

POLICY **Brief**

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Ministry of Health

Optimizing Utilization of Health Infrastructure in Achieving Universal Health Coverage

Insights from the KHFA 2018/2019

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Executive Statement

Universal Health Coverage (UHC) is one of the top priority agendas adopted by the Kenyan government with the goal of ensuring that by 2022 all those living in Kenya should be able to access quality healthcare without financial burden. This calls for comprehensive, effective, and efficient health infrastructure development. Good quality health infrastructure makes it possible to easily link people to health facilities and access to quality healthcare services.

The KHFA 2018/19 gives some insights into the Kenyan health infrastructure based on some indicators such as facility density and bed density, adherence to norms and standards, among others. National health facility density is at 2.2 per 10000 population with geographical disparities between counties, inpatient bed density at 13.3 per 10000 population and bed occupancy rate being at 46% but a variance between counties. From the findings, it is necessary to optimize existing infrastructure to contribute to the achievement of universal health coverage (UHC).

Introduction

Health infrastructure is the core foundation that supports the planning, execution/delivery and evaluation of health activities which is geared towards the protection and improvement of health care services. Health infrastructure which consists of buildings, equipment, transport and information & communication technology (ICT), has a vital and direct contribution to improving health outcomes, (Ministry of Health, Uganda, 2020).

Health infrastructure and UHC

The World Bank (2015), states that in implementing universal health coverage, a country's government should prioritize the provision of health infrastructure and access to health services. It further suggests that well-designed and funded health outcome programs will not show results if they are not supported by the provision of well-organized health infrastructure.

Devolution and County Initiative

The Kenya Constitution 2010 provides the overarching legal framework to ensure a comprehensive rights-based approach to health services and forms the basis upon which health services are organized and therefore informs planning and reporting. The fourth schedule assigns health functions between the County and National Governments. While County Governments manage the county Health facilities, National government functions include policy formulation, regulation and standards, capacity building and management of National referral Hospitals and other health semi-autonomous government agencies.

Since devolution, there is evidence from a summary report of counties APR 2019/19 of large investment in health infrastructure by counties. Namely construction of maternity theatres in some sub county hospitals, renovation of health facilities (expansion of inpatient facilities and upgrading of dispensaries), establishment of newborn units and wards, and construction of regional laboratories and facilities to improve access to services (Ministry of Health, 2020).

National Level Initiative

The Government of Kenya established the equalization fund to provide basic infrastructural services to marginalized areas to enhance quality that is generally enjoyed by the rest of the nation. According to the Annual Performance Review 2018/2019, the Health sector implements a total of 84 equalization fund projects in a number of marginalized counties.

The projects range from construction, upgrading and equipping health facilities as well as putting up medical training colleges (Ministry of Health, 2020).

The Ministry also finalized the health infrastructure norms and standards 2017 which lays down the guidelines for service delivery, design, construction, equipping and staffing of health facilities. The norms and standards are also used to facilitate accreditation, licensing and autonomy at health facilities.

Problem

Utilization

Table 1 highlights some health infrastructure indicators against the global recommendation and Country targets. Despite the achieved number of health facilities per 10,000 population, there are some imbalances in geographical distribution. In fact, there were 14 counties that were below the national average of 2 health facilities per 10,000 population at the time of the facility assessment, 2018 (Ministry of Health, 2019). Although the country achieved the targeted facility density, there still remains low inpatient density at 13.3 beds per 10,000 population which is below the targeted 25 and the global average for lower middle-income countries of 18. Further, the utilization of low bed density, or the bed occupancy rate stands at 46% against the targeted 80%. This is despite the high burden of both communicable and non-communicable diseases indicating that both demand and utilization is wanting and has room for improvement.

Adherence Norms and standards

In addition to inadequate utilization, there exists a challenge in adherence to the health infrastructure norms and standards especially for public facilities which have old and dilapidated infrastructure as reported by APR, 2017/18 (Ministry of Health, 2019). Although the norms and standards were made available in 2017, only 17% of health facilities were complying with health infrastructure norms and standards during the time of the study against the global target of 100% as shown in Table 1. This alludes to the fact that although there may be quality norms, standards and guidelines in existence, the implementation rate may be low. Therefore, dissemination and awareness creation efforts to counties should be enhanced with every policy, norms and standards and guideline developed. In fact, it should be part and parcel of the cycle of the policy/guideline.

Table 1. Health Infrastructure Indicators for Kenya

Health Infrastructure	2018/19	Source	WHO Recommended
# of facilities per 10,000 population	2.2	KHFA 2018	2
# of hospital beds per 10,000 population	13.3	KHFA 2018	25
% Population living within 5 km radius to a health facility	75	APR 2018/19	100
Proportion of health facilities complying with health infrastructure norms and standards	17	APR 2018/19	100
Maternity bed density per 1,000 pregnant women	13.3	KHFA 2018	10
Inpatient bed occupancy rate	46	KHFA 2018	80
Proportion of health facilities with Electronic Health Records	16	APR2018/19	100 (Kenya Country Target)
% of primary facilities with internet connectivity	22	APR 2018/19	100 (Kenya Country Target)

Call to Action

This policy brief, therefore, aims to shed light on the country's health infrastructure utilization as well as facility adherence to the existing norms and standards for the purpose of providing policy direction for quality health care services thus contributing to the achievement of UHC.

Methodology

This policy brief uses findings from the Kenya Harmonized Health Facilities Assessment (KHFA) 2018/19, as well as evidence from review on documents such as Annual health sector performance report and the joint health facilities assessment reports. Publications on health infrastructure were also used to collaborate the findings. The KHFA assessment entailed a comprehensive study of availability and readiness of health facilities in Kenya to provide services using a modular approach. The modules applied included: Availability, Readiness, Management & finance, Quality of care and Community health systems. The KHFA 2018 assessed 2,980 facilities out of the 10,535 health facilities in the Kenya Health Master Facility List (KHMFL) as the sampling frame for the survey to ensure a representative sample for each of the 47 counties. The sample consisted of all types of health facilities (dispensary, medical clinics, health centres, primary hospitals, and secondary hospitals) and all managing authorities (public, private, FBO/NGOs).

In health infrastructure the KHFA assessment answered the status of health infrastructure at county and national level. A standard set of data was collected from each facility and management unit based on a pre-designed questionnaire that collected three sets of information based on: facility density, inpatient bed density, Inpatient bed occupancy rate and Maternity bed density.

Facility density is primarily an indicator of access to outpatient services, inpatient bed density provides information on access to inpatient services and maternity bed density provides information on delivery access services. In addition, a consistent and reliable health infrastructure facilitates access to health care and emergency services across the country, hence improving clinical outcomes. The interrelated components of the health infrastructure, medical devices, ICT and transport have the outputs of expanding and improving physical infrastructure.

Results & Conclusions

The existence of health infrastructure is a collaboration between the national, county and other stakeholders with the objective of optimising health infrastructure in achieving UHC. This policy brief used findings from KHFA together with other reports such as the Annual Performance Review 2017/18.

Facility Density

There has been a progressive improvement on the facility density over the previous years. The average national health facility density is 2.2 per 10,000 population which is slightly above the target of 2 per 10,000 population. (2018, KHFA). However, it is noted that there are geographical disparities with 33 (70%) counties having health facility densities of 2 per 10,000 population and above apart from Nandi, Kwale, Uasin Gishu, Nairobi, Busia, Bomet, Trans Nzoia, Kakamega, Narok, Vihiga, Wajir, Kisii, Bungoma and Mandera Counties with facility density of below 2 per 10,000 population.

Inpatient bed density

Nationally, the Inpatient Bed-density is at 13.3 beds per 10,000 population which was below the WHO recommended target of 25 and the global average for lower-middle-income countries of 18 (KHFA,2018).



There is a wide variance between counties on inpatient bed density with 10 counties (Isiolo, Embu, Kisumu, Nyeri, Tharaka-Nithi, Migori, Samburu, Kericho, Kirinyaga and Marsabit) found to have inpatient bed density of 18 beds per 10,000 population and above. However, the rest had an inpatient bed capacity of fewer than 18 beds per 10,000 population such as Wajir and Kwale Counties which recorded the lowest inpatient bed capacity of 5.3 beds per 10,000 population. Only Isiolo County surpassed the WHO recommendation with 29.6 beds per 10,000.

Inpatient Bed Occupancy Rate

The national average inpatient bed occupancy rate (46%) is below the set target of 80%. However, there is a variance between counties in inpatient bed occupancy rates. Kirinyaga County had the highest and was the only county to have reached the set target of 80% while counties such as Siaya (14%), Homabay (14%), Samburu (8%) and Mandera (5%) are among the counties with the lowest bed occupancy rate (KHFA, 2018).

Compliance to Norms and Standard

The Ministry finalized the health infrastructure norms and standards 2017/18 which lays down the guides for service delivery, design, construction, equipping and staffing of health facilities. Most of the existing facilities (83%) do not conform to the health infrastructure norms and standards with respect to the country's expected infrastructure and equipment. These norms and standards are also used to facilitate accreditation, licensing and autonomy at health facilities. The Ministry needs to develop a dashboard which will be used to monitor the adherence to the norms and standards for infrastructure with the bear minimum for each facility as per the Kenya health master facility list (APR 2017/18, Ministry of Health)

Conclusion

While great strides have been made in increasing of facility density, the low bed occupancy rate of the already low bed density depicts that there are still some challenges in the utilization of health infrastructure.

Moreover, most health infrastructures are not compliant with the set norms and standards. The low compliance rate means that there is low optimization of the facilities hence negatively affecting the general quality of services in the country. Therefore, there is a need to optimize existing infrastructure thus contributing to the achievement of universal health coverage (UHC).

Recommendations

Based on the results, the policy brief presents the following recommendations:

1. Ensure that existing health facilities are adequately equipped in line with the existing norms and standards through proper dissemination and implementation of the standards. This will result in both demand and supply of services.
 - (a) Inpatient beds
 - (b) ICT (both hardware and software)
 - (c) Ambulance and utility vehicles
 - (d) Basic amenities (water and power)
2. Ministry of Health to collaborate with the Ministry of ICT to increase fibre connectivity to health facilities, increase the cover of Local Area Network to health facilities and design and develop a Hospital Management Information System.
3. The Health sector to mobilize the private sector through public private partnerships to counter budgetary constraints that the government faces frequently while implementing different healthcare plans and schemes.

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