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Mr. Andrews,

Our team is looking forward to this opportunity to partner with McBride Stephens, LLC in developing a senior living facility that will incorporate timeless design, effective space planning, and cutting-edge amenities to meet the needs and comforts of its future residents and guests. Through detailed research and employing evidence-based design strategies, this facility to be constructed on Smith Mountain Lake will provide a unique advantage for McBride Stephens, LLC in this specific market of adequate housing for the aged in need of additional care.

As individuals age, there is a growing need for assisted care to support the health, wellbeing, and needs of daily living for seniors due to issues related to memory loss (such as Alzheimer's or dementia), diminished vision, and ambulatory concerns in terms of limited mobility. The increased need for senior care resources is partially due to the fact that according to the US Census Bureau, "the nation's 65-and-older population has grown rapidly since 2010, driven by the aging of the Baby Boomers born between 1946 and 1964" with the 65-

and-older population growing by 34.2% in the past decade". In the process of transferring an individual to a care institution, the transition can be difficult due to the changes in physical, social, and environmental surroundings.

Additionally, not only is there an increase in the 65-and-older demographic, but the Human Factors & Aging Series' study on designing for older adults shows that "today's generation of older adults are different than prior generations of older people as they are living longer, remaining more active into older age, and staying in their homes longer before finding the need for assisted living arrangements". A presentation for the Keenan Institute of Private Enterprise by James Johnson and Stephen Appold also describes the same principle mentioned previously that many older adults prefer to live as independently as possible, aging in their homes instead of an institutionalized facility. When this is no longer possible, it is important that the resources available for various forms of assisted living are able to provide both quality care and dignity to those who cannot function fully independently any longer. This care facility to be designed in conjunction with McBride Stephens, LLC will aim to encompass current statistics, trends, and assistive measures required for successful senior living in the Smith Mountain Lake, Virginia area.

## **SUMMARY OF BEST PRACTICES**

Several key design concerns that are necessary to consider include creating an environment that fosters independence, socialization, and improved health of the occupants. In consideration of spatial design needs, the Journal of Aging and Health describes in a systematic review written by Dr. Farhana Ferdous, that "features such as ambience in the environment, the use of familiar objects, furniture type and arrangement, inclusion of kitchen and residential scaled dining room, white noise, connection to nature, access to outdoor areas, privacy, use of bright light, color, temperature, wayfinding, use of smaller spaces or landmarks with simple decision-

making points, and, above all, homeliness can significantly affect a patient's mood and behavior."The intent of this facility is to provide spaces designed for privacy, personalization, and a variety of spatial experiences such as access to outdoor space, non-institutionalized resident living rooms, clear wayfinding signage, adequate security for patient safety, social spaces for gathering with both other residents as well as family visitors, and activities to stimulate cognitive function and development.

Creating an environment that is tailored to meet the unique and needs of its residents instead of a onesize-all fits approach will encourage independence and adequately cater to residents' wellbeing. The American
Health Care Association in conjunction with the National Center for Assisted Living details that typical
services for a multi-use senior care facility for the aged include "24-hour supervision and assistance, exercise and
wellness programs, housekeeping and maintenance, meals and dining services, medication management and
assistance, personal care services (such as Activities of Daily Living [ADLs]), and transportation". Furthermore,
tailoring this facility to meet the needs of "individuals with specific needs including Alzheimer's disease or
other forms of dementia (such as memory care units), intellectual and developmental disabilities, and
particular medical conditions (e.g., Parkinson's disease) or other needs," would be an additional benefit for
residents of this community according to the AHCA.

# TRENDS AND CUTTING-EDGE AMENITIES

Several aspects of care facilities for the elderly that are to be considered include the design and addition of more home-like spaces, multi-sensory rooms for memory care patients, the use of biophilic design, and considerations for disease control while still encouraging socialization. Throughout my research, I have discovered that a study conducted on the effects of the physical environment on health and behaviors of residents with dementia in long-term care facilities for the Research in Gerontological Nursing journal state that "small-scale facilities have positive effects on health and behavior of residents in long-term care facilities in

demonstrating a higher level of positive mood, social engagement, physical functioning, and better health status compared with residents with dementia living in the traditional large-scale unit". Additionally, the layout of these home-like spaces and living room settings can encourage communication between residents and allow families a space to gather with a loved one living in the facility.

Another emerging trend includes the integration of Snoezelen therapy, also called multi-sensory environment therapy by the Journal of the American Medical Directors Association, which provides "patients with dementia with a unique multisensory experience that promotes sensory stimulation while simultaneously reducing mental burden". In this setting, a resident is exposed to sensory equipment that reduces agitation caused by sundowning. I believe that the integration of these multi-sensory spaces would be a benefit to this community.

Biophilic design, incorporating outdoor spaces and nature design, has "the opportunity to exercise helps reduce stress, which is one of the main contributors to 'challenging' behavior for people with dementia, such as anxiety, agitation and sleeplessness" according to a study conducted for Nursing Standard. This will also promote independence and allow our residents to wander safely within these green spaces.

In light of the current global pandemic, care facilities for the aged have been particularly impacted. In recent information on this, Senior Housing News has said that "to avoid community-wide disruptions in the future, more providers may choose to adopt designs that emphasize the use of separated neighborhoods, where residents can live, socialize and dine together in smaller groups." With the need to radically alter the approach to senior living due to safety concerns, it is important to also design in a way that does not limit isolation for the residents of this new care facility. While the pandemic may eventually pass, these are design lessons that can be incorporated into this new construction project, allowing McBride Stephens LLC, to be a pioneer in designing for adaptability in the changing atmosphere of elderly care facilities.

### **SUMMARY OF LOCAL COMPETITION**

In the surrounding area, local competition includes Runk & Pratt, with facilities located in Smith Mountain Lake and the surrounding Lynchburg area. The Runk and Pratt Smith Mountain Lake campus contains assisted living, memory support, and independent living options for residents. The Smith Mountain Lake campus offers medical oversight, physician appointments, medication management, on site therapy, as well as a 24/7 available staff. In terms of amenities, this facility offers private and semi-private rooms, common areas, outdoor garden space, a parlor shop, and private dining rooms. This facility places focus on activities for residents to promote a healthy and active lifestyle for all aspects of senior living. For memory support, Runk and Pratt offers a fully equipped multi-sensory room, security features, and trained Dementia practitioners on staff.

Located in Roanoke, Woodland Hills is another facility that offers independent living, memory care, and assisted living. Independent residents have choices between 1 to 3-bedroom layouts each offering emergency call systems, transportation, on-site therapy, and housekeeping. The assisted living portion involves a tailored approach to meet the needs of each individual resident. Designed to meet patients emotional, physical, and spiritual needs, the Inspiritas memory care neighborhood is secured for resident safety but offers enrichment programs for resident wellbeing. This facility offers both long- and short-term stays.

### RECCOMENDATIONS

As we determine which phase of this project to implement first, it is important to examine the data of local demographics within the Smith Mountain Lake and surrounding areas. According to information from the U.S Census in Bedford County, 21.8% of the population is over 65. In Pittsylvania Country it is 23.3% and 24.2% in Franklin County. This is a sizeable portion of the population that is above 65. As the Baby Boomer population grows older, facilities able to handle these unique needs of the elderly will be more necessary.

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However, in light of the current situation with COVID-19, large institutional nursing home facilities

have experienced great difficulty, with more adults opting to stay in their homes instead of locating to a large

facility according to current information from Senior Housing News. In this case, I would recommend moving

forward with plans for a smaller memory care facility in the first phase, as according to Virginia statistics there

are "approximately 140,000 Virginia residents aged 65 and older who have been diagnosed with Alzheimer's

disease or other forms of dementia, and by 2025, that number is expected to increase by 35.7%." Additionally,

according to the CDC, "the U.S. burden of Alzheimer's disease and related dementias (ADRD) will double by

2060."

Following the memory care facility to be designed with awareness of current trends and state-of-the-art

practices, I propose that the assisted living facility follow shortly after, as many of the memory care amenities

can be incorporated seamlessly into assisted living needs as well. The last phase would contain independent

living villages where those who are staying in assisted living for short term needs could easily transition into

long-term independent living with this part of the facility nearby to the first two phases of this construction

project. Upon completion, each of these facilities would comprise one distinct campus on Smith Mountain

Lake to meet the unique needs of the growing 65 -and-older population.

Once again, I would like to thank you for this opportunity to partner with the McBride Stephens, LLC

team to provide a care facility for the elderly that will simultaneously meet the needs of the growing 65-and-

older population and incorporate state-of-the-art cutting-edge trends into this environment as well.

Regards,

Sarah Lemley

Interior Designer

Sarah Jemley

#### Sources

- American Health Care Association. (2019). Facts & Figures. American Health Care Association and National Center for Assisted Living. https://www.ahcancal.org/Assisted-Living/Facts-and-Figures/Pages/default.aspx
- Berkheimer, S. D., Qian, C., & Malmstrom, T. K. (2017). Snoezelen therapy as an intervention to reduce agitation in nursing home patients with dementia: A pilot study. *Journal of the American Medical Directors Association*, 18(12), 1089–1091. https://doi.org/10.1016/j.jamda.2017.09.009
- Czaja, S. J., Boot, W. R., Charness, N., & Rogers, W. A. (2019). Designing for older adults: Principles and creative human factors approaches. CRC press.
- US Census Bureau. (2020, June 25). 65 and Older Population Grows Rapidly as Baby Boomers Age. The United States Census Bureau. https://www.census.gov/newsroom/press-releases/2020/65-older-population-grows.html
- Ferdous, F. (2020). Positive Social Interaction by Spatial Design: A Systematic Review of Empirical Literature in Memory Care Facilities for People Experiencing Dementia. *Journal of Aging and Health*, 32(9), 949–961. https://doi.org/10.1177/0898264319870090
- Johnson, J. H., & Appold, S. J. (2017). US older adults: Demographics, living arrangements, and barriers to aging in place. *Kenan Institute*.
- Lee, S. Y., Chaudhury, H., & Hung, L. (2015). Effects of physical environment on health and behaviors of residents with dementia in long-term care facilities: A longitudinal study. *Research in Gerontological Nursing*, 9(2), 81–91. https://doi.org/10.3928/19404921-20150709-01
- Memory Care. (2020, December 2). *Memory Care in Virginia*. MemoryCare.Com. https://www.memorycare.com/memory-care-in-virginia/

- Regan, T. (2020, April 7). How Covid-19 Is Shaping the Future of Senior Living Architecture and Design. Senior Housing News. https://seniorhousingnews.com/2020/04/07/how-covid-19-is-shaping-the-future-of-senior-living-architecture-and-design/?itm\_source=parsely-api
- Trueland, J. (2017). Outdoor spaces improve dementia care. *Nursing Standard*, 32(2), 24–26. https://doi.org/10.7748/ns.32.2.24.s24
- United States Center for Disease Control. (2018, August 20). U.S. burden of Alzbeimer's disease, related dementias to double by 2060 | CDC Online Newsroom | CDC. Centers for Disease Control and Prevention.

  https://www.cdc.gov/media/releases/2018/p0920-alzheimers-burden-double-2060.html
- U.S. Census Bureau QuickFacts. (2019). U.S. Census Bureau QuickFacts: Bedford County, Virginia. Census Bureau QuickFacts. https://www.census.gov/quickfacts/fact/table/bedfordcountyvirginia/PST045219

https://www.runkandpratt.com

https://www.rui.net/woodland-hills