

HEALTH INFRASTRUCTURE

Wayfinding for Healthcare --- Facilities

FOREWORD

Acknowledgments

In the spirit of reconciliation Health Infrastructure acknowledges the Traditional Custodians of country throughout Australia and their connections to land sea and community. We pay our respects to elders past and present and extend that respect to all Aboriginal and Torres Strait Islander Peoples today.

NSW Health Infrastructure would like to acknowledge and thank the many passionate individuals and groups who shared their views, knowledge, and expertise for the development of this update of the *Wayfinding for Healthcare facilities*.

NSW Health recognises and appreciates the advice and living experiences of consumers, patients, carers, supporters and loved ones. The voices of people with living experience are powerful, and their contributions are vital to enabling decision-making for health system change.

The development of the *Wayfinding for Healthcare facilities* has benefited from the lessons learnt of NSW Health Organisations such as Local Health Districts, Clinical Excellence Commission, Patient Experience and Systems Performance Division, eHealth, Health Infrastructure, Capital projects, Arts in Health, Design portfolio within hi, Town Planning, Transport NSW and other key stakeholders.

Purpose and vision

NSW Health strives to create an environment that is safe, welcoming, and clean, and conducive to the wellbeing of patients, their families and carers, staff, and communities of NSW. The implementation of *Wayfinding for Healthcare facilities* document aims to instill a guided and cared for experience while traveling to the destination, reducing anxiety by providing personalized assistance as required.

Healthcare facilities can be complex spaces that need to be navigated by all people regardless of age, culture, ability. Building on previous versions of this document, the new edition of the *Wayfinding for Healthcare Facilities* responds to the ongoing need for healthcare design to cater to *all* people who use healthcare facilities.

By providing a space in which people are safe, comfortable, and confident in the care they receive, hospitals and health systems become a positive environment for patients.

Defining users of healthcare facilities

Throughout these Guidelines, the term user includes patients, their families and carers, staff and volunteers, community members, visitors, and any person navigating through a healthcare facility.

HEALTH INFRASTRUCTURE

Wayfinding

for Healthcare

Facilities

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This is the second edition of Wayfinding for Healthcare Facilities, replacing the first edition from 2014. The document has been significantly amended and is broken into four sections:

- **Part 1** – Introduction to the Guidelines
- **Part 2** – Introduction to Wayfinding
- **Part 3** – Wayfinding Process Step by Step
- Appendices

This document should be read in conjunction with the [Design Guide for Healthcare](#).

Part 1

Introduction

to the

Guidelines

Introduction to the Guidelines

Wayfinding is more than signage; it provides a safe and stress-free journey through a facility from before a user arrives until after they leave. Effective wayfinding encompasses inclusivity, ingenuity and collaboration from the design stage through to the post-build phase to ensure the best experience for all users regardless of age, gender, cultural background or physical and mental ability. Simply put, good wayfinding helps all of us to feel more sure of where we are and where we are going.

As our built environments continue to change at an increasingly rapid pace, we all need solutions and strategies to better orientate us, especially in unfamiliar or complex spaces. Wayfinding for Healthcare Facilities caters to this need for universal accessibility in the design of healthcare facilities by reducing the focus of signage and providing a broader perspective and approach. It centres on ensuring the design and management of wayfinding in healthcare facilities keeps the user in mind at all times, provides a framework for understanding good wayfinding practice, describes a holistic approach in which wayfinding is considered across its full spectrum, and provides a step-by-step guide to effective wayfinding.

It is intended to inform those designing and managing healthcare facilities about the full scope of wayfinding and key considerations that need to be made throughout the entire process.

When to Use These Guidelines

- Planning a new healthcare facility
- Redeveloping an existing healthcare facility
- Upgrading or making modifications to an existing healthcare facility
- Updating wayfinding due to works or development surrounding an existing healthcare facility
- Undertaking quality auditing to identify opportunities for improvement while checking compliance with legislation
- Planning for ongoing management and maintenance

Project Types

Not every project will be a major redevelopment or new healthcare facility. Each project will be different and require a customised solution. However, as complexity is at the core of all healthcare projects, they will benefit from the same methodological approach as described in these guidelines.

For the purposes of this document, there are three types of projects:

- **Type 1.** Update of existing wayfinding system only. Interventions in this type of project are limited to wayfinding elements such as tools and communication.

- **Type 2.** Hospital redevelopment/ refurbishment. This type of project offers a broader scope for updates, and can include changes to the environment, process, tools and communication.
- **Type 3.** New build projects. These allow the most influence on all elements that can impact wayfinding, with the opportunity to develop environment, process, tools and communication in conjunction with the development of the building and site.

Type 1 and 2 are known as brownfield projects. These take place within existing sites and facilities, and come with some in-built limitations. Older hospital campuses are often an amalgamation of buildings that have grown organically across the years. The connections between services may not be obvious, and services may be in unexpected places.

Brownfields will already have a wayfinding strategy in place (sometimes several strategies), so existing signage will need to be updated and incorporated, or removed.

Type 3 is known as a greenfield project. This means an entirely new build is taking place. These projects are an excellent opportunity to build wayfinding into the fabric of the facility.

In terms of these new hospital projects, the wayfinding team should be engaged in the master plan phase (see [page 123](#) for Health

Infrastructure [HI] project phases) to ensure that the architectural planning is aligned with wayfinding and universal design principles. If it isn't addressed until late in the design process, many opportunities for inclusivity and intuitive wayfinding will already have been lost. This can lead to a design that fails to meet the needs of the users that it is intended for.

The architectural and spatial design of healthcare settings can provide intuitive cues to assist people to orientate themselves and navigate through campuses and buildings. Design factors such as form, flow, building layout, the alignment of corridors and location of clinical settings all contribute to a positive wayfinding experience for patients and visitors.

Refer to the Audit Tool on [page 129](#) to assess an existing facility or use this tool to help define key considerations for the design of a new facility.

[Who Should Use These Guidelines](#)

This document has been written for a range of professionals involved in the design delivery and ongoing management of healthcare facilities including:

- Local Health District/Network, Board Members, CEOs and Executives
- Facility and operations managers
- Corporate and customer service managers
- Project directors
- Architects and facility planners
- Wayfinding consultants
- Change and transition managers
- Quality managers
- Local government areas
- Transport agencies

[Navigating the Guidelines](#)

Locate specific wayfinding instructions related to the environment or facility being designed or updated.

Introduction to Wayfinding:

- The Importance of Wayfinding – [page 16](#)
- Key Points for Successful Wayfinding – [page 16](#)
- Wayfinding: A Holistic Approach – [page 19](#)
- The Benefits of Collaboration – [page 20](#)

Wayfinding: Step by Step Process:

- Introduction to the Steps – [page 24](#)
- Step 1–Analyse, Define and Ideate – [page 27](#)
 - Universal Design – [page 30](#)
 - User Groups – [page 32](#)
 - Cultural Safety and Universal Design – [page 33](#)
 - User Needs – [page 34](#)
 - User Engagement – [page 38](#)
 - Facility Processes – [page 40](#)
 - Environment – [page 42](#)
 - Communication – [page 52](#)
 - Tools – [page 56](#)
 - Creating a User Journey – [page 70](#)
- Step 2 –Develop and Implement – [page 95](#)
 - Choosing a Wayfinding Strategy – [page 97](#)
 - Graphic Design Elements – [page 106](#)
 - Industrial Design Elements – [page 112](#)
- Step 3 –Manage and Maintain – [page 115](#)
 - Management System Structure – [page 116](#)
 - Performance Assessment and Auditing – [page 118](#)
 - Maintenance Program Development and Delivery – [page 119](#)
 - Training and Development – [page 120](#)

The presented content is a guideline for the development of a successful wayfinding system and does not define specific wayfinding strategy, systems, terminology, design or sign types that should be used. These elements need to be defined in response to an individual facility and its requirements.

Part 2

Introduction

to Wayfinding

The Importance of Wayfinding

Wayfinding has an extensive impact on the overall user experience and forms part of a wider human-centred communication strategy – **providing the right information, to the right people, at the right time** (see Elevating the Human Experience: Our guide to action for patient, family, carer, volunteer and caregiver staff experiences for more information).

It plays a fundamental role in how a facility communicates with its users, and how those users perceive the facility. Patients, staff and visitors want to feel safe and welcome.

A hospital environment is often already stressful; a person may be undergoing medical testing, receiving treatment, or visiting a sick relative. If somebody is struggling to find their destination due to a poor wayfinding experience, this can increase already-elevated stress levels.

Done well, the design and strategy of a wayfinding system can have a substantive impact in creating positive user experiences and a comfortable, functional space where users are confident to find their way.

Figure 2.1 →

Coffs Harbour Hospital
Clinical Services Building.
Architects: McConnel Smith and Johnson/
Conrad Gargett.

Key Points for Successful Wayfinding

The following should be considered when designing a wayfinding system:

Fit for Purpose

Wayfinding should be fit for purpose¹ and cater for all user groups, their different backgrounds, culture, language, needs and abilities. Close collaboration and the use of universal design principles (see [page 30](#)) creates an inclusive space that is safe and accessible for everyone.

The aim is to ensure everyone – regardless of ability, gender, age, culture or family composition – can fully participate in healthcare facilities and infrastructure.

Complete User Experience

The various forms of communication, design, architecture and environment all work together to build a complete user experience that starts before leaving home and continues beyond the he return journey.

Integrated Functionality

The wayfinding design should fit within and enhance its environment. The technology in use should coordinate with the physical signage to create a seamless transition from the website to directional signage at the facility.

¹ See the assessment criteria in The National Safety and Quality Health Service (NSQHS) Standards 2019



In a new build or redevelopment, the architect and wayfinding consultant should work closely together to integrate intuitive wayfinding into the design of the facility.

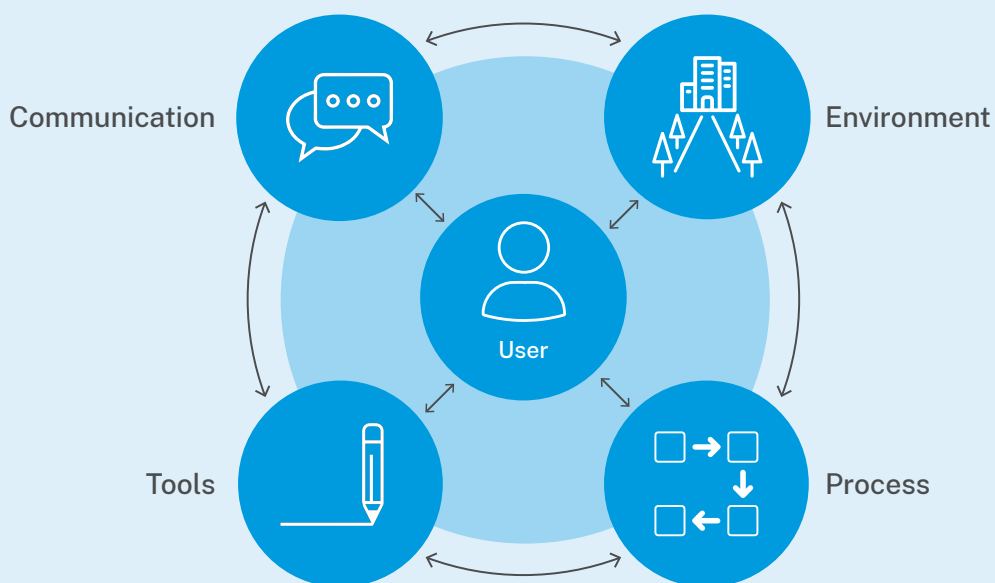
Design for Now, Plan for the Future

A great deal of effort goes into the development and implementation of a new wayfinding system. Large healthcare facilities are in a constant state of flux; departments

move, areas expand, and renovations are ongoing. Changes in the built environment or hospital processes will often have an impact on the users’ navigational processes. In response, the wayfinding system needs to be managed and maintained to deal with these changes. In response, the wayfinding system needs to be managed and maintained to deal with these changes.

Figure 2.3

The four elements of wayfinding



Wayfinding:

A Holistic Approach

Wayfinding provides a user with the information they need to safely and efficiently navigate a space. Refer to the Design Guide for Healthcare for high level guidance on good healthcare design and principles.

Effective wayfinding means knowing where you are, where you are going, following the best route to your destination and recognising it on arrival. Achieving this requires a coordinated group of aids.

Signage has its place. However, the more a building or environment has been designed with wayfinding in mind, the less signage will be needed. Successful wayfinding involves many underlying elements and factors which users consider while making decisions at a conscious and subconscious level.

The following four elements all have a big impact on a user's wayfinding experience:

1. Processes (See [page 40](#))

Hospital processes should be patient focused, but also aligned with the facility's operational needs (e.g. a clinic check-in process should suit both the patient and clinical staff).

An understanding of these processes is necessary to understand why and how people engage with the hospital environment and organisation and how to effectively intervene.

Hospital wayfinding can be complex, so information needs to be presented in a way that informs without overwhelming. Therefore, the right information should be delivered at the right time, in the right order.

Wayfinding systems are inherently human, and processes at healthcare facilities will continue to evolve as time passes. Change management and ongoing resourcing are both critical to system effectiveness and users' ongoing positive experience of a space.

2. Environment (See [page 42](#))

One of the most effective strategies for navigating through unfamiliar environments can be to form a mental map of the space as the user goes through it.

Certain architectural and spatial characteristics – hidden lifts and winding corridors for example – can make this more difficult, causing wayfinding challenges. Instead, clear guidance through purpose designed spaces and past memorable landmarks is needed.

3. Communication (See [page 52](#))

A wayfinding system is only as strong as its individual parts. Presenting information in a consistent manner builds trust with users. Design, terminology and information hierarchy should all be made as simple as possible.

Collaboration

Benefits

From the instructions on appointment letters and the facility website, to the final reception desk at the facility, wayfinding information and messaging needs to be consistent.

4. Tools (See [page 56](#))

A wayfinding system uses an array of tools to create an effective wayfinding experience – giving users the right information, at the right time, so that they can intuitively navigate the environment.

Creating a wayfinding system that integrates with technology allows users the security of movement, particularly for appointments or treatment schedules.

Smartphones apps such as BlindSquare and Google Maps can be used for specific assistance, particularly by those with significant vision impairments.

Wayfinding tools help people determine where they are in relation to their destination, inform them about their journey, and easily direct them to and from their destination.

Modern wayfinding strategies should be developed as an integral part of overall design strategy. Architects, interior designers, wayfinding consultants, health planners, universal design and accessibility consultants, landscape architects, facility management services and users should all share their knowledge to develop a wayfinding solution. Only then can an intuitive, integrated, clear wayfinding system be developed and embedded into the hospital and organisation.

Refer to the Better Design for Healthcare Facilities guidelines for further information.

“Successful
wayfinding means
better experiences
for everyone
using the facility.”

Part 3

Wayfinding

Process

Step by Step

Introduction to the Steps

The development of effective wayfinding is a process that can be divided in three main steps, described in this chapter.

Step 1 – Analyse, Define and Ideate

Step 1 creates clear parameters for the wayfinding project. This requires understanding the needs of the user, their abilities and desires, as well as the needs and desires of the organisation.

Typical activities in Step 1:

- Gap analysis
- Research
- Stakeholder/user group workshops
- Architectural workshops
- Terminology workshops
- Design reference workshop
- Interviews
- User stories

Step 2 – Develop and Implement

The wayfinding system will be developed and implemented in close collaboration with the facility’s architects. It sets the scope and the boundaries for all wayfinding approaches and systems. It responds to the needs of all user groups identified in Step 1, such as patients, visitors and staff.

Typical activities in Step 2:

- Strategy development
- User journey mapping (flows)
- Information planning (content)
- Spatial information planning (planning principles)
- Concept design
- Prototyping and testing
- Design development
- Tender document
- Defects inspection

Step 3 – Manage and Maintain

Wayfinding is an ongoing commitment. Once the plan is in place, it needs to be managed and maintained. Without a plan on how to manage and maintain the wayfinding system, there is a risk of it becoming outdated. As processes change, so to does the wayfinding system.

Typical activities in Step 3:

- Strategy for change management
- Staff training
- Audit

Step 1

Analyse,

Define

and Ideate

NOT CLEAR WHERE TO PARK
NO ABILITY TO PAY ONCE IN CAR
FINE AS STRIPPED TO PARK ON THE STREET (LIFT)

GOT LOST CONFUSED AT LIFTS IN CARPARK
↳ MERELY VS AUSTIN LIFTS

CAR PARKS ARE POTENTIALLY CONFUSING

Carpark on the street. NO SIGNAGE SO ENTER AT AUSTIN LIMITED PARKING

could be exiting from another location

Has no mobile no mixi no friends for Dlc.

Exit way find to exit department

(WAYFIND) WHERE TO GO

NO CONSISTENCY B/W ENTITIES (LANGUAGE, STYLE ETC)

BETTER SIGNAGE ON ENTRANCE W/ AND FIX BOTH ENTITIES (ATT + MEDIC)

Address of Campus

Inadequate signage in different areas of Tower carpark

WINDOW/DESIGN

CONFUSION OF SIGNS

* Storage in front of hospital complex, small font

NO INTUITIVE WAY TO FIND ED
LEVEL 1 VS GROUND

NOT INTUITIVE TO FIND ED FROM LEVEL 1 CAR PARK LIFTS

* 2 points of access to hospital ONE SET OF DIRECTIONS

Inadequate signage to nursing allocations

lack of exiting lifts on Level 2

* How do I know main lifts

* Level confusion - no ground floor

NAVIGATION TO ED NOT CLEAR (MISSED SIGNAGE CONFUSING)

GROUND FLOOR CALLED LEVEL 1

Inadequate campus signage + lighting (security concerns)

direction visible exiting lift

* No MAPS at reception (PAPER)

Signage too not obvious - AH - BLUE

Names of sites + than buildings (complex)

could go to wrong campus

Friends drove Frank to ONVS instead of ED. ? car parking location

NOT INTUITIVE WHICH WINDOW I NEED TO ATTEND.

NOT CLEAR WHICH DESIC I GO TO FROM THIS ENTRANCE

No reception at Repat to ask where to go **

EXIT ON GROUND FLOOR + AREA AT RECEPTION -> RECEPTION CLOSED

EMOTIONS

Stress levels Late arrival Relative Car find patient

TILLY WAS BELIEVED TO BE TAKEN TO HER HUSBAND SHE ASKED TO LINK HER ARM WITH THE UNUSUAL POST

TILLY WAS DISTRACTED BECAUSE SHE WAS LISTENING AND SHE SWOONED HER ARM AND MESSAGE

unforeseen barrier escalating anxiety

PICK UP

* Where to leave

← **Figure 3.1**

Mapping user groups and stories

© ID-LAB

Introduction

to Step 1

Analyse

Research your users' needs and their interactions with the built environment.

Get to know your users by understanding their wants, needs and objectives. During this step, it is important to set aside any assumptions or confirmation bias in order to gather objective data.

Knowledge creates assumptions, and our expertise and experiences are no exception to this. To understand and solve a problem, it needs to be looked at from the point of view of a first-time user with no pre-existing knowledge.

Define

Define user needs and issues/problems.

Using the findings from the analysis, define potential issues and challenges that could inhibit the roll-out of an effective wayfinding system. For example:

- What difficulties and barriers are your users coming up against?
- What patterns do you observe?
- What is the big user problem that your team needs to solve?

By the end of this step, you will have a clear problem statement. The key here is to frame the problem in a user-centred way; rather than saying 'We need to...', frame it in terms of your user, e.g. 'Patients to the clinics need...'. Once you've put the problem into words, you can start to come up with solutions and ideas.

Ideate

Challenge assumptions and create ideas through collaboration.

With a solid understanding of your users and a clearly defined problem statement, it's time to work on potential solutions.

All the various design disciplines will brainstorm ways to address those (unmet) needs, coming up with as many new angles and ideas as possible. Don't worry about the quality or feasibility of ideas at this point. Once ideas are collected, they can then be evaluated and narrowed down to a few main points to concentrate on.



User

Universal Design

Universal design is the design and composition of buildings, products or environments to make them accessible to all people, regardless of age, disability or other factors. Wayfinding goes hand in hand with universal design.

It encompasses seven principles that aim to ensure that users of all ages, abilities, cultures, gender, and economic backgrounds are able to seamlessly move from various precincts, networks or links to specific spaces and features.

20% of the Australian population has some form of disability. Adding the needs of an ageing, culturally and linguistically diverse population into this group, the role of wayfinding becomes crucial. Additionally,

healthcare facilities need to be easy to navigate to prevent patients feeling anxious and postponing health checks and preventative care.

Closely aligned with universal design is the requirement for accessibility. Accessibility relates to the ‘reasonable adjustment’ provisions of the Disability Discrimination Act (DDA), Australian Standards and the Access to Premises Standard.

Compliance to the Access to Premises Standard is the minimum requirement. However, features such as landscape, furniture and fixtures and wayfinding are not typically required. Under the DDA, however, principles such as equality, functionality, dignity, safety and independence of use are unwritten rules of design.

Figure 3.2

Universal design principles



Equitable use
Principle 1



Flexibility
Principle 2



Simple and intuitive
Principle 3



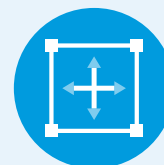
Perceptible information
Principle 4



Tolerance for error
Principle 5



Low physical effort
Principle 6



Size and space for approach and use
Principle 7

“Accessibility is just
one outcome of
universal design.”

Users

Healthcare facilities cater to a wide range of users. To ensure the best design and benefits for everyone, the wayfinding strategy must consider the needs of all these users.

While the overall wayfinding system focus should be on public users who are visiting the facility for the first time – as they require more information – it has to work for staff and repeat users too.

Users Who Need More Information

The primary targets for a wayfinding system are first-time users – whether visiting the facility for the first time, or visiting a new part of the facility. This includes:

- Patients
- Visitors, friends and relatives
- New or casual staff
- People making deliveries
- People providing services

Users Who Will Benefit from Universal Design and/or Accessibility Interventions

- People with mobility, vision, hearing or sensory impairments
- People who are ageing
- People with temporary injuries, illness or medical conditions
- People who encounter fatigue, anxiety or stress
- Young families
- People who are culturally and linguistically diverse

Users Who Need Less Information

The wayfinding system is less important for:

- Unfamiliar users to low-level destinations (e.g. professional visitors such as representatives and visiting staff). In these cases, ad-hoc solutions should be devised, such as special protocols, meeting points and extensive pre-visit information.
- Familiar users to high-level destinations, as this is covered by the public wayfinding system (e.g. staff to their own working areas, staff to public areas).

Based on these user groups, the wayfinding strategy needs to be centred on the following scenarios:

- Unfamiliar users to high-level destinations (low depth of reach, i.e. destinations which are immediately visible within the fabric of the building).
- Familiar users to low-level destinations (deep within the fabric of the building, hard to find).

Once the different user groups are identified, and before the location of any information is planned, all preferred routes need to be mapped. Ideally, these user journeys will be designed to minimise the number of decisions that need to be made, reducing opportunities to stray from the route.

Cultural Safety and Universal Design

NSW is home to more Aboriginal and Torres Strait Islander people than any other state or territory. In 2016, Aboriginal and Torres Strait Islander people made up 1.5% of the total NSW population and 2.9% of the Greater Sydney population.

Improving Aboriginal Health is a key focus for the NSW health system (see NSW Aboriginal Health Plan 2013-2023), and cultural safety is an important part of this.

‘Cultural safety refers to the accumulation and application of knowledge of Aboriginal and Torres Strait Islander values, principles and norms’¹. It is about ‘overcoming the cultural power imbalances of places, people and policies to contribute to improvements in Aboriginal and Torres Strait Islander health’², with the end goal of all people who interact with the healthcare system feeling safe and respected.

1 Position Paper Cultural Safety for Aboriginal and Torres Strait Islander Doctors, Medical Students and Patients. (n.d.). [online]. Available at: https://www.aida.org.au/wp-content/uploads/2018/03/Cultural_Safety.pdf.

2 Australian Indigenous Doctors’ Association. (2019). Cultural safety - Australian Indigenous Doctors’ Association. [online] Available at: <https://www.aida.org.au/our-work/cultural-safety/>.

Having a connection to Country and community can have a positive impact on the health outcomes of Indigenous people. Ideas on how this can be incorporated into a healthcare facility wayfinding system include the use of Aboriginal and Torres Strait Islander artwork as prominent landmarks or environmental graphics.

In the same way as universal design aims to design for the widest range of users, integrating cultural safety into the overall design and culture of a healthcare facility benefits everyone.

Figure 3.3

The use of local languages and artwork can be woven into the wayfinding system.

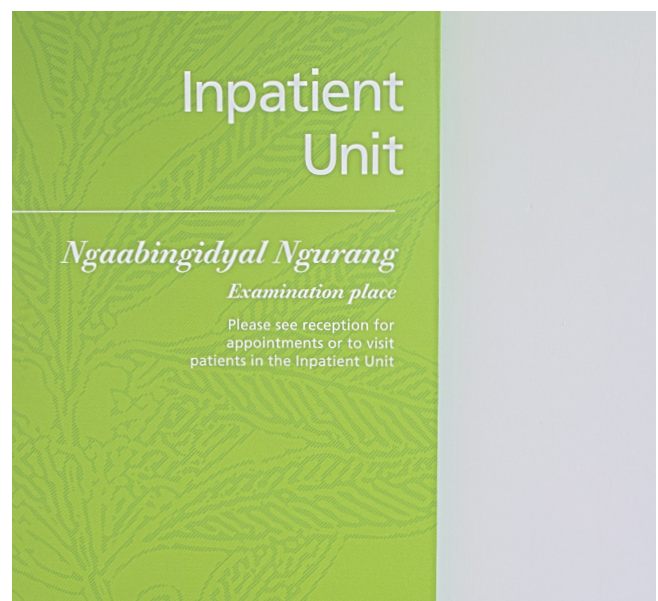


Figure 3.4 →

Cultural safety can extend outdoors and be woven into the landscape of a campus, Westmead Hospital, NSW.

Photographer: Caitlin Amy Photography

Architect: HDR

User Needs

Wayfinding instructions and tools must be delivered in such a way that people of all cultures, ages and abilities can understand and act upon.

An understanding of the wayfinding audience for your facility can be drawn from:

- Demographic analysis of local communities to identify cultural and language groups, age structure, levels of education, car ownership and public transport use
- Consumer councils/committees
- Consumer representatives on project groups or committees
- Consultation with people through surveys, focus groups and interviews
- Literature reviews to identify universal issues of access to healthcare facilities
- Consultation with cultural associations to identify cultural issues that may impact the ability of particular groups to access healthcare facilities

Literacy Levels

According to the OECD, 44% of Australians lack the literacy skills needed for participation in everyday life, and one in eight Australians are functionally illiterate³ In addition to this,

low health literacy affects over 60% of Australians (see the Health Literacy Guide for further information).

Users with low literacy levels can read some text and recognise numbers and letters. They have difficulties understanding written messages and complicated wording.

Specific wayfinding interventions:

- Use of coding strategy, e.g. A12 instead of complicated long wording
- Use of simple language
- Provide landmarks – clearly defined information points at entrances, 3D lettering and colour lift cores
- Providing spoken instruction at digital information points

Cultural and Language Diversity

Australia is one of the most culturally diverse countries in the world. Having English as a second language may result in an inability to accurately understand written messages and signage.

Specific wayfinding interventions:

- Use of coding strategy (e.g. A12 instead of long and complicated medical terminology)
- Use of simple language
- Multiple languages available at digital information points
- Simple pictograms

³ AUSTRALIA Key issues. (n.d.). [online] Available at: https://www.oecd.org/skills/piaac/Country%20note%20-%20Australia_final.pdf.





← Figure 3.5

Facility entrances should be accessible for people of all abilities.

Bowral and District Hospital, NSW.

Photographer: Richard Glover

Architects: McConnel Smith and Johnson/
Conrad Gargett.

Mobility Impaired

Users with a limited ability or difficulty with walking, grasping or lifting objects.

Specific wayfinding interventions:

- Pre-visit information with instructions on how best to access the facility, and where amenities such as parking and toilets are located.
- Route design to allow for mobility impaired access, e.g. ramps and lifts.
- Clear paths, ensuring there are no physical obstructions in the circulation areas.
- Seating hubs and mobility aids.

Vision Impaired or Blind

Users with a limited or no sight. These users rely on hearing or touch to navigate the space and cannot rely on written messages.

Specific wayfinding interventions:

- Pre-visit information in audio format
- Use of beacons or similar technology, such as BlindSquare
- Sufficient lighting
- Braille
- Use of a large and legible typeface
- Use of short messages (e.g. A12)
- Use of colour and high contrast

- Use of matte finish to avoid reflection on sign surfaces
- Clear audio announcements in waiting rooms and lifts
- Consistently located signage, so people know when and where to look for a particular type of information
- Service animal relief areas

Hearing Impaired or Deaf

Users with limited or no ability to hear sounds, who rely on written messages.

Specific wayfinding interventions:

- Sufficient lighting
- Pre-visit information includes a map of the hospital and site
- Visual announcements via digital screens in waiting rooms and lifts
- Hearing augmentation systems or subtitles on audio-visual media

User Engagement

Engaging with users in the early design stages leads to a successful wayfinding strategy. Meeting with different groups of users and stakeholders—ranging from user representatives, front-line staff, to management—creates support for change through a shared vision of the outcome and increased ownership.

Designs are often developed on assumed preferences and needs, which can lead to an ineffective system. Therefore, a range of users and consultants should be included in the design development to maximise success and inclusivity.

Expertise and experience create assumptions, which can make their way into the design and management of a project. Challenging those assumptions can be difficult; when you have extensive knowledge of a subject or familiarity with an environment, it's hard to see things from the point of view of someone who does not.

This is where user engagement comes in.

Why Engage?

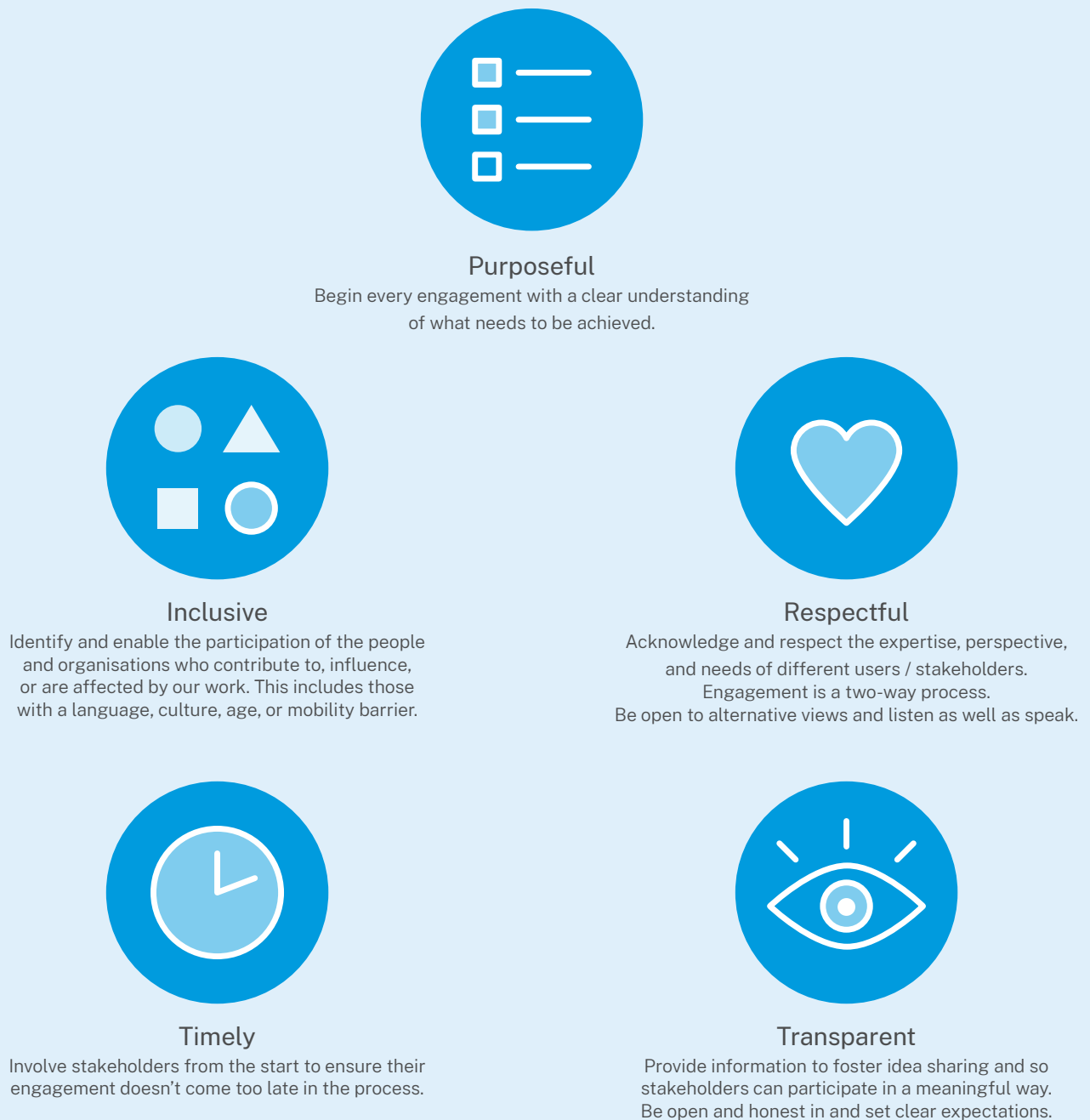
- Shape the outcomes of the new wayfinding system
- Share experiences from existing situations
- Get information about user requirements and hospital processes
- Stakeholder understanding of the main principles in wayfinding
- Stakeholder engagement with the process

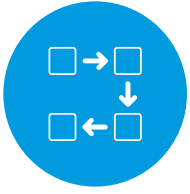
Engagement Groups:

- Wayfinding project group
- Wayfinding steering committee
- Client facing staff
- Clinical staff
- Volunteers
- Security and parking
- Communication staff
- Customer service staff
- Marketing staff
- Planning services
- Operations manager
- Facility manager
- Wayfinding team
- Architect
- Landscape architect
- User representatives (either individual users or a consultant that represents a specific group of users, e.g. First Nations peoples, universal design consultant)

Figure 3.6

User engagement principles





Facility Processes

Understanding the facility's processes and operational requirements is one of the most important parts of developing a successful wayfinding system. The various procedures, services and internal operations of a facility must be explored, discovered and mapped-out to create a system that works for the user and the facility.

Exploring the interaction between the user and the facility's operational requirements helps to understand where and why bottlenecks occur and contributes to a more holistic approach to wayfinding. Instead of solving isolated issues, this creates a system that considers the whole picture.

Hospital Processes

Every healthcare facility and department have different processes. An understanding of these processes needs to be in place before any wayfinding changes or planning can be implemented.

Stakeholder engagement, user groups and consultation of hospital standards, as well as the sections included below, are good places to start.

Emergency Department

Wayfinding in the Emergency Department is necessary for both staff and the public. Visitors to this department are likely to be stressed and may have difficulty following directions. Staff need to find their way in a hurry and don't have time to decode complicated instructions.

Questions to consider:

- Patients will need to go to Triage first, so are all instructions and labels clear?
- What is the waiting procedure?
- Does paediatrics have its own waiting area?
- Where do visitors need to go first?
- How will access past reception be controlled? Will visitors be escorted in? And out?
- Will patients need to self-navigate to different areas in the Emergency Department (e.g. Fast Track to Imaging)?
- Is there after-hours access? Are the directions for access clear and concise?

Clinics

Wayfinding to and within clinics is a particularly complicated task. Many people attending a clinic are first time users and may not have been to the facility before. Clinics can also move around depending on current need – a space might be a neurology clinic on Monday and a diabetes clinic on Tuesday.

Questions to consider:

- What pre-visit information will patients be given?
- Can patients check in at a kiosk or do they need to check in at reception?
- What is the waiting procedure?
- How will the clinics be labelled? Does this need to change depending on the day?
- Will patients be escorted in? And out?
- Will patients need to self-navigate within the clinic area, e.g. from a consult room to the gym?

Wards

Wayfinding in wards is primarily aimed at users visiting inpatients.

Questions to consider:

- Is the ward open access or will visitors need to be buzzed in?
- Do visitors need to go via a reception point?
- What is access like for repeat visitors? Can they find their own way in and out?
- Is there after-hours access? Are the directions for access clear and concise?

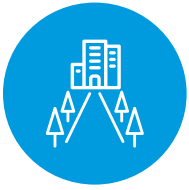
Facilities in Transition

Information management is extremely important when a redevelopment or refurbishment is taking place. Departments will change, facilities will temporarily move and routes to destinations will be updated. Tracking these changes is key to having signage that is in line with journeys.

Temporary signage needs to be bold and eye-catching, as it will compete with building works and hoarding in addition to the already busy hospital environment. Bright colours and graphics can be used to great effect.

The use of coloured lines on the floor or walls is not generally recommended as a permanent wayfinding solution, for the reasons mentioned in [page 98](#). However, for temporary wayfinding changes due to building works and redevelopment, it can be very effective.

For major redevelopments there is the option of installing permanent signage early. Make sure that destinations that are not yet in use are covered up so that there are no conflicting directions.



Environment

Legible environments and spatial organisation play an essential role in navigation. If wayfinding circulation and spaces are already defined by urban design, landscape and architecture, less physical signage is needed.

Incorporating universal design into the environment can further simplify wayfinding. Making the main entrance of a facility accessible to all users – rather than having a revolving door and a separate accessible entrance to the side for wheelchair users and prams – can have multiple benefits. It promotes inclusion and equitable use, and reduces the amount of wayfinding information needed.

Campus Layout

Precinct and campus layout can help or hinder wayfinding. In the case of a brownfield site, opportunities for improving campus legibility can be limited by the design and location of existing buildings. Other strategies, such as an overhaul of the signage system, may be needed.

When redeveloping or adding a new building to an existing site, placement of and connections between the existing buildings should always be taken into consideration. When the campus layout is complex and cannot be decoded without explicit instructions, supporting signage is important.

A greenfield site offers more scope to integrate wayfinding into the layout. Vehicular and pedestrian movements should be simple, with short, direct routes. When the building and landscape design work together to support intuitive wayfinding, signage can be kept to a minimum.

Connections to the Site

Users can arrive at the facility via a number of different transport options – vehicle, bicycle, public transport or on foot. The wayfinding system needs to cater to this with specific signage to avoid confusion.

Vehicular signage should:

- Begin on the approach to the site.
- Liaise with the relevant authority to ensure that the correct public road signage is in place.
- Have large totems with text sized and placed specifically for vehicles arriving to the site to clearly identify entrances.
- Have smaller signage that follows the same principles can be used for internal site circulation.

Pedestrian and cycle signage and paths should:

- Be of a size that is scaled to those on foot or bike.

Figure 3.7

The wider environment needs to be considered, as well as the facility itself

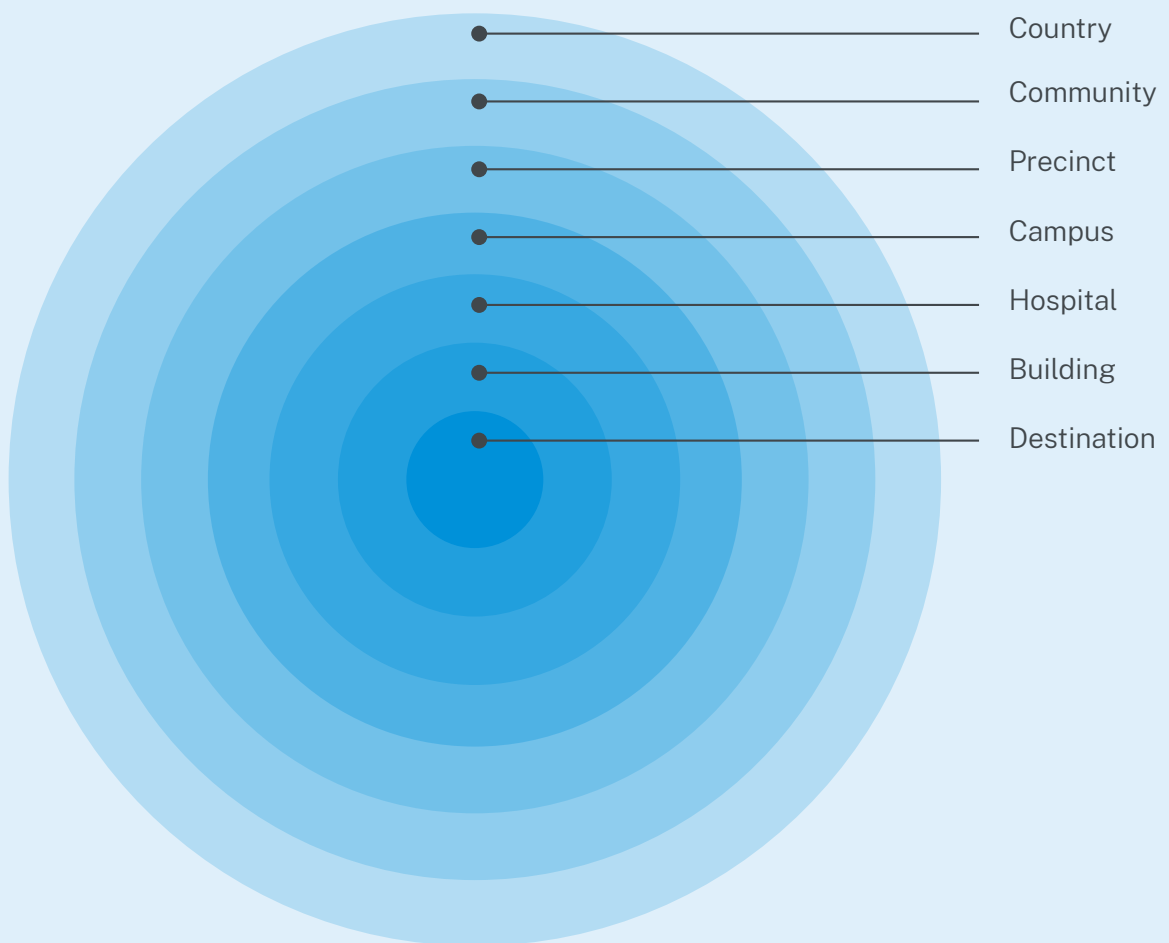


Figure 3.8 →

The entrance to Bendigo Hospital, Victoria.

© ID-LAB

- Be easily distinguishable from vehicular signage to avoid confusion between different routes.
- Be easy to follow and accessible for those with impaired mobility.

Parking, Buildings and Entrances

Parking

For many users, finding the car park is the most stressful part of a visit, followed by finding the right entrance. Not finding a car park is a common cause of complaint, and can cause lateness, anxiety and stress.

Directions to parking and drop-off areas must be clear and unambiguous. If there is more than one car park, pre-visit information should specify which one is most convenient for the user's destination. Car park counters can be used to show users available parking spots.

Emergency Department traffic, parking traffic and traffic to other entrances should be separated from main entrance traffic prior to the drop-off, pick-up and taxi area.

Buildings

The architecture of the building and the landscaping at entrances to a healthcare campus are important triggers for people to recognise that they have arrived.

Many hospitals are a well-recognised landmark within the community. Prominent signs can be used to assist people to visually locate a facility from a distance. An illuminated sign in a prominent location on the highest building can assist people in recognising the hospital and finding their way to the site.

Entrances

When people get near the healthcare facility or campus they'll need to be able to clearly identify and recognise the facility and entrances.

The Emergency Department entrance is the most important hospital destination within a wayfinding system. Users who drive to Emergency Department will not usually have pre-visit information and will be reliant on public road signs to find the correct entrance. They are often in an agitated, panicked state of mind, so it's important that the Emergency Department entrance is easy to find.

BENDIGO HOSPITAL

Buildings 02-10

BENDIGO HEALTH

Opening Hours
Monday-Friday
6am-8:30 pm
After Hour Access
via Emergency on
Drought Street

Building
01

Main Entrance
Through to
EMERGENCY

BOOSTER ASSEMBLY
LOCATED AT
MERRY STREET
ENTRANCE

Precinct Map



Buildings Directory

01	Bendigo Hospital Main Building	20	Monash School of Rural Health	35	Madbury House
02	Carver's Hall	21	Bendigo Primary Care Centre	40	Jerry's Early Learning Centre
03	West Wing	22	LaTrobe University Clinical School	41	Old Library
04	Anne Claude Building	23	Clinical Library Bendigo Health	42	Hyatt's Block
05	Williams Centre	24	Lanark Building	43	Proctor Block
06	Superintendent's Residence	25	F2	44	Accommodation
07	John Lindell Building	26	F2	45	Scholar House
08	Margaret Phillips Building	27	F2	46	Old Mortuary
18	Care House	34	F2		

Key

	Walkway		Public Parking
	Roads		Staff Parking
	Bus Stop		Hotel Parking
	Building Entrance		Childcare Parking

Bendigo Health is a Smoke Free Organisation
Smoking is Not Permitted on Hospital Precinct Grounds



← Figure 3.9

The entrance canopy forms a highly legible main entrance at Mudgee Hospital, NSW.
 Photographer: Amber Creative
 Architect: Silver Thomas Hanley

Priority should be given to directing drivers to Emergency Department from the public road, and every primary campus entrance that does not lead to the Emergency Department entrance should have directions to Emergency Department.

Ideally, public main entrances to a facility should be easily recognisable and visible from all angles of approach. Entrances should be prominently signed, particularly when working with an existing entrance that is not as recognisable as it could be.

Where possible, there should be one entrance that is accessible to all users, removing the need for a separate accessible entrance and the associated extra wayfinding.

Signage should direct all first-time visitors to a facility through the main entrance/s, where the main reception is located. The wayfinding in place there will provide users with all of the information they need to find their destination (or where to find help if they have special requirements).

Secondary entrances don't require the same level of identification. There is no need for directories or kiosks, only basic directional information. It is expected that anyone using these entrances (staff, representatives, frequent users) will know where they are going.

The main entrance drop-off area will predominantly be used for drop-off, pick-up and taxis. A well-designed drop-off area should be clearly identified and accessible for all users.

Landscape

While many of the considerations listed in this document are expensive or not practical for brownfield facilities, landscaping changes are very accessible. Improving the landscape can help alleviate many external wayfinding problems for existing sites.

The landscape and lighting around the facility play an important role in external wayfinding. Good landscape design can provide wayfinding cues via paths and plantings, guiding users towards public entrances and away from service areas.

Pathways should be well lit, and wide enough for users of all abilities to use comfortably. Graded walkways are preferable to ramps, as these allow efficient vertical movement for those with mobility considerations.

Green spaces can also give a calming influence, and incorporating places of respite and relaxation should be considered in the overall landscape design.

Figure 3.10 →

A directory board forms part of the welcome area at AZ Zeno, Belgium

© ID-LAB

Interior Architecture

The spatial layout of a facility has a large impact on a wayfinding system. Upon entering a building for the first time, users will try to understand how it is organised and what is in it, creating a mental map of the space.

Users draw on previous experiences to interpret the environmental cues around them. If the main reception was in the entrance lobby in previous hospitals they have visited, they will expect the same to be true for this one.

Designing spaces that meet these expectations lowers the amount of new information that needs to be processed by users. Orientating features like reception desks and lifts towards the direction of travel, recognisable design and clear labelling all help users familiarise themselves with a space.

Welcome Areas

On arrival, users need to understand what to do or where to go next. This requires more than just directional signs. Primary locations, such as the main reception, lifts and stairs, and major travel paths on that level should be readily visible from the main entrance. If they are not, signage will have to make up for the lack of visibility.

Wayfinding directories or kiosks need to be easy to access whilst not cluttering the entrance. Kiosks are becoming increasingly common in healthcare facilities, both for wayfinding and check-in. They can be used instead of or in addition to directories.

The ideal position for a kiosk is the main reception desk, encouraging their use while still allowing those unfamiliar with the technology to continue through to a receptionist. Where volunteers are present, it is good to have some available to help users with the kiosks.

Lift Core

In a new build, lift cores should be positioned so that they are prominent, highly visible and orientated towards the direction of travel. In older buildings where lift cores are tucked away, there needs to be clear and consistent signage to direct users to them.

Research shows that many people find it difficult to orientate themselves after they exit a lift. Providing views to the outside and reducing the number of wayfinding decisions when exiting the lift reduces confusion.

Informatie

←
→

Lift
A
Lift
B


#Hoogte	Lift	Wissel
Urgentie 	B	-1
Abdominaal centrum	B	2
Ambulante therapie	A	-1
Auditorium		0
Bistro		0
Consultaties 1	A	1
Consultaties 2	A	2
Consultaties 3	A	3
Dagcentrum chirurgie	B	1
Dagcentrum geriatric	A	2
Dagcentrum interne	B	2
Geriatric centrum	A	2
Intensieve zorg	A	3
Kamers 1.01-1.59	A	1
Kamers 1.60-1.95	B	1
Kamers 2.01-2.59	A	2
Kamers 2.60-2.95	B	2
Kamers 3.01-3.34	A	3
Kamers 3.36-3.98	B	3
Labo	B	-1
Moeder-kind centrum	A	1
Nucleaire dienst	B	-1
Operatiekwartier - CSA	A	1
Orthopedisch centrum	B	1
PAAZ	B	3
Preventiecentrum	A	-1
Radiologie	B	-1
Stille ruimte	B	-1
Thorax-neurocentrum	A	3
Uitgang		0
Vergadercentrum	A	2

Figure 3.11 →

Clearly defined circulation spaces
and bold signage at Amphia Ziekenhuis,
the Netherlands
© ID-LAB

Circulation Spaces

All buildings should have clearly defined, logical movement systems incorporating simple patterns.

Horizontal systems such as corridors and public thoroughfares are best aligned with memorable landmarks either within or outside the building. Vertical systems such as lifts, stairs and escalators are best located at key points on these thoroughfares with connections to reception, welcome areas and information points. Building circulation systems should have a hierarchy of connected pathways that include:

- Main routes (i.e. a hospital street or concourse) connecting to the building entrance and drop-off area
- Primary routes
- Secondary routes
- Vertical routes (lifts, stairs, ramps and escalators)

Destination Identification

Receptions should have recognisable design features and need to be clearly identified and/or labelled. In contrast, staff stations that are not intended to serve as receptions should not mimic these cues. If reception desks have specific areas for people in wheelchairs, these areas should be visible from the primary direction of travel.

Clinics, wards and other departments should have obvious location identification signs, letting the user know they have arrived at their destination.





Communication

Wayfinding requires a set of instructions in a style and language that reflects the facility's cultural, architectural and operational needs.

Delivering consistent and functional communication starts with defining all possible touch points between the user and the facility. The facility website, promotional and induction material, appointment letters, staff instructions and signage should all work together.

Branding

To keep wayfinding consistent, clear and legible, only essential wayfinding information should be included on signs (this excludes any branding elements such as logos or taglines). The pace at which branding is updated tends to be much quicker than wayfinding information, meaning signage needs to be updated more often if branding elements are included. There is, however, an obvious need to brand the hospital for the user. Branding is best included within primary signs on the exterior of the building – namely, the sky sign, external precinct and campus entries and main entrance information.

Pre-Visit Information

Pre-visit wayfinding information is a journey planning tool provided to patients, visitors and staff prior to the beginning of their journey at the facility. It is typically delivered through digital means (email or website) written material (appointment confirmation, admission information, referral letters, employment rosters), or verbal instructions. This information should be easy to understand and consistent with on-site wayfinding.

The facility website will be an important source of this information, so it needs to be carefully coordinated to match wayfinding information provided at the facility.

Verbal Instructions

Verbal instructions are provided over the phone or in person. The instructions should be concise and clear so that users will be able to easily recall them when they arrive at the facility. Verbal pre-visit instructions need to refer to clearly visible landmarks on the site and direct people to the nearest entrance to their destination, where they can receive further wayfinding information.

Verbal instructions also need to follow a single protocol, and staff and volunteers must be trained in how to deliver them so there is no confusion for users. Common verbal instructions, such as arriving via public transport or car, should be developed in detail.

Appointment Confirmations

Appointment confirmations (letters, text or email) provide an opportunity to provide detailed wayfinding information, in addition to the standard appointment time and address.

Along with time and date details, each confirmation can include information such as an area and campus map, general information, and can highlight the department number and name.

The information should match what is provided at the facility and be consistent with any on-site wording. This promotes familiarity with the way information is shown throughout the site.

Website

A healthcare facility's website should incorporate clear and appropriate wayfinding information and maps. This should include an

easy-to-find page detailing the different methods to get to the facility (vehicle, walking, cycling, public transport), the location and cost of parking, and an explanation of what people can expect when they enter the facility.

Public Transport Information

Including details for public transport in pre-visit information can give users the confidence to take it. It is important that any information provided matches other information provided by and at the facility.

Liaison with the relevant councils and authorities can simplify public transport use – the name of the facility can be included in public transport apps and websites. Stops that service the facility directly should include the facility name, as should any announcements made by drivers. Public transport information can be provided within the facility on digital information systems with live links to timetables and departure times. For the return journey, signs should direct users to bus, tram and train stops.

Staff and Volunteers

Wayfinding systems are dependent on a series of separate parts working together to deliver a consistent message. One commonly overlooked part of a successful system is the facility's staff, who need to deliver both formal and ad-hoc wayfinding information. Staff are a critical point in the system; it is no use having correct signs if information given by staff contradicts it.

Consistent language needs to be developed in collaboration with the staff who are responsible for putting it into practice. They are likely to have experience directing people through the facility and may have tried and tested methods that work well. By asking staff to participate in the development of wayfinding language, they are more likely to ensure it is applied consistently.

Staff and volunteers throughout the facility should use the same language that is on fixed and digital signs. Destinations and directions should be explained in the same way, using the same terminology. Using consistent language allows people to quickly become familiar with the wayfinding system, and easily transition from verbal directions to written content on signage.

As the majority of people cannot remember more than a few instructions at a time, staff should refer to the surrounding environment when giving directions. Landmarks such as lifts and artworks are useful memory cues. Staff should ask people to repeat directions back to them. Repetition helps to embed information in the short-term memory, and with the creation of cognitive maps.

Some healthcare facilities contain clinics which are rented out to specialists and general practitioners. It is important that the information provided by these services is consistent with that provided by the facility. Having a standardised format for providing directions enables third parties to provide the same level of wayfinding assistance as the rest of the staff.

Measuring the efficacy of directions provided by staff can be done in a number of ways. Surveys and other feedback and/or consultation tools can be used to improve the system, rather than as a way of singling out particular members of staff.

Anonymous surveys of staff, patients and visitors are a good way to get information regarding the functioning of the wayfinding system. These can be done face-to-face, or

as part of an online survey. For example, visitors and patients can receive a link to a survey after their visit.

Anonymous ‘mystery shopping’ by volunteers can be an effective way of confirming whether directional assistance is being provided in the agreed manner. Create a list of common destinations and ask people to check how staff provide directions to them.

In summary, staff and volunteers should:

- Be inducted so that they understand the wayfinding system
- Use the same language as the physical signage
- Refer to the installed signage when giving directions
- Refer to the surrounding environment
- Write directions down

Figure 3.12

A reception desk at Amphia Ziekenhuis, the Netherlands. © ID-LAB





Tools

An array of tools, such as signage and environmental cues, are used to create an effective wayfinding environment. These tools are the key to intuitively navigating a space.

Wayfinding tools help the user determine where they are in relation to their destination, inform them about their journey, and direct them to and from their destination with minimal effort.

Common wayfinding tools include:

- Signage
- Digital tools (digital signage, kiosks, app and app integrations, text messaging, online maps etc.)
- Landmarks
- Art
- Thresholds

Signage

First time visitors will be consciously looking for signs to provide information and will expect to follow arrows and instructions on the wall until they reach their destination.

However, signs alone are not the solution to most wayfinding problems. Signs will not resolve problems caused by:

- A campus that has expanded, often illogically, over many decades
- Poor planning
- Conflicting directional cues in the environment

Therefore, it is imperative that signs are connected to all the other elements of the wayfinding system – pre-visit and verbal information, architecture, landscaping and other visual cues.

The main types of signs in a wayfinding system are:

- Directional – to tell users where they need to go
- Identification – to tell users when they have arrived
- Directory listings

Other signs in a healthcare facility (utility, statutory, safety, etc.) are separate from the wayfinding system.

← Reception 2

Ultrasound
GO.04

Figure 3.13

A wall graphic, directional sign and door identification work together to guide visitors at the Bendigo Hospital, Victoria
© ID-LAB

Special Considerations

Specialist areas of healthcare facilities, such as the Emergency Department, Mental Health and Dementia Care, have special wayfinding needs that should be dealt with as part of their functional briefing and clinical safety processes.

Emergency Department signs must be uniform, prominent, concise and in plain language to avoid confusion. A guide to implementation, ‘Practical steps to improving Emergency Department signage’, has been developed to assist with this. In Mental Health facilities (including Dementia Care) appropriate advice on effective wayfinding techniques should be sought. Signs in areas for mental health access will need special consideration to ensure safety and avoidance of possible misuse.

Public Road Signs

Generally, the Main Entrance and Emergency Department entrance signs are used by Transport NSW to direct people to a healthcare campus.

All public road signs are the responsibility of Transport NSW, but they need to be pro-actively managed in a coordinated manner by the healthcare facility.

Digital Tools

Digital Wayfinding

Healthcare facilities are among the most complex environments people are likely to visit. The larger or older the hospital, the greater the complexity; large hospitals have many levels and destinations, while older hospitals haven’t been built with the current use in mind.

When serving a wide range of users with an even wider range of needs, abilities and knowledge levels, digital wayfinding plays a powerful role.

A good digital wayfinding system effectively guides users to their destination, using simple instructions either given at the start of their journey (see [Figure 3.14](#)) or updated during it (see [Figure 3.15](#)).

Advantages

- Digital wayfinding systems support users to be more independent and confident, which can significantly reduce psychological and physiological stress.

“Digital wayfinding can play a powerful role in serving a wide range of users with an even wider range of needs.”

- Digital wayfinding can provide personalised information that is not possible with a purely static system. For example, directional instructions tailored to a user’s abilities or in their preferred language.
- The instructions on digital components can be adjusted to deal with changing circumstances, such as a lift under maintenance, or a part of the hospital closed for redevelopment.
- The ability of digital wayfinding to display distance and duration to a destination can help reduce user stress and anxiety.

Disadvantages

- Some users, such as those with vision or cognitive impairment and technologically inexperienced, may find using digital devices difficult or feel anxious using a technology-based system.
- Due to differing scopes and disciplines, a lack of coordination between consultants (AV, IT, wayfinding) can result in digital tools feeling like stand-alone installations and not a part of the broader wayfinding system. This means that they may not use a similar ‘language’ or have different instructions to those in use in the physical environment. Consistency is one of the most important parts of a wayfinding system, and having separate systems work next to each other creates a confusing patient experience.

Supporting Digitals Tools

A digital wayfinding system should be operated in parallel with the on-site wayfinding system, not as a replacement. Users will generally prefer one over the other. Importantly, the static component of the system will not be affected by technological glitches or outages.

Digital Wayfinding Interfaces

Digital signs are subject to many of the same design requirements as fixed signs and should be treated as an equal part of the wayfinding system. The look and feel of digital elements should match that of the physical signs; font, colour, arrangement, and scale should all be consistent. The same principles of positioning and construction also apply.

Digital signs should:

- Only be used for wayfinding. Additional information should not be displayed alongside wayfinding information.
- Have a slightly larger text size than that of physical signs to account for reduced legibility caused by illumination.
- Avoid having animation and movement surrounding the information. Where transitions are required, they should be simple and clear.
- Be used where information is likely to change often; for instance, department directory boards, opening hours, etc.
- Not be used as a static directional sign.

Figure 3.14

Digital tools include mobile apps and wayfinding kiosks

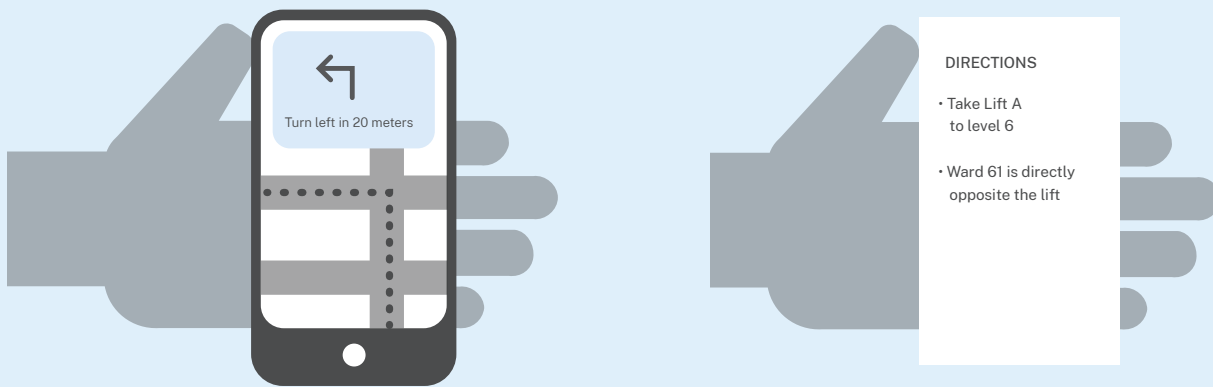
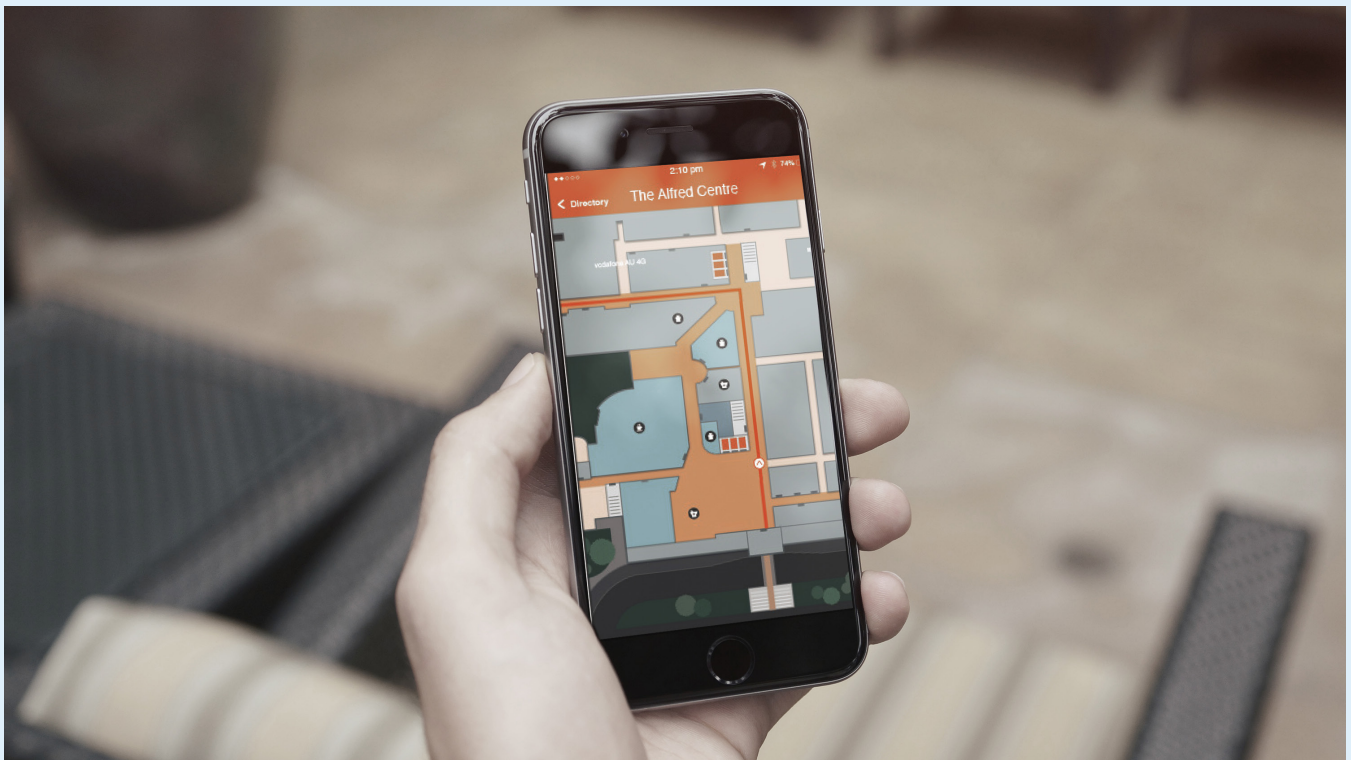


Figure 3.15

The Alfred in Melbourne has developed an app that guides users through the hospital



Et Niveau	Naam	Code	Route	Lift Niveau	Verpleegsoorten	Route	Lift Niveau	Verpleegsoort 7	Code	Kamer nummers	Route	Lift Niveau	1.850 - 1.899		
0	Neurologie	B032	-	0	Dienst			Verpleegsoort 8	C221	C 2			2.100 - 2.149		
0	Neus -, keel - en oorzakten	B031	-	0	Algemeen facilitair departement	D064	D 9	Verpleegsoort 9	C241	C 2	0.320 - 0.369	C030	-	0	2.150 - 2.162
0	Nucleaire geneeskunde	E061	-	0	Algemene directie en staf	B034	-	Verpleegsoort 10	D262	D 2	0.020 - 0.035	D047	-	0	2.163 - 2.199
0	Oncologie	E042	-	0	Bistro	B050	-	Verpleegsoort 11	D251	D 2	0.710 - 0.720	E020	-	0	2.200 - 2.249
0	Oogziekten	E033	-	0	Bouweam	D064	D 9	Verpleegsoort 12	E221	E 2	1.040 - 1.059	E111	E 1		2.250 - 2.259
0	Orthopedie - handgroep	D041	-	0	Directie financiën en administratie	B034	-	Verpleegsoort 13	E222	E 2	1.060 - 1.079	B111	B 1		2.300 - 2.349
0	Plastische chirurgie	B022	-	0	Facilitaire diensten	B034	-	Verpleegsoort 14	E244	E 2	1.080 - 1.089	B112	B 1		2.350 - 2.399
0	Psychiatrie	D046	-	0	Human resources	D062	D 9	Verpleegsoort 15	B243	E 2	1.100 - 1.149	B120	B 1		2.400 - 2.449
0	Radiotherapie	E042	-	0	ICT - processen en kwaliteit	D093	-	Verpleegsoort geriatie 1	D121	D 1	1.150 - 1.199	B130	B 1		2.450 - 2.499
0	Reproductieve geneeskunde	C171	C 1		Kapal	B182	B 1	Verpleegsoort geriatie 2	D131	D 1	1.200 - 1.249	B140	B 1		2.501 - 2.549
0	Reumatologie	D044	-	0	Logopedie	E140	E 1	Verpleegsoort geriatie 3	E121	E 1	1.250 - 1.299	B150	B 1		2.550 - 2.599
0	Stomatologie	B011	-	0	Medsche directie	B034	-	Verpleegsoort geriatie 4	E122	E 1	1.300 - 1.349	C120	C 1		2.601 - 2.649
0	Spond	D030	-	0	Ombudsdienst	B041	-	Verpleegsoort indolieve zorg	E111	E 1	1.350 - 1.399	C130	C 1		2.650 - 2.699
0	Urologie	E035	-	0	Parkeren - en geldautomaat	C011	-	Verpleegsoort kindergeneeskunde	B222	B 2	1.400 - 1.449	C140	C 1		2.701 - 2.749
0	Vasculaire / thoracale chirurgie	E031	-	0	Preventiedienst	D066	D 9	Verpleegsoort neonatologie	B112	B 1	1.450 - 1.499	C150	C 1		2.750 - 2.799
0					Profilering	D061	D 9	Verpleegsoort psychiatrie de dag	D231	D 2	1.501 - 1.549	D120	D 1		2.800 - 2.899
0					Roelkrante	E140	E 1	Verpleegsoort psychiatrie de nacht	D221	D 2	1.550 - 1.599	D130	D 1		
0					Sociale dienst	B040	-	Verpleegsoort psychiatrie de pas	D253	D 2	1.601 - 1.649	D140	D 1		
0					Silla ruimte	B182	B 1	Verpleegsoort revalidatie 1	C141	C 1	1.650 - 1.699	D150	D 1		
0					Technische dienst	D064	D 9				1.701 - 1.749	E120	E 1		
0											1.750 - 1.799	E130	E 1		
0											1.800 - 1.849	E140	E 1		



← **Figure 3.16**

Kiosks and digital directories at AZ Groeninge, Belgium
© ID-LAB

Integrated Digital Wayfinding

Experience has shown that stand-alone wayfinding apps have low uptake and usage. This is understandable, as the users who can most benefit from digital wayfinding, especially on their first visit to an unfamiliar facility, are those who are the least likely to download an app for one-time use.

Instead, it is better to incorporate wayfinding into a fully integrated Hospital Services Application, which has the potential to offer users:

- Information on the clinic and clinicians
- A booking engine
- Community news
- Pre-visit preparation
- In-app navigation, e.g. Google Maps integration
- Registration/check-in
- On-site wayfinding
- Waiting/real-time clinic information
- Access to 'waiting content', e.g. facility-wide TV/movies
- On-site services, e.g. food and beverage, retail
- Visitor services, e.g. locations and opening hours
- Post-visit reviews and feedback

An app offers fully integrated wayfinding functions tied to the kiosk functions (real-time upload of information from a kiosk to the user's mobile device, such as a customised map).

Fixed On-Site Terminals

Digital kiosks are becoming a familiar site in healthcare facilities and are used to support finding the location of already-known destinations. They can also be used to enhance the patient experience by allowing patients to:

- Check themselves in to the facility or clinic.
- Receive real-time updates on their place in the queue via text message, allowing them to make use of other facilities on offer, rather than sitting in a waiting room.
- Discover additional services and amenities in and around the facility.
- Get public transport information.

Kiosks should be attractively designed, with large touch screens. As they are often the first element of the facility a user interacts with, their looks and functionality are particularly important. The ideal kiosk locations are at key points throughout the facility, such as the main entrance and reception areas. The positioning of kiosks en-route to manned receptions gives users the opportunity to choose which service they would like to use.

Figure 3.17 →

A good landmark is easy to describe.

Kiosks can offer multilingual features to assist users who have low levels of English, and be designed for universal access with features for vision and mobility impairment. Search functions can be programmed with a wide range of synonyms, helping to further reduce confusion. For example, if a user looks up 'X-ray' they will be redirected to 'Medical Imaging'.

Most importantly, kiosks should integrate with the physical wayfinding system. Terminology, coding and the order of information needs to be consistent across the kiosk, signage and language used by staff. It is helpful to position volunteers near the kiosks to assist with their use.

Interactive digital kiosks are increasingly used to deliver a range of wayfinding information and should be considered as part of a complete wayfinding system. Kiosks are a good way to provide personal information and directional support, but can only be used one at a time. Kiosks should:

- Be positioned at major entrances to the hospital, so that they are a clearly visible alternative to approaching reception.
- Work with other wayfinding elements to deliver a complete solution.
- Contain only wayfinding information. Additional features, such as internet access, are not necessary, and will create confusion over the function of the kiosks.
- Contain current, updated information.

Landmarks

Good landmarks function as key wayfinding points, are clearly recognisable, easy to describe, not too similar, and large enough to stand out in the space. Applied correctly, they are an important feature when giving directions and navigating unfamiliar environments.

Landmarks foster familiarity with the space and give the user confirmation that they are on the right path. They also help with return journeys – people will not remember the number of left and right turns that they took to get somewhere. However, they are likely to remember passing a unique, recognisable landmark.

Art

Public art can provide identifiable landmarks for use in directing and navigating. Visual art such as sculpture, paintings and digital projections are attention grabbing and easily describable. Artworks that are large enough to be visible from a distance provide a clear destination.

Integrating artwork into the design of the facility is also an opportunity to reflect the culture, community and heritage of the building and its

Julum-nyarr gaagal-gu
(Mountains to the Sea)
Artwork by Gumbaynggirr
weavers Aunty Lauren
Jarrett, Jasmine Stadhams
and Denise Buchanan
with Saltwater Freshwater
Arts Alliance and National
Aboriginal Design Agency
2020, Macksville Hospital.
© Jay Black



Figure 3.18 →

An example of a clear building threshold at the Alfred Hospital, Victoria
© ID-LAB

surroundings. The selection of artwork can contribute towards a positive, welcoming user experience.

Relevant stakeholders should be included in workshops to determine the thematic goals for the artwork, prior to the development and acquisition of art pieces.

Artwork can also be integrated within the design of the wayfinding system. Colours, materials and symbolism can be integrated in subtle ways to form cohesive ties between the artwork, architecture and wayfinding system.

See the NSW Health and The Arts Framework Report for further information on how to integrate art into your facility.

Maps

Maps serve as a useful orientation tool for users to understand how a healthcare facility or campus is organised. Maps should be included with appointment letters and on websites. A facility website should also include a prominently displayed map of the facility.

A facility map should:

- Include key points of interest, such as entrances, roads, public transport stops, and identifiable landmarks.

- Provide information about entry points to a campus or facility and the preferred route.
- Be orientated in the direction a user is facing.
- Be easy for a variety of users to follow.

Many people can struggle with reading maps so be careful not to rely on maps alone.

Thresholds

The marking of thresholds, such as the entry into a new building from a corridor, can be a useful strategy in establishing and reinforcing mental maps. Thresholds mark a transition and signify that a destination has been reached. They can be particularly useful in a brownfield site where many buildings have morphed into one over the years.

Clear thresholds can be achieved by using high colour contrast, or different material types, around an entry point. These changes can be used to signal a destination point along the journey and to announce that a threshold has been crossed.

Centre Block

Directory Main Hospital



Ground Level

- Key
- Main Corridor
- Main Corridor (Outside)
- Blocks
- Amenities
- Café
- Gift Shop
- Main Hospital Reception
- Parking
- Pharmacy

Figure 3.19

Vertical legibility

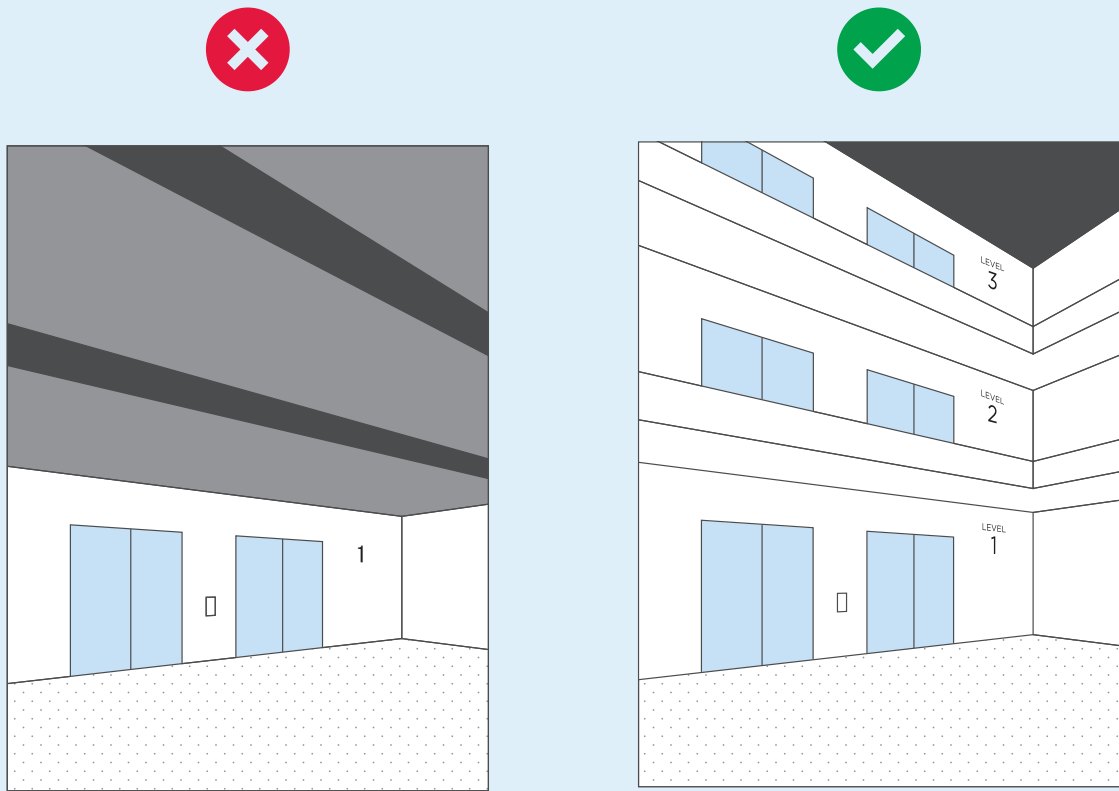


Figure 3.20

Entrance legibility

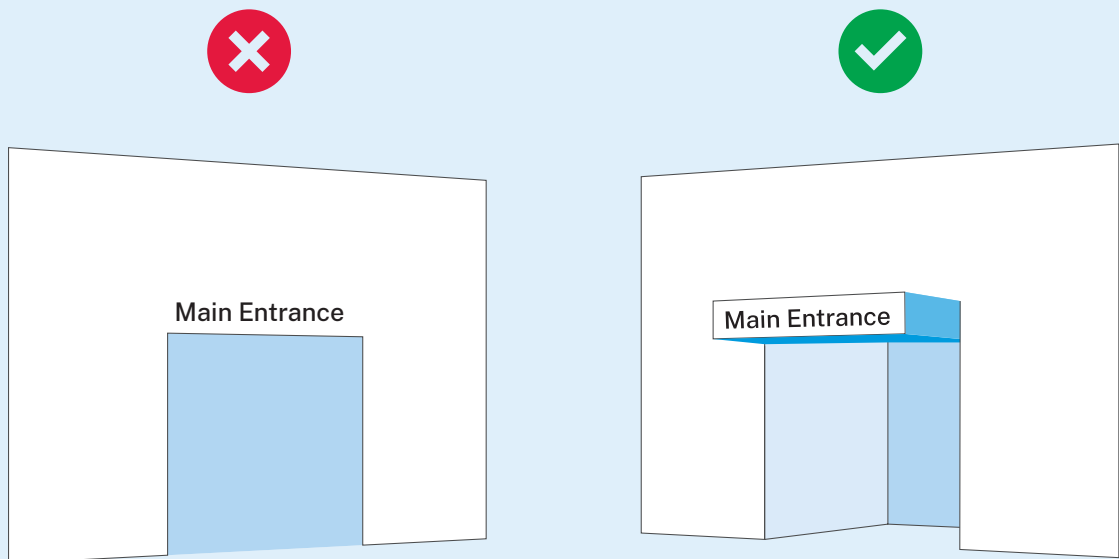


Figure 3.21

Threshold legibility

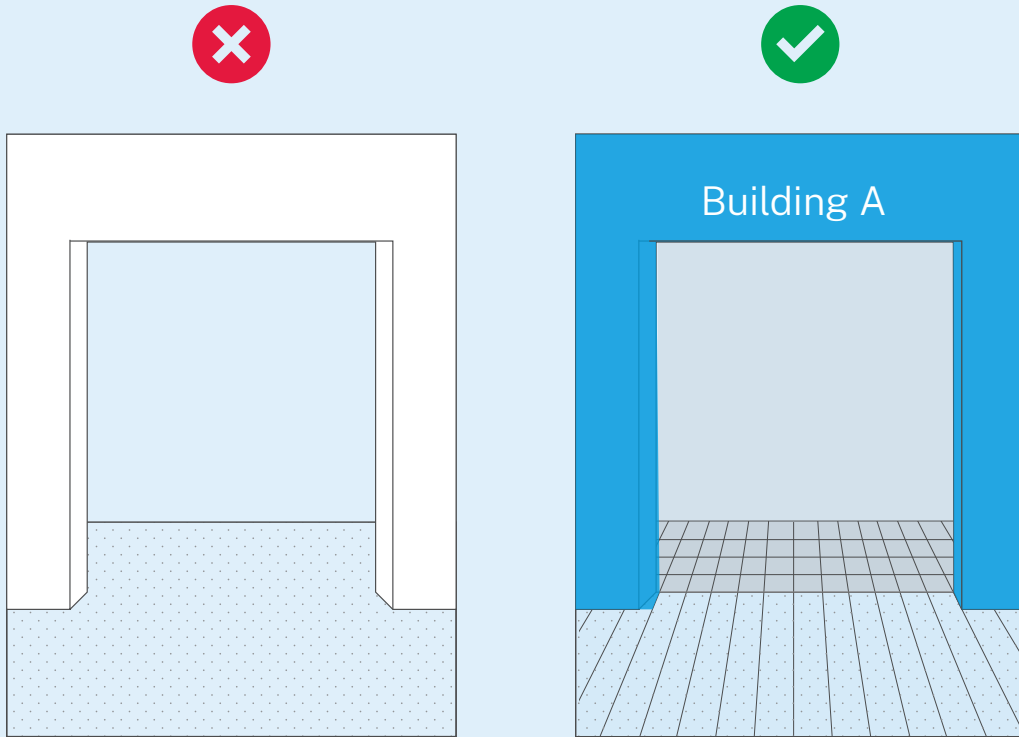
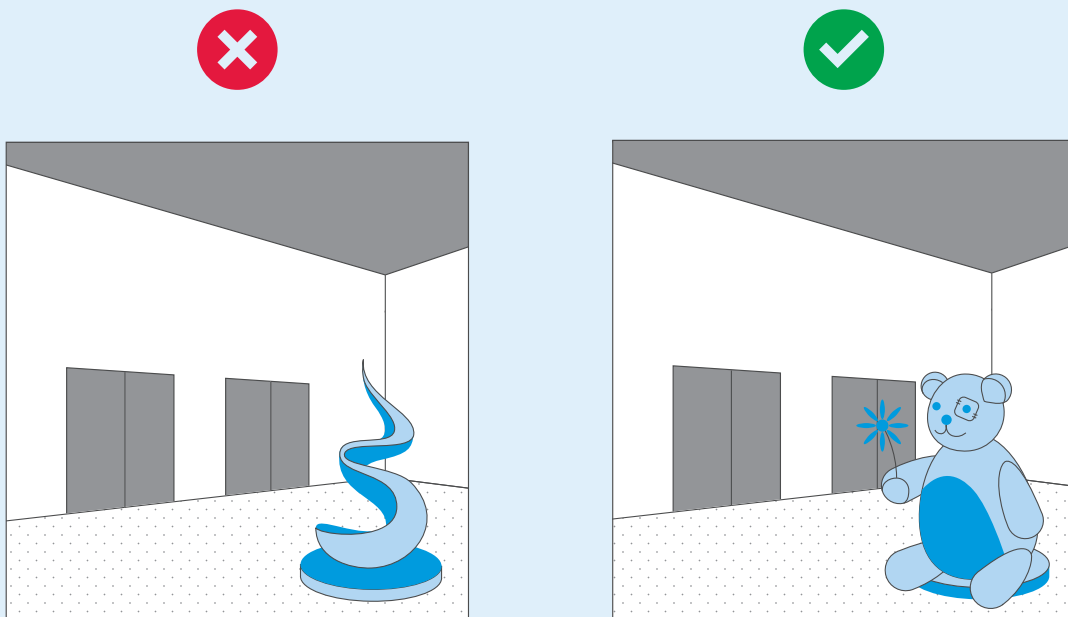


Figure 3.22

Landmark legibility



Creating a User Journey

The creation of user journeys is a fantastic way to sum up all of the information learnt throughout Step 1. It confirms the processes within the organisation have been designed to match the physical journey users take through the facility.

Providing the Right Information

The type and location of information should be related to the:

- Complexity of the message
- Desirable content
- Characteristics of the audience

The more stress a person is under, the less able they are to perceive or process new information.

Stress within the hospital environment can be defined by:

- The complexity of the task
- The complexity of the environment
- Time pressure
- Treatment received
- Results/news received

The complexity of information shown should be aligned with the expected level of stress.

High stress levels can be experienced when:

- Entering a complex new environment, such as a hospital

- Checking in for an appointment
- Finding the way to an appointment
- Undergoing a treatment, receiving test results etc.

At these points, wayfinding should be the only information presented. Anything else can be distracting or ineffective. If other messages are needed, the complexity should be low. This means:

- Short messages – brief text or image only
- Broad statements – no unnecessary details

Low(er) stress levels can be experienced when:

- Waiting in the waiting room
- Standing in a lift
- Within a dedicated retail area

These situations give the opportunity to effectively present more complex information.

- More detailed messages
- Short movies

Way Out

User journeys should map the way in, and the way out.

The way out of a healthcare facility is often considered the most difficult part of the journey – users may have been concentrating on finding their destination, or were so stressed

they weren't paying attention to their surroundings. They might have received bad news, and now have no memory of their journey.

Not being able to find the way out is a very common complaint for healthcare facilities. To ensure a more positive user experience, directions to the way out should always be clearly visible.

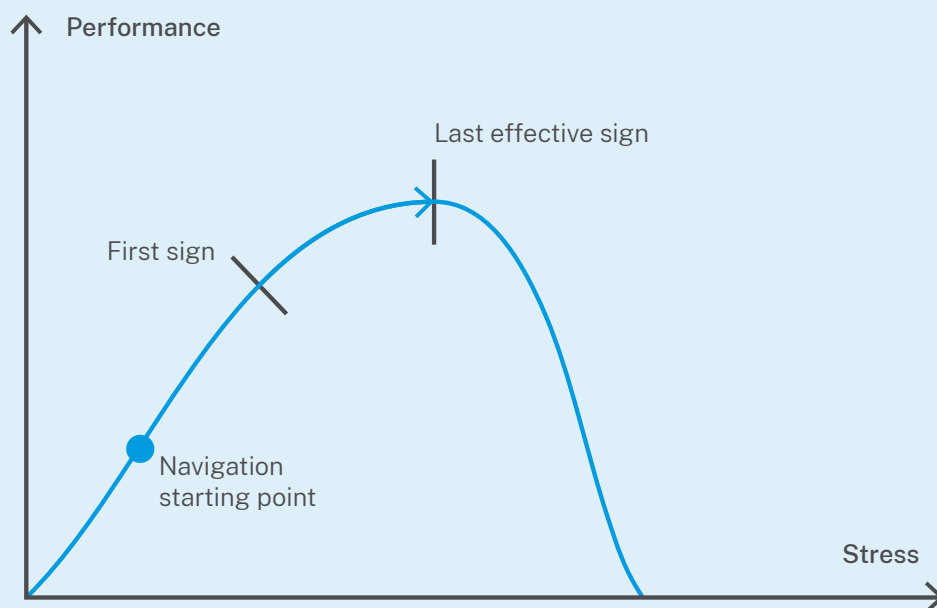
Typical User Journeys

The following user journeys show the journeys of different users through the healthcare facility, their needs and desires at every step of their journey and possible aids.

The user journeys are generic and can serve as a starting point for creating specific journeys for your facility.

Figure 3.23

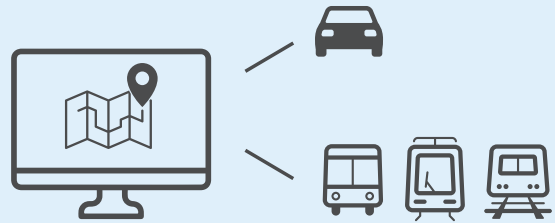
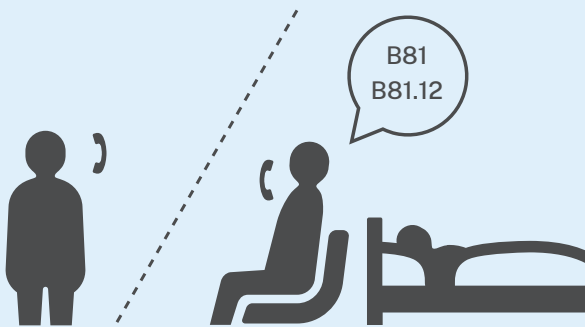
As stress levels rise, users become less able to use wayfinding tools



Visitor to a Ward

This shows the typical journey of a visitor to a ward. This is a very common journey, and many people making it will never have been to the hospital before, so will need clear and reassuring wayfinding cues.

Our journey shows a father with a pram, illustrating the importance of graded paths and ramps, lift access, and equal access to baby changing facilities.



AT HOME - GETTING READY TO GO

Relative in hospital

Pre-visit information

NEEDS AND DESIRES

AIDS

- What are the visiting hours?

> Website hospital.

- How to get to the hospital?

> Website hospital.

- Can I take public transport?

> Website hospital.
 > Online mapping service, eg Google Maps.
 > Information on NSW Transport app/website.

- Which stop do I need to get out?

> Bus stop to be named 'Hospital xxx'.



GETTING THERE

Taking public transport

Getting out at the right stop

NEEDS AND DESIRES

AIDS

• What time is the bus coming?

- > Online mapping service, eg Google Maps
- > Information on NSW Transport app/website

• Is this my stop?

- > Stop name "Hospital xxx"
- > Clear on-board announcement

• Is that the hospital?

- > Hospital identification visible from bus stop



ARRIVING AT THE HOSPITAL

Crossing the street

Walking to the entrance

NEEDS AND DESIRES

AIDS

- Where is the entrance?

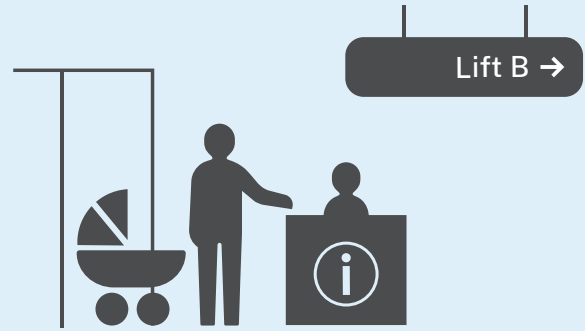
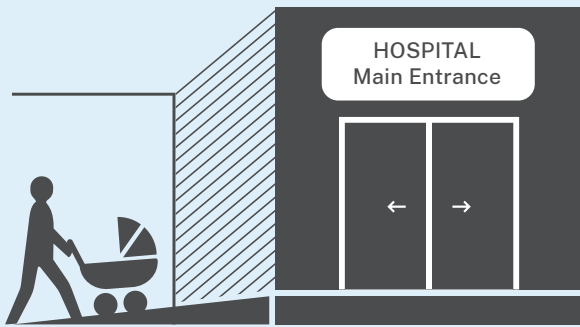
- > Legible and distinctive entrance

- How to get to the entrance?

- > Directional information
- > Guiding landscape
- > Safe footpaths and crossing

- I need a place to rest

- > Seating along footpath



ARRIVING AT THE HOSPITAL

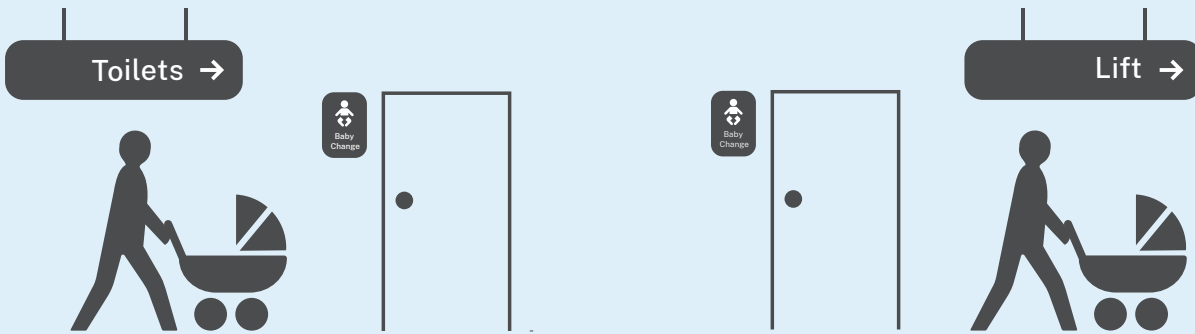
Using the ramp at the entrance

Getting information and directions

NEEDS AND DESIRES

AIDS

- | | |
|---|---|
| • Where is the ramp? | > Ramp clearly visible or directed |
| • Is this the correct entrance? | > Identification |
| • This entrance is closed, where to go? | > After Hours access information |
| • Which room is my mother in? | > Staff at main reception |
| • How to get to my destination? | > Directional information, visible from main reception
> Volunteer to escort
> Printed/written instructions |
| • I need a rest | > Seating in entrance lobby |



GETTING AROUND THE HOSPITAL

Using the facilities

Finding the way to the lift

NEEDS AND DESIRES

AIDS

- I need to change my son's nappy

- > Identification and directional information to toilets
- > Baby change room

- I would like to get a coffee

- > Directional information to Cafe

- Where can I buy some flowers?

- > Directional information to Retail
- > Information on available facilities -map/kiosk

- Where is the lift?

- > Lift visible from entrance
- > Directional information to lift visible from entrance



GETTING AROUND THE HOSPITAL

Taking the lift

Follow directions to the ward

NEEDS AND DESIRES

AIDS

• Which level did I have to go to?

- > Directory board
- > Digital wayfinding, eg kiosk or tablet

• How do I 'call' the lift?

- > Destination control system integrated in directory
- > Clear lift buttons

• Am I at the right level?

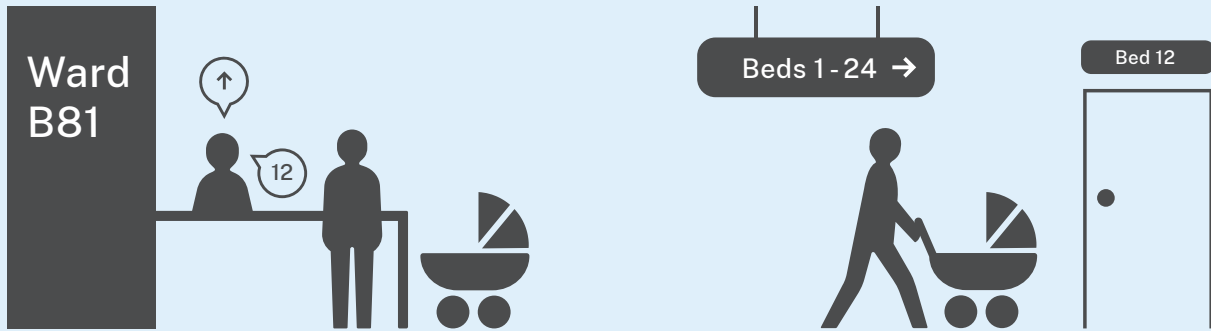
- > Announcement in lift
- > Level identification visible when doors open

• Where to go next?

- > Directional information to destinations on this level

• Am I going in the right direction?

- > Environmental graphics
- > Logical numbering
- > Repeated directional information



ARRIVING AT YOUR DESTINATION

Arriving at the staff station

Finding the right room

NEEDS AND DESIRES

AIDS

- Is this Ward B81?

- > Identification of the destination
- > Legible and recognisable staff station from entrance

- Where is bed 12?

- > Directional info visible from staff station/entrance

- Am I going in the right direction?

- > Environmental graphics
- > Logical numbering
- > Repeated directional information

- Is this the right room?

- > Confirmation bed number with patient name

Patient to a Clinic

This journey shows the typical journey of a patient to a clinic. Patients with clinic appointments may be new to the hospital, or may have a condition that requires weekly visits. Either way, a clear indication of the check in process, an indication of current wait times and simple wayfinding can all make for a more positive experience.



AT HOME

Making an appointment

Pre-visit information

NEEDS AND DESIRES

AIDS

- I need to make an appointment
- How do I contact the hospital?

> Provide contact information on website

- Hospital name and address
- Appointment date and time
- Clinic name/code

> Clear appointment confirmation

- How do I get to the hospital?

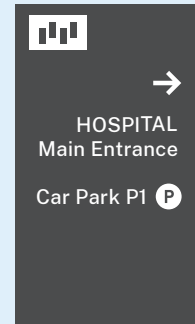
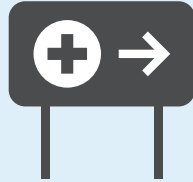
> Comprehensive pre-visit information - map
> Website
> Online mapping service, eg Google Maps

- What to bring to my appointment?

> Comprehensive pre-visit information - instructions

- When is my appointment?

> Appointment reminder via mail/text



GETTING THERE

Road sign

Identification hospital

NEEDS AND DESIRES

AIDS

- How do I drive there?

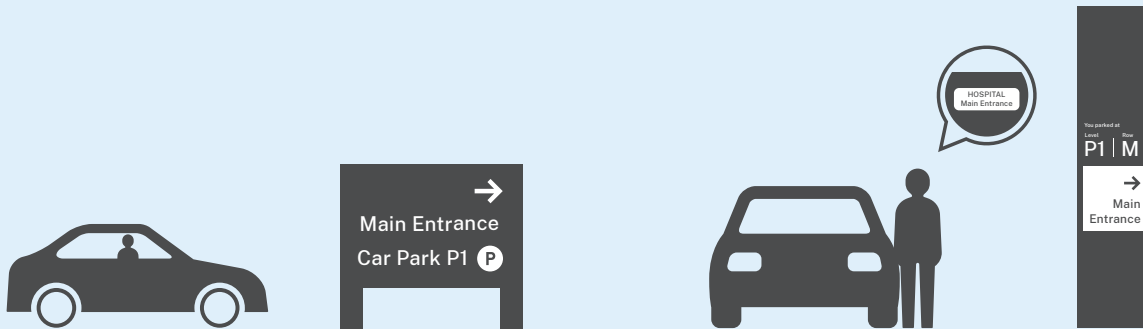
- > Map provided in pre-visit information
- > Online mapping service (prompt right entrance)

- Am I driving in the right direction?

- > RTA road sign
- > Identification-sky sign

- Is this the hospital?
- Is this the right entrance?

- > Identification-perimeter totem



GETTING AROUND THE HOSPITAL CAMPUS

Vehicular signs to parking

Parking the car

NEEDS AND DESIRES

AIDS

- Where to park the car?
- Where can I drop off my family?

- > Directional information to parking
- > Directional information to entrance/drop-off

- Where is an empty park spot?

- > Show available spots

- How to remember where I parked my car?

- > Identification of car park and row/level

- How to get to hospital entrance?

- > Directional information

- Where is the lift?

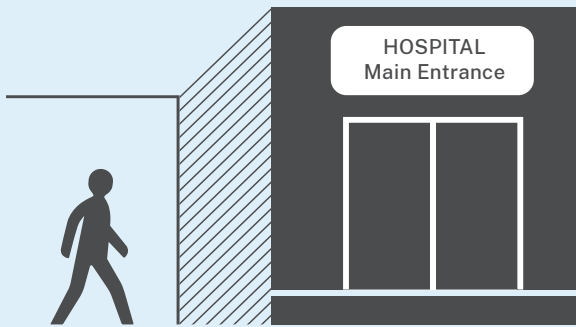
- > Clearly defined footpath and safe crossings, well lit.

- How do I walk to the lift safely?

- > Clearly defined footpath and safe crossings, well lit

- Can I also take the stairs?

- > Identification of staircase/directional information.



ARRIVING AT THE HOSPITAL ENTRANCE

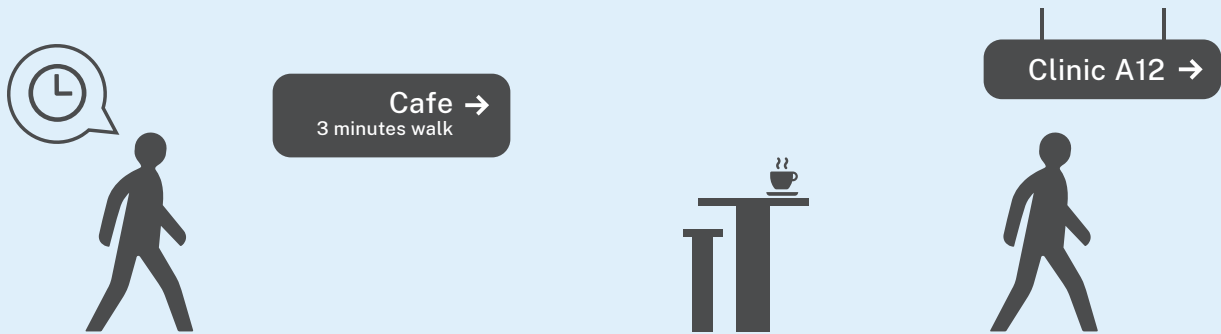
Walking to the entrance

Checking in

NEEDS AND DESIRES

AIDS

• Where is the entrance?	> Legible and distinctive entrance
• How to get to the entrance?	> Directional information > Guiding landscape > Safe footpaths and crossing
• Is this the right entrance?	> Identification
• This entrance is closed, where to go?	> After Hours access information
• How do I check in for my appointment?	> Kiosks visible from entrance
• How much time do I have before my appointment?	> Kiosk to provide this information on check-in
• Where should I wait?	> Kiosk/volunteer/staff to provide this information on check-in
• How to get to my destination?	> Directional information > Volunteer to escort > Written/printed instructions > Directional info visible from info point



GETTING AROUND THE HOSPITAL

Using the facilities

To the Clinic

NEEDS AND DESIRES

AIDS

- How to get to my destination?

- > Directional information
- > Written/printed instructions

- I need a rest

- > Seating along route

- I need to use the bathroom

- > Identification and directional information to toilets

- I would like to get a coffee while I wait

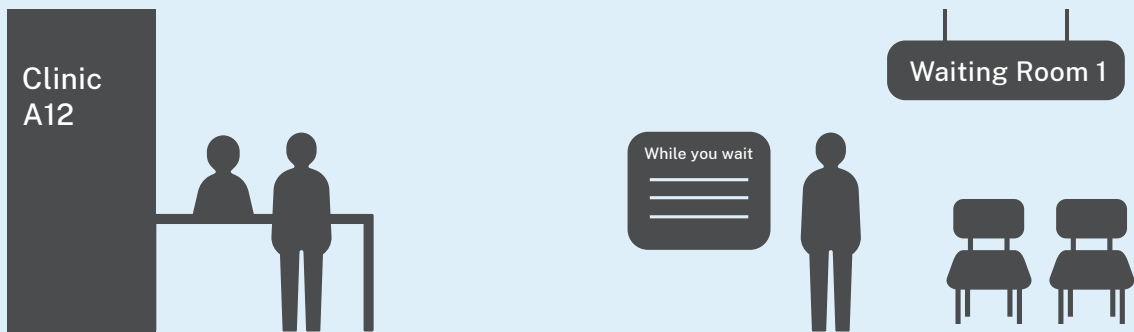
- > Directional information to Cafe

- How do I get to Clinic A12 from the cafe?

- > Directional information

- How much time do I have left?

- > Digital wayfinding to check wait time



ARRIVING AT YOUR DESTINATION

Clinic reception

Waiting room

NEEDS AND DESIRES

AIDS

• Is this Clinic A12?

- > Identification of the destination
- > Legible reception desk

• What to do next?

- > Information/instructions from staff

• Where is waiting room 1?

- > Directional information from reception

• Is this waiting room 1?

- > Identification

• I need to charge my phone

- > Charge points waiting room

• I need to use the toilet

- > Directional information/identification toilets from waiting room

• I need to see my number

- > Screen visible for all 'waiters'



GETTING AROUND

Going to the doctor

Way Out

NEEDS AND DESIRES

AIDS

- Where is consult room 12?

- > Directional info visible from waiting room

- Am I going in the right direction?

- > Environmental graphics
- > logical numbering
- > Repeated directional information

- Is this the right room?

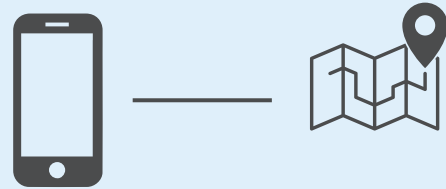
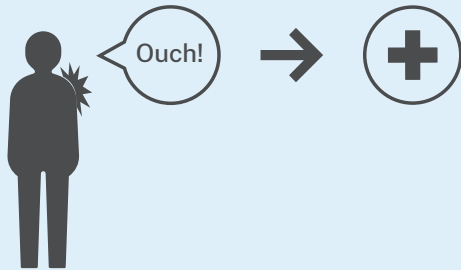
- > Confirmation consult room 12

- How do I get out of here?

- > Directional information to Way Out

Patient to an Emergency Department

This shows the typical journey of a patient to Emergency Department. Generally, patients and visitors to Emergency Department have a minimal amount of pre-visit information, and may be anxious and stressed. There should be clear wayfinding that begins on external approach roads and continues onto the hospital site, as well as large, prominent signage directing to the Emergency Department entrance.



AT HOME

Accident happens

How to get to the closest Emergency Department?

NEEDS AND DESIRES

AIDS

-
- How to get to the closest Emergency Department?

> Online mapping service, eg Google Maps



GETTING THERE

Road signs

Identification Emergency Department

NEEDS AND DESIRES

AIDS

- What is the quickest way to get there?

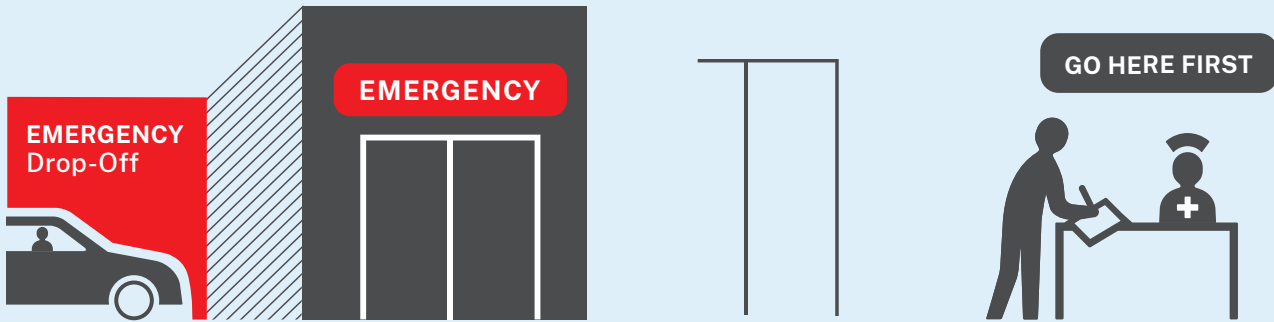
- > Online mapping service
(prompt Emergency Department entrance)

- Am I driving in the right direction?

- > RTA road sign
- > Identification hospital from distance - sky sign

- Is this the hospital?
- Is this the right entrance?

- > Identification - perimeter totem - Emergency Department highlighted in red



GETTING AROUND THE HOSPITAL CAMPUS

Drop-off Emergency Department

Go here first - Triage

NEEDS AND DESIRES

AIDS

- Where is the closest parking to Emergency Department?
- Where to park the car?

- > Directional information to Emergency Department entrance/drop-off

- How long can I leave my car here?

- > Information on parking limits

- Where can I park my car?

- > Directional information to long term parking

- How to get to Emergency Department entrance?

- > Entrance Emergency Department visible from drop-off
- > Identification entrance

- Where do I need to go to get help?

- > 'Go here first' sign



ARRIVING AT THE EMERGENCY DEPARTMENT

Waiting room

Going to see the doctor

NEEDS AND DESIRES

AIDS

• What do I need to do if I feel worse?

> Information about process

• How long do I have to wait?

> Information about process and wait times

• I need to charge my phone

> Chargers

• I would like to get a coffee

> Directional information to facilities

Step 2

Develop

and Implement

Niveau
0

← Route **B010-049**
Route en lift
E
♂ ♀ 📦

Route **B050-079** →
Route en lift
C | D
Uitgang
📍 ☕ ♿



← **Figure 3.24**

Coding in use at
AZ Groeninge, Belgium
© ID-LAB

Introduction to Step 2

The development and implementation of a wayfinding strategy is integral to a high-functioning system. It sets the scope and boundaries for all wayfinding approaches and systems, and responds to the needs of all user groups identified in the previous step.

Your wayfinding strategy can provide an overarching view of wayfinding for a building, healthcare campus or across an entire health service or district. The wayfinding strategy should address the complete journey from home to the facility, through the facility, and back again.

The user journeys created in Step 1 form the basis of the development of the wayfinding system. These clearly lay out all user needs and will have been created via collaboration between the different design teams working together to discuss and agree on possible interventions and solutions.

A wayfinding strategy takes a holistic approach. It lays down rules for all wayfinding elements to deliver a consistent message, based on the parameters set during Step 1. Understanding the different elements that impact wayfinding, the user, and their journeys, informs the development of an effective strategy.

A successful strategy needs to be supported and understood by executives and communicated to all staff.

Choosing a Wayfinding Strategy

There are many different ways to get users to their required destination. The most effective strategy for your facility will depend on:

- The size and complexity of the facility
 - How many lift cores there are
 - How many different buildings form the facility
 - How many entrances there are
- The different user groups who attend the facility
 - Do many users speak a language other than English?
 - Do many users have low literacy levels?

There are two main information strategies to choose from:

- Directing by name
- Directing by code

Other strategies often used, but not recommended, are:

- Colour
- Pictograms

Directing by Name

Naming systems work well with smaller facilities that have a low level of culturally and linguistically diverse users. When directing by name, clear and concise terminology becomes particularly important. See [page 100](#) for some basic principles.

Combined with progressive information disclosure (See [page 104](#)), this traditional strategy can be very effective.

Wards and clinics can either be individually named, e.g. Cardiac Care Unit, or they can be assigned an alphanumeric code that will function as a name. Ideally, these names are linked to the building levels, so Ward 7B would be the second ward on level 7. These are not directional codes and should not be used as such.

Directing by Code

People are familiar with using alpha and numerical patterns to find their way in everyday life, like using street numbers to find a specific address. Therefore, assigning a code to destinations within a facility can contribute significantly to a successful wayfinding system.

Coded systems work well for large, complex facilities, or those that have a high percentage of culturally and linguistically diverse users – the simple shapes of a code are easier to recognise for those with low English literacy.

Coding is flexible, as spaces can change function while the signage remains the same. It is also a good choice for sensitive destinations such as the mortuary, which can be referred to by a simple code rather than a name.

When developing a coding system, the following should be considered:

- Alphabetical and numerical coding is always preferred. It is short, sequential, multilingual, and flexible. Gaps allow for future proofing, and codes are not linked with a service name, allowing them to accommodate more than one service depending on the current need.
- Alphanumeric coding works for all users of the hospital services, from the first-time visitor, to staff and delivery drivers. Airports and universities are good examples of this type of coding in use.

Directing by Colour

Colour can act as an aid to memory in much the same way that other visual landmarks can, so it can be used in car parks to distinguish levels (in addition to naming or alphanumeric coding). Collaboration with the architects will ensure that any added colour is used in a way that draws the eye to highlighted areas and complements the interior design.

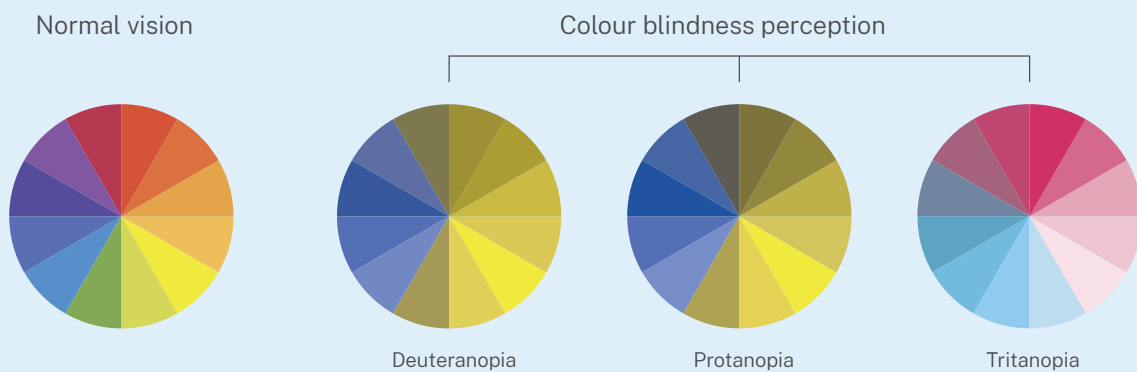
Figure 3.25

Some sequences are more predictable than others



Figure 3.26

Colour perception for people with both normal vision and the three most common forms of colour blindness



However, the use of colour coding destinations in wayfinding can be problematic:

- Any colours used need to be easily described (red, blue, green, yellow, etc.) which severely limits the number of colours that can be used.
- The number of colours needed mean that some will almost certainly clash with the interior design colours, which isn't aesthetically appealing.
- Almost 10% of men and a smaller percentage of women are colour blind, which means that any colour-based wayfinding system must be backed up by a non-colour based one.
- Colours do not have a logical sequence.

For these reasons, colour can be used to complement the wayfinding system, but not as an integral part of it.

Pictograms

While pictograms can simplify information, they can be misinterpreted or not understood if they are not designed and used correctly.

The use of pictograms in a hospital environment is limited by a lack of universally understood healthcare symbols. For example, it is difficult to represent 'Medical Imaging' in a way that is recognisable to the majority of users.

For this reason, pictograms should only be used to denote common destinations such as toilets and accessible routes.

As symbols are only meaningful if a user has encountered them before, all new or uncommon symbols need to be accompanied by a text equivalent.

Terminology

The chosen strategy will inform the type of terminology needed. A complete destination list should be compiled that has all the locations in the facility and their chosen name/number. User groups and staff are an excellent starting point to help with naming.

Some basic considerations to take into account are:

- Use of Plain English. The terminology used in wayfinding should be simple and easy to remember. Plain language reduces the complexity of information and makes navigation easier.
- Consistent messaging. All wayfinding elements should communicate a consistent message throughout the journey and across all wayfinding systems. Terminology should be uniform across pre-visit information, site information (signage, digital tools, graphics, etc.), and verbal directions.
- Staff input. The language used for directions by volunteers and staff is critical to people's understanding. By including staff in the development of wayfinding language, they are more likely to ensure it is applied consistently (see [page 54](#)).

When developing wayfinding terminology:

Use:

- Terminology that is well known, clear and descriptive, e.g. ‘Car Park’ or ‘Parking’, but not ‘Multi-deck Parking’
- Distinguishing codes for destinations that require distinction from other similar destinations, e.g. ‘Car Park A’, ‘Reception A’
- Code or pseudonyms for places of sensitive purpose

Avoid:

- Abbreviations
- Complicated, medical terms
- Long destination names

Numbering Strategies

When it comes to numbering strategies, there are many options. However, a simple system is usually best. Your strategy needs to align with any that are already in place at your facility. For example, if existing wards are named using the floor number and a compass direction, the new ward should be too.

If your facility uses a coding system, you will also need to follow any principles set out there.

For buildings;

- Multi-level buildings should have a predictable and recognisable system for floor numbering, e.g.: Basement, Ground, Level 1, Level 2.

Figure 3.27

Simple terminology is always preferred



Ophthalmology
Podiatry
Children’s Care Inpatient Unit
Ambulatory Care
CAMHSE



Eye Clinic
Foot Clinic
Children’s Ward
Day Clinics
Ward E

- Facilities using alphanumeric coding are advised to use numbers only, e.g. Level 0, Level 1, Level 2. This avoids confusion between Level B and Building B.
- Ideally, when integrating a new building with existing level numbers, numbers should align across all buildings. Where this is not possible, signs need to include clear level indicators at building crossovers.
- Facilities on sloped sites with entrances at multiple levels are also advised to use numbers only. This avoids confusion about which level is 'Ground'.

Where possible, numbers and codes should stack on top of one another across floors, i.e., Ward 7A should be directly above Ward 6A. This gives users a feeling of familiarity with the building layout.

For departments and wards;

- Numbers should be unique, so that users cannot confuse one room with another.
- Numbers should be sequential. This allows users to understand where they are in relation to their destination.
- For facilities directing by name, it is good practice to link the ward or department number to the building level to help with orientation. Level 7 could have Wards 7A and 7B etc.

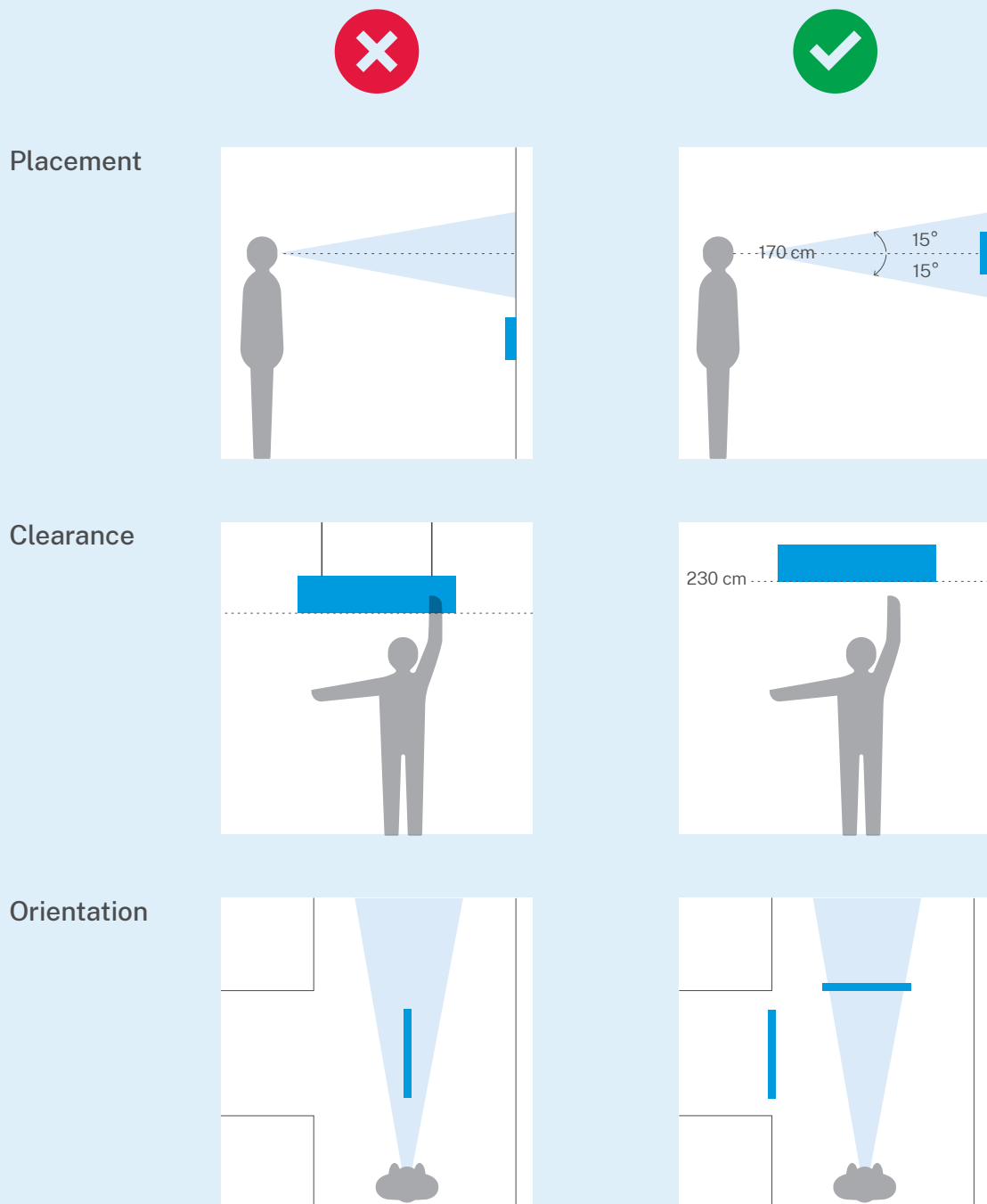
For meeting rooms, interview rooms, beds etc;

- Numbers should be unique, so that users cannot confuse one room with another.
- Numbers should be sequential. This allows users to understand where they are in relation to their destination.
- Numbers can be repeated across departments, e.g. there can be a Bed 1 in each ward. Or they can be entirely unique across the building, e.g. Bed 7.1 on level 7, Bed 8.1 on level 8 etc.
- Locating similar numbers in similar locations across floors will help staff in particular become familiar with the building.

Check with facility management for the best way to co-ordinate the wayfinding numbering with facility numbering and nurse call systems. Facility management numbering is not important from the user perspective and should not be as prominent as wayfinding numbering.

Figure 3.28

Signage placement principles



Signage Placement

Wayfinding information is not the only type of information present when entering a healthcare building. Regulatory and operational information, commercial messages and advertising are also competing for the user's attention.

Signage should be consistently positioned where people have an opportunity to act upon them, giving the user confidence in knowing where information can be found across the site.

Consistent spatial organisation of information helps users to create a mental map and link a particular zone with a particular type of information. This makes navigation simpler and more intuitive.

Signage placement should:

- Be clearly visible from the direction of approach.
- Ensure that the area surrounding the sign is free of visual clutter, including statutory signs, public information displays, message boards etc.
- Ensure that the viewing angle is comfortable when signs are above head height, particularly for those in wheelchairs.
- Consider the surrounding environment. For instance, do not place signs directly above stairs or escalators, unless they are intended to direct people up or down those elements.
- Consider effects of vegetation growth adjacent to outdoor signage.

Progressive Information Disclosure

Many users will arrive at the facility knowing the name of their destination, if not where it is located. However, attempting to direct to all of the places within a facility from the moment the user enters the site is not practical.

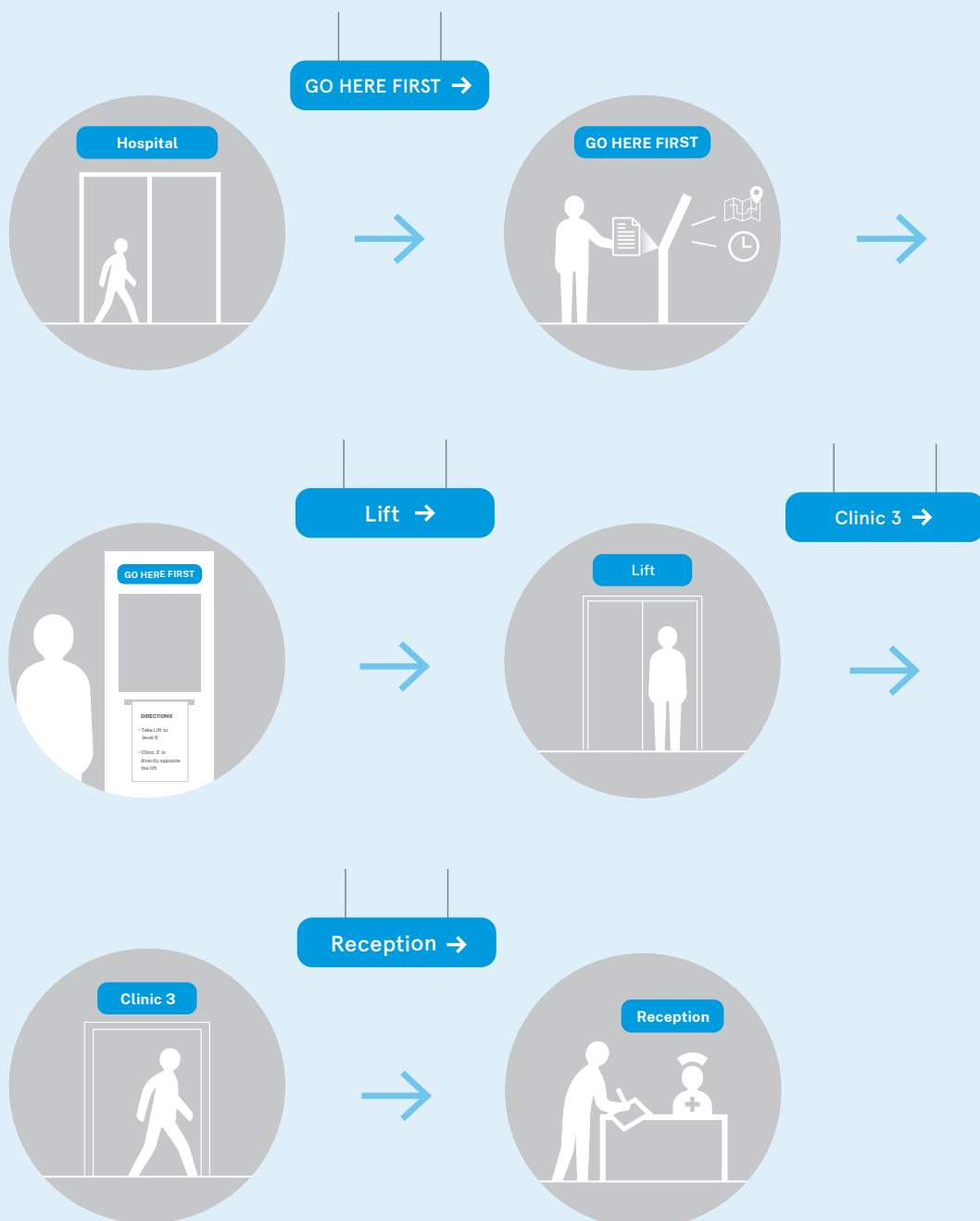
Instead, progressive information disclosure should be used, ensuring only the essential information required to navigate from one point of the journey to another is provided. This avoids overwhelming the user with too much information and reduces the amount of text needed on signage.

To begin with, all the user needs is information on how to reach the entrance of the building. Only when they have entered is it necessary to provide them with enough information to reach the kiosks, volunteers or reception. The kiosk or volunteer/staff member behind the reception can then supply information on getting to the required end destination, and so on.

This layering of information minimises the amount of information a user has to remember, avoiding confusion and decreasing time spent at each decision point.

Figure 3.29

An example of progressive information disclosure



Graphic Design

Elements

Typography

Legibility depends on the ability to recognise individual characters. This will depend on the characteristics of the font and will vary greatly between them. Legibility is different from readability, which measures how easy the font is for extended reading. Many fonts which score highly in terms of readability are not very legible.

For text to be legible:

- The intended use, font, size and required viewing distance should be taken into consideration.
- Typography should be styled so that information is delivered in a clear and consistent format.
- Changes to the font weight, size or colour should only be made to enhance the delivery of information.

Font

Fonts selected for use on wayfinding signs and tools should:

- Be 'sans serif' or have unobtrusive serifs (a serif is the small line finishing off the strokes of a letter – refer to [Figure 3.30](#) for reference).
- Have distinguishable letters. Many letters, such as lowercase 'l' (el) and uppercase 'I' (aye) can be confused. Choosing a font with distinctive letters improves legibility.
- Have a good 'x-height': 'cap height' ratio. The x-height is the height of a lowercase x, and the cap height is the height of its capital form. If the x-height is too small in comparison to the cap height the lower-case letters are much smaller than capitals, meaning letters appear smaller and therefore less legible. Refer to [Figure 3.30](#) for reference.
- Have a consistent thickness. Large variations in letter stroke thickness create visual disturbance, reducing legibility.
- Not be italic or condensed.
- Be set in title case, where each significant word is capitalised. Articles, conjunctions, and prepositions are not counted as significant, and are not capitalised unless they are the first or last word in a sentence.
- Have consistent letter and word spacing, so that each word is easy to distinguish and read.

Figure 3.30

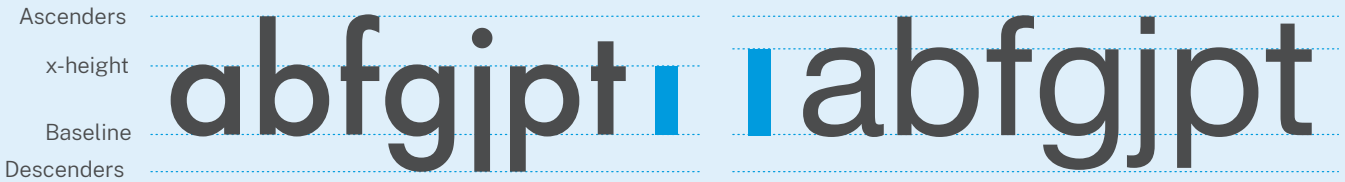
Features to look for when choosing a wayfinding font



Example of a font with:
small x-height
long ascenders and descenders



Example of a font with:
larger x-height
short ascenders and descenders



Script font
Message One



Light weight
Message One



Display font
Message One



Black weight
Message One



Serif font
Message One



Bold weight
Message One



Sans serif font
Message One



Regular weight
Message One

Size

In order for text on signs to be legible, the intended use, viewing distance, font, illumination, and location all need to be considered. Text on signs intended for drivers needs to be much larger than the text on signs intended for pedestrians.

The size of text will vary according to the characteristics of the font. Clearer fonts can accommodate smaller text sizes, while condensed fonts need to be larger. Different fonts may have drastically different legibility at different sizes, even if they initially look similar. It is important that text size and legibility be tested at the actual location of the sign.

The accompanying table shows the recommended height of letters for varying viewing distances for pedestrian sign messages as per the Australian Standards. Typographical sizes should be considered based on the optimum viewing.

Colour and Contrast

When designing and implementing a wayfinding system it is important to consider how colour can affect the legibility and readability of the information displayed.

Colour can improve the organisation and clarity of information, and assist with the creation of an integrated, designed environment. Colours should be consistent across all wayfinding applications, creating a visual system that gives the wayfinding signs and tools an identity. This system allows users to understand where to look to receive navigational assistance.

The colour of text, icons, symbols and other tactile characters should contrast with the sign or wayfinding tool on which the characters are mounted. The sign or tool itself should also contrast with the environment in which it is placed.

Gloss vs Matte

While glossy signs can look good, shiny surfaces make text more difficult to read. For maximum legibility, all signage should have a matte finish.

Figure 3.31

Recommended height of text for various viewing distances

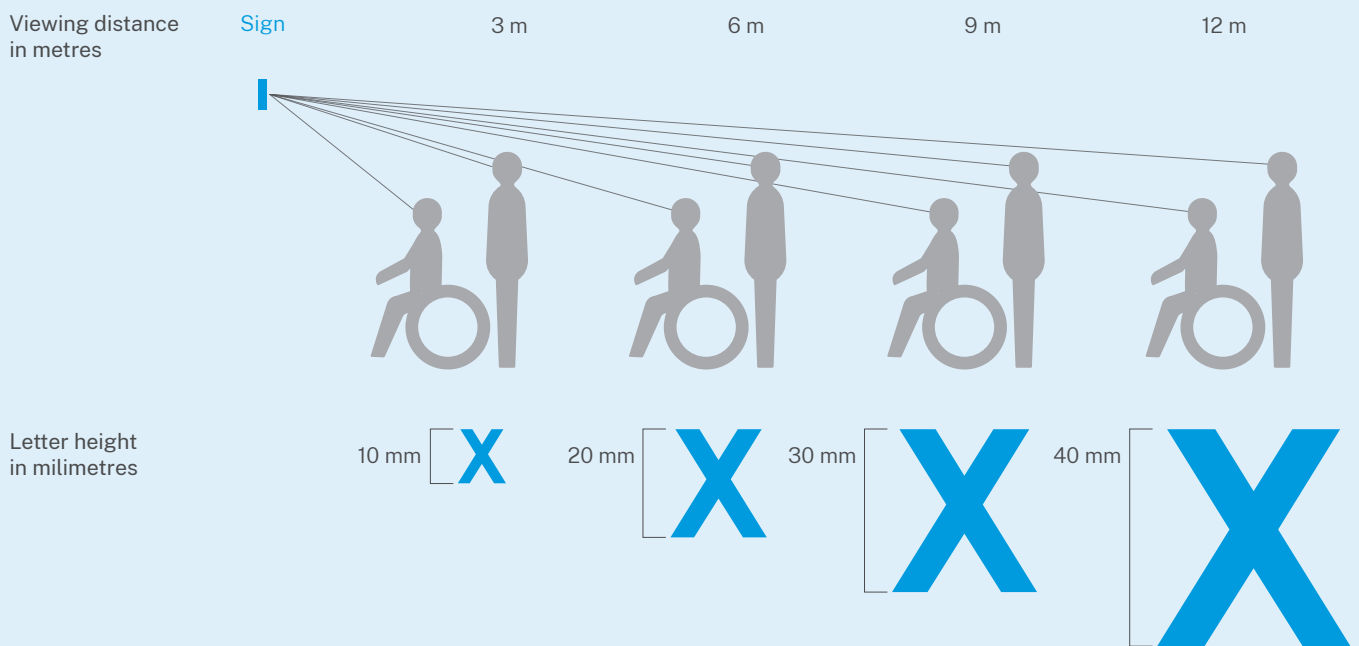
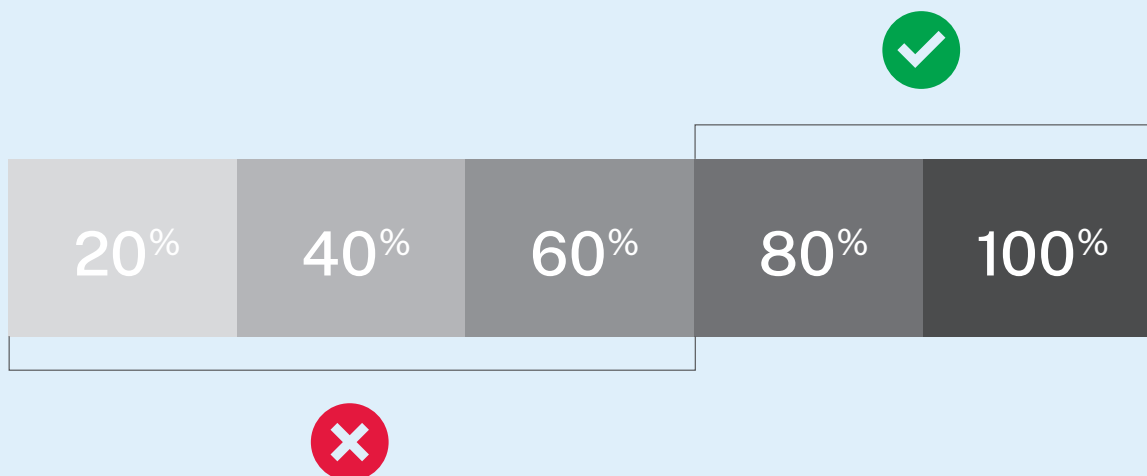


Figure 3.32

The contrast between text and the background colour must be a minimum of 80%



Pictograms

Symbols and pictograms are visual shorthand for amenities within the building such as toilets, lifts and disabled access. While they take up less room than text information, they suffer from a lack of visual clarity, and symbols and pictograms are often misinterpreted or not understood.

Pictograms and symbols should:

- Be tested for legibility and recognition.
- Conform to commonly understood visual traits.
- Be accompanied by a plain English description where a new or uncommon symbol is used.
- Be larger than the relative text size. Due to their visual complexity, symbols often need to be significantly larger than text to achieve the same visual recognition and legibility.
- Be of simple and clear design and in accordance with [ISO 7001: Graphical symbols -Public information symbols.](#)

Organisation of Information

The facility wayfinding system should use text size, weight, layout and colour to change the emphasis of information, allowing users to scan signage without having to read and process all the information displayed.

Text Layout and Grouping

While text size is an important factor in the clarity of information, it is important that the layout and grouping of this information is considered too.

Text layout should:

- Be consistent across signs; each information type appears in the same relative location, and in the same style, across the whole system.
- Ensure that the most important information appears first.
- Create a clear distinction between different types of information.
- Group similar items together.

Text and Arrow Alignment:

- Aligning text and arrows in the direction of travel helps to emphasise which way people need to move. Arrows should be placed on the left when pointing left, and on the right when pointing right.

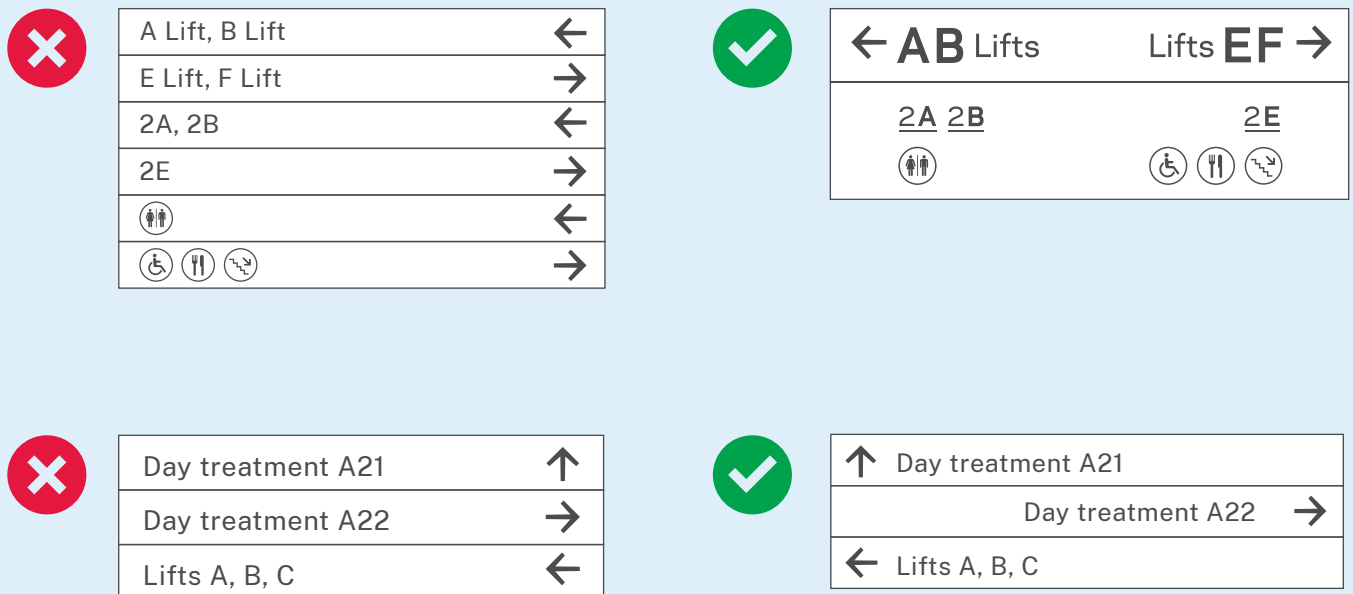
Figure 3.33

Only universally recognised pictograms should be used



Figure 3.34

The organisation of information has an impact on legibility



Industrial Design

Elements

Material

The choice of materials and finishes is vital in the performance of the wayfinding system. There are a number of considerations to be taken into account when choosing materials:

- Durability – the signage system is to be installed in a complex environment and will be exposed to everything from toddlers to harsh cleaning chemicals. The system should also have a long lifespan and have finishes able to withstand considerable wear and tear and minor collisions with hospital equipment.
- UV resistance – it is recommended that all internal and external signage and graphics have a UV resistant coating to prevent fading or discolouration.
- The system will be exposed to the public and subject to vandalism and tampering. To prevent damage or theft signs should be secured with minimal visible fasteners. Any exposed fasteners should have tamper proof security heads.
- All materials should be anti-microbial and hygienic. Porous materials should not be used. Dust or dirt traps should be prevented and all areas should be easily cleaned. All finishes need to withstand the ongoing use of hospital grade cleaning products.
- The wayfinding system should be designed to require minimal ongoing maintenance. Key components should be replaceable and retain colour consistency.

Flexibility

The wayfinding system should be flexible and be able to adapt to future changes. Departments may change or move and key messaging and graphic components should be replaceable and/or removable.

Illumination

The hospital is a 24-hour environment, so the wayfinding system needs to be as well. The system should allow for a variety of lighting conditions, whether internal or externally.

When illuminating signs, care should be taken to assess how any lighting will impact the surrounding environment.

Other considerations include connection with electricity, lighting control, heat generated by components and service and maintenance, ongoing cost and sustainability implications.

Technology

There have been significant advances in information display technology in recent times, including:

- Dynamic LED screens and display modules (digital billboards, digital glass, media mesh)
- Digital screens in a wide variety of sizes and ratios
- Tablets and touchscreen capabilities that offer interactive information displays
- Displays that can be controlled and updated remotely or be cloud-based, enabling signage content and messaging to be completely flexible
- LED lighting systems

Step 3

Manage

and Maintain

Manage and Maintain

Large healthcare institutions are in a constant state of flux: departments move, areas expand, and renovations are ongoing. These changes will often have an impact on the users' navigational processes.

Visitors rely on the overall system to work, and on wayfinding elements like signs, apps, landmarks and maps to guide them through these ever-changing landscapes. Therefore, these tools need to be kept up-to-date and accurate as the facility changes and grows.

Wayfinding is not just a component of individual construction projects and is not the sole ownership of a single department such as facility management. There is a responsibility to appropriately sponsor and resource the maintenance and upkeep of the wayfinding system.

Even the best designed buildings and wayfinding strategies will need ongoing attention and a good knowledge of wayfinding as a strategic tool to maintain high-performance.

Management System Structure

Effective management of wayfinding as a holistic communication system requires the persons responsible for the upkeep of the system to understand the strategy and communication paradigms that are at the basis of the greater wayfinding system.

There should be a defined process to:

- Check that the system meets the key performance indicators (KPIs)
- Deal with complaints and suggestions
- Implement wayfinding tools that improve the patient experience when required

The wayfinding should be monitored and improved on a regular basis. Representatives from marketing and communication, patient services, patient experience, and volunteers, should provide recommendations considering the performance of wayfinding tools from a user's perspective.

Each wayfinding project should include the following steps:

- Identify needs and project drivers
- Identify existing and future wayfinding tools
- Establish the project scope
- Develop a project plan
- Establish a timeline and budget

- Identify the project owner
- Confirm the need for specialist consultants
- Consider linkages to other programs or activities, e.g. volunteers, parking strategy, communications
- Identify consumer input required

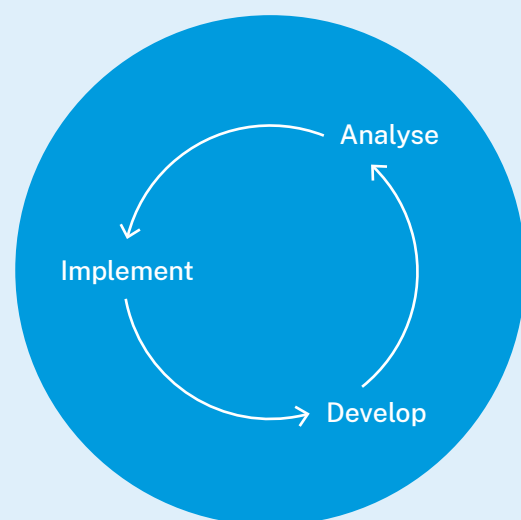
For the performance of the system to be monitored, and wayfinding tools kept accurate, coherent, and visitor-focused, a specific person should be made responsible for coordination issues such as:

- A formalised system of sign standards and management tools
- Processes to enact, support, and administer those standards across the facility

- Advocating the positive impact of the wayfinding tools across the Hospital and educating staff members on how to give directions using the agreed wayfinding paradigms
- Reviewing the effectiveness of the wayfinding system and individual wayfinding tools (such as maps, brochures, appointment confirmations, etc.) against KPIs
- Change requests
- Digital maintenance
- Advocating correct use
- Recommendations around language use, terminology
- Inducting new staff
- Wayfinding asset management

Figure 3.35

The management and maintenance of a wayfinding system is an ongoing process



Performance Assessment and Auditing

Any successful wayfinding system requires a continuous improvement plan.

As part of this, three key tools should be engaged as part of the feedback loop to ensure the system is optimised for all users:

- User research tools: employ visitor, patient and staff research tools, such as regular surveys, to evaluate the effectiveness of wayfinding tools against KPIs and to improve the overall visitor experience. These tools can be incorporated into kiosks, online or be part of other feedback tools being developed for the facility.
- User group consultation and feedback: Identify and partner with a representative user group to maintain ongoing consultation and elicit feedback on the effectiveness of the wayfinding system.
- A wayfinding audit, patient shadowing, mystery shoppers, visitor surveys, asset registers and maintenance schedules provide useful information about signs, language, maps, people, and written materials currently in use.

Change Management

Change management in the context of wayfinding is about changing the way people work and the language they use. It is about identifying the impacts of the wayfinding strategy and the things that need to change. These impacts may be large or small and not all changes need to happen at once.

A change management strategy:

- Identifies a transition manager responsible for coordination of tasks
- Includes a process for reviewing customer service processes and systems
- Includes a process for reviewing written materials such as brochures and letterheads
- Identifies a glossary of key terms used to describe services and functions
- Includes a process for auditing wayfinding and conducting a site survey
- Applies to new buildings, redevelopment projects and existing facilities

Maintenance Program Development and Delivery

Keeping wayfinding systems up-to-date, and maintaining a system that facilitates good access to healthcare, requires a continuous improvement process.

This process can be part of accreditation and quality improvement programs. Ideally, it should be linked to the work of consumer representatives and customer services.

Key tasks include:

- Identifying the maintenance owner
- Developing a maintenance plan
- Use of expert advice
- Troubleshooting

This should be incorporated into the Asset Management Plan and updated regularly.

The key priorities for the ongoing development and delivery of the holistic wayfinding system for the facility are:

- Develop and implement a wayfinding asset management system.
- Develop a formalised system of sign standards and management tools.

- Develop processes to enact, support, and administer those standards across the hospital.
- Advocate the positive impact of improved wayfinding tools across the hospital and educate staff members on how to give directions using the agreed wayfinding strategy.

Training and Development

Wayfinding induction material should be developed through a combination of printed information that explains the system and how to use it (for the majority of staff), and a more in-depth training for frontline staff and volunteers.

Staff and volunteers should:

- Be inducted so that they understand the wayfinding system
- Use the same language as the physical signage
- Refer to the installed signage when giving directions
- Refer to the surrounding environment
- Write directions down

1. When to Conduct Training:

- Before the installation phase – to gradually prepare staff for the future changes and to explain how the wayfinding system works and the reason behind it. This will be simpler if staff have been kept updated and involved throughout the process, as recommended.
- After wayfinding implementation – to refresh the staff’s memory of the new strategy and ensure it is understood.

2. What to Communicate During the Training:

- Why is wayfinding and its consistency important?
- What terminology and language to use
- Explain the coding system and numbering
- Explain how to give instructions

3. How to Communicate the New Strategy:

- Develop a brochure for staff that explains the strategy
- Meet with front line staff – allow for 2–3 sessions

Appendix 1

Wayfinding

in the Project

Phases

Stage 1 and Stage 2

- > **Project Initiation**
- > **Master Planning**
- > **Feasibility Development**
- > **Schematic Development**

Master Planning and Feasibility Development

In order for a wayfinding system to work for the people interacting with it, it needs to be considered as a fundamental design specification from the health facility planning phase. In terms of new hospital projects, the wayfinding team should be engaged in the master plan phase to ensure that the architectural planning is aligned with the wayfinding guidelines.

Typical activities and deliverables for master planning include:

- Undertaking site investigations of existing wayfinding infrastructure at existing sites where redevelopment may occur, or the relocation of the site is being assessed for input into the site analysis and site selection assessment report.
- Reviewing three different development options from a wayfinding perspective to ensure inherent flexibility while delivering on the functional imperatives required for the project.
- A system wide review of wayfinding aspects to identify other systems that may be affected when wayfinding is updated (e.g. nurse call systems).
- A system wide review into opportunities to integrate other elements into the wayfinding system (e.g. patient queue management, patient information boards, parking).
- Risk assessment of system wide updates and recommendations for integration of other systems into the wayfinding.
- Input into the master plan report.

STAGE 1			STAGE 2	STAGE 3	
Part 0	Part 1	Part 2	Part 3	Part 4	Part 5
Project Initiation	Master Planning	Feasibility Development	Schematic Development	Design Development	Contract Documentation

Typical activities and deliverables for the feasibility include:

- Reviewing the preferred option, providing feedback and outlining benefits.
- Input into a cost plan.
- Planning implications in relation to signage.
- Assisting with the wayfinding implications of maintaining and providing clinical and non-clinical services on operating sites.
- Ensuring wayfinding strategy and design principles form part of the concept design report.

Schematic Development

The schematic design starts with investigating what kinds of wayfinding information is required, and what it needs to communicate to users. This investigation is best done together with the existing users of the space, and the architects; people who should have an intimate knowledge of the process.

Once the requirements are clear, the design direction (forms, materials and treatments) should be determined. Informational approaches and visual concepts for key signage locations will be developed, defining form, materials, palette and typography, for review and endorsement.

Typical activities and deliverables for this stage include:

- User group meetings
- Workshops with the stakeholders
- Input into a cost plan
- Input to the schematic design report
- Review of the organisation’s DDA action plans or policies

			STAGE 4	
Part 6 Tender, Evaluate & Award	Part 7 Construction Administration	Part 8 Commissioning & Handover	Part 9 Post Completion Wty Period	Part 10 Post Occupancy Evaluation

Implementation

- > Design Development
- > Contract Documentation
- > Tender Evaluation and Award
- > Construction Administration
- > Commissioning and Handover

Design Development

Whereas the schematic design development works with higher level ideas, the primary goal of the design development phase is to flesh out, fill in, modify and refine the conceptual direction selected at the end of the schematic design, and to obtain client input and approval before proceeding into final documentation of the project.

Part of the design development should focus on details of typography, colours, material, finishes and mounting, and finalise design for each member of the signage family and the environmental graphics. This should be in close collaboration with the architects to coordinate locations and any required interventions in the architecture.

Typical activities and deliverables for this stage include:

- User group meetings
- Workshops with stakeholders
- BIM implementation of primary wayfinding
- Design development of schematic designs
- Location planning and message schedules
- Input to the design development report

Contract Documentation

At this stage, a tender document is produced that includes design drawings for all approved sign types, final layouts, typical elevations and installation details, and suggested fabrication details. The location plans and sign schedules are finalised, which, combined with the design drawings, and minimum production quality instructions and conditions, form the tender document.

Typically, the manufacturer will then create a set of shop drawings (construction drawings) in subsequent stages (construction administration).

There is an option to have the wayfinding consultant create a tender document that contains construction drawings, therefore removing the need for shop drawings to be produced at a later date.

Typical activities and deliverables for this stage include:

- BIM implementation of primary wayfinding
- Tender document
- Input into a cost plan
- Assess alternatives and provide recommendations for cost effective solutions

Evaluation

Tender Evaluation and Award

Typical activities and deliverables for this stage include:

- Provision of request for information requests
- Review of technical departures, tender qualifications and alternative specifications
- Provide recommendations for input into the tender recommendation report

Construction Administration

Typical activities and deliverables for this stage include:

- Monthly and weekly reports
- Provision of request for information requests
- Site visits
- Shop drawing review
- Artwork supply/review
- Prototype/sample inspections
- Defect inspections
- Defects inspection reports
- Signage subcontractor to supply
- Engineering
- As-built documentation

Commissioning and Handover

Typical activities and deliverables for this stage include:

- Staff induction/training
- Implementation of a management system

- > Post Completion Warranty Period
- > Post Occupancy Evaluation

Post Completion Warranty Period

Typical activities and deliverables for this stage include:

- Input into defect rectification reports

Post Occupancy Evaluation

Typical activities and deliverables for this stage include:

- Evaluation of the management system
- Performance assessment and auditing

Appendix 2

Audit Tool

Audit

Tool

This tool is designed to give an indication of the state of wayfinding at a facility. It is not designed for formal assessment, but can provide an idea of the areas in a facility that could be improved.

This audit can also be used as a checklist when designing a wayfinding system for a new facility or as part of a redevelopment project.

Pre-Visit Information

- Appointment letters/emails/texts deliver pre-visit information in the same way as information on site, using the same terminology
- Appointment letters/emails/texts clearly indicate the date, time and destination of the appointment
- Directions provided are consistent with information on site, and have clear, manageable steps
- Verbal directions are given via an agreed system that works over the phone and in person
- Any maps provided show entrances and key landmarks
- Digital components (e.g. the website) provide information consistent with digital and signage on site

Hospital Approach

- The facility is correctly named and identified on local road signage
- The entrance/s are correctly directed to and identified
- Emergency Department is directed to and identified separately
- Public and service entrances cannot be confused

Public Transport

- The facility is listed as a destination on official public transport (bus/train/tram) timetable/websites/apps
- The pedestrian route to and from the bus/train/tram is clearly identified
- The pedestrian route from the bus/train/tram is safe - good visibility/not blocked by surrounding buildings or bushes/illuminated at night.

Driving

- The hospital address is correct on different mapping apps
- If there is more than one entrance, all are clearly identified
- Different entrances (Main Entrance/ Outpatients/Emergency Department) are correctly identified on rideshare apps
- The rideshare and/or taxi drop-off/pick-up area is clearly identified
- The rideshare and/or taxi drop-off pick-up area is directed to from the facility
- The pedestrian drop-off/pick-up area is clearly identified
- The pedestrian drop-off pick-up area is directed to from the facility

Parking

- There are clear directions to car park/s
- Entrances to car parks are clearly marked
- If different car parks are used for different purposes, this is clearly identified
- Public and staff parking areas cannot be confused
- There are visual cues to remember where you have parked (car park/row/level)
- There is a clear and safe pedestrian route to and from the car park/facility
- It is clear where and how to pay
- The way out of the car park is clearly directed

Emergency Department

- The site entrance for Emergency Department is clearly identified
- Emergency Department is directed to and from the Main Entrance
- There is enough short term parking at Emergency Department
- There are directions to car parks from Emergency Department
- There are directions from car parks to Emergency Department
- If Emergency Department is separate to the main building/s, there are directions between the two
- The Emergency Department entrance is highlighted by the architecture, and signage/graphics
- There are clear instructions on what to do when entering Emergency Department
- There are instructions/information for people waiting
- There are directions from Emergency Department to and from food and beverage facilities, if applicable

Cyclists

- Cycle paths on the campus are safe and separate from vehicular traffic
- Secure bike parking is easy to find and identify
- There is a clear and safe pedestrian route to and from the bike parking
- The way out for cyclists is clearly directed

Pedestrians

- Pedestrian only access to the campus is clearly identified with appropriately scaled signage
- Pedestrian access is safe and separated from traffic (footpaths/crossings/lights)
- Landscaping and lighting are used to guide people
- Paths are wide enough for all users, and accessible for people with limited mobility
- There are directions from drop-off/pick up to the Main Entrance
- There are directions from drop-off/pick up to Emergency Department
- It is clear how to get between different entrances
- It is clear how to get between different buildings, if applicable

Building Entrances

- Entrances are clearly identified, and the Main Entrance is a prominent feature
- Different entrances are visually distinct, and can be verbally described
- There are directions between different entrances, if applicable
- There are conditions of entry at each entrance
- There are opening hours at each entrance
- There are after-hours instructions at each entrance

Main Entrance Lobby

- Main reception is visible from the Main Entrance, or clearly directed to if it isn't
- Verbal instructions (from staff and volunteers) are clear, unambiguous and do-able
- Printed instructions (from staff and volunteers) are clear, unambiguous and do-able
- There is a directory board with clear instructions
- The first step of a verbal, printed or directory instruction is visible from reception

Facilities

- Toilets, baby change etc are clearly directed to, labelled and easy to identify
- Where possible, accessible toilets, baby change etc are provided on every level
- Tactile/Braille signage layout and mounting is compliant with the BCA
- Cafes/food and beverage outlets are directed to from major locations, such as Emergency and clinic waiting areas

Lifts

- The lifts are clearly identified
- Public and staff lifts cannot be confused with each other
- There is a lift directory
- Level numbers on the directory and lift buttons match
- There is a level indicator in the lift
- There is an audio announcement in the lift
- The level indicator in the lift lobby is visible when the lift doors open

Stairs

- Multiple stairs are identified separately
- There are level indicators in stairwells
- Level indicators are visible when you step out of the stairwell
- Public and staff stairs cannot be confused with each other
- Emergency Department stair use is clear

Reception and Staff Stations

- The design of reception desks and staff stations is consistent with what a user would expect
- Receptions and staff stations that act as receptions, are clearly labelled and easy to identify
- Staff stations that do not act as receptions are not labelled

Waiting Rooms

- Screens are visible from everywhere in the space
- There are toilets provided, or directions on where to find them
- Directional information to clinic rooms is provided if self-navigation is necessary

Way Out

- Way out is directed from all destinations
- Lifts and stairs are easy to identify on all levels and from all directions
- Distinctive landmarks are used at key decision points and destinations

Staff

- Staff throughout the facility use the same language that is used on signs and other wayfinding tools
- Staff/volunteers in customer service roles, e.g. main reception, have been trained in how to give directions, and do so in a consistent way
- When giving directions, staff/volunteers make explicit reference to signage, landmarks and the surrounding environment
- Staff have the ability to write directions down
- New staff are inducted so that they understand the wayfinding system employed by the facility

Development and Maintenance

- Common journeys have been identified and described
- A site survey of buildings and access points has been completed
- An audit of current signage/wayfinding tools has been undertaken to identify areas for improvement
- User group input has been recorded and used to inform the wayfinding strategy
- There are a clear set of agreed wayfinding principles
- There is a clear understanding of the needs and desires of patients, visitors and staff
- There is a specific person responsible for wayfinding and transition management

Appendix 3

Glossary

Glossary

Access consultants	Provide practical and objective advice on the provision of access to premises (buildings) for people with disabilities.
Accessibility standards	The requirements of the Disability Discrimination Act 1992, Disability (Access to PremisesBuildings) Standards 2010, and all other statutory requirements relating to the access by people with a disability to public buildings.
Accessible route	A continuous, unobstructed path between all accessible elements and areas of a building, including corridors, ramps, and lifts.
Accreditation	A process in which certification of competency, authority, or credibility is assigned. In healthcare settings, it includes accreditation against the National Safety and Quality Health Service (NSQHS) Standards.
Architectural elements/ building features	The unique details and component parts that, together, form the architectural style of houses, buildings and structures.
Architectural form	The shape, visual appearance, constitution or configuration of both the process and the product of planning, designing, and constructing buildings and other physical structures.
Brownfield site	A site that has a previous development on it, such as an existing hospital facility.
Built environment	The man-made environment, including everything from public buildings and houses to streets, footpaths and even the transport system.
Campus	A collection of buildings and spaces that belong to a given healthcare facility.
Change management/ transition management	An approach to transitioning individuals, teams, and organisations to a desired future state.
Circulation path/ circulation system	An exterior or interior way of passage provided for travel, including but not limited to, walks, hallways, courtyards, elevators, platform lifts, ramps, stairways, and landings.
Coding system	A system where an alphanumeric (letter and number based) code is used to direct to and/or identify a destination.
Font	The styling and colour of lettering or alphabet.

Greenfield Site	A previously undeveloped site marked for a brand new facility.
Hierarchy	An arrangement of items (objects, names, values, categories, etc.) in which the items are represented as being “above,” “below,” or “at the same level as” one another.
Interactive digital kiosks	A computer terminal featuring specialised hardware and software located in a public area that provides access to information and applications for communication of wayfinding information.
Intuitive wayfinding	Intuitive wayfinding occurs when an environment is designed in such a way that no conscious decisions are needed to navigate. Healthcare facilities can encourage this via prominent entrances and lifts, highlighted touch points etc, but are ultimately so complex that signage will always be needed.
Legibility	The quality of being clear enough to read. This can refer to text or buildings and landscapes. -see legible environments below.
Legible environments/ spatial organisation	Legible environments are simple to understand and easy to organise into an effective mental map. The design features fit recognisable patterns -a main entrance is prominent and welcoming, drawing users in -and this allows faster acquisition of spatial knowledge and subsequent ease of wayfinding.
Lift core	A core is a space used for vertical circulation in a building, allowing people to travel from one floor to another.
Maintenance owner	Someone who is responsible for all actions which have the objective of retaining or restoring a healthcare facility in or to a state in which it can perform its required function. This includes the maintenance of the wayfinding system.
Mental map	A mental representation of the surrounding space, incorporating both objective knowledge and personal perceptions.
Project owner	The entity/person that initiates a project, finances it, contracts it out, and benefits from its output(s).
Project plan	A formal, approved document used to guide both project execution and project control.

Quality audit / quality improvement/ quality management	Quality audit is the process of systematic examination of a quality system carried out by an internal or external quality auditor or an audit team. Quality improvement for wayfinding uses quantitative and qualitative methods to improve the effectiveness, efficiency, and safety of wayfinding systems including the performance of human resources in delivering effective wayfinding. Quality management is focused on product/service quality, and the means to achieve it. Quality management for wayfinding therefore uses quality assurance and control of processes as well as products to achieve more consistent quality of wayfinding.
Universal design	The process of making design inclusive for everyone. It aims to ensure that users of all ages, abilities, cultures, gender, and economic backgrounds have equal access to the built environment.
Wayfinding cue	A cue serves as a signal to do something. In wayfinding, these cues prompt recognition of position, location, route and place identification. They can be as simple as an arrow or as complex as a directory.
Wayfinding consultants/ strategists	Specialised consultants that define, develop and deliver solutions that help people find their way around buildings and landscapes.

Appendix 4

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