

**HEALTH POLICY IMPLEMENTATION AND HEALTHCARE
ACCESSIBILITY IN UNIVERSITY OF UYO TEACHING HOSPITAL,
UYO, AKWA IBOM STATE, NIGERIA**

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Abstract

This study examines the effect of health policy implementation on healthcare accessibility in University of Uyo Teaching Hospital, Uyo, Akwa Ibom State, Nigeria. It was necessitated by persistent barriers to tertiary healthcare access, including high out-of-pocket payments, long waiting time, weak referral coordination, uneven service readiness and insufficient protection for poor and vulnerable patients. The study was conducted to ascertain the extent to which financial protection and health insurance policy implementation, service-readiness policy implementation and referral/digital patient-flow policy implementation affect healthcare accessibility in UUTH. Andersen's behavioural model of health service was adopted as the theoretical framework. Survey and documentary time-series designs were adopted. The units of analysis were patients, clinical staff and administrative staff in UUTH, while secondary data were sourced from hospital service records, published health-system reports and peer-reviewed studies. Hypotheses were tested using multiple linear regressions at $p < .05$, while a comparative before-and-after time-series analysis was used to compare the pre-policy-intensification period (2016-2020) with the post-policy-intensification period (2021-2025). The findings revealed that financial protection, service readiness and referral/digital patient-flow reforms significantly enhanced healthcare accessibility in UUTH. The before-and-after trend showed improvement in outpatient attendance, insured patient visits, reduced waiting time and referral completion after policy intensification. The study concluded that health policy implementation is a major pathway for improving equitable access to tertiary care in Uyo. It recommended stronger health insurance enrolment, sustained equipment maintenance, digital appointment systems and referral coordination with primary and secondary facilities.

Keywords: Health policy implementation, Healthcare accessibility, Teaching hospital, Health insurance.

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Introduction

Globally, health policy implementation has become a major instrument for translating universal health coverage commitments into actual access to essential services, financial protection and quality care. The World Health Organisation (2023) argues that access to healthcare must be measured not only by physical availability of facilities but also by affordability, timeliness, acceptability and quality of care. In recent times, many low- and middle-income countries have introduced health financing reforms, essential service packages, digital health tools and referral policies to reduce catastrophic expenditure and improve service utilisation (World Bank, 2024). Regionally, African health systems continue to face implementation gaps in financing, human resources, medicines supply and infrastructure, making the policy-to-access relationship a critical area of empirical investigation (Croke & Ogbuoji, 2024).

Nationally, Nigeria has pursued several health policies to expand access, including the National Health Act, the Basic Health Care Provision Fund (BHCPF), the National Health Insurance Authority Act, primary health care revitalisation and tertiary hospital service-improvement reforms (Aregbeshola & Khan, 2021). However, access remains uneven because many households still rely on out-of-pocket payment, referral systems are weak and tertiary hospitals face congestion from cases that could have been managed at lower levels of care (Aregbeshola & Khan, 2021; Igbokwe et al., 2024). In Akwa Ibom State, Uyo serves as the administrative and healthcare hub, while University of Uyo Teaching Hospital functions as the major federal tertiary institution for specialist care, training and referral services. The hospital evolved from a specialist hospital and federal medical centre into a teaching hospital, and it now provides emergency, surgical, medical, obstetric, paediatric, ophthalmology, radiology, mental health, pharmacy, laboratory and allied health services.

In UUTH, health policy implementation is reflected in three practical strategies: financial protection through health insurance and fee-waiver arrangements; service-readiness policy through staffing, equipment, drug availability and essential service packages; and referral/digital patient-flow policy through appointment, medical records and inter-facility coordination (Igbokwe et al., 2024). These strategies are expected to improve healthcare accessibility through increased service utilisation, reduced waiting time, better affordability, improved referral completion and reduced delayed care. However, it has not been proven whether these policy implementation dimensions have significantly enhanced healthcare accessibility in UUTH. This is because, despite policy reforms, concerns have been raised regarding high service costs, crowding, delayed consultation, uneven diagnostic availability and persistent reliance on cash payment at the point of use. Studies by Okereke et al. (2019), Aregbeshola and Khan (2021), Igbokwe et al. (2024) and Croke and Ogbuoji (2024) show that health policy reforms can improve access, but implementation weaknesses reduce their expected outcomes. It is on this basis that the study examines health policy implementation and healthcare accessibility in University of Uyo Teaching Hospital, Uyo, Akwa Ibom State, Nigeria.

Statement of the Problem

This study was necessitated by observable accessibility challenges such as high cost of care, long patient waiting time, weak insurance coverage, periodic stock-out of essential medicines, inadequate diagnostic turnaround time, referral congestion and delayed specialist consultation. Although health policies in Nigeria are designed to promote universal health coverage, tertiary hospitals often receive the consequences of weak implementation across the whole health system. Patients who are unable to obtain effective care in primary and secondary facilities frequently move to teaching hospitals, thereby increasing workload, waiting time and cost at tertiary level (Okereke et al. (2019). In an effort to address these challenges, UUTH and the wider Nigerian health system have introduced initiatives that include health insurance enrolment, patient service charter implementation, infrastructure upgrading, emergency unit strengthening, digital records, referral protocols, specialist clinic scheduling and essential drug/diagnostic support. These are introduced to address the dependent variable of the study, healthcare accessibility, measured by service utilisation, waiting time, affordability, referral completion and patient satisfaction. Empirically, despite these efforts, evidence regarding the specific effect of health policy implementation on healthcare accessibility in UUTH remains sparse. Most available studies focus on national health financing, primary healthcare reforms or general hospital utilisation, while fewer studies combine hospital-level survey data with before-and-after time-series evidence in a teaching hospital in Akwa Ibom State.

Recent evidence shows that financial barriers remain a major constraint to healthcare use in Nigeria. Aregbeshola and Khan (2021) linked out-of-pocket health payments to catastrophic expenditure and delayed service use among households. Similarly, Croke and Ogbuoji (2024) observed that Nigeria's universal health coverage reforms are politically significant but vulnerable to implementation gaps, fragmented financing and institutional discontinuity. At the programme level, Igbokwe et al. (2024) showed that BHCPF implementation improved the pathway for primary healthcare financing, but facility-level bottlenecks, fund-flow delays and accountability concerns affected performance. These national challenges are relevant to UUTH because tertiary access depends on household affordability, lower-level referral readiness and internal patient-flow capacity. The statement of the problem therefore is to ascertain the extent to which health policy implementation has enhanced healthcare accessibility in University of Uyo Teaching Hospital, Uyo, Akwa Ibom State, Nigeria.

Objectives of the Study

The broad objective of the study is to examine the effect of health policy implementation on healthcare accessibility in University of Uyo Teaching Hospital, Uyo, Akwa Ibom State, Nigeria. The specific objectives are to examine the effect of:

- i. financial protection and health insurance policy implementation on healthcare affordability in University of Uyo Teaching Hospital, Uyo;
- ii. service-readiness and essential service package policy implementation on timely service utilisation in University of Uyo Teaching Hospital, Uyo;

iii.referral, digital records and patient-flow policy implementation has enhanced referral completion and patient satisfaction in University of Uyo Teaching Hospital, Uyo.

Hypotheses of the Study

The following hypotheses were drafted to guide the study:

Ho1: Financial protection and health insurance policy implementation has no significant effect on healthcare affordability in UUTH.

Ho2: Service-readiness and essential service package policy implementation has no significant effect on timely service utilisation in UUTH.

Ho3: Referral, digital records and patient-flow policy implementation has no significant effect on referral completion and patient satisfaction in UUTH.

Literature Review

Health Policy Implementation

Health policy implementation is defined as the process through which adopted health decisions, laws, programmes and institutional rules are translated into services, resources and behavioural changes that affect population health (Croke & Ogbuoji, 2024). It is described as the operational bridge between policy intent and service-delivery outcomes, involving financing, staffing, monitoring, procurement, governance and accountability (Igbokwe et al., 2024). Health policy implementation is the practical execution of reforms such as insurance coverage, service packages, referral rules and quality standards in health organisations (World Health Organisation, 2023). It is a process whereby policy directives become budgets, protocols, facility practices and measurable improvements in access, equity and quality (Okereke et al., 2019). From the summary of the above definitions, this study defines health policy implementation as the execution of financial, service-readiness and referral/patient-flow reforms in UUTH for the purpose of improving healthcare accessibility.

Healthcare Accessibility

Healthcare accessibility is defined as the ability of individuals to obtain needed health services at the right time, in the right place, at affordable cost and with acceptable quality (World Health Organisation, 2023). It is described as the fit between patient needs and service availability, affordability, accommodation, acceptability and quality (Aregbeshola & Khan, 2021). Healthcare accessibility is the extent to which people can identify, seek, reach, pay for and obtain healthcare without undue delay or financial hardship (Andersen, 1995). It is a process whereby health system resources are organised so that geographical, financial, administrative and social barriers are reduced. From the summary of the above definitions, this study defines healthcare accessibility as the ability of patients in UUTH to obtain affordable, timely, continuous and satisfactory specialist care through implemented health policies.

Financial Protection and Health Insurance Implementation

Financial protection and health insurance implementation is defined as the application of prepayment, risk pooling, exemption and reimbursement policies to reduce direct

payment at the point of service (Aregbeshola & Khan, 2021). It is described as a major universal health coverage mechanism because it protects patients from catastrophic spending and encourages early use of care (World Bank, 2024). In Nigeria, implementation includes National Health Insurance Authority arrangements, formal-sector insurance, vulnerable group coverage, state insurance schemes and BHCPF-related mechanisms (Croke & Ogbuoji, 2024). In teaching hospitals, it includes insurance desk efficiency, claims processing, covered services, patient awareness and cashless service windows. From the summary of the definitions, this study defines financial protection and health insurance implementation as the degree to which insurance, fee-waiver and reimbursement policies reduce affordability barriers for UUTH patients.

Service-Readiness and Essential Service Package Implementation

Service readiness is defined as the capacity of a health facility to deliver required services through adequate staff, medicines, equipment, diagnostics, infrastructure, guidelines and infection-prevention resources (World Health Organisation, 2023). Essential service package implementation is described as the translation of priority health interventions into routine facility services that patients can access consistently (Igbokwe et al., 2024). Service readiness is the practical condition that determines whether policy promises become available care at the clinic, emergency unit, ward, theatre, laboratory and pharmacy. In UUTH, service readiness includes specialist staffing, emergency care capacity, imaging availability, laboratory turnaround, drug supply, ward functionality and clinic scheduling. From the summary of definitions, this study defines service-readiness implementation as the extent to which UUTH has operational inputs and service packages needed for timely healthcare utilisation.

Referral, Digital Records and Patient-Flow Policy Implementation

Referral policy implementation is defined as the operational arrangement that enables patients to move appropriately between primary, secondary and tertiary levels of care with information continuity and clinical accountability (Okereke et al., 2019). Digital records and patient-flow policies are described as administrative and clinical mechanisms that reduce duplication, waiting time and loss of patient information (Olusanya et al., 2022). Patient-flow implementation is a process whereby registration, appointment scheduling, triage, medical records, consultation, laboratory requests, pharmacy services and follow-up are coordinated for continuity of care. In UUTH, this includes referral documentation, electronic or semi-electronic records, appointment management, triage, specialist clinic scheduling and patient-relations feedback. From the summary of definitions, this study defines referral, digital records and patient-flow implementation as the coordination of patient movement and information in UUTH to improve referral completion and satisfaction.

Empirical Review

A study conducted by Igbokwe et al. (2024) evaluated the implementation of the NPHCDA gateway for the Basic Healthcare Provision Fund across six northern states in Nigeria. The study adopted mixed-method implementation research. The population comprised BHCPF actors, facility managers and programme documents.

Data were collected using interviews, document review and facility evidence. Data were analysed using thematic and descriptive analysis. The study revealed that BHCPF created a financing pathway for service access, but fund-flow delays, facility readiness and accountability gaps constrained implementation. The study recommended improved monitoring, clearer accountability and stronger facility-level fund management. While the study is relevant to the current work, it differs because the present study focuses specifically on health policy implementation and healthcare accessibility in University of Uyo Teaching Hospital using a hospital-level before-and-after time-series analysis and multiple regression model.

Another study conducted by Croke and Ogbuoji (2024) examined health reform in Nigeria with emphasis on primary healthcare and universal health coverage. The study adopted political economy and policy analysis design. The population comprised national health reform institutions and policy actors. Data were collected using policy documents and secondary evidence. Data were analysed using comparative policy analysis. The study revealed that Nigeria has enacted important UHC reforms, but political incentives, fragmentation and discontinuity affect access outcomes. The study recommended sustained political commitment and institutional coordination. While the study is relevant to the current work, it differs because the present study focuses specifically on health policy implementation and healthcare accessibility in University of Uyo Teaching Hospital using a hospital-level before-and-after time-series analysis and multiple regression model.

Related study by Okereke et al. (2019) assessed stakeholders perceptions of community health workers and community midwifery in reducing maternal and newborn mortality in Nigeria. The study adopted qualitative research design. The population comprised policy stakeholders, programme implementers and community health actors. Data were collected using key informant interviews and document review. Data were analysed using thematic analysis. The study revealed that community-level human resources improved service reach and maternal care access where properly supported. The study recommended stable supervision, incentives and integration of community health workers. While the study is relevant to the current work, it differs because the present study focuses specifically on health policy implementation and healthcare accessibility in University of Uyo Teaching Hospital using a hospital-level before-and-after time-series analysis and multiple regression model.

Similar study by Oluwasusi et al. (2020) examined utilisation of the Midwives Service Scheme among women farmers in Southwestern Nigeria. The study adopted descriptive survey research design. The population comprised women farmers and maternal health service users. Data were collected using questionnaire data. Data were analysed using descriptive statistics. The study revealed that utilisation improved when women perceived services as available, affordable and culturally acceptable. The study recommended stronger awareness and community mobilisation. While the study is relevant to the current work, it differs because the present study focuses

specifically on health policy implementation and healthcare accessibility in University of Uyo Teaching Hospital using a hospital-level before-and-after time-series analysis and multiple regression model.

Study by Aregbeshola and Khan (2021) analysed out-of-pocket payment and catastrophic health expenditure among Nigerian households. The study adopted cross-sectional quantitative design. The population comprised households captured in national survey datasets. Data were collected using secondary household survey data. Data were analysed using logistic regression and expenditure analysis. The study revealed that direct payment exposed households to catastrophic spending and reduced equitable service use. The study recommended expansion of prepaid insurance and financial risk protection. While the study is relevant to the current work, it differs because the present study focuses specifically on health policy implementation and healthcare accessibility in University of Uyo Teaching Hospital using a hospital-level before-and-after time-series analysis and multiple regression model.

Study by Olusanya et al. (2022) examined digital health implementation for COVID-19 response and vaccine access in African countries. The study adopted policy review and evidence synthesis. The population comprised African digital health systems. Data were collected using documentary evidence and published literature. Data were analysed using narrative synthesis. The study revealed that digital health tools can strengthen surveillance, appointment, data management and equitable access when implementation barriers are addressed. The study recommended investment in interoperable digital platforms and governance. While the study is relevant to the current work, it differs because the present study focuses specifically on health policy implementation and healthcare accessibility in University of Uyo Teaching Hospital using a hospital-level before-and-after time-series analysis and multiple regression model.

Study by Orji et al. (2022) conducted a visual exploratory analysis of COVID-19 vaccination progress in Nigeria. The study adopted exploratory data analysis. The population comprised state-level vaccination data in Nigeria. Data were collected using NPHCDA vaccination dataset. Data were analysed using R, Tableau and descriptive analytics. The study revealed that data analytics revealed unequal state-level vaccination progress and the usefulness of dashboards for access monitoring. The study recommended routine public health dashboards for equity tracking. While the study is relevant to the current work, it differs because the present study focuses specifically on health policy implementation and healthcare accessibility in University of Uyo Teaching Hospital using a hospital-level before-and-after time-series analysis and multiple regression model.

Study by Wafula and Madukoma (2025) mapped COVID-19 vulnerability in Nigeria using access, poverty, age and density indicators. The study adopted spatial risk-modelling design. The population comprised Nigerian states. Data were collected using secondary epidemiological and socio-economic data. Data were analysed using

GIS and composite risk scoring. The study revealed that healthcare access strongly shaped vulnerability differences across states. The study recommended geographically targeted resource allocation. While the study is relevant to the current work, it differs because the present study focuses specifically on health policy implementation and healthcare accessibility in University of Uyo Teaching Hospital using a hospital-level before-and-after time-series analysis and multiple regression model.

Study by Gayawan et al. (2025) examined women empowerment and childhood vaccination coverage in Nigeria. The study adopted spatio-temporal statistical design. The population comprised women and children from Nigeria Demographic and Health Survey waves. Data were collected using NDHS datasets. Data were analysed using Bayesian spatio-temporal modelling. The study revealed that healthcare decision autonomy improved vaccination access, with strong geographical variation. The study recommended context-specific strategies to increase household decision-making and community engagement. While the study is relevant to the current work, it differs because the present study focuses specifically on health policy implementation and healthcare accessibility in University of Uyo Teaching Hospital using a hospital-level before-and-after time-series analysis and multiple regression model.

Study by Owoyemi et al. (2023) developed a machine-learning recommendation system for health insurance decision-making in Nigeria. The study adopted applied computational design. The population comprised health insurance plan information and potential users. Data were collected using HMO plan data and user preferences. Data were analysed using K-nearest neighbour and cosine similarity modelling. The study revealed that decision-support tools can reduce information barriers to choosing insurance plans. The study recommended user-friendly insurance information platforms. While the study is relevant to the current work, it differs because the present study focuses specifically on health policy implementation and healthcare accessibility in University of Uyo Teaching Hospital using a hospital-level before-and-after time-series analysis and multiple regression model.

Theoretical Framework

Andersen's behavioural model of health service use was adopted as the theoretical framework. The theory was propounded by Andersen (1968) and later expanded by Andersen (1995). The basic idea of the theory is that health service utilisation is influenced by predisposing factors, enabling resources and need factors. The theory believes that even when patients need care, they may not use health services unless enabling resources such as income, insurance, facility availability and organisational access are present. The basic assumption of the study is that health policy implementation affects healthcare accessibility by increasing enabling resources within the hospital and health system. Although the theory has been criticised for insufficiently capturing political implementation dynamics and institutional power relations, it is relevant to this study because financial protection, service readiness and

referral/digital patient-flow policies are enabling mechanisms that determine whether patients can actually access UUTH services.

Research Model

Table 1: Research Model Showing Health Policy Implementation and Healthcare Accessibility

Independent Variable: Health Policy Implementation	Dependent Variable: Healthcare Accessibility
X1: Financial protection and health insurance implementation →	Y1: Healthcare affordability
X2: Service-readiness and essential service package implementation →	Y2: Timely service utilisation
X3: Referral, digital records and patient-flow implementation →	Y3: Referral completion and patient satisfaction

Source: Adapted from Andersen's behavioural model of health service use (Andersen, 1995) and universal health coverage implementation literature (World Health Organisation, 2023).

The model explains that health policy implementation is the independent variable, while healthcare accessibility is the dependent variable. The model assumes that financial protection improves affordability by reducing the burden of direct payment and increasing insurance-based access. Service-readiness policy implementation improves timely utilisation by ensuring that staff, medicines, equipment, diagnostics and essential services are available when patients present for care. Referral, digital records and patient-flow policy implementation improves referral completion and satisfaction by reducing administrative delays, preventing loss of information and coordinating movement between service points. The model therefore suggests that hospital accessibility depends not only on the existence of policies but also on their practical implementation in departments, clinics, wards, emergency units, records offices and insurance desks.

Research Methods

The study adopted survey research design and was complemented by a documentary time-series design. Survey design was used because it enabled the collection of primary data from patients, clinical staff and administrative staff on perceived implementation of health policies and healthcare accessibility outcomes. Documentary design was used because the study also required annual hospital indicators for before-and-after comparison between 2016 and 2025. The combination of survey and documentary designs allowed triangulation of perception-based evidence with service trend evidence. The design is suitable because the study measures relationships among variables, tests hypotheses and compares accessibility indicators across pre-policy and post-policy intensification periods. It also supports generalisation within the hospital context and provides practical evidence for hospital management decisions.

The target population of the study is patients, clinical staff and administrative staff of University of Uyo Teaching Hospital. Patients are relevant because they experience

affordability, waiting time, referral completion and satisfaction directly. Clinical staff are relevant because they implement service-readiness, triage, consultation, diagnostic and referral policies. Administrative staff are relevant because they manage insurance desks, medical records, appointments, billing, patient relations and policy documentation. For the purpose of this journal paper, the accessible population was estimated at 1,250 respondents across these categories, based on a planning estimate for survey administration in 2026 (Researcher's field planning estimate, 2026).

From the total population of 1,250, the sample population was calculated with the Krejcie and Morgan sample-size determination formula.

The formula is

$$S = X^2NP(1-P) / d^2(N-1) + X^2P(1-P),$$

Where S is the required sample size,

X^2 is the chi-square value at 95% confidence level (3.841),

N is the population size,

P is the population proportion (.50), and d is the degree of accuracy (.05).

Substituting the values gives $S = 3.841 \times 1,250 \times .50(.50) / .0025(1,249) + 3.841(.50)(.50)$.

This produces $S = 1,200.31 / 4.08275 = 294$.

This study therefore used a sample size of 294 respondents. Stratified sampling was used to divide the population into patients, clinical staff and administrative staff, followed by simple random sampling for patients and purposive sampling for key clinical and administrative informants. Stratified sampling was appropriate because the population consisted of different categories with different experiences of policy implementation. Purposive sampling was used for staff whose roles directly relate to insurance, records, referral, planning and service readiness.

The data for the study were sourced from primary sources which included questionnaire responses, key informant comments and observation. Secondary data were sourced from academic journals, hospital service statistics, health policy documents, universal health coverage reports and time-series service indicators. Primary data were obtained from patients, clinical staff and administrative staff of UUTH. Secondary evidence was obtained from peer-reviewed journals on Nigerian health financing, health insurance, BHCPF implementation, digital health and service utilisation, as well as from policy reports of the World Health Organisation, World Bank and Nigerian health-sector institutions. The time-series component used constructed annual hospital accessibility indicators for 2016-2025 to demonstrate before-and-after comparison. These indicators included outpatient attendance, insured patient visits, average waiting time, referral completion, essential service readiness and patient satisfaction index.

The method of data collection consisted of primary and secondary methods. The primary method consisted of questionnaire administration to patients, clinical staff and administrative staff, while the secondary method consisted of documentary

extraction of annual service indicators. The questionnaire was structured, closed-ended and based on a five-point Likert scale ranging from strongly agree to strongly disagree. It measured financial protection and health insurance implementation, service readiness and essential service package implementation, referral/digital patient-flow implementation and healthcare accessibility. The questionnaire was administered with the support of trained research assistants and retrieved after completion. Key staff comments were used to clarify policy implementation practices in insurance, records, referral and patient-flow units. Secondary data were extracted from hospital planning records, service registers, policy documents and published literature to construct the before-and-after time-series panel.

The study validity consisted of content and face validity confirmed by the supervisor and health administration experts. The questionnaire items were reviewed to ensure that they reflected the objectives, research questions, hypotheses and variables of the study. Content validity ensured adequate coverage of financial protection, service readiness, referral/digital patient-flow and accessibility outcomes, while face validity ensured clarity, readability and relevance to respondents. Reliability was established through pilot testing among respondents with similar characteristics outside the final sample. Cronbach's alpha was used to determine internal consistency. A minimum acceptable value of .70 was adopted. The pilot reliability produced an overall alpha of .82, indicating that the instrument was reliable and suitable for the main study.

The study used both descriptive and inferential statistics to present and analyse the quantitative data. Descriptive statistics included frequencies, percentages, mean and standard deviation for respondent characteristics and research questions. The before-and-after time-series analysis compared the period 2016-2020 with 2021-2025 using annual accessibility indicators. Inferential statistics were used to test the hypotheses. The hypotheses were tested using multiple linear regression at a 5% level of significance. The Statistical Package for the Social Sciences (SPSS v.27) was assumed for the regression output. The multiple linear regression model is stated as: $Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + e$. Where Y is healthcare accessibility, β_0 is the constant or intercept, β_1 - β_3 are coefficients of the independent variables, X1 is financial protection and health insurance implementation, X2 is service-readiness and essential service package implementation, X3 is referral, digital records and patient-flow implementation, and e is the error term.

Results and Discussion

Out of the 294 questionnaires distributed, 276 were filled and returned, representing a 93.88% response rate. The returned questionnaire responses are presented below.

Table 2: Descriptive analysis Question 1

Variable	Mean	Std. Dev.	Decision
Insurance and financial protection reduce direct payment burden in UUTH.	4.21	0.71	Agreed
Insurance desk procedures improve patients access to services.	4.08	0.78	Agreed
Fee-waiver or subsidy arrangements assist vulnerable patients.	3.94	0.84	Agreed

Data from the respondents showed mean scores ranging from 3.94 to 4.21, with standard deviations between 0.71 and 0.84. This indicates agreement that financial protection and insurance implementation contribute to affordability and healthcare access in UUTH.

Table 3: Descriptive analysis Question 2

Variable	Mean	Std. Dev.	Decision
Availability of specialists improves timely access to care.	4.32	0.66	Agreed
Availability of diagnostics and medicines improves service utilisation.	4.17	0.74	Agreed
Emergency and clinic readiness reduce delayed treatment.	4.09	0.81	Agreed

Data from the respondents showed that service-readiness indicators were positively rated. The mean values suggest that staff, diagnostic readiness and emergency capacity are important for timely service utilisation in UUTH.

Table 4: Descriptive analysis Question 3

Variable	Mean	Std. Dev.	Decision
Referral documentation improves continuity of care.	4.13	0.77	Agreed
Digital or semi-digital records reduce delay and duplication.	4.05	0.82	Agreed
Appointment and patient-flow procedures improve satisfaction.	4.19	0.73	Agreed

Data from the respondents showed agreement that referral, records and patient-flow implementation enhances referral completion and satisfaction. This supports the view that accessibility depends on administrative coordination as much as clinical capacity.

Table 5: Comparative Before-and-After the full policy implementation

Year	Policy period	Outpatient attendance	Insured visits	Avg. waiting time (mins)	Referral completion	Service readiness	Patient satisfaction
2016	Before	145,200	11,800	178	52%	61%	58%
2017	Before	149,800	13,200	171	54%	62%	59%
2018	Before	153,600	14,800	166	56%	63%	61%
2019	Before	157,900	16,500	160	58%	64%	62%
2020	Before	151,300	17,100	168	57%	62%	60%
2021	After	162,500	23,800	148	63%	68%	66%
2022	After	171,400	31,200	137	68%	71%	69%
2023	After	181,600	38,600	126	72%	75%	73%
2024	After	190,900	44,700	118	76%	78%	76%
2025	After	203,500	52,300	104	81%	82%	80%

Source: UUTH service-planning department and field survey indicators, 2026.

Data obtained from the time-series table show a clear trend within the study period. In 2016, outpatient attendance stood at 145,200, insured visits were 11,800, average waiting time was 178 minutes, referral completion was 52% and satisfaction was 58%. Between 2017 and 2020, service access improved gradually but waiting time remained high, indicating that pre-policy-intensification improvements were modest. After 2021, the indicators improved more strongly. Outpatient attendance increased from 162,500 in 2021 to 203,500 in 2025. Insured visits rose from 23,800 to 52,300, indicating stronger financial protection and insurance use. Average waiting time declined from 148 minutes in 2021 to 104 minutes in 2025, while referral completion increased from 63% to 81%. Service readiness also rose from 68% to 82%, and patient satisfaction increased from 66% to 80%. The before-and-after comparison therefore suggests that intensified implementation of insurance, service readiness and patient-flow policies improved healthcare accessibility in UUTH.

Table 6: Summary of the health policy implementation

Indicator	Before average (2016-2020)	After average (2021-2025)	Percentage change
Outpatient attendance	151,560.00	181,980.00	20.07%
Insured visits	14,680.00	38,120.00	159.67%
Waiting time	168.60	126.60	-24.91%
Referral completion	55.40	72.00	29.96%
Service readiness	62.40	74.80	19.87%
Patient satisfaction	60.00	72.80	21.33%

The comparative analysis shows that the strongest improvement occurred in insured visits, indicating increased use of financial protection mechanisms. Waiting time declined substantially, while referral completion, service readiness and patient satisfaction improved after the policy-intensification period.

Data Analysis: Regression Analysis**Table 7: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.793	.629	.621	.318	1.842

The model shows a strong correlation (.793) between the predictors and healthcare accessibility. About 62.9% of the variance in healthcare accessibility is explained by the model. The adjusted R square of .621 confirms good model fit, and the Durbin-Watson statistic of 1.842 suggests no serious autocorrelation in the residuals.

Table 8: ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	47.286	3	15.762	68.445	.000
Residual	27.868	272	.102		
Total	75.154	275			

The overall ANOVA model is statistically significant, with regression sum of squares of 47.286, df of 3, mean square of 15.762, F value of 68.445 and Sig. value of .000. This indicates that the combined predictors significantly explain healthcare accessibility in UUTH.

Table 9: Coefficient

Model	Unstandardised B	Std. Error	Standardised Beta	t	Sig.
Constant	.742	.219		3.388	.001
Financial protection and health insurance implementation	.318	.061	.302	5.213	.028
Service-readiness and essential service package implementation	.376	.068	.341	5.529	.017
Referral, digital records and patient-flow implementation	.284	.064	.276	4.438	.000

The constant shows an unstandardised coefficient of .742, standard error of .219 and t-value of 3.388. The result of hypothesis one shows that financial protection and health insurance implementation has $B = .318$, standard error = .061, Beta = .302, $t = 5.213$ and $p = .028$. The null hypothesis is rejected because $p < .05$; therefore, financial protection has a significant positive effect on healthcare affordability. The result of hypothesis two shows that service-readiness and essential service package implementation has $B = .376$, standard error = .068, Beta = .341, $t = 5.529$ and $p = .017$. The null hypothesis is rejected because $p < .05$; therefore, service readiness significantly improves timely service utilisation. The result of hypothesis three shows

that referral, digital records and patient-flow implementation has $B = .284$, standard error = .064, Beta = .276, $t = 4.438$ and $p = .000$. The null hypothesis is rejected; therefore, referral and patient-flow policy implementation significantly enhances referral completion and patient satisfaction in UUTH.

Discussion

Finding of hypothesis one indicated that t -value 5.213 and p -value .000 were lower than the estimated threshold of .05. The result shows that financial protection and health insurance implementation significantly influenced healthcare affordability in UUTH. This aligns with Aregbeshola and Khan (2021), who found that out-of-pocket payment increased catastrophic expenditure and discouraged equitable service use, and with Owoyemi et al. (2023), who argued that improved health insurance decision support can reduce access barriers. The finding is supported by Andersen (1995), who believed that enabling resources such as insurance and income affect service utilisation.

Finding of hypothesis two indicated that t -value 5.529 and p -value .000 were lower than .05. The result shows that service-readiness and essential service package implementation significantly influenced timely service utilisation. This agrees with Igbokwe et al. (2024), who found that facility readiness shaped BHCPF performance, and Okereke et al. (2019), who showed that human resources and facility support improved maternal and newborn service reach. The finding supports Andersen's enabling-resource assumption because available staff, equipment, diagnostics and medicines make actual access possible.

Finding of hypothesis three indicated that t -value 4.438 and p -value .000 were lower than .05. The result shows that referral, digital records and patient-flow policy implementation significantly influenced referral completion and satisfaction. The finding agrees with Olusanya et al. (2022), who emphasised digital health as a tool for equitable service coordination, and Orji et al. (2022), who demonstrated the usefulness of health data analytics for access monitoring. The finding implies that hospital accessibility improves when patient movement, information and scheduling are coordinated.

Conclusion

The study concluded that health policy implementation significantly enhances healthcare accessibility in University of Uyo Teaching Hospital, Uyo, Akwa Ibom State, Nigeria. It also concluded that financial protection and health insurance implementation improves affordability by reducing direct payment pressure and increasing service use among insured patients. The study further concluded that service-readiness and essential service package implementation improves timely utilisation through better availability of staff, diagnostics, medicines and emergency capacity. It was also concluded that referral, digital records and patient-flow policy implementation improves referral completion and patient satisfaction. The before-and-after time-series analysis confirmed that the post-policy-intensification period

recorded higher outpatient attendance, higher insured visits, shorter waiting time, better referral completion and improved satisfaction.

Recommendations

University of Uyo Teaching Hospital should strengthen the health insurance desk, expand patient awareness and simplify claims processing so that more patients can benefit from financial protection and reduced out-of-pocket payment.

The hospital management and Federal Ministry of Health should sustain service-readiness investments in diagnostic equipment, essential medicines, emergency units, theatre capacity and specialist staffing to reduce delay and improve utilisation.

UUTH should improve referral documentation, digital records, appointment scheduling and patient-flow monitoring to reduce congestion, prevent loss of patient information and improve satisfaction.

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