

UNIVERSAL DESIGN IN HEALTHCARE



M A N U A L



UNIVERSAL DESIGN

IN HEALTHCARE



The manual was prepared within the Joint Programme ‘Mainstreaming Policies and Services for People with Disabilities in Ukraine’, implemented by the United Nations Development Programme (UNDP) in cooperation with the World Health Organization (WHO) and the International Labor Organization (ILO) with the support of the UN Partnership to Promote the Rights of Persons with Disabilities together with the Ministry of Social Policy of Ukraine, the Ministry of Health of Ukraine, and the National Assembly of People with Disabilities.

УДК 614.21:7.05(072)
У59

Photo: *Brandon Hartwig, Mariia Nedilko, Olena Ivanova, Into Sana Clinic, Clinic “Dobrobut,” Dental Clinic “Darling”.*

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Universal Design in Healthcare: Manual / Authors: Larysa Baida, Olena Ivanova / ed. Olena Ivanova; UNDP Ukraine, Joint Programme ‘Mainstreaming Policies and Services for People with Disabilities in Ukraine.’ – K.: UNDP, 2019. – 56 p.

ISBN 978-617-7627-14-1

The publication offers guidelines for creating accessible, comfortable, and safe environments and services for clients in healthcare facilities according to the Principles of Universal Design. Being human-centred, Universal Design allows for medical facility policy-making that considers human diversity, acknowledges the needs and abilities of different users, promotes equality and high-quality service for all, and encourages the use of new technology, equipment, and approaches to accessible facilities planning.

This manual will be useful for health care facilities managers, members of non-governmental organizations, professors, students, and everyone who is interested in Universal Design and strives to live in a society that acknowledges the interests of different people, leaving no one behind.

The authors would like to express particular gratitude to: Mackenzie Wilson, Mariia Nedilko, Maryna Lebid, and Olha Khomenko.

The description of international experience was prepared with the support of the UNDP Project ‘*Procurement Support Services to the Ministry of Health of Ukraine*’.

The views, conclusions and recommendations are those of the authors and editors of this edition and may not coincide with the official position of UNDP or partner organizations.

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1

THE IMPORTANCE OF UNIVERSAL DESIGN

UNIVERSAL DESIGN means the design of products, environments, programmes, and services to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design¹.

UNIVERSAL DESIGN IN HEALTHCARE FACILITIES:

- Promotes medical facility policy-making that considers the needs of everyone who uses the facility: clients and their families, service providers, and distributors.
- Promotes resource savings.
- Reduces potential risks and promotes a safe environment.
- Acknowledges human diversity.
- Makes service provision human-centred, ensuring safety, high quality, and respect for human dignity.
- Promotes an improvement in the health of clients and personnel.
- Offers solutions that can be modified or changed to meet different users' needs and requirements.
- Helps balance the needs of different people.
- Reduces professional burnout of medical personnel.
- Optimises efforts and facilitates the work of personnel.
- Improves the safety and comfort of all.

¹ Convention on the Rights of Persons with Disabilities <https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities/article-2-definitions.html>

THE BENEFITS OF UNIVERSAL DESIGN:

- Creates an inclusive society which acknowledges human diversity, ensures equality and social inclusion on equal terms, and promotes respect for the abilities of every person.
- Improves the quality of life of all people, leaving no one behind.
- Reduces stigma and discrimination, providing more opportunities for vulnerable groups.
- Promotes independence, mobility, and social inclusion.
- Reduces the economic burden of special programmes and services which aim to assist specific persons and groups.
- Acknowledges the needs of all users in different fields and thus prevents irrational future expenses for businesses and governments.
- Makes the world attractive, comfortable, accessible, convenient, and safe for all users.

2

WHO BENEFITS FROM UNIVERSAL DESIGN

Universal Design is for all people. Therefore, it must consider that each person is unique and has different:

- ▶ vision
- ▶ hearing
- ▶ mobility
- ▶ intellectual abilities
- ▶ communication abilities

- ▶ height
- ▶ weight
- ▶ age
- ▶ sex
- ▶ gender

- ▶ dietary preferences or restrictions
- ▶ culture
- ▶ religion
- ▶ social status
- ▶ economic status

- ▶ psycho-emotional state
- ▶ ways of perception

In a healthcare facility, Universal Design should consider the interests of:

CLIENTS
AND PATIENTS

MEDICAL
PERSONNEL

FAMILY MEMBERS
AND ACCOMPANYING
PERSONS

SPACE
EQUAL ACCESS
PERCEPTIBLE
INFORMATION
CONVENTION
ON HUMAN RIGHTS
SERVICES
UNIVERSAL
DESIGN
NON-DISCRIMINATION
RON MACE
FLEXIBILITY
UNIVERSAL DESIGN
INFORMATION
SAFETY
TOLERANCE
CONVENTION ON THE RIGHTS OF PERSONS WITH DISABILITIES
HUMAN RIGHTS
EQUITABLE USE
PERSON
LOW PHYSICAL EFFORT
ACCESSIBILITY
RESPECT
CONVENTION
ON HUMAN
RIGHTS
EQUIPMENT
UNIVERSAL
DESIGN
FLEXIBILITY
PERCEPTIBLE
INFORMATION
SPACE
INFORMATION
UNIVERSAL
DESIGN

3

THE HISTORY OF UNIVERSAL DESIGN

The concept of Universal Design emerged from the “barrier-free movement” which started in the USA in the 1950s as a response to war veterans and activists with disabilities demanding an accessible environment in the fields of education, employment, healthcare, and services. Accessible design has become a prerequisite for the recognition of the civil rights of persons with disabilities and an issue of non-discrimination of this population group.

In the 1960s, organizations of persons with disabilities began to develop a new concept of disability which showcased how many problems emerge not because people have disabilities, but because of interactions between people and society-constructed barriers.

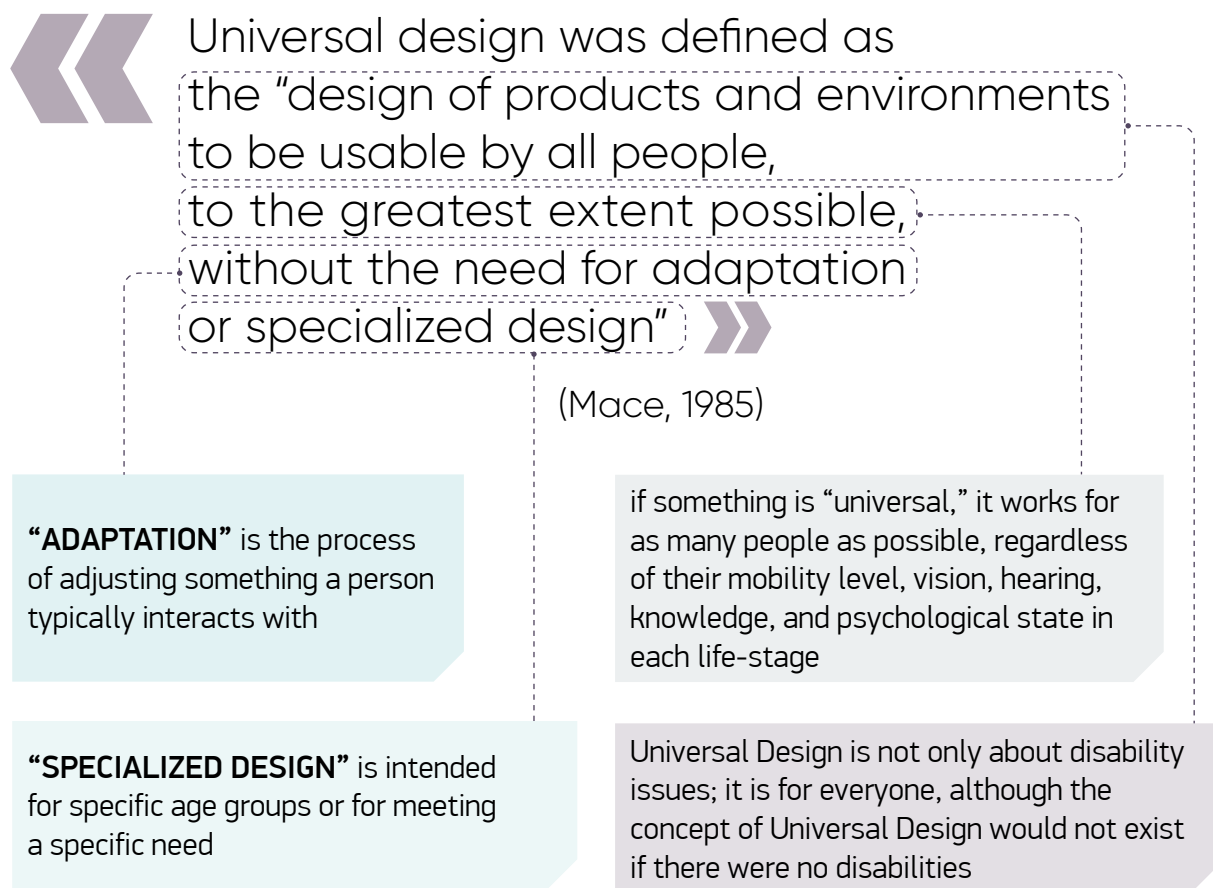
The emergence of a new approach to disability, closing state care institutions, incorporating inclusive education, and overall inclusion of persons with disabilities into different areas of social life required a new design policy. Legal, economic, and social benefits of a barrier-free environment which meets the everyday needs of persons with disabilities were further defined. When architects began implementing accessibility standards, it became clear that some devices and features created to meet the “special” needs of a certain subset of individuals were convenient for broader population groups, despite sometimes being unattractive and resource-intensive.

There was a need for a new concept of accessible environments, which would be universal and become accessible for everyone, not only for persons with disabilities.

The concept of Universal Design was developed in the field of architecture in the 1970s. Its purpose has been to acknowledge human diversity, focusing on inclusion and equality.

Ron Mace, an American architect, founded the Center for Universal Design in North Carolina State University, USA²; he was the first to use the term “Universal Design.” Together with a group of architects, designers, and engineers, he developed the 7 Principles of Universal Design which are now used in various fields, including architecture, education, healthcare, transport, and information and communication technology.

² Center for Universal Design, https://projects.ncsu.edu/design/cud/about_ud/udprinciples.htm



Ron Mace also concluded that despite using the term “universal,” we should understand that nothing is completely universal. There are always people who, for different reasons, cannot use a specific object, no matter how good it is designed. Therefore, Universal Design does not exclude assistive devices and reasonable accommodations. «Reasonable accommodation» provides for introducing, if necessary, the required and suitable modifications and corrections to ensure the rights of particular persons on an equal basis with others.

In Ukraine, the concept of Universal Design began drawing more attention after the Convention on the Rights of Persons with Disabilities was signed and ratified³.

³ The Ukrainian Parliament ratified the Convention on the Rights of Persons with Disabilities in 2009.

4

APPLYING THE PRINCIPLES OF UNIVERSAL DESIGN IN HEALTHCARE FACILITIES

THE 7 PRINCIPLES OF UNIVERSAL DESIGN

1. Equitable Use.
2. Flexibility in Use.
3. Simple and Intuitive Use.
4. Perceptible Information.
5. Tolerance for Error.
6. Low Physical Effort.
7. Size and Space for Approach and Use.

The Principles of Universal Design promote comfortable and safe environments for all users. They improve service quality for clients, positively influence the working conditions of medical personnel, and reduce the expenses of a facility.

Principle 1: Equitable Use

GUIDELINES:

- ✓ Provide equal access to services and the environment for all clients, medical personnel, and visitors.
- ✓ Avoid singling out or stigmatizing any users.
- ✓ Ensure confidentiality and safety for all users.
- ✓ Make the design attractive for all users.

EXAMPLES

An entrance with a low or no threshold, a portion of the reception desk at a low height, and accessible emergency exits help to create an accessible, comfortable, and safe environment.

Wide doorways and corridors facilitate mobility and accessibility for all users and at the same time improve air circulation, reducing the fatigue of medical personnel.

Ensuring physical accessibility in a healthcare facility helps to avoid and reduce the stress and anxiety of its visitors.

Incorporating the appropriate interior design elements, such as pictures, reproductions, photos, music, and colour may significantly improve patients' intellectual health and raise medical personnel's productivity. At the same time, when choosing the colours of walls, doors, and furniture, in terms of contrast, it is necessary to keep in mind that some people, such as elderly patients, clients with mental disabilities, and those with colour perception impairments, may have difficulties distinguishing between the colours.

A play area for children creates comfortable conditions for all visitors; it occupies both children and their parents during the waiting time and reduces the discomfort of their stay while in the facility. When planning this area, opt for easy-to-wash and non-slippery floors, as well as furniture and toys for children of different ages.

Principle 2: Flexibility in Use

GUIDELINES:

- ✓ Provide options for different individual abilities and preferences.
- ✓ Provide the opportunity to choose between different user modes.
- ✓ Incorporate access and opportunity to use products with either the left or right hand.
- ✓ Provide the option to change user interface settings.
- ✓ Adapt to the users' pace.

EXAMPLES

Creating an optimal workspace, for example, by installing monitors at the right angle, adjusting font size, screen brightness, lighting, and choosing the height of tables and chairs according to individual needs helps to avoid unnecessary effort, enhance a person's well-being, reduce eye tension and discomfort, and facilitate the work process.

Including the option to make a doctor's appointment online, at the reception in person or by phone, and attending consultations via Skype or Viber ensures the services meet the needs of different users.

Medical equipment that is easily transformable and accessible for different levels of user mobility promotes comfortable and safe conditions for service provision and facilitates the work of medical personnel. For example, a gynecological chair with an adjustable height provides access for elderly clients, pregnant women, women with locomotor impairments and at the same time, reduces the effort required from medical personnel.

Principle 3: Simple and Intuitive Use

GUIDELINES:

- ✓ Arrange objects and organise the environment or service provision process according to user expectations and intuition.

EXAMPLES

Clients, visitors, and medical personnel should be able to clearly understand where they are, how to get to specific units and offices, or where to find an exit. Routes should be simple, with clear and understandable marking. This is especially important for clients, given a sense of competence, independence, and the ability to easily navigate the environment without any assistance reduces tension and fear.

To make navigation easier, it is a good idea to use colour coding for different functional facilities and mark the routes with respectively coloured arrows. In fact, for some elderly patients and children, colour coding is the best guide.

Contrasting colour of walls, floors, doors, and furniture helps persons with vision impairments. Moreover, it attracts attention, preventing clients from falling and injury.

Principle 4: Perceptible Information

GUIDELINES:

- ✓ Incorporate different ways of presenting information (written, oral, and tactile), keeping in mind clients' sensory abilities and disabilities.
- ✓ Organise information based on its importance.
- ✓ Create contrast between important and supplementary information.
- ✓ Present important information in the most understandable way.
- ✓ Present information in consideration of different levels of education, users' language skills, attention levels, and age.

- ✓ Provide effective suggestions and feedback during and after conversations or appointments.
- ✓ Consider the compatibility of different equipment with special devices or software used by persons with sensory impairments.

EXAMPLES

The right choice of contrasting colours to present information messages, such as black font on a white or yellow background, makes them easier to identify and read (Appendix 2).

Using colour coding for different functional facilities and navigation eases client and visitor orientation.

Symbols, icons, and signs should be applied logically and understood by all, including by children and people who do not speak the language of the country they are in⁴.

Information for clients on a healthcare facility website should be accessible to different groups of users⁵ (Appendix 3) and written in plain language (Appendix 1). The website should contain information about the convenient routes leading to the facility, available parking spaces, including those for persons with disabilities, accessible toilets, baby changing stations, accompaniment services for persons with disabilities, different ways of making a doctor's appointment, etc.

To provide accessible information for visitors with vision impairments, information tables, signs, facility layout, etc. may be reproduced in Braille⁶. For convenient navigation for persons with vision impairments, provide tactile or contrasting guides. While these elements are provided primarily for visitors with vision impairments, in some cases they may be a useful navigation tool for everyone.

Placing monitors with information about the time of doctor appointments and the queue progress in waiting areas allows easy access to information and helps to reduce tension and improve the comfort of clients during their visit to the facility.

Any switches, controls, and buttons should contrast with the colour of the walls and equipment.

⁴ Cabinet of Ministers Resolution no. 1262 of November 25, 2009 "On Approval of the Technical Regulation on Safety Signs and Healthcare of Staff"

⁵ Web Content Accessibility Guidelines 2.1. <https://www.w3.org/TR/WCAG21/>

⁶ ISO 17049:2017 Accessible design. Using Braille on information signs, equipment, and devices (ISO 17049:2013, IDT)

Principle 5: Tolerance for Error

GUIDELINES:

- ✓ Install an emergency alert system; prevent any unconscious or accidental actions of visitors by installing warning signs, providing clear instructions, and sound or light signals.
- ✓ Take appropriate precautions for dangerous parts of equipment and the environment by isolating them or installing warning signs.
- ✓ Minimize danger and the number of mistakes medical personnel make while completing tasks, using medical equipment, technical devices, and electronic client databases by providing clear written instructions, operational protocols, extra security codes, or other means of information or equipment protection.
- ✓ Prevent unconscious or accidental actions of visitors when they receive information, medical service, aid, accompaniment, or navigate the facility by providing extra information and orientation for visitors, as well as for personnel.

EXAMPLES

Authentication⁷ and authorization systems prevent visitors and facility personnel from unauthorized actions. For example, introducing e-passes and security codes for entrance to service facilities promotes safety and prevents any accidental actions.

Mistakes occur when users have false information or access the situation incorrectly.

It is important for facility administration to provide training, detailed information, and notices for personnel and personnel should follow the regulations. To avoid any complications and errors in the work of personnel, equipment should be supplied with clear instructions and use appropriate marking.

Exercising communication etiquette with different groups of clients regarding their special characteristics, reacting to conflicts early, and involving clients in the decision-making process concerning service improvement promotes a comfortable and safe environment for all.

⁷ Authentication is a process of recognizing the users by the system and providing them with certain rights and authority.

To ensure the safety of visitors and personnel, use appropriate design elements or instructions which give clear information about the purpose of the equipment and which provide user guidelines. For example, an inscription on a door should indicate whether to pull or push it. Glass doors should be marked accordingly with bright contrast elements to attract visitors' attention and prevent injury.

A slippery floor after cleaning may lead to injury of personnel or visitors; to prevent it, use special warning cones.

Principle 6: Low Physical Effort

GUIDELINES:

- ✓ Organise services in a way that minimizes repetitive actions.
- ✓ Ensure clients maintain comfortable body posture when using equipment or attending an examination, consultation, etc.
- ✓ Minimize the need for a constant physical effort by placing equipment and furniture in a convenient way.
- ✓ Use rational approaches to user effort.

EXAMPLES

Doors (entrance, corridor, office, etc.) in medical facilities should open without any physical effort by clients, including the elderly, those with hand dexterity impairments, children, pregnant women, and people with low mobility.

Lever-type handles on office doors, sensor taps, soap dispensers, and hand dryers in bathrooms should require minimal physical effort.

Choosing equipment, locks, drawers, and chairs that are used by workers with different physical abilities helps to avoid/reduce physical overload.

Placing the instruments in a convenient way and minimizing the distance between frequently used equipment and facilities improves the efficiency of personnel.

Principle 7: Size and Space for Approach and Use

GUIDELINES:

- ✓ Provide adequate size and space for easy access to and use of objects, equipment, and services by different clients, regardless of their height, age, size, functional impairments, and mobility level.
- ✓ Provide clear visibility of important elements for every visitor and worker, regardless of their height or body position (sitting/standing).
- ✓ Provide enough space for assistive devices or personal assistants.

EXAMPLES

The width of corridors allows for installing handrails along the walls, providing sitting places for waiting, and hanging monitors which do not obstruct passage. Furniture for sitting, such as chairs, armchairs, and benches should be accessible for visitors of different sizes and heights.

Toilets in medical facilities should allow enough space for persons using a wheelchair and be equipped with a baby changing station, a space for crutches near the sink, a seat for changing clothes, etc.

Enough space in doctors' offices, particularly around an examination couch/armchair, improves the quality of service for every client and for those with low mobility.

Well-placed waiting areas with proper lighting allow personnel to see clients and communicate with them without any obstructions. Above all, it is important for people who read lips, persons with vision impairments, the elderly, children, etc.


Accessible car parking spaces, bicycle parking racks, and special spaces for strollers improve service, safety, and comfort for all.

5

ACCESSIBILITY AND UNIVERSAL DESIGN ELEMENTS IN HEALTHCARE FACILITIES

Environment and Facilities⁸

ENVIRONMENT AROUND THE FACILITY

- ▶ Ensure an accessible public transport stop is built according to the standard and is not far from the facility.
- ▶ Provide parking spaces, including accessible parking spots for persons with disabilities marked with the International Symbol of Access. 
- ▶ Install bicycle parking racks.
- ▶ Hang a signboard with the name of the facility.
- ▶ Provide clear and understandable direction signs near the building.
- ▶ Provide appropriate width and even surfaces for pedestrian paths.
- ▶ Ensure tree branches and bushes are not an obstruction or potential hazard.
- ▶ Provide rest benches.

⁸ In Ukraine, accessible environment regulations are: DBN V.2.2-10:2017 Buildings and constructions. Healthcare facilities, DBN V.2.3-5:2018 Streets and roads of population centers, DBN V.2.2-17:2006 Buildings and constructions accessibility for low mobility population groups, DBN B.2.2-5 Area development, DBN V.2.3-5-2001 Transport constructions. Streets and roads of population centers, DBN V.23-4:2007 Transport constructions. Public roads, V.2.2-31 Guidelines on applying accessibility elements to houses and constructions for private use for persons with vision and hearing impairments; ISO 7240-1:2007 Fire alert system (ISO 7240-1:2005, IDT), etc.



The entrance to *Kyiv Diagnostic Centre for Children*: the title is in large font on the front of the building, tactile and contrast guiding lines are present, an information plate with the working hours is reproduced in Braille, according to Principle 4: Perceptible Information; the first and last steps, glass doors, and pillars have contrasting colour markings, according to Principle 5: Tolerance for Error.

Bicycle parking racks promote accessibility.



*Healthcare centre, Manevychi district,
Volyn oblast*



Kyiv Diagnostic Centre for Children

EXAMPLE

KANSAI ROSAI HOSPITAL GARDEN, JAPAN – ENVIRONMENT COMFORTABLE FOR ALL

An accessible, comfortable, and safe environment was created around the hospital by applying the Principles of Universal Design. The garden design includes barrier walls concealed with planting mounds that limit industrial noise. It is a barrier-free environment with proper lighting, divided into nine areas that are tailored to the needs of its visitors. For example, *The Garden of Four Seasons* contains raised beds with seasonal flowers, so that all visitors, including those using wheelchairs, can touch and smell the flowers. *The Garden of Whispering Sounds* contains covered rest areas designed for quiet conversation, personal meditation, or enjoying musical fountains. Patients and their families, hospital staff, and those living in nearby communities often visit this garden. Surrounded by buildings, housing, and a heavy traffic road, the garden has become an oasis for not only the hospital but also for people living in nearby communities.

Addressed Elements of Universal Design:

Equitable Use: division into sections, entrances and approaches with gradient slope and proper width which allow easy wheelchair mobility, comfortable benches, proper lighting throughout the garden, etc.

Flexibility in Use: sports areas, picnic areas, benches along the paths, rain shelters throughout the garden, areas tailored for users with different needs and abilities, etc.

Perceptible Information: signs indicating walking distances, understandable icons and symbols, colour coding of the paths, etc.

Tolerance for Error: handrails installed on the bridges to prevent falling into the water, flowerbeds installed on the stairs near playgrounds to prevent injury, natural landscape (lawn, contrast marking along the paths, handrails, and fences), etc.

Low Physical Effort: smooth surfaces, level entrances to different areas of the garden, raised flowerbeds and water basins, benches that allow neutral body posture.

Size and Space for Approach and Use: adequate space for wheelchair users to stop at the base of ramps, spacious rest and semi-private areas, etc.

Source: Asano, F., Marcus, C.C., Miyake, Y., & Sasaki, M. (2008). Uses and healing effects of the Garden of Kansai Rosai Hospital. *Landscape Research Japan Online*, 1, 90-97, <http://universaldesigncasestudies.org/health/hospitals/kansai-rosai-hospital-garden>

ENTRANCE

- ▶ Locate the main entrance on an even, solid, and non-slippery surface.
- ▶ If there are stairs, there should be a ramp. Install handrails on both sides of stairs or ramps.
- ▶ Mark the first and last step according to the standards.
- ▶ Install automatic sliding doors and/or doors which can be operated with minimal physical effort with lever-type handles.
- ▶ Provide adequate covered space in front of the entrance for shelter and protection from adverse weather conditions.
- ▶ If the doors are automatic, provide an alternative entrance/exit which is not blocked in case of an emergency.
- ▶ Apply bright contrast marking on glass doors.

LOBBY

- ▶ Furnish waiting areas according to the needs of different users: provide benches, chairs, chairs with armrests, armchairs, tables of different height, and coffee tables with informational materials.
- ▶ Ensure adequate natural and artificial lighting.
- ▶ Provide play areas for children.
- ▶ Adapt the reception or a portion of the reception for convenient communication with people of short height, children, and visitors in wheelchairs.
- ▶ Provide guiding strips and icons which lead to elevators.
- ▶ Install a sound and light emergency alert system (for example, a fire alarm).
- ▶ Provide a clear navigation system throughout the facility.
- ▶ Provide a facility layout that shows the location of all functional areas and facilities (units, offices, toilets, etc.) in an accessible place; a tactile layout is desirable.
- ▶ Provide non-slippery floor surfaces with contrast and tactile guiding strips.
- ▶ Use warning cones.
- ▶ Provide adequate space in the cloakroom for clients with low mobility.

- ▶ Provide space for strollers.
- ▶ Provide drinking water.

STAIRS

- ▶ Construct stairs of appropriate depth, straight, with a rough surface, and without any ledges.
- ▶ Install stairs that are uniform in both width and height.
- ▶ Mark the first and last steps with a contrasting colour.
- ▶ Install handrails on both sides of the stairs.
- ▶ Provide proper natural and artificial lighting⁹.

CORRIDORS

- ▶ Provide clear signs showing the location of different areas and offices.
- ▶ Install signs with alternative ways of providing information (text, numbers, Braille, icons, pictures, and colourful symbols).
- ▶ Provide non-slippery floor surfaces.
- ▶ Install handrails along the walls.
- ▶ Provide warning and tactile guiding strips.
- ▶ Minimize noise.
- ▶ Provide proper natural and artificial lighting.

ELEVATORS

- ▶ Provide free space in front of elevators.
- ▶ Place call buttons on the right or between two elevators.
- ▶ Provide an adequate door width for wheelchair access.
- ▶ Mark buttons in Braille.
- ▶ Provide voice announcements for each floor.

⁹ DBN V.2.5-28-2006 “Natural and artificial lighting”

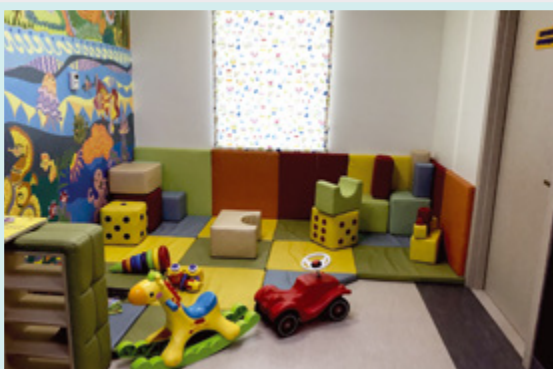


A low reception promotes Principle 1: Equitable Use, creating equal conditions for all clients, including children, those of low height, or persons using wheelchairs (Clinic "Dobrobut," Kyiv).



A spacious lobby and corridors promote mobility and accessibility for all visitors; waiting areas are tailored to the needs of different clients according to Principle 1: Equitable Use and Principle 7: Size and Space for Approach and Use (Children's Clinic "Dobrobut," Kyiv).

A kid's area creates a comfortable environment for all: it keeps children occupied during the waiting time and reduces the discomfort of others at the facility.



Into Sana Clinic, Kyiv



Children's Clinic "Dobrobut," Kyiv

An interior design that uses informational posters and drawings makes hospital visits more pleasant and helps reduce stress and anxiety for young visitors (*Children's Clinic "Dobrobut," Kyiv*).



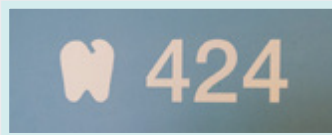
According to Principle 3: Simple and Intuitive Use, colour differentiation of walls, floor, doors, and furniture helps persons with vision impairments to navigate, attracts visitors' attention, and prevents falling and injury (*Into Sana Clinic, Odessa*).

Tactile and contrast guiding strips in corridors and the layout of the first floor reproduced in Braille promote Principle 4: Perceptible Information (*Kyiv Diagnostic Centre for Children*).





Bright contrast marking of glass doors ensures their visibility for clients with vision impairments and attracts the attention of all visitors and personnel, preventing injury, according to Principle 5: Tolerance for Error (*Children's Clinic "Dobrobut," Kyiv*).



Applying colour coding to different functional areas makes it easier for visitors to navigate the facility according to Principle 3: Simple and Intuitive Use (*Kyiv Diagnostic Centre for Children*).



The contrast between light switches and walls provides better visibility of their placement (*Children's Clinic "Dobrobut," Kyiv*).

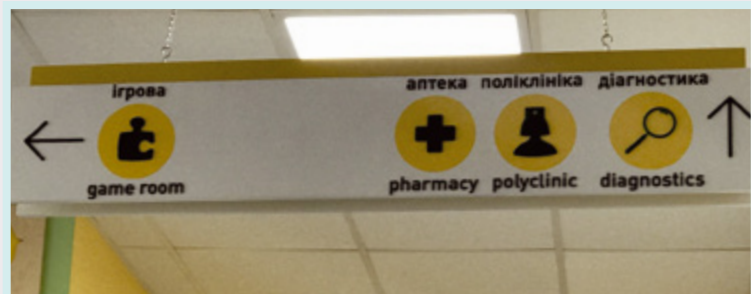


Colour guiding strips help facilitate easy navigation of the facility according to Principle 3: Simple and Intuitive Use (*Into Sana Clinic, Kyiv*).

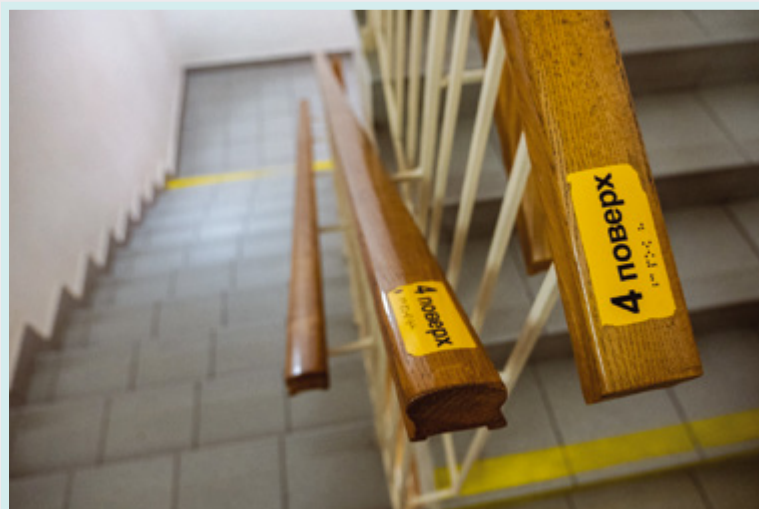
Information and direction signs with icons make finding the right room easier, even for those clients who do not understand the language of the country they are in, according to Principle 4: Perceptible Information.



Kyiv Diagnostic Centre for Children



Clinic "Dobrobut," Kyiv



Navigation signs on handrails use a contrasting colour combination (black on yellow), large font, and Braille, according to Principle 4: Perceptible Information (*Kyiv Diagnostic Centre for Children*).

OFFICES/ROOMS

- ▶ Ensure the door width complies with the effective building regulations and does not have a threshold.
- ▶ Provide space for a free approach to the door on both sides (from and to the office).
- ▶ Install doors which can be operated with minimal physical effort.
- ▶ Install lever-type handles on doors.
- ▶ Provide space for a free approach to couches, armchairs, and equipment.
- ▶ Provide adequate space for clients to be able to turn in a wheelchair in the office.
- ▶ Provide non-slippery floor surfaces.

BABY CHANGING STATIONS

- ▶ Provide baby changing rooms or corners, accessible regardless of the person's gender identity.

NURSING ROOMS

- ▶ Provide a comfortable seat.
- ▶ Install a baby changing station.
- ▶ Provide hooks, cabinets, or shelves for personal items.
- ▶ Mark the room with an appropriate icon.

TOILETS

- ▶ Ensure toilets comply with the effective building regulations and allow access for all users.
- ▶ Provide appropriate door width and sufficient space inside cubicles for all people, especially those using wheelchairs.

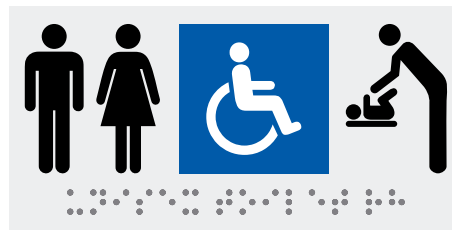
- ▶ Provide a universal room with toilets, washbasins with handrails, hygienic showers, changing couches (to change hygienic products or clothes), and baby changing stations, accessible regardless of the person's gender identity. Mark the doors with the International Symbol of Access and in Braille.
- ▶ Install sound and light emergency alert systems.
- ▶ Ensure the emergency button is accessible for people with different mobility levels and vision abilities.
- ▶ Ensure users of different height and those using wheelchairs can reach hooks and hangers.
- ▶ Provide holders for canes and crutches.
- ▶ Install sensor taps.
- ▶ Locate soap dispensers, mirrors with an adjustable height/angle, paper towel holders, hand dryers, and baby changing stations at a height that is convenient for different people including those using wheelchairs.
- ▶ Provide a toilet for children or a kid's toilet seat.
- ▶ Install low washbasins or provide stable stands.
- ▶ Provide baby holders.



Example of a gender-neutral icon for a baby changing room.



Example of an icon for a nursing room.



Example of an information sign for a universal toilet with the International Symbol of Access, according to Principle 1: Equitable Use and Principle 4: Perceptible Information.

EXAMPLE

ST OLAV'S HOSPITAL, NORWAY – ARCHITECTURE THAT INCORPORATES THE NEEDS OF EVERYONE

The hospital opened in 2010 and since then has gained international recognition for its innovative architecture that united nature and city, personnel and patients, focusing on patient needs. When people are ill, they are more vulnerable and can be psychologically and physically affected by the environment. The architects accounted for these two factors, combining the interior design of the hospital with the environment and focusing on human needs.

The fundamental concept of St. Olav's Hospital design is the provision of an accessible environment that emphasizes equitable use for visitors with disabilities, elderly women and men, other patients, relatives, and personnel, and strives to make the hospital area a pleasant and welcoming place for all visitors.

Addressed Elements of Universal Design:

Equitable Use: accessible entrances to the hospital and offices, handrails on the stairs, facilitating independence and mobility regardless of the type of disability, etc.

Flexibility in Use: workspaces for personnel with proper lighting, tables and chairs with adjustable height, chairs/armchairs with and without armrests in waiting areas, benches in rest areas around the hospital, well-suited for independent transfer from wheelchairs, etc.

Simple and Intuitive Use: clear and understandable routes, medical equipment accessible for people with low mobility, etc.

Perceptible Information: clear icons and signs on every floor, tactile guiding strips, colour marking of the floors, etc.

Low Physical Effort: lever-type door handles, beds with adjustable height, furniture on wheels for easy movement in hospital wards, etc.

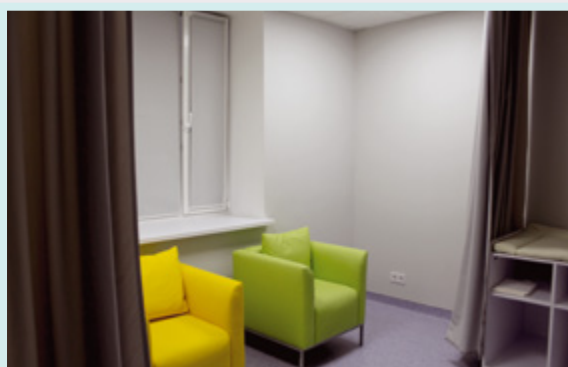
Size and Space for Approach and Use: adequate width of corridors, sufficient space in rest areas around the hospital for low mobility patients, etc.

Source: Inclusive Design – a people centered strategy for innovation: St. Olavs Hospital, <http://inclusivedesign.no/landscape-architecture/st-olavs-hospital-article175-260.html>

This spacious in-patient hospital unit room is an appropriate size and provides comfort for all, including patients using walkers or wheelchairs, children that need more space for games, assistants or visitors, and medical personnel who require free access to the bed and medical equipment (*Children's Clinic "Dobrobut," Kyiv*).



Spacious nursing and baby changing rooms are marked with the respective icon and equipped with appropriate furniture, according to Principle 7: Size and Space for Approach and Use (*Children's Clinic "Dobrobut," Kyiv*).





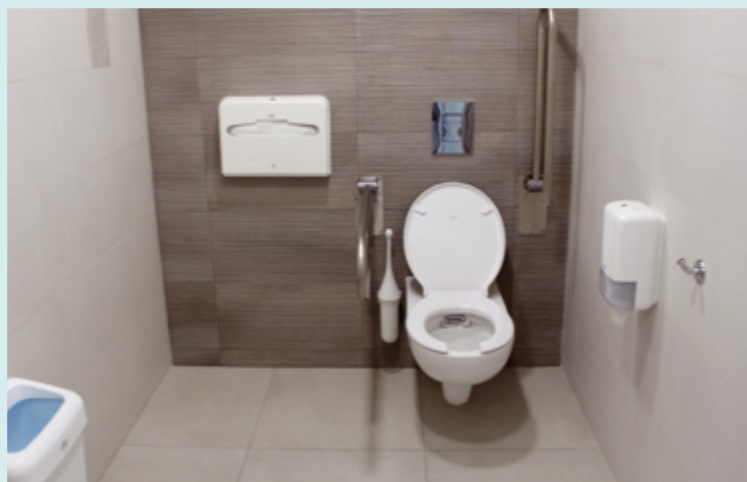
The equipment of this toilet is located at different heights, providing access for children of different ages and height, according to Principle 1: Equitable Use (*Children's Clinic "Dobrobut," Kyiv*).



A hanging baby seat in the bathroom provides comfort and minimises physical effort according to Principle 6.



Vertical hand dryers are comfortable to use for everyone, especially persons with disabilities, promoting Principle 1: Equitable Use and Principle 6: Low Physical Effort.



This spacious toilet is comfortable for clients using wheelchairs, walkers, or crutches, as well as for visitors with children, according to Principle 7: Size and Space for Approach and Use (*Children's Clinic "Dobrobut," Kyiv*).

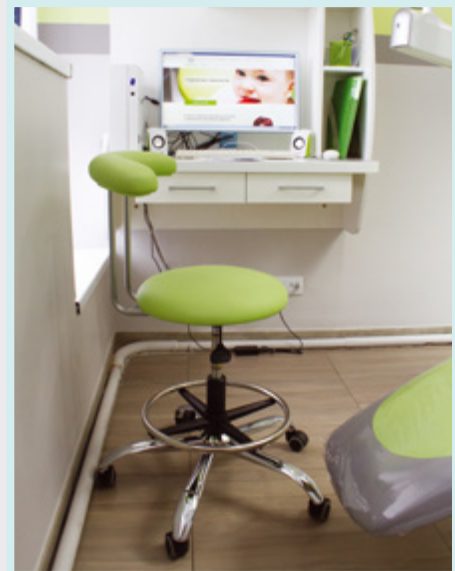
Equipment and Furniture

- ▶ Provide equipment, examination couches, and armchairs with adjustable height.
- ▶ Provide wheelchairs for clients with low mobility.
- ▶ Provide scales accessible for people with locomotor impairments, those with temporary lower body injuries, the elderly, pregnant women, and others (e.g. seated).
- ▶ Provide portable floor and ceiling lifts (if necessary).
- ▶ Provide items that support body posture (pillows, foam rubber wedges, and belts).
- ▶ Provide clear and understandable marking on equipment.
- ▶ Provide disposable items (robes, slippers, masks, diapers, wipes, etc.).
- ▶ Provide tables with adjustable height for personnel and clients.
- ▶ Provide chairs, armchairs, and benches with and without armrests for comfortable use by different groups.



This dental workstation is arranged according to Principle 6: Low Physical Effort. Intuitive and convenient placement of equipment and furniture and the use of equipment with foot pedals allow easy access to instruments and make it possible to adjust the seat to minimize the doctor's efforts, as well as to support the comfortable body position of the client (*Dental Clinic "Darling"*).

Workspaces for medical personnel are arranged according to Principle 2: Flexibility in Use and Principle 6: Low Physical Effort. The adjustment of the monitor angle and brightness, font size, lighting, and the height of a chair to match the user's height helps to avoid any additional effort, reduces eye tension and discomfort, and improves productivity (*Dental Clinic "Darling"*).



The equipment is programmed to display user tips, promoting Principle 5: Tolerance for Error (*Dental Clinic "Darling"*).



The special marking on toy containers prevents mistakes made by the personnel (*Children's Clinic "Dobrobut," Kyiv*).

Furniture of different sizes, with and without armrests, and tailored to the needs of different visitors promotes Principle 1: Equitable Use.



Children's Clinic "Dobrobut," Kyiv



Into Sana Clinic, Odessa

Easily transformable equipment helps to provide services to people with low mobility, promoting Principle 1: Equitable Use and reducing physical effort, according to Principle 6.



Scales for clients with low mobility



Equipment for transporting patients (Children's Clinic "Dobrobut," Kyiv)

Information, Communication, and Information & Communications Technology (ICT)

- ▶ Ensure the website is accessible for different users according to the Web Content Accessibility Guidelines¹⁰.
- ▶ Provide clients' medical records in formats which are recognized by screen readers for clients with vision impairments.
- ▶ Use plain language¹¹ (Appendix 1) for information on the website, announcements, and medical information.
- ▶ Provide client information in convenient formats (i.e. Braille, large print, plain language, and electronically) (Appendix 5).
- ▶ Maintain an electronic database of medical records.
- ▶ Ensure personnel of the facility follow the regulations for personal data processing safety and confidentiality.
- ▶ Install monitors to track queues and display messages.
- ▶ Use e-mail, mobile applications, Skype, and Viber to send medical reports, examination results, doctor's recommendations, and reminders about doctor's appointments.
- ▶ Use mobile applications which help clients plan their visit and which provide information about the healthcare facility, the services offered, the doctors available, pregnancy programs, pre- and postnatal care, "free" medication program, etc.
- ▶ Use mobile applications for cell phones or tablets that provide sign language interpretation or transform speech into text for communicating with clients with hearing impairments.
- ▶ Use software to optimize the managing process and keep an electronic database of clients' medical records.

¹⁰ Web Content Accessibility Guidelines 2.1. These Guidelines are an internationally recognized standard for accessible websites.
<https://www.w3.org/TR/WCAG21/>

¹¹ See Appendix

EXAMPLE**IN CASE OF EMERGENCY (ICE) STANDARD APPLICATION (USA) IS SUITABLE FOR EVERYONE, INCLUDING PERSONS WITH DISABILITIES**

ICE Standard is a mobile application for placing emergency health and patient contact information as the lock screen wallpaper of a smartphone. Having this information easily accessible for emergency personnel may be beneficial. This ability is especially helpful for parents and caregivers of persons with cognitive and communication impairments, dementia, seizure disorders, implanted medical devices, severe allergies, or other medical conditions where timely and focused treatment with the correct information is critical. Additionally, this feature may also be useful in the event of a disaster where the risk of separation from the caregivers is higher.

An interesting optional feature of ICE Standard is its ability to be connected directly to the Smart 911 national database. If the local emergency service participates in this public safety initiative, medical information can be integrated with an online “Safety Profile” for faster and more precise medical treatment. Additionally, there is another version of this mobile application called ICE Standard-Auto Edition which includes features developed specifically for automobile related emergencies. In this case, the mobile application generates an emergency message for help with the location of the accident to the 911 database. This type of mobile application can be useful for persons with disabilities using accessible vehicles with certain adaptations (for example, persons with physical disabilities, using an adapted vehicle that can be driven by using controls on a steering wheel) in the event of an accident.

Addressed Elements of Universal Design:

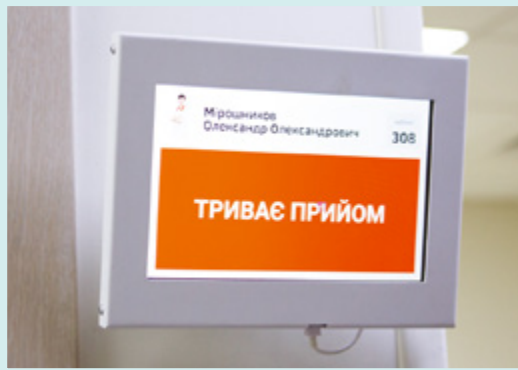
Equitable Use: a clear interface allows persons with disabilities to use this mobile application, especially in a situation of emergency. The application is supported by various screen readers which makes it accessible for persons with vision impairments. Persons with physical disabilities can also access it like any other application.

Low Physical Effort: little physical effort is required, which makes the application easier to use for persons with disabilities.

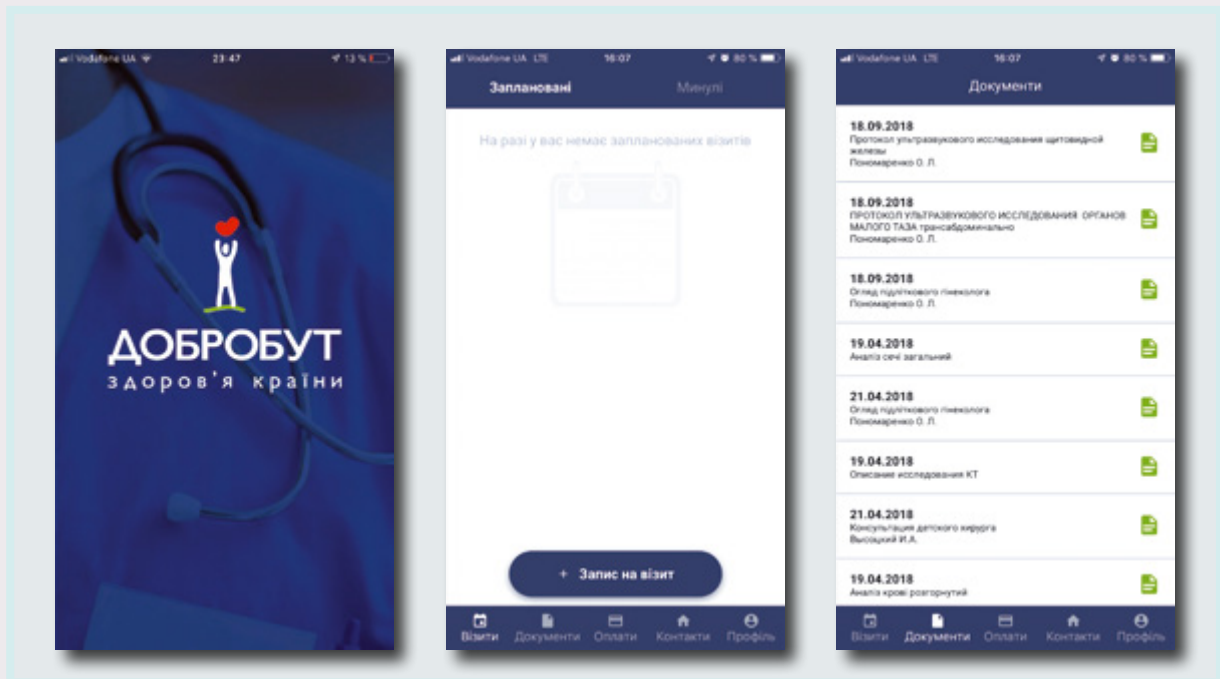
Tolerance for Error: the application is linked to the central 911 database which helps to reduce response time in case of an emergency and provides timely and accurate medical treatment in emergency situations.

Source: 11 APPs that can save your life in case of an emergency, New York Daily News, June 2016.
<http://www.nydailynews.com/news/world/10-apps-save-life-case-emergency-article-1.2438105>

The monitors in waiting areas provide information about the queue progress and doctors' availability, which reduces tension and improves the comfort of clients (*Into Sana Clinic, Kyiv*).



The mobile application of the *Clinic "Dobrobut"* provides contact information that enables the scheduling of doctor's appointment, organises visit schedules, and offers clients quick and convenient access to their medical records.



Services

- ▶ Provide accompaniment services for clients with low mobility, vision impairments, or intellectual disabilities (if necessary).
- ▶ Organise a queue management system in waiting rooms, indicating the time and providing sound, light, or text notifications.
- ▶ Provide an option for clients to be accompanied by guide dogs. Provide the relevant information on the website or by phone. Facility personnel should be given the necessary instructions, and information about permission should be provided in the lobby for all visitors (confirmation of a guide dog status required).
- ▶ Provide sign language interpretation services.
- ▶ Provide different ways of making a doctor's appointment: on the hospital's website, through a mobile application, by phone, in person at the reception, or through a terminal in the facility.
- ▶ Provide the option of attending consultations via Skype, Viber or by phone.
- ▶ Provide services at home (medical tests, operations, doctor's consultations, etc.).

EXAMPLE

WOODSTOCK GENERAL HOSPITAL – FOCUS ON THE PATIENTS

As a patient-centred facility, the hospital took upon itself the responsibility to react to unstable conditions in the field of healthcare, ensure the safety of patients by applying an ecological approach, provide high-quality and accessible programs and services, support qualified personnel, and cooperate with partners for a common cause. The hospital has a five-year strategic plan, a care philosophy comprised of a list of core values which personnel should follow, and an accessibility program. The task of the latter is to help hospital workers and patients with a disability, as well as their family members who require assistance, to avoid any barriers in the hospital.

In its mission, the hospital strives to provide accessible and high-quality care, respecting the honour and dignity of every person, including persons with disabilities. Great effort is made to create an accessible environment and services for all, applying the Principles of Universal Design. The initiatives of the hospital include an accessible website, information in different formats, providing wheelchairs, walkers, and crutches for use on hospital grounds, adaptive computer technology, client assistance service, etc. One of the recent initiatives of the hospital is introducing the possibility for people with vision impairments to visit the hospital with a guide dog, given it has proper certification and does not cause discomfort for other patients.

Addressed Elements of Universal Design:

Equitable use: level entrances to the hospital and offices, adequate door width, no thresholds, an accessible website that provides information about the services, the option to make a doctor's appointment and get advice by phone or on the Internet, etc.; information on accessibility for persons with disabilities; information about people in charge of providing detailed information by phone or e-mail.

Flexible Use: medical equipment and equipment for physical rehabilitation are tailored to the needs of different patients; proper natural and artificial lighting and colour coding of the floors.

Simple and Intuitive Use: clear signs and icons, tactile guiding strips, and information monitors for patients in the corridors.

Perceptible Information: clear instructions for patients and their family about different aspects of their hospital stay, such as how to rent a phone, how much to pay for a transport ticket to the hospital, how to arrange a celebration for a patient who is staying at a facility, how visitors should behave, etc.; clear and understandable instructions for personnel and volunteers on how to act in various situations.

Tolerance for Error: surgical safety checklist used before and during surgery, non-slippery floor surface, warning cones, call buttons, etc.

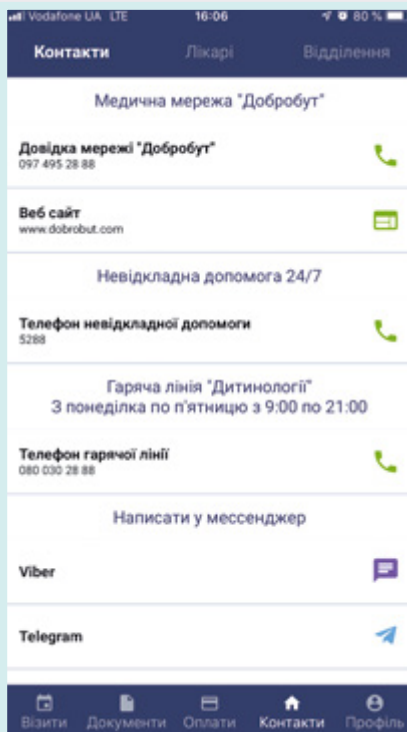
Low Physical Effort: lever-type door handles, automatic doors, a mobile application for assistance at home (if necessary), etc.

Size and Space for Approach and Use: adequate width of corridors and space in offices and waiting areas for improved mobility of patients using wheelchairs, accessible parking spaces for persons with disabilities, etc.

Source: Delivering Accessible Customer Service, Woodstock General Hospital, 2018, www.wgh.on.ca

The *Dental Clinic “Darling”* provides clear written instructions and operational protocols to minimize the mistakes made by medical personnel while disinfecting medical instruments.





Healthcare facilities offer different ways to make a doctor's appointment, such as on the website, through mobile applications, by phone, in person at the reception, or through terminals in the facility.

Terminal for making doctor's appointments (*Kyiv Diagnostic Centre for Children*).



An informational stand about the option to make a doctor's appointment online through the mobile application (*Clinic "Dobrobut"*).

6

COLOUR PHILOSOPHY IN UNIVERSAL DESIGN

COLOUR CAN BE USED IN UNIVERSAL DESIGN TO:

- Improve the aesthetics of the facility;
- Distinguish the facility from others;
- Facilitate navigation and identify specific areas;
- Organise information;
- Provide hints to facilitate decision-making.

When choosing colours, it is important to keep in mind the functional purpose of the area (waiting area, kids' area, doctor's office, physical therapy room, operation room, etc.).

Well-selected colours improve personnel's productivity, reduce stress, and provide the feeling of comfort.

Using a lot of different colours, especially bright ones, in one room may lead to disorientation, trigger nervousness and anxiety in visitors, or intensify fatigue of personnel. Using one colour creates a uniform environment..

RECOMMENDATIONS:

- ✓ The form and colour of safety signs and icons should comply with effective technical regulations and ISO standards.
- ✓ Use colour coding. The healthcare facility may make independent decisions concerning the colour coding of floors, rest areas, layout, and other elements, keeping in mind the functional purpose of the areas and signature colours of the facility.
- ✓ Consider natural and artificial lighting when choosing the colour for the walls.
- ✓ Use contrasting colours between walls and floors, walls and handrails, walls and doorways, doors and handles, and so on to improve visibility for persons with vision impairments.
- ✓ Mark interior design elements, such as pillars, glass doors, or partitions with bright contrasting colours to improve their visibility.

7

COMMUNICATING WITH CLIENTS

- ✓ Provide different ways of making a doctor's appointment, such as on the hospital's website or by phone. Provide the option of attending a consultation via Skype or Viber.
- ✓ Provide the opportunity to choose the means of communication (by phone, by email, and by feedback form on the website).
- ✓ Communicate and provide information to clients in a way that is convenient for them, according to their communication needs.
- ✓ Incorporate a system that informs healthcare facility personnel about clients' communication needs.
- ✓ Create an electronic database of clients' medical records.
- ✓ Monitor personnel's compliance with the procedures of data processing and confidentiality.
- ✓ Incorporate a telephone consultation system (preferably, 24-hour) which promptly connects patients with medical workers who can provide a quick consultation or assistance.

All clients of a healthcare facility should receive information they understand, and the communication support they require.

Healthcare facility administration should take steps to ensure that clients receive the required information in an accessible format and in a language they can understand:

- ✓ Identify clients' communication needs;
- ✓ Provide clear instructions to personnel concerning communication with clients in general and ways to consider their needs;
- ✓ Organise training to ensure personnel have the required communication skills.

Information should be given in plain language (Appendix 1) and in an accessible format according to the sensory or cognitive disabilities or abilities of clients and their relatives or accompanying persons. It is necessary to ask clients about their preferred means of communication and receiving information. This can be done when a client is making an appointment on the phone, visits the facility, or when a doctor is making a home visit. It is also

possible for a client to fill out a relevant form on a website. Appendix 4 offers an example of a questionnaire for the communication needs of a healthcare facility client.

Clients should be able to understand what personal information is collected, what it is for, and who has the access to it. Moreover, they should give their consent for the processing and dissemination of their personal data. Clients need to know what is stated in their medical records concerning their communication needs and the ways of meeting these needs.

The conversation between clients and medical personnel concerning communication needs should take place in a space which protects their privacy. Additional detail may be needed to precisely identify the patients' needs; therefore, more time may be needed for this conversation.

Information concerning modes of communication or additional communication needs of clients should be stated in their medical records. This can be done through the electronic database of the facility. If paper medical records are kept, special notes should be put on medical records and/or included in a database of the communication needs of clients. Information received from clients must be encoded (for an example of encoding, see Appendix 5). For personal data protection, access to data should be restricted. Information should be up to date and reliable; therefore, it needs to be constantly updated.

Effective communication in healthcare facilities depends on the skills of medical personnel. These skills determine the degree of personnel's understanding of patients' problems and the correctness of diagnoses. Subsequently, these skills will determine the degree of patients' understanding and adherence to the treatment plan which affects the quality and result of medical services.

Facility administration should make sure that medical personnel consider information about the acceptable means of communication with clients and adjust the ways of providing medical information accordingly.

The administration needs to make sure that personnel understand the communication needs and the respective ways of communicating with clients. It can be done through training, workshops, or discussions. It is the responsibility of the administration to organise training on communication with specific groups of patients (the elderly, children, and patients with low mobility, hearing, speech, vision, intellectual, psychological, or cognitive impairments). Personnel need to know the correct ways of providing help and ensuring the safety and effectiveness of the services provided.

It is important that clients have specific feedback channels to inform the administration about their communication with medical personnel, accessibility, timeliness, and the formats in which medical information is provided.

EXAMPLE**WHAT SHOULD A DOCTOR KNOW BEYOND THE DIAGNOSIS?**

Regardless of your patients' medical diagnoses, you need to know whether their disabilities might affect your ability to provide medical care. Questions you could ask:

How will I communicate with the patient? Can they speak/hear?
Will I be able to understand them? Is it necessary to invite a sign language interpreter? Do they use assistive devices for communication?

Will they understand what I say and how will I know whether they understand me? Is there a need for photos/images or video to help to explain the examination or procedure?
Will they be able to provide informed consent?

Will they be able to use the couch/armchair in my office?
Do we have any more accessible equipment at our facility?

To what extent is the patient sensitive to touch, pain, discomfort, or a new situation?

What can we do to prepare them and make the examination/procedure more comfortable?

Will their physical or sensory disabilities influence their ability to stand, lie still, or see what I am doing?

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APPENDICES

Appendix 1. Plain Language

A plain language format for documents requires:

- ✓ using simple words;
- ✓ using large print;
- ✓ using images;
- ✓ constructing short paragraphs;
- ✓ focusing on one topic per paragraph;
- ✓ limiting each sentence to only one idea.

Guidelines on the use of plain language in spoken communication:

- ✓ use everyday language, familiar to clients;
- ✓ construct short and understandable sentences;
- ✓ limit each sentence to only one idea;
- ✓ replace multisyllabic words with shorter synonyms;
- ✓ avoid using professional jargon, abbreviations pronounced as one word, technical terms, and details. If it is necessary to use an abbreviation, give the full version first;
- ✓ use active voice and avoid passive constructs. For example, *“Peter made a written request”* is better than *“A written request was made by Peter”*;
- ✓ provide simple instructions, for example, *“Please answer this question”*;
- ✓ help your interlocutor, be humane and polite.

Appendix 2. Guidelines on Information Signs, Stands, and Symbols Design

- ✓ The content of orientation and navigation signs should be understandable, clear, and concise.
- ✓ Avoid using all capital letters.
- ✓ Use typefaces which are easy to recognise and read without any decorative elements or shadows, non-italicized, and with a consistent font weight and letter height, for example, sans serif, Helvetic, Standard, Tahoma Univers, Gill Sans, Frutiger, Arial Cyr Bold, etc.
- ✓ The ratio of width to height of letters, numbers, and symbols should be between 3:5 and 1:1.
- ✓ Pay attention to the contrast ratio between the text and background. The following color combinations are the most accessible for visual perception: yellow – black, white – black, yellow – dark blue, white – dark blue, white – green, etc. These color combinations are reversible, which means the colors can be used for background or text.
- ✓ When choosing the font size, consider the reading distance (see Table); however, if a dark background is combined with a light-colored text, the recommended font size should be enlarged by 25%.
- ✓ All information signs should be located at a height of 120-160 cm which is convenient for visual perception. If the sign is placed at 2 m or higher, follow the guidelines on the symbol size, format, and color combination given in the table below.
- ✓ Make information signs (tables, stands, and symbols) matte and non-reflective.
- ✓ Make sure information signs are well-lit from all sides.

Table.
LETTER SIZE IN PROPORTION TO THE READING DISTANCE

MAXIMUM DISTANCE FROM USER TO TEXT	LETTER SIZE
30 m	52.0 cm – 104.0 cm
25 m	44.0 cm – 87.0 cm
20 m	35.0 cm – 70.0 cm
15 m	26.0 cm – 52.0 cm
10 m	17.0 cm – 35.0 cm
5 m	9.0 cm – 18.0 cm
2 m	3.5 cm – 7.0 cm
1 m	1.8 cm – 3.5 cm
30 cm	0.5 cm – 1.0 cm
25 cm	0.4 cm – 0.9 cm

Appendix 3. Guidelines on Website Accessibility

- ✓ Follow the Web Content Accessibility Guidelines¹².
- ✓ Provide all information on a webpage to avoid having users download additional files.
- ✓ Design a simple and logical page structure.
- ✓ Use an adaptive layout (also for the mobile version).
- ✓ When planning the page, focus not only on color, but also on color combinations, form, and text.
- ✓ Section the text with subheadings, images, and diagrams.
- ✓ Avoid putting too much information in one place.
- ✓ Use plain language for text.
- ✓ Use alternative ways of presenting information, such as text, audio, and video; however, one way should not exclude the others.
- ✓ Use video subtitles.
- ✓ Add descriptions to videos and images.
- ✓ Avoid creating the necessity for users to memorize the content of previous tabs.
- ✓ Use auto-fill, as users' spelling may not always be correct.
- ✓ Provide context for buttons and instructions.
- ✓ Allow users to choose the most convenient way of communication for them (by phone, email, and a feedback form).
- ✓ Enlarge clickable areas.
- ✓ Name the buttons.
- ✓ Use descriptive headings and buttons.
- ✓ Test the layout (i.e. make sure the font quality does not decrease if the size is changed and the website is accessible for screen readers).
- ✓ Place important information to the left or in the middle.

¹² Web Content Accessibility Guidelines 2.1. <https://www.w3.org/TR/WCAG21/>

Appendix 4. Communication Needs of a Health Facility Client Questionnaire

First and last name _____

Home address _____

Email _____

Telephone number _____

Information about the confidant *(if necessary)*

First and last name _____

Email _____

Telephone number _____

IDENTIFIED COMMUNICATION NEEDS

Filled in by the personnel after the answers are given

1. DO YOU HAVE HEARING IMPAIRMENTS?

NO ☐ YES ☐

1.1. If yes, specify your mode of communication:

- ☐ loud speech;
- ☐ hearing aid;
- ☐ lip reading;

- ☐ sign language;
- ☐ writing;
- ☐ assistive devices (smartphone, tablet, etc.);
- ☐ other (please specify)

1.2. To communicate with medical personnel, you require:

- ☐ a sign language interpreter;
- ☐ other (please specify)

2. DO YOU HAVE SPEECH IMPAIRMENTS?

NO ☐ YES ☐

2.1. If yes, specify your mode of communication:

- ☐ writing;
- ☐ assistive devices (smartphone, tablet, etc.);
- ☐ other (please specify)

3. DO YOU HAVE VISION IMPAIRMENTS?

NO ☐ YES ☐

3.1. If yes, do you need any of the written information:

- ☐ to be spoken;
- ☐ in large print;
- ☐ sent in an electronic format via email;
- ☐ other (please specify)

4. DO YOU HAVE MEMORY ISSUES?

NO ☐ YES ☐

5. DO YOU REQUIRE INFORMATION IN PLAIN LANGUAGE?

NO ☐ YES ☐

6. DO YOU NEED TO BE REMINDED ABOUT YOUR VISIT TO A HEALTH FACILITY?NO ☐ YES ☐**6.1. If yes, specify how:**

- ☐ send me an SMS;
- ☐ contact me by phone;
- ☐ send my confidant an SMS;
- ☐ contact my confidant by phone;
- ☐ other (please specify)

7. HOW WOULD YOU LIKE TO RECEIVE MEDICAL DOCUMENTS (REPORTS, EXAMINATION RESULTS, ETC.)?

- ☐ as a hard copy;
- ☐ as a hard copy in large print;
- ☐ by email;
- ☐ other (please specify)

8. SHOULD YOUR MEDICAL INFORMATION BE COPIED FOR YOUR CONFIDANT?NO ☐ YES ☐**8.1. If yes, specify how:**







- ☐ as an additional hard copy;
- ☐ by email;
- ☐ other (please specify)

9. DO YOU HAVE ANY OTHER REQUIREMENTS, RECOMMENDATIONS, OR WISHES CONCERNING COMMUNICATION WHICH ARE NOT MENTIONED ABOVE?NO ☐ YES ☐ (please list them below)

Appendix 5. Communication Needs of Clients

Clients with certain types of impairments (i.e. hearing, visual, speech, or cognitive impairments) and their confidants require special modes of communication and receiving information. To facilitate their identification by medical personnel, these communication needs should be stated in clients’ medical documentation, preferably in an encoded format.

Table.
EXAMPLES OF CLIENTS’ COMMUNICATION NEEDS AND THEIR ENCODING

Nº	COMMUNICATION NEEDS	EXAMPLES OF SYMBOLS	EXAMPLES OF ICONS
1.	Plain language	PL	
2.	Text in Braille	Br	
3.	Sign language translation	SL	
4.	Written communication	W	
5.	Information in large print	F	A A A
6.	Electronic messages	@	
7.	Copy all medical information through electronic messages for family members or other specified persons	@x2	

Joint Programme ‘Mainstreaming Policies and Services
for People with Disabilities in Ukraine

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M A N U A L

Edited by Olena Ivanova

Photo: Brandon Hartwig, Mariia Nedilko, Olena Ivanova,
Into Sana Clinic, Clinic “Dobrobut,” Dental Clinic “Darling”

UNIVERSAL DESIGN IN HEALTHCARE



ISBN 978-617-7627-14-1

