

Assessment of Equitable Use in the Parking and Entrance of a Typical General Hospital in Lagos, Nigeria.

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Abstract:

Equitable use, a key principle of universal design, aims to maximize usability for individuals with diverse abilities. It focuses on creating designs, products, and environments that are accessible and user-friendly for all individuals, eliminating barriers and promoting inclusivity. Hospitals are one of the buildings that accommodate several people with diverse abilities, however, people living with disabilities are denied access to quality healthcare because of their inability to access facilities in hospitals. The aim of this study was to assess accessible entrances and parking lots in Ayinke House, LASUTH (Lagos State University Teaching Hospital), a medical facility in Lagos State. The methodology adopted was case study approach and the physical infrastructures were assessed using standard Visual Research Method. Available parking spaces and entrances were accessed with a bid to determine their usability for PLWDs. The findings of the research indicate that while the entrances to Ayinke House are physically accessible, there is a notable absence of designated parking areas reserved for individuals with disabilities, leading to difficulties in finding suitable parking spots close to the entrances, exacerbating accessibility challenges. Moreover, the lack of parking reservations specifically allocated for people with disabilities further hinders their ability to access the facility. Additionally, inadequate signage for wayfinding and directions within the premises contributes to navigation difficulties, particularly for individuals with visual impairments or cognitive disabilities, highlighting the need for comprehensive improvements to enhance accessibility and promote inclusivity at Ayinke House.

Keywords: Accessibility, Entrance, Equitable Use, Parking, People with disability, Hospitals, Universal design.

I. INTRODUCTION

To enable persons with mobility limitations to use a building, an accessible entrance is necessary. Enhancing accessibility for people with disabilities will be necessary to provide architecture for all types of users (Basha-Jakupi, Morina, & Hasimja, 2023). Design approaches that promote inclusivity, such as universal design, advocate for catering to the requirements of the broadest audience possible, with the aim of acknowledging and accommodating human diversity. Inclusive design, as defined by the Convention on the Rights of Persons with Disabilities, involves the creation of products, procedures, environments, and services that, to the maximum extent feasible, are accessible to everyone without the need for adaptation or specific design (Boucherit, Berkouk, Bouziri, Masullo, & Maffei, 2022).

According to the Centre for Universal Design in 2007, Universal Design is characterized as the development of products and environments intended to be accessible to all individuals to the highest degree feasible, without requiring modification or specialized design (Piramanayagam, Seal, & More, 2019). The first principle of universal design, equitable

use, highlights the necessity for a design to be both practical and appealing to individuals with diverse abilities. This principle is fundamental to ensuring that a design not only meets the functional needs of its users but also upholds their dignity and rights (Singh & Saxena, 2023).

Equitable use in hospital buildings refers to designing and organizing the facilities in a way that ensures fair and inclusive access for every person, without regard to their physical abilities, age, or any other distinguishing features. The goal of equitable use in healthcare design is to create an environment where healthcare services are easily available and user-friendly for all individuals, promoting equal opportunities and eliminating barriers for diverse patient populations. Healthcare facility design has an impact regarding the quality of overall care provided. Good hospital and ward designs may lower stress levels, enhance treatment results, and boost staff and patient happiness (Miedema, Krabshuis, & Willekens, 2023). Before any user can have access to adequate health care facility, they must be able to access the building in question.

The three paramount challenges confronting today's rapidly developing global cities are parking, walking, and accessibility

(Mihigo & Lukenangula 2023). Even with the daily increase in these cities' car populations, many of them are still unable to adapt to these changes for a variety of reasons, including a lack of suitable technology (Mihigo & Lukenangula, 2023). In healthcare systems, proper space programming and allocation is required to ensure optimal and inclusive accessibility for all users, especially for people with disabilities (Adeboyejo, Kure, Onamade, Akintunde O., Gbolade, & Archibong, 2022).

Ayinke House is a specialized maternity hospital situated within the larger Lagos State University Teaching Hospital (LASUTH) complex in Ikeja, Lagos. As a dedicated facility for maternity services, Ayinke House fulfils a vital role in providing healthcare support to expectant mothers and ensuring the well-being of pregnant mothers and newborns during the process of giving birth. Being an integral part of the LASUTH medical complex, Ayinke House benefits from its association with a broader range of medical services and expertise, facilitating comprehensive care for pregnant women.

Situated in the bustling city of Lagos, Ayinke House stands as a significant healthcare institution contributing to maternal health in the region. Being part of the larger LASUTH framework positions Ayinke House within a network of medical resources, educational opportunities, and collaborative efforts aimed at advancing healthcare delivery in Lagos State. This strategic location underscores the hospital's commitment to serving the diverse healthcare needs of the local population and aligns with its role in contributing to medical education, research, and clinical services within the broader Lagos State University Teaching Hospital setting.



Figure 1: Ayinke House (Source: Authors' Field Work)

Under the oversight of the Lagos State government, Ayinke House is a medical facility that specializes in multiple medical fields that offers comprehensive maternity care as well as professional training for resident physicians and medical students in the State. It is the cornerstone of obstetric practices across the country and a stronghold for pre- and postnatal services, women's reproductive health care (Akinfenwa, 2019). Reconstruction on the facility started in 2016 and was completed in 2019.

Architectural design is a crucial aspect of healthcare systems in developing surroundings that are tailored to each patient's specific demands. Comfort, safety, and therapeutic value are given top priority in these settings, which are considerate of the requirements of people with disabilities and have a significant influence on staff productivity and patient recovery (Adeboyejo *et al.*, 2022; Jaušovec & Gabrovec, 2023).

This paper aims to access equitable use in the parking and entrance through case studying at Ayinke house which is located at Lagos State University Teaching Hospital (LASUTH), Lagos Nigeria through case studying and visual research methods and analysis.

II. LITERATURE REVIEW

Universal design and inclusion strategy's objective is to accommodate as many individuals as possible, irrespective of their age, gender, physical characteristics, cultural background, talents, or disabilities. The idea includes a number of quality aspects (social, sensorial-cognitive, physical-spatial, and security and privacy) as well as a number of requirements for navigation, comprehension, environmental considerations, well-being, and social inclusion (Mosca & Capolongo, 2020). Equitable use in buildings goes beyond ensuring resources and spaces are allocated fairly; it embodies a commitment to inclusivity and accessibility. This principle considers the distinct and varied necessities of users, spanning various age groups and individuals with disabilities (Maulana, Immaculata, Winandari, & Iskandar, 2022).

By prioritizing equitable use, the planning and conceptualization of a building ensures accessibility and usability for everyone, regardless of their physical abilities. Equitable use in universal design is the principle that emphasizes making designs accessible, practical, and appealing to a diverse range of individuals with varying abilities. It involves creating products, environments, or services that can be utilized by everyone without the need for specific adaptations or accommodations. The objective is to foster inclusivity, ensuring that all individuals, irrespective of their capacity or disabilities, can use and enjoy the design while upholding their dignity and rights throughout the design process.

Features such as clear pedestrian access, facilities catering to the elderly and those in wheelchairs, and budget-friendly amenities contribute to this goal (Stoeckel, 2004). Additionally, equitable use involves providing adaptable spaces that can evolve over time to accommodate various activities and unexpected uses (Memo, Wennink, & Krapp, 2016). The ultimate aim is to cultivate an environment where every user can participate on equal footing, with the freedom to define and shape their own experiences within the building (Vecchione, 2018). Adopting the equitable usage concept allows architects to ensure that their designs acknowledge the varied needs of users and facilitate the equal participation of all individuals in activities. This principle advocates for an inclusive design approach that acknowledges the diverse spectrum of human

abilities and upholds users' rights to inclusion (Singh & Saxena, 2023).

The concept of inclusive accessibility in design is guaranteeing that every individual, irrespective of their abilities, requirements, or disabilities, enjoys equal access to and can actively engage in the design and utilization of products, services, and environments (Ahmed, Muhammad, Abdulrahman, & Adebisi, 2022). It entails crafting designs that are convenient and easy to use for a diverse range of users, encompassing those with physical, sensory, and cognitive challenges. The objective of inclusive design is to eliminate barriers and ensure equitable opportunities for all individuals to interact with and derive benefits from the design. This includes considerations for visual accessibility, even within environments like hospital buildings (Commission for Architecture and the Built Environment., 2006).

Inclusive accessibility in health facilities is a fundamental aspect of ensuring equitable healthcare services for all individuals, regardless of their physical or cognitive abilities. The World Health Organization (WHO) has emphasized the importance of creating accessible healthcare environments to promote inclusivity. In their publication "Checklist of Essential Features of Age-friendly Health Care Facilities," the WHO outlines key considerations for healthcare facilities to enhance accessibility, including provisions for ramps, handrails, and accessible restroom facilities to accommodate people facing mobility difficulties (World Health Organization, 2007). Such features contribute to creating an inclusive healthcare setting that caters to the needs of diverse patient populations.

Accessible entrance is necessary for those with mobility issues to use a building (Fenley, 2017). According to research, more than one ramp at the entrance of any building is often required to handle the entire problem of accessibility, thus it is critical to understand how the building works and how people with disabilities should be accommodated (Basha-Jakupi *et al.*, 2023).

All structures should be constructed with the intention of ensuring safe accessibility to every floor through either stairs or ramps. The design and construction of stairs and ramps must adhere to established standards, facilitating safe and convenient passage. Additionally, these features should be strategically planned to enable all individuals to use them comfortably and safely, requiring minimal effort (Badawy, 2023). Everyone should be able to access the healthcare facility and its surroundings. The fundamental prerequisites for accessibility include the planning and development of solutions for the transit of pedestrians and the disabled, as well as the creation of parking spaces for emergency medical vehicles, public transportation, and fire and service vehicles (Güner, 2018).

Hospital architecture faces challenges in accessibility, including issues like unclear visual elements, crowded circulation spaces, ambiguous nodes, and inadequate or inappropriate facilities for different types of disabilities. These accessibility restrictions often result in the marginalization of individuals with disabilities. from public spaces, including public transportation (Jackson & Green, 2015). Accessible

parking pertains to specifically designated parking spaces that are specially created and designated for individuals with disabilities. These parking spots are strategically positioned to offer convenient and secure access to facilities and buildings for individuals facing mobility challenges. Traditionally, licenses given by local government officials combined with disabled parking have been provided to support the resulting reliance on private automobiles. Nonetheless, certain programs have evolved organically, with minimal to no input from individuals with impairments (Jackson & Green, 2015).

In the past few decades, literature on hospital design has shown a growing emphasis on the imperative to 'humanize' healthcare environments. In spite of the extensive endeavour toward achieving this design goal, there has been a notable absence of a comprehensive and in-depth definition or examination of the concept of 'humanizing' a space (Bates, 2018). A hospital is a specialized institution where healthcare professionals offer diagnostic, therapeutic, and preventive medical services to patients. Hospitals are equipped with medical staff, including doctors, nurses, and other healthcare professionals, as well as advanced medical technology and facilities for various medical treatments and procedures. Playing a vital role in the healthcare system, hospitals provide emergency care, surgery, rehabilitation, and various medical services to individuals with diverse health conditions and ailments.

Inclusive design involves creating products, services, and spaces that everyone, including those with special needs or from underserved communities, can easily access and use. It requires considering the needs and perspectives of all users throughout the design process to ensure that nobody is left out. The goal is to develop solutions that address challenges faced by minority groups, promoting diversity, equity, and inclusion in society (Boucherit *et al.*, 2022; Brankaert, 2022; Moreira da Silva, 2022; Morris & Boyle, 2022). Inclusive design, also denoted as universal design or design for all, represents a methodological approach within the realm of design and architecture characterized by the conscientious consideration of diverse user demographics, irrespective of age, abilities, or disabilities.

The primary aim of inclusive design is to create products, environments, and systems that promote fair use and advantages for individuals with diverse backgrounds and characteristics. In essence, it seeks to obviate impediments, promote universal accessibility, and contribute to the realization of an inclusive and egalitarian societal milieu. This paradigm extends beyond the mere accommodation of individuals with disabilities, aspiring to cultivate solutions that are cognizant of, and responsive to, the multifaceted needs and preferences of a broad and varied user base.

Key values in this approach include empathy, active participation, and collaboration with stakeholders, especially end-users, to create designs that are accessible and fair. In areas like healthcare, inclusive design is crucial, focusing on clients or patients' abilities and prioritizing their interests and needs (Garay-Rondero, Caratozzolo, Membrillo-Hernandez, & Busciantella-Ricci, 2022). By incorporating inclusive design

principles, designers and researchers contribute to building a society characterized by greater inclusivity and equity.

Accessibility primarily focuses on ensuring an equitable user experience for people with disabilities, aiming to eliminate discriminatory elements. The absence of accessibility creates obstacles for people with disabilities, limiting their access to resources, opportunities, and engagement in social and political activities (Panda & Kaur, 2023). People with disabilities are identified as those facing physical or mental challenges either from birth or acquired later in life, hindering their full participation in the community (Yakob, Mazlan, Abdullah, & Nasrudin, 2022).

The Disabilities Act plays a pivotal role in systematically fostering the inclusive integration of individuals with disabilities into the framework of Nigerian society. Its overarching objective is to meticulously ensure the realization and attainment of their constitutional rights, spanning critical domains like education and healthcare, thereby embodying a crucial step towards fostering inclusivity and equality within the nation (Etieyibo, 2020).

III. METHODOLOGY

This research engaged case study approach in assessing the inclusive accessibility of Ayinke House. The physical infrastructures such as the entrances, exits, parking etc were assessed using standard Visual Research Method. Visual research methods involve a collection of techniques that incorporate visual elements, such as maps, drawings, photographs, videos, and three-dimensional objects, into the research process (Christopher, 2021). The photographs taken were visually analysed.

IV. RESULTS

After careful observation and case studying, the following conclusions were drawn from the Assessment.

Pick-Up And Drop-Off

Hospital pick-up and drop-off points that are accessible are specially designed areas to accommodate individuals with different abilities. These designated areas typically include features like ramps, clear signage, and close proximity to hospital entrances. These accommodations aim to ensure a seamless and inclusive experience for all, particularly for those with mobility challenges or other accessibility requirements, when using transportation services at the hospital.

It was observed in the hospital that pedestrian walkways are defined in some area but other areas, they aren't defined and have been overrun by overgrown grass. Pedestrian walkway kerbs aren't sloped in a way that is accessible for wheel chair users.



Figure 2: Drop off and pick up area in drive way showing pedestrian walkway (Source: Authors' Field Work).



Figure 3: Pedestrian walkway (Source: Authors' Field Work).

Parking

Accessible parking in hospitals pertains to specially designated parking spaces created for individuals with disabilities. These parking areas are strategically positioned to offer convenient access to hospital entrances, particularly for those with mobility challenges. Marked with distinctive signage, these spaces are often wider to facilitate the use of wheelchair ramps and ensure easier entry and exit from vehicles. The objective is to promote equal access to healthcare facilities, making it more convenient for individuals with disabilities to park and access medical services.

The evaluation revealed a notable deficiency in the parking infrastructure at Ayinke House, specifically concerning the lack of defined parking spaces. Unlike structured and designated parking areas, the hospital currently relies on several open spaces where users park their vehicles. This absence of clearly defined parking spaces poses a considerable challenge,

particularly in terms of accessibility for individuals with disabilities.

The crucial aspect of this observation lies in the fact that without defined parking spaces, there is no provision for parking reserved specifically for people with disabilities. In conventional parking designs, marked and reserved spaces for individuals with disabilities are fundamental to ensuring equal access to healthcare facilities. These designated spaces typically include features such as wider areas, closer proximity to entrances, and accessibility to ramps, making it easier for individuals with mobility challenges to access the hospital.

The lack of defined parking spaces not only impacts the accessibility of the hospital but also creates potential difficulties for users, particularly those with disabilities. This issue underscores the importance of implementing clear parking guidelines, including the designation of spaces reserved for individuals with disabilities. By incorporating such features, Ayinke House can significantly enhance its accessibility, ensuring that individuals of all abilities can access medical services conveniently and safely.



Figure 4: Undefined parking area close to the entrance of Ayinke House (Source: Authors' Field Work).

The parking area at Ayinke House raises concerns due to its utilization of tyres for segmentation, as depicted in Figures 4. This method of separation, though evident, introduces a less-than-ideal approach to organizing parking spaces. The use of tyres, rather than more conventional and professional means, contributes to an overall lack of sophistication and professionalism in the parking infrastructure.

Instead of employing well-defined markings or signage, the reliance on tyres gives the parking area a makeshift and

haphazard appearance. The segmentation, while attempting to organize spaces, lacks the clarity and professionalism needed in a hospital setting. The visual effect is not only unimpressive but also potentially confusing for users seeking clear and well-delineated parking spaces.

Moreover, the use of tyres as a means of separation may be prone to wear and tear, further diminishing the overall aesthetic and functional quality of the parking area. This less-than-ideal approach could potentially lead to parking-related issues, with unclear boundaries and a lack of proper organization contributing to a subpar user experience within the hospital premises.



Figure 5: General alternative parking area (Source: Authors' Field Work)

In addition to the parking area at the entrance of Ayinke House, there exists an alternative general parking area, as depicted in Figure 5. However, this secondary parking facility faces similar issues as the primary one—the parking spaces are not clearly defined or labelled. This lack of delineation poses a notable challenge, especially regarding prioritizing individuals with disabilities, as there are no reserved parking spaces designated for them.

The absence of defined and labelled parking spaces diminishes the ability to allocate specific areas for people with disabilities. This deficiency contradicts established accessibility standards, where clearly marked spaces ensure equitable access to healthcare facilities. Without designated parking spaces, individuals with disabilities face increased difficulty in finding suitable and accessible parking, impeding their seamless entry into the hospital.



Figure 6: Image showing illegal parking along the road (Omoyele 2023)



Figure 7: Unauthorized parking on the road (Source Authors' Field Work).

Despite a significant expanse of land allocated for parking, the inadequacy of defined spaces contributes to a situation where users resort to parking along the road. This not only compromises the safety of pedestrians and drivers but also exacerbates congestion issues within the hospital premises. The lack of organization and clear demarcation in this alternative parking area highlights a crucial need for improvements in design and signage to create a safer, more accessible, and user-friendly parking environment at Ayinke House.

Entrance

An accessible entrance in hospitals refers to an entry point designed to accommodate individuals with disabilities. These entrances are equipped with features such as ramps, wide doors, and other accessibility aids to ensure easy and barrier-free access for people with mobility challenges or other impairments. The goal is to provide an inclusive and welcoming

entryway that allows individuals of all abilities to access healthcare facilities without facing obstacles.

The presence of ramps at the entrances of Ayinke House signifies a commendable effort toward enhancing accessibility for individuals with disabilities. These ramps are specifically designed with a gentle slope, making it feasible for people with disabilities to navigate them comfortably. The gentle slope is particularly beneficial, as it allows individuals with mobility challenges to support themselves while using the ramps. One safety risk is the lack of handrails on the ramps at the entrance.



Figure 8: Ramp with gentle slope (Source: Authors' Field Work).

One key advantage of these accessible entrances is that they cater not only to individuals with disabilities but also consider the needs of their caregivers. The design allows caregivers to guide individuals with disabilities easily, ensuring a smoother and more supportive transition into the healthcare facility.

In practical terms, the implementation of such accessible entrances acknowledges the diverse range of abilities among individuals accessing Ayinke House. It contributes to a more inclusive environment, promoting independence for those with disabilities and facilitating the role of caregivers in providing necessary assistance. These thoughtful design features exemplify a commitment to creating a healthcare facility that is considerate of the diverse needs of its users, reinforcing the principles of universal design and equitable access within the hospital premises.

Signage

Signage in hospital parking areas and entrances functions as visual aids to convey essential information to patients, visitors, and staff. Within parking spaces, the signage directs individuals to specific areas, including accessible parking and drop-off zones. Similarly, around entrances, signage assists in guiding people to different hospital departments, services, and facilities. Clear and well-designed signage in these areas enhances the overall accessibility and organization of the hospital premises, facilitating easy navigation for all.

The deficiency of signage denoting parking spaces and areas reserved for people with disabilities within the hospital premises presents a significant challenge to users, particularly individuals with disabilities. This shortage not only adds complexity to the process of locating designated parking spaces but also hinders the overall accessibility of the hospital.

Furthermore, the inadequacy of wayfinding signage compounds the issue, especially for individuals with disabilities who may require clearer guidance on general directions, basic movements, and the identification of entrances within the hospital. Effective wayfinding signage is essential for delivering vital information to users, aiding them in navigating the complex layout of the facility. The lack of such signage not only creates confusion but also poses a serious risk to the safety and well-being of individuals, including pedestrians.

This absence of clear signage not only impacts people with disabilities but extends its repercussions to the broader pedestrian community within the hospital premises. Without proper signage, individuals may struggle to find their way, leading to potential delays in accessing critical services, increased stress, and heightened safety concerns.

Addressing this issue by implementing clear and comprehensive signage is vital for promoting a safer and more accessible environment within the hospital. Clear signage not only facilitates the navigation of individuals with disabilities but ensures a user-friendly experience for all hospital visitors, fostering a safer and more inclusive healthcare facility.

V. CONCLUSION AND RECOMMENDATIONS

In conclusion, the findings of this study highlight a notable deficiency in the current hospital infrastructure, specifically in terms of insufficient signage and undefined parking spaces for individuals with disabilities. The research findings bring to light a substantial challenge that poses a threat to the accessibility and overall experience for patients, visitors, and staff members facing mobility or other disabilities. Despite the current implementation of ramps with gentle slopes at the entrances, the study suggests that there is considerable potential for enhancement.

While the entrances are notably accessible, indicating a positive step towards inclusivity, the findings underscore areas where further improvements could be made. This recognition of room for enhancement implies an opportunity to refine existing accessibility features or introduce additional measures that could better cater to the diverse needs of individuals with mobility challenges or disabilities.

By acknowledging these findings, there exists the potential to implement targeted improvements that would not only address the identified challenges but also contribute to a more inclusive and accommodating environment within the facility. This continuous commitment to enhancing accessibility reflects a proactive approach in ensuring that the healthcare facility

optimally serves the needs of all individuals, regardless of their physical capabilities or disabilities.

The presence of inadequate and unclear signage within the Ayinke House hospital premises significantly adds to the confusion and stress experienced by individuals trying to navigate the facility. This deficiency in signage not only hampers the ease of wayfinding but can also potentially result in delays in accessing critical care and essential services. Patients, visitors, and members of staff might encounter difficulties in locating specific departments, facilities, or services due to insufficient guidance, leading to a heightened level of frustration and anxiety.

Moreover, the issue of undefined parking spaces further compounds the challenges faced by disabled patients. The absence of clearly designated parking spaces catering to individuals with disabilities hinders their ability to conveniently access medical facilities. This barrier not only adds physical strain but also exacerbates the already challenging circumstances these individuals are likely to encounter. In a healthcare setting where time and accessibility are crucial, addressing these concerns becomes paramount to ensuring a more seamless and patient-friendly environment, where everyone, which includes people with disabilities, can navigate the premises with confidence and ease.

Addressing these issues is paramount to ensuring that hospitals provide optimal care and support for all individuals, including those with disabilities. Hospital administrations should prioritize the implementation of clear, comprehensive signage that caters to various needs, including visual, auditory, and cognitive impairments. Furthermore, delineating and defining parking spaces in adherence to accessibility standards is crucial for facilitating seamless access to healthcare facilities.

Effective solutions to the challenges related to signage and parking infrastructure in hospitals necessitate collaborative efforts among hospital administrations, healthcare professionals, and accessibility experts. The synergy of these stakeholders is crucial in identifying, planning, and implementing measures that will significantly enhance the overall accessibility and experience within the healthcare facility.

Collaboration with hospital administrations allows for a thorough comprehension of the facility's operational aspects, ensuring that proposed improvements align with the broader goals and strategies of the institution. Healthcare professionals contribute valuable insights into the specific needs and concerns of patients and staff, helping tailor solutions that directly address the unique challenges faced within a medical setting. Accessibility experts bring specialized knowledge to the table, ensuring that the proposed changes comply with industry standards and guidelines, promoting universal design principles that cater to a diverse range of abilities.

Investing in improvements in signage and parking infrastructure represents a commitment to creating a more inclusive environment. Clear, informative signage aids

navigation, reducing stress and confusion for individuals within the hospital premises. Well-defined and accessible parking spaces cater to the needs of disabled patients, ensuring convenient access to medical facilities.

By fostering collaboration and investing in these enhancements, hospitals not only improve the physical environment but also demonstrate a dedication to prioritizing the well-being and experience of all individuals accessing their healthcare services. This comprehensive approach fosters a more welcoming, efficient, and inclusive healthcare environment that aligns with the principles of patient-centred care and accessibility for all. The initiatives aimed at improving signage and parking infrastructure in healthcare institutions align closely with the principle of equitable use. Equitable use, in the context of design and accessibility, emphasizes creating environments and services that can be used by all individuals, regardless of their abilities or disabilities, on an equal basis.

In the case of hospital improvements, addressing signage challenges ensures that information is presented in a manner

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