



**The University of Sydney**  
Faculties of Health Sciences and Architecture  
**The Home Modification:  
Information Clearinghouse Project**

## NEWSLETTER

[www.homemods.info](http://www.homemods.info)

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Our stated mission is “to develop a leading edge Home Modification information clearing project designed with the assistance of, and accessible to, the full range of industry and consumer target groups.”

### HMinfo Redesign Website and Dementia Design Guidelines Launch

By Lara Oram

The Home Modification Information Clearinghouse launched its beta version of the redesigned website on the 25<sup>th</sup> July at the 14<sup>th</sup> International Congress of the World Federation of Occupational Therapists held at the Convention Centre in Sydney. Janett Milligan, DADHC's Director of Service Development and Planning, formally introduced the website at centre stage of the exhibition hall - witnessed by occupational therapists from around the world. Conferees were invited to trial the new website, which was running live from the HACC stall in the exhibition hall all week, and chat with the representatives from HMinfo and DADHC. Many people approached the stall during the week with interest and feedback, and some even discussed ideas of international collaboration. Samples of HMinfo's latest publications including the Dementia Design Guidelines, hot off the press, and mouse mats advertising the new website address, were available from the stall and went like hotcakes. The Dementia Design Guidelines were also formally presented by Janett Milligan as a conference paper in the afternoon following the launch of the website.

The redesigned website under the HSNet server has a fantastic new look and some great features that will benefit the Home Modification and Maintenance (HMM) services, therapists, trades people and consumers alike. These include: Google earth functions which assist with the location of local HMM services; secure, standardised home modification electronic referral

& services through HSNet and quick access to home design information via mobile phone technology. Some of these features may not yet be running.

Please take the time to navigate through our beta version of the website at temporary address <http://homemods.heydon.com.au/> and trial the new features. We would appreciate any feedback you may have. To provide feedback, click on the 'feedback' link located at the bottom of any web page or click on this link: <http://homemods.heydon.com.au/contact>.

The previous HMMinfo website [www.homemods.info](http://www.homemods.info) is still available whilst the beta version of the redesigned website is running. Please note: the address [www.homemods.info](http://www.homemods.info) will be the same address for the final version of the redesigned website, so keep this one in your 'favourites'!

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## Featured Web Site: Vision Australia

[www.visionaustralia.org.au](http://www.visionaustralia.org.au)

By Tanja von Behrens

In 2004, 9.4% of Australians aged 55 and older were affected by some form of visual disability, impacting their ability to navigate their environment. Of these individuals, 31% suffered from cataracts, 50% from age-related macular degeneration (AMD) and increasing numbers from glaucoma and diabetic retinopathy (DR). The 1998 Disability and Carers survey states that 91.3 thousand Australians suffer from some form of disease of the eye and surrounding area – disease which impacts one's ability to perform core activities in some way.

[http://www.ausstats.abs.gov.au/Ausstats/subscriber.nsf/0/978A7C78CC11B702CA256F0F007B1311/\\$File/44300\\_2003.pdf](http://www.ausstats.abs.gov.au/Ausstats/subscriber.nsf/0/978A7C78CC11B702CA256F0F007B1311/$File/44300_2003.pdf)

In terms of the level of disability experienced by individuals with vision impairments, cataracts can impact the lense quality, resulting in cloudiness and dulled colour vision, which can make way-finding and object clarity an issue. Age-related Macular Degeneration is caused by retinal deposits or blood vessel leakage at the back of the eye. Sufferers of macular degeneration may be considered legally blind, although some vision may remain.

Usually beginning with a loss of peripheral vision, Glaucoma can often develop into tunnel vision, until only objects that are straight ahead may be seen. In terms of one's ability to navigate the built environment, Glaucoma can cause such symptoms as light sensitivity.

<http://www.aihw.gov.au/publications/aus/bulletin27/bulletin27-c02.pdf>

Keeping in mind the impact of these visual impairments on an individual's ability to navigate their environment, we have chosen to review Vision Australia's website - particularly as it relates to accessibility. The largest national provider of services to the blind or vision impaired, Vision Australia assists more than 38,000 children and adults with daily living activities. The foundation aims to bring together the knowledge, skills and expertise necessary to enable those with vision impairment to live participatory lives, and was formed in 2004 as the result of a merger between the Royal Blind Society (RBS), the Royal

Victorian Institute for the Blind (RVIB) and the Vision Australia Foundation (VAF).

Vision Australia offers many services to those with visual impairments, some of which are relevant to making appropriate modifications to the home environment. By example, Vision Australia has an equipment evaluation process in place and has, to date, evaluated such tools as a big button cordless phone and an accessible talking mobile phone. Assessments are conducted by people with visual disabilities.

<http://www.visionaustralia.org.au/info.aspx?page=678>

Most relevant to the area of home modifications is the section of the Vision Australia website dedicated to design principles and considerations for the design of accessible environments. Similar guidelines for home modifications for a wide range of disabilities are provided in many other of the HMinfo web-links, but the recommendations made by Vision Australia are visual specific.

Based on the principles of independence, dignity and safety, the guidelines provide simple and logical building layout to avoid unnecessary complications in moving about one's environment. In addition, such recommendations as creating tactile pathways to encourage way-finding, diffusion of light to avoid glare and the use of contrasting colours, textures and modification of environmental acoustics are all recommended to improve design for those with visual impairments. The website provides information both on accessibility to public buildings and design principles as they relate to the home environment. Modification recommendations, in addition to some product information and where to obtain or search for the relevant products, are provided.

In addition, the site provides information on making daily activities more user-friendly for those with vision impairments, including orientation and mobility training. This site is a great place to start for anyone who requires information on all aspects of visual impairment, modifications, advice, care and services. The Vision Australia website, suitably, provides options for users to change text sizes and contrast to improve accessibility. In conjunction, the site has an audio logo.

## Publication Review: Dementia Design Guidelines: Home and Community Care Capital Works Program

By Lisa Hodges

Keeping those with dementia at home is the more favoured option over institutionalisation. Therefore, the importance of respite-style services are being promoted and supported by the NSW Government. As the importance of the environment has been recognised as an aid in caring for those with dementia (Day, Carreon & Stump, 2000), the provision of well designed dementia day care centres that provide support to those with dementia and their respite to their carers is critical.

At the request of the Department of the NSW Department of Ageing, Disability and Home Care (DADHC), HMinfo conducted a systematic review of the current literature available to produce a list of design guidelines for optimum therapeutic support from community dementia day care centres. The results of this review yielded nine guidelines:

1. *Services that afford independence, autonomy & control by being adaptable to the users*

As the world around the person with dementia can be particularly stressful and the opportunities for enjoyable activities are reduced, the physical design of an adult day care centre should allow the program to offer choice. For example, this includes having more than one activities room to provide the choice of sitting in a quiet room or participating in more demanding activities such as singing (Cohen & Day, 1993).

2. *Spaces that afford meaningful & culturally appropriate activity*

The activities in which a person with dementia engages can contribute to a positive self-image and a sense of fulfillment (Cohen & Weisman, 1991). For example, a kitchen designed for use by people with dementia may facilitate the clients' practice of their learned skills and experience of the positive feelings associated with performing a familiar task when many tasks around them have slipped from their reach (Alzheimer's Disease International, 1999).

3. *Interior and exterior detailing that is familiar & non-threatening*

An atmosphere modelled after the non-institutional, homelike qualities can support people

with dementia in maintaining ties to the healthy and familiar (Cohen & Day, 1993). These healthy and familiar environments assist in the creation of a soothing, pleasant and non-threatening environment, qualities necessary in an adult day care centre (Singapore Ministry of Health, 2002). Brawley (2002a) has asserted that providing a pleasing décor, reducing noise and glare, increasing illumination, implementing the use of a hand-held shower and providing domestic touches such as richly coloured towels can create a less threatening environment.

4. *Spaces, access points, pathways & services that use appropriate modes (light, colour, pictorial, verbal, tactile) for presentation of essential information to assist appropriate task completion (i.e. cueing stimuli)*

People with dementia require "environments that provide positive quality, meaningful, and familiar cues to help them function at their optimum level of competencies" (Calkins, 2002, p.v). The use of landmarks (a distinctive object or feature), tonal contrast and indirect highlighting are examples of such cues to assist people with dementia find their way (Brawley, 1997; Burke, 2003; Namazi & Johnson, 1991).

5. *Spaces, access points, pathways & services that eliminate unnecessary complexity & reduce extraneous sensory stimuli*

People with dementia appear to be less able to screen out unwanted stimuli and often become more confused, agitated and anxious when over-stimulated (Brawley, 1997). Reducing intercoms, phones, alarms, clutter, glare and sudden light contrast can help reduce unnecessary stimulation.

6. *Spaces, access points & pathways services that reduce agitation & opportunities for meaningless wandering*

Wandering is a behaviour often seen in people with dementia and can be accommodated with a wandering path. An ideal wandering path should have unlocked access points and go through many secure rooms including the secure outdoor area of the day care centre and should showcase activities alternate to wandering to participate in or observe. It should pass landmarks to assist in orientation (Cohen & Day, 1993), toilets and sitting areas and never have a dead end, but

rather form some type of loop (Alzheimer's Disease International, 1999; Brawley, 2002b).

7. *Spaces, access points, pathways & services that afford approach, reach, manipulation, and use regardless of user's limitations (i.e. highly negotiable)*

Simplicity in the design of an environment for people with dementia is required (Brawley, 1997). An example of this is making items and places directly visible (eg, the toilets) so the user does not need to manipulate entrances or remember where places are (Fleming, Forbes & Bennett, 2003; Namazi and Johnson, 1991).

8. *Spaces, access points, pathways & services that are tolerant of user related error (i.e. safe & secure)*

The confusion and memory loss caused by dementia (Brawley, 1997) creates a need for the presence of safety features in the environment such as safety switches, hot water controls (Fleming, Forbes & Bennett, 2003) and secure areas in which people who wander may do so safely (Fleming, Forbes & Bennett, 2003).

9. *Spaces, access points, pathways & services that support staff*

The physical environment of the dementia day care centre has the potential to allow both control over the environment and a reduction in difficult behaviours (eg, wandering) when designed appropriately, thereby reducing the stress experienced by staff and facilitating a probable positive secondary impact onto the client with dementia (Calkins, 2005).

These guidelines will apply to all capital grants for Home and Community Care funded centre-based day care facilities in the future and consequently, need to be considered by all architects, planners, builders and funding applicants involved in future design and construction processes.

These design principles are conceptual guidelines but the audit style checklist of items in the appendix of the full publication provides a concrete guide to what features support the design principles and consequently, how to incorporate them into the dementia day care centre environment.

To obtain a copy of this publication go the 'occasional papers' section of the 'resource library' at [www.homemods.info](http://www.homemods.info) or at this link: [http://homemods.heydon.com.au/files/DementiaDesignGuidelines24\\_7\\_06.pdf](http://homemods.heydon.com.au/files/DementiaDesignGuidelines24_7_06.pdf).

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### Latest Publications:

- ▶ Dementia Design Guidelines: Home and Community Care Capital Works Program
- ▶ Selecting Doorbells for People with Hearing Impairment: Evidence Based Research
- ▶ Legalities of the Australian Standards and Alternative Access Solutions: Summary Bulletin

### Upcoming Publications:

- ▶ Wayfinding Lighting: Evidence Based Research
- ▶ Home Smoke Alarms – Hard-wired and Un-wired Systems: Summary Bulletin

## HMinfo Background

Our team brings together a range of experience. The Directors are Catherine Bridge from School of Occupation and Leisure Science, Faculty of Health Sciences and Peter Phibbs from Faculty of Architecture. Katrina is our librarian. Lara, Lisa, Stephanie and Tanja are the research assistants. Gordon is our Drupal php programmer and Mark is our Drupal theme designer.

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