DESIGN FOR DEMENTIA

School of Human Sciences
Interior Design
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Abstract

Purpose

Our team was challenged to design an assisted living (AL) facility for county residents with dementia when their condition ultimately prevents their continued participation in the Nacogdoches Treatment Center's (NTC) Day Activity Program. The NTC is a non-profit facility founded in 1972. Its mission is to provide needed services that are not being met by the community. With the new facility, patients may transition seamlessly from the daily program to a permanent living space, surrounded by familiar faces and loving care.

Kathy Strong, NTC executive director, asked SFA interior design students to explore the construction of an AL facility on the present NTC site. This facility will house 10-16 dementia residents and have 5-8 staff members. Features will include living quarters, community kitchen, quiet room, dining area, community/activity space, and outdoor garden. The community-oriented and home-like atmosphere will provide ADA accessibility and functionality for both residents and staff.

Research

Courthouse records revealed that the NTC is located on two lots. One lot features the existing building and small parking area; the second provides only parking. The second lot was proposed for the new building's location.

To understand dementia, our team interviewed a specialist—Carol Johnson from Heart to Heart Hospice. We discussed common misconceptions in dementia care. She shared design recommendations for flooring, colors, and walls. For example, due to failing vision and cognition, contrasting values help residents perceive objects. Adjacent surfaces should contrast in lightness/darkness such as walls to floor, bedroom walls to closet and bathroom doors, bathroom flooring to toilet, and furniture to flooring. Conversely, doors where residents should not enter should be painted the same color/value as the wall. These color strategies enhance resident safety.

Other research involved the Heart to Heart Hospice Dementia Live simulation, *Americans with Disabilities Act* (ADA), *Texas Accessibility Standards* (TAS), Department of Aging and Disabilities Services (DADS), and *International Building Code* (IBC). These sources guided us in insuring that resident health, safety, and welfare were protected. For example, the Dementia Live simulation increased awareness of how confusing an environment may seem to a dementia client. The IBC stated that an AL building is an R-4 occupancy which determined features of the building layout. DADS stated that a minimum of 80 square feet is required for a resident bedroom and that dirty/clean areas within a laundry must be separated to prevent cross-contamination. The research phase determined the quality of the final design.

Procedure

Our team followed the design process in developing the design solution. Steps included conceptual sketches, floor plan layout, exit/travel calculations, interior elevations, site plan development, and final computer-drafted drawings. We presented the finalized design to the NTC staff and provided copies of all drawings.

Results

The final design satisfied project requirements, meeting state/national codes and regulations. The project taught us how important research is to insure the health, safety and welfare of the public and how designers must remain up-to-date on codes, regulations, and laws. We also learned that sensitivity is needed, especially when designing for special populations.

Research References

- Heart to Heart Hospice Dementia Live simulation
- *Americans with Disabilities Act* (ADA)
- *Texas Accessibility Standards* (TAS)
- *Health and Human Services Commission* (HHSC)
- *International Building Code* (IBC)

Health and Human Services Commission (HHSC)

- If the facility provides linens to the residents, the quantity of available linen must meet the sanitary and cleanliness needs of the residents. Clean linens must be stored in a clean area.
- All resident rooms must open upon an exit, corridor, living area, or public area and must be arranged for convenient resident access to dining and recreation areas.
- In facilities that have living units consisting of separate living spaces, dining spaces, and bedrooms, 10% of the required bedroom square footage may be included as part of the living and dining space.

International Building Code (IBC)

- Occupancy classification is residential group R-4 with 5-16 residents excluding staff
- Maximum exit access travel distance 75'-0"
- Number of exits and exit configuration for 1-500 people requires 2 exits
- Sprinklers required for assisted living facilities
- Dead end corridors limited to 50'-0"

Texas Accessibility Standards (TAS)

- 60"minimum hallways
- 34"-38" handrail height in hallways
- 60" wheelchair turning radius in all rooms
- 32" minimum door clearance
- 30" x 48" wheelchair parking spaces
- 30" minimum table height for wheelchairs
- 30" x 60" roll in showers

References

2012 International Building Code. Country Club Hills, Ill: ICC, 2011. Print.

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Wayfinding: Design for Understanding. (n.d.). Retrieved April 19, 2017, from https://www.healthdesign.org/chd/research/wayfinding-design-understanding