

# Referral Services under the National Health Insurance Scheme; a Hospital-Based Descriptive Cross-Sectional Study in Abuja, Nigeria

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**Abstract**— The goal of the National Health Insurance Scheme (NHIS) is to make adequate and affordable healthcare accessible to the Nigerian population through the three-tier healthcare system. NHIS beneficiaries are enrolled in primary healthcare facilities, managed by primary care physicians and general practitioners, and then referred to higher levels of care if the need arises. Referral is a process by which patient care is transferred from one health professional to another for necessary diagnostic and therapeutic interventions. The referral system is an important component of health systems, with primary care as the foundation.

A descriptive cross-sectional study was carried out among NHIS enrollees in University of Abuja Teaching Hospital (UATH), Gwagwalada, Federal Capital Territory, Nigeria in July, 2018. It assessed patient satisfaction with the referral system and other related factors. An interviewer-administered questionnaire developed by the researchers was used for this study. A total of 124 participants were included and data analysis was done using IBM SPSS Statistics 20.0. The mean age was  $38 \pm 8.5$  years, with females being 60.5%. Satisfaction with the referral procedure was 53.2%, while satisfaction with care received when referred was 67.7%. Main causes of dissatisfaction were referral approval delays and long appointment dates between referral and specialist consultation. More efforts are needed to advance the Nigerian healthcare delivery system, strengthen NHIS/HMOs operations, improve referral process/execution and service provision, and address causes of dissatisfaction.

**Index Terms**— Referral; Services; Patient; Satisfaction; Health insurance; Nigeria.

## I. INTRODUCTION

The goal of the National Health Insurance Scheme (NHIS) is to make adequate and affordable healthcare accessible to the Nigerian population. Nigeria operates a three – tier healthcare system: primary, secondary, and tertiary; with primary health care being the entry point, and all the three levels interlinked through the referral system.

Under the NHIS, registered beneficiaries are enrolled with primary healthcare providers where they are managed by primary care physicians (PCPs) and general practitioners (GPs) who act as gatekeepers and first point of contact for patients, and also responsible for coordinating access to

specialist care through referral if there is a need. Referral is a process by which a health worker or provider transfers the responsibility of patient-care temporarily or permanently to another health professional in response to its inability to provide diagnostic and therapeutic intervention as it relates to the health care need of a patient.<sup>1-3</sup>

The NHIS system encourages optimal utilization of primary health services, hence self-referrals or bypassing primary care don't usually occur except in emergencies. According to the NHIS guidelines, patients should be referred from one healthcare level to another through an established referral system. Referrals can be internal- within the same healthcare facility, or external- from one facility to another, and are usually born out of the need for secondary/specialized investigations, services or specialist care, usually within public or private accredited facilities in the NHIS referral network.

Referral is a two-way communication process between health providers, and can be upward, downward or sideward. A patient can be referred across the levels of health care; from a primary healthcare provider to secondary/tertiary provider or from a secondary provider to tertiary provider (vertical referrals), and from one specialist to another within the same level (lateral referral).<sup>4</sup>

The referral system is an important component of health systems with primary healthcare as the foundation, ensuring the continuum of care from one level to another.<sup>5,6</sup> An effective patient referral system is critical to an efficient healthcare delivery setting; promoting a functional relationship between all levels of the health system, ensuring that patients receive the best possible care at the appropriate level, and that those in need specialist services access them in a timely way.<sup>7</sup>

The referral process involves several sequential activities which can be assessed on three dimensions: referral decision (*whether the patient should be referred and the indication for such*), referral destination (*where the patient should be referred*), and quality of the referral process, which includes *the referral communication* and other related activities.<sup>8,9</sup>

The referral communication under the NHIS usually involves a healthcare provider passing the referral information to the HMO and requesting for an authorization/approval. The information usually consist of patient's details including the unique NHIS identification number, clinical basis for referral, where and to who patient is being referred (healthcare facility/specialist type), and the

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services needed by the patient. The HMO checks the patient's eligibility status i.e. verification of patient's name on NHIS register, the appropriateness of referral *vis-à-vis* the services requested for, and then respond either by approving the referral through a preauthorization code, refusing to approve the referral or seeking for more details in order to facilitate an appropriate referral.

Under the NHIS, referral delays can be related to the patient, physician/hospital, HMO and technology. Physician / hospital related delay can be due to a delay in making a referral decision, contacting the HMO or insisting on referral approvals in emergencies in which patient management can be instituted and then referral approval sought within 48 hours.<sup>4</sup> Patient related delay can be as a result of patient's perceptions, attitudes and preferences which influence patient's compliance with the referral process and execution. A patient may be unwilling to be referred, insisting to be treated by the referring healthcare facility, a particular physician or healthcare facility at all cost. Patients may also demand for referral when there are no clear referral indications. HMO related delay may be due to HMO's delay in responding to referral requests, busy call centres or call centre operatives putting providers on unnecessary hold, denial of referral by HMO i.e. due to no clear referral indications etc. Technology related delay can arise from GSM network interruptions and internet downtime etc., making communication exchange difficult.

The importance of referral systems in health care has been documented by many studies,<sup>1,2,5-11</sup> a few studies have also mentioned the NHIS referral system.<sup>12-14</sup> However there is paucity of information on patient satisfaction specifically with the referral procedures, care received at secondary level and other associated factors.

The assessment of the referral system (being a critical component of the health care delivery system) can be used as one of the indicators of the quality of health care services. This study assessed the satisfaction of patients with the referral system under the NHIS. Findings from this study will help to identify service gaps and provide information for health policy decisions towards strengthening of the referral system and services under the National Health Insurance Scheme.

## II. MATERIALS AND METHODS

### Study Area

The study was done at the General Outpatient Clinic of University of Abuja Teaching Hospital (UATH), Gwagwalada, FCT-Abuja, Nigeria. It is a 350 - bed hospital, providing primary, secondary and tertiary care services.

### Study Design, Sample Size, Selection and Inclusion Criteria

This descriptive cross-sectional study was part of a larger survey carried out among NHIS enrollees in the healthcare facility in July, 2018. It assessed patient satisfaction with the referral system and the related factors. The study population comprised of NHIS patients attending the General Outpatient Clinic of the hospital. A sample size of 100 was derived utilizing the appropriate sample size determination formula.<sup>15</sup>  
<sup>16</sup> Data from all the 124 respondents who met the inclusion

criteria of having been referred for secondary care previously, at least once under the NHIS were included in the study.

### Data Collection

A pretested, structured, interviewer-administered questionnaire developed by the researchers, based on the complaints from NHIS patients was used for this study. The questionnaire contained information on basic socio-demographic variables, knowledge of the referral protocols, satisfaction with the referral process and care, and reasons for dissatisfaction.

### Data Analysis

Each satisfaction item was scored on a 5-point Likert scale, with 1 and 5 indicating the lowest and highest levels of satisfaction respectively. Patients indicated their level of satisfaction by selecting responses ranging from: Very satisfied =5, Satisfied =4, Neutral =3, Dissatisfied =2 and Very dissatisfied =1.

Data analysis was done using IBM SPSS Statistics 20.0. Frequency tables and cross tabulations were generated. Chi-square test was used to determine statistical significance of observed differences in cross tabulated variables, and the level of significance set at  $p < 0.05$ .

Ethical clearance was sought and obtained from University of Abuja Teaching Hospital Health Research Ethical Committee. Informed consents were obtained from all the respondents with confidentiality and anonymity of their responses assured and maintained.

## III. RESULTS

A total of 124 participants were included in this study, with the age range of 24-64 years and a mean of  $38 \pm 8.5$  years, with 54 (43.6%) aged 40 years and above. There were 55 (44.4%) males and 69 (55.6%) females. Most of the participants were married 93 (75.0%), 98 (79.0%) had various forms of post-secondary/tertiary education, while 90 (72.6%) had good knowledge of referral procedures. [Table 1]

The services accessed included; surgery, obstetrics and gynecological services, dental and eye care, laboratory and radiological investigations, physiotherapy, specialist consultation and in-patient care. An average of 4 types of services were utilized by the respondents; with laboratory and radiological services, obstetrics/gynaecology and in-patient care accounting for the most utilized services.

Those satisfied with the referral process were 66 (53.2%), while 84 (67.8%) were satisfied with the care received when referred. [Table 2]

Out of 42 respondents who reported dissatisfaction with the referral process; the majority 26 (61.9%) complained of difficulty in getting the referral request across to the HMOs, 17 (40.5%) were dissatisfied due to delayed response from HMOs, 16 (38.1%) stated that getting approvals were too cumbersome and time consuming, while 10 (23.8%) complained about the hospital not communicating with the HMO on time. [Table 3]

Table 1: Socio-demographic Characteristics of Respondents

Variables	Frequency (n=124)	Percent
<b>Age group (years)</b>		
< 30	19	15.3
30-39	51	41.1
40-49	40	32.3
≥ 50	14	11.3
<i>Mean: 38 ± 8.5</i>		
<b>Sex</b>		
Male	55	44.4
Female	69	55.6
<b>Marital Status</b>		
Single	28	22.6
Married	93	75.0
Divorced	2	1.6
Widowed	1	0.8
<b>Religion</b>		
Christianity	85	68.5
Islam	39	31.5
<b>Level of education</b>		
Primary	5	4.0
Secondary	21	16.9
Post-Secondary/Tertiary	98	79.0
<b>Knowledge of Referral Protocols</b>		
Good	90	72.6
Poor	34	27.4

Out of 25 respondents who reported dissatisfaction with the care received when referred; more than half 14 (56.0%) were dissatisfied because the appointment date given to them was too long, 8 (32.0%) complained of poor services, 6 (24.0%) stated they were denied the services needed, while 5 (20.0%) complained that they paid for accessed services even when they are supposed to be covered by NHIS. [Table 3]

Those who had good knowledge of the NHIS referral protocols reported statistically significant higher level of satisfaction with the referral procedure and care received when referred. (p value: 0.038 & 0.031) [Table 4].

#### IV. DISCUSSION

The mean age was  $38 \pm 8.5$  years, this is higher than the mean age in studies conducted by Ali A,<sup>17</sup> and Albalushi *et al.*<sup>18</sup> who reported mean ages of  $33 \pm 13.0$  years and  $27.5 \pm 8.3$  years respectively, but similar to that of Afsar and Younus, with a mean age of 37.5 years.<sup>19</sup> More than a third of the participants (43.6%) were aged above 40 years, while 55.6% were women. Studies have shown that increasing age and gender influence health seeking behaviours and utilization of healthcare positively, with the influence higher in women.<sup>20-23</sup>

Sixty-six respondents (53.2%) were satisfied with the referral process. Dissatisfaction with the referral process was from approval delays and denials arising from the hospital, patient, HMO, or infrequently from technology challenges.

Health education can influence the promotion of health,

utilization of health services and provide patients with the basis for evaluation of services. Being an informed patient is important to promoting positive outcomes in health care.<sup>24</sup> This study found that those who had good knowledge of the NHIS referral protocols reported higher level of satisfaction with the referral process and care. Studies have shown that information, education and communication improve patient satisfaction, and that patients who are kept informed are more likely to be more satisfied.<sup>25, 26</sup> Hence it necessary to enlighten patients about the referral protocol and services under the NHIS. If a patient is made aware of the processes and time frame it will take to get a referral approval, he/she is more likely to wait patiently and not get unduly dissatisfied. Healthcare facilities should also endeavour that appropriate referral requests are made promptly without delay, and the HMOs should ensure that timely responses are given.

About two-third (67.8%) were satisfied with the care received when referred. More than half (56%) of the respondents who reported reasons for dissatisfaction with the referral care complained that the appointment date was too long. Long waiting time and appointment dates in many hospitals can be attributed to a large number of patients and few physicians, clinic scheduling challenges and delays caused by hospital bureaucratic bottlenecks.<sup>27</sup> Public hospitals in Nigeria tend to be more patronized by the general populace due to the perception of quality services, availability of more qualified personnel and the relatively cheaper cost.<sup>28</sup> The NHIS patient register also shows more patients are registered in government hospitals

than private facilities.

**Table 2: Respondents Satisfaction with Referral Process and Care**

VARIABLE	Frequency (n=124)	
	Referral Process (%)	Referral Care (%)
Very Satisfied	22 (17.7%)	26 (21.0%)
Satisfied	44 (35.5%)	58 (46.8%)
Neutral	16 (12.9%)	15 (12.1%)
Dissatisfied	31 (25.0%)	20 (16.1%)
Very Dissatisfied	11 (8.9%)	5 (4.0%)

**Table 3: Respondents Reasons for Dissatisfaction with Referral Process and Care**

Reasons for dissatisfaction	Frequency	Percent
<b>Referral Process N= 42</b>		
Hospital delay in contacting HMO	10	23.8
HMO difficult to reach	26	61.9
HMO delayed response	17	40.5
Getting approvals too cumbersome	16	38.1
<b>Referral Care N= 25</b>		
Appointment date too long	14	56.0
Poor Services	8	32.0
Denied Services by the hospital	6	24.0
Paid for services	5	20.0

**Table 4: Respondents Knowledge of referral protocols and Patient Satisfaction**

Knowledge of Referral Protocols	Satisfied	Dissatisfied	x <sup>2</sup>	p-value
<b>Satisfaction Level with Referral Process</b>				
Good	54	25	6.54	.038
Poor	12	17		
<b>Satisfaction Level with Referral Care</b>				
Good	67	10	6.95	.031
Poor	17	15		

Long waiting times and delays are not only dissatisfying but have been reported to cause more distress among patients, with negative impact on healthcare outcomes.<sup>30,31</sup> Long waiting times in the health care setting are experienced by patients at the various levels of care: first; time spent before seeing a doctor at primary level,<sup>32</sup> second; time spent before accessing other aspects of care i.e. laboratory/radiological investigations,<sup>33,34</sup> and third; time interval between referral for specialist care and specialist consultation.<sup>35</sup> While many papers have focused on waiting times and delays especially at the primary level at general outpatient settings, a few have dealt with waiting times and delays between referrals from primary to specialty care.

Studies have shown that satisfaction correlated with the time interval between referral and specialist consultation, as patients who had shorter time intervals between referral and consultation are usually more satisfied.<sup>32</sup> It is therefore necessary for all the stakeholders to streamline the referral process/care, address the causes of delay and reduce the time interval between referral and consultation, towards

better patient experience and satisfaction.

In conclusion, an effective referral system particularly under the National Health Insurance Scheme is an important and critical component of health care delivery system, promoting functional relationships between all levels of the health system and ensuring that patients receive the best possible care at the appropriate level. Though inundated by many challenges in its implementation, referral under the NHIS can be adjudged evolving and somewhat laudable. More efforts are needed to advance the Nigerian health care delivery system, strengthen NHIS/HMOs operations, upgrade the referral processes and execution, and improve service provision.

**V. COMPETING INTEREST**

Authors have declared that no competing interests exist.

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