

# Accessibility Barriers in Health Facilities of the South African Public Sector

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**Abstract:** The study seeks to propose a framework that may assist government to improve accessibility of health facilities in South African public sector. The public sector requires health care facilities that are readily accessible to serve every citizen. For instance, people in rural areas and urban areas, rich and poor should have equal access to health care facilities. Access to health care is a basic right enshrined in the constitution of the Republic of South Africa. Previous studies have shown that there is unequal access to health care service in South Africa. Most often than not, health care facilities are easily accessible to rich people and those in urban areas, while neglecting majority of poor people and those in rural areas. Unequal access to health facilities in South African public sector is attributed to various factors that include: poor infrastructure delivery planning, poor infrastructure delivery institutional arrangement and systems, long distances to health facilities, disruptions of projects during project construction, inadequate maintenance of health facilities and lack of community involvement and empowerment. In the absence of health care facilities citizens are at higher risk of contracting communicable diseases such as Covid-19 and losing their lives. The study will employ the qualitative research method and rely on the literature review to suggest the strategies that if implemented may improve accessibility of health facilities in South African public sector.

**Keywords:** Accessibility of health facilities, Health facilities, Infrastructure delivery, Public sector

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## 1. Introduction

The demand for healthcare facilities and services are constantly increasing in the 21<sup>st</sup> century because of population growth, increased life expectancies, and high standards of life (Van Weel & Kidd, 2018). Access to these healthcare facilities and services becomes paramount. Access to health care is a complex, universal concern and is identified as a basic human right (Kassai, van Weel, Flegg, Tong, Han, Noknoy, Dashtseren, Le An, Ng Chirk, Khoo, Noh, Lee, Howe & Goodyear, 2020). Globally, more than 1 billion people have little or no access to healthcare and 6.3 million children die each year, primarily from preventable diseases (McLaren, Ardington & Leibbrandt, 2013). Many countries including South Africa have developed and introduced health care services and policies with the aim of improving access to health care (deLooper & Lafortune, 2009). Access to health facilities enable patients to receive the right health care, at the right time, in the right place. Based on Penchansky and Thomas's (1981) theory, access is defined as the degree of fit between the consumer and the service; the better the fit, the better the access. Therefore, the

degree of fitness of the service rendered should be favourable on consumers of the service. According to this theory, access is optimized by accounting for each of the following dimensions: accessibility; availability; acceptability; affordability; and adequacy (or accommodation). The dimensions of access are independent but interrelated and each is important to assess the accomplishment of access. However, access is influenced by various factors. Accessibility of healthcare service influences use of the service, consumer satisfaction and system practice (Penchansky & Thomas, 1981).

South African government has made a considerable progress to increase the number and accessibility of health facilities, including in remote rural areas (McLaren, Ardington & Leibbrandt, 2013:1). In South African setting, particularly in rural areas many clinics are built 10 km away from the communities. As a result, accessibility of healthcare facilities and services, is affected by socioeconomic factors that include, poor infrastructure delivery planning, poor infrastructure delivery institutional arrangement and systems, long distances to health facilities, disruptions of projects during project construction,

inadequate maintenance of health facilities and lack of community involvement and empowerment. These factors among others affect majority of citizens who depend on public health care facilities to access their right to health care services (The South African Human Rights Commission SAHRC, n.d.). This result in some health facilities being available but not accessible.

Saurman, (2016) citing Donabedian (1972) underscore that "the proof of access is demonstrated in the use of the service, not simply the presence of a facility". Along with use, the dimensions of access address concerns of barriers to, relevance of and equity in access to health facilities. Therefore, government need to consider the dimensions of access when planning health care facilities and providing service thereof. Improving the accessibility of health care services can optimize the equity of resource allocation and fulfilment of community needs for health care services (Saurman, 2016:37). This is more important because firstly, large population (84%) access health services through public clinics and hospitals (McLaren, Ardington, Leibbrandt, 2013:1). Secondly, the

country's population distribution indicates that about 64.7% live in the provinces that are predominantly rural (Mahlathi & Dlamini, 2015) and characterised by limited resources and poor infrastructure which impede the ability of the community members to access quality health services. Accessibility of health facilities is arguably a thorny issue requiring immediate attention. Hence, this study sought to identifying accessibility barriers in health facilities of South African public sector. The paper is structured as follows: factors that affect accessibility of health facilities in South Africa, theoretical framework, problem statement, purpose and objectives of the study, literature review, conclusion and recommendations.

## 2. Theoretical Framework

This study is framed on five dimensions of access identified by Penchansky and Thomas (1981) as depicted in Table 1. The sixth dimension that may influence access was developed by Saurman (2016). The table outlines six dimensions of access, definitions and dimensions components including their examples.

**Table 1: The Dimensions of Access**

Dimension of access	Definition	Dimension Components and Examples
Accessibility	Location	An accessible service is within reasonable proximity to the consumer in terms of time and distance.
Availability	Supply and demand	An available service has sufficient services and resources to meet the volume and needs of the consumers and communities served.
Acceptability	Consumer perception	An acceptable service responds to the attitude of the provider and the consumer regarding characteristics of the service and social or cultural concerns. For instance, a patient's willingness to see a female doctor may determine whether a service is acceptable or not.
Affordability	Financial and incidental costs	Affordable services examine the direct costs for both the service provider and the consumer.
Adequacy (accommodation)	Organization	An adequate service is well organised to accept clients, and clients are able to use the services. Considerations of adequacy include hours of operation (after-hour services), referral or appointment systems, and facility structures (wheel chair access).
Awareness	Communication & information	A service maintains awareness through effective communication and information strategies with relevant users (clinicians, patients, the broader community), including consideration of context and health literacy.

Source: Penchansky and Thomas (1981)

### 3. Methodological Approach

This is a qualitative desktop study. The data collection techniques included literature reviews of existing academic research to gain a broad understanding of the research problem. The use of qualitative desktop study afforded researchers the quickest and cheapest way to investigate the research problem. Marutha (2020) used the same approach to investigate the landscaping of electronic system through the use of the functional patient's records management activities in South African public health sector.

### 4. Problem Statement

South Africa's Constitution (1996) stipulates that every citizen has the right to quality health services. Despite this constitutional right, Tana (2013:80) noted that the Government of South Africa appears to be unable to deliver equitable access to the quality health and care as promised. Therefore, South African government cannot claim to be providing equitable access to quality health care service to all patients because many people struggle to access health care facilities and are displeased with services thereof (Ned, Cloete & Mji, 2017:311). Organisations and Researchers alike concur that in South Africa Access to healthcare is a major concern and is influenced by socio-economic factors (The South African Human Rights Commission (SAHRC, n.d.; villagereach.org, 2021; McLaren, Ardington & Leibbrandt, 2013:1). Among the commonly cited and experienced by the public are: cleanliness, safety and security of staff and patients, long waiting times, staff attitudes, infection control and drug stock-outs (Republic of South Africa Department of Health, 2011:9) poor quality of care and old facilities. To optimise access to health facilities and services, it is necessary to identify the root causes or factors hindering access to health facilities and services. Hence, this study.

### 5. Purpose and Objectives of the Study

The purpose of the study was to investigate accessibility barriers in health facilities of South African public sector. The specific objectives were to identify factors hindering accessibility of health facilities of South African public sector and to suggest a framework that may assist government to improve accessibility of health facilities of South African public sector.

### 6. Literature Review

#### 6.1 Factors Hindering Accessibility of Health Facilities of South African Public Sector

There are different barriers influencing accessibility of health facilities in South African public sector. Some of the key factors include the following.

##### *6.1.1 Delays, Disruptions of Projects During Construction and Local Participation Empowerment Challenges*

The highest ranked contributors to time delays on projects across the globe are the shortage of skills, followed by poor planning and labor problems, constant design changes, unrealistic planning schedules, political risk, corruption and fraud (Rwelamila, 2018). Further delays emanate from local participation empowerment challenges. As part of affirmative action, the Preferential Procurement Regulations 2017, requires where possible on contracts having a value of R30 million or more, that a minimum 30% of the contract value on government construction contracts to be apportioned to local communities targeting designated groups, including black-owned small and medium-sized enterprises, (Watermeyer & Phillips, 2020:72). However, the regulation had some unintended consequences whereby a number of construction projects are disrupted and delayed (Sweis, Sweis, Abu Hammad & Shboul, 2008). For instance, the 30% requirement led to the emergence of business fora using violence or threats of violence to claim share of 30% without contributing or willing to contribute any skills or resources towards delivery of the project (Watermeyer & Phillips, 2020). These businesses demand that the contractors employ locals rather than skilled and experienced people from outside the area. Njobeni (2019) a Business Day journalist reported that a mega project of building the Mtentu bridge R1.63 billion in the Eastern Cape, was stopped on 22<sup>nd</sup> October 2018 due to threats of violence, community unrest and protests associated with the involvement and empowerment local people. These expectations cannot be ignored because some are valid and have to be met as they may affect the investor confidence, and tarnish the image of the construction industry and government. Organisations such as Human Sciences Research Council Report (2019) and SAFCEC and News & Press: Industry News (2019) found that the violent disruption of projects are often associated with political figures.

Apparently the problem of invading major construction sites started in KwaZulu-Natal (KZN), then spread to Gauteng before spreading to other provinces (Ryan, 2009). When acts of this nature occur, projects surpass initial time and cost budgets. This delays the construction of projects. Disruptions of projects during construction is compounded by the so-called service delivery protests that seen many governments infrastructure including health facilities being vandalised, thus affecting accessibility of health facilities. This is consistent with Seleka's (2020) observations that after service delivery protests many primary health-care facilities were not operational as health practitioners were unable to go to work because of barricaded roads to health facilities.

### 6.1.2 Inadequate Maintenance of Health Facilities

The existing hospital facilities are in a poor condition (Maphumulo & Bhengu, 2019). Apparently, buildings and building services have deteriorated due to a lack of proper maintenance and proper maintenance management. Similarly, Young (2016:20) stipulates that public healthcare facilities exhibit old and poorly maintained infrastructure. The South African Medical Association (2015:42) also agrees that the current physical state of public facilities in the country is disgraceful and not favourable to the delivery of quality health services. According to Dunjwa (2016:1) and the South African Medical Association (2015:36), most facilities had problems such as poor waste management, lack of cleanliness and poor maintenance of grounds and equipment. In a study by Nevhotalu (2016:138), patients and staff confirmed that some departments had an unacceptable physical environment (e.g. dirty toilets) for delivery of quality health care.

Rani et al. (2015) advises that government should do three types of maintenance, namely unplanned (corrective) or planned (preventive), and predictive maintenance approaches. Corrective maintenance (CM) occurs when a component is going out of function and needs intervention in the form of repair or replacement (Higgins et al., 2002). On the other hand, Preventive maintenance (PM) includes planning of periodical repairs or replacements at specified time intervals (Gross, 2002) such as monthly, quarterly or annually. In this regard, proactive maintenance may be used to monitor the symptoms and possible failure to make-in-advance maintenance interventions based on these predictive measures.

### 6.1.3 Poor Infrastructure Design and Planning

- Lack of proper planning and inadequate construction of health facilities affect the delivery of projects and accessibility thereof. Most of the contractors seem to fail to submit or produce construction programme or plan to the relevant authorities and client at early stage of the project. Some contractors deliver or submit unrealistic programme of health facilities to the engineer which delay the approval by the engineer as the programme needs to be adjusted (Sunjka & Jacob, 2013). According to Jones (2021), poor infrastructure design and planning of clinics and hospitals manifest in a form of incomplete drawings and poorly defined scope, design errors, unknown site conditions, poorly written contracts, unexpected increases in material costs, and poor project management. The major cause of poor infrastructure design and planning of health facilities are attributed to the following factors (APM Group, 2016).
- Lack of proper quality control mechanisms.
- Poor communication amongst the stakeholders. Political rush and unrealistic time scales (Watermeyer, 2019).
- Undermining of engineering skills in municipalities; (Mashwama, Mushatu & Aigbavboa, 2018).
- Lack of essential skills necessary for the management of projects (Watermeyer & Phillips, 2020:X) and lack of funds to hire advisors.

A questionnaire survey conducted by Abd El-Karim et al. (2015) with managers of sixteen Egyptian companies, found that poor engineering and design information as well as political unrest disturbs the timing and the cost of the projects including clinics and hospitals. In another study, aimed at assessing the causes and effects of delays and disruptions of health facilities in Tanzanian construction projects, Chileshe & Kikwasi (2014) established the root causes of disruptions and delays are inadequate experience, low capacity and capability of the local contractors and consultants as a result of a weak resource base (Chileshe & Kikwasi, 2014).

There is no doubt that poor project planning of health facilities leads to project failure as a result of poor project management (Mashwama, Mushatu & Aigbavboa, 2018; Aigbavboa & Thwala, 2014).

Poor design of these health facilities can impede service delivery and increase the cost thereof, frustrate and endanger users (Mashwama, Mushatu & Aigbavboa, 2018) and deny users access to health facilities. According to the Health Protection Agency (HPA) (2008), design and poor planning related problems in clinics and hospitals may manifest itself for example in a failure to include domestic rooms or sluice or clean utility rooms in the facility, or in the fitting of carpets instead of washable floor coverings in clinical areas. Poor planning and design of clinics and hospitals may affect their maintainability resulting in the health-care built environment being unsuitable for patient care (Quinn et al., 2015).

According to AECOM, (2018) clients can improve the design and delivery management of health facilities by adopting governance systems that incorporate oversight functions to assess aspects of value for money throughout the construction of health facility in a systematic and coordinated manner. Watermeyer (2018) suggests that clients can improve the design and delivery management of health facilities by establishing trust-based engagements of stakeholders throughout the process to avoid suboptimal solutions and unnecessary delays. Additionally, clients can improve the design and delivery management of health facilities by embracing the "soft" issues of project delivery such as leadership, organisational culture, mind sets, attitudes and behaviours of those functioning within the client delivery management team (McKinsey & Company, 2017).

#### **6.1.4 Distance and Transportation to Health Facilities**

In South Africa, the norms and standards of primary health service stipulate that citizens should not travel more than five (5) km for health services (Mahlo, 2007, cited in Dikotla, 2008). In consistent with this norm and standard, Ntsala & Dikotla (2019) noted that many people in South Africa particularly those in rural areas are faced with challenges of accessing health facilities due to geographic location. Similarly, McLaren, Ardington, Leibbrandt (2013:1) established that 90% of South Africans live within 7km of the nearest public clinic, and two-thirds live less than 2km away. However, 15% of Black African live more than 5km from the nearest facility, in contrast to only 7% of coloureds and 4% of whites. Organisations like Rural Health Information Hub, (2019) also noted that rural populations on African continent are more likely to have to travel

long distances to access healthcare services. In African continent, the average distance that patients travel to access health facility is between 7km-21km (Blandford, Kumar, Luo & MacEachren, 2012). As a result, citizens incur travelling costs, and time spent travelling. Additionally, the problem is exacerbated by the lack of reliable transportation to health facilities particularly in rural areas where many roads are still non-paved. Access to health facilities becomes challenging without reliable public or private transportation to health facilities.

#### **6.2 Suggested Course Correction for Improving Accessibility of Health Facilities**

It is clear that the identified barriers have adverse impact on accessibility of health facilities. Delays and disruptions in construction projects bring about dissatisfaction to all involved parties (Aziz, 2013). To the client, delay and disruption is regarded as loss of returns resulting from deficiency in the production facilities and rentable space or a dependence on existing facilities. To the contractor, delay and disruption extends the project life span, increase costs in terms of material and labour (Assaf & Al-Hejji, 2006). Reyneke (2018:4) concurs that delay to Practical Completion and/or brings about proven additional costs. The poor condition of health facilities can impact on government's ability to provide health services as people may choose not to use such facilities. It is worth noting that the maintenance problems with respect to government hospitals are not unique to health facilities South Africa (Malakoane, Heunis, Chikobvu, Kigozi & Kruger, 2020). Similar problems are evident in other parts of the world (Manyazewal, Oosthuizen & Matlakala, 2016) and in other South African government departments (Malakoane, Heunis, Chikobvu, Kigozi & Kruger, 2020). Poor planning and design in health facilities may affect the quality of health care service and the image of the government. Therefore, those appointed to management positions should have professional expertise and sufficient technical knowledge, along with relevant management experience in the construction industry. Although, health services are provided free of charge, monetary and time costs of travel to health facilities pose a major barrier for vulnerable group, leading to overall poorer health (McLaren, Ardington & Leibbrandt, 2013:1). To improve accessibility of health care service, the identified barriers should be overcome. Therefore, a course of correction is required. As such, the authors suggest the

**Table 2: Course Correction for Improving Accessibility of Health Facilities**

Factors Affecting Accessibility of Health Facilities	Possible Solution
Disruptions of projects during project construction	Construction procurement factoring local content in terms of local contractors and sourcing of materials
Inadequate maintenance of Health Facilities and lack of community involvement and empowerment	<p>Recruit local semi-skilled labourers in various trades to do maintenance of health facilities whilst training them for certification in Recognition of Prior learning and at the same time creating jobs</p> <p>Improve facilities for informal trading around health facilities. Raise awareness and understanding on Preferential Procurement Regulations</p>
Poor infrastructure delivery design and planning	Integrated planning by all spheres of government such as improving access roads to Health Facilities through partnership with local government
Poor infrastructure delivery institutional arrangement and systems	Adhere to IDMS (Infrastructure Delivery Management System) and strengthen Institutional Protocols among key partners: Public Works, Roads and Infrastructure, Treasury and Health
Distance and transportation to health facilities	Rural development should be intensified by increasing a number of health facilities

Source: Researchers (2021)

following course correction to promote equitable access, as shown in Table 2.

Communities wherein construction of health facilities takes place are an important stakeholder to ensure there are no disruptions to the works delivered. The level of recognition of community participation by government and developers will determine the extent at which the construction shall proceed with less or no disruptions at all. The Preferential Procurement Regulations of 2017 on Local Content allow for among others designation of specific materials to be provided by local suppliers as condition for appointment of a contractor.

Any facility is as good as its upkeep. The Government Immovable Asset Management Act of 2007, (GIAMA) lays procedures and value chain for maintenance of properties. Maintenance is one of viable means to create sustainable jobs coupled with empowerment of communities. A Culture of maintenance should be developed, including strategy to identify semi-skilled members of communities in various trades and thus develop a database for their appointment whenever maintenance needs to be conducted. At the same time such semi-skilled labourers must be trained to obtain particular trade qualifications as part of vocational skills development.

Integrated planning, collaboration and inter-sphere cooperation is crucial to realise timeous infrastructure delivery. Municipalities should identify their infrastructure requirements and factor them into Integrated Development Plans (IDPS) and as such find their way into the Provincial Health Departments who will then accordingly submit such plans in time to the Provincial Public Works Department for implementation. The important matter here is that such an aligned planning should be informed by the needs at local government level than a top-down approach and all indications of infrastructure required must reach an implementing department which is public works timeously (the standard time is two years before implementation) for proper planning. In terms of long distances and transportation to health facilities, government should consider building health facilities reasonably close to communities as required by norms and standard of the Department of Health.

The rollout of health facilities has to take into consideration issues of informal economy and local economic development. When planning such constructions there have to be clearly demarcated informal trading areas that will empower youth, women and people living with disability as designated groups.

In the end, the biggest enabler will be when organisational structures of public works departments align and comply to the Infrastructure Management Delivery System of government (IDMS), developed by Department of Treasury in 2012. The IDMS advocates for integration and factoring in of all systems, processes, procedures in an interrelated manner to provide workflow for delivery of projects.

## 7. Conclusion

It is clear that the South African government is unable to deliver equitable access to healthcare service as promised (Tana, 2013:80) because many patients are displeased with health care service delivery and denied access to health facilities. Ned, Cloete & Mji (2017:311) confirm that South Africa's health outcomes remains below what is anticipated and expected. This is evidenced by media reports. In one incident, it was reported that some patients developed complications, and in some cases died, because they were denied access to healthcare service. The Sunday Tribune (08 March 2015:2) reported a 35-year-old woman passed away in tertiary hospital of KwaZulu-Natal after she was allegedly turned away from the hospital despite being gravely ill. Kama (2017:2) reported the case of a 1-year-old baby who died on his grandmother's back after they were turned away from three different healthcare facilities in one of the townships in Cape Town. In another incident in the same township, a teenager gave birth on the pavement outside the gates of a health facility because she was denied access (Kama, 2017:2). In conclusion, the risks involved in a construction works project should be dealt with at the start of the planning of the project and should be allocated to the party most suited to be able to manage the project from the beginning to the end (Reyneke, 2018:3). Finally, the capacity to deliver infrastructure projects efficiently, effectively and economically can be achieved by sharing best practices and lessons learned from successful and unsuccessful projects.

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