

First Principle of Universal Design: Equitable Use

N. Yaprak Savut, PhD, CKE, and Hunt McKinnon, AIA, NCARB, NCIDQ

In the first article of a series on best practices in assisted living (AL) design (see May/June *ALC*, page 25; www.assistedlivingconsult.com/issues/04-03/alc56-Design%20McKinnon-528a.pdf), we introduced universal design, a concept created by Ron Mace of the Center for Universal Design (CUD) at North Carolina State University. Rather than designing to meet an often restrictive building code or the Americans with Disabilities Act (ADA) standards, architects who incorporate universal design are creating inclusive structures that are more usable by everyone, regardless of their abilities or limitations.

There are 7 principles of universal design, which we introduced in the first article. These include:

- Equitable use
- Flexibility in use
- Simple and intuitive use
- Perceptible information
- Tolerance for error
- Low physical effort
- Size and space for approach and use

In each of the next articles in the series, we will look in greater detail at each of these 7 principles within the context of design quality in AL facilities.

First Principle: Equitable Use

To develop these articles, we worked with our interior design students who were given a group project in the spring of 2008. They were instructed to visit 1 of the 20 AL facilities in the North Carolina State



University area and observe the facility according to the 7 principles of universal design, and to see the facilities through the eyes of a senior who has just moved in. They were then asked to write a postoccupancy evaluation of the facility (we have dubbed it “Any-Home Manor”) based on their observations and experience. In this article, we will share these observations, focusing on the *first principle of equitable use*: “The

design is useful and marketable to people with diverse abilities.” What follows is our students’ report.

FIRST IMPRESSIONS

My son David took me to the place they had decided that I should move to last week. I remember him driving up to Any-Home Manor and my first impressions. I first thought, “This is no home: I will miss my house and I cannot believe that my

only son David is going to ‘put me in an institution.’”

However, during the week that I have been here, I have made some new friends and started to realize that the quality of the building and its interior are a result of having to accommodate the various needs of so many different residents. I am still mobile and do not even need a walker at this point, but many of the people whom I have met this past week are more frail than I am and some are even confined to wheelchairs for the rest of their lives. Any-Home Manor must make sure that they have access to the entire building in a way that is equal to my ability to enjoy my new home.

But I am getting ahead of myself; let me tell you about my first day. As we drove up to the facility, I noticed that the entrance had a covered area that will keep the rain and snow from bothering me, or anyone else who lives here, as we get in and out of our cars.

Guideline 1a.

Provide the same means of use for all users: identical whenever possible; equivalent when not.

David found a place to park that was a brief walk to the front door, and the pavement was not bumpy or sloped. It was rather flat, as I recall, with no steps or level changes that might cause me to trip. I sometimes see those entrances where it says you must find the handicap entrance towards the side or rear of the building. I find those notices discriminating. Why can all the folks not enter the building from the same door? But this building's entrance is inclusive. Anyone can enter to the building through the same door. It is that simple.

Guideline 1b.

Avoid segregating or stigmatizing any users.

The front door was rather pretty and had a glass sidelight. The thing

that I most remember about the door though was how easy it was to open, and it did not shut on my heel like the screen door at my house. That door was such a bother and it was hard to open with a bag of groceries in one hand. This door is much easier to operate since it has a big handle on the outside and a bar that opens the door when you push it on the inside. Even my little granddaughter

I noticed that the front entrance was like a parlor.

Lucy can open this door without being caught in the middle. She came to visit me last week and just walked right in and gave me a big hug. I noticed later in the week that the door on the side of the building opens when it sees you coming. I like this option better. It has an electric eye, David said—whatever that is. That is really helpful for the folks with walkers and wheelchairs.

Guidelines 1c.

Provisions for privacy, security, and safety should be equally available to all users.

Once I got inside the building, I noticed that the front entrance was like a parlor; everyone was just sitting around where they could see down the hallways and be close to the dining area and the toilets. They liked being where all the activity could be observed. Some of my new friends were watching an old movie on television at the corner of this big room. Everyone gets to do what they wanted to do at Any-Home Manor.

The colors of the hallway and the other spaces are very nice too. They are calming colors: light blues

and reds, and the patterns of the wall papers are not confusing.

I made a new friend on Wednesday. Her name is Lillian, and she has glaucoma. I do not really know what that means, but she said that bright light and reflections bother her. The lights here do not cause any glare, and the wall color makes the rooms easy for Lucy to cross. She said she used to be afraid to walk in the nursing home where she had to go last summer because everything was so bright. It made her dizzy. There is a chair rail on the wall, and I noticed that Lucy and some of the other people who stay here use it to steady themselves. Its wood is the same color as the coffee tables and the reception desk. The color of the carpet on the floor and the pattern on the chairs match each other. If it were not so crowded, this entrance hall could easily be someone's home. I prefer this feeling rather than what you get from institutional, white-colored, metal furniture of hospitals.

Guideline 1d.

Make the design appealing to all users.

While David was talking to the staff, I realized I had to use the restroom. There were public restrooms nearby, but I didn't want to occupy the one with the handicap sign since I am not handicapped yet. I looked at the doors carefully but there were no signs showing that any of them were for disabled people. No signs for ladies or gentlemen either. I chose the one on the left side, and as soon as I entered, I was surprised to see that the restroom was an individual room with a large space (enough for a walker or a wheelchair to turn around in), a toilet bowl with 2 grab bars, and a lavatory with a soap dispenser and faucet. The overhead lights in both of them were activated with sensors. Later on, when I checked the other restroom, I saw the same thing—all the restrooms are the

same. That is why they don't put a handicap sign on either of the doors because it doesn't matter which restroom you use. Each of the restrooms is accessible.

I visited the dining room on the afternoon of my first day at Any-Home Manor. Thank goodness David waited all day so that I could get settled in. My observations were that someone had tried to make the place look homey, but it did not look like my dining room at home. It was more like a restaurant or David's country club dining room. What I noticed right away was how much room there was between the tables and how the chairs all had arms and were on rollers. I also noticed that the tables had an edge that was a different color of wood. That detail helps me see where the edge of the round table is.

When I first visited my new bedroom and bathroom, I was surprised that it was so plain. The wall outlets were not even at the normal

height on the wall. There was something with a pull cord behind where my bed would be located and another one in my new bathroom. I later learned that the reason that the cords were there was

Someone had tried to make the [dining room] look homey.

for my own safety; I could pull them and a staff member would respond—like room service! The wall outlets were placed at a height for people in wheelchairs or with back problems to easily be able to reach them. The other thing I noticed was that the bathroom was so big, and the floor was an ugly vinyl floor.

Later I found out the reason for this was for the residents who must use wheelchairs to get around. I also had a shower; and there were grab rails everywhere.

I so much wanted my old bathtub back; the one with the claw feet. Unfortunately, I have had to get used to not taking baths. Once I moved my own furniture into the room, and put up my own drapes and photos of my family, I made the space my own. I even found out that the grab bars are dandy places to hang bath towels. I am not handicapped and do not need all these special things, but they make my life easier, and I have come to realize that many of my new friends do need some or all of these special features. ALC

N. Yaprak Savut, PhD, CKE, and Hunt McKinnon, AIA, NCARB, NCIDQ, are assistant professors in the Department of Interior Design and Merchandising in the College of Human Ecology at East Carolina University.

"Slow Medicine"...? Why Not Palliative Care?

(continued from page 18)

and palliative care experience with a feasible payment structure that responds to patients' and families' needs over years—not months. As we look to the future and consider how we will provide and pay for services to the burgeoning population who will need support, it is clearly time to bridge the LTC gap. Palliative care is a good place to start. ALC

JoAnne Reifsnnyder, PhD, APRN, BC-PCM, is Research Assistant Professor and Division Director, Health Policy and Health Services Research in the Department of Health Policy, Jefferson Medical College, Philadelphia, PA.

References

1. Gross J. For the elderly, being heard about end of life. *The New York Times*. May 5, 2008. Available at: <http://www.nytimes.com/2008/05/05/health/05slow.html#>. Accessed June 5, 2008.
2. World Health Organization. WHO definition of palliative care. WHO Web site. <http://>

www.who.int/cancer/palliative/definition/en/. 2008. Accessed May 15, 2002.

3. Hallenbeck JL. *Palliative Care Perspectives*. New York: Oxford; 2003.

4. Billings JA. What is palliative care? *J Palliat Med*. 1998;1(1):73-81.

5. The Center to Advance Palliative Care (CAPC). Making the Case for Hospital-based Palliative Care. CAPC Web site. <http://www.capc.org/building-a-hospital-based-palliative-care-program/case/index.html>. 2008. Accessed May 22, 2008.

6. Pan CX, Morrison RS, Meier DE, Natale DK, Goldhirsch SL, Kralovec P, Cassel CK. How prevalent are hospital-based palliative care programs? Status report and future directions. *J Palliat Med*. 2001;4(3):315-324.

7. Morrison RS, Maroney-Galin C, Kralovec PD, Meier DE. The growth of palliative care programs in United States hospitals. *J Palliat Med*. 2005;8(6):1127-1134.

8. National Hospice and Palliative Care Organization (NHPCO). *NHPCO Facts and Figures: Hospice Care in America*. NHPCO Web site. http://www.nhpc.org/files/public/Statistics_Research/NHPCO_facts-andfigures_Nov2007.pdf. November 2007. Accessed May 15, 2008.

9. The Center to Advance Palliative Care (CAPC). *CAPC Manual. Hospice Growth in the United States*. CAPC Web site. <http://64.85.16.230/educate/content/rationale/ushospicegrowth.html>. 2002. Accessed May 22, 2008.

10. Department of Health and Human Services,

Office of the Inspector General (OIG). *Semiannual Report*. OIG Web site. <http://www.oig.hhs.gov/reading/seminannual/1998/98sssemi.pdf>. 1998. Accessed May 22, 2008.

11. The Medicare Payment Advisory Commission (MedPAC). *A Data Book: Healthcare Spending and the Medicare Program, Section 12, Other Services*. Washington, DC: MedPAC; 2007.

12. National Hospice and Palliative Care Organization. Questionable practices by hospices and nursing homes under health care fraud and abuse rules. 2007. NHPCO Web site. www.nhpc.org/files/public/regulatory/Hospices-NursingHome-Focus_Questionable_Practices.pdf. Accessed June 10, 2008.

13. Carroll J. *Hot Regulatory Topics*. Presentation at the 2008 Pennsylvania Hospice Network Annual Meeting and Conference, State College, PA, April 28, 2008.

14. Centers for Medicare & Medicaid Services (CMS). Medicare Hospice Data 1998-2005. CMS Web site. <http://www.cms.hhs.gov/Prosop/MedicareFeeSvcPmtGen/downloads/HospiceData1998-2005.pdf>. 2007. Accessed May 15, 2008.

15. MedPAC. Hospice Services Payment System: Payment Basics. 2007. MedPac Web site. www.medpac.gov/documents/MedPAC_Payment_Basics_07_hospice.pdf. Accessed June 16, 2008.

16. Department of Health and Human Services (DHHS), Office of the Inspector General (OIG). *Work Plan, Fiscal Year 2008*. Washington, DC: DHHS; 2008.