

Northside Hospital HCCA design advice

Table of Contents

3.	About HCCA3
4.	Purpose4
5.	Consumer centred design principles and their application to the Northside Hospital4
	Principle: Design for all physical abilities
	Design application5
	Principle: Design for diverse communities6
	Design application
	Design application8
	Principle: Design for family and carer needs9
	Design application9
	Principle: Design for wayfinding
	Design application
	Principle: Design for dementia and cognitive impairment
	Design application
	Principle: Access to outdoors
	Design application
6.	Consumer input on specific areas of hospital
	Waiting areas and public spaces
	Reception areas
	Inpatient Units
7.	Design Principles and Interconnections
8.	Process Learnings22

3. About HCCA

The **Health Care Consumers' Association (HCCA)** is a health promotion charity and the peak consumer advocacy organisation in the Canberra region. We speak up for people who use health care.

We work with community members to:

- Help people understand how to use health services and get the most out of them.
- Become health care advocates and speak up for themselves, their families and their communities.

We work with health services to help them:

- Understand the needs of people who use health care.
- Make services work better for consumers.
- Communicate better with consumers.

This submission was prepared by HCCA staff based on feedback from HCCA members.

4. Purpose

The purpose of this paper is to provide a baseline of practical design principles and features applicable to consumer-facing spaces, for consideration in the design of the Northside Hospital.

This paper provides a summary of advice contributed by consumers to the ACT health infrastructure projects HCCA has supported with consumer input and process advice since 2008. It includes recent consumer-led improvements to the design of the new Building 5 at the Canberra Hospital campus.

While HCCA is confident that the recommendations represent improvements to consumer and staff comfort, safety and functionality in an inpatient health facility, the advice in this paper should not be considered a replacement for thorough and meaningful inclusion of iterative consumer input throughout the entire design phase for the Northside Hospital. The needs of consumers must be investigated and considered in real time and as they apply to the specific functionality and context of the Northside Hospital project.

Some principles or design examples are repeated in multiple sections. This is because the same principles and features support different groups of users or a range of spaces. We have written this paper with the expectation that users may not read the whole document but may turn to the discrete section that applies to the particular work they are doing. Therefore, while we have tried to minimise repetition, some is inevitable. An overall summary of how the different principles and features support different users is provided in the table beginning on page 19.

5. Consumer centred design principles and their application to the Northside Hospital

In the design of healthcare spaces, there are some essential principles and specific features that are widely applicable across areas and improve the experience and outcomes of being admitted to or visiting hospital.

Principle: Design for all physical abilities

"Variation in human ability is ordinary, not special, and affects most of us for some part of our lives."

Institute for Human Centred Design¹

¹ Human Centered Design Institute, *Mission*, accessed 14 May 2025, https://humancentereddesign.org/about-us/mission.

Many, if not most people visiting or staying in hospital are experiencing some form of impairment. They may live with it permanently, or it might be a temporary problem that has brought them to hospital, or even a side effect of medication. It makes absolute sense, therefore, to design spaces for consumers with **universal design** principles in mind.

Universal design² means design which is suitable for the whole range of human ability (or as close to it as possible) and does not disadvantage a group of people.

Universal design principles are:

- 1. **Equitable Use:** The design does not disadvantage or stigmatise any group of users.
- 2. **Flexibility in Use:** The design accommodates a wide range of individual preferences and abilities.
- 3. **Simple, Intuitive Use:** Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level.
- 4. **Perceptible Information:** The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities.
- 5. **Tolerance for Error:** The design minimises hazards and the adverse consequences of accidental or unintended actions.
- 6. **Low Physical Effort:** The design can be used efficiently and comfortably, and with a minimum of fatigue.
- 7. **Size and Space for Approach & Use:** Appropriate size and space is provided for approach, reach, manipulation, and use, regardless of the user's body size, posture, or mobility.³

Design application

Physical accessibility examples include:

• The installation of fittings and amenities at different heights (e.g. power points, hand basins, food and drink options).

² Center for Universal Design 1997, *The principles of universal design (Version 2.0)*, North Carolina State University, viewed 14 May 2025,

https://projects.ncsu.edu/ncsu/design/cud/about_ud/udprinciplestext.htm

³ Compiled by advocates of Universal Design in 1997. Participants are listed in alphabetical order: Bettye Rose Connell, Mike Jones, Ron Mace, Jim Mueller, Abir Mullick, Elaine Ostroff, Jon Sanford, Ed Steinfeld, Molly Story, Gregg Vanderheiden. The Principles are copyrighted to the Center for Universal Design, School of Design, State University of North Carolina at Raleigh [USA].

- Fully accessible adult toilets and changerooms and single-user, all-gender bathrooms and changerooms.
- Consideration of outdoor footpath gradients and surfaces.
 - o Include seating and shade for long walks to main entry points.
- Spaces to park or store bulky equipment in a variety of locations including waiting areas and patient rooms.
- Automatic doors, where possible.
 - If automatic doors are not feasible, use lightweight doors with levertype door handles.
- Doorways, corridors and waiting spaces that are wide enough to accommodate mobility aids. Corridors are wide enough for two people using mobility aids to pass each other.
- Wide, non-slip, well-lit footpaths with gently sloped kerbs.
- Reception counters at wheelchair/seat height, as well as standing height.

Sound and sensory accessibility examples include:

- Design that considers sensory needs of neurodivergent people and those with cognitive or sensory impairments.
- Sensory-friendly design, including low sensory-input breakout rooms. This accommodates the needs of people who are neurodivergent, or who have epilepsy, asthma, multiple chemical sensitivities (MCS), sensory processing disorders, migraines, dementia, mental health needs and other conditions.
- Inclusion of accessible technology for hearing and vision support.

Principle: Design for diverse communities

Designing for diverse communities means creating a space that is inclusive, accessible and reflects the various needs, identities and experiences of the people in our community. In this context, 'diverse', includes individuals and groups across different cultural and linguistic backgrounds and literacy levels, Aboriginal and Torres Strait Islander people, people with disabilities, LGBTQIA+ communities, neurodivergent individuals and older adults. Most consumers hold intersecting identities (i.e. they belong to multiple communities at once), which can lead to increased stigma and marginalisation and affects their health outcomes and access to care.

Consumers have told us that for **culturally responsive care**, they need:

 Design features and technology that improve access to and understanding of information, including access to translation and interpreter services.

- Translation of information into the main community languages.
- Clear signage using plain English.
- The ability to use technology to translate information and help with communications.
- Private spaces that can be accessed for cultural needs such as prayer and gatherings.
- Artwork, plants and design elements that reflect and welcome diverse communities.
- For women from some cultural backgrounds, non-gender specific amenities are not culturally appropriate and access to private breastfeeding rooms must be provided.⁴

Design application

Examples include:

- Include a Welcome to Country text or artwork in the main entry area to create a welcoming and respectful environment.
- Technological wayfinding assistance, such as digital kiosks with touchscreen navigation and multilingual capability, similar those in shopping centres.
 These could offer access to maps, service information and interpreter functions.
- Printed and digital materials (i.e. consent forms, wayfinding, brochures) in the top community languages, updated regularly.
- Use culturally appropriate phrasing and icons.
- In consumer-facing signage and information, prioritise using plain English (not complex language, medical jargon or acronyms), legible fonts and icons.
- Use consistent colour coding by building.
- Designated multi faith prayer rooms as well as flexible gathering rooms that can be used for family or cultural ceremonies. Ensure privacy, acoustics, adjustable lighting and appropriate décor.
- Include artwork by Aboriginal and multicultural artists. Use native plants with local cultural significance in landscaping.
- With advice from local Aboriginal communities, consideration of a yarning circle on the campus.

Consumers have told us that for **inclusive care**⁵, they need:

⁴ Health Care Consumers' Association, "HCCA CSB Consumer Focus Group Report", 2020. Available from: https://www.hcca.org.au/publication/hcca-csb-consumer-focus-groups-report/ (Accessed 16 May 2025).

⁵ Health Care Consumers' Association, "Inclusive Health Care Position Statement", 2023. Available from: https://www.hcca.org.au/publication/inclusive-health-care-position-statement/ (Accessed 16 May 2025)

- Clearly marked <u>all-gender amenities</u>.
- Access to sensory-friendly spaces such as quiet rooms and low-sensory environments for neurodivergent people. This can be useful for reducing delirium in older people.
- Family friendly spaces such as paediatric areas, private breastfeeding rooms and family lounges.
- Adjustable lighting and acoustic quietening measures.
- Signage that includes large contrast text and colour coded maps.
- Minimal clutter and calming décor.
- Publicly accessible, adult sized, fully equipped accessible change, shower and toilet facilities.

Design application

Examples include:

- Include all gender amenities that are quiet and safe. These need to be clearly sign posted with icons which indicate provision of toilet, urinal, shower, etc.
- Low sensory rooms in the Emergency Department, wards and outpatient clinics that include dimmable lighting, soundproofing, privacy, comfortable furniture and minimal décor.
 - Include acoustic wall and ceiling panels to absorb sound and reduce stimulation.
- Paediatric waiting areas with child friendly furniture, play spaces, toys and wall graphics.
- Family lounges near wards with a dining room, kitchen amenities, charging stations and lounge areas.
- Design breastfeeding friendly rooms with baby change spaces close to public areas.
- Earth tones, natural materials, and natural light where possible to create a warm, homely atmosphere.
- A minimalist design approach to avoid visual clutter (e.g. remove excessive signage, loud patterns) and maintain consistent room layouts, neutral colour palettes and nature inspired designs throughout.
- <u>Changing Places</u> for those who have complex disabilities. These rooms should include a height adjustable change table, larger than standard accessible toilet, tracking hoist system and a safe and clean environment.

Principle: Design for family and carer⁶ needs

Designing with family members and carers in mind means recognising that they play a central role in the care and wellbeing of their person⁷, even, and sometimes especially, while that person is admitted to hospital. Making sure family and carer needs are met is looking after the patient, both during and after the patient's stay. Supporting carers to stay overnight in hospital with the patient leads to⁸:

- improved patient and carer experience.
- reduction in hospital acquired injuries such as falls.
- improved opportunity for staff-carer communication.
- better discharge planning, education opportunities and the exchange of relevant information.
- a positive impact on nurse workload with a reduced frequency of nurse calls being reported.

Consumers and carers have told us they need:

- places to sleep or rest within a patient's room or patient bay
- a variety of calming, comfortable non-clinical spaces that can be used for:
 - o time out or privacy for phone calls/discussions
 - eating, drinking, resting, or showering,
 - o a space to do work or admin tasks regarding patient care
 - space for larger family group visits or conferences
- access to a variety of healthy, culturally appropriate, and low-cost food options, including after-hours availability.

Design application

Examples include:

- Single or multi patient rooms with space and furniture for a carer (i.e. sleeper chairs, pull out beds).
- For the support person: personal storage space, power outlets, separate dimmable lights, reading light and a privacy curtain.
- Carer amenities close to the patient rooms (i.e. carer lounge, kitchen, cafés).

⁶ Health Care Consumers' Association, "Appendix 7 CHEP Requirements for Family and Carer Spaces", 2020. Available from: https://www.hcca.org.au/publication/appendix-7-chep-requirements-for-family-and-carer-spaces (Accessed 9 May 2025).

⁷ Johnson, B., Lee, M. & Mossburg, S. 2023, *Patient and Family Roles in Safety*, PSNet, viewed 14 May 2025, https://psnet.ahrg.gov/perspective/patient-and-family-roles-safety

⁸ Western Sydney Health 2017, *Blacktown Carer Zone*, YouTube video, 3 March, https://www.youtube.com/watch?v=rgMNJ2lyW2A.

- Non-clinical family lounges with comfortable seating and lighting, a kitchenette with full sized fridge, private breakout rooms for phone calls and discussions, quiet workstations with Wi-Fi and power outlets.
- An access-controlled lounge space with full amenities, especially valuable for families who are waiting in unexpected emergencies.
- Multipurpose family conference rooms with movable furniture, AV equipment for videoconferencing and privacy.
- Shower and change rooms for carers.
- Access to a café with a diverse range of food including halal, vegetarian, vegan and gluten-free.
- 24/7 vending machines with healthy food and drink options.
- A fridge in the kitchen/family lounge area that is big enough to store food for carers and family.
- Kitchenette access in family areas have tea and coffee facilities and microwaves available 24/7.
- An ATM near the main entrance or waiting areas.
- A public phone in main reception and family areas, ensuring accessibility for wheelchair users.
- A fully accessible public adult changing place that includes height adjustable change table, larger than standard accessible toilet, tracking hoist system and a safe and clean environment⁹.
- Integrations with digital support systems, such as carer apps and designated telehealth support zones.

Principle: Design for wayfinding

Designing for wayfinding means helping people navigate facilities easily and confidently. Use clear and easy to read signs, maps, symbols and layouts so that everyone can find their way around without confusion, regardless of age, ability or literacy levels.

In discussing wayfinding over many projects, HCCA often hears consumers from multicultural communities say they would like signage to be translated into different languages. Given the number of community languages in the ACT, and the competing desire for simple uncluttered signage, this is unlikely to be a practical solution for physical signage. However, designers must consider the ways in which people who may not be able to read English can use digital or other tools to find their way and create a physical environment that supports this. For example, ensuring signage words are in in plain English for clear translation with translation apps, using

⁹ Changing Places, 2023 at Changing Places - DFFH Service Providers

universal icons, colour graphic markers, and providing paper and digital maps/apps with translated information.

Consumers value the following elements which make their journey through a hospital easier:

- Accessible pavements with sloping kerbs that are wide and unobstructed.
- Clear signage (including aspects of colour, font, contrast, icons, language and placement).
- A direct journey.
- Maps available in different formats and locations.
- Free, public technology which provides wayfinding help.
- Including on signage the distance consumers will need to travel to specific points.
- Coloured lines on the floor, matched to area theme colours.
- Colour coded buildings and maps.
- Roads, walkways, signage and building entrances are well lit.¹⁰
- Volunteers (who can help with directions and guidance) are clearly visible.

Design application

Examples include:

- Footpaths are wide enough for two mobility scooters to pass. They have even, non-slip surfaces and gently sloped kerbs.
- Large, legible font on high contrast background to enhance readability.
- Icons are included on signage.
- Signage at eye level with braille options.
- Signage and feedback boxes are not obstructed by furniture, posters or vending machines.
- Easy to follow routes between main zones.
- Provision of printed maps, wall maps and digital maps via digital kiosks or QR codes.
- Maps in multiple languages, braille and audio formats.
- Provision of maps at all entrances.
- Install interactive touchscreen kiosks at main reception and other key points throughout the hospital with multilanguage options and accessible heights.
- Include distance and time estimates into signage and digital wayfinding (e.g. Imaging – 50m (3min walk) and show different accessible routes if needed).

¹⁰ Health Care Consumers' Association, "HCCA CSB Consumer Focus Group Report", 2020. Available from: https://www.hcca.org.au/publication/hcca-csb-consumer-focus-groups-report/ (Accessed 16 May 2025).

- Consider flexible wayfinding options (e.g. decals) rather than fixed floor lines, as building use and ward layouts may change over time.
- Use different colours to identify buildings and future-proof building numbering by leaving gaps for potential new buildings.
- Light all entrances, signage and drop off areas.
- Provide clear, large signage for all main entrances.
- User-test wayfinding and signage solutions with people from varied literacy and disability backgrounds.
- Points where volunteers are based are centrally located with clear signage.

Principle: Design for dementia and cognitive impairment

More than half of the patients in adult hospitals are over 65 years of age¹¹. Many older people will have some kind of cognitive impairment. If they have dementia, being admitted can make it worse. Some people have conditions where they experience a temporary cognitive impairment, or delirium. People with cognitive impairments in hospital are at increased risk of harms such as falls and accelerated functional and cognitive decline¹². An important mitigation strategy is the involvement of family members in their care¹³. Design elements can also help to keep people with cognitive impairments safe in hospital.

Design application

Adapted from 'A guide to creating a dementia-friendly ward'. 14

There are many practical ways to use design to help people with dementia or cognitive impairment. As with universal design, many of design solutions will improve the environment for all people, not just those with dementia. Here are some that relate to hospital design:

¹¹ Caplan, G.A., Kurrle, S.E. & Cumming, A. 2016, *Appropriate care for older people with cognitive impairment in hospital, Medical Journal of Australia*, vol. 205, no. 10 Suppl, pp. S12–S15. https://www.mja.com.au/journal/2016/205/10/appropriate-care-older-people-cognitive-impairment-hospital

¹² Caplan, G.A., Kurrle, S.E. & Cumming, A. 2016, *Appropriate care for older people with cognitive impairment in hospital, Medical Journal of Australia*, vol. 205, no. 10 Suppl, pp. S12–S15. https://www.mja.com.au/journal/2016/205/10/appropriate-care-older-people-cognitive-impairment-hospital

¹³ Western Sydney Health 2017, *Blacktown Carer Zone*, YouTube video, 3 March, https://www.youtube.com/watch?v=rqMNJ2IyW2A.

¹⁴ Nursing Times, *A guide to creating a dementia-friendly ward*, 2013, at https://www.nursingtimes.net/roles/older-people-nurses-roles/a-guide-to-creating-a-dementia-friendly-ward-21-02-2013/

- **Floors** should be one colour without changes that could be mistaken for a step. Shiny floors can be perceived as slippery. Sound absorption is important.
- **Skirting and walls** show clearly where the floor and wall join. If the floor covering is bent up against the wall, this must be as low as possible and in a contrasting colour.
- **Handrails** should contrast with the wall and have indicators where they end, such as a knob, or turn into the wall.
- Ceilings offer the best opportunity for sound absorption given the difficulties
 associated with using carpets and fabrics in hospitals. Sound-absorbent tiles
 can reduce the reverberation of noise around the room. Ceilings should also
 be light coloured to reflect light.
- Doors are crucial for wayfinding. All staff-only doors should be the same
 colour as the wall, while doors that the patient is expected to find, and use
 should contrast with walls. Sliding doors are difficult to understand. Panes of
 glass let people see what is through the door (bedroom doors are an
 exception because of sleep and privacy issues). If doors are identical, add
 striking signs, kick plates or panels. All toilet doors should be a consistent,
 bright, contrasting colour.
- **Signs** should be consistent throughout, eye-level (no more than 1.2m high), clearly contrast with the wall or door, using capital and lowercase letters and include a graphic.
- **Clocks** should be large, clear, accurate analogue clocks visible from every bed. There is evidence that clocks can help with delirium¹⁵
- **Lighting** levels should be high or be able to be adjusted to become high. By the time people are about 75 years old they need twice as much light as normal lighting standards recommend, and nearly four times as much as a 20-year-old, to see satisfactorily. As much daylight as possible should be able to get in. Over-bed and chair task lighting is vital to avoid glare. Good lighting over food and drink helps patients to recognise and consume it.
- Staff need adequate lighting to observe patients but making rooms completely
 dark at night is desirable to encourage sleep. Lighting that is activated by
 movement needs to stay on for long enough so people who move slowly can
 do so safely. Light switches should be easy to understand and made visible
 through contrasting colours.
- **Sound**, including that from buzzers, medical devices, phones and noisy chatter should be kept to the minimum. Washable acoustic panels should be fitted on walls and ceilings.

¹⁵ National Institute for Health and Care Excellence 2010, *Delirium: prevention, diagnosis and management* (Clinical Guideline CG103), recommendation 1.4.4, viewed 14 May 2025, https://www.nice.org.uk/guidance/cg103

- **Furniture** such as chair seats should contrast the floor colour. Beds should be able to be adjusted down to the floor with bedrails that can easily be raised or lowered by the patient or carer. Table coverings and place mats should contrast in colour with plates to help people see their food.
- **Mirrors** can cause problems for patients who no longer recognise their own image. They may wonder, "Who is the strange person looking puzzled at me through this window?" Provide covers or doors for mirrors.
- Nurse call systems can cause alarm because people with dementia may not understand where the noise is coming from or what it means. Passive alarms can be more effective for people with dementia; the signal should be a vibrating pager carried by staff, rather than a sonic or flashing light alarm. Call buttons should be clearly labelled.
- Nurses' stations are a hub of noise and activity, which makes them attractive
 to people with dementia, or conversely, a source of disturbance impacting the
 quality of sleep or rest. Having several smaller reception desks, ideally with a
 seating area for patients, providing space where notes can be written close to
 patients, is desirable.
- Relatives are better able to offer support if patients with dementia are cared
 for in single rooms with a comfortable reclining chair, foldaway bed or couch
 for overnight stays. A reassuring, familiar voice can make a huge difference if
 patients wake in the night and feel disoriented. When patients with dementia
 are being cared for in bays, a nearby room, with a door, for relatives is the
 next best thing. Ward routines must be flexible enough to allow relatives to
 support care.
- Noticeboards and leaflet racks can lead to confusion and should be kept up to date and free of clutter.
- Toilet seats and handrails should contrast with walls and floor. Any raised-level toilet seat should also contrast. Flush controls, taps, soap dispensers, toilet paper dispensers and hand drying arrangements should be classic in design, so they are easily recognised. The aim is for domestic ambience.
- Bathrooms/shower rooms should have contrasting colours, and familiar fittings. Showers can be frightening if the water lands directly on the person from above; height-adjustable, detachable showerheads allow gradual exposure to water.
- Kitchens for daily activity assessment should be dementia friendly and all previous guidance on floors, walls, light and sound apply.
- A day room for additional activities is a great asset. It can be used for sitting, eating and speaking to relatives. Some people eat better if the setting is like a cafe or dining room. Activities can relieve boredom, and the room is good for one-to-one work with people who have communication difficulties in addition to dementia.

- Outside views, together with access to sunshine or direct daylight, have been shown to benefit patients' recovery. The orientation and aspect of inpatient accommodation must be prioritised when developing a hospital master plan. Research suggests that easy access to outside reduces aggressive behaviour (Alzheimer's Society, 2010).
- Doors should be easily visible and easy to use. Internal and external floors should not have too strong a contrast. A seat easily visible from the door is good.
- Outside spaces need a concealed and secure perimeter, non-slip paving, raised garden beds, robust seating, objects of interest to look at and protection from wind, rain and sun in some areas.

Principle: Access to outdoors

Designing with access to outdoors means creating spaces that connect people to nature, fresh air and natural light. Spaces that have access to the outdoors promote movement and relaxation. Ways to provide access to outdoors include big windows, courtyards, gardens and walking tracks. Having safe and easy access to an outdoor area has a measurable positive impact on mood, experience and outcomes of care ¹⁶.

Consumers have raised the following needs relating to access to outdoor areas to enhance patient wellbeing and connection to nature:

- Natural light to inpatient rooms
- Windows that open in patient rooms
- Green outdoor spaces that patients and visitors of all ages and abilities can spend time in

Design application

- Natural daylight exposure through large windows in patient rooms, corridors, waiting areas and staff spaces.
- Internal courtyards to bring light deep into the building.
- In spaces where natural light through skylights or windows isn't possible, consider using circadian lights to simulate the sky and adjust with the time of day. Some wards at North Canberra Hospital offer a great example of this approach that has received positive feedback.
- Prioritise the orientation of patient rooms so that beds face natural light and offer views of the outdoors.

¹⁶ Cardinal, D & Molyneux, A 2023, *Therapeutic Hospital Gardens: Literature Review and Working Definition*, HERD: Health Environments Research & Design Journal, viewed 15 May 2025, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10621031/

- Patient rooms should include windows that can be opened to allow fresh air circulation.
- Designing easy and direct access to courtyards throughout the facility is essential. The University of Canberra Hospital offers a great example of how these spaces can be successfully integrated across a campus.
- A dedicated outdoor play area for children is important for supporting young patients and visiting families.
- Dedicated spaces outdoors for family gathering, cultural and spiritual practices.
- A circular walking path around the campus to promote gentle activity and mental health for all campus users. The natural beauty of the bush setting of the Northside Hospital site is a real asset for this principle. Incorporating a walking track with art and cultural elements also provides a meaningful way to engage local Aboriginal communities with the project. John Hunter Hospital provides a strong model for this type of design.
- Direct access to courtyards throughout the facility.
- Outdoor play area for children.

6. Consumer input on specific areas of hospital

HCCA held consultations with consumers and consumer organisations in November 2020 about the design of the Critical Services Building. Consumers had the following input about what they would like to see in different areas:

Waiting areas and public spaces

In waiting areas and public spaces consumers value:

- Flexible seating arrangements and a variety of furniture types.
- Close access to accessible toilets and change facilities.
- Private areas nearby that allow for breastfeeding and conversations and phone calls.
- Access to a range of healthy food options.
- Access to a sensory room and quiet spaces for time out or privacy to make calls.
- Systems in reception area for notifying consumers of their turn, their place in the queue and expected wait times.¹⁷
- Digital queue systems integrated with hospital apps.
- · Access to charging points for devices.

¹⁷ Health Care Consumers' Association, "HCCA CSB Consumer Focus Group Report", 2020. Available from: https://www.hcca.org.au/publication/hcca-csb-consumer-focus-groups-report/ (Accessed 16 May 2025).

• Well-organised spaces for printed information (brochures, etc.) and translated resources in languages.

Reception areas

In reception areas, consumers value:

- Visually prominent desk using contrasting colours.
- Open reception desks with minimal barriers between consumers and staff.
- Entry through an obvious front entrance with large signage.
- A spacious, low-noise environment.
- Reception desk level and design to suit a variety of consumers, particularly people who need to be seated or use wheelchairs. ¹⁸
- Areas which provide disability accommodations (e.g. low counters) to be centred in the space- not further away or less convenient.

Inpatient Units

Consumers have raised the following needs relating to the design of inpatient units:

- A preference for single rooms, for most people.
- Rooms with designated space and furniture for family and carers to stay overnight.
- Accessible toilets in ensuites, with rails around sink as well as toilet and shower
- Spaces for families and carers when visiting- e.g. lounge spaces, places for families to eat together.
- Access to outdoors.
- Rooms with natural light and views.
- Adjustable lighting and temperature controls.
- Adequate bedside storage is available for consumers to store their personal items.
- Sufficient comfortable waiting space for families, nearby.
- Privacy and cultural considerations, particularly in shared rooms.
- Where rooms are shared, single gender rooms.
- Smaller, decentralised staff stations.
- Access to power points for personal medical devices such as CPAP machines, and for devices.

¹⁸ Health Care Consumers' Association, "HCCA CSB Consumer Focus Group Report", 2020. Available from: https://www.hcca.org.au/publication/hcca-csb-consumer-focus-groups-report/ (Accessed 16 May 2025).

• Noise control measures are essential as the noise of medical devices and staff interactions across the ward often inhibits rest or sleep.

7. Design Principles and Interconnections

Key Principle	Focus	Key Considerations	Interconnections
Design for All Physical Abilities	Create inclusive, accessible hospital environments that meet the needs of people with all physical, sensory and cognitive abilities	 Multi-height options. Wide corridors and doorways. Automatic doors. Accessible toilet and changeroom facilities. Accessible waiting areas. Sensory-friendly design. Clear signage and wayfinding. Technology support. Safe, calm environments with breakout rooms. Wide, non-slip, well-lit footpaths with gently sloped kerbs. 	Also supports wayfinding, diverse communities and dementia and cognitive impairment
Design for Diverse Communities	Design inclusive spaces that reflect the cultural, linguistic, spiritual, sensory and family needs of diverse communities	 Multilingual signage printed materials and digital resources in top community languages. Interpreter services and translation technology. Culturally appropriate icons, plain English and legible fonts. Multi-faith prayer and gathering rooms. Welcome to country displays, Indigenous art and culturally significant landscaping. All-gender amenities. Use of natural light, earth tones and calming materials. 	Also supports wayfinding, all physical abilities, family and carer needs and outdoor access

Key Principle	Focus	Key Considerations	Interconnections
		 Sensory-friendly spaces. 	
Design for Family and Carer Needs	Support the role of families and carers by designing spaces that promote comfort, access and participation in care	 Spaces for family and carers that include beds, personal storage, power outlets, dimmable lighting and privacy curtains. Comfortable, non-clinical lounges. Private breakout rooms. Family conference rooms. Showers and change rooms. Access to diverse, affordable food and drink options 24/7, including kitchenettes, vending machines, cafes and culturally appropriate meals. Integration with digital support tools. Outdoor recreation spaces. 	Also supports diverse communities, outdoor access and dementia and cognitive impairment
Design for Wayfinding	Help people navigate the hospital campus with ease regardless of age, ability or literacy level	 Clear signage using plain English in large, legible fonts with high contrast backgrounds. Incorporate icon and braille where possible. Display distance and time estimates. Use of digital wayfinding tools such as digital kiosks with multilingual and accessible features. Use colour-coded buildings, zones and maps. Direct and simple routes between key areas. Wide, non-slip, well-lit footpaths with gently sloped kerbs. Clear, visible signage at all entrances and dropoff points. 	Also supports all physical abilities, diverse communities and dementia and cognitive impairment

Key Principle	Focus	Key Considerations	Interconnections
		 Avoid signage clutter and visual overload Locate translated written materials in accessible, organised displays. 	
Design for Dementia and Cognitive Impairment	Create calm, clear and safe environments that support orientation, independence and wellbeing for people with dementia and cognitive impairment	 Clear contrasts for floors, walls and furniture. Bedroom and toilet doors highly visible. Clear and consistent signage. Maximise natural light and adjustable lighting. Low noise, soft lighting and clutter free spaces. Include day rooms for meals, conversation and activities. Secure and easy-to-navigate outdoor areas. Smooth transitions from indoors to outdoors. 	Also supports all physical abilities, wayfinding, and family and carer needs
Design for Access to Outdoors	Connect people to nature, light and fresh air to support physical, mental and emotional wellbeing	 Large windows and natural light in patient rooms, corridors and waiting areas. Windows that open to allow natural airflow. Use of circadian lighting systems in spaces without natural light. Accessible outdoor areas for cultural, spiritual and family activities. Circular walking path and internal courtyards Easy access to outdoor spaces from wards and public areas. Natural materials and native plants. Children's outdoor play area. 	Also supports diverse communities, dementia and cognitive impairment, and family and carer needs

Figure 1. Design Principles and Interconnections

8. **Process Learnings**

This section provides a summary of the process learnings HCCA has documented through the years of involving consumer representatives and community members in infrastructure projects. It is intended to be a starting point for discussion and set out considerations for planning the ways consumers will be involved in the Northside Hospital Project.

We have found the following elements are important in successful consumer participation in infrastructure projects.

- a. Pursue diverse representation of community to participate in infrastructure projects and include flexible participation mechanisms that allow this.
 - Focus groups specifically for CALD communities, First Nations peoples, older adults, veterans or people with disability.
 - Translated materials and interpreters at sessions.
 - Drop-in booths on-site in the hospital with project visuals and staff to take feedback.
 - Virtual walk-through tours.
 - Ability to participate in person or online, and provide input in written or spoken formats, flexibility in use of online platforms, provision of/ support for assistive communication technology where needed.
- b. Spend time on the induction of consumers into health infrastructure, the specific project, who the partners are and what they do.
 - Provide information about who the different government players are and what their specific roles in the project are, as well as the different contractors and what they do.
 - Include information about the Australasian Health Facility Guidelines (AusHFG) and other relevant guidance on design.
 - Ensure that consumers are provided with an understanding of the project timeline, which includes when opportunities for input will be available on different aspects of the project.
 - Manage consumers' expectations of the work that they will be doing, and the timeframes and process involved for decision making. Create a draft work plan for the group which is regularly reviewed and updated.
- c. Spend time on induction of project staff into consumer participation, mechanisms for participation and the value it brings.
 - Train staff in partnership with consumer organisations.

- Document shared understandings about roles in consumer support, and consumer participation activities.
- d. Provide well planned, genuine opportunities for consumer participation which allow real influence on the project.
- e. A Consumer Reference Group (CRG) is important, but it is not enough, by itself, for meaningful detailed consumer advice to a large complex project.

A CRG is useful when:

- It gives consumers a regular place to get a project update.
- It allows consumers to ask questions and raise issues broadly.
- It provides a forum for a more in-depth report about a topic, if consumers seek that.
- It's discussions and input can generate design improvements.

A CRG can be limited when:

- The schedule of CRG meetings does not line up with the project points where input was needed.
- Project staff are not aware of the group as a resource they could use, or do not know how to approach the group for advice.
- There isn't time for the group to get across the detail of an area sufficiently to provide useful input.
- A small group of diverse people cannot give broad advice that covers whole communities and their need.
- Over time, consumer attendance drops as design stage is complete and opportunities for input are more limited.
- f. Topic-specific focus groups are extremely valuable for consumer input and advice. Planning for topics and timing should begin early in the project. Good structure, facilitation and documentation of focus groups is essential.

Focus groups:

- Give time to delve into detail, aligned with timing of project points which need input.
- Provide opportunity to involve more consumers and consumer organisations than a CRG alone.
- Can consider detailed designs on large paper printouts and/or on big screen.
- Give consumers access to designers and architects.

- Can suggest changes in real time.
- Provide opportunity to collaborate with other consumers and project staff face to face (relationship building).
- Allow consumers to feel valued and heard, generating interest, energy and support for the project.
- Require provision of venue, food, attendance of designers and decision makers.
- g. Provide a shared mechanism to track the consumer issues or needs that have been raised, when decisions will be made, and what the outcomes are.

Ensure that there is a feedback loop to consumer participants to inform them of the outcome of the advocacy, and that they have an opportunity to be connected to this even if they leave the project.

h. Involve consumer representatives in experiential learning and testing whenever possible.

Involving consumers in hands-on learning will maximise their value as project partners. It supports their input to be well informed and better see and understand the issues and possible solutions for both consumers and health staff.

- The **prototype shed** was highly valued by consumer participants in the Building 5 project.
- Consider site visits to other facilities, ideally with project staff.
- Hands-on testing of furniture, equipment, fittings, finishes etc.
- i. Do everything possible for consumer representatives and project staff to meet each other and work together. Relationships are essential for the free flow of information and advice both ways and the beneficial outcomes of consumer input to the project.
- j. In partnership with consumers, design and deliver an evaluation plan, which evaluates their contribution to the project and captures learnings for all partners. Include post occupancy evaluation of consumer led design improvements.
- k. Build on the learnings, relationships and consumer-led design improvements from previous projects- actively consider their inclusion and further development for the current project.
- I. Value consumer participants by:
 - Promptly reimbursing them,

- Providing flexible opportunities for input,
- Including them in milestone celebrations and project media,
- Offering opportunities to speak or present about the project (if available) and
- Acknowledge their contribution whenever it is appropriate to acknowledge the contributors to a project.

m. Actively consider and transfer design improvements and process learnings from previous projects into the Northside Hospital project.

Seek experienced consumer participants, as well as new ones, to enable consumer representative mentoring and help transfer and build on previous learnings. Similarly, seek the inclusion of health staff who have been involved in previous projects, and those who have delivered healthcare in both old and new spaces.

Additional Resources

NZ Dementia Foundation, *Best Practice Links Dementia friendly hospital design*, 2021, at https://www.nzdementia.org/Best-Practice-Resources/In-hospitals/Dementia-friendly-hospital-design (Accessed 30 July 2021).

Victorian Department of Health, *Designing for people with dementia*, at https://www2.health.vic.gov.au/ageing-and-aged-care/dementia-friendly-environments/designing-for-dementia (Accessed 30 July 2021).