International Journal of Research in All Subject
www.multiarticlejournal.com
ISSN: 3107-5878
Received: 06-04-2026, Accepted: 07-05-2026, Published: 22-05-2026
Volume 2, Issue 2, 2026, Page No. 68-76

Exploring patient satisfaction under Ghana's NHIS: A qualitative study of service quality, value, and access barriers in Accra

Benedict Banasko Adjartey Hays
Department of Business and Management, Texila American University, Guyana

Abstract
Purpose: This study examined patient satisfaction under Ghana's National Health Insurance Scheme (NHIS) by exploring service quality, perceived value, and access barriers in selected healthcare facilities in Accra.
Methodology/Design: A qualitative approach was used, adopting a descriptive phenomenological design. Data were collected through semi structured interviews with 30 NHIS beneficiaries selected using purposive sampling. The data were analysed using thematic analysis to identify key patterns and experiences.
Findings: The results showed that patient satisfaction was influenced by waiting time, staff attitude, and availability of medicines. Long delays and overcrowding reduced perceived service quality, while inconsistent provider behavior affected patient experience. Although NHIS reduced financial burden, perceived value declined when patients made additional payments for drugs and services. Access barriers such as staff shortages, medicine unavailability, and indirect costs like time and transport further limited effective use of services and reduced satisfaction.
Implications: The study highlights the need for improved healthcare delivery, better resource availability, and stronger patient centered practices to enhance satisfaction under NHIS. Policymakers and healthcare managers must address both service quality and access challenges.
Originality/Value: The study provides in depth qualitative insights into patient experiences under NHIS in an urban Ghanaian context, linking service quality, value, and access in one framework.

Keywords: NHIS, patient satisfaction, service quality, perceived value, access barriers, ghana

Introduction

Patient satisfaction has become a central indicator in evaluating the performance of health systems globally, particularly in settings striving toward universal health coverage. In Ghana, the National Health Insurance Scheme (NHIS) was introduced to improve financial access to healthcare and reduce out of pocket payments, yet concerns persist regarding the actual quality of services delivered to insured clients. Recent evidence suggests that while the NHIS has expanded healthcare utilization, perceived service quality challenges such as long waiting times, inconsistent drug availability, and provider attitudes continue to shape patient experiences and satisfaction levels in public and private facilities (Amporfro *et al*., 2021; Abiiro & De Allegri, 2020) [1, 4]. These issues are particularly relevant in urban settings like Accra, where high patient volumes place additional pressure on healthcare delivery systems.

Service quality remains a key determinant of patient satisfaction under the NHIS framework. Studies conducted in Ghana indicate that dimensions such as responsiveness, reliability, empathy, and assurance significantly influence how patients evaluate healthcare services received under insurance coverage (Nketiah Amponsah *et al*., 2019) [19]. Despite policy efforts to standardize care, disparities in service delivery continue to be reported, especially between insured and uninsured patients and across different facility types. In addition, inefficiencies in claims processing and delays in reimbursement have been linked to provider reluctance in fully adhering to NHIS benefit provisions, further affecting patient experiences (Kodom *et al*., 2019; Atinga *et al*., 2021) [4, 19]. These systemic challenges raise concerns about whether the NHIS is achieving its intended goal of not only increasing access but also ensuring acceptable quality of care.

Access barriers also remain a persistent issue within Ghana's health system. Although the NHIS was designed to eliminate financial constraints, non-financial barriers such as distance to facilities, overcrowding, and limited availability of essential services continue to affect healthcare access and utilization, particularly among vulnerable populations. In urban centers like Accra, increased demand for healthcare services often leads to congestion and reduced consultation time, which can negatively influence patient perceptions of care quality. Furthermore, variations in facility resources and staff capacity contribute to uneven service experiences, which may ultimately shape satisfaction outcomes (Otoo *et al*., 2024; Mensah *et al*., 2020) [23, 32].

Notwithstanding the growing literature on NHIS performance, there remains limited qualitative exploration of how patients in urban Ghana perceive service quality, value, and access barriers simultaneously. Most existing studies rely on quantitative measures that do not fully capture patient voices and lived experiences. This creates a gap in understanding how service interactions, perceived value for insurance coverage, and structural barriers collectively influence satisfaction levels. Addressing this gap is important for informing policy improvements aimed at strengthening trust and efficiency in the NHIS.

Therefore, this study explores patient satisfaction under Ghana's NHIS in Accra with a focus on service quality, perceived value, and access barriers. It seeks to provide deeper insight into how patients interpret their healthcare experiences within the insurance system and how these perceptions shape overall satisfaction. The adoption of a qualitative approach contribute to a more nuanced understanding of patient centered care challenges and offers

evidence to support improvements in healthcare delivery under the NHIS.

Study Objectives

The study aims to understand how patients experience healthcare services under the NHIS and how these experiences influence their overall satisfaction. Specifically, the study seeks to:

1. Explore patients' perceptions of service quality under Ghana's National Health Insurance Scheme in selected healthcare facilities in Accra;
2. Examine the perceived value of healthcare services received under the NHIS and how it influences patient satisfaction in Accra and;
3. Identify access barriers affecting the utilization of NHIS services and their impact on patient satisfaction in Accra.

Significance of the Study

This study is significant because it provides a deeper understanding of how patients experience healthcare services under Ghana's National Health Insurance Scheme (NHIS) in Accra. It helps to highlight gaps in service quality, perceived value, and access barriers that continue to influence patient satisfaction within the health system (Amporfro *et al.*, 2021) [4]. In focusing on lived patient experiences, the study offers useful insights for policymakers and health managers to improve the delivery of NHIS services and strengthen trust in the scheme.

The findings are also important for health administrators and service providers as they reveal practical challenges such as long waiting times, staff attitudes, and service inefficiencies that affect patient satisfaction (Nketiah Amponsah *et al.*, 2019). Understanding these issues can support hospitals and clinics to improve patient centered care and ensure more responsive service delivery. Furthermore, the study contributes to academic literature by adding qualitative evidence on NHIS performance in urban Ghana, where limited research has focused on patient perspectives in detail (Otoo *et al.*, 2024) [33]. It also provides a useful reference for future research and policy development aimed at improving equitable access to quality healthcare services under the NHIS system. Essentially, the study supports efforts to strengthen healthcare delivery, improve patient experiences, and enhance the sustainability of the NHIS in Ghana (Mensah et al., 2020) [23].

Literature Review

Theoretical Foundation

This study is anchored on two main theories that help explain patient satisfaction under Ghana's National Health Insurance Scheme (NHIS), particularly in relation to service quality, perceived value, and access barriers.

The first theory is the SERVQUAL Model, which explains service quality based on five dimensions: reliability, responsiveness, assurance, empathy, and tangibles. The model suggests that patient satisfaction is determined by the gap between expected and perceived service quality. In healthcare settings, if patients perceive that services fall below their expectations, dissatisfaction occurs (Parasuraman *et al.*, 1988 [34]; Nketiah Amponsah *et al.*, 2019). This theory is relevant to the study because it helps explain how patients evaluate NHIS services in Accra based on their actual experiences with healthcare providers.

The second theory is the Andersen Behavioral Model of Health Service Use, which explains healthcare utilization based on predisposing factors, enabling factors, and need factors. The model argues that access to healthcare is influenced not only by financial coverage but also by structural and personal factors such as availability of services, distance, and system efficiency (Andersen, 1995; Mensah *et al.*, 2020) [5, 23]. This theory is important for the study because it helps explain how access barriers under the NHIS affect patient satisfaction in urban healthcare settings like Accra.

Service Quality

Service quality in healthcare refers to how well health services meet patient expectations in terms of reliability, responsiveness, empathy, assurance, and tangibles. In Ghana, studies show that service quality strongly influences patient satisfaction and continued use of healthcare services. Evidence indicates that responsiveness and empathy are often the weakest dimensions, especially in public hospitals, affecting overall patient experiences (Essiam, 2020; Amporfro *et al.*, 2021) [4, 14]. Research also confirms that better perceived service quality leads to higher satisfaction and trust in healthcare providers (Boakye *et al.*, 2017).

Patient Satisfaction

Patient satisfaction is defined as the extent to which patients feel their expectations of healthcare services have been met or exceeded. In Ghana, satisfaction is influenced by factors such as waiting time, staff attitude, availability of drugs, and ease of accessing care. Studies reveal that patient satisfaction is generally moderate, with significant dissatisfaction linked to long queues and communication gaps between providers and patients (Amporfro et al., 2021; Owusu *et al.*, 2024) [4, 33]. Satisfaction is also found to improve when patients experience respectful treatment and timely service delivery.

Value

Perceived value in healthcare refers to the patient's assessment of the benefits received relative to the cost or effort spent in obtaining care. In the Ghanaian context, perceived value is closely linked to service quality and financial protection offered by the NHIS. Research shows that when patients perceive higher value in NHIS services, they are more likely to report satisfaction and continued utilization of healthcare facilities (Boakye *et al.*, 2017; Atinga *et al.*, 2019) [10]. However, challenges such as informal payments and drug shortages can reduce perceived value among insured patients.

Ghana's NHIS

The National Health Insurance Scheme (NHIS) was introduced to improve access to affordable healthcare and reduce out of pocket payments. The scheme has increased healthcare utilization, especially among low income groups, but challenges remain in implementation. Studies highlight issues such as delayed claims reimbursement, inadequate drug coverage, and perceived poor service quality in accredited facilities (Nketiah Amponsah *et al.*, 2019; Amporfro et al., 2021) [9, 19]. These challenges continue to affect patient satisfaction and raise concerns about the overall effectiveness of the scheme in ensuring quality healthcare access.

Patients' Perceptions of Service Quality under Ghana's NHIS

Patients' perceptions of service quality under Ghana's National Health Insurance Scheme (NHIS) can be well explained using the SERVQUAL Model, which evaluates service quality through five key dimensions: reliability, responsiveness, assurance, empathy, and tangibles (Parasuraman *et al*., 1988) [34]. In the Ghanaian health context, these dimensions reflect how patients judge their experiences in healthcare facilities. Studies show that insured patients often evaluate service quality based on waiting time, provider attitude, communication clarity, and availability of medical resources (Amporfro *et al*., 2021; Boakye *et al*., 2021) [4, 9].

In Accra, service quality perceptions under the NHIS are shaped strongly by responsiveness and empathy. Many patients expect timely attention and respectful treatment, but overcrowding and staff workload often reduce the level of personal attention given to each patient. This creates a gap between expected and perceived service quality, leading to dissatisfaction as explained by SERVQUAL gap theory (Essiam, 2020; Owusu *et al*., 2024) [14, 33]. Reliability is also frequently questioned when patients experience delays in laboratory results or unavailability of prescribed drugs within NHIS accredited facilities.

Furthermore, assurance and tangibility influence trust in the system. When healthcare providers demonstrate competence and facilities are well equipped, patients tend to rate service quality higher. However, inconsistent service delivery across facilities weakens this trust. The SERVQUAL model therefore helps to explain why even when NHIS improves financial access, perceived service quality may still be rated low if expectations are not met (Nketiah Amponsah *et al*., 2022; Atinga *et al*., 2022) [28]. Overall, patient perceptions of service quality under NHIS in Accra are shaped by both structural constraints and interpersonal healthcare experiences.

Perceived Value of NHIS Healthcare Services and Its Influence on Patient Satisfaction

The concept of perceived value under the NHIS can be understood through the SERVQUAL Model and supported by the Andersen Behavioral Model of Health Service Use, which emphasizes that healthcare utilization and satisfaction are influenced by enabling and need factors (Andersen, 1995) [5]. Perceived value reflects how patients assess the benefits of NHIS services relative to the costs, time, and effort involved in accessing care.

In Ghana, patients perceive high value when NHIS coverage reduces direct financial payments and provides timely, quality healthcare services. Studies show that when service quality aligns with expectations, patients feel they are receiving good value for their insurance contributions (Boakye *et al*., 2021; Amporfro *et al*., 2021) [4, 9]. However, when patients are required to make out of pocket payments due to drug shortages or diagnostic limitations, perceived value declines significantly.

From the Andersen model perspective, enabling factors such as availability of medicines, facility efficiency, and provider responsiveness strongly influence perceived value. Even when patients are insured, poor service delivery acts as a barrier to positive evaluation of care (Atinga et al., 2022; Mensah *et al*., 2020) [7, 23]. Additionally, predisposing factors such as patient expectations and past experiences shape how value is interpreted.

Therefore, perceived value under NHIS is not only financial but also experiential. When healthcare delivery meets both functional and emotional expectations, patient satisfaction increases. Conversely, gaps between expectations and actual service delivery reduce perceived value and weaken trust in the NHIS (Essiam *et al*., 2020; Otoo *et al*., 2024) [14, 32].

Access Barriers Affecting NHIS Utilization and Their Impact on Patient Satisfaction

Access barriers under Ghana's NHIS can be explained using the Andersen Behavioral Model of Health Service Use, which identifies predisposing, enabling, and need factors as key determinants of healthcare access (Andersen, 1995) [5]. Although the NHIS was designed to improve financial access, several non-financial barriers continue to affect service utilization and patient satisfaction in Accra.

One major enabling barrier is overcrowding in health facilities. High patient demand, especially in urban hospitals, leads to long waiting times and reduced quality of interaction between patients and providers. According to the Andersen model, even when insurance coverage is available, limited facility capacity can restrict actual access to care (Mensah *et al*., 2020; Amporfro et al., 2021) [4, 23]. This contributes to dissatisfaction and reduced confidence in the system.

Another key barrier is service availability. Patients often experience shortages of essential medicines and diagnostic services under the NHIS, forcing them to seek care externally at additional cost. This reduces both access and satisfaction, as financial protection becomes incomplete (Nketiah Amponsah *et al*., 2022; Boakye *et al*., 2021) [9, 28]. From the SERVQUAL perspective, this also reflects a failure in reliability and tangibles, further worsening patient evaluations.

Geographical and indirect cost barriers such as transport expenses and time loss also affect access, particularly for low income patients. Even in urban areas like Accra, these factors influence healthcare seeking behavior and overall satisfaction (Otoo *et al*., 2024; Essiam, 2020) [16, 32]. The Andersen model highlights these enabling constraints as critical in shaping whether patients can fully benefit from insured services

Methodology

Research Philosophy and Paradigm

This study is guided by the interpretivist philosophical paradigm, which assumes that reality is socially constructed and best understood through the meanings individuals assign to their lived experiences. In the context of healthcare, patient satisfaction under Ghana's National Health Insurance Scheme (NHIS) cannot be fully captured through numerical measurement alone, but rather through rich descriptions of patient experiences, perceptions, and interpretations (Creswell & Poth, 2018; Saunders *et al*., 2019) [11, 37]. The interpretivist paradigm is therefore appropriate because it allows the study to explore how patients in Accra subjectively experience service quality, perceived value, and access barriers within the NHIS system.

Research Approach and Design

The study adopted a qualitative research approach using a descriptive phenomenological design. This design was

suitable for exploring lived experiences and understanding how individuals made sense of healthcare services under the National Health Insurance Scheme (NHIS). Phenomenology enabled the researcher to capture the depth of patient experiences regarding service delivery, satisfaction, and access challenges without imposing predefined assumptions (Neubauer *et al*., 2019) [27]. This approach aligned with the study's aim of generating detailed insights into patient perspectives in selected healthcare facilities in Accra.

Study Area

The study was conducted in selected NHIS accredited healthcare facilities in Accra, Ghana. Accra was chosen due to its high population density, diverse patient groups, and significant pressure on healthcare facilities, making it a relevant setting for examining service quality and access barriers under NHIS (Otoo et al., 2024) [32]. The urban nature of Accra also provided a suitable environment for capturing varied patient experiences across different facility types.

Population of the Study

The target population included NHIS registered patients who had accessed healthcare services in selected public and private healthcare facilities in Accra. These patients were considered suitable respondents because they had direct experience with service delivery under the NHIS and were able to provide informed perspectives on satisfaction, value, and access barriers.

Sampling Technique and Sample Size

A purposive sampling technique was used to select participants who had recent experience with services under the National Health Insurance Scheme (NHIS). This approach was appropriate for qualitative studies because it allowed the researcher to deliberately select information rich participants who could provide deep and meaningful insights into their healthcare experiences (Etikan *et al*., 2016) [15]. Participants were selected based on their direct use of NHIS services in accredited healthcare facilities in Accra, ensuring that they were well positioned to discuss service quality, perceived value, and access barriers.

The sample size for the study was 30 participants. In qualitative research, sample size is not determined by statistical representation but by the depth and richness of information obtained from participants. The principle of data saturation guided the sample size, meaning data collection continued until no new themes or insights emerged from additional interviews (Guest *et al*., 2020) [17].

A sample of 30 was considered adequate in qualitative health research to achieve saturation while still allowing for diverse patient experiences across different healthcare facilities. This sampling strategy ensured that the study captured varied perspectives of NHIS beneficiaries in Accra while maintaining depth of analysis and reliability of findings.

Data Collection Method

Data were collected using semi structured interviews. This method allowed participants to freely express their experiences while ensuring that key areas such as service quality, perceived value, and access barriers were covered. Interviews were conducted in person and audio recorded with participant consent. This approach is widely used in qualitative healthcare research to capture detailed insights into patient experiences (Creswell & Poth, 2018) [11].

Reliability and Trustworthiness

To ensure the quality and credibility of the findings, the study applied established principles of trustworthiness in qualitative research, which include credibility, transferability, dependability, and confirmability (Lincoln & Guba, 1985; Nowell *et al*., 2017) [22, 29].

Credibility was ensured through prolonged engagement with participants during interviews and the use of probing questions to obtain detailed and accurate responses. Member checking was also applied, where participants were given the opportunity to confirm summaries of their responses to ensure accuracy and consistency of the data collected (Creswell & Poth, 2018) [11].

Transferability was enhanced through thick and rich descriptions of participants' experiences within NHIS accredited healthcare facilities in Accra. This allows readers to determine whether the findings can be applied to similar healthcare contexts beyond the study area.

Dependability was maintained by ensuring a clear and transparent documentation of the entire research process, including sampling, data collection, and data analysis procedures. An audit trail was kept to allow other researchers to follow the steps taken in the study (Nowell *et al*., 2017) [29].

Confirmability was ensured by reducing researcher bias through careful documentation of data and interpretations. Audio recordings and transcriptions were used to support findings, ensuring that conclusions were based on participants' actual responses rather than the researcher's personal assumptions.

These strategies strengthened the trustworthiness of the study and ensured that the findings accurately reflected patients' experiences with service quality, perceived value, and access barriers under Ghana's NHIS.

Data Analysis

Data were analysed using thematic analysis, which involved identifying, coding, and interpreting patterns or themes within qualitative data. Thematic analysis was appropriate because it provided a flexible yet systematic way of analysing participants' narratives (Braun & Clarke, 2019) [10]. The analysis followed key steps including familiarisation with data, generating initial codes, searching for themes, reviewing themes, and defining final themes.

Ethical Considerations

Ethical approval was obtained from the Ghana Health Service. Informed consent was sought from all participants before interviews. Participants were assured of confidentiality, anonymity, and the right to withdraw from the study at any time without any penalty. All data collected were securely stored and used strictly for academic purposes.

Results

Demographic Characteristics of Respondents

The demographic profile of the study was assessed with 30 respondents showing a slight female majority (53.3 percent) compared to males (46.7 percent). This pattern reflects findings in Nigeria and South Africa where females are often more represented in healthcare studies due to higher

health seeking behavior and reproductive health service use (Oladipo *et al*., 2021; Mokgalaka *et al*., 2020) [24, 30].

Most respondents were within the 30–39 years age group (33.3 percent), followed by 40–49 years (26.7 percent). This indicates dominance of economically active individuals, similar to studies in Nigeria and South Africa where middle aged groups are the most frequent users of healthcare services (Adewale *et al*., 2022; Dube *et al*., 2019) [12, 28].

In terms of education, nearly half of the respondents had tertiary education (46.6 percent), suggesting a relatively educated sample. Prior studies show that higher education is linked to more critical assessment of healthcare services in both Nigeria and South Africa (Okeke *et al*., 2020; Mokoena & Erasmus, 2021) [25, 31].

Regarding NHIS membership, most respondents had been enrolled for 2–5 years (40 percent), indicating adequate experience with the scheme. Longer enrollment is associated with more informed evaluations of service quality in similar studies from Nigeria (Adebayo & Yusuf, 2021) [2].

Finally, most respondents accessed care from public hospitals (60 percent), reflecting the dominance of public facilities in NHIS service delivery, a pattern also observed in South Africa (Dube *et al*., 2019) [12].

Table 1: Demographic Profile of Respondents (N = 30)

Variable	Category	Frequency	Percent
Gender	Male	14	46.7
	Female	16	53.3
Age	18–29 years	6	20.0
	30–39 years	10	33.3
	40–49 years	8	26.7
	Above 50 years	6	20.0
Education Level	Basic	5	16.7
	Secondary	11	36.7
	Tertiary	14	46.6
NHIS Membership Duration	Less than 2 years	7	23.3
	2-5 years	12	40.0
	Above 5 years	11	36.7
Type of Facility Used	Public Hospital	18	60.0
	Private Hospital	12	40.0

Source: Field Data, 2025

Reliability and Trustworthiness Results

To ensure the credibility and rigor of the qualitative findings, the study assessed trustworthiness across the three research objectives using established qualitative criteria.

The results as shown in Table 2 indicate that all four components of trustworthiness were achieved across the three objectives. Credibility was strengthened through participant validation and saturation, ensuring that findings accurately reflected lived experiences. Transferability was enhanced through detailed descriptions of respondents and settings, allowing contextual applicability. Dependability was ensured through a systematic and consistent data collection and analysis process, while confirmability was maintained by grounding findings strictly in participants' responses without researcher bias.

Table 2: Trustworthiness of Findings across Research Objectives

Objective	Credibility	Transferability	Dependability	Confirmability
Objective 1: Service quality perceptions under NHIS	Achieved through member checking and participant validation of interview summaries	Supported by thick descriptions of patient experiences in different facilities in Accra	Ensured through consistent interview guide and audio recording of all sessions	Maintained through verbatim transcription and audit trail of response
Objective 2: Perceived value of NHIS services and patient satisfaction	Strengthened through repeated probing and triangulation of responses	Enhanced by diverse respondents from both public and private facilities	Maintained through systematic coding and step by step thematic analysis	Ensured by linking interpretations directly to participant narratives
Objective 3: Access barriers and their impact on satisfaction	Established through data saturation and cross verification of similar responses	Supported by inclusion of patients from different demographic backgrounds	Strengthened through consistent application of thematic framework across interviews	Maintained through transparent documentation of coding decisions and themes

Source: Field Data, 2026

Objective One: Patients' Perceptions of Service Quality under Ghana's NHIS

The findings showed that patients' perceptions of service quality under the NHIS were shaped mainly by waiting time, staff attitude, and availability of medicines. Most respondents described service delivery in NHIS accredited facilities as slow, with long queues and overcrowding being common experiences. One participant explained:

"*I* sometimes spend almost the whole day at the hospital before I see a doctor" (Respondent 7).

Staff attitude also played a major role in shaping perceptions of service quality. Some patients reported polite and supportive interactions, while others experienced unfriendly communication, especially during busy periods. As one respondent stated:

"Some nurses are kind, but others talk to us harshly when the hospital is full" (Respondent 14).

Another key issue was the unavailability of medicines under NHIS coverage, which reduced confidence in service reliability. A participant noted:

"They will prescribe drugs for you, but you still have to buy them outside" (Respondent 11).
Overall, service quality was perceived as inconsistent, with experiences varying across facilities and staff.

Objective Two: Perceived Value of NHIS Services and Its Influence on Patient Satisfaction

The findings revealed that patients generally appreciated the NHIS for reducing the financial burden of healthcare, but their perception of value was influenced by service experience. Many respondents acknowledged that the scheme helped them access care they could otherwise not afford. One participant stated:
"Without NHIS I could not afford treatment, so it still helps me a lot" (Respondent 5).
However, several respondents expressed concerns about unmet expectations, particularly regarding additional payments for drugs and services. A participant explained:
"I thought everything would be free, but I still have to pay for medicines outside" (Respondent 9).
Perceived value was closely linked to satisfaction, as patients evaluated the scheme based on both cost savings and quality of care received. As one respondent noted:
"If I am treated well and do not spend too much money, then I feel satisfied" (Respondent 18).
Overall, while NHIS was valued for financial protection, dissatisfaction arose when service quality did not match expectations.

Objective Three: Access Barriers Affecting NHIS Utilization and Patient Satisfaction

The study found that several access barriers affected the utilization of NHIS services and overall patient satisfaction. Overcrowding and limited healthcare staff were frequently mentioned as major challenges. One participant explained:
"There are too many patients and few doctors, so everything takes a long time" (Respondent 6).
Drug shortages and limited service availability were also significant barriers, forcing patients to purchase medicines externally. A respondent stated:
"Even with NHIS, you still go outside to buy drugs because they are not available" (Respondent 8).
Indirect costs such as transport expenses and time loss further affected access to care. One participant noted:
"I spend a lot of time and money on transport just to attend hospital" (Respondent 4).
These barriers negatively influenced satisfaction, as patients felt that the benefits of NHIS were reduced by delays and additional costs. As one respondent concluded:
"The waiting and stress make the service feel poor, even though I have insurance" (Respondent 17).
Overall, access barriers significantly reduced the effectiveness of NHIS in delivering satisfactory healthcare experiences.

Discussion of Findings

Objective One: Patients' Perceptions of Service Quality under Ghana's NHIS

The findings show that patients' perceptions of service quality under the NHIS were largely shaped by waiting time, staff attitude, and availability of medicines. These experiences reflect key dimensions of the SERVQUAL model, particularly responsiveness, empathy, and reliability. The long waiting times and overcrowding reported by participants indicate weak responsiveness, where healthcare delivery does not meet patient expectations for timely service. This aligns with the SERVQUAL gap theory, which explains dissatisfaction as a result of differences between expected and perceived service performance (Parasuraman *et al*., 1988) [34].
The statement that patients sometimes spend almost the entire day before seeing a doctor illustrates structural inefficiencies within service delivery. From a theoretical perspective, this reflects low responsiveness and limited assurance, since patients may begin to question the competence and efficiency of the system when delays persist. Similar patterns have been reported in Ghanaian empirical studies where overcrowding and long queues significantly reduce perceived service quality and increase dissatisfaction among NHIS users (Amporfro *et al*., 2021; Asante & Aikins, 2020) [6, 9]. These findings are also consistent with another study in Ghana which found that waiting time is one of the strongest predictors of dissatisfaction among insured patients in public hospitals (Atinga *et al*., 2022) [7].
Staff attitude emerged as another critical factor influencing perceived service quality. The mixed experiences of respectful and harsh communication demonstrate inconsistency in the empathy dimension of SERVQUAL. In facilities where staff are polite and supportive, patients are more satisfied, confirming that interpersonal interaction is central to perceived quality. However, negative experiences weaken trust and reinforce dissatisfaction, especially during high workload periods. This is supported by findings from Ghanaian research which shows that provider attitude strongly influences patient trust and satisfaction under NHIS (Boateng *et al*., 2021) [8].
Evidence from Europe also supports these findings. A study in the United Kingdom reported that patient satisfaction in public hospitals was strongly linked to communication quality and staff empathy, rather than only clinical outcomes (Sizmur *et al*., 2022) [39]. Similarly, research in Germany found that respectful provider patient interaction significantly improved perceived service quality even in high demand healthcare systems (Groene *et al*., 2020) [16].
From Asia, studies further reinforce these results. In India, research showed that overcrowding and long waiting times in public hospitals negatively affected SERVQUAL dimensions, especially responsiveness and reliability (Kumar *et al*., 2020) [20]. In China, patient satisfaction was also found to be highly dependent on doctor patient communication and perceived attentiveness of healthcare staff (Li *et al*., 2021) [2].
The issue of medicine unavailability further reflects problems with reliability and tangibles. When patients are prescribed drugs under NHIS but are required to purchase them externally, it creates a perception of system failure. This weakens confidence in the scheme and contributes to the belief that NHIS does not fully deliver promised services. Similar findings in Ghana show that drug stock outs remain a major concern affecting perceived service reliability (Nketiah Amponsah *et al*., 2022) [28]. Overall, the findings confirm that service quality under NHIS in Accra is inconsistent and shaped by both structural constraints and human interaction factors.

Objective Two: Perceived Value of NHIS Services and Its Influence on Patient Satisfaction

The findings indicate that while patients appreciate the NHIS for reducing financial burden, their perceived value is strongly influenced by service quality and overall

experience. This can be explained using the SERVQUAL model combined with the Andersen Behavioral Model, which emphasizes that satisfaction is shaped by both service performance and enabling conditions such as access, availability, and system efficiency (Andersen, 1995) [5].

Patients acknowledged that NHIS provides financial protection, which increases perceived value. This confirms that cost reduction remains a major benefit of health insurance systems in low income settings. However, perceived value declines when patients are required to make additional out of pocket payments, especially for medicines. This creates a mismatch between expectations and actual service delivery, weakening satisfaction levels.

From the Andersen model perspective, enabling factors such as drug availability and service efficiency directly shape how value is experienced. When essential medicines or diagnostic services are unavailable, the financial protection offered by NHIS becomes incomplete, reducing perceived benefit. Additionally, predisposing factors such as patient expectations and prior experiences influence how value is interpreted. Those who expect full coverage often feel disappointed when additional payments are required.

The close link between perceived value and satisfaction is evident in patient responses indicating that satisfaction depends on both cost savings and quality of care. This supports existing literature that value perception is not purely economic but also experiential. When patients receive timely, respectful, and affordable care, perceived value increases. However, when service quality is poor, even financial benefits cannot sustain satisfaction. Thus, value under NHIS is multidimensional, combining financial relief with service experience.

Evidence from the United States supports this finding. A study by Moser *et al*. (2020) [26] found that insured patients' perceived value was strongly influenced by service accessibility and out of pocket costs, rather than insurance coverage alone. Similarly, research by Johnston *et al*. (2022) [18] showed that even with comprehensive insurance coverage, patients reported low perceived value when care coordination and service efficiency were weak.

In Asia, similar patterns have been observed. In Malaysia, Rahman *et al*. (2021) [36] found that perceived value of public health insurance was significantly reduced by medicine shortages and long waiting times. In India, Singh and Gupta (2020) [38] reported that patients' satisfaction under public insurance schemes depended not only on financial protection but also on quality of hospital experience and service responsiveness.

These international findings reinforce the Ghanaian evidence that perceived value is shaped by both financial protection and service quality experience, confirming that insurance coverage alone does not guarantee satisfaction.

Objective Three: Access Barriers affecting NHIS Utilization and Patient Satisfaction

The findings reveal that access barriers significantly influence NHIS utilization and patient satisfaction. Using the Andersen Behavioral Model, these barriers can be understood as enabling constraints that limit healthcare access even when insurance coverage exists. Although NHIS reduces direct financial barriers, structural and system related challenges continue to affect service delivery and patient experience.

Overcrowding and limited staffing were identified as major barriers. These conditions reduce the system's capacity to deliver timely care, leading to long waiting times and limited patient provider interaction. According to Andersen's model, the presence of insurance alone does not guarantee access when health system capacity is weak. Similar findings have been reported in Asia. For example, a study in India found that overcrowded public hospitals significantly reduced access and patient satisfaction under government insurance schemes (Kumar et al., 2020). In China, Li *et al*. (2021) [4, 20] also observed that high patient volumes and limited staff reduced consultation time and negatively affected patient experiences.

Drug shortages and service limitations further weaken access. When patients are required to purchase medicines outside healthcare facilities, the intended financial protection of NHIS becomes incomplete. From the SERVQUAL perspective, this reflects weak reliability and inadequate tangibles, as core service components are missing. Evidence from Indonesia supports this finding, where medicine stock outs under national insurance were found to reduce both access and trust in the healthcare system (Putri *et al*., 2021) [35]. Similarly, a study in Bangladesh reported that lack of essential drugs was a major barrier to effective utilization of insured services (Rahman *et al*., 2020) [14].

Indirect costs such as transport expenses and time loss also contribute to access challenges. These findings show that access is not only financial but also involves time and effort. Even in urban areas like Accra, patients still face logistical burdens that affect healthcare utilization. This is consistent with studies from Australia. For instance, Duckett *et al*. (2020) [13] found that travel time and waiting periods significantly influenced access to public healthcare services, even within a well-resourced system. In another study, Willis *et al*. (2019) [40] reported that indirect costs and service delays reduced patient satisfaction and discouraged continued use of healthcare services.

Ultimately, access barriers reduce the effectiveness of NHIS by limiting full service utilization and increasing dissatisfaction. When combined with poor service quality and low perceived value, these barriers create a cycle that weakens patient confidence in the healthcare system. The findings therefore confirm that improving access requires attention not only to financial coverage but also to system capacity, service availability, and operational efficiency.

Conclusion

The study examined patient satisfaction under Ghana's National Health Insurance Scheme with focus on service quality, perceived value, and access barriers in Accra. The findings show that while the NHIS has improved financial access to healthcare, patient satisfaction is still shaped more by actual service experience than by insurance coverage alone.

Service quality was found to be inconsistent, with major concerns around long waiting time, staff attitude, and limited availability of medicines. These issues reflect gaps in responsiveness, empathy, and reliability, which reduce patients' confidence in the healthcare system. Although some positive experiences were reported, variations across facilities suggest uneven service delivery.

Perceived value of NHIS services was largely influenced by both cost savings and quality of care received. Patients appreciated the reduction in direct healthcare expenses, but dissatisfaction emerged when expectations of full coverage were not met. The need to make additional payments and experience poor service reduced the overall value of the scheme.

Access barriers such as overcrowding, staff shortages, drug unavailability, and indirect costs further limited the effective use of NHIS services. These barriers show that financial protection alone is not enough to ensure access and satisfaction. Structural and operational challenges continue to restrict the full benefits of the scheme.
These findings collectively indicate that patient satisfaction under NHIS depends on the interaction between service quality, perceived value, and access conditions. Improving satisfaction requires strengthening healthcare delivery systems, ensuring consistent availability of resources, and enhancing patient centered care. Addressing these areas will help the NHIS achieve its goal of not only improving access but also delivering quality and satisfactory healthcare services.

Implications of the Study

The findings of this study carry important implications for policy, practice, and research within Ghana's healthcare system.
From a policy perspective, the results suggest that expanding insurance coverage alone is not enough to improve patient satisfaction. Policymakers need to focus on strengthening service delivery by addressing delays in care, improving drug supply systems, and ensuring timely reimbursement to healthcare providers. Enhancing these areas will help reduce gaps between expected and actual service quality under the NHIS.
In terms of healthcare practice, the study highlights the need for improved staff training and patient centered care. Healthcare providers should place greater emphasis on communication, empathy, and responsiveness, as these interpersonal factors strongly influence patient satisfaction. In addition, facility managers must adopt strategies to manage patient flow and reduce overcrowding, such as better scheduling systems and resource allocation.
The study also has implications for health system management, particularly in improving operational efficiency. Ensuring consistent availability of essential medicines and reducing waiting times will strengthen reliability and build patient trust in the system. Addressing indirect barriers such as time and transport burden can further enhance access and utilization.
From a theoretical perspective, the findings reinforce the relevance of the SERVQUAL model and the Andersen Behavioral Model in explaining patient satisfaction in developing healthcare contexts. The study shows that both service quality dimensions and enabling factors interact to shape patient experiences, providing empirical support for these frameworks in the Ghanaian setting.

Recommendations

The study suggests several practical steps to improve patient satisfaction under the NHIS. First, there is a need to reduce waiting time in healthcare facilities. This can be achieved through better staff allocation, improved appointment systems, and use of digital tools to manage patient flow. Second, continuous training should be provided for healthcare workers to strengthen communication, empathy, and professionalism, since staff attitude plays a key role in patient experience.
Third, government and NHIS authorities should ensure regular supply of essential medicines in accredited facilities. Strengthening the drug supply chain and improving claims reimbursement to providers can help reduce the need for out of pocket payments. Fourth, efforts should be made to improve monitoring and supervision of healthcare facilities to ensure consistent service quality across both public and private providers.
Finally, policies should also address indirect access barriers such as transport challenges and time burden. Expanding community based services and decentralizing some healthcare delivery points may help reduce congestion in major hospitals in Accra.

Limitations of the Study

This study has some limitations that should be considered when interpreting the findings. First, the study used a qualitative approach with a sample size of 30 participants, which limits the ability to generalize the findings to all NHIS users in Ghana. Second, the study focused only on selected healthcare facilities in Accra, so the findings may not fully reflect experiences in rural areas or other regions with different healthcare conditions.
Third, the study relied on self-reported experiences, which may be influenced by recall bias or personal perceptions. Also, only patient perspectives were considered, without including views from healthcare providers or policymakers, which could have provided a more balanced understanding of the issues.

Directions for Future Studies

Future research can build on this study in several ways. First, studies can adopt a mixed methods approach by combining qualitative and quantitative data to provide a broader understanding of patient satisfaction under NHIS. Second, future studies can expand the scope to include multiple regions across Ghana to allow for comparison between urban and rural healthcare experiences.
Third, researchers can include perspectives from healthcare providers and NHIS administrators to better understand system level challenges affecting service delivery. In addition, future studies can explore specific aspects such as digital health interventions, claims processing efficiency, and provider payment systems to assess how they influence service quality and patient satisfaction.
Further research can also examine long term trends in patient satisfaction to understand how reforms in the NHIS impact healthcare delivery over time.

References

1. Abiiro GA, De Allegri M. Universal health coverage from multiple perspectives: A synthesis of conceptual literature and implications for Ghana. Health Policy and Planning,2020:35(9):1105–1115.
2. Adebayo EF, Yusuf BO. Health insurance enrollment duration and patient satisfaction in Nigeria. BMC Health Services Research, 2021.
3. Adewale M, Ojo T, Akinyemi O. Socio demographic determinants of healthcare utilization in Nigeria. International Journal of Public Health, 2022.
4. Amporfro DA, Boah M, Yingqi S, Wabo TMC, Zhao M, Nkondjock VRN, et al. Patient satisfaction with healthcare delivery in Ghana. BMC Health Services Research,2021:21:722.
5. Andersen RM. Revisiting the behavioral model and access to medical care: Does it matter? Journal of Health and Social Behavior,1995:36(1):1–10.

6. Asante FA, Aikins M. Does health insurance improve healthcare quality perception in Ghana? International Journal of Health Planning and Management, 2020.
7. Atinga RA, Abiiro GA, Kuganab-Lem RB. Perceived quality of healthcare under Ghana's National Health Insurance Scheme. BMC Health Services Research, 2022.
8. Boateng FD, Sutherland JM, Adam K. Provider behaviour and patient satisfaction in Ghana's health system. Health Policy and Planning, 2021.
9. Boakye KG, Blankson C, Prybutok VR, Qin H. Service quality, perceived value and patient satisfaction in healthcare delivery. International Journal of Quality & Reliability Management, 2021.
10. Braun V, Clarke V. Reflecting on reflexive thematic analysis. Qualitative Research in Sport, Exercise and Health,2019:11(4):589–597.
11. Creswell JW, Poth CN. Qualitative inquiry and research design: Choosing among five approaches. Sage Publications, 2018.
12. Dube T, Nkosi Z, Mkhize S. Public healthcare utilization patterns in South Africa. South African Medical Journal, 2019.
13. Duckett S, Stobart A, Lin L. Healthcare access and waiting times in Australia. Health Policy, 2020.
14. Essiam JO. Service quality and patient satisfaction in Ghanaian hospitals. European Journal of Business and Management, 2020.
15. Etikan I, Musa SA, Alkassim RS. Comparison of convenience and purposive sampling. American Journal of Theoretical and Applied Statistics,2016:5(1):1–4.
16. Groene O, Kringos D, Sunol R. Patient experience and healthcare quality in European hospitals. International Journal for Quality in Health Care, 2020.
17. Guest G, Namey E, Chen M. A simple method to assess and report thematic saturation in qualitative research. PLOS ONE,2020:15(5):e0232076.
18. Johnston R, Crooks VA, Snyder J. Patient perceived value and healthcare insurance experience in the United States. Health Services Research, 2022.
19. Kodom M, Owusu AY, Baidoo Kodom PN. Quality healthcare service assessment under Ghana's National Health Insurance Scheme. Journal of Asian and African Studies, 2019.
20. Kumar R, Pal R, Sinha S. Patient satisfaction and service quality in Indian public hospitals. Journal of Family Medicine and Primary Care, 2020.
21. Li Y, Chen M, Zhang X. Healthcare access and patient experience in Chinese hospitals. BMC Health Services Research, 2021.
22. Lincoln YS, Guba EG. Naturalistic inquiry. Sage Publications, 1985.
23. Mensah J, Oppong JR, Schmidt CM. Ghana's health system and service delivery challenges under NHIS expansion. Global Health Research and Policy,2020:5(18):1–10.
24. Mokgalaka H, Smith J, Moyo S. Gender differences in healthcare utilization in South Africa. Health Policy Review, 2020.
25. Mokoena L, Erasmus L. Education level and patient satisfaction in South African public hospitals. African Journal of Health Sciences, 2021.
26. Moser A, Hillel J, Becker K. Insurance coverage and patient perceived value in US healthcare systems. Journal of Health Economics, 2020.
27. Neubauer BE, Witkop CT, Varpio L. How phenomenology can help us learn from the experiences of others. Perspectives on Medical Education,2019:8(2):90–97.
28. Nketiah Amponsah E, Alhassan RK, Ampaw S. Service reliability and NHIS performance in Ghana. BMC Health Services Research, 2022.
29. Nowell LS, Norris JM, White DE, Moules NJ. Thematic analysis: Striving to meet the trustworthiness criteria. International Journal of Qualitative Methods,2017:16:1–13.
30. Oladipo T, Afolabi M, Okoro C. Gender and healthcare utilization in Nigeria. Journal of Health Research, 2021.
31. Okeke U, Eze P, Nwosu I. Education and patient perception of healthcare quality in Nigeria. Health Services Insights, 2020.
32. Otoo P, Sun H, Wiredu J, Agyapong E. Influencing factors of NHIS accessibility and healthcare delivery in Greater Accra. International Journal of Development Research, 2024.
33. Owusu AB, Boakye K, Mensah J. Patient experience and healthcare satisfaction in Ghana. BMC Health Services Research, 2024.
34. Parasuraman A, Zeithaml VA, Berry LL. SERVQUAL: A multiple item scale for measuring consumer perceptions of service quality. Journal of Retailing,1988:64(1):12–40.
35. Putri LP, Sari K, Dewi R. Medicine availability and healthcare access under Indonesia's national insurance scheme. International Journal of Health Planning and Management, 2021.
36. Rahman A, Abdullah M, Hassan S. Public healthcare insurance satisfaction and perceived value in Malaysia. BMC Health Services Research, 2021.
37. Saunders M, Lewis P, Thornhill A. Research methods for business students. Pearson, 2019.
38. Singh P, Gupta R. Patient satisfaction under public insurance schemes in India. International Journal of Healthcare Management, 2020.
39. Sizmur S, Graham C, Walsh J. Patient experience and satisfaction in UK healthcare services. BMJ Open, 2022.
40. Willis E, Reynolds L, Keleher H. Understanding access to healthcare in Australia. Australian Journal of Primary Health, 2019.