

Accessible Health Facilities: Common Issues and Recommendations

2006





motivation quality of life for people with disabilities



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Table of Contents

Introduction	02
Summary of Major Issues	04
Access to main entrance	05
Finding Your Way & Signage	11
Access to Specialist Clinics and Services above Ground Floor	16
Links between buildings	18
Stairways	19
Car Parking	22
Dispensary	24
Toilets—general & wards	26
Lighting	29
Corridors	32
Regular maintenance checks	34

Introduction

Health and hospital facilities are places regularly visited by sick and elderly people, and people whose physical condition is often poor. A greater proportion of people with difficulties in moving will be concentrated in such places. They should, therefore, be places where additional attention is given to making them easy and safe for people to get to, find their way, and move around in.

Accessible design standards exist to make environments easier for all to move around in—including the elderly, sick, disabled, and pregnant women who often find it more difficult than others. Government regulations specify that all new buildings should conform to such standards. By around 2013 it is anticipated that all existing buildings will have to be upgraded to meet these standards.

Meeting minimum standards might not be enough for health/hospital settings, however. This is because of the larger volume of people who will present with mobility difficulties. The minimum standards cater only to about 80% of the population. Often, the severely disabled are not included as part of this 80%. However, people with severe disabilities are more likely to have more medical complications throughout their lifespan and are thus more likely to visit specialist facilities.

Health facilities and hospitals are also places where large equipment needs to be moved around efficiently and in a timely manner. Often this equipment is on wheels. This includes trolleys for patient movement as well as medical equipment. Much of this equipment has dimensions larger than a wheelchair so minimum standards for physical accessibility based on standard wheelchair dimensions will not be adequate.

For such reasons, it is recommended that minimum standards are exceeded. This booklet identifies the common issues for accessibility based on a review of existing buildings. A review of some design plans was also conducted and the common issues identified. Suggestions have been provided to address these common issues. Unless otherwise stated, the Government of Sri Lanka (GoSL) standards should be used. Where the minimum standards might not be adequate, enhanced standards are suggested.

Not all accessibility issues are identified. It is recommended that these issues are considered in yearly maintenance and

Introduction

repair programmes so that each facility can identify some of the main barriers to access.

This booklet does not address some of the (negative) institutional discrimination that many disabled people express they experience when they visit facilities (e.g., how to ensure people with hearing impairment are kept informed of the treatment process, how people with visual impairment are oriented to a ward, how people who use wheelchairs are ensured their right to dignity and independence while in hospital etc). Policies about the appropriate service, treatment and care processes need to be addressed and discussed with disabled people, along with regular audits to ensure they are being implemented.

Feedback & Contact

This booklet was written with the support of many people who kindly allowed us to view their facilities. We welcome any feedback to help improve our ideas and suggestions.

This booklet was written by Samantha Whybrow for John Grooms. We wish to thank all those involved in the production.

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Summary of Major Issues

The major problem areas in health facilities are listed below. These do not represent all of the access barriers but are ones that make a big impact on the safety, independence, and dignity of people who try to access and use the facilities. These issues could be addressed in a regular maintenance and repair programme for health facilities.

Access to main entrance is difficult or impossible. In particular, there is usually no ramped access and steps that exist are often deteriorating or in poor condition. Other issues include poor condition of pathways or road surfaces, lack of adequate signage, lack of safe and simple pedestrian access from roadside (including lack of pedestrian crossings or accessible bus shelters).

- Signs and signboards around the facility do not exist or are confusing/unclear or not easy to read.
- Limited access to services provided on upper floors for those with difficulty climbing stairs. Stair condition is often poor and without handrails.
- No disabled toilet facilities for general use or on wards

- No disabled wash rooms on wards
- Car parking (including disabled car parking) and drop-off points are either not provided, signed, positioned too far from the entrance, or have poor road surface conditions.
- Outpatient facilities are not easily accessed, with steps at the entrance, seats that are inappropriate. The queuing system may be one with rails that blocks easy access.
- Dispensaries often offer limited access for patients to make appropriate eye contact or hear the person dispensing pharmaceuticals when there is a 'hole in the wall' dispensing system. The queuing system generally has rails that block access.
- **Corridors** are poorly lit and floor surface has deteriorated
- No accessible linkages (pathways) between buildings on the site.
- Poor lighting

The main entrance is generally set back from the road—this distance could be a few metres or it could be around one hundred metres. The way from the road to the main entrance may or may not be paved and the way to the main entrance is generally shared by cars, ambulances, other vehicles, and pedestrians. The main entrance to the building is often up at least one, two or more steps with no alternative ramped access.

Common access issues

- Stepped access only to entrance with no rails and no ramped alternative making it difficult for those with mobility problems or who use wheelchairs (also placing added burden on carers or staff who might have to carry the patient up steps).
- Steps may be in a state of poor repair and be broken, causing trip hazards.
- Width of main entrance may be too narrow to accommodate high volumes of people passing through at busy facilities
- Main entrance not clearly signed from roadside making it difficult to find for those who are unfamiliar with the

facility or who get tired easily (ie, they must use extra energy to search for the entrance)

- No designated pedestrian route—pedestrians and vehicles take the same approach with no pedestrian crossings which is potentially dangerous for pedestrians
- No nominated drop-off point for vehicles to drop-off passengers close to the main entrance making it difficult for those who cannot walk far to get close to the entrance
- Path from roadside to main entrance uneven and with holes making it difficult and potentially hazardous to walk along, as well as making a journey by vehicle uncomfortable for those who are ill
- No pedestrian crossing across road in front of the hospital to assist pedestrians safely in crossing the road
- Bus shelters/public transport may or may not be within easy walking distance and may not be accessible



This picture shows a main entrance to a base hospital. There are steps at the entrance. The steps are too narrow for large numbers of people to move up/down at once. The steps are crumbling and no adequate handrails are present. There is no alternative ramped access. The gate at the doorway does not open fully so the doorway is narrowed.

There is a cover over the main entrance to protect from the weather. There is also a 'no parking' sign painted in front of the entrance to allow easier pedestrian access. It is unclear whether vehicles are allowed to stop quickly here to set down passengers. The spaces closest to the entrance are used by motorcycles with no allocation for disabled parking.



The roadside access to this hospital is from a busy street. There is no nearby accessible bus shelter. There is no pedestrian crossing for safe crossing of roads.



This is an example of the entrance to an outpatients department. There are steps with no handrails and no ramp. No signs are present. The open drains so close to the steps could be a safety problem.

Suggested Improvements to Access

Level access

The greatest barrier to access is the steps at the entrance. Therefore, the greatest improvement that will make the maximum difference is to create level access to the main entrance. If there are steps, a ramp should also be provided. Most facilities do not have appropriate ramped access so it would need to be constructed as a matter of priority. The ramp should conform to government standards, however, the following points should be considered in addition to the government standards to ensure maximum use and appropriateness of the ramp:

- The ramp should have a gradient of not more than 1:15. If trolleys are to be pushed up the ramp it is advisable the ramp have a gradient as close to 1:20 as possible.
- Ramps should also be at least 1500mm wide where possible to allow as many people to move up and down as freely and easily as possible. Hospitals and health facilities should expect more people to be walking with assistance so the wider ramp is necessary.
- Landings on ramps should be

provided according to the gradient (about every 9 metres for a ramp with a gradient of 1:15). Landings need to be at least 1500mm long to allow turning.

- The surface should be roughened texture (e.g., brushed concrete) and should not pool water anywhere on its surface or on the landings. Close attention to the cross-fall and drainage during construction should help with this.
- Handrails must be provided on both sides of the ramp. Consideration to handrails at two levels—one for children and one for adults—could be given. Children's handrails should be approximately 9 inches below the adult rail. This is important so as to prevent children's head and limbs getting caught accidentally.

Steps should be provided with any ramp where there is a level difference of more than 300mm. Stepped access is important for those with some types of walking disabilities who cannot manage ramps easily or safely (e.g., people with some types of paralysis). Steps should conform to the government standards. Some of the common and simple issues that could be addressed in a regular

maintenance programme to increase compliance with standards include:

- Repair steps that are broken so they are not a trip hazard
- Provide a colour contrast strip on the nosing (edge) assists those who do not see well
- Handrails should be installed on both sides of the steps (refer to government standards)

Ideally, the steps and ramp should be under cover so they are protected from the heat and rain.

Width of entrance

The width of the main entrances to all facilities reviewed is more than 900mm, which is wide enough to comply with disability regulations. However, it is recommended that the entrances should be much wider than this due to the nature of use of these facilities. At times trolleys may need to pass through. Where the facility is a major hospital, higher volumes of users will be passing through and a wider entrance will reduce congestion and make it easier for slower

moving people.

Drop off point and Weather protection

A car drop-off space should be nearby the main entrance so passengers can be set down within a close walking distance. Ideally, it should be covered as well. This allows sick and less mobile people to be dropped off right at the main entrance. They will not be exposed to the elements, especially if it is raining.

It should be noted that many health facilities have a covered entrance area. They may be using the space as an unofficial drop-off point already. All that may be necessary is to clearly sign the area so vehicles do not permanently park in the drop-off area.

Entrances to other areas of the facility

The main entrances to any service departments, where these are separate to the main entrance, should also be accessible. For example, the outpatient department or dispensary/pharmacy.

Clear and understandable Signs

The main entrance should be signed and clearly recognizable from the roadside so that people can find it easily and get there quickly. Many people who come to

hospitals are in pain, experiencing fatigue, or other difficulties so they should be able to get to the entrance as quickly and easily as possible.

Weather mats

If a weather mat is necessary, it should be set into the floor so that no-one can trip over it. The weather mat should be the same size as the cut out in the floor. This needs to be regularly checked. Also, the weather mat should not have large diameter holes in it that a crutch or mobility aid might get caught in (no larger than 10mm diameter).

Path from roadside to main entrance

Providing a designated pedestrian pathway from roadside to the entrance that is firm and even will make it easier for people to manage and reduce the safety risk of sick or slow moving pedestrians having to share the space with vehicles.

Pedestrian crossing on roads

Pedestrian crossings on major roads in front of the facility would assist slow moving people who are trying to go to or come from the facility. Liaison with the relevant authority may need to be undertaken. The authority needs to ensure there is a curb ramp on both sides of the crossing and that the crossing is clearly sign posted. Traffic lights with a pedestrian signal might be an option for very busy roads.

Public transport

Many people travel by public transport and it should be checked that an accessible bus shelter is nearby for those that travel by bus. Liaison with the relevant authority is required. It may be necessary to emphasize that the shelter should be accessible since many people who come and go from health facilities have mobility or other difficulties. Depending on the size of a health facility, it is possible that a person might need to walk several hundred metres to get to where they are going. Even if the facility is not that large, most will have a large number of wards, rooms and or specialist areas that are spread out from each other. It is important that people are able to find their way easily and with as little energy as possible to where they want to go. To assist people in finding their way around, three types of signs are most useful:

Site layout plan:

When people first arrive at the facility, it is important that people are able to find out the easiest way to their destination, which requires a good signboard that shows the overall layout of the facility.

Directional signs:

It is important that people are guided to where they want to go with directional signs that inform the person when to turn, go up etc.

Locational signs:

It is important that the destination is signed as well so they know that they have arrived.

Other signs around the facility may be used such as name boards for specialists, warning signs, instructions etc. Careful attention to the way these signs are written and their location is also required.

Common issues:

- Signs that have trees or branches or wires hanging over them so you cannot read them
- Signs with letters that are too small to read well
- Signs that you cannot stand close enough to be able to read because there are plants or rubbish bins or benches in front of them
- The colour of the letters on the sign is too similar to the colour of the background
- Too many signs in the one place that create confusion
- Glare on the sign due to the material the sign is made from reflecting too much light or poor position of sign in relation to lighting
- No signs!
- Sign is positioned too high for seated users to read

Finding Your Way & Signage

- Sign is positioned on a door rather than beside the door (you cannot read signs when the door is open if they are on the door)
- Signs that do not clearly indicate the message they are meant to (e.g., due to poor wording, poor pictures, poor symbols)
- Signs that do not convey information to people with visual impairment



The site layout plan is unclear. The writing is too small. The signboard is too high (more than 1600mm from the floor to the bottom edge). The lettering of the key (next to the map) is large and contrasts well with the wall. The board is in darkness and it is only the flash of the camera that provides any light in this picture.

There is a hanging sign directing patients to the toilet and injecting room. The letters are too small to read easily from the ground. The colour of the letters does not contrast enough with the sign itself. There are distracting pictures on the sign that do not provide information and are there only for decoration. They should be removed.

Finding Your Way & Signage

Suggested Improvements to Access

When planning for or checking the signs at a facility, pay attention to whether the following principles have been accommodated. Ask, are the signs:

Consistent & Logical:

Signs within a building should be consistent. This means signs of a similar type should be in a consistent position (e.g., height, placement on a wall). Their style should be consistent (e.g., same font/lettering). The lettering size should be consistent. The light that shines onto them should be consistent as well.

People should not have to look for the signs—they should be obvious! Location of signs is important:

- Signs should be placed in logical positions leading from the boundary of the site to the main entrance and then throughout the building.
- Locate at key points around buildings such as entrances or junctions in corridors.
- Signs indicating room use should not be attached to the door—this can lead to confusion when doors are not closed. Signs should be beside the door on the latch side.

Easy to read:

Signs should have lettering styles that are easy to read. Several factors whether how easy the sign is to read:

- **Type of script:** Plain script is better. Always avoid italic or flowing or cursive lettering styles. The simpler the better!
- Position the reader is in to read the sign (how far away the reader is). For example, signs that are hanging from the ceiling need to have much larger writing than those that are lower on a wall beside a door. In general it is better for signs to be positioned so that people can get close enough to touch them if necessary—within 400mm.
 - Near Signs (viewer can read within 400mm)—Text Height. Should never be less than 35 mm in height.
 - Distant Signs (viewer cannot read or is not meant to read within 400mm—Text Height.) Ideal is for a sign that can be touched or viewed within 400mm. Some types of signs are supposed to be read at greater distances, however (e.g.,

prominent 'main entrance' signs). Where near viewing distances are impossible/undesireable, text size must be increased with distance. For a viewing distance of 3m, the text height should be 155 mm. Minimum text heights should be calculated at 50 mm per metre of viewing distance.

- Height of sign: Where possible, signs should be fixed at heights (1300mm to 1500mm from floor level) to give both ambulant and wheelchair users the opportunity to read or touch the sign from a close distance.
- **Reflective surface**: Both the signboard and the lettering should be given a matt surface to minimise glare and reflections.
- Colour of the writing versus the colour of the signboard. The writing should be contrasted well with the sign. For example white on black or black on white.

Easily identifiable

• Colour of the signboard versus the colour of the background (e.g., wall). The signboard itself should be contrasted with the background

- Borders around signs can sometimes help enhance text, where background contrast is otherwise poor.
- Unobstructed Viewing Space: Care must be exercised to ensure sign locations are obstruction free, thus allowing people with poorer vision to touch or get closer.
 - There should not be obstacles positioned in front of the sign that would prevent a p e r s o n getting close to it.
 - There should not be obstacles hanging over the sign (such as tree branches) that w o u I d obstruct the sign.

Information provided in tactile form

- All signs within touchable distance should be tactile as these are invaluable for those who have no sight at all, or for people who have sufficient sight to identify the signboard but have difficulty reading the text.
- Embossed text (the characters are raised above the surface of the sign board to a height of 1 1.5 mm) is useful for some people.

Finding Your Way & Signage

- Signs of width (or length) greater than 1500mm can be difficult to feel.
- Sign edges should be slightly bevelled.
- For touchable signs, the minimum character or text height should be 35 mm, with a maximum of 60mm.
- The person must not be obstructed from standing close to the sign.

Braille on Signs¹

- Wherever possible, Braille should be included into signs;
- The recommended position is for the left hand most characters on the sign to align vertically with the Braille below.
- The Braille should have a tactile locator consisting of a vertically aligned semicircular cut out and where possible the Braille sign portion should be in a contrasting colour.1

Easy to Understand

 Symbols and pictograms can convey information in a very simple and concise way. They are also helpful to people with learning difficulties. These symbols can be tactile. Whenever published, standard symbols should be used and the same design principles described in the details above should be followed.

- Use only necessary signs. Too many signs can be confusing.
- Keep signs short and simple. Convey the information in a clear way with as little text as possible.
- Photographs of people: Where the sign is a name boards, people with hearing impairment may find it helpful to have a photograph of the person beside the name so they can identify the person easily.

Site layout signs

 Signs that are used for site layouts should follow the above principles. They should be positioned near the main entrance. Clear diagrams/pictures should be used so a person can clearly identify where they are on the map, where they want to go, and the most efficient way to get there.

¹ For further information about including Braille on signs, contact the Disability Organisations Joint Front

Access to Specialist Clinics and Services above Ground Floor

Many services (clinics, wards etc.) are situated above ground level. Most health facilities in Sri Lanka do not have lift access (in some areas it may be difficult or inappropriate to have lifts if they cannot be maintained, repaired, serviced etc). This means people have to travel up one or more flights of stairs to access the services. If a person cannot go up or down the steps themselves they must be carried. If there is no-one to carry them or no-one able to carry them, they usually miss out on the service. Even if someone does carry them, this is dangerous to the health of the person/people who is/are carrying.

Common issues

- Stepped access only (no ramps or lifts)
- Steps in poor condition [refer to section on steps for guidance]
- Clinics/wards located above ground floor cannot be accessed independently by people with difficulties climbing stairs
- Safety hazard for those who carry people up stairs
- Professionals refusing to come to ground floor to see a patient who cannot climb the stairs²



This photo shows important areas of the hospital located up two flights of stairs. To pay and to see the dentist people must go up the stairs. These are important, common services that a large number of people will use. Provision should be made so people do not need to climb stairs to access these services.

[There is also a lot of glare from the window behind the sign, making it more difficult to read the sign for people with visual impairment. Please see discussion on 'lighting' in this booklet for more on this topic]

² Many people with disabilities have reported that consultants have refused to come downstairs to meet them when they are unable to go up the stairs to meet the consultant.

Access to Specialist Clinics and Services above Ground Floor

Suggested Improvements to Access

There are two main solutions to this problem. One is to enable access to upper floors by constructing ramps or installing lifts. The other is to ensure at least one type of each service is available on ground floor level.

Ramps or lifts

If possible, ramps or lifts that comply with accessibility standards should be installed to provide access to upper floors. Before installing lifts, consideration needs to be given to whether they can be maintained and serviced as required. Ramped access should be covered to protect patients, staff and visitors from wind, rain, and the heat when moving up and down floors.

Rearranging services

If it is not appropriate to install a lift and a ramp cannot be provided, consideration should be given to rearranging how services are provided so that people who cannot get to the upper floors can be attended to on the ground floor. This might mean providing a generic consulting room on the ground floor that could be used by a variety of consultants for instance.

Importantly, the people who work in the building need to be made aware of their obligation to come down to meet patients who are not able to come up to meet them.

Links between buildings

So people can move easily and safely from one building to another, a smooth, level, even pathway should be provided. It should be paved and covered if possible, especially if patients are moving between buildings frequently.



There is a firm, level path between the buildings on this site. The path has been sloped gently near the building so access is by ramp rather than step. The edge of the path is the same level as the ground beside it, which is ideal as it presents no danger if a person walks off the path accidentally. An internal road crosses this path but it is relatively unused. Pedestrian markings could be positioned here and a signal to cars that tell them to give way to pedestrians could be introduced if desired.

Common issues

- No pathway
- Pathways with holes
- Pathways that are not smooth
- Steps in pathway/uneven pathways
- Frequently used pathways not covered

Suggestions for improvements to access

- Existing pathways should be checked for damage and repaired
- Pathways should be constructed to important facilities where they do not exist.
- Any longer pathways (more than 50 metres) could have handrails installed, which may be beneficial for those who tire, have difficulty walking, or who do not see well.

Stairways

Stairways are impossible for wheelchairs to negotiate and other solutions must be found to ensure appropriate access to services that might take usually take place above ground level (see section on 'access to specialist clinics and services above ground floor').

Stairways can be inaccessible, unsafe or difficult for other people too. Many older people will find it hard to manage stairs. Climbing stairs is particularly difficult for people with mobility impairments who find it difficult to lift and bend their legs (e.g., people with polio, arthritis, spasticity, hemiplegia, weakness), or people with visual impairments who are at a greater risk of falling on staircases, or people who get tired quickly due to cardiac problems, age, or neuromusculoskeletal problems (ie., many people who have difficulty walking will also get tired more quickly because they have to put more effort into taking each step). Health facilities and hospitals are the places where there are large proportions of these types of people. Therefore, good design of stairways must be carefully considered.

Common issues

- No handrails at all to provide support.
- A banister on one side that does not provide an appropriate supporting surface so cannot be considered an adequate substitute for a handrail.
- No colour contrast strip on the edge (nosing) of steps to provide guidance for people with difficulty seeing.
- Low lighting on staircases.
- Broken, crumbling steps

Stairways



These stairs have no proper handrails. The banister on the right is not suitable for gripping with the hand. The banister ends before the bottom step, which is dangerous. There is no rail on the left to help people on their way up or to help people who use their right hand on their way down. There is no colour contrast on the edge of the step to help people as they walk down the steps to see the edge of the step clearly.

Stairways

Suggested Improvements to Access

- Provide handrails or appropriate dimensions and heights on both sides of the staircase (refer to accessibility standards)
- Provide colour contrast strip on nosing of steps
- Provide lighting at every landing and
- Repair broken steps

Good stair design includes:

- Steps 300mm long and 150mm high with at least 1200mm wide between the railings
- Circular handrails on both sides—if the school has children of primary school age then a second, lower, rail might be considered at a height of 700mm (there should always be a gap of at least 200mm between two rails so children's heads cannot be trapped between the two railings). Landings at top and bottom—with tactile indicators
- Colour contrast strips on the nosing of steps
- Well lit



Car Parking

Some people may arrive at the facility by private or hired vehicle. It is important that vehicles do not drive or park such that they cause a blockage or barrier or safety hazard for patients, staff and visitors. An appropriate space should be allocated for vehicles and should be clearly signed. In addition, a separate disabled car parking space should be allocated and clearly signed as close to the main entrance as possible. Depending on the size of the facility, the number of such spaces would need to be decided upon.

Common issues:

- No nominated car parking spaces—vehicles park haphazzardly
- No nominated disabled car parking space
- Car parking surface is not smooth or even—holes or rough surfaces are common.
- Path from disabled space to main entrance is not smooth or even and there may be steps.

Car Parking

Suggested Improvements to Access

Designate a disabled car parking space

The most significant accommodation that could be made is to provide a designated disabled car parking space close to the main entrance. This space should be the closest car parking space to the main entrance and, ideally, should not be more than 50 metres away from it. Ensuring the space is the appropriate size and has the appropriate surface will make moving from the vehicle to the building much simpler.

A disabled car parking space should be clearly signed on the road surface and on a sign posted on a pole so that it clearly visible from a distance.

It is important that the ground surface is smooth and level, and that the space is on flat ground. This is so a wheelchair user will be able to transfer in and out of the car easily. Ideally, a smooth, level path should lead from the car parking space to the main entrance.

Designate car parking spaces—general

Cars often park haphazardly in and around the facilities. Providing clear guidelines for vehicles to park will reduce confusion and enhance safety for those who use the facility. This is especially for visually impaired people.

Improve ground surface

Improvements to ground surfaces so there are no holes or hazards will assist all who use the facility.

Dispensary

Dispensaries are often busy and crowded places, which make it difficult for everyone to move around in. Some dispensaries offer a 'hole in the wall' style service where the patient cannot interact with the person dispensing. This could lead to difficulties for patients who want to communicate a particular message, or if a message needs to be communicated to the patient. Rails are usually set up to help people form a queue. These rails can also act as barriers to those who require more space to move around in.

Common issues

- Rails for queuing block access
- Often no capacity for face-to-face interaction in 'hole in the wall' style dispensaries, which is potentially difficult for those with hearing impairment and other who rely on sight to communicate.
- Small, crowded facilities with reduced space for manoeuvring.
- Seating often broken or of one type only (a range of seating types—with and without arms—will help people of different sizes and abilities to move in and out of chairs)



In the picture the railing provides support for people to lean on. It could be widened to allow access for people with mobility aids or wheelchairs. The windows are large and have grating rather than glass, which is better for communication. There is a large amount of natural light in this room, which reflects a lot of glare and would make it difficult for those with visual impairment to see well. Curtains might reduce the alare

Dispensary

Suggested Improvements to Access

Rails for queuing

The rails for queuing provide a orderly way for people to wait in line. They also provide support for people who need it when standing for too long. Most people would required support on one side only to stand up (if they needed support on two sides they would probably have walking aides). Widening the rails to about 800mm would provide wheelchair access for most wheelchairs and also access. This would provide equal access for wheelchair users and reduce the need for a 'special' or separate facility for those people only.

Method of dispensing

Small, hole in the wall type dispensaries provide little opportunity for communication if required. Many facilities have a larger window, which is more suitable to communication. If the lowest edge of the window is at around 1000mm, most people should be able to see through and reach to it. Windows made of glass are more likely to reflect light if lighting in the room is too bright or not suitable and, therefore, be more difficult to see through. Grating is more suitable.

Seating and lack of space.

It is difficult to resolve the space issue in existing facilities, apart from trying to rearrange the furniture to make the room more organized. Otherwise, extensions could be considered to increase the space available.

Providing two main types of seating—seats with arms and seats without arms—will be of benefit to those who need arms to help them stand.

Toilets—general & wards

Many people spend many hours waiting when they visit health facilities and hospitals, so it is important that toilet facilities are available.

Every ward should have a disabled toilet and bathroom facility. People with disabilities are often independent in these activities and they should be given the opportunity and dignity to perform these activities on their own if desired.

Common issues

- No disabled toilet facilities
- No disabled bathing facilities
- Toilets up steps
- No signs directing people to toilets
- Toilets far from the waiting area

Toilets—general & wards



The shower area in this photo is large and could easily be adapted to be accessible. The door is not wide enough because the corridor is too narrow to allow a wheelchair to properly turn into the bathing area. The door would have to be widened. There is a small ramp already at the threshold instead of a step. However, the two doors to the back of the photo show steps to the entrance of the toilets. These toilets are too small to be accessible but they could be combined to make one accessible toilet. The alternative might be to put an accessible toilet in the large shower room as well.



Often there will be a western commode in at least one toilet. However, just putting a western commode in a toilet does not make it accessible. A wheelchair clearly could not enter this space. The door is too narrow, there is a step, the space inside is too small. The pipe on the wall for the tap is in danger of being used as a grabrail to help a person get on and off the toilet as it is in about the right position. This is dangerous as it is not fixed to the wall securely and could easily break off under the pressure of a person's body weight. This toilet may benefit those who cannot squat but will not benefit those who cannot stand up easily from sitting as there are not rails, and will not benefit wheelchair users who want to be independent. It will also be difficult for anyone who needs help in the toilet as there is not enough space for two people.

Toilets—general & wards

Suggested Improvements to Access

Provide disabled toilet facilities.

Refer to standards for notes on disabled toilet design. The number and location of disabled toilet facilities depends on the hospital/health centre. However, it is recommended that wherever a toilet facility exists, that at least one disabled facility be provided also. Disabled people will have more difficulty moving longer distances so they should not have to move a long way to get to a toilet.

Provide disabled toilet and bathroom facility for every ward.

Refer to standards for appropriate designs. It must be considered that the path from the bed to the toilet and bathroom area should be accessible too. No steps should be in the way.

If there is no way to provide disabled access, a commode chair should be provided. Curtains around the bed are essential for privacy.

Steps

Stepped access to toilets is common. Steps to enter the room itself and steps to enter the toilet cubicle. Steps should be eliminated where possible. They should be replaced by rounded mounds or ramps. If appropriate, the floor surface can be raised so the two floor surfaces are matched. It is better to ensure the floor surface inside the cubicle and toilet room are appropriately drained by grading the floor gently rather than use steps to overcome this problem. Another idea is to set a drain into the floor near the door and cover it with grating to maintain a level floor surface.

Signs

Refer to the section on signage for more details about signs. Signs indicating the way to the toilet and labeling the toilet location should be provided to help people find their way there quickly. Many people may not have good control of their bladders and bowels and need to get to the toilet as fast as possible.

Toilets should be close to waiting areas

In places where people have to sit and wait for long periods of time, it is recommended that toilet facilities be located within 50 metres walking distance.

Lighting

Lighting within hospitals needs to be considered to ensure there is a minimum of glare and reflection. Lighting should not be too low. Many people with visual impairment are able to move around well if the lighting is appropriate. Special attention should be paid to areas such as steps, around signs, reception/service desks, and in toilets.

Common issues

- Lighting levels too low
- Too much light, producing glare



The large window with no curtains produces a very bright light with a lot of glare. It is difficult for people with visual impairment to see. It also reflects of any surfaces, producing more light reflection and difficulty in seeing. It is reflecting of signs, making the signs difficult to read. The window behind the service counter (see the queue on far right) is also producing a lot of glare directly in the face of the patients, making it difficult to see the person behind the counter, who will be in shadow. People with hearing impairment need to see faces clearly in order to read expression and lip-read, which they would find it difficult to do with so much glare.

Alternatively, the corridor on the left of the picture is in virtual darkness due to inadequate lighting. This is a long corridor and people must walk more than 50 metres in very dark conditions to reach the end. Again, this is difficult for those with visual impairment and hearing impairment (who, for example, might need to read signs along the way).

Lighting

It is difficult to ensure the correct level of lighting without the appropriate technology. A simple idea is to look for areas of darkness and shadow within the buildings. Along some corridors it is easy to see there are areas of light and areas of darkness. This should be avoided. On some stairways it is easy to see that there are areas of light and then areas where shadows are cast. Avoid this by providing more light so shadows and darkness do not appear.

In some areas, especially with large windows that have no curtains, it is very bright. This type of glare should also be avoided. Curtains may help. Another idea is to ensure the room is set up so that no-one has to look directly into the glare—especially the patient.

Reflection of highly polished floor surfaces or glazed signs is another problem. It makes signs difficult to read and is confusing for people with visual impairment. A matt finish on surfaces helps to reduce this problem. Also, appropriate levels and positioning of lighting. These are generally things that needs to be considered in a 'walking tour' of the facility.



These two photos are of the same ramp and step but the photo on the left has been manipulated (grayscale) to demonstrate the significance of colour contrast. The photo on the left is shown as an example of how a person with visual impairment might see the world. The ramp is barely visible. It is difficult to see the edge of the step as well. This is because there is not enough colour contrast.

Lighting



bathrooms make it difficult to distinguish the toilet. All white bathrooms make it difficult to distinguish the toilet, the tap, the floor and the wall. There is a step at the entrance to this toilet (visible in the photo on the right) that cannot be seen in the photo on the left. The only thing that gives a little clue and contrast in the photo on the left are the lines between the tiles!

Corridors

Many facilities have numerous corridors. Corridors that are very long are difficult for some people to move along. In large hospitals there can be dozens of corridors that often look very similar and it can be very confusing to move from one place to another.

Common issues

- Poor signs in corridors, making it difficult to find the way
- Long corridors with no seats for resting if needed
- Floor surface broken making it unsafe
- Low lighting in corridors leaving areas of darkness making it difficult to find the way or read signs



This corridor is broken. It is wide but there are moveable objects (the beds) positioned on it. This presents a potential safety hazard for those with visual impairment. The lighting at night is poor (there is a small, low-watt bulb hanging overhead).

Corridors

Suggested Improvements to Access

Signage

Refer to the section on signage.

Provide seating along long corridors

Corridors that are more than 20-30 meters long should have some opportunities for sitting to rest if required.

Repair floor surfaces

Ensure all floor surfaces are regular maintained so there are no areas of unevenness. They should not be polished as this will make them slippery.

Improve lighting

Lighting along corridors should be provided so there are no areas of shadow or darkness.



This corridor is long but there are seats to rest on if needed. These seats are outside a consultation room but more could be deliberately positioned further along the corridor to provide resting places. The wall and the floors provide good colour contrast to help people with visual impairment. The floor is in relatively good condition and is not slippery. At the end of the corridor is a large open window that is producing a lot of glare, which will make it more difficult for people with visual impairment to move along the corridor. There are no signs at all along this corridor, which there should be because, at the end of the corridor are toilets and the dispensary. There are no signs beside the doors to show the function of the rooms (the signs are on the doors, which means they cannot be read if the door is open).

Regular maintenance checks

As part of a regular maintenance programme, each facility could ensure the following areas are assessed.

Main Entrance

Is there level access?

Do ramps have appropriate rails, surface, and gradient?

Are the ramps wide enough for the amount of people?

Do steps have appropriate handrails?

Are steps in good condition with colour contrast strip?

Are steps and ramp covered?

Is the entrance at least 1500mm wide?

Is there a drop-off point for cars in front of the main entrance?

Are all other entrances to other departments and service areas accessible by ramp?

Are there clear signs to indicate the entrance from the roadside?

Do weather mats lie level with the floor with no gaps?

Is the path from the roadside to the entrance firm, level, smooth, and even?

Is there a safe crossing for pedestrians at the road?

Is there an accessible bus shelter nearby?

Signs

Are signs consistent and logical?

Are signs easy to identify?

Are signs easy to read?

Are signs easy to understand?

Are signs available in tactile form?

Access to services/facilities above ground floor

Is there a way apart from steps to gain access to upper floors?

Is there a safe policy about providing services to people who cannot climb steps?

Is there provision for providing services on ground floor if necessary?

Linkages between buildings

Are there firm, smooth, level, even pathways connecting all buildings?

Are rest points or handrails available on longer pathways?

Stairways

Are suitable handrails on both sides?

Is there colour contrast on the nosing (edge) of steps?

Is the lighting adequate on landings and on steps with no areas of shadow?

Are any steps in need of repair?

Regular maintenance checks

Car parking

Is there a designated disabled car parking space with appropriate signs within 50 metres of the main entrance? Is this monitored?

Is the area where cars are allowed to park (and not allowed) clearly signed and is this monitored?

Is the ground surface smooth and even where cars park?

Is there a smooth, level, even, firm path of travel from the disabled car park to the main entrance with no steps along the way?

Dispensary

Are the rails for queuing wide enough for wheelchair access?

Does the method of dispensing allow for eye contact between the server and patient?

Are there enough seats with and without handles?

Are broken seats repaired so they do not present a danger?

Are seats laid out in an orderly manner so wheelchairs can move through?

Toilets

Are disabled toilets available generally?

Are disabled toilets available on each ward?

Are there steps to toilets?

Is the pathway to the toilet accessible?

Are there accessible washrooms?

Are disabled facilities clearly signed?

Lighting

Are there areas of shadow or darkness in rooms or above steps or ramps?

Are there large windows with no curtains that let high levels of light into the rooms?

Corridors

Is lighting adequate?

Are the floors smooth, level, firm, and even with no broken/damaged areas?

Are there seats to rest in along long corridors?

Are signs located in appropriate places along corridors?

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