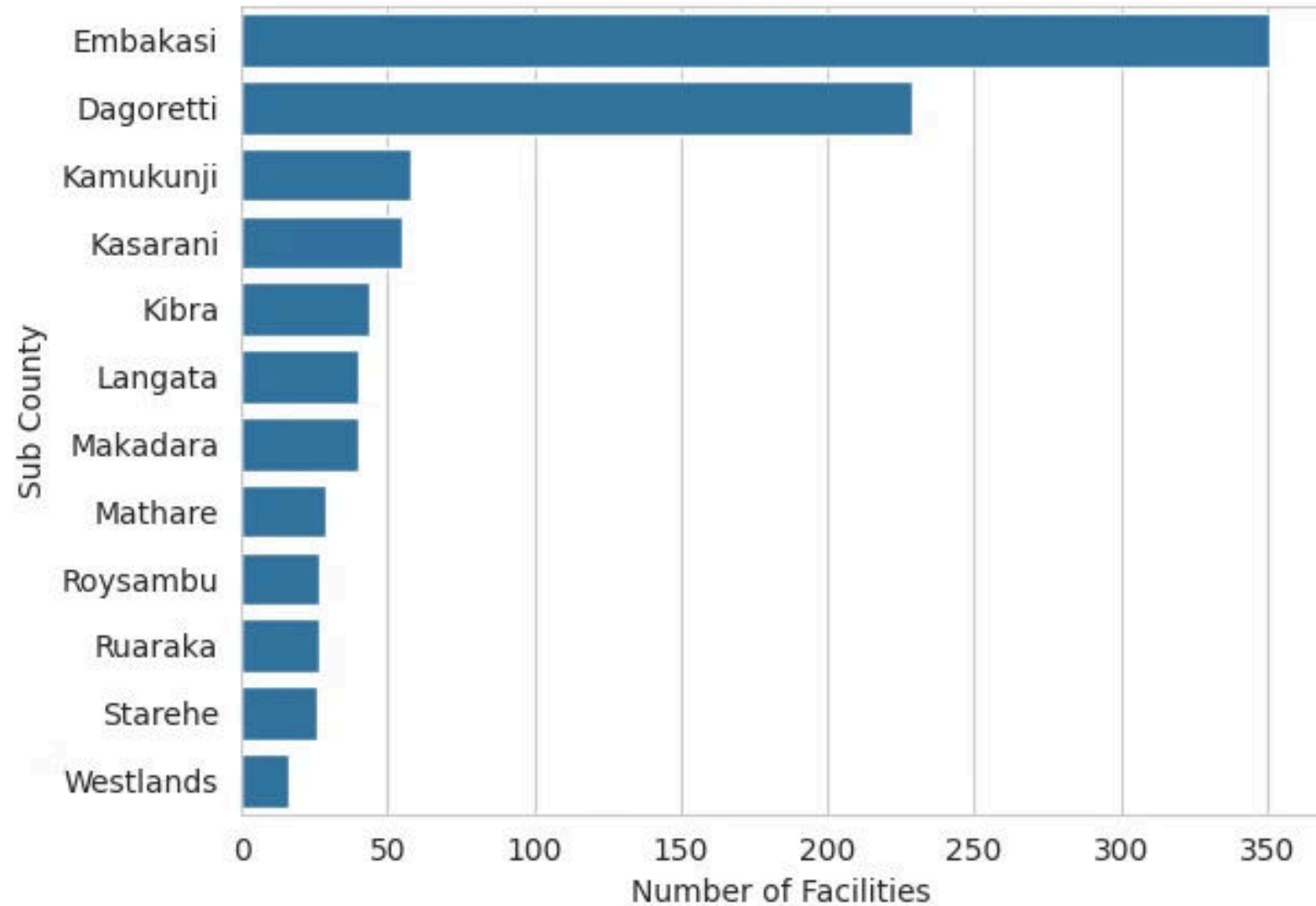# Uneven Distribution of Healthcare Facilities in Nairobi

Analysis of the distribution and accessibility of healthcare facilities in Nairobi, Kenya reveals stark disparities across the county's sub-regions. While some areas are well-served, others lack adequate access to critical medical resources, posing challenges for public health.

Number of Health Facilities in Nairobi

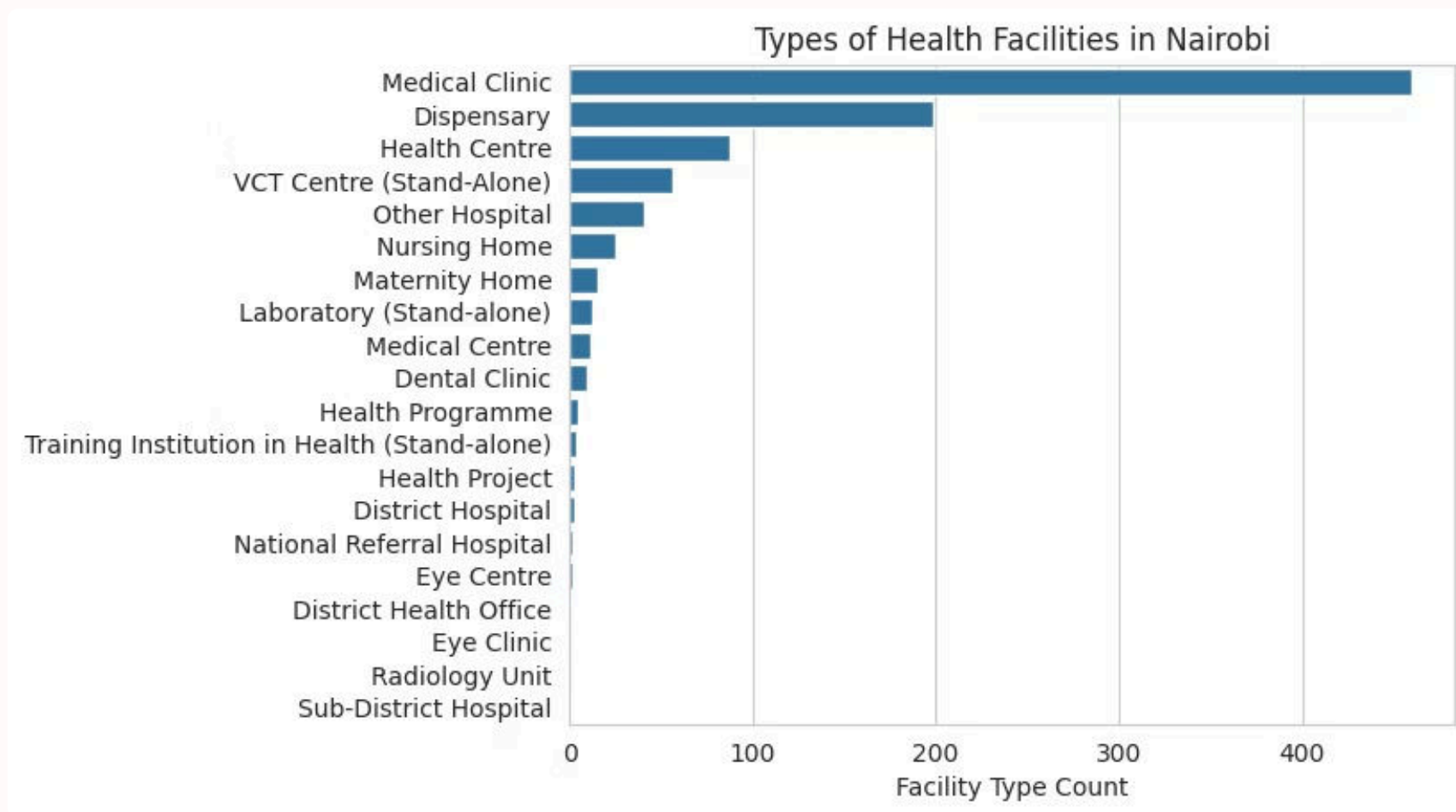# Facility Density by Sub-County

Well-Served Areas

Embakasi, Dagoretti, and Westlands sub-counties have the highest density of healthcare facilities, meeting or exceeding the national target of 2 per 10,000 population.

Underserved Regions

Other sub-counties like Kibra and Kasarani fall short of the recommended facility density, potentially limiting access to essential medical services for residents.

Uneven Distribution

The data suggests that the distribution of healthcare resources in Nairobi is uneven, with some areas experiencing a concentration of facilities while others remain underserved.

Types of Health Facilities in Nairobi

Health Facility Ownership in Nairobi

Ownership	Facility Ownership Count
Private Enterprise (Institution)	~220
Private Practice - General Practitioner	~160
Non-Governmental Organizations	~115
Private Practice - Unspecified	~62
Local Authority	~58
Ministry of Health	~56
Kenya Episcopal Conference-Catholic Secretariat	~48
Private Practice - Nurse / Midwife	~40
Private Practice - Clinical Officer	~39
Private Practice - Medical Specialist	~34
Other Faith Based	~26
Christian Health Association of Kenya	~24
Other Public Institution	~13
Community	~11
Armed Forces	~8
Parastatal	~6
Academic (if registered)	~5
Company Medical Service	~3
Humanitarian Agencies	~3
State Coorporation	~3
Supreme Council for Kenya Muslims	~2

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Facility Types and Ownership

Diverse Facility Types

Nairobi's healthcare landscape consists of a variety of facilities, including medical clinics, dispensaries, and specialized centers, catering to diverse medical needs.

Private Sector Dominance

The majority of healthcare facilities in Nairobi are privately owned, with the government and local authorities playing a smaller role in facility ownership.

Implications for Access

The predominance of private facilities may have implications for healthcare affordability and accessibility, particularly for low-income residents.

Facility Leadership

Nursing officers in charge make up the largest proportion of personnel overseeing healthcare facilities in Nairobi.

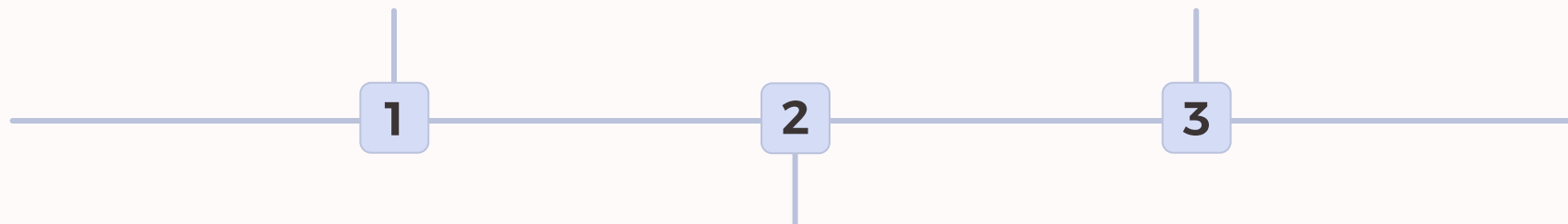|	Sub County	Number of Facilities	Latitude	Longitude	Population	Land Area (Sq. Km)	Population Density (No. per Sq. Km)
0	Dagoretti	229	-1.283451	36.724673	434208	29.1	14908.0
1	Embakasi	351	-1.307610	36.934177	988808	86.3	11460.0
2	Kamukunji	58	-1.277867	36.861705	268276	10.5	25455.0
3	Kasarani	55	-1.218500	36.902231	780656	86.2	9058.0
4	Kibra	44	-1.306289	36.780783	185777	12.1	15311.0
5	Langata	40	-1.370875	36.818415	197489	216.8	911.0
6	Makadara	40	-1.295219	36.871861	189536	11.7	16150.0
7	Mathare	29	-1.265011	36.849570	206564	3.0	68941.0
10	Starehe	26	-1.297481	36.832560	210423	20.6	10205.0
11	Westlands	16	-1.246528	36.786076	308854	97.5	3167.0

Population Density and Facility Access

Population Concentration

Certain sub-counties in Nairobi, such as Embakasi and Kibra, have significantly higher population densities compared to other areas.

Accessibility Challenges

The uneven distribution of facilities combined with high population density can create barriers to healthcare access, particularly for vulnerable or marginalized communities.

1   **2**   **3**

Facility Availability

The number of healthcare facilities in these densely populated sub-counties does not always match the high demand, potentially leading to overcrowding and longer wait times.

Improving Healthcare Equity

1 **Targeted Expansion**

Strategically increasing the number of healthcare facilities in underserved sub-counties to better meet the needs of local populations.

2 **Public-Private Collaboration**

Fostering partnerships between the government and private healthcare providers to ensure equitable access to affordable medical services.

3 **Community Engagement**

Engaging with local communities to understand their specific healthcare needs and preferences, informing the development of tailored solutions.

4 **Data-Driven Policymaking**

Leveraging the insights from this analysis to inform evidence-based healthcare policies and resource allocation decisions.

Disparities in Facility Density

2.2 Facilities per 10,000 People

The national average healthcare facility density in Kenya, slightly above the recommended target of 2 per 10,000 population.

Over 4 Facilities per 10,000

The higher facility density observed in some Nairobi sub-counties, meeting or exceeding the national target.
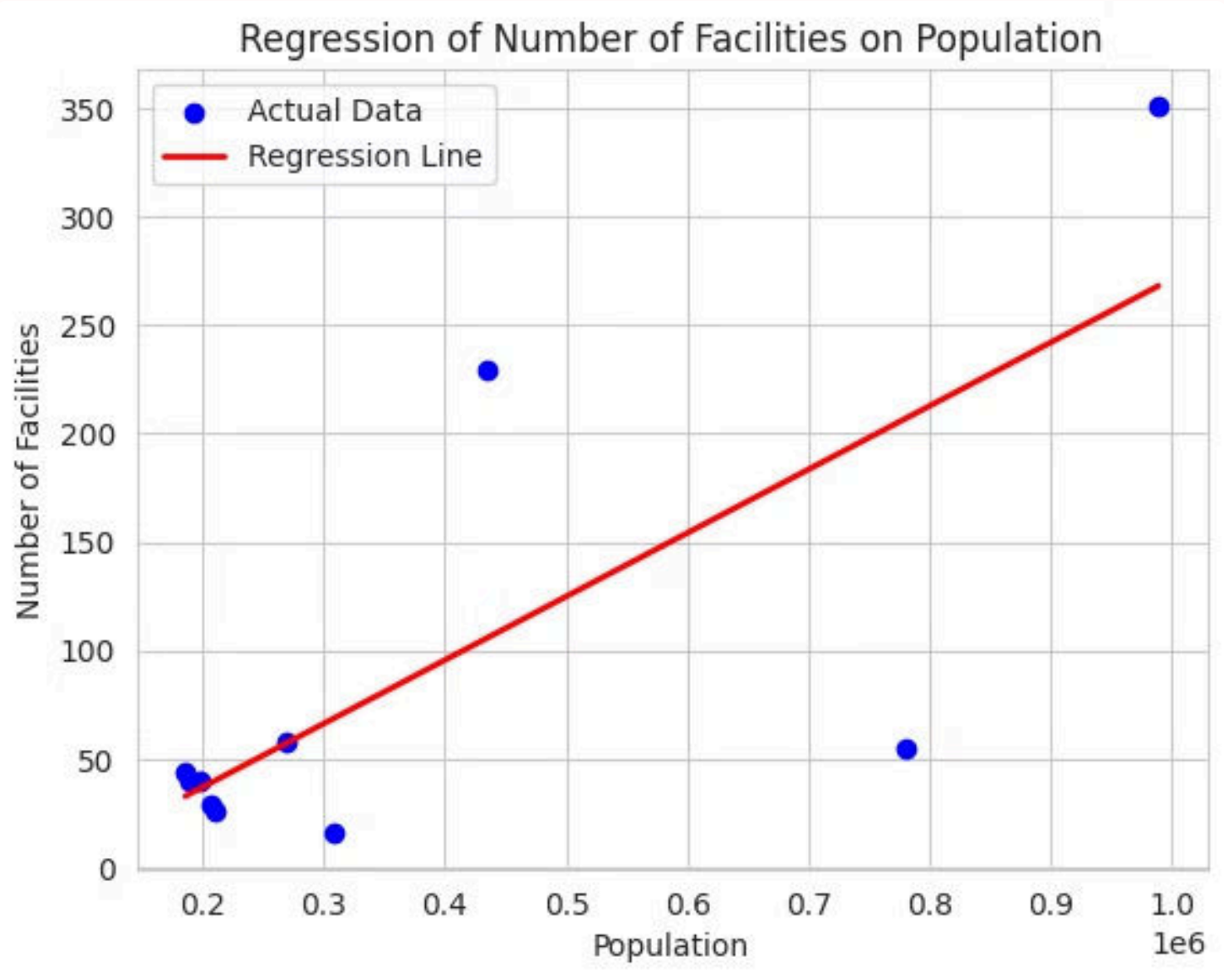
Under 2 Facilities per 10,000

The lower facility density in other Nairobi sub-counties, falling short of the recommended standard.

Uneven Geographic Distribution

The data reveals stark disparities in healthcare facility access across Nairobi's diverse sub-counties.

Regression of Number of Facilities on Population

Correlation Between Population and Facilities

1	2	3

Population Growth

As the population of a sub-county in Nairobi increases, the demand for healthcare services also rises.

Facility Expansion

The number of healthcare facilities tends to increase in response to the growing population, though not always at the same rate.

Accessibility Challenges

In some cases, the facility expansion does not keep pace with population growth, leading to healthcare access issues for residents.

Conclusion: Addressing Healthcare Inequities

Key Findings	Implications	Recommendations
Uneven distribution of healthcare facilities across Nairobi's sub-counties	Inequitable access to essential medical services for residents	Targeted expansion of facilities in underserved areas
Predominance of privately-owned healthcare facilities	Potential affordability barriers for low-income populations	Strengthening public-private partnerships to improve affordability
Positive correlation between population density and facility density	Facility availability not always keeping pace with population growth	Data-driven healthcare planning and resource allocation