



Society for the Advancement of Gerontological Environments

Volume 2, Issue 2

September 2002

## Upcoming Events

**SEE YOU IN BALTIMORE! The SAGE annual post occupancy (POE) session at AAHSA.** SAGE will be presenting the results of an evaluation of the assisted living facility and Alzheimer's dementia program at Mercy Ridge, which is one of the AAHSA site visit tour locations. The presentation will be *Tuesday, October 29th, from 10:15-12:15*. See the AAHSA conference brochure for exact location.

The **SAGE annual meeting** will be held in conjunction with the AAHSA conference and SAGE POE presentation (see above). The meeting will be *Tuesday, October 29th, 12:15-1:30*. All members are invited to attend.

SAGE is once again partnering with Nursing Homes Long Term Care Management Magazine on its **annual DESIGN issue**. A distinguished panel of judges has been convened, including regulators, designers, researchers and providers. The judging will be held October 26th and 27th. The DESIGN issue comes out in March 2003. Good luck to everyone who entered.

SAGE is pleased to announce that it will be also be conducting a **SAGE-POE for the International Association of Homes and Services for the Aging conference**, which is in *Sydney Australia in June, 2003*. Anyone interested in attending, and participating in the POE, should contact Jerry Weisman.

## COMMENTS FROM THE PRESIDENT

It's been an exciting year for SAGE. We are expanding into some new states and involving more and more regulators. We had more events this past year than every before. And we're planning another international event at the IAHSA meetings in Australia next year. So the word about SAGE is spreading. With this growth has come some growing pains. In the past, SAGE was able to operate with an informal structure which the key players, many of whom have been involved since our inception in 1994, knew and understood. As new people have come onto the Steering Committee, we have worked to disseminate this "historical knowledge." But more structure was warranted. To that end, the Steering Committee now has several standing committees – newsletter, nominating, conferences, design competition, finances and membership. We have developed a set of policy guidelines that should help new state units get up and running more smoothly. We are planning on having this newsletter come out twice a year, with a key topic addressed in each one.

One of our goals for the upcoming year is to provide more content-based information to our members. This will partly be through the newsletter. So if you have topics you'd like us to consider, please let me know. We'd also like to feature some case studies – examples of facilities that have successfully worked with regulators to create a setting that reflects a resident-centered approach to care. Feel free to nominate your facility.

## RE M I N D E R

**SAGE Memberships run for the calendar year.**

**Please send in your membership renewal for 2003. See membership form.**

If you joined recently, the date on the mailing label below your name indicates when you last renewed. If there is no date, it means either you are not a current member, or we don't have up-to-date information.

If you want to check your membership status, contact Suzanne Sandusky  
at 440-256-1880 or [sageorganization@hotmail.com](mailto:sageorganization@hotmail.com).

## STATE UPDATES

**SAGE-Wisconsin** On March 19, 2002, SAGE WI partnered with the Wisconsin Alzheimer Institute and the Wisconsin Association of Homes and Services for the Aging to present, "Creating a Vision of Long-term Care Environments Through Collaboration. The day began with a compelling and futuristic view of what's in store for us through the eyes of Leland R. Kaiser, Ph.D. This thought provoking presentation and discussion was followed by in-depth presentations and displays by 12 architects and senior care providers that featured the latest trends in long-term care and senior living environments throughout the state of Wisconsin. The day concluded with an in-depth review by the provider, architect and regulator for Village Shalom, Kansas.

On September 10, 2002 SAGE WI, sponsored a SAGE Day that featured Brewster Village located in Appleton, WI. An eight member multidisciplinary team assembled in August to conduct a post occupancy evaluation (POE) of the facility. David Rothman, Administrator, lead the daylong activities with a thorough and candid review of the recently completed complex. Past history, project objectives, state regulator involvement, staffing, design features and project costs were presented to the POE team for evaluation. A tour of the facility ensued where the team was introduced to the physical environment as well as interaction with residents and staff. The POE team then convened to discuss their observations and plan their presentation.

Approximately sixty people attended the POE day presentation and were afforded a multidisciplinary review by the team as well as a tour of the complex. Of special interest to many was the research initiative that began during the programming phase of this project. Jerry Weisman, from the Institute on Aging and Environment and Andrew Alden, of Engberg, Anderson Design Partnership provided the attendees with a unique perspective that documented the former replacement facility's environmental and behavioral characteristics. On-going research was presented that demonstrated the positive effects that the new environment has had for the various project stakeholders. True to all SAGE educational functions, the presentations, tour and dialogue were both candid and informative.

This years activities represent SAGE WI's 5th featured facility POE and our 5th educational symposium. The SAGE WI Steering Committee will be planning future

educational efforts with our next meeting scheduled in early October. So look forward to more from the SAGE WI "Cheeseheads" Terry McLaughlin, AIA, (920) 380-2123.

**SAGE-Utah** On April 19, 2001 SAGE Utah celebrated its first year of existence by having a SAGE Day event at the Utah State Veterans Home at the Veterans Affairs Medical Center campus in Salt Lake City. John E. Pace, Co-Chair, made a presentation on the POE conducted by the SAGE Federation team in conjunction with the AAHSA Conference in San Diego last fall. Keynote speaker Jack Carman, ASLA, from New Jersey made a presentation on Healing Gardens. Following a tour of the veterans' facility and lunch, the group of 30 participants divided into three teams for a charette design session. Under the oversight and encouragement of Jack Carmen, each team was given a site plan of the wooded property adjacent to the Special Care Unit and developed three scenarios of possible improvements to this underdeveloped site, demonstrating the incorporation of appropriate concepts and details in the site design.

The SAGE Utah steering committee continues to meet monthly using these occasions to meet in skilled nursing facilities, assisted living facilities and other locations related to housing and services for the aging and palliative care. In August we met at the Residence of CareSource Hospice in Salt Lake City, a new hospice facility that is note-worthy not only in its design but in the philosophy and approach to care and dying.

On September 18th and 19th, SAGE Utah had a booth at the Utah Health Care Association's annual conference, from which information about SAGE Federation was distributed to the nursing facility administrators and staff who were participants at the UHCA Conference. On the second day, SAGE Utah conducted a 2-hour breakout session, during which Co-chair Tracy Stocking, AIA introduced SAGE to the audience and invited their participation and membership. Susan Crook, Associate with Carol R. Johnson Associates, landscape architects presented an illustrated lecture on Healing Gardens. John Pace described the Post Occupancy Evaluation process and invited interested facility administrator's to contact SAGE Utah if interested in having a POE conducted at their location. Contact: John Pace 801-531-1133

**SAGE-Kansas** has been busy. They are setting up three committees with work with Pat Maben and the Kansas Department of Health on updating and revising the state regulations. These committees are 1) Residents and environment

## STATE UPDATES *continued*

2) Staff and public spaces and 3) Mechanical and electrical systems. Anyone interesting in working on any of these committees should contact Tom P. Montgomery. Kansas is also planning a session at next year's KAHSA conference (May, 2003) in conjunction with AARP on Universal Design. Finally, Kansas has a website up and running. Go to: <http://successfulagingcenter.org/sagekansas/> It's a great website, with information about members and monthly meetings. They also have a "topic of the month" with information on different topic areas of interest to SAGE. Planned topics include: toilet room design, culture change, engaging users in the design process, landscaping, and ergonomics from OSHA's perspective. Anyone interested in joining SAGE Kansas should contact Tom P. Montgomery 316-265-9367. The next meeting will be in October.

**SAGE-Ohio** After last year's successful POE of Rocky Knoll, which was presented at the AOPHA conference last fall, SAGE-Ohio is beginning to work on an event for 2003. We have several ideas going, such as another POE, modeled after the SAGE-WI SAGE Day events, or a "Best Design Practices" showcase event, where architectural and interior firms would present and discuss current trends and design examples in long-term care. If you are interested in helping out with any of these events, including serving as a host location, please contact Jerry Maddox at 614-764-3800.

**SAGE-Michigan** We're planning a SAGE POE presentation at the MAHSA (Michigan Association of Homes & Services for the Aging) "Heart of the Mission" conference April 28-30, 2003. We're working to see whether Jeff McManus, in the Bureau of Health Systems, will be able to participate. If anyone else is interested in learning how to conduct a post occupancy evaluation of a care facility and wants to participate — whether you're a designer, provider, researcher or regulator, please contact Robert Johns at 517-323-3687.

WISCONSIN  
UTAH  
KANSAS OHIO  
MICHIGAN



Society for the Advancement of Gerontological Environments

### SAGE OFFICERS

**President**

**Margaret Calkins, Ph.D.**  
I.D.E.A.S. Inc.

**Vice President**

**Jerry Weisman, Ph.D.**  
University of Wisconsin – Milwaukee

**Treasurer**

**Mark A. Proffitt**  
Dorsky Hodgson Partners

**Secretary**

**Andrew Alden**  
Engberg Anderson Design Partnership, Inc.

### Steering Committee Members

**Charles Bennett**

HCFA/Region V (Retired)

**David Fodness**

The Troyer Group

**David Green**

Evergreen Retirement Community

**Cee Cee Hodgson**

Dorsky Hodgson & Partners, Inc.

**Linda Ipp**

Otterbein Homes

**Robert Johns**

Michigan Assoc. of Homes and Services for the Aging

**Robert Lagoyda**

AAHSA & IAHS

**Jim Leich**

**Monte Levinson, M.D.**

Presbyterian Homes of Evanston

**Patricia Maben**

Kansas Department of Health

**Jerry Maddox**

Maddox NBD, Inc.

**Gaius G. Nelson**

Nelson-Tremain Partnership

**John Pace**

Pace Pollard Architects

**Susan Schroeder**

Wisconsin Dept. of Health/Family Services

**David Soens**

Wisconsin Dept. of Health/Family Services

**Joseph C. Wiener**

Wight & Company

**La Vern Woodford**

Wisconsin Dept. of Health/Family Services



## CODE TOILET OR NOT TOILET *That is the Question*

### Jon A. Sanford, M.Arch

Research Architect

Rehab R&D Center, Atlanta VA

1670 Clairmont Rd., Decatur, GA 30033

jon.sanford@med.va.gov

#### **Acknowledgements:**

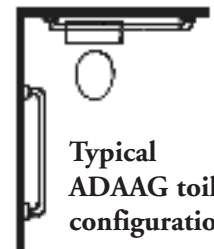
*The information reported in this paper was supported by the Department of Veterans Affairs Rehabilitation Research and Development Service and the US Access Board.*

The Americans with Disabilities Act Accessibility Guidelines (ADAAG), which was developed with the intention of providing greater access for individuals with disabilities, often falls short of the mark for older adults. First, many of the guidelines, as with most other accessibility codes and standards, were developed more than 2 decades ago and are generally based upon the stature, strength, and abilities of younger disabled adults. In the time since the development of these guidelines, the demographics and abilities of the population of people with disabilities have changed dramatically. People are growing older and a larger number of individuals are living longer with disabilities. As a result, the majority of individuals with disabilities also have a variety of comorbidities, secondary conditions, and general frailty due to aging. Second, the ADAAG is predicated on the belief that design should promote independent functioning. As a result, little consideration has been given to the needs of frail individuals who require assistance from caregivers regardless of how well the environment is designed. This is particularly true of the majority of users in health care and long term care facilities.

#### **THE NEED FOR ALTERNATIVES**

Both research and the experience of long term care providers suggest that use of toilet and bathing facilities is one area in which the ADAAG specifications are clearly inadequate for older adults. For example, Sanford, et al. have consistently reported (1995, 1999, 2001) that grab bar configurations that complied with ADAAG requirements for new facilities were among the most difficult to use by older adults who stood to transfer. This is not surprising, as ADAAG specifications are intended to facilitate a non-ambulatory wheelchair user sliding directly from the

chair to the toilet. In contrast, most older adults use a sit-to-stand movements to get on and off a toilet, even those who use wheelchairs. Yet, these studies are only the tip of the iceberg in the case against ADAAG specifications for toilet design. These previous studies only focused on independent toilet and bathtub transfers. Unfortunately, independent transfer may no longer be an option for frail elders who have limited mobility, reduced strength and stamina, and are at risk of falling. For these individuals, many of whom are in health and long term care facilities, personal assistance is necessary even when "good" grab bars are provided.



To complicate matters, institutionalized frail older adults often have mobility problems, use wheelchairs and walking aids, and suffer from incontinence. Therefore, fixtures in these facilities need to accommodate older people who have many different types of impairments and comorbidities, including limitations in reach, difficulty lifting legs, and difficulty with sit-to-stand; who use devices for assistance with ambulation; and who may transfer either independently or with assistance. However, the ADAAG were not intended to accommodate people with such a disparate variety of conditions.

The need for alternative designs is outlined in a set of guidelines adopted by the American Institute of Architects (2001). The guidelines state that: "...users of hospitals and health care facilities often have very different accessibility needs from the typical adult individual with disabilities addressed by the model standards and guidelines. Hospital patients, and especially nursing facility residents, due to their stature, reach, and strength characteristics, typically require the assistance of caregivers during transfer maneuvers. Many prescriptive requirements of model accessibility standards place both older persons and caregivers at greater risk of injury than do facilities that would be considered noncompliant. Flexibility may be permitted for the use of assistive configurations that provide considerations for transfer assistance."

#### **ALTERNATIVE DESIGNS TO MEET ELDERS' NEEDS**

To accommodate the largest number of older individuals, the design of toilet facilities should have sufficient flexibility to promote independent use as well as assistance by as many as two care providers, when necessary. Therefore, designs should

# CODE TOILET OR NOT TOILET *That is the Question*

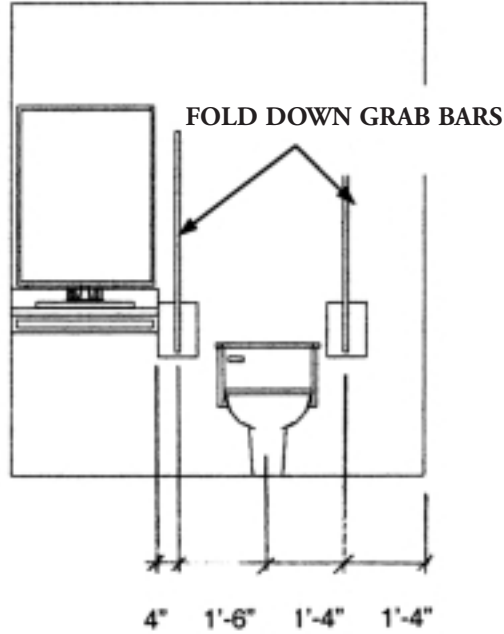
not only accommodate elders who have the capability of supporting their own weight and pivoting on their feet during transfers, but also those who cannot. Moreover, designs should prevent and/or reduce injuries to all users, both elders and care providers and permit ease of access by individuals with many types of impairments. Based on these goals, “best practices” in the design of toilet facilities for older adults are described below.

## Toilet location

In contrast to ADAAG, which specifies that the centerline of the toilet shall be located 18” from a sidewall, increasing the sidewall space adjacent to the toilet will provide space for caregivers to stand alongside one or both sides of the toilet as necessary, to provide support and assistance with transfer as well as to help with the partial removal and replacement of clothing. Although there is no research data to substantiate how much space is needed, the general sentiment among designers is that more space is better.

## Grab bar type and positioning

Research has repeatedly documented (Sanford and Megrew, 1995; Sanford, Echt, and MalassignÉ, 1999) that grab bars mounted at the recommended heights and distances from the toilet, both side and rear locations are too far away to be effective for ‘self’ assistance. In contrast, research has shown that swing-up or fold-away models (e.g., by Linido, Hewi, or Bobrick) can place the ‘assistance’ where it is useful as well as providing flexibility for assisted transfers. Rather than stationary bars, fixed to the walls alongside and behind a toilet, swing-up bars are typically attached to the rear wall and pivot up and down. With grab bars in the vertical or up position, sufficient space is provided for caregivers to stand next to the toilet on either (or both) side(s) to provide support getting on and off the toilet. In the horizontal or down position, grab bars on both sides of the toilet would permit individuals requiring assistance to maintain balance while clothing was removed or



replaced. Alternatively, for individuals capable of independent transfer, grab bars on both sides facilitates pulling up to a standing position and lowering down to a sitting position.

Whereas there is no data available to suggest the ideal length of grab bars, most designers tend to use swing-up grab bars that are considerably shorter (usually 24”-30”) than the 42” minimum requirement for grab bars alongside the toilet. This approach makes good common sense, as these bars are typically used by individuals who have unsteady gait and are at risk of falls. As a result, the shorter bars permit both older individuals and caregivers to get as close to the toilet as possible and thereby minimize ambulation.

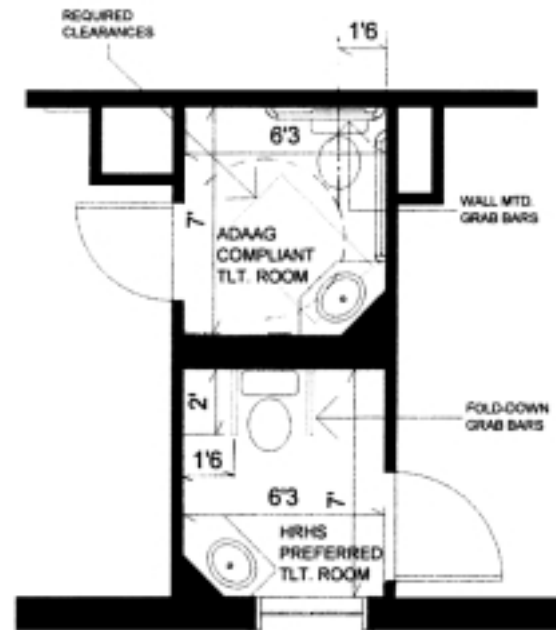
## IMPLEMENTING ALTERNATIVE DESIGNS

Although the alternative designs suggested here do not meet ADAAG specifications, there are several routes that would permit their use in facilities required to comply with the ADAAG. The first is the use of **equivalent facilitation**. Equivalent facilitation is essentially a caveat in ADAAG that permits the use of design alternatives if they can be shown to be at least as accessible for the intended population

as ADAAG-compliant designs. Unfortunately, in practice, equivalent facilitation is rarely used. This is not because designers and facility owners do not want to push the envelope, but rather because of their limited ability to do so. Approval of alternative designs under equivalent facilitation is difficult. Too often alternative designs that will meet the needs of frail individuals, but that do not meet ADAAG specifications, are rejected by local code officials who generally don’t understand the intent of ADA as well as they do enforcement of it. As a result, even when designs are equivalent (or in some cases superior) for a frail, older population, ADAAG-compliant solutions are still required by local codes officials.

Moreover, going over the heads of local officials to receive approval for alternative designs at the state or federal level (i.e., Department of Justice) takes time that equates to lost dollars in the construction process. As a result, few facility owners are willing to roll the dice and hope that an alternative design will be approved under equivalent facilitation.

Fortunately, innovations occur despite the system when a building owner is willing



How to meet and go beyond ADAAG

# CODE TOILET OR NOT TOILET *That is the Question*

to pay for what is needed in addition to what is required. For example, facility owners might construct both an ADAAG compliant toilet room to appease building code officials and a “preferred” toilet room that was not ADAAG compliant, but better met the needs of users. Often times, it is less expensive to build a second bathroom, than to risk construction delays while trying to obtain approval of alternative designs under equivalent facilitation.

Second, ADAAG can be circumvented by designing alternatives that are sold as training facilities. For example, one design firm uses the concept of a “training toilet” based on the European model of “bathroom as shower room.” Ostensibly, the idea of the training toilet is to circumvent the limitations of accessibility requirements, by designing bathroom facilities that were intended for training residents rather than for their actual use. Training toilets are either located in a separate room as a unisex toilet or combined with a bathing facility, for use by staff in retraining residents in toileting skills.

## SUMMARY

Although research and experience do not necessarily suggest that existing accessibility guidelines and common practices are wrong, they do indicate that current guidelines may be incomplete when the functional abilities, preferences, and transfer techniques of older adults are considered. Thus, while updating of ADAAG to meet the needs of an aging population is clearly warranted, codes are generally slow to respond to change. Thus, in institutional settings where ADAAG is mandated, it is often necessary to meet the minimum requirements and then design the rest of the facility to go beyond ADAAG in order to meet the needs of the older adults and care providers. Alternatively, when ADA guidelines are not mandated, such as in an individual’s own home, it is extremely

important that providers of aging services are aware of alternative toilet and grab bar configurations and recommend designs that are individualized to meet the needs of the older resident(s).

## References

1. *Americans with Disabilities Act Accessibility Guidelines* (1991).
2. Sanford, J.A., Echt, K., Malassigné, P. *An E for ADAAG: The case for ADA Accessibility Guidelines for the elderly based on three studies of toilet transfer. Physical and Occupational Therapy in Geriatrics.* 1999; 16(3/4):39-58.
3. Sanford, J.A., Megrew, M.B. *An evaluation of grab bars to meet the needs of elderly people. Assistive Technology.* 1995; 7(1):36-47.
4. Sanford, J.A., Megrew, M.B. *Using Environmental simulation to test the validity of code requirements. In: Steinfeld, E., Danford, G.S., eds. Enabling Environments: Measuring the Impact of Environment on Disability and Rehabilitation. New York: Plenum Press; 1999:183-205.*
5. Sanford, J.A. *Access to toilet and bathing facilities. Washington, DC: US Access Board; 2001. Final Report.*

## COMMENTS FROM REGULATORS

**SAGE Newsletter staff contacted regulators in several states** to ask about their perceptions of creating functional toilet areas. Of course, all regulators started by stating that they follow ADA accessibility guidelines (ADAAG), since it is a Federal regulation. They also acknowledged that facilities can ask for an “equivalent facilitation” ruling, if they can show that the proposed design meets or exceeds the intent of the ADAAG, although this can be a lengthy process. In Michigan, for instance, it requires having a hearing

before a judge, and the process can take up to two months. Regulators also acknowledged that the environment – as a fixed feature – often does not lend itself to easy modification to suit individual needs. However, individualizing care – and the care environment – is a primary focus of current regulations. So a facility that can show that it is creating an environment which is able to be customized for individual needs (or able to be easily modified to suit individual needs) will be viewed more favorably than one that is trying to find a single solution to suit all residents’ needs and abilities. And remember, not all bathrooms need to meet ADAAG guidelines. While most designers like to find a single bathroom design and replicate it in every bedroom, several regulators agreed that a better solution would be to have different bathroom/toilet/grab bar configurations that differentially support different abilities.

*We very much appreciate the time the following regulators spent with SAGE newsletter staff explaining their positions on this important issue.*

**Jan Sokolnicki** may be reached at State of Ohio, Board of Building Standards, 1-614-644-2613 or [jasokoln@com.state.oh.us](mailto:jasokoln@com.state.oh.us)

**Jeff McManus** may be reached at Dept. of Consumer and Industry Services, Bureau of Health Systems, 1-517-241-3412 or [jlmcman@michigan.gov](mailto:jlmcman@michigan.gov).



# SAGE

# MEMBERSHIP FORM

Society for the Advancement of Gerontological Environments

## SAGE MEMBERSHIP BENEFITS

- Networking opportunities for architects, designers administrators and regulators
- Peer-to-peer problem solving advice
- Discounts at SAGE conferences and educational events
- Newsletter
- Annual copy of the DESIGN issue of Nursing Homes Magazine

SAGE MEMBERSHIP: \$35/year Individual Membership

\$100/year Organization Membership (*up to 5 members*)

Name \_\_\_\_\_ Title \_\_\_\_\_

Organization \_\_\_\_\_

Address \_\_\_\_\_

City, State Zip \_\_\_\_\_

Phone \_\_\_\_\_ Fax \_\_\_\_\_

E-mail \_\_\_\_\_

## MEMBERSHIP TYPE

Individual

New

Organization – *Please list up to 4 additional members below.*

Renewal

Name

Title

E-mail (*very important*)

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

**Send check or money order to:**

**SAGE** • 8055 Chardon Road • Kirtland, Ohio 44094

**Membership questions?**

Contact: Suzanne Sandusky

440-256-1880 • [sageorganization@hotmail.com](mailto:sageorganization@hotmail.com)



Society for the Advancement of Gerontological Environments



## MISSION STATEMENT

To promote collaboration among health care and design professionals, government officials, residents, researchers, manufacturers and other interested individuals so that education, research, regulation and practice all result in appropriate environments for older adults.

SAGE is an organization that promotes networking and collaboration among individuals who are creating better environments for older adults. SAGE seeks common ground so that environmental issues can be discussed in a non-adversarial climate. SAGE is guided by a steering committee that reflects the diversity of interest and experiences of our constituent groups. Those involved with SAGE work primarily with existing groups and programs to build interdisciplinary partnerships.

8055 Chardon Road • Kirtland, Ohio 44094  
Society for the Advancement of Gerontological Environments

