

Analysis of Healthcare Accessibility in Africa

Total Population

11M

Total Facilities

2000

Population per Facility

5.30K

Total No. of Doctors

21K

Facilities per 1000 People

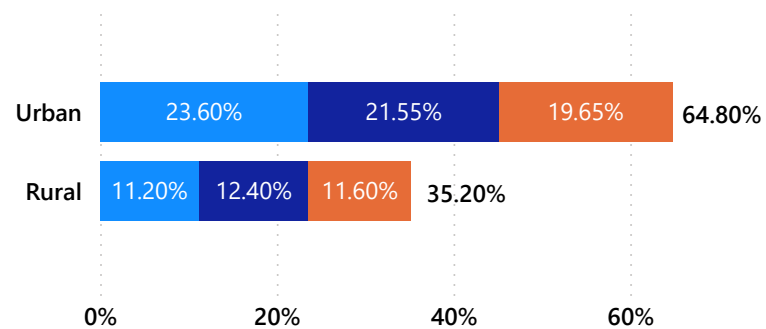
0.19

Doctor to Pop. Ratio

1.99

Healthcare Facility Distribution in Urban vs. Rural Areas

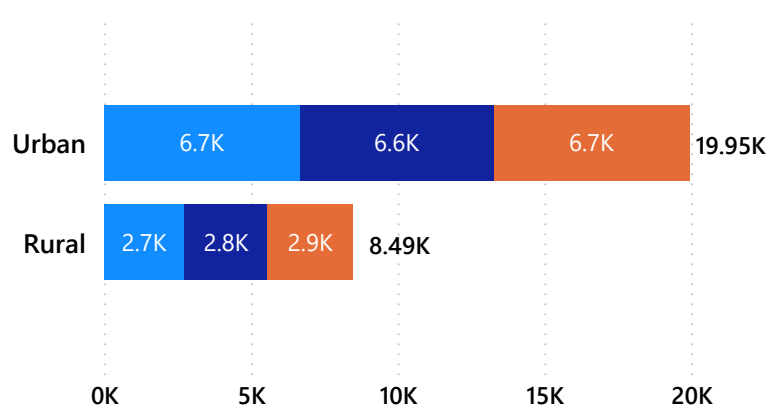
Facility Type ● Clinic ● Health Center ● Hospital



Facility Type	No. of Facility	Population	Pop. Per Facility
Clinic	696	4M	5,412.21
Hospital	625	3M	5,274.60
Health Center	679	4M	5,223.02

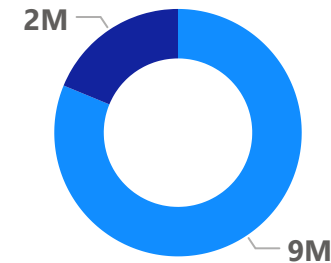
Population Per Healthcare Facility: Urban vs. Rural

Facility Type ● Clinic ● Health Center ● Hospital

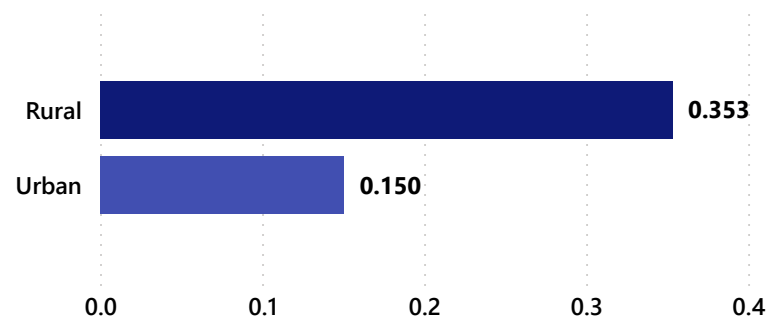


Population of Urban and Rural Areas

Area ● Urban ● Rural

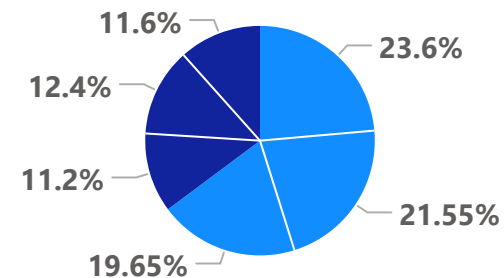


Availability of Healthcare Facility: Urban vs Rural



Percentage of Facilities in Urban and Rural Areas

Area ● Urban ● Rural



Facility Type

Clinic

Health Center

Hospital

Distribution Area

Rural

Urban

Key Insights

- Population Distribution:** There are 11 million total population of which 9 million of this population are in urban areas while 2 million of the population are in rural areas.
- Urban vs. Rural Facility Distribution:** Urban areas have a higher percentage of healthcare facilities compared to rural areas. Clinics dominate urban settings while health centers dominate rural areas.
- Population Per Facility:** Urban areas have an average of 6.7K - 6.6K people per facility, whereas rural areas range from 2.7K - 4.9K people per facility, suggesting uneven distribution.
- Rural areas have more facilities per 1,000 people.**
- The ratio of doctors per person is 1.99, indicating a shortage of professionals relative to the population size.**

Analysis of Healthcare Accessibility in Africa

Total Funding Received
\$213.1M

Total Number of Facilities
2000

Funding Received per Facility
\$106.5K

Funding Received Per Person
\$20.1

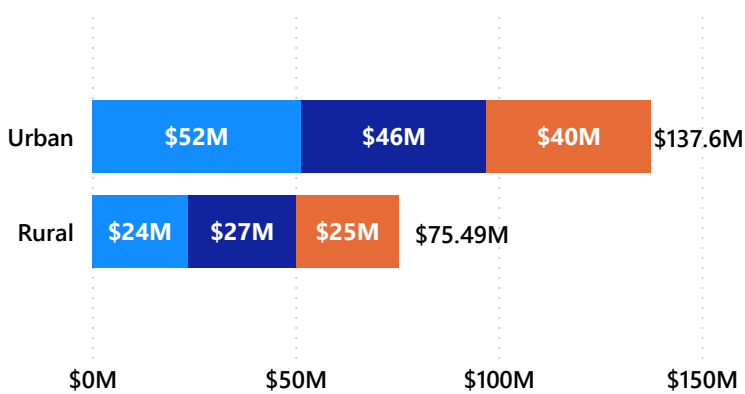
Avg Emergency Response Time
32.41

Funding Category
All

Facility Type
All

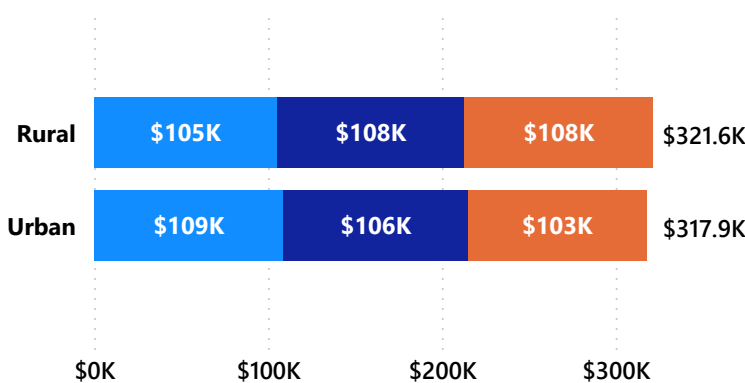
Total Funding Received by Each Area

Facility Type ● Clinic ● Health Center ● Hospital



Healthcare facility Funding: Urban vs. Rural Breakdown

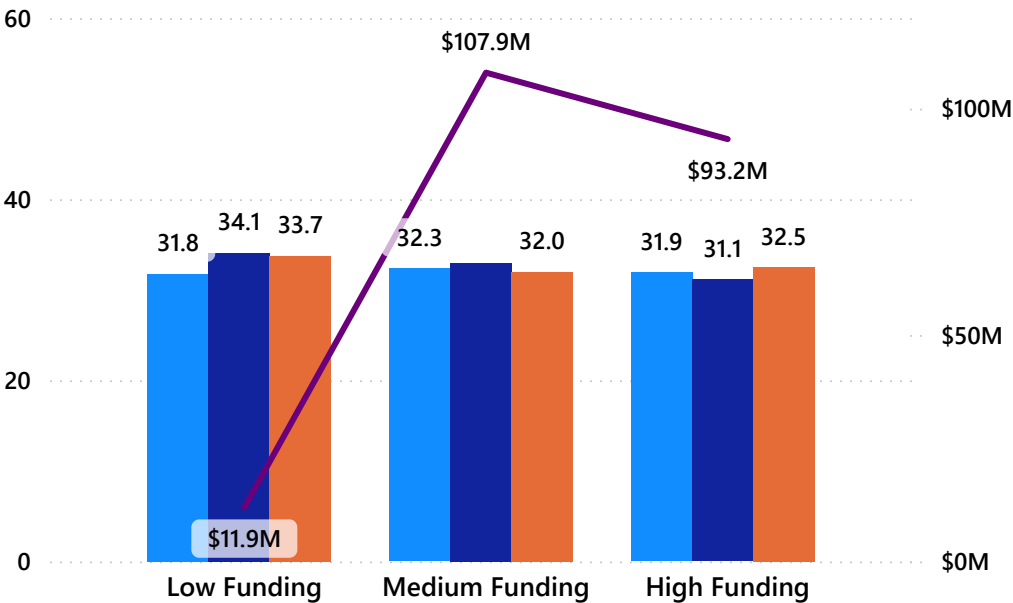
Facility Type ● Clinic ● Health Center ● Hospital



Facility	Area	Number	Resp. Time	Fund. Per Facility	Fund. Per Person
Clinic	Rural	224	31.52	\$105,371.8	\$38.36
Clinic	Urban	472	32.37	\$109,169.8	\$16.35
Health Center	Rural	248	33.21	\$107,771.4	\$38.02
Health Center	Urban	431	32.35	\$105,942.3	\$16.06
Hospital	Rural	232	33.00	\$108,459.9	\$37.33
Hospital	Urban	393	32.19	\$102,834.0	\$15.41

Funding vs. Response Time: A Comparison Across Healthcare Facilities

Facility Type ● Clinic ● Health Center ● Hospital ● Total Funding



FUNDING CATEGORY

Low Funding Facilities: \$0 - \$50,000 (401 Facilities).

Medium Funding Facilities: < \$150,000 (1065 Facilities).

High Funding Facilities: > \$150,000 (534 Facilities).

Key Insights

1. Urban areas received significantly more funding compared to rural areas.

2. Higher funding correlates with shorter response times.

Low-funded facilities have the longest response time (34.1 mins), while high-funded ones have the shortest (32.1 mins).

Clinics in urban areas have both the most funding and shortest response time.

3. Rural areas receive more funding per person (\$38 vs. \$16 in urban areas).

Funding per facility is fairly similar across rural and urban regions (~\$106K - \$109K), indicating distribution inefficiencies.

Facility Type	Area of Facility	Number	Response Time	Funding Per Capita	Funding Per Facility	Total Funding
Clinic	Rural	224	31.52	\$38.36	\$105,371.8	\$23,603,281
Clinic	Urban	472	32.37	\$16.35	\$109,169.8	\$51,528,143
Health Center	Rural	248	33.21	\$38.02	\$107,771.4	\$26,727,299
Health Center	Urban	431	32.35	\$16.06	\$105,942.3	\$45,661,115
Hospital	Rural	232	33.00	\$37.33	\$108,459.9	\$25,162,693
Hospital	Urban	393	32.19	\$15.41	\$102,834.0	\$40,413,747

Discussion

1. Disparities in Healthcare Facility Distribution

Urban areas have a higher concentration of healthcare facilities, with clinics being the most prevalent, while rural areas are dominated by health centers. Rural facilities are fewer but serve smaller populations.

The insufficient Doctor-to-Population ratio suggests severe shortage of professionals, which limits service delivery.

2. Funding Allocation and Efficiency

Urban facilities receive significantly higher funding compared to rural ones. Despite receiving less total funding, rural areas receive more funding per person (\$38) compared to urban areas (\$16), which suggests funding inefficiencies in urban areas.

3. Emergency Response Time and Funding Relationship

Facilities with higher funding have shorter emergency response times (high-funded facilities at 32.1 mins vs. low-funded facilities at 34.1 mins).

Clinics tend to have both the highest funding per facility and the shortest emergency response time.

Facilities with lower funding face longer response times, indicating a direct impact of funding on healthcare efficiency.

Policy Recommendation

1. Improve Rural Healthcare Access and Infrastructure

Increase funding for rural healthcare infrastructure and service delivery. Establish more healthcare facilities in underserved areas and create good road networks. Ensure the availability of electricity and Internet services in these areas.

2. Optimize Funding Distribution

Shift to a needs-based funding model prioritizing underserved regions and ensure transparency in fund utilization for maximum impact.

3. Enhance Emergency Response Systems

Deploy more ambulances and emergency units in high-response-time areas. Invest in telemedicine and mobile clinics for remote healthcare access. And implement paramedics training for quick emergency response.

4. Expand Healthcare Workforce

Offer incentives and better working conditions to attract and retain doctors in underserved regions. Increase medical training programs to address workforce shortages. Expand medical schools and provide scholarships for students.

5. Strengthen Stakeholder Collaboration

Partner with NGOs and private healthcare providers to supplement funding and use data-driven decision-making to monitor and improve healthcare services.