Nigerian Medical Journal
NIGERIA MEDICAL ASSOCIATION
Print ISSN 0300-1652, E-ISSN 2229-774X

Original Article

Assessment of patients' satisfaction with healthcare services provided under the Nigeria national health insurance authority.

***Innocent Achanya Otobo Ujah[1], Madu J. Awa[2], Daniel Jatau Meshak[3], Rayyan Muhammad Garba,[4] Salami Ajibola[5], Jide Onyekwelu[6], Nankling Michael Lamu[3].**

[1]Federal University of Health Sciences, Otukpo, Benue State, Nigeria. [2] College of Medicine and Health Sciences, Rhema University Nigeria, Aba, Abia State, Nigeria. [3]Department of Family Medicine, University of Jos/Jos University Teaching Hospital, Plateau State, Nigeria.
[4]Department of Community Health, Aminu Kano Teaching Hospital, (AKTH) Kano, Kano, Nigeria. [5]Department of Oral and Maxillofacial Surgery, Lagos State Health Service Commission, Randle General Hospital, Surulere, Lagos, Nigeria.
[6]Obinwanne Hospital and Maternity, Nkpor, Anambra State, Nigeria.

Abstract

Background: The Nigeria National Health Insurance Authority (NHIA) is the official Social Health Insurance Agency of the Federal Government established to provide quality healthcare services to Nigerians at affordable cost, sufficient to address catastrophic health expenditures. One key indicator of quality healthcare services is patient satisfaction. This National Survey aimed to assess enrollees' satisfaction with healthcare services under this organization.

Methodology: This was a cross-sectional, observational study conducted among enrollees of NHIA in four Nigerian cities (Aba, Kano, Lagos, and Onitsha) from three randomly selected geopolitical zones of the federation. A sample size of 1,043 was proportionately allocated to the study states based on the number of enrollees in the state (Aba 204; Kano 250; Lagos 359 and Onitsha 230). Data were collected as exit interviews with adapted validated interviewer-administered questionnaires. Quantitative data were analyzed using a statistical package for social science (SPSS v. 21). Logistic regression was done to determine predictors of satisfaction with services. A p-value of <0.05 was considered statistically significant.

Results: A total of 1043 respondents were interviewed, with 451 from private healthcare facilities and 592 from public facilities. There were 599 (57.49) dependents and 444 (42.62) principal enrollees. The majority, 608 (58.3%) were females. The mean age of respondents was 38.83 years and 679 (65.1%) had tertiary education. Overall, 928 (89%) of the respondents were satisfied with NHIA healthcare services with the following predictors: marital status, time spent in the hospital, and services received from healthcare providers.

Conclusion: Most of the study participants were satisfied with the services provided by the Authority. However, there are identified limitations and administrative challenges at the facility levels that need attention to further enhance quality services and overall patients' satisfaction.

Key Words: Patients Satisfaction; Healthcare Services; National Health Insurance Authority; Nigeria.

***Corresponding Author:** Prof Innocent AO Ujah, Email: innocentujah@ymail.com; achanyaujah@gmail.com

How to cite: Ujah IAO, Awa MJ, Meshak DJ, Garba RM, Ajibola S, Onyekwelu J, Lamu NM. Assessment of patients' satisfaction with healthcare services provided under the Nigeria National Health Insurance Authority. Niger Med J 2024;65(5):621-631.https://doi.org/10.60787/nmj-v65i3.413.

Quick Response Code:

Introduction

Health insurance is a type of insurance or prepayment plan, where participants pay regular fixed amounts that are pooled and used to offset the medical bills of the insured when they take ill. Health insurance thus provides an avenue for risk sharing, resource mobilization, and equity.[1]

Social health insurance is a form of health insurance based on employment and income level. It is premised on the fact that people cannot always meet the financial requirements of the consequences of sudden ill health from their resources. Currently, all countries in the developed world and several developing countries use health insurance as a viable way of financing health care.[2]

In Nigeria, National Health Insurance Authority (NHIA), previously known as National Health Insurance Scheme (NHIS) is a corporate body established by law under the NHIS ACT 35 of 1999, to improve the health of all Nigerians at a cost the government and the citizens can afford through the following programs; Formal Sector, Voluntary Contributors, Tertiary Institution, Group Insurance, and the provision of healthcare services to the vulnerable groups; children under five years, prison inmates, disabled persons, retirees and the elderly.

Its objectives are to solve the financing and accessibility problems of our health sector, as well as to correct other problems bedeviling the sector such as inefficiency, inequity, inappropriate use of health services, government bureaucracy, and poor-quality services.[3]

The NHIA is the official Social Health Insurance Agency of the Federal Government of Nigeria, established to provide quality healthcare services to Nigerians at a cost affordable enough to address catastrophic health expenditures.[4] One of the key indicators of quality health care services is enrollees' (patients') satisfaction and it measures the level of ease with services received in a health facility.[5] Further, it shows to what extent patients' healthcare needs and expectations are met by the healthcare providers.[6] Assessment of patients' satisfaction is widely used to evaluate the quality and effectiveness of various healthcare service deliveries, yet public healthcare in developing countries has failed to achieve an adequate level of service.

Most studies in Nigeria on patients' satisfaction with services under NHIA are either institutional or state based. There is a dearth of national data on the level of enrollees' satisfaction with healthcare services under NHIA. This is a wider coverage survey aimed at assessing enrollees' satisfaction with healthcare services under the NHIA in four Nigerian states. The outcome of this study will be used for advocacy to the policymakers and other critical stakeholders to address identified determinants of enrollees' satisfaction and design programmes that will improve the overall service delivery.

Methodology

Study Areas and Design:

The study was conducted in Lagos, Kano, Aba, and Onitsha, in South West, North West and South-Eastern parts of Nigeria, respectively. In the last National Population Census in 2006Lagos, Kano, Aba, and Onitsha had populations of 9 million, 3.6 million, 897,560, and 561,066 respectively.[7] The cities are predominantly urban with Kano comprising mainly Muslims, Aba and Onitsha, Christians, while Lagos has mixed Muslims and Christians. The cities have robust mixed public/private economies with major revenue derived from federation accounts accruable from crude oil revenue. Other sources of revenue include agriculture, commerce, and industry. These areas were purposefully chosen for this study because they are key commercial cities in Nigeria. The inhabitants access healthcare through a network of private (orthodox, traditional, patent medicine vendors and prayer houses) and public health facilities and pay bills through out-of-pocket or the NHIA.

There are forty-one (41) primary and secondary service providers registered with the NHIS in Aba (12,661 enrollees),215 in Kano (13,560 enrollees), 855 in Lagos (16,680 enrollees), and 36 in Onitsha (11,621enrollees). The study population comprised the total number of enrollees in each study city; Lagos (16,680), Kano (13,560), Aba (12,661), and Onitsha (11,621). A sample size of 1,043 was proportionately allocated to the study states based on the number of enrollees in the states as follows; Aba - 204, Kano - 250, Lagos - 359, and Onitsha - 230.

This was a descriptive, cross-sectional study covering the period, of February to April 2022. A validated questionnaire adapted from the Bureau for Clinical Excellence, USA, and validated in many Nigerian studies, was used to collect data on enrollees' satisfaction as an exit interview from 1043 randomly selected enrollees from the four study areas. This questionnaire is based on the Donabedian Model for Healthcare quality assessment.

Sample Size and Sampling Technique:
Fisher's formula was used to calculate the minimum sample size, $n = (Z_{\alpha} + Z_{1-\beta})^2 pq/d^2$. Using a power of 90% (1.28), standard normal deviate of 1.96 for a 95% confidence limit, degree of precision of 5% (0.05), and proportion of patients satisfied with the NHIS of 94% (0.94) obtained from a previous Nigerian study.[8] A minimum sample size of 237 was obtained. However, since the study was fully funded, the sample size was increased to 1000. This will increase the power and precision of the study.

A multistage sampling technique was used to select participants for the study: In the first stage, the study sites of Lagos, Kano, Onitsha, and Aba were due to their large population sizes being commercial cities in different geographic zones of Nigeria; In the second stage, the total number of registered facilities in the selected cities was used as the sampling frame. A proportionate allocation of the sample size to each study area was used to determine the number of facilities to select. In Lagos with an allocated sample size of 350, 14 facilities were selected at 25 enrollees per facility; in Kano with an allocated sample size of 250, 10 facilities were selected at 25 enrollees per facility; while in Aba and Onitsha with allocated sample sizes of 200 each, 10 facilities were each selected at 20 enrollees per facility; and in the third stage, the number of eligible enrollees from all facilities in the study areas was selected using systematic random sampling from the list clients who presented at the facilities every day until the required sample size was obtained.

Data Collection
Two trained enumerators for each study area (Kano, Aba, and Onitsha) and three for Lagos were recruited based on age, sex, and level of education to match the subjects. Data were collected using a pretested, interviewer-administeredquestionnaire, adapted from the clinical Quality Service Branch of the Bureau of Primary Health Care in the United States of America, and has been used in a previous Nigerian study.[8] The questionnaire was administered electronically via the Kobo Collect Application to obtain information on socio-demographic characteristics and enrollees' satisfaction with healthcare processes and services rendered by the healthcare providers.

The interviewers were unknown to the enrollees, the answers were anonymous without disclosure of subjects' details and subjects were made to understand that there were no correct or wrong answers. These steps were aimed at addressing possible social desirability bias. Also, the use of Kobo Collect for data collection minimized information bias as it checks skip patterns, and only correct responses were accepted by the Application. Errors due to data entry hard copies of questionnaires have also been eliminated.

Ethical Considerations:
Ethical approval for the research was obtained from the National Health Research Ethics Committee (NHREC) of the Federal Ministry of Health, Nigeria, with reference number NHREC/01/01/2007-13/01/2022 dated 13th January 2022. The subjects were fully informed that participation in the study was voluntary and that they could withdraw at any time. Informed consent was obtained from all participants. Data obtained was treated with utmost confidentiality and anonymity in line with the Helsinki Declaration. Administrative approvals were obtained from the NHIA national office in Abuja and the management of all selected facilities.

Data analysis
The electronically obtained quantitative data were cleaned using Statistical Package for Social Science (SPSS v21) software by running frequencies for categorical variables to detect wrong entries. Descriptive statistics were used to describe respondents' characteristics in terms of mean/standard deviation for continuous data and frequency/percentages for categorical data. The Likert scale items which have five-point were grouped to give bivariate outcomes; 'excellent', 'very good', and 'good' were considered as being satisfied, while 'fair' and 'poor' were considered as being unsatisfied, as used in a previous study.[8] The indicator for assessing the level of satisfaction across all domains was the percentage of patients satisfied with that domain.Logistic regression was done to determine the predictors of patients' satisfaction with services. The level of significance was set at a value of less than 5% ($p<0.05$). Confidence level was at 95%.

Results
A total of 1043 consented respondents were successfully interviewed, giving a response rate of 100%. The mean age of the respondents was 38.8 years, 58.3% were females, and 78.5% were married. Most of them were senior civil servants and 65.1% attained tertiary education (Table 1). The mean time of reaching the nearest health facility was 32.8 minutes.

Table 2 presents the satisfaction of clients with different healthcare providers, and the overall satisfaction with services received from the NHIA clinics.

Bivariate analysis showed that the following variables were significantly associated with the overall satisfaction with NHIA services; sex; ethnicity, marital status, time spent in the hospital, services received from the doctor, nurse, laboratory, pharmacy, and record staff, as shown in Table 3.

Table 1. Socio-demographic Characteristics of respondents (N=1043)

Variables	n (%)
Age (years)	Mean ± SD =38.8 ± 12.4
Sex	
Female	608 (58.3)
Male	435 (41.7)
Marital Status	
Divorced	6 (0.6)
Married	819 (78.5)
Separated	13 (1.2)
Single	153 (14.7)
Widowed	52 (5)
Occupation	
Junior Civil Servant	163 (16)
Large Scale Business	67 (6)
Senior Civil Servant	413 (40)
Small Scale Business	229 (22)
Unemployed	171 (16)
Highest Educational Level	
Informal	4 (0.4)
Primary	50 (1.8)
Secondary	310 (29.7)
Tertiary	679 (65.1)
Time taken to get to the hospital from home (minutes)	Median = 30.0

Table 2: Satisfaction with Services received from Healthcare Providers and Overall Satisfaction with NHIA Services

Variables	Frequency	Percent
Satisfaction with services received from the doctor		
Unsatisfied	105	9.7
Satisfied	938	86.3
Total	1043	100.0

Satisfaction with services received from the nurses		
Unsatisfied	168	15.5
Satisfied	875	80.5
Total	1043	100.0
Satisfaction with services received from the laboratory		
Unsatisfied	171	15.7
Satisfied	872	80.2
Total	1043	100.0
Satisfaction with services received from the pharmacy		
Unsatisfied	154	14.2
Satisfied	889	81.8
Total	1043	100.0
Satisfaction with services received from record staff		
Unsatisfied	146	13.4
Satisfied	897	82.5
Total	1043	100.0
Overall Satisfaction with services received from NHIA		
Unsatisfied	113	10.4
Satisfied	930	85.6
Total	1087	100.0

Note: The 5-point Likert Scale was converted to binary with poor and fair considered as unsatisfied; while good, very good, and excellent were considered as satisfied

Table 3: Grouped Bivariate Analysis of socio-demographic factors and overall satisfaction with services received from hospitals.

Variables	Overall satisfaction with NHIS services received		Total	p-value
	Unsatisfied	Satisfied		
Age (years)				
18 – 29	27 (10.8)	224 (89.2)	251 (100)	
30 – 39	31 (9.5)	294 (90.5)	325 (100)	
40 – 49	25 (9.6)	235 (90.4)	260 (100)	0.518
50 – 59	20 (13.9)	124 (86.1)	144 (100)	
≥ 60	9 (14.5)	53 (85.5)	62 (100)	
Sex				
Female	56 (9.2)	552 (90.8)	608 (100)	0.046
Male	57 (13.1)	378 (86.9)	435 (100)	
Ethnicity				
Hausa	24 (10.1)	213 (89.9)	237 (100)	
Igbo	38 (7.9)	440 (92.1)	478 (100)	0.005
Others	5 (11.4)	39 (88.6)	44 (100)	
Yoruba	46 (16.2)	238 (83.8)	284 (100)	
Marital status				
Divorced	3 (50.0)	3 (50.0)	6 (100)	
Married	75. (9.2)	744 (90.8)	819 (100)	
Separated	4 (30.8)	9 (69.2)	13 (100)	<0.001
Single	18 (11.8)	135 (88.2)	153 (100)	
Widowed	13 (25.0)	39 (75.0)	52 (100)	
Occupation				
Junior Civil Servant	27 (16.6)	136 (83.4)	163 (100)	
Large Scale Business	10 (14.9)	57 (85.1)	67 (100)	
Senior Civil Servant	36 (8.7)	377 (91.3)	413 (100)	0.063
Small Scale Business	23 (10.0)	206 (90.0)	229 (100)	
Unemployed	17 (9.9)	154 (90.1)	171 (100)	
Highest educational level				
Informal	0 (0.0)	4 (100)	4 (100)	
Primary	8 (16.0)	42 (84.0)	50 (100)	0.263
Secondary	39 (12.6)	271 (87.4)	310 (100)	
Tertiary	66 (9.7)	613 (90.3)	679 (100)	

Table 4: Binary Logistic Regression analysis to determine some explanatory socio-demographic and service factors for overall patients' satisfaction with healthcare services under NHIA.

Covariates	B	p-value	Adjusted OR	95% C.I. for AOR	
				Lower	Upper
Sex					
Female	0.474	0.079	1.606	0.947	2.722
Male	Ref				
Ethnicity		0.668			
Hausa	-0.241	0.537	0.786	0.365	1.690
Igbo	-0.387	0.237	0.679	0.358	1.290
Others	0.054	0.931	1.056	0.310	3.596
Yoruba	Ref				
Marital Status		0.049			
Divorced	-1.931	0.066	0.145	0.019	1.132
Married	0.480	0.322	1.615	0.625	4.173
Separated	0.641	0.482	1.898	0.318	11.329
Single	0.950	0.082	2.586	0.887	7.534
Widowed	Ref				
Estimated Monthly Income		0.353			
Less than 30,000	-0.454	0.590	0.635	0.122	3.315
30,000 - 100,000	17.647	0.999	1	0.000	1
101,000 - 300,000	-0.106	0.902	0.900	0.166	4.870
More than 300,000	18.658	0.998	1	0.000	1
Unspecified	Ref				
Transport to hospital					
< 300	0.392	0.175	1.480	0.840	2.609
≥300	Ref				
Satisfaction with time spent in the Hospital					
Unsatisfied	-1.645	**<0.001***	0.193	0.107	0.347
Satisfied	Ref				
Satisfaction with services received from the doctor					
Unsatisfied	-1.671	**<0.001***	0.188	0.103	0.343
Satisfied	Ref				
Satisfaction with services received from the nurses					

Unsatisfied	-0.923	**0.003***	0.397	0.214	0.738
Satisfied	Ref				
Satisfaction with services received from the laboratory					
Unsatisfied	-1.021	**0.001***	0.360	0.202	0.641
Satisfied	Ref				
Constant	3.144	**0.001***			

***Statistically significant

All variables found to be significantly associated with overall satisfaction with NHIA services at the bivariate level, and a-priori confounders from previous studies,[8] were entered into a logistic regression model to adjust for possible confounding as shown in Table 4. Marital status, time spent in the hospital, and services received from the doctors, nurses, and laboratories were found to be independent (intrinsic) predictors of overall satisfaction with services under the NHIA.

Discussion

There were 1,043 respondents in this study; majority of whom were in the 31-40 years age group with the majority being females. Most of them were married, Christians, and mostly Igbos, with tertiary school being the highest educational attainment. Patients' satisfaction with healthcare services is associated with the fulfillment of the healthcare needs of the patients in ways that remove undue stress. Studies have also shown that satisfaction is associated with utilization and follow-up with health care interventions and agreement with prescribed treatment schedules. [10]

On patient satisfaction assessment, this study showed that most (89%) of the enrollees were satisfied with the services of the providers despite some identified challenges. This finding agrees with a state-based study in Jigawa State, Nigeria which revealed that more than three-quarters (80.6%) of the clients were satisfied with healthcare services provided under NHIA in the hospital.[11] Also, another study showed that the NHIA enrollees are satisfied with the NHIA service delivery system.[8, 12] These could be due to the fairly similar quality of NHIA services across the country. This could also be due to reduced costs of NHIA services because a high financial burden has been associated with dissatisfaction with healthcare services.[8]

Our finding is further corroborated by similar studies in Ghana with 92% and 65% of enrollees reporting satisfaction with health care services under the Scheme.[13, 14] Similar satisfaction of the majority of the enrollees with services under the scheme was also reported in a study in Rwanda.[15] However, two studies carried out in tertiary institutions in Southwest, Nigeria reported low level of enrollees' satisfaction with the health care services.[11, 12] The difference between our study and others in agreement may be due to high expectations of the enrollees in tertiary institutions, being highly knowledgeable people.

The predictors of patients' overall satisfaction with services from the NHIA clinic were marital status, time spent in the hospital, and services received from the Doctors, Nurses, laboratory, and pharmacy. Our finding is in tandem with the result of a meta-analysis of 221 studies on the relation of consumers' socio-demographic characteristics to their satisfaction with medical care which reported significant association with marital status and age, but less with ethnicity and gender.[16]

On Enrollee's satisfaction with the healthcare delivery process, our study reported a statistically significant association with time spent accessing care in the hospital. This finding agrees with the result of a study on trends and correlates of patients' satisfaction with services under NHIS in a tertiary institution in Southeast, Nigeria.[17] The better attitude of the providers towards clients would have been responsible for decreased waiting time in hospitals. However, a study conducted in a medical center in Ethiopia, revealed that respondents were dissatisfied with waiting time in the hospital.[17] This difference could be attributed to the health worker deficit commonly found in most general hospitals in developing countries.

Services received from the doctors, nurses, laboratory, and pharmacy were also found to be independent predictors of overall satisfaction with NHIA services. This is like findings from a previous study conducted in Kano, Nigeria.[8] This shows that healthcare workers' attitudes towards patients are a major determinant of satisfaction. Therefore, interventions on healthcare workers' attitudes will go a long way in improving the quality of care under NHIA.

This study further evaluated the overall enrollees' satisfaction with services from health care workers, doctors, nurses, laboratory technologists, and pharmacists. The result revealed that the services from the health care providers were statistically significantly associated with overall patients' satisfaction, and, therefore, are good predictors of patients' satisfaction. This finding conforms to the findings of a state-based study which revealed that respondents were satisfied with the attitude of health workers.[12, 17] This may be explained on the basis of the availability of hospital personnel at all times which not only reduces waiting time but enhances access and utilization of services.

Conclusion and Recommendation

The findings showed a high level of overall enrollees' satisfaction with the health care services rendered under the authority. It has also identified the predictors of satisfaction with services among enrollees. Therefore, we recommend that government interventions on improving the quality of services provided under the NHIA should consider these identified predictors because patients' satisfaction is a major component of quality care.

Acknowledgement

This study was supported by Centre for International Private Enterprise (CIPE) with a grant to the Nigerian Medical Association (NMA).

References

1. Prussin JA, Wood JC, Private third-party reimbursement. Topics in Health Care Financing. 1975:2(1): 1-100
2. Uzochukwu BSC, Ughasoro MD, Etiaba E, Okwuosa C, Envuladu E, Onwujekwe OE. Health Care Financing in Nigeria: Implications for achieving universal health coverage. Niger J Clin Pract. 2015 Jul-Aug;18(4):437-44. doi: 10.4103/1119-3077.154196.
3. National Health Insurance Scheme. NHIS-OPERATIONAL-GUIDELINES.
4. Ogundeji YK, Akomolafe B, Ohiri K, Butawa NN, Factors influencing willingness and ability to pay for social health insurance in Nigeria. PLOS ONE 2019;14(8):e0220558.
5. Mohammed S, Bermejo J L, Souares A, Sauerborn R, Dong H. Assessing responsiveness of health care services within a health insurance scheme in Nigeria: users' perspectives. BMC *Health Serv Res. 2013,*13(1):1.
6. Sanders SR, Erickso LD, Call VR, McKnight ML, Hedges DW.Rural health care bypass behavior: how community and spatial characteristics affect primary health care selection. *J Rural Health.*2015;*31 (2):146-56.*

7. Nigeria National Demographic and Health Survey 2018. National Population Commission Abuja, Nigeria. 2019, Available from: www.DHSprogram.com
8. Garba MR, Gadanya MA, Iliyasu Z, Gajida AU. Comparative study of patients' satisfaction between national health insurance scheme-insured and un-insured patients attending a Northern Nigerian tertiary hospital. Niger J Basic Clin Sci 2018;15:118-26.
9. Bes RE, Wendel S, Curfs EC, Groenewegen P& de Jong JD. Acceptance of selective contracting: the role of trust in the health insurer. *BMC Health Serv Res* 2013; *13:375.*
10. Abiola A O, Ladi-Akinyemi TW, Oyeleye OA, Oyeleke GK, Olowoselu OI, Abdulkareem AT. Knowledge and utilization of the National Health Insurance Scheme among adult patients attending a tertiary health facility in Lagos State, South-Western Nigeria. *African Journal Prim Health Care Fam Med.* 2019; 11:1-7.
11. Mustapha Kurfi M, Hussaini Aliero I, Author C. A study on clients' satisfaction on the National Health Insurance Scheme among staff of Usmanu Danfodiyo University, Sokoto. *IOSR J Econ Financ*e 2017, *8:44-52.*
12. National Development. Planning Commission 2008. Citizens' Assessment of the National Health Insurance Scheme: Towards a Sustainable Health Care Financing Arrangement. 2009. 41-56
13. Nketiah-Amponsah E, and Heimenz U. Determinants of Consumers' satisfaction of healthcare in Ghana: Does choice of healthcare provider matter? *Global Journal of Health Science.* 2009,*1(2):50*-61.
14. Twahirwa A. Sharing the burden of sickness: mutual health insurance in Rwanda. Bull World Health Organ. 2008 Nov;86(11):823-4. doi: 10.2471/blt.08.021108.
15. Hall JA and Dorman MC. Patient socio-demographic characteristics with predictors of satisfaction with medical care: meta-analysis. *Social Science medicine, 1990, 30:811-818*
16. Iloh G, Ofoedu JN, Njoku PU, Odu FU, Ifedigbo CV, Iwuamanam KD. Evaluation of patients' satisfaction with quality of care provided at the National Health Insurance Scheme clinic of a tertiary hospital in South Eastern Nigeria. *Nigerian Journal of Clinical Practice*. 2012, *15:469-74*.
17. Fufa BD, Negao EB. Satisfaction of outpatient service consumers and associated factors towards the health service given at jimma medical center, southwest Ethiopia. Patient Relat Outcome Meas. 2019 Dec 3;10:347-354. doi: 10.2147/PROM.S220404.