National Centre of Excellence in Intellectual Disability Health

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Response to the Specialist Disability Accommodation Design Standard Review Discussion Paper

Authors

Dr Rachael Cvejic, Senior Research Fellow, National Centre of Excellence in Intellectual Disability Health, Faculty of Medicine & Health, UNSW Sydney (r.cvejic@unsw.edu.au)

Scientia Professor Julian Trollor AM, FAHMS, Director, National Centre of Excellence in Intellectual Disability Health, Faculty of Medicine & Health, UNSW Sydney

A/Prof Rebecca Koncz, UNSW Chair of Intellectual Disability Mental Health, National Centre of Excellence in Intellectual Disability Health, Faculty of Medicine & Health, UNSW Sydney

Sophie Howlett, Lead Driving Change Team, National Centre of Excellence in Intellectual Disability Health, Council for Intellectual Disability

Executive summary

- Latest available data shows that people with intellectual disability represent approximately 42% of eligible Specialist Disability Accommodation (SDA) eligible participants.
- As a population, people with intellectual disability are ageing and experience high rates of young onset dementia (onset under 65 years of age).
- The SDA Design Standard currently addresses universal accessibility, supporting independence and safety of participants living with dementia.
- However, dementia-enabling and dementia-friendly features, such as lighting quality, acoustics, wayfinding, familiarity, and sensory retreat are not explicitly embedded in current SDA guidelines.
- Embedding principles of dementia -enabling and dementia-friendly design will improve the extent to which SDA is future-ready and will promote enhancement in wellbeing and independence of people with intellectual disability living in SDA properties, particularly those living with dementia.

National Centre of Excellence in Intellectual Disability Health

About the National Centre of Excellence in Intellectual Disability Health

The National Centre of Excellence in Intellectual Disability Health ('the Centre') is an important initiative supported by the Australian Government Department of Health, Disability and Ageing. The Centre is a consortium of nine organisations including UNSW Sydney, Centre for Disability Studies (University of Sydney), Council for Intellectual Disability, Down Syndrome Australia, First Peoples Disability Network, Queensland Centre of Excellence in Intellectual Disability and Autism Health, Queenslanders with Disability Network, The Kids Research Institute and University of Melbourne. It also includes another 56 health and disability organisations as partners and collaborators. Centre staff involved in this submission bring strong expertise in the health, mental health and support needs of people with intellectual disability and people living with dementia.

Context

People with intellectual disability represent approximately 42% of Specialist Disability Accommodation (SDA) eligible participants [1], and as a population, are ageing [2]. People with intellectual disability experience elevated rates of young onset dementia [3, 4], characterised by progressive decline in cognitive and daily functioning before the age of 65 years. Our recent New South Wales-based study indicates an overall 4.5-fold over-representation of dementia among people with intellectual disability aged 5 years and older compared to an age-, sex- and location-matched comparison group of people with intellectual disability [4]. Among people with intellectual disability, risk of dementia is known to be highest for people with Down syndrome. Approximately 50% of people with Down syndrome aged 55 to 64 years are living with dementia due to Alzheimer's disease [5], with average age of diagnosis between ages 51-56 years [6].

Environmental design plays a critical role in supporting participation and wellbeing of people with intellectual disability [7]. It is essential that design standards adequately address the needs of people with intellectual disability living with dementia, who may experience compounding and increasing support needs associated with progressive cognitive, mobility, and functional decline. Unmet environmental, cognitive and sensory needs can contribute to behaviours of concern such as agitation, aggression, self-injury and property destruction; such behaviours are experienced by approximately 10-20% of people with intellectual disability [8, 9], with evidence of

higher prevalence (30-60%) among older adults with intellectual disability and those living with dementia [10, 11]. Incorporating dementia-enabling and dementia-friendly design principles will help enhance future-readiness of SDA properties for the growing population of older people with intellectual disability.

Principles of dementia-enabling and dementia-friendly design

Dementia-enabling and dementia-friendly environments refer to built or home settings designed to support the cognitive, sensory and functional changes experienced by people living with dementia. Dementia-enabling and dementia friendly environments are designed to support a person to maintain independence and engagement in meaningful activities for as long as possible. Core principles of dementia-enabling and dementia-friendly design [12, 13] are summarised in Box 1.

UNSW Sydney
Level 6, Health Translation Hub
55 Botany Street
Randwick NSW 2031
www.nceidh.org.au

Email: nceidh@unsw.edu.au
Telephone: +61 2 9065 8076

Box 1. Core principles of dementia-enabling and dementia-friendly design [12, 13]
Unobtrusively reduce risks: Safety risks should be conspicuously managed. Hazards are minimised through features such as non-slip flooring, consistent lighting, and secure but homelike exits, allowing freedom of movement without compromising safety.
Provide a human scale: Spaces should feel intimate, familiar, and manageable, reflecting the proportions of a domestic home. Smaller group living arrangements, familiar furniture, and clear room purposes support comfort and orientation within the environment.
Allow people to see and be seen: Clear sightlines to key destinations (e.g., toilets, kitchen, garden) enable independence, reduce anxiety, and support memory and recognition of place.
Manage levels of stimulation - reduce unhelpful stimulation: Excess noise, clutter, glare and visual complexity can cause confusion or distress. Calm, acoustically soft, well-lit spaces with controlled colour and pattern support focus on meaningful cues.
Manage levels of stimulation - optimise helpful stimulation: The environment should draw attention to important features, e.g., using colour contrast for doors or grab rails, natural light, and personal objects.
Support movement and engagement: The environment should encourage safe, purposeful movement. Circular or looped pathways, resting spots, and access to outdoor gardens promote mobility, reduce agitation, and support autonomy.
Create a familiar place: The environment should enable individuals to incorporate familiar elements in its design (both internal and external areas), including the use of recognisable furniture, fittings and cultural references.
Provide opportunities to be alone or with others: Environments should support choice and control over social interaction through incorporation of a mix of private and shared spaces.
Create links to the community: Connections to the wider community can be supported through visual links and accessible paths.
Design in response to a vision for way of life: Designs should have potential to reflect the values, culture and lifestyle of the people who live there. This includes spaces to support everyday routines, such as cooking, prayer or hosting visitors.

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Opportunities for enhancement of the SDA Design Standard

The principles of dementia-enabling and dementia-friendly building design emphasise the creation of spaces that are not only safe and accessible, but also comforting and familiar. Adherence to these principles can positively influence behaviour, cognition, function, wellbeing, social abilities, orientation and care outcomes [14]. Current elements of the SDA Design Standard that align with dementia-enabling and dementia-friendly building design include small household sizes (five people or less), accessible and step-free environments, private bedrooms and bathrooms, and use of colour and luminance contrast. However, several dementia-enabling and dementia-friendly features, such as lighting quality, acoustics, wayfinding, familiarity, and sensory retreat are not explicitly embedded in current SDA guidelines. Enhanced incorporation of dementia-enabling and dementia-friendly principles into the SDA Design Standard aligns directly with the NDIS purpose to enable participants' self-determination, independence, and community participation. Proposed adjustments in select focus areas of the SDA Design Standard Review Discussion Paper are outlined in Table 1. Our recommendations include consideration of aesthetic qualities required to create pleasant home environments.

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Table 1. Proposed enhancements to SDA Design Standard

Focus area/s	Gap	Recommendation
Detailed design requirements	No minimum task/ambient illuminance or glare indices	Set quantitative lighting requirements for different areas and specify glare control; mandate adjustable/dimmable lighting to suit individual needs. Emphasise daylight access and glare reduction.
	No explicit sound or acoustic requirements	Introduce acoustic targets particularly in shared spaces and living areas.
	Limited wayfinding guidance	Require sightlines to key destinations (e.g., toilet, kitchen) and looped paths that enable safe movement both indoors and outdoors. Accessibility can be enhanced through aesthetic design including use of artistic principles (e.g., visual anchors and focal points) to strengthen wayfinding and orientation.
	Limited emphasis on homelike cues	Embed emphasis on home-like and non-institutional design, personalisation and sensory enhancement, all of which have been linked to improve wellbeing and care outcomes for people living with dementia [14]. Avoidance of institutional character, including within robust designs, can be achieved through considered use of materials, colours, textures and detailing. Embed guidance on recognisable room layouts (e.g., kitchen, bathroom) and enable opportunities for personalisation. Enabling opportunities for meaningful personalisation and customisation of spaces supports personal identity and autonomy. Example design elements include adjustable shelving or display areas, picture rails or suitable surfaces for personal artwork or photographs, flexible furniture configurations, and facilitating individual input into colour schemes and decorative features.

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Table 1 (continued). Proposed enhancements to SDA Design Standard

Focus area/s	Gap	Recommendation
Detailed design requirements	Breakout room is optional	Require at least one sensory-calm retreat per dwelling, with dimmable lighting, acoustic dampening, and soft finishes. Clarify that this is not for purposes of restriction or seclusion.
Innovative design & building specifications (assistive technology and smart home) Future-proofing SDA (reducing retrofit costs/complexity)	No requirement for assistive technology-ready pathways, service cupboards, or mounting points for future devices	Introduce future-ready assistive technology “rough-in” requirements, such as structured cabling to every room, ceiling power points for sensors, wall backing and fixed mounting rails at common install heights, and wiring loops for environmental control devices. Devices that may be later funded by participants’ assistive technology budgets include voice-prompt systems, motion sensor lighting (including night paths to bathrooms), appliance interlocks (e.g., for cooktop and tap mixers), dynamic signage for wayfinding, movement sensors, and environmental controls (e.g., door operators, automated blinds).

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Conclusion

Incorporating dementia-enabling and dementia-friendly principles within the SDA Design Standard will:

- Contribute to future-proofing of housing for ageing NDIS participants, including people with intellectual disability
- Reduce long-term modification costs
- Promote safety, familiarity, independence, and wellbeing of people living in SDA properties; and
- Uphold NDIS goals of inclusion and community participation.

Embedding the suggested minor enhancements to lighting, acoustics, wayfinding, outdoor access, sensory retreats, and assistive technology infrastructure represent high-value, low-cost reforms. Such changes will enable the creation of more suitable home environments that support improved quality of life for people with intellectual disability living in SDA, particularly those living with dementia.

We thank you for the opportunity to provide feedback on the Review of the SDA Design Standard. We look forward to seeing our suggestions incorporated. We would be very happy to provide further feedback as required, please do not hesitate to get in touch at r.cvejic@unsw.edu.au.

Additional resources

- Alzheimer's WA: Dementia Enabling Environments, visit https://www.enablingenvironments.com.au/.
- Dementia Training Australia: Environmental Design Resources Handbook, visit https://dta.com.au/resources/environmental-design-resources/.
- Dementia Australia: Designing dementia-friendly care environments, visit https://www.dementia.org.au/professionals/designing-dementia-friendly-care-environments.
- Home Modification Information Clearinghouse, visit https://www.homemods.info/. Includes resources on designing home environments for people with cognitive disability and people with self-injurious and/or aggressive behaviour, and considerations to promote choice and comfort in robust designs.

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