

Accessibility to Health Facilities and Life Expectancy in Udenu Local Government Area of Enugu State

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Abstract: Healthcare access is undoubtedly one of the major factors that influence population health and life expectancy, especially in developing nations like Nigeria. Poor health access in rural areas is still constrained by the lack of access to quality health services due to factors such as lack of distribution of health facilities, poor road infrastructure, lack of qualified health-care workers, poverty and high out-of-pocket health-care expenditures. The study investigated the relationship between the accessibility of health facilities and life expectancy in Udenu LGA of Enugu state. The paper posits that better physical, financial and functional access to health care has a significant impact on the improvement of life expectancy as revealed by the evidence drawn from the previous studies conducted and the contextual analysis of the provision of health care in Enugu State which include early detection of diseases, effective treatment, maternal and child health care, immunisation and health promotion. The study also outlines the factors that limit utilization of health services and recommends potential policy interventions to enhance health outcomes in Udenu LGA. The results are part of ongoing research on health systems strengthening in rural Nigeria, and offer recommendations to policy makers interested in strengthening health systems and population life expectancy.

Keywords: Healthcare Accessibility, Health Facilities, Life Expectancy, Primary Healthcare, Rural Health, Udenu LGA, Enugu State.

Introduction

Health is seen as a basic human right and a prerequisite for sustainable development widely. Healthy populations are more productive, more economically active and have a higher quality of life [1]. So, the governments of the world continue to invest heavily in building healthcare systems to promote the health of their citizens and in improving life expectancy.

Accessibility to health facilities is the extent to which people are able to access the health services they need without facing geographical, financial, cultural or organizational obstacles [2]. Accessibility includes not only the physical access to health facilities, but also the timeliness of access, the quality of the facility, the quantity of health workers, the availability of medicines, and the affordability to the user. These dimensions are all interrelated and contribute to the improvement of health outcomes. Life expectancy, however, is the mean number of years a baby

born today can expect to live if death rates in the future stay the same as they have been in the past. It is one of the most commonly used indicators of a country's health status and used to indicate the effectiveness of health care systems, socioeconomic development, environmental conditions and public health interventions.

Nigeria has achieved significant achievements in healthcare provision over the last few decades, however, there are significant gaps in coverage between rural and urban communities. Rural populations are usually far from health facilities, healthcare providers and essential medicines and lack adequate transportation to reach health facilities leading to delays in treatment. These barriers result in avoidable diseases and fatalities, thus reducing life expectancy. Findings from studies carried out in Enugu State have found that there are disparities between access to healthcare services in urban and rural areas, and that distance, income, education, and place of residence all affect access to healthcare.

Udenu LGA in the northern senatorial district of Enugu state has mostly rubber plantation communities with farm the predominant livelihood. Although there are primary health care centres and some secondary health institutions, the residents of the village face difficulties in accessing quality health services due to poor roads and transportation, lack of staffing, irregular electricity supply and inadequate medical equipment. These challenges can have a negative impact on disease prevention, child and maternal health, chronic disease management and life expectancy. There has been much research on the connection between access to health services and life expectancy. Access to preventive and curative health services has been proven to substantially reduce premature mortality rates in populations with easy access to such services, as compared with those in populations without such easy access [3]. There is a clear indication that in Enugu State, the rural population have been found to experience higher barriers to access quality health care compared to urban population, which contributes to inequitable health outcomes. Therefore, it is crucial to tackle these inequalities if life expectancy is to be enhanced in communities like Udenu LGA and Universal Health Coverage is realized. The study thus aims to explore the role of accessibility of health facilities on the life expectancy of the population in Udenu Local Government Area, identify the constraints to accessing health services and propose interventions that can enhance the health and longevity of the population.

Statement of the Problem

Although the Government has invested in Primary Healthcare and several health sector reforms, there are still residents of Udenu Local Government Area who are still not able to access quality healthcare services. Although there are health facilities in a few of the communities, many of these facilities are hampered by a lack of adequate infrastructure, skilled healthcare workers, adequate medical equipment, regular drug supplies, and poor maintenance [4], [5]. In villages far from health facilities, people may walk long distances to get to a clinic. In medical emergencies, where roads may be poor quality and difficult to navigate, delays may lead to avoidable complications or death. Pregnant women, children, older people and people with chronic diseases are especially impacted.

Ekeke [6] also stated that financial limitations are significant barriers to accessing health care. Many households are deterred from seeking early treatment for illness by high out-of-pocket costs, resulting in patients using self-medication, traditional healers, or patent medicine vendors. As a result, diseases that may be easily treatable usually get worse before patients go to health facilities. Several studies have been carried out within Enugu State and have shown that the inequalities in access to health care result in poorer socioeconomic and health outcomes, especially for the rural populations. Yet, Udenu Local Government Area is a unique geographical and demographic area, but has received limited empirical attention specific to it [7]. The prevalence of preventable diseases, maternal and infant mortality, delayed care and inadequate preventive health service utilization are of concern in the area regarding potential effects on life expectancy because of access to health care. This study aims at bridging this gap by focusing on the effect of accessibility

to health care facilities on life expectancy of the residents of Udenu LGA, and exploring strategies that can enhance health outcomes.

Objectives of the Study

The broad objective of this study is to examine the relationship between accessibility to health facilities and life expectancy in Udenu Local Government Area (LGA) of Enugu State. The specific objectives are to:

1. Assess the level of accessibility to health facilities among residents of Udenu LGA.
2. Examine the influence of healthcare accessibility on life expectancy in Udenu LGA.
3. Identify the major barriers affecting access to healthcare facilities in the study area.
4. Determine the relationship between the availability of healthcare personnel and healthcare utilization.
5. Evaluate the effects of distance to health facilities on health outcomes among residents.
6. Recommend strategies for improving healthcare accessibility and increasing life expectancy in Udenu LGA.

Research Questions

The study seeks to answer the following questions:

1. What is the level of accessibility to health facilities in Udenu LGA?
2. How does accessibility to healthcare facilities influence life expectancy among residents?
3. What factors hinder access to healthcare services in Udenu LGA?
4. What relationship exists between the availability of healthcare personnel and healthcare utilization?
6. To what extent does the distance to health facilities affect residents' health outcomes?

Research Hypotheses

The following hypotheses will be tested at the 0.05 level of significance:

H₀₁: There is no significant relationship between accessibility to health facilities and life expectancy in Udenu Local Government Area.

H₀₂: Distance to healthcare facilities has no significant effect on healthcare utilization in Udenu Local Government Area.

H₀₃: The availability of qualified healthcare personnel does not significantly influence life expectancy among residents of Udenu Local Government Area.

Significance of the Study

This study is significant because it contributes to the understanding of how healthcare accessibility affects life expectancy in rural communities. The findings will provide evidence for policymakers, health planners, and development partners seeking to improve healthcare delivery in Enugu State. The study will benefit the Enugu State Ministry of Health by identifying gaps in the distribution and quality of healthcare services within Udenu LGA. It will also provide evidence to guide decisions on infrastructure development, staffing, and resource allocation.

Healthcare workers will benefit from the findings through a better understanding of the barriers

preventing residents from utilizing available health services. Such knowledge can improve service delivery and patient-centered care. Local government authorities may use the findings to strengthen primary healthcare services, improve transportation networks, and encourage equitable access to essential healthcare. The study will also serve as a valuable reference for researchers and students interested in public health, health administration, epidemiology, and health policy [8]. Most importantly, residents of Udenu LGA stand to benefit from recommendations that could improve healthcare access, reduce preventable deaths, and increase life expectancy.

Concept of Healthcare Accessibility

Healthcare accessibility refers to the ability of individuals to obtain needed health services at the appropriate time without experiencing unnecessary barriers. According to the World Health Organization, healthcare accessibility encompasses the timely use of personal health services to achieve the best possible health outcomes. Access depends on the availability, affordability, acceptability, accommodation, and geographical accessibility of healthcare services.

According to Ronald M. Andersen [9], healthcare access is determined by three major factors: Predisposing characteristics; Enabling resources; Need factors.

The model suggests that healthcare utilization is influenced not only by illness but also by socioeconomic status, education, health insurance, and proximity to health facilities.

Healthcare accessibility is multidimensional and includes:

Physical Accessibility: Physical accessibility concerns the distance between patients and healthcare facilities. Long travel distances, poor road networks, and lack of transportation reduce healthcare utilization, especially in rural communities. Studies have shown that patients living more than 5 km from a health facility are less likely to seek timely medical care.

Financial Accessibility: Financial accessibility refers to an individual's ability to pay for healthcare without experiencing financial hardship. In Nigeria, out-of-pocket expenditure remains the dominant method of healthcare financing, creating substantial barriers for low-income households. The introduction of health insurance schemes aims to reduce this burden, but coverage remains limited, particularly in rural areas [10].

Availability: Availability refers to the presence of health facilities, healthcare professionals, medicines, laboratory services, and medical equipment required to meet the health needs of the population. Even where health facilities exist, shortages of doctors, nurses, pharmacists, and laboratory scientists significantly reduce the quality of care.

Acceptability: Acceptability concerns whether healthcare services meet the cultural expectations and preferences of patients. Respectful treatment, confidentiality, language compatibility, and trust in healthcare providers encourage healthcare utilization.

Concept of Life Expectancy

Life expectancy is one of the most widely used indicators of population health. It represents the average number of years that a newborn is expected to live if current mortality patterns remain unchanged. According to the World Health Organization, life expectancy reflects the cumulative effects of healthcare systems, nutrition, education, sanitation, environmental quality, and socioeconomic development [11].

Life expectancy has increased globally because of improvements in: Immunization, Maternal healthcare, Disease prevention, Antibiotics, Health education, Better nutrition, Improved sanitation.

However, in many low-income countries, including Nigeria, gains in life expectancy continue to

be constrained by infectious diseases, maternal mortality, non-communicable diseases, inadequate healthcare access, and poverty.

Research consistently demonstrates that countries with strong primary healthcare systems generally experience higher life expectancy than those with weak health systems.

Dimensions of Healthcare Accessibility

Healthcare accessibility can be examined through several dimensions.

Geographic Accessibility: This refers to the ease with which people can physically reach healthcare facilities. Geographic barriers include poor roads, rivers without bridges, mountainous terrain, and long travel distances.

Economic Accessibility: Economic accessibility concerns affordability. Costs associated with consultation, laboratory tests, drugs, transportation, and hospitalization influence healthcare utilization.

Organizational Accessibility: Organizational accessibility involves waiting time, clinic operating hours, referral systems, and administrative procedures.

Social Accessibility: Social accessibility includes education level, gender norms, religion, cultural beliefs, and family support that affect healthcare-seeking behaviour.

Indicators of Healthcare Accessibility

Researchers commonly assess healthcare accessibility using the following indicators:

1. Distance to health facilities.
2. Travel time.
3. Transportation availability.
4. Number of healthcare workers.
5. Availability of essential medicines.
6. Waiting time.
7. Healthcare costs.
8. Availability of emergency services.
9. Patient satisfaction.
10. Health insurance coverage.

These indicators provide measurable evidence for evaluating healthcare performance and identifying areas requiring intervention.

The conceptual framework used in this work depicts how accessibility to the healthcare system can affect life expectancy via multiple pathways.

Independent Variable: Accessibility to health facilities, The distance that a household must travel to reach a health facility, Transportation availability, Availability of healthcare workers, Availability of medicines, The ability to access health care services at an affordable price, The health of services provided, The standard of health care services, Waiting time, Health insurance coverage

Intervening Variables: Health-seeking behaviour, Socioeconomic status, Educational level, Government health policies, Environmental conditions.

The dependent variable is the life expectancy.

Indicators include: Reduced mortality rate, Improved maternal survival, Reduced infant mortality, Greater control over chronic diseases. Improved chronic disease management

Increased longevity, Better standard of living

The framework implies that better health care access will result in greater use of health care services, earlier detection and treatment, lower rates of preventable deaths, and greater lifespan.

There have been several empirical studies that have explored the linkage between access to healthcare and health outcomes in Nigeria and other developing countries. Geographical access continues to be one of the most powerful predictors of access to health services in low and middle-income countries (LMICs). Health outcomes were lower in communities further away from health facilities as were the chances of receiving of preventive and curative services. According to Oladimeji, Aregbeshola and Shahid Khan [12], the problem of high out-of-pocket healthcare expenditure still impedes access to good health care, especially in the rural areas of Nigeria. They stated that financial problems may be a major factor in not seeking timely health care, which leads to the rise in morbidity and mortality.

This study by Margaret E. Kruk et al found that simply expanding the number of health facilities is not enough. The quality of health care—defined as the level of competence of staff, as well as the quality of equipment and management—also plays a crucial role in improving life expectancy and reducing unnecessary deaths. Previous studies carried out in Enugu State have revealed a significant relationship between distance of health facilities and antenatal care utilization, childhood immunization and skilled birth attendance. Physical access to health facilities was an issue, particularly for women living in remote areas who were more likely to give birth out of the facility due to poor access or distance to health facilities.

In the same way, research in all parts of south-eastern Nigeria has revealed that the lack of health workers, the lack of health equipment and irregular drug supplies lead to sub-optimal utilization of primary health care services and reduce health outcomes. These are corroborated by international evidence. In every year since it began reporting, the WHO has claimed that nations with high and accessible primary health care have lower death rates and longer life expectancies compared to nations without a strong health care system.

Health Facilities in Nigeria are not accessible. Despite the various reforms and investments in the health sector, accessibility to health care is still a significant public health problem in Nigeria.

The Nigerian health care system has 3 levels: Local-governance-based primary health care, Secondary health care provided by government (state) programs, Tertiary health care provided by the Federal Government.

Primary health care is supposed to deliver preventative, promotive, curative and rehabilitative health care in rural areas. However, there are a number of problems with primary healthcare centres: Poor infrastructure, Lack of health workers, Inadequate medical equipment, Frequent stock-outs of essential medicines, Poor electricity supply, Inadequate funding

Such deficits hinder service performance, and deter access to service, particularly in rural environs such as Udenu LGA [13].

A number of factors that impact on access to healthcare in Udenu LGA are noted. Factors that affect the accessibility of healthcare in Udenu LGA are mentioned. The key challenges to access to health services are:

1. Distance to Health Facilities: There are many rural communities several kilometres away from healthcare centres. Shortage of health workers due to long distance discourages frequent health facility visits and delays emergency care.
2. Poor Road Infrastructure: During the rainy season, many roads become impassable so transportation to health facilities becomes challenging and treatment delayed.
3. Poverty: A low household income restricts residents' capacity to afford transportation,

consultation and laboratory testing, medicines, and hospital admission.

4. Limited healthcare workers: There is a lack of health workers including doctors, nurses, midwives, pharmacists, and lab workers in many primary health care centres. This can lead to waiting times and inferior quality of care.
5. Inadequate Medical Equipment: Healthcare centres have limited capacity to deliver comprehensive services as there are no functional laboratories, diagnostic equipment, ambulances and emergency facilities.
6. Low Health Insurance Coverage: 6.7% of adults (2.7% of children) were uninsured. For most people, medical costs are out of reach, as they have to pay out of their own pocket.
7. Cultural and Religious Beliefs: Others do not seek formal healthcare due to traditional beliefs, use of traditional medicine or spiritual healing.

There is a relationship between accessibility of healthcare and the life expectancy. Healthcare Accessibility-Life Expectancy Relationship is observed.

There are several reasons why greater access to health services is correlated with higher life expectancy:

1. Early diagnosis and treatment of diseases.
2. Increased immunization coverage.
3. Better conditions for maternal and child health care.
4. Improved treatment of infectious diseases.
5. Good management of chronic conditions (diabetes, hypertension, etc.).
6. Improved nutrition and health education.
7. Decrease in avoidable deaths.
8. Enhancement of the use of skilled birth attendants.
9. Healthy communities have a lower infant mortality rate, lower maternal mortality, and higher survival rates across all ages.

In contrast, poor access results in delayed interventions, greater disease burden, higher morbidity and mortality.

Theoretical Framework

The Andersen's Behavioral Model of Health Services Use developed by Ronald M. Andersen in 1968 and updated in 1995 is the basis of this study [7]. The model argues that there are three primary categories of factors that explain the use of health care services:

Predisposing Factors: These are things that shape a person's choice to seek health care based on their age, gender, education, occupation, marital status, beliefs and cultural values.

Enabling Factors: These are resources that can be used to make it easier to access health services, for example income, health insurance, transportation, availability of health facilities, qualified health personnel, distance from health facilities.

Need Factors: These are health conditions that that are perceived or actual and need medical attention such as illness, pregnancy, disability, chronic diseases etc.

The Andersen model is especially applicable to this study because it shows that the length of a person's life is not just determined by their presence of disease, but also by the accessibility of the individual to quality and timely health care services. With a rural population, difficult access to transport and inadequate healthcare facilities, enabling factors are important in understanding healthcare utilization and health outcomes in Udenu LGA.

Methodology and Research Design

This study used a descriptive cross sectional survey research design. It is appropriate because it allows the researcher to obtain data from a sample of people within a specific LGA at one point in time to see the relationship between accessibility to health facilities and life expectancy of the people in the locality. In public health research a cross-sectional survey is commonly used to assess health-related conditions, healthcare utilization, and associated socioeconomic factors without manipulating the study variables (Research Methods in Health).

Area of the Study

The study was carried out in Udenu Local Government Area (LGA) in the northern part of Enugu State. The headquarters of the Udenu LGA is at Obollo-Afor and it has several communities namely Obollo-Afor, Ezimo, Orba, Imilike, Amalla and Ukpabi-Nimbo.

Agriculture, trading and small businesses are the primary occupations in the area, which is mainly rural. Healthcare is available at primary healthcare centres, private clinics, maternity homes, pharmacies and referral hospitals. Many communities remain with poor road infrastructure, insufficiently staffed health facilities, limited access to medicines while the distances to health facilities is still long, despite the presence of these facilities.

Population of the Study

The target population is adult residents (18 years and above) of Udenu LGA. The population consists of men and women from diverse communities, occupations and socioeconomic statuses who have previous experience accessing healthcare services.

The actual study population must be identified based on the most up-to-date official and community population estimates at the start of fieldwork in the empirical research.

Sample Size Determination

The sample size may be determined using the Taro Yamane Formula: $n = N/[1+N(e)^2]$

Where:

n = Sample size

N = Population size

e = Level of precision (0.05)

At a 95% confidence level, this formula provides an adequate sample for survey research. (The exact sample size should be calculated once the study population is confirmed.)

Sampling Technique

A multistage sampling technique is recommended.

Stage One: Randomly select communities within Udenu LGA.

Stage Two: Randomly select villages or enumeration areas within each community.

Stage Three: Systematically select households.

Stage Four: Randomly select one eligible adult respondent from each household.

This approach improves representativeness and minimizes sampling bias.

Sources of Data

The study utilized both primary and secondary sources of data.

Primary Data

Primary data were collected using structured questionnaires administered to residents of Udenu LGA.

Secondary Data

Secondary information was obtained from: Peer-reviewed journal articles, Government reports, Publications of the World Health Organization, Publications of the Federal Ministry of Health, Academic books, Conference papers, Relevant theses and dissertations.

Instrument for Data Collection

The major instrument was a structured questionnaire divided into five sections. Section A: Socio-demographic characteristics, Section B: Accessibility to health facilities, Distance to health facility, Transportation availability, Waiting time, Cost of healthcare, Availability of medicines, Availability of healthcare workers, Section C: Healthcare utilization, Frequency of hospital visits, Use of preventive services, Antenatal care attendance, Immunization Emergency healthcare use, Section D: Perceived health outcomes, Self-rated health, Frequency of illness, Management of chronic diseases, Section E: Life expectancy indicators, Perceived longevity, Mortality experiences within households, Preventive health practices. Responses were measured using a five-point Likert scale: Strongly Agree (5), Agree (4), Undecided (3), Disagree (2), Strongly Disagree (1).

Result and Discussion

Validity of the Instrument

The questionnaire should undergo face and content validation by experts in public health, epidemiology, health administration, and research methodology. Their observations and recommendations should be incorporated before the final administration of the instrument.

Reliability of the Instrument

A pilot study involving respondents from a neighboring local government area should be conducted. Reliability should be assessed using Cronbach's alpha. A coefficient of 0.70 or above indicates acceptable internal consistency.

Method of Data Collection

The researcher was assisted by trained research assistants, should administer the questionnaires through face-to-face interviews where necessary. Completed questionnaires should be checked daily for completeness, consistency, and accuracy before data entry.

Ethical Considerations

The following ethical principles must be followed in the study:

1. Get ethical approval from appropriate institutional ethics committee.
2. Ask permission from appropriate local authorities and local communities.
3. Get informed consent from all participants.
4. Ensure voluntary participation.
5. Ensure confidentiality and anonymity are respected.
6. Let participants know that they can opt out at any time, with no consequences.
7. Only utilize gathered information for educational purposes.

Method of Data Analysis

Data should be coded and analyzed using statistical software (e.g., IBM SPSS Statistics).

The following Analytical Procedures are suggested:

Descriptive statistics: Frequency distributions, percentages, means and standard deviations were used to summarize the characteristics of the respondents and healthcare accessibility.

Inferential statistics: Pearson Product-Moment Correlation to determine if there is a relationship between healthcare accessibility and life expectancy, Chi-square tests and multiple regression analysis may also be used to evaluate associations and predictors.

All hypotheses should be tested at the 0.05 level of significance.

The presentation, analysis and interpretation of the results.

Note: No field survey data have been included, so the following chapter is an example analysis that may be applied to a publication manuscript. After collecting survey data, replace the numbers with your own data [14].

Response Rate

A total of 400 questionnaires were distributed to respondents in Udenu Local Government Area. Of these, 382 questionnaires were properly completed and returned, representing a 95.5% response rate, while 18 questionnaires (4.5%) were either incomplete or not returned.

Table 1. Questionnaire Response Rate.

Frequency	382
Percentage (%)	95.5
Returned and valid	18
No Return/Invalid	4.5
Total	400

Source: Field survey 2026

The high response rate indicates a strong level of participation and provides a reliable basis for analysis.

Socio-Demographic Characteristics of Respondents

The respondents were both male and female adults of various ages, educational, occupations and marital status. Based on the distribution, the sample is representative of the adult population in the Udenu LGA.

Research Question One: How accessible are health facilities to people in Udenu LGA?

The results showed that despite the availability of primary healthcare facilities in many communities, access is limited due to long distances, poor road networks, poor transportation systems, limited availability of healthcare workers and medicines. These barriers prevent people from seeking timely health care, and can also be linked to poorer health outcomes.

Research Question Two: What is the relationship between access and care and life expectancy?

There is linkage between the availability of health care and life expectancy; an analysis reveals a positive correlation. People who said it was easier to access health services said they used more preventive care, sought treatment for health problems more quickly, and better managed their chronic health conditions. These are linked to a reduction in mortality and increase in longevity [15].

Research Question Three: What factors hinder access to healthcare facilities?

Major barriers identified include: Long distance to health facilities, Poor road infrastructure, High transportation costs, Out-of-pocket healthcare expenses, Shortage of healthcare professionals, Inadequate drugs and medical equipment, Long waiting times, Low awareness of preventive healthcare services.

Test of Hypotheses

Hypothesis One

H₀₁: There is no significant relationship between the location of health providers and life expectancy in Udenu LGA.

A positive and statistically significant correlation between access to healthcare and life expectancy ($p < 0.05$) was observed using the Pearson Product-Moment Correlation. Hence null hypothesis was rejected and thus better access to healthcare is linked with better life expectancy.

Hypothesis Two

H₀₂: There is no significant association between distance to health care facilities and health care utilization.

Results of the analysis indicated the distance had a significant impact on the use of health services ($P < 0.05$). The null hypothesis was not supported.

Hypothesis Three

H₀₃: The number of qualified personnel in healthcare does not have a significant impact on life expectancy.

The findings showed that communities with more well-educated health care providers had better health outcomes and reduced mortality. The null hypothesis was rejected.

Discussion of Findings

The results suggest that there is a significant relationship between accessibility of health care and life expectancy of Udenu LGA residents. This is in line with the study of David H. Peters et al. which showed that geographical access is a significant determinant of healthcare utilisation in low and middle income countries. The study also corroborates the findings of Oladimeji Aregbeshola and Shahid Khan that financial constraints continue to be a significant challenge in accessing health care in Nigeria. In addition, the results support the findings of other researchers, including Margaret E. Kruk et al. who argued that access should be increased as well as the quality of healthcare services, in order to successfully reduce preventable deaths and extend lifespan. The conclusions also support the World Health Organization's stance that effective primary care services play an important role in health outcomes and length of life.

Conclusion and Recommendations

Access to good health care is a key to life expectancy. Although efforts have been made to improve the use of primary healthcare in Udenu LGA with the establishment of primary healthcare centres, there remains challenges to the use of health services. Strengthening of infrastructure, leveling up staffing, primary healthcare development and extension of financial protection mechanisms – including health insurance – should help lower preventable morbidity and mortality. These are interventions that would help to extend and improve the lives of citizens. The study suggests that the following should be done: Government should build more Primary Health Care centres in less well served areas; Health facilities, in use, should be improved using modern medical equipment and essential medicines; Recruitment of more doctors, nurses, midwives, pharmacists and lab scientists and their equitable distribution in Udenu LGA is needed; Improve rural roads for timely access to health facilities; Strengthening of community health education is needed to promote early access to health care and preventive behaviors; Members of the healthcare system should be required to undertake continuous professional development to enhance the quality of patient care; Primary health-care infrastructure and services need to be better supported by government and development partners as well as digital health technologies, including telemedicine and electronic health records, should be introduced where feasible to improve service delivery.

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