Accessible House, Adaptable House, Smart House

PLANNING FOR SENIOR LIVING
OLLI COURSE #21017

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Home, increases in importance as elders age. It has many meanings. It represents control, autonomy, and privacy. It organizes the rhythms of their everyday life. For elders it signifies . . . “their ability to be alone; their capacity to act spontaneously; their familiar attachments to people and objects of their past. Residential utopias are hard to come by” (Golant, 1992, p. 11).
Understand strategies to adapt home environment through design and assistive technology

Proactive strategies to support quality of life
Most individuals retain most of their abilities

- Most changes are gradual, adaptations are gradual
- More recover from catastrophic injury and illness – accommodate after and side effects
- More likely to change behaviors than environment
Mobility Changes

- Disease
- Damage to kinesthetic sense
- Results in greater caution
  - slower, shuffling, and more deliberate steps
Sensory Changes

- Decline in sensory receptors is a normal part of aging
- Occurs at varied rates and degrees
Framework

Home safety and use

Quality of Life Basics – enhance sense of worth and well-being for residents (Wylde, Baron-Robbins, & Clark, 1994)

- Privacy – decide when to be alone
- Belonging – blends privacy with when, how, and who to interact with
- Control – ability to use the environment
- Safety and security – protected, accessible
Scald Protection Devices

for safety, scald proof valves should be used
Lighting

Indoor illumination
About the level of twilight – not bright
Increase quantity and variety not brightness
Reduce glare
Provide Gradual Changes in Light Levels
Aging-in-Place

- Goal -> remain independent as much and for as long as possible; low propensity to change
- Respond to physical changes
  - Alter housing
  - Alter behavior
  - Move to alternative housing – requires adjustment to new residential environments
True or False
Most housing has been designed to accommodate or support changes due to aging.

Would the home you grew up in accommodate aging?
Most housing, built between 1950 and 1970, is not readily accessible to individuals with mobility impairments.
Traditionally housing was not designed to accommodate changes due to aging. Most do not change the physical structure; most adjust to the environment.

- Use different entrance
- Take fewer baths
- Use stairs less
- Avoid using low toilets
Universal Design

- Concepts intended to make homes safer, easier, and comfortable as the people who live there age.
- The goal is housing with features that meet the needs of individuals with a variety of abilities across the lifespan.
- Should not be confused with accommodations for special needs.
Ron Mace, North Carolina State University’s Center for Universal Design, universal design is “the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design”.

In other words, the principals of universal design when applied to products, communication, and environment makes life easier.
Universal Design Features Are:

- Supportive
- Adaptable
- Accessible
- Safe
Good design

- Accommodates individual abilities, supports diversity
- Is easy to use
  - Simple
  - Little effort
- Communicates necessary information
- Minimizes hazards
Adaptable Home

- More easily modified later to suit the abilities of all family members over time
- Fits the changing needs of residents
- Planning for possibilities
  - adaptations are easy and cost-efficient
- Proactive rather than reactive

An Adaptable House accommodates lifestyle changes without the need to demolish or substantially modify the existing structure and services (http://www.yourhome.gov.au/technical/fs32.html#adaptable)

AARP, 2006
Visitability

- Individuals with varying levels of abilities are welcomed into my home.
- No-step entrance, no steps on the first floor
- Wide hall and doorways
- Accessible bath on the first floor
- Accommodates short term - broken bones, recovery from illness and surgery
Smart housing plans for modifications

- Less expensive if included in construction and rehab plans – stack closets
- Decisions are thoughtful
- Safer - help prevent unnecessary losses and accidents
Home Modifications

- Improve ease of use, safety, security, and independence
- Enhance the home and protect financial asset
- Plan ahead – stack closets to accommodate elevator
- Remove barriers and hazards -> safety
- Reduce stress and preserve energy
- Facilitate ongoing social activities
Common Modifications in US

- Full bath and bedroom on main level
- Climate controls within optimal reach
- Non-slip floor coverings
- Bathroom with grab bars, etc
- Emergency alert system
- No-step entrance
- Garage or covered parking
Process

- Identify
  - Design objectives and family values and goals
  - Resources; city, county, HRA home modification programs

- Decision making – access information, weigh alternatives
  - Aesthetic
  - Easy and logical to use
  - Affordable
  - Sustainable
Process continued . . .

- Product evaluation – whole as well as parts
  - Safety, healthy
  - Ease of use – does not fine fingering, provides feedback, logical, within range of reach
  - Maintenance
Welcoming, no-step entrance

- Landscaping
- Easy open window; residents see visitors before opening door
- Level surface extends minimum of 18 inches
- Lighting: walkway, overhead, numbers
- Shelf, seating
- Attractive door with easy to operate handle and lock; one hand, closed-fist test
- Low maintenance exterior materials
Priorities

- Approach, enter and leave
- Places to rest
- Bathroom
- Kitchen
- Places to socialize
Quick and easy

- Rocker switches or dimmers to lower light levels
- Lever faucets and door handles
- Shower chair, hand held shower head
- Hard, level floors – office chair
- Braced hand rails and grab bars
- Lift to conquer stairs – starting at $1,000
- Elevator - $15,000 and up
Living Room
activities previously in basement family room

- Furniture – color contrast, supportive seating, comfortable, arms
- Colors and lighting
- Personal activities – handcrafts, large print books and magazines, family picture
- Controls (thermostat, switches and electrical outlets within 36 to 44 inches above floor),
- Phone, remote to control electronics, etc
Home Office

- Embody Chair - comfort
- Desk
- Computer
  - Tele medicine
  - Connection to family, friends, and information
Resources


http://www.louistenenbaum.com/ Aging in Place Ideas

National Resource Center on Supportive Housing and Home Modification

Andrus Gerontology Center
University of Southern California
3715 McClintock Avenue
Los Angeles, CA 90089-0191

Telephone: (213) 740-1364 Fax: (213) 740-7069
Email: homemods@usc.edu
METROPOLITAN AREA AGENCY ON AGING (MAAA)

2365 N McKnight Rd, Suite 3
North Saint Paul, MN 55109
Phone: 651-641-8612
Fax: 651-641-8618
Email: maaa@tcaging.org

Eldercare locator
http://www.eldercare.gov/Eldercare.NET/Public/Index.aspx

AARP, 2006
Smart House: Livable Community - statewide digital MN Channel showing is scheduled for:

Friday, October 25, 2013 at 2:30 AM
Friday, October 25, 2013 at 8:30 AM
Friday, October 25, 2013 at 2:30 PM
Friday, October 25, 2013 at 8:30 PM

visit the Smart House: Livable Community program page at [http://www.tpt.org/?a=programs#21208](http://www.tpt.org/?a=programs#21208)