

A SURVEY ON THE PARTICIPATION OF OPTOMETRIC PRACTICES IN HEALTH INSURANCE IN NIGERIA

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ABSTRACT

Optometric services are well integrated in health insurance programs in the developed world. This study was designed to assess the level of participation of optometric practices in health insurance systems in Nigeria. By convenience, 40 optometric practices in the country were interviewed directly, or by telephone or email surveys. 24 (65%) of respondents participated in health insurance. 95% of this 24 preferred private insurance to the National Health Insurance Scheme (NHIS) because of limited optometric service provision by the NHIS. This group also reported that participation enhanced gross income earnings (95%), patient load (100%), publicity (83.3%) and credibility (20%). Major reasons given by the 16 (35%) non-participating respondents were no consideration due to lack of awareness. Optometric service provisions under the NHIS should be expanded. Optometrist should embrace Health insurance as introduction of business models and management tools into eye care delivery which will ultimately raise its benefits to everyone.

INTRODUCTION

Health insurance in broad terms is a kind of financial system that protects health care seekers from financial risks of health care costs on contributions of the health care seekers¹. It could be government run (social health insurance) or by non-governmental companies (private health insurance). Health insurance exists as managed care and indemnity health insurance¹⁻⁴. Managed care systems have an aim to provide affordable and quality health care through various means^{4, 5}. Managed care therefore differs from indemnity health insurance which uses

the traditional insurance method of compensation after health service delivery. Managed care is reported to be replacing traditional indemnity systems in the health insurance environment¹.

The National Health Insurance Scheme (NHIS) started in 2005 and the scheme serves as an insurer and a regulator or overseer of private health insurance systems in Nigeria⁶. It makes provisions for ocular prosthesis, eye examination and care excluding the provision of refractive correction across the programs of the scheme. Optometry centers are regarded as secondary health care facilities under the NHIS. Optometric services are also included in the provisions of private managed care organizations and employment based health insurance in Nigeria^{7, 8}. The optometric service provisions with limitations vary across the insurers⁶⁻⁸.

KEYWORDS: *health insurance; participation; optometric practices.*

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Scarce is information on optometric participation in health insurance in Nigeria. Not readily available are answers to questions that ask about; the level of participation of optometric practices in health insurance, benefits and challenges faced by optometry through participation in health insurance, reasons for non-participation amongst others. Similar information not pertaining to Nigeria and regarding optometric interactions with health insurance is available⁹. Such information can serve to educate and as a means of planning for stakeholders. The aim of this study was therefore to obtain information on optometric participation in health insurance in Nigeria. With the assumption that there are participating and non-participating optometric practices, the study objectives which only pertain to optometric practices in Nigeria was to obtain information on these five subjects listed:

- 1) the level of participation in health insurance
- 2) the reasons for non-participation in health insurance
- 3) the advantages of health insurance participation
- 4) the challenges faced by participating in health insurance
- 5) the preference pattern for the different health insurance systems of the country.

METHODS

This is a cross-sectional descriptive study. The Optometric and dispensing opticians Registration Board of Nigeria (ODORBN) web site reported that in 2014, there were 389 registered optometric practices in the

country without the consideration of branches of some of the practices¹⁰. By non-random convenience (i.e. subjects were chosen simply because they were easy to recruit), forty optometric practices from four (4) jurisdictions of Nigeria (Abuja, Delta state, Edo State and Lagos) were interviewed in an open ended approach. Direct interviews, or telephone interviews or email interviews were used to obtain responses required for questions posed. These questions were posed to the interviewees:

1. Does your practice participate in health insurance?
2. If your practice doesn't participate in health insurance, can you state reasons why?
3. Does your practice participate with the NHIS, private health insurance or both?
4. Comparing the NHIS and private health insurance, which has more comparative advantage to optometric practices? Please give reasons for the answer
5. Does health insurance participation significantly enhance the gross income earnings of your practice?
6. Does health insurance participation enhance patient flow for your practice?
7. Can you state any other advantages your practice gains through health insurance participation?
8. What are the limitations and challenges your practice faces through health insurance participation.

Questions three (3) to question eight (8) were posed to only those interviewees that participate in health insurance i.e. those that answered yes in question one (1).

RESULTS

In total, there were 40 respondents. 20, from Abuja, 10 from Lagos, 3 from Delta state and 7 from Benin City.

1. **Participation:** 40 optometric practices were reached out of which, 24 (60%) participated in health insurance and 16 (40%) did not participate in health insurance.
2. **Reported Reasons for Non-participation in Health Insurance by Interviewed Optometric Practices:** Of the 16 interviewees that did not participate in health insurance, 2 (12.5%) reported that they did not know enough about health insurance, 9 (56.25%) had not considered participation in health insurance, 4 (25%) reported that they were about to start health insurance participation and 1 (6.25%) did not trust the system.
3. **Pattern of Health Insurance Participation:** Of the 24, health insurance participating respondents, 17 (70.8%) participated only with private health insurance and 7 (29.2%) took part in the NHIS and private health insurance
4. **Preference Analysis Across the Interviewees for the NHIS and Private Health Insurance:** Of the 24 respondents, participating in health insurance; 23 (95%) preferred private health insurance to the NHIS. 1 (5%) did not prefer any of the health insurance systems. The reason given by all respondents that preferred private health insurance to the NHIS was the limited provisions for optometric services by the NHIS .The reason given by the only respondent that did not prefer the NHIS nor private health was that while the private health insurance has better coverage and pay better for services rendered, the NHIS covers a wide range of people so the scheme brings to the practice many eye care seekers who later become regular out of pocket patients.
5. **Responses on Health Insurance Enhancement of Patient Load:** All 24 (100%) health insurance participants reported that participating in health insurance improved patient load.
6. **Responses on Health Insurance enhancement of Gross Income Earnings:** Of the 24 health insurance participating respondents. 1 (5%) reported that participation in health insurance did not enhance gross income earnings while other 23 (95%) respondents reported that participation in health insurance enhanced gross income earnings.
7. **Other Reported Benefits of Health Insurance Participation:** Of the 24 optometry practices that participated in health insurance, 20 (83.3%) reported that it creates awareness of the practice and establishes corporate relationships, 3 (20%) of the 20, reported that in addition to awareness creation and corporate relationships, it enhances the credibility of the practice. 4 (16.7%) of the participating practices did not report any other advantage of participation.

TABLES**Table 1. Reasons Reported by Interviewed Optometric Practices for Non-participation in Health Insurance**

Responses	Frequency	Percentage
Do Not Know Enough about Health Insurance	2	12.5%
Have Not Considered Health Insurance	9	56.25%
About to Start Health Insurance	4	25%
Do Not Trust Health Insurance in Nigeria	1	6.25%
Total	16	100%

Table 2. Other Benefits of Health Insurance Participation reported by Interviewed Optometric Practices

Benefits	Frequency	Percentage
Publicity/ Awareness and Corporate Relationships or the Practice only	17	53.3%
Publicity for the Practice, Corporate Relationships and Credibility	3	20%
Did not Report any other advantages	4	26.7%
Total	24	100%

8. Responses on Limitations and Challenges faced in Health Insurance Participation: All 24 (100%) respondents that participated in health insurance reported delayed payments by the insurers as the major challenge faced. 4 (16.7%) added that limited coverage for optometric services by some of the insurers is another challenge

DISCUSSION

The results cannot be generalized for the whole population of optometric practices in Nigeria due to the lack of consideration for the total number of optometric practices in the study and the non-random selection of interviewees. Still, this paper does provide valuable insight into the preference patterns, advantages, benefits and challenges faced by optometry in health insurance systems in the Nigeria. There were some significant results especially regarding the high frequency of some responses. The design of the interview was open ended to create freedom of responses considering the exploratory nature of the study. It was quite significant to appreciate that a significant number of optometric practices are now participating actively in social and private health insurance in the country.

The reported reasons for not participating in health insurance were;

1. Lack of consideration of the health insurance system.
2. Lack of awareness on how to participate in health insurance.
3. Lack of trust in the health insurance management

The majority of the respondents reported that consideration has not been given to the participation in health insurance.

Lack of consideration may also be due to many reasons. It could be that these practices are satisfied with out of pocket payments for eye care services. In any case, the lack of consideration could also reflect lack of trust and poor education on how to effectively participate in health insurance. Lack of trust was attributed to the “non transparent management problems” reportedly faced by some institutions in the country.

Ninety five percent (95%) of the health insurance participating respondents preferred the private insurance systems of managed care and employer based health insurance to the NHIS. This preference pattern seems to be related to difference in pattern of participation in the NHIS and private health insurance. The pattern of participation results reveal that none of the participants are part of the NHIS alone and majority (70.8%) participate only in private health insurance. The reports of wider optometric service provision by private insurers may be a reflection of the better funding of private insurers in the country. Research has reported reduced funding as a challenge of the NHIS¹¹. The only respondent that could not choose a preferred health insurance system gave a reason that; although the NHIS has limited provision for optometric services and pays little for services rendered to optometric practices, the scheme serves as a means of bringing patients to the practice who later pay on an out of pocket basis when they meet the eye service restrictions of the scheme. This reported benefit of the NHIS was also reported by practices that chose private health insurance as a preferred health insurance option during discussions. Limited access to healthcare services due to limited service provision by health insurance systems has been reported in relevant literature reviewed as a challenge of health insurance systems in the developed world¹²⁻¹⁴. The NHIS has not been shown by research to be very efficient. It

has been reported that capitation payment fares better than fee for service payments¹⁵ and limited coverage, poor funding and poor monitoring are challenges the scheme grapples with¹¹. This challenges may be related to the response pattern of quite significant participation and preference pattern for private health insurance. The NHIS is still developing new plans and strategies to meet the vision of quality and affordable health service delivery across the country and universal coverage for Nigerians¹⁶. This limited coverage of the NHIS as regards optometric services should not only be looked at in the light of the impact on optometric practices alone but also, on the possible effect on the vision of the populace as several literature have shown that availability of health insurance is associated with increased visits to health care providers^{12,17-20} and enhancement of the vision of the populace²¹⁻²³.

All the health insurance participating respondents reported that participation in health insurance enhanced patient load. Relevant literature reviewed have shown that there is a direct association between availability of health insurance and willingness to use health care facilities^{12, 17-22}. This is a good reason to encourage participation. There are still other factors to consider as regards patient load one of which one is the population of health care seekers in a particular locality that have health insurance²⁴. Awareness on the part of health care seekers about health insurance is also a factor to consider when evaluating the possibility of enhancing patient load²⁵. It may be necessary to carry out a research comparing the participation in health insurance by optometric practices between some geographic locations of Nigeria. Considering these factors which may not be exhaustive, it is pertinent for the new generation optometrists to become familiar with business administration and financial economics.

A couple of related studies reviewed were carried out by health care providers that showed prowess in financial and legal fields in their discourse and recommendations^{21,26,27}. This seems to be a factor that enables such researches to be executed and such recommendations to be made.

Ninety five percent (95%) of health insurance participating respondents agreed that participation in health insurance enhanced gross income earnings. Only one respondent (5%) disagreed with this. This respondent did not give a possible reason for this response. Despite the non-probability selection of interviewees, significant it is that majority of the respondents that participated in health insurance feel that it enhances gross income. Some even stated that most of the patients that visited their clinics were on private health insurance. The American Optometric Association survey on health insurance participation reported similar findings⁶. This finding is greatly encouraging for the optometric practice in the country. There should be other unaccounted factors that determine if participation in health insurance enhance gross income earnings. The reason for the this assumption is that the interview questions did not allow respondents grade the level to which participation enhances gross income earnings, some were quick to give the answer yes while others hesitated to give the same answer. This different patterns in response probably indicates that the extent to which gross income earnings is enhanced by participation in health insurance varies due to factors unaccounted for in the design of the interview. These factors need to be exposed through subsequent research on this subject.

Health insurance participation was reported by the majority to enhance the awareness or publicity of the practice,

build relationships and credibility. This is again is very important for emerging optometric practices in the country. Such finding gains significance in that majority of the participating respondents reported that it enhances publicity. Majority of the respondents report that the reason for this was that, as more patients were willing to visit eye clinics under health insurance, they tell their close associates about the eye clinics they visited. Others added that participation in health insurance encouraged the practices to upgrade their clinics and keep high practice standards.

All the respondents reported delayed reimbursements as the major challenge faced through participation and this challenge was greatly attributed to private health maintenance organizations. Some also added that this limitation led to stock depletion due to starvation of cash inflow on continued health service rendering. Delayed payments can only serve as a great drawback to participation even with the reported benefits.

Another challenge reported by the practices was the limited provisions for optometric services by insurers. This is not uncommon as even in developed countries as there are always limitations to health service provision due to the financial implication of insuring^{28,29}. What should be of greater importance are exploring possible ways to expand the provisions for optometric services in these insurance systems. Again, for optometric associations in Nigeria to meet this, proper knowledge about health insurance as a part of financial economics and business administration is required. The challenge of delayed payments

should be checked by legal structures as with the prompt pay law of the state of Illinois, U.S.A³⁰. The decree that established the NHIS of Nigeria also makes provision for delayed payments with sanctions for offenders³¹. It is not clear to the research team how this law is enforced and if it is enforced in Nigeria effectively.

The NHIS recently are reported to have sent out a warning to delist HMOs that do not remit payment to health care providers on time³². This is very encouraging considering the financial implication of delayed payments on these practices with special consideration given to new ones. Optometrists affected by this challenge of delayed payments may need to take up legal action against it. The Optometric Associations in Nigeria can also be involved in this by making reports to appropriate organizations like the NHIS and other bodies that are in position to act in order to mitigate this challenge. Considering the frequency of the reports of delayed payments in this small population interviewed, such a finding gains significance. Such a demerit gives room for distrust of the health insurance systems in optometrists hence the necessity for urgent address.

CONCLUSION AND RECOMMENDATIONS

Sixty five percent (65%) of interviewed optometric practices participated in health insurance. The reasons for non-participation of optometric practices interviewed in health insurance were lack of consideration of health insurance, poor awareness of health insurance and distrust of the health insurance

management. Most of the interviewed health insurance participating respondents reported that participation enhances gross income earnings (95%) and patient load (100%). In addition, health insurance participating optometric practices reported that other advantage of participation are publicity for the practice, enhancing relationships with corporate bodies and credibility. Majority of the interviewed practices (95%) preferred private health insurance to the NHIS. Major reported reasons for this preference pattern for private health insurance is the limited provisions for optometric services in the NHIS and comparatively low payments for optometric services by the same scheme. The reported challenges faced by the health insurance participating optometrists were delayed payments and limited provisions for services.

Recommendations are necessary to improve the health insurance system in the country for optometric participation and it is hoped that if implemented there should go with an enhancement of the vision of the populace. Comments and recommendations are listed;

1. Participation in health insurance have reported advantages for optometric practices in the country and could place them in a better position in modern health care systems therefore should be encouraged by stakeholders.
2. The frequency of the complaints of delayed payments are of great concern to optometric participation in health insurance in the country. An effective legal checking framework is necessary to check this challenge.
3. The NHIS provisions for optometric

services will need to be reviewed and expanded to ensure effective incorporation of optometrists in the scheme.

4. For improved optometric participation in health insurance, conversance in aspects of health insurance dynamics as a part of financial economics and business administration is needed. It is recommended that interested optometrists become conversant with these fields. It could also be beneficial if such information is included in the curriculum of the optometric schools in the country.
5. More research needs to be done to further evaluate the effect of health insurance participation on other aspects of optometric practices.

REFERENCES

1. Awosika, L, Health Insurance and Managed Care in Nigeria, *Annals of Ibadan Postgraduate Medicine*. 2005; 3(2):40-51.
2. Medline Plus. Managed Care, US National Library of Medicine 2014 Available from 11 January 2015, <<http://www.nlm.nih.gov/medlineplus/managedcare.html>>
3. eHealth Services, Indemnity Insurance Plans, eHealth Services Inc, 2015 Available from 11 January 2015, <<http://www.ehealthinsurance.com/health-plans/indemnity>>
4. National Library of Medicine, Managed Care Programs, National Library of Medicine, viewed 10 January 2015, <<http://www.ncbi.nlm.nih.gov/mesh?term=managed%20care>>
5. Tobin, C What is Managed Care? American Association of Diabetes Educators, 1997; 23(1) Available from: <https://nfb.org/images/nfb/publications/vod/oid/mngdcare.htm>

6. National Health Insurance Scheme. National Health Insurance Operational Guidelines National Health Insurance Scheme, Nigeria. 2012; Available from September 1 2014, <http://www.nhis.gov.ng/images/stories/hmoregister/NHIS_OPERATIONAL_GUIDELINES.pdf>
7. Hygeia Group, Our Plans: HYPrestige, Hygeia Group, Nigeria, Available from 10 January 2015, <<http://www.hygeiagroup.com/hmo/OurPlans/HyPrestige.aspx>>
8. Oceanic Health. Oceanic Platinum Health Plan, Oceanic Health Maintenance, Nigeria, Available from 10 January 2015, <<http://www.oceanichealthng.com/platinum-health-plan.html>>
9. American Optometric Association, American Optometric Association Third Party/Managed Care Survey, Journal of the American Optometric Association. 2006; 7(11):563-565.
10. Optometrists and Dispensing Registration Board of Nigeria, List Registered Optometry Clinics. 2014; viewed 19 September 2014, http://odorbn.gov.ng/LIST_OF_CLINICS.htm
11. Kwanga, ZH, WKirfi, M. M., Balarabe, A. Social Security Reform and Service Delivery: A Study of NHIS (client- service providers' relationship) in Kebbi State, Nigeria', International Journal of Humanities and Social Science Invention. 2013; 2(5):86-94.
12. Devoe, JE, Baez, A, Angier, H, Krois, L, Edlund, C, & Carney, PA. Insurance+Access is Not Equal to Health Care: Typology of Barriers to Health Care Access for Low Income Families. Annals of Family Medicine. 2007; 5(6):511-518.
13. Mehta, S, Nunley R & the Washington Health Policy Fellows, Issues facing America: Medicaid, American Academy of Orthopaedic Surgeon. 2008; viewed 15 Dec. 2014, <<http://www.aaos.org/news/aaosnow/jun08/reimbursement1.asp>>
14. Center for Health Care Strategies. Advancing Dental Access, Innovation, and Quality for adult Medicaid beneficiaries, Center for Health Care Strategies. 2014; viewed 16 December 2014, <<http://www.chcs.org/project/advancing-dental-access-innovation-quality-adult-medicaid-beneficiaries/>>
15. Mohammed, S, Souares, A, Bermejo, JL, Sauerborn, R, & Dong, H. Performance evaluation of a health insurance in Nigeria using optimal resource use: health care providers perspective', BMC Health Services Research. 2014; 14(127):100-112.
16. National Health Insurance Scheme. Home, National Health Insurance Scheme, Nigeria 2014; viewed 10 January 2015, <<http://www.nhis.gov.ng>>
17. Blanchet, N, Fink, G, & Osei-Akoto, I., The Effect of Ghana's National Health Insurance Scheme on Health Care Utilization. Ghana Medical Journal. 2012; 46(2):76-84.
18. Feinberg, E, Swartz, K, Zalavsky, A, Gardner, J, & Walker, DK. Family Income and the Impact of a Children's Health Insurance Program on the Reported Need for Health Services and Unmet Health Need', Journal of the American Academy of Pediatrics. 2002; 109(2):112-122.
19. Gugelmann, HM & Perrone, J 'Affordable Care Act and Insurance Coverage for Young Adults' Journal of the American Medical Association. 2012; 307(9):912-914.
20. Van der Gaag, J, Gustafsson-Wright, E, Tanovic, Z, Kramer, B, Janssens, W, Duynhouwer, A et al A short term impact evaluation of the health insurance fund programme in central Kwara state, Nigeria. 2013; Retrieved, 1 September 2014, <<http://www.pharmaccess.org/img/A>>
21. Li, XY, Xirasagar, S, Punkam, C, Krishnaswamy, M, & Bennett, CL. Vision insurance, eye care visits and vision impairment among working-age adults in the United States. JAMA Ophthalmology. 2013; 131(4):499-506.
22. Zhang X, Lee PP, Thomson TJ, Sharma, S., Bake L., Geiss LS, et al. Health Insurance coverage and the use of eye care services'. Archives of Ophthalmology. 2008; 126:1121-1126.

23. Lurie N, Kamberg JC, Brook RH, Keeler EB, & Newhouse JP. How free care improved vision in the health insurance experiment, *American Journal of Public Health*. 1989; 79,(5):640-642.
24. Obikeze, E, Onwujekwe, O, Uzochukwu, B, Ogoamaka, C, Uchegbu, E, Soludo, E, & Uguru, N Benefit Incidence of National Health Insurance Scheme in Enugu State, South East Nigeria, *African Journal of Health Economics*. 2013; 2(1):13-29. retrieved 2 September 2014.
25. Ibiwoye, A., & Adeleke, I. Does Health Insurance Promote Access to Quality Health Care? Evidence from Nigeria. *The Geneva Papers on Risk and Insurance*, 2008; 33(2):219-233.
26. Soroka, M. The Future of Medicare, Managed Care and Optometry. *Journal of the American Optometric Association*. 1997; 683:147-154.
27. Kemper, A. R., Diaz, G., and Clark, J. S. Willingness of Eye Care Practices to Evaluate Children and Accept Medicaid. *Ambulatory Pediatrics*. 2004; 4(4):303-307.28. Centers for Medicare and Medicaid Services, Your Medicaid Benefits. Centers for Medicare and Medicaid Services, United States of America. 2014; retrieved September 1 2014, <<http://medicare.gov/Pubs/pdf/10116pdf>>
29. US Department of Veterans Affairs Medical Benefits Package, US Department of Veterans Affairs, Washington DC 2014; viewed 11 January 2015, <http://www.va.gov/HEALTHBENEFITS/access/medical_benefits_package.asp>
30. Illinois Department of Insurance. The Prompt Pay Law, Illinois Department of Insurance. 2014, viewed 15 December 2014, <<http://www.insurance.illinois.gov/HealthInsurance/promptpay.asp>>
31. Laws of the Federation of Nigeria. National Health Insurance Scheme Decree No. 35 of 1999, Part VII, Subsection 1a and 2a. 2000. viewed 16 December 2014, <<https://www.nigeria-law.org/NationalHealthInsuranceSchemeDecree.htm>>
32. Zaggi H. NHIS to sanction HMOs over delayed payments to hospitals, *Daily Independent Nigeria*. 2015 7 January. viewed 11 February 2015, <http://dailyindependentnig.com/2014/12/nh-is-sanction-hmos-delayed-payment-hospitals/>