graduate students about how this partnership might work.

The university faculty provided the conceptual framework. Theoretical frameworks from gerontology undergirded the vision and provided touchstones against which ideas were tested. In particular, the faculty referred regularly to the concept of person–environment fit (Lawton & Nahemow, 1973), lifespan developmental theory (Baltes, Lindenberger, & Staudinger, 1998), systems theory (Bronfenbrenner & Morris, 2006), and wellness models (Hettler, 1984; Myers, Sweeney, & Witmer, 2000). These theories were used to justify and shape the vision, which included creating physical spaces, equipment, staffing, and programs to maximize individuals’ well-being across stages of life. Although no single theory or holistic wellness model was adopted, faculty explored wellness models (Hettler, 1984) and models of academic–private partnerships in senior housing (Bookman, 2008; Rantz et al., 2008). We found that a multidimensional wellness model that encourages the pursuit of wellness across social, spiritual, physical, intellectual, occupational, and emotional domains adapted from Hettler (1984) provided the best fit for the model of aging-in-place for this senior housing community. The Palisades model was co-developed by the facility staff and the university faculty in order to create a useful and efficient wellness approach. Faculty and developers viewed senior housing as an opportunity for people to downsize their space in order to upsize their lives within a community rich with resources to support their developmental needs.

Support for an upsized life emphasizes wellness-supportive activities (physical, cognitive, health, and psychosocial) and life engagement. Wellness receives a major focus at the Palisades because of the emphasis on maintaining functional well-being and preventing or managing disease as described in most models of successful aging. The term wellness was chosen as it encompassed the multidisciplinary goals of the faculty and because wellness as a concept is universally appealing and not inherently threatening as the individual components may be to residents (e.g., cognitive screening). The design of Palisades included a wellness center as a hub for various activities that would draw residents into
comfortable, regular contact with wellness staff. Within the wellness center are the salon (hair care, massage, and manicure/pedicure), the health clinic, the physical wellness program staff, a state-of-the-art gym, behavioral consultants, and psychosocial wellness staff who coordinate activities. The Director of the wellness center is a key person known and trusted by residents, who offers them an accessible entry point to safely discuss concerns and preferences. This position is integral to the model, serving as a coordinator for assessments and programming and as a liaison between the university faculty, the students, and the facility.

Embedded within a wellness perspective is the philosophy of person-centered care and support (PCCS), which considers each person’s needs, respects each person’s value, autonomy, goals, and preferences, and addresses these principles from a holistic perspective. Providing PCCS requires assessment, thus no-cost Wellness Checks are provided to residents semi-annually by staff and university partners. The Wellness Check includes multiple components and results in an integrated wellness report that is shared with the resident in a feedback session. Wellness Check findings are used by center staff to identify areas for health promotion or to assist residents in setting new goals. Aggregated findings are entered as de-identified wellness data into a secure, password-protected database maintained on-site. Residents or powers of attorney give informed consent for the clinic director to extract health data from the electronic health record that is de-identified prior to entry into the wellness database by the research team. These wellness data are used by the team and staff to guide program development and as a research database. This principle of data-driven programming support is a simple but powerful application of clinical skill within a home environment.

Technological supports for aging-in-place are another component of the vision. The facility was built with a fiber-optic backbone and a wireless network. Multiple technologies were selected to support staff and residents across levels of housing. A security system links card-entry readers on residents’ apartments to the same system that monitors employee biometric entry/exit scans and the pull-cord system for emergency requests for help. Peripheral devices can be installed in individual apartments (e.g., moisture sensors for beds and medication dispensers) and linked to the same alerting system. Consistent with assessment-driven PCCS, devices are used only as needed, based on clear assessment evidence and resident request. These technologies provide additional data about residents’ daily lives allowing the team to match support and resources where needed and to use staff time efficiently.

Initial Implementation
Wellness assessments and programming were implemented within several months of the facility’s opening. A Wellness Check program that measures multiple domains of functioning semi-annually was established as the cornerstone of the Palisades operations (see Figure 1).
These measures serve as baselines against which improvement or decline in functioning can be evaluated, as triggers for services, and for program planning. Implementation of these Checks required the partners (university and housing) to define and expand staff roles within the wellness center and to clarify their marketing messages about wellness to current and future residents. Six faculty, six students, and five staff were closely involved in the assessment process in the first year. In addition, other faculty brought students to the facility for educational activities and engagement with the residents.

Table 1 provides descriptive and demographic data for residents during the first year of the wellness program and total bed capacity for each unit. AL and MC residents will participate in the wellness checks beginning in Year 2.

**Wellness Check Program Domains**

**Physical Wellness**

The aims of the initial physical wellness programs were to (a) increase overall functioning and mitigate disability, (b) increase residents’ self-efficacy about recovering from a balance or gait disturbance, and (c) increase movement to places beyond one’s personal living space or what we termed “Life Space usage” (Stalvey, Owlsley, Sloanem, & Ball, 1999). Faculty operationalized these aims by providing group exercise classes on Tai Chi, yoga, balance and mobility, aquatics, and individualized Techno-Gym® training programs for residents. Health Sciences faculty designed the classes with goals to increase muscle strength, endurance, flexibility, balance, and mobility and improve body composition.

Initial planning and start up required recruitment, selection, training, and evaluation of wellness program staff by the faculty member who served as Director of physical wellness services. The physical wellness team coordinated classes and programming, evaluated and acquired equipment, and assessed the ongoing needs of the community. The physical assessments within the Wellness Check consist of tests measuring stride length, walking ability and endurance, strength, balance, fall efficacy, and use of space. The physical wellness team worked closely with the Palisades’ management, marketing department, and residents to develop services that were desired and needed by the residential community and to communicate their value to residents. As part of the Wellness Check, residents were asked about what

<table>
<thead>
<tr>
<th>Facility</th>
<th>IL</th>
<th>AL</th>
<th>MC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of beds</td>
<td>50 (30 apartment homes, 8 patio homes, and 3 cottages)</td>
<td>48 (40 apartment homes, 6 Medicaid beds)</td>
<td>22 (19 apartment homes)</td>
</tr>
<tr>
<td>Total occupied</td>
<td>26</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mage</td>
<td>84.42</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range</td>
<td>65–94</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>34.62%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>65.38%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>100%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support needs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ambulatory status</td>
<td>73% walk independently</td>
<td>23.1% use a cane/walker</td>
<td>3.8% use a wheelchair</td>
</tr>
<tr>
<td>Cognitive status (based on SLUMS score)</td>
<td>29.4% within normal range</td>
<td>41.2% scored within the MCI range</td>
<td>29.4% scored within the dementia range</td>
</tr>
</tbody>
</table>

*Note: IL = independent living; AL = assisted living; MC = memory care; MCI = mild cognitive impairment, impairment that is greater than what is expected for the participant’s age but does not qualify for dementia; SLUMS = Saint Louis University Mental Status Examination (Tariq et al., 2006).*
they hoped-for and/or feared related to their “possible selves” in the health and psychosocial domains. This information, along with suggestions from the residents’ programming committee, shaped the services and programs offered. For example, residents report of fear of falling due to poor balance and limited mobility led to the expansion of balance and mobility exercise classes, individualized assessment and support in the gym, and Tai Chi class offerings. Clinic services were expanded to provide foot care services and anticoagulation monitoring. A balance of passive (movies and musical performances) and active (dances and happy hours) social activities provided a variety of engagement opportunities for residents.

Psychosocial Wellness

The psychosocial component of the Wellness Check includes measures of psychological and social functioning that are administered by wellness staff and clinical psychology trainees within two individual interviews with residents every six months. The measures assess quality of life, levels of social support and loneliness, general health, mood, social networks, hoped for (and feared) future health status, and instrumental activities of daily living.

Cognitive Wellness

The Cognitive component begins with an annual 1-hr screening assessment that is immediately scored and analyzed by a neuropsychologist and a graduate student. The screening assessment includes evaluation of memory, executive functioning, language, and other domains of cognitive functioning. Results are shared with residents (or staff, if more appropriate) as part of an integrated report feedback session. If this assessment raises concerns, residents are referred to community providers for a full neuropsychological evaluation that is billed through personal health insurance. Residents have the right to refuse further evaluation and treatment; however, neuropsychological evaluation results assist in discussion with the resident and family about most appropriate care levels. If a resident has a substantial decline in functioning that jeopardizes safety, the wellness team and facility directors speak with the resident and family to develop a plan to assure safety either through a move to a more supportive environment (AL or MC) or by bringing home health care services into the resident’s home. To date, this process has been successful in negotiating plans for additional support to residents demonstrating greater service needs.

Health Assessment

The health clinic serves as a safety net for residents and provides health services for employees. It is staffed by two board-certified nurse practitioners (NPs). The Director of clinic services assisted with the design of the clinic’s physical layout, established equipment and supplies needs, and wrote policies and procedures. In order to provide evidence-based care coordination using an electronic medical record (EMR) system, the clinic director and the Palisades’ owners coordinated a business agreement with a large, local medical group. For a percentage of reimbursements, this partnership provides use of an EMR system with technology support, billing services, referral sources, physician collaboration, and a medical director.

The NPs conduct comprehensive health assessments (CHA) with each resident at baseline and every six months. These CHA’s include a complete history, nutrition assessment, review of systems, medications, physical examination, diagnoses, and interventions recommended or initiated. Interventions may include diagnostic testing, provider referrals, education, communication with primary care provider, medication changes, immunizations, and routine assessments and primary care for employees. Acute primary care services are available to residents and staff.

In summary, The Palisades Wellness Model begins with assessment off our wellness domains, an integrated report of findings, and feedback to residents, staff, and/or families. In the first two years, data from the Wellness Checks led to the addition of services in the health clinic, shifts in activity programming, and the addition of integrated reports and feedback, as well as counseling services for families of residents anticipating or experiencing a transition.

Implementation: Unexpected Challenges and Opportunities

In pursuing the dream of a new culture in senior residential living that enhanced residents’ quality of life, unexpected challenges and surprises arose. Communication across disciplines, introduction of a new system of health care, slow development of
trust and familiarity with residents after relocation, and the low level of residents’ physical health conditioning were all obstacles to realizing the shared vision.

**Communication**

Building trust between the residents and wellness team required time and effort. Residents needed frequent clarification of the role of the university faculty and students at the facility. Through faculty “Chats” and informal discussion during assessments, wellness team members worked to clarify the benefits of participation in the ongoing wellness checks for residents rather than focusing on the research benefits to the university alone. Examples of “NP Chats” topics included medication management strategies, bone health, and nutrition for high blood pressure; and “Brain Chats” included age-related changes in the brain and research on optimizing memory. Over time, residents were able to acknowledge these benefits including improvements in physical stamina and social engagement.

Bridging communication and coordinating services between the university teams and the Palisades’ staff proved challenging. Both parties were relatively naïve to each others’ work, requiring each to learn the others’ roles and scope of practice. Negotiating these relationships and defining roles while providing services took significant time. Some facility staff took time to become comfortable engaging with faculty. Psychology faculty served as consultants to facilitate communication and streamline functioning between the Palisades’ staff and university partners. For example, university partners provided language for the marketing team to use when describing the wellness program to convey its benefits and purpose without eliciting prospective residents’ fears of being studied for research.

Another communication challenge related to the sharing of information among wellness staff and with facility staff. To facilitate communication, both the facility and the clinic consent forms were modified to specify that health information could be shared among wellness staff. This fluid communication became an invaluable resource considering residents’ general health status and care planning.

**Scheduling**

Wellness Checks were a priority for university faculty initially to provide a basis for program-
Engagement in Activities

Despite residents’ reticence about the Wellness Checks, they eagerly attended physical activity classes from the start. These classes were marketed to residents’ needs and interests, focusing on fall prevention and building stamina. These classes evolved to become a hub for socializing and publicizing upcoming Palisades’ events. A mature (50+ years old) wellness staff person was selected to lead these classes with support of trained undergraduate students. Many residents needed one-on-one attention, physical prompts, emotional/motivational support, and regular feedback to remain safe. Most individualized assistance was offered in open gym sessions where wellness staff could guide and support individualized needs.

Cognitive fitness was conceptualized as occurring within carefully crafted activities programming. University personnel consulted with facility staff on program conceptualization and specific activities. Although all personnel were to assist with programming, the wellness center Director served a strong administrative role in scheduling, training, and designing activities. The prevalence of cognitive impairment (approximately 30% in the dementia range) among independent residents was surprising to the team initially and led to reconceptualization of the range of activities needed to support engagement. University students were hired and trained to expand options, including stronger programming on weekends. The core wellness faculty created resident meeting opportunities (e.g., monthly NP and Brain Chats) and organized a university lecture series. The development of activity offerings appropriate to stimulate cognitive fitness in each community (IL, AL, and MC) is still a work in progress, but the model that is visible in our other wellness activities drives innovation in this area as well.

Although Year 1 included surprising challenges to personnel and organizational structures, it also witnessed the creation of a new model of service delivery in senior housing via a university–private developer partnership. Year 2 began with a reorganization of our plans and processes to consider the challenges we experienced and to maximize residents’ wellness. The higher census in the facility in Year 2 has provided the additional data needed to begin evaluation of the model.

Revision and Reorganization at the End of First Year

The wellness team reflected on progress at the end of the first year, which led to refocus of the service goals and research agenda. As noted previously, the Wellness Check was streamlined and organized to occur within a two-month time frame, reducing gaps between assessments. This new process consistently captures a comprehensive “snapshot” of each person for reliable data on resident functioning while distributing the workload evenly throughout the year. For residents whose health is frequently de-stabilized by illnesses or accidents, the assessment process is far more variable because no Wellness Checks can be accomplished when residents are ill or hospitalized. The team addressed the recruitment barriers by ensuring that each resident clearly understood the importance and life-altering potential of having data available to build the type of engaged, healthy lifestyle they desire. Each team member reinforces this principle during his/her piece of the Wellness Checks. Finally, a stronger process for providing feedback to residents was implemented to enhance the meaning and value of the Wellness Check (i.e., integrated multidisciplinary reports and individualized feedback) to provide practical, targeted feedback to residents. A pilot program, currently under development, will test the value and feasibility of extending the feedback session into a short-term coaching process that allows residents and/or staff and family to consider both the risks and opportunities in their wellness profile.

Perhaps, one of the most critical developments at the start of Year 2 was improving our ability to communicate transitions among ourselves as a wellness team. Previously, information about resident hospitalizations or incidents was relayed informally through staff conversations. An incident reporting system has since been created within a more comprehensive electronic record system that allows wellness and other staff to flag significant events. Information passed through this system allows our team to integrate dynamic, daily changes into more static semi-annual assessments and offers a simple risk indicator to management while protecting the privacy of health information in an efficient and timely manner.
Other changes have also been instituted; shortening and finalizing the assessments to reduce time and energy burden, purchasing incentives for participation in assessments, tailoring interview and assessment protocols for use in AL, and collaborating with marketing staff to encourage partnerships with the wellness center from the moment residents and their families consider our community. Overall, our wellness check process will continue to be modified and refined based on data and feedback.

**Recommendations for Future Collaborations**

*Creating a Common Vision*

Inevitably, developers, housing managers, and university faculty each bring their own assumptions and styles of thinking to a collaboration, requiring investments in communication and problem solving to generate a successful partnership. In our project, we learned that we needed to spend time learning more about the motivations of all parties, including our distinct definitions of success. Creating a common vision may be the greatest challenge and yet remains a crucial aspect of cross-disciplinary and cross-industry collaboration.

*Understanding Goals and Operating Procedures*

Differences in goals are grounded in visions and motivations. Academic motives primarily may be conducting research or developing innovations in service delivery. Owners/managers need to understand the academic workload and culture, as well as the work incentives in the academic world. University professors need to understand the tensions that businesses need to maintain in order to prosper and remain competitive. Expectations about service delivery also need to be clarified during the development phase, including milestone points when the responsibilities are revisited. For example, the way that academic semesters affect student employee staffing challenged the continuity in care and the perception of that care. Clear role definitions and duties, with flexibility as institutional needs change, are important.

*Preparing for Integrated Care Models*

Integrated care is popular to espouse and challenging to implement. The onsite clinic was a new model for the state licensure offices, requiring a long lead time to sort out issues before opening. What we perceived as a great benefit may not be judged so by the consumers. Wellness Center personnel needed to be proactive in educating residents, marketing staff, families, and community providers. Although the benefits of the Wellness Center were obvious to us, we needed to better market this service to residents and their families through newsletter articles, orientation meetings, chats about health topics, and services for family members and employees.

*Staff Training*

Clear processes for personnel training are crucial when engaging students and faculty in work with seniors in a residential community. A training program includes issues related to “elder speak,” stereotypes, and other considerations of working with older adults, as well as professionalism at work. Having a liaison between the university and the facility is crucial for optimal student experiences that support students’ wishes to learn while respecting their place within residents’ homes. The disadvantage of students’ short-term status as employees has to be outweighed by the perceived benefits of providing training in multidisciplinary settings.

*Transferability*

The Palisades facility is a middle/upper middle income housing opportunity for seniors and includes six Medicaid beds in the AL unit. Once the Palisades model has been fully evaluated, revised, and honed, the goal is to replicate this model in other settings as a cost-effective wellness program. The costs associated with the Palisades wellness model are primarily for staffing rather than expensive technology. The upfront technology investment by the facility owners, including the fiber optic backbone and security system, are expected to provide cost savings over the long term in security personnel and frequent upgrades to technology. The team is working to formulate the briefest measures and processes necessary for efficient implementation and evaluation of the wellness program in other sites. Because the model is not technology focused, adoption of the program will be more feasible in diverse settings.

*Research Program*

The university faculty spent one year prior to opening creating their framework and selecting...
measures for the Wellness Checks. The guiding principle was that all assessments had to have practical information useful to residents and staff while meeting the standards for a longitudinal data set that would support research. The research team aims to accomplish the creation of a longitudinal database that addresses the following questions: (a) develop baseline data for our residents, (b) develop an understanding of which factors interact to necessitate a move to a higher level of care, and (c) develop a database of physical, cognitive, psychosocial, and health measures for our residents.

The first aim in obtaining baseline data for our residents enables us to make fewer errors in estimating what is normal for a resident. Wellness Checks also support residents in their goals and help to sustain a higher quality of life. This database can be a source of information that empowers residents and staff to collaborate toward maximum autonomy for the residents. The second aim is developing an understanding of the factors that lead to a higher level of care. We hope to develop a measure that would estimate the most appropriate level of care.

Our third aim is to develop a longitudinal research database that enables us to examine how each of the assessment domains interact and impact our residents’ well-being. The outcomes from this database will have clinical, treatment, and programming implications. Specific outcome data relevant to testing of the model will be reported in future papers.

The research team consists of faculty with a variety of interests. The wellness database is available to all members of the team for projects that may focus only on a specific faculty’s research or that involve collaboration with other faculty across domains. Core faculty projects include fall prevention, correlations of cognition and cardiovascular measures, medication management interventions, psychosocial impact of technologies, and behavioral and environmental management of challenging dementia behaviors. The university community may request permission to access the wellness data by submitting a proposal to a joint facility staff-university committee. This committee reviews the proposal in light of the potential for contribution, burden to residents, and intrusiveness on facility day-to-day function.

Summary

Enhancing seniors’ quality of life has guided the process of developing the collaboration, facility, and programming for Palisades. We aim to collaborate with residents to create an aging version of the PCCS that is so often discussed in the intellectual disabilities/developmental disabilities literature. This multilevel housing campus illustrates the new opportunities available in public–private collaborations. Initial conceptualizations, implementation strategies, lessons learned, and revised processes have been shared in hopes of promoting further innovation in similar projects designed to upsize the lives of older adults.

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